3.4.1 Sources of Finance

Unit: Unit 1 – Treasury Strategy

Module: Module 3 – Financial strategy

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Summary: A crucial element of a financial strategy is where to source finance from. This reading gives a strategic view of the major sources, and finds that the major sources of finance are equity, bank and bond finance, although bank finance is probably in a secular decline. Several forms of finance are available which are based around trade. Several forms of non debt finance, such as letters of credit, must be included in the financial strategy. Credit rating is a key driver of markets.

Keywords: liquidity, volume, borrower, lender, investor, secondary market, committed, uncommitted, subordinated, high grade, high yield, bilateral, syndicated, covenants, rights issue, pre-emption rights, underwriting

Contents

1 Introduction 1
2 Public equity 2
  2.1 Analysis 2
  2.2 Rights issues 4
  2.3 Share classes 5
3 Private equity 5
4 Bank finance 8
  4.1 Syndication of bank finance 10
  4.2 Comparison of bank facilities 12
5 Bond finance (and medium term notes) 15
  5.1 Medium term notes and Euro medium term notes 22
6 Non bank lenders 22
7 Private Placements 24
8 Commercial paper 28
9 Asset finance, including leasing 30
10 Supply chain finance 34
11 Other sources of finance 37
  11.1 Convertibles 37
  11.2 Subordinated debt 37
  11.3 Mezzanine debt 38
  11.4 Islamic finance 38
12 Non-lending uses of credit 38

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Learning outcomes:

1. A financial strategy must take account of the different types of finance available in the markets, and must recognise the issues around each market.
2. The biggest dimensions to remember include liquidity, volume and price.
3. Some markets can be closed for extended periods
4. The bank market is probably in secular decline but is often called the lender of last resort as a deal can usually be struck with a bank on some terms.
5. The major markets are equity, bank and bond markets.
6. Private placement is a useful diversification from the bank market.
7. Most markets are differentiated by rating, particularly bond markets where there is a strong divide between investment grade (High grade) and speculative grade (High Yield, or junk).
8. Asset finance is particularly useful in some specific sectors, such as transport assets and property.
9. Some finance, such as supply chain and asset finance, is specifically based around trading and business, rather than leverage and acquisition finance.
10. Non funded debt, such as bank guarantees and letters of credit, also needs to be sourced and considered, as a use of credit
11. The bank market may be in secular decline and the dependence on it needs to be fully assessed.

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1 Introduction

This reading analyses different sources of finance that are available to the corporate treasurer. We try to approach this from a strategic point of view and so the approach will build on an assumed knowledge of technical aspects, the aim being to give the treasurer the confidence to speak to the CFO or to the board when establishing financial strategy. The context of this analysis will come from two directions.

Firstly, from the approach of the three major questions in strategy:

- What to invest in
- How to finance it
- How to manage the risk

Secondly this analysis is required as a part of financial strategy. We have already seen that the construction of a financial strategy is to some extent circular. If we decide that debt forms part of the capital structure, then we need to understand how and from where that debt can be sourced. Thus, a knowledge of financial markets is necessary before a financial strategy can be finalised.

The analysis that we undertake here will take account broadly of the following:

- Constraints on liquidity and volume
- For what kind of borrower / user is a source suitable
- The type of lender or investor, their approach and regulations affecting them
- Cost and the related issues of the risk and return trade-off
- Control and covenants / documentation
- Secondary market considerations and investor / bank relations
- Any commitment to lend, underwriting possibilities and confidentiality
- The parties involved in an issue
- The ability to repay

This reading is more of a reference source than a route to deep understanding of financial strategy, but the important learning point is that these markets have developed in the way they have for reasons, and a financial strategy needs to respect that. Students should be most familiar with this material for the exam. However, the examples and exhibits carry useful messages and give a wider context to the material.

Read Chapter 9, pp 411 - 432 from Applied Corporate Finance, by Aswath Damodaran, 4th edition which talks about the corporate finance aspects of choosing the right debt instruments.

2 Public equity

We will start the reading by considering equity or common stock, and specifically public equity. Public equity means that stocks or shares in the firm are quoted on an exchange. The main advantage of this is an access to further capital and indeed during the credit crisis liquidity via the public equity markets seemed to be readily available. There are, however, disadvantages. These mostly hinge around disclosure requirements, the need to manage investor relations and the pressure for good news and increasing earnings. The investor relations issue is based around three audiences. Firstly are the shareholders, secondly the investment bank broker / adviser community and finally the investment analysts.

The disclosure requirement issue is most important on first listing, called Initial Public Offering (IPO). Different exchanges have different requirements, but a real choice is rarely available - in many cases firms are most comfortable using their local exchange. However, there is much international competition for share listings leading, for example, to many former Communist bloc based firms being quoted in London. Some European firms now seek an initial quotation in the Far East.

2.1 Analysis

Dimension	Comment	Practical effect
Constraints on liquidity and volume	Generally, there are few liquidity or volume issues in the major equity markets. Some lesser markets may require minimum or maximum issue sizes or suitable timing to assure liquidity	Even major equity markets may sometimes close, or show restricted liquidity. Treasurers need to be aware of the selected market's conventions for raising capital.
For what kind of borrower / user is a source suitable	Generally the larger company, but there are no formal credit status restrictions	Probably most suitable for investment grade aspirants
The type of lender or investor, their approach, regulations affecting them	Investors are predominantly institutional, mainly from investment houses but also insurance companies. Pension schemes are often cited as investors but usually invest through investment houses. Some of these investors are now subject to regulation which may restrict their ability to invest in equities, such as Dodd Frank in the US and Solvency 2 elsewhere.	Most individual shareholdings in the firm are usually quite small, although in every firm there are quite often a handful of very important investors (say holding more than 1-2% of available shares) who require significant amounts of time to be spent on them.

Dimension	Comment	Practical effect
Cost and the related issues of the risk and return trade-off	The cost of equity issuance is high from every aspect. The use of investment banks and other costs of issue make equity issue an expensive process. In addition, investors seek equity type returns, which we know to be in the range of 10 to 15 percent, typically or arguably less in recent years. Any issuance has to come with a story which can justify this. There are also limits to how often this market can be tapped.	There have recently been efforts in the UK to tackle this high issuance cost and practical monopoly on underwriting by investment banks. However, managers of firms rarely issue equity, the cost does not directly affect trading profits and hence bonuses but usually the deal is very much more important than the fees.
Control and covenants / documentation	Equity shareholders control the company (through managers) and there are therefore no covenants. However documentation (to back up the 'story') on issuance is very substantial.	There are no control issues with equity for the treasurer but any underwriting conditions are traditionally difficult to negotiate.
Disclosure	Bi-annual reporting at the very least, requiring significant effort on preparation and investor relations.	This can be both demanding and pressured as promises made will be remembered as will be the pressure for continual growth.
Secondary market considerations and investor / bank relations	The company needs to monitor the secondary market very carefully for the share price, volume and direction of trades, and significant holdings. Hedge funds or others can quickly gain influence by gaining stakes or by shorting the stock.	To a certain extent, monitoring is all that can be done. Hedge funds are investors like any other. The only way to avoid trouble is to have a good business model, properly communicated to investors.
Any commitment to lend, underwriting possibilities and confidentiality	A significant advantage of equity issuance is that there is a good market (albeit expensive) in underwriting and so the issuer can gain certainty of quick success. Confidentiality is available.	The underwriting of share issues is commonplace but not compulsory. Share issues can to some extent be confidential for small issues. However,

		the long period from announcement to certainty, in the UK process at least, can be a clear disadvantage.
The parties involved in an issue	A large number of players is required to issue equity. Brokers, advisers, investors, accountants / auditors, lawyers, publishers, listing authorities are all needed in the process, as well as the firm's management team.	Players need management and herding to a conclusion. Don't expect to get much else done in the course of an equity issuance.
The ability to repay	Equity is of course quite difficult to repay and that is one reason why it is expensive. Buybacks are possible but need a clear context and story.	Because the number of times you can go to market to raise funds is limited, care is needed on buybacks. Buybacks made to improve EPS (by decreasing the number of shares in issue) litter the disaster case studies in business textbooks.
Other	Equity issuance is generally restricted to one currency. It is also possible to use equity in acquisitions, as a "vendor placing" subject to pre-emption restrictions.	

There are several other aspects to these issues.

2.2 Rights issues

In many markets, investors fiercely guard the control they have over a company. If, for example, they own 10 per cent of a company, they react badly if that 10 per cent is diluted in any way. This existing level of control is usually protected in law by pre-emption rights, so that an existing investor has first right of refusal to any new issue, proportionate to their holding. This allows an investor to maintain his percentage stake. Pre-emption rights have advantages and disadvantages. They give a ready investor base, as long as investors are supporters and keen to invest more, but make any small issuance unwieldy because of the long pre-emption process that needs to be followed.

Accordingly, many markets have adopted a basket approach to pre-emption. For example, in the UK, it is generally accepted that firms can issue up to 7.5 per cent of their equity without incurring pre-emption obligations in any rolling three year period or 5 per cent in any one year. Interestingly, this approach is endorsed by investor groups such as the Association of British Insurers (ABI), National Association of Pension Funds (NAPF) and the Investment Management Association (IMA), rather than through listing authorities or statute.

Some jurisdictions, notably the US, do not have pre-emption rights, arguably making the US an easier place to raise equity.

Example 1: US company with different classes of common stock
Facebook was started by two owners with equal equity shares. The company was capitalised by one of them, effectively disenfranchising the other.

2.3 Share classes

It is possible to have different classes of share capital. The classic example is preference shares although these tend to be more debt-like then equity-like. There are however, interesting cases where different classes of share capital exist.

Example 2: US company with different classes of common stock
In 2004 Google Inc. ('Google') issued Class A common stock to third party investors. Following the offering, Google had two classes of authorised common stock: Class A and Class B. Holders of Class A and Class B have identical rights except that holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to ten votes per share.

From the 29 April 2004 Prospectus:

'…. [Google] have set up a corporate structure that will make it harder for outside parties to take over or influence Google.

The main effect of this structure is likely to leave [Google's management] with significant control over the company's decisions and fate, as Google shares change hands. New investors will fully share in Google's long-term growth but will have less influence over its strategic decisions than they would most public companies.

While this structure is unusual for technology companies, it is common in the media business and has had a profound impact there. The New York Times Company, the Washington Post Company and Dow Jones, the publisher of the Wall Street Journal, all have similar dual class ownership structures.'

In some jurisdictions, 'golden shares' exist, which give the holder (usually government) a de facto veto on a change of control of the firm. This is usually the case for firms with a significant national interest such as defence firms.

Different classes of shares are also often seen in structured arrangements, such as venture capital trusts in the UK and private equity arrangements: see below.

3 Private equity

Private equity (PE) normally forms part of a structured arrangement which in consequence becomes a financial strategy in itself. Private equity normally goes along with high debt levels

and an investment servicing calendar which cannot be touched for several years, until such time as the investors consider an exit strategy.

Apart from participating in a private equity structure, treasurers may nevertheless, come across private equity in several different ways:

- as an investor in a joint-venture or project finance type structure
- when making an acquisition from a private equity house
- when making a disposal to a private equity house

This brief analysis may assist treasurers on those occasions:

Dimension	**Comment**	**Practical effect**
Constraints on liquidity and volume	There seems to be no theoretical limit to the size or availability of private equity transactions, which became increasingly adventurous prior to the 2008 credit crisis. Those days may be over – at least in their historic form, but because the market is private, specific investors can still be found for specific deals. .	Private equity suffers heavily from fashion and the market can be closed for prolonged periods.
For what kind of borrower / user is a source suitable	There seems to be no real size limit, except fashion dictated but generally PE seeks business with a relatively stable cash flow, i.e. an established or structured businesses	The treasurer does not usually have much say in this sort of process, the overall financing being set up by the private equity house and associated transactional advisors.
The type of lender or investor, their approach, regulations affecting them	Classically risk-seeking, PE investors seek high returns and accept high risk.	Traditionally tough negotiators, PE investors nevertheless are able to make decisions quickly. Although risk-takers, PE investors are not foolhardy, and take a deep interest in monitoring their businesses.
Cost and the related issues of the risk and return trade-off	PE investors seek a high return. The benchmark used to be in the region of between 18 and 20 per cent per annum although the low	PE investors will set clear KPIs for the business, and manage performance against those measures.

Dimension	Comment	Practical effect
	interest rate environment and the 'search for yield' has driven this to somewhere probably nearer 8 to 10%.	
Control and covenants / documentation	PE investors exercise tight control over their investment. Note that control is effectively shared between equity- and debt-holders. Generally the business model is fixed for the lifetime of the structure.	Loan covenants in PE structures are generally tight and heavily focussed on cash generation to service & repay debt.
Secondary market considerations and investor / bank relations	Generally, there is no secondary market in private equity transactions until the original investors sell their investment on. Investor relations is all about control by the investor, which is generally tight.	Loan conditions are generally designed to tie borrowers tightly into the lender.
Any commitment to lend, underwriting possibilities and confidentiality	The PE structure being set up by the private equity house, this doesn't apply at the outset.	Loan facilities will be committed, but subject to tight covenants and servicing / repayment schedules. Ancillary facilities will form part of the committed package, and the ability to take on additional uncommitted debt will be strictly limited or forbidden.
The parties involved in an issue	Private equity partners, bankers, lawyers, accountants	The investors may appoint reporting accountants to provide verification of profitability, balance sheet strength and cash generation.
The ability to repay	The expense of each transaction generally means that structures survive for several years but as they are private changes can generally be made easily, subject to relevant approvals.	PE houses are always on the eye out for ways to extract more money by gearing up their investments even further – so long as they can find the additional debt.

4 Bank finance

Bank finance, is of course, where a treasurer comes into his own. It is usually his domain to deal with banks whereas often in other markets more senior management becomes heavily involved, usually because of the need to involve investment banks who prefer to have relationships at board level rather than at the treasurer level.

We will spend a little more time on bank finance because it forms the bulk of corporate financing in Europe and most parts of the world. Only in the US, does bond finance exceed bank finance as a major source of capital for corporations.

Having said that, following the credit crisis, it seems that bank finance is in decline. Banks, in the West anyway, are facing several threats:

- a retreat from overextended balance sheets – decreasing the amount of debt they issue, and hence decreasing the amount they can lend on
- geographical concentration in domestic markets plus a few other strategic ones.
- increasing regulation, leading to
    - a need for new capital
    - new controls on liquidity, questioning the whole bank model
    - a need to achieve adequate return on capital for banks (RAROC)
- recessionary forces threatening existing assets
- public hostility
- write-downs of sovereign assets banks have to hold for regulatory purposes
- lower transaction income as, e.g. SEPA is enforced
- separation of profitable investment banking activities from less profitable (but lower risk) transactional banking

Many businesses have complained about a lack of bank finance as a threat to growth, while at the same time banks have indicated that they will be happy to lend as long as they can justify the lending decision. Investment-grade corporations do not seem so affected by this, mainly because they tend to fund themselves from the bond markets. But nevertheless all businesses face an increase in costs (as the banks themselves face increase costs in funding) and are exposed to more risks in dealing with less credit worthy banks.

Dimension	Comment	Practical effect
Constraints on liquidity and volume	Theoretically there are no liquidity or volume restraints, so long as banks stand ready to lend	Fashion affects this issue like any other market, and there is no doubt that bank credit is becoming scarcer and more expensive.
For what kind of borrower / user is a source suitable	Bank debt is suitable for all types of borrower although the very strongest borrowers	Increasingly core financing may be best sourced from other markets, whatever credit

Dimension	Comment	Practical effect
	usually find other markets cheaper. Small and sub investment grade borrowers are becoming increasingly squeezed out.	status of the borrower. Outside the US we can expect a growth in 'junk' bond markets, private and perhaps non-bank lenders to meet this need.

Dimension	Comment	Practical effect
The type of lender or investor, their approach, regulations affecting them	Banks vary from very large to small, with lending appetites to match. Basel III is now well-known to most participants and will have wide-ranging implications. These include capacity to lend, cost of lending and the implications of liquidity and stress testing.	The large banks are well known. The implications of Basel III have yet to work themselves through into bank / customer relationships.
Cost and the related issues of the risk and return trade-off	In relationship banking for large corporates, banks are quite competitive in lending, relying on their ability to gain other business to make an appropriate overall return. Cost includes both margin and upfront cost.	Sometimes the pressure to provide ancillary business can become intense, and some banks will now only lend if they are assured of a minimum level of ancillary business.
Control and covenants / documentation	Generally, banks will always seek as much control as they can get away with and it usually follows the credit rating. Investment grade borrowers suffer little loss of control.	Relationship banking usually allows amendments to loan documentation, thus making control less of an issue.
Secondary market considerations and investor / bank relations	There is an increasing trend towards secondary market trading in all types of corporate debt. For sub investment-grade debt, trading is very common.	Treasurers like to know who their lenders are and for investment grade borrowers this is usually possible. However, the CDS market allows banks to trade borrowers' credit

		invisibly (potentially invisibly by and within the bank). Sub investment grade borrowers may see their lenders change quickly. Maintaining bank relationships requires substantial investment in terms of time and information.
Dimension	**Comment**	**Practical effect**
Any commitment to lend, underwriting possibilities and confidentiality	There is a full range of products available in the banking market to meet all committed and uncommitted needs, together with underwriting. Confidentiality, as long as only banks are used, is easy	The banking market gives treasurers a huge choice with the advantage of total privacy. These factors make bank finance very popular.
The parties involved in an issue	This can vary from only the treasurer for routine re-financings and small transactions to all of management, lawyers and accountants for more complex transactions. Even so, generally it is the simplest of all financing approaches.	Simplicity is another key advantage of bank finance.
The ability to repay	One of the great strengths of bank finance is the ability to repay quickly and often without penalty, although some transactions will have early repayment penalties. This contrasts favourably with many other markets.	Treasurers do not like to be saddled with debt which is difficult to repay. This, combined with the ease of issuance, often makes treasurers reluctant to seek other sources of finance.

4.1 Syndication of bank finance

One major advantage of bank finance is that for any borrower other than the very smallest, lending is not restricted by the size of anyone individual bank. Borrowers have two choices to increase the size of lending beyond that available from just one bank. Firstly they could negotiate facilities with a number of banks individually, called a bilateral approach or secondly they can negotiate a single facility with a group of banks collectively, called a syndicated[1]

[1] A half-way house is the ‘club deal’ where the borrower puts together a ‘club’ of banks to provide as single facility.

approach.

While there are pros and cons to each approach, the syndicated loans market rivals bond markets for size and is where the majority of bank lending is undertaken. For many borrowers the syndicated loan market is the natural place to undertake their bank borrowing. The approach does concentrate refinancing risk into one time period but the market is usually able to cope with large amounts required by borrowers. Dealing with just one or maybe two banks to negotiate the terms of the transaction turns out to be easier than negotiating with the many that might be required. The syndicated loan market also allows underwriting, thus giving borrowers certainty of refinancing or of new financing in situations such as acquisitions where large amounts of money might be required at short notice and in confidence.

There are many different ways to tackle the syndicated loan market, from club deals arranged by the treasurer, to underwritten deals initially funded by very few banks and then syndicated heavily to meet the permanent (‘hold’) requirements of each individual bank.

4.2 Comparison of bank facilities

Exhibit 1: Bank finance

The various types of borrowing described so far, plus some additional areas of comparison, are summarised and compared in the following table:

	Overdraft	Money market line	Term loan	Revolving credit facility
Basics				
Flexibility	Highly flexible. Immediate access to funds within limit	Short-term funds directly from the money markets via banks	Inflexible, of fixed duration and specified amount	Flexible: Immediate access to funds within limits
Committed?	Usually uncommitted	Committed only for each drawdown period	Yes: early repayment penalised	Committed for life of facility. No requirement to borrow
Use	Unsuitable as a fallback source of liquidity unless committed	'Opportunistic': active short term funding	Fixed funding requirements	Core source of variable liquidity
Secured or unsecured	**Either (typically unsecured)**	**Either (typically unsecured)**	**Either**	**Either**
Sector	Any; sole source of funding for small businesses, source of marginal funding for larger firms	Limited to larger companies	Any	Limited to larger companies
Life				
Maturity	repayable on demand, typically reviewed annually	Drawdown 1-364 days, but typically less than 3 months	1-10 years, typically 2 – 5 years. Either amortising or bullet repayment	1-7 years Usually repaid as desired or pre-agreed
Drawdown/ re-drawing permitted	any time	any time	Drawdown only, typically once at the start of the facility. No redrawing permitted even if drawing are prepaid	any time
Interest/costs				

	Overdraft	Money market line	Term loan	Revolving credit facility
Interest rates and fees	Benchmark rate e.g. Interbank Offered Rate (IBOR) - rarely - or base / repo / prime rate, + margin	IBOR + margin	IBOR / agreed fixed rate + margin + upfront / continuing fees. Can be subject to minimum IBOR.	IBOR + margin, + upfront fees + commitment fee. Can be subject to minimum IBOR.
Interest charged	Daily interest on outstanding balance, paid monthly or quarterly	Usually at the end of the borrowing	Periodic interest on balance outstanding (6-monthly or quarterly)	At end of interest period or if longer, 6-monthly
Other issues				
Covenants / documentation	No / simple	No / limited events of default	Yes / complex but standard	Yes / complex
Currency: single or multi	Currency must match bank account currency	Multi-currency	Single (term loans can be split into currency elements)	Multi-currency
Bilateral or syndicated	Bilateral	Bilateral	Either	Either

There are two crucial aspects to dealings with the banking sector. The first is that banks provide access to almost every source of finance that we list. So as well as being a source of finance in their own right, banks also act as de facto brokers or intermediaries to the rest of the financial services sector. Thus, equity almost always requires a bank, usually an investment bank, to manage the transaction. Similarly, bonds are usually accessed through the investment banking sector, assisted by commercial banks. Commercial paper is also accessed through the banking sector, as is supply chain finance and asset finance. It is probably only the private placement market which has eluded involvement of the banking sector. Even then however, banks often play a major role. And of course virtually no business can function without at least one bank account.

So banks bring a route to the financing markets and they also bring intelligence, as they will be dealing with borrowers and the raisers of capital on a daily basis. This is as good an argument as any for encouraging bank relationships.

Secondly, banks are often viewed as lenders of last resort, in that they will lend even when all other markets have declined to help. There is enough flexibility that can be offered by the banking sector, such as high margins, short terms, control surrendered by the borrower through covenants, or security over assets, that usually a deal can be done. This is another reason why bank relationships are so important. Note, however, that Basel III and the post 2008 financial crisis threaten to severely restrict the amount of bank credit available at any price, thus eroding banks' 'last resort' capability.

Example 3: Club deal example

Diablo plc is financed by a mixture of bonds and bank debt. It generates cash but still needs to refinance regularly. Its main committed bank facility, providing around 30% of debt and all of its liquidity capacity (i.e. its undrawn facilities), is syndicated with 7 banks and matures in 2 years' time. Diablo is rated BBB.

Diablo recognises that bank facilities rarely reach full term as that creates an unacceptable refinancing risk and also believes that conditions in the banking market will deteriorate over the next year, when the facility would normally be renewed.

It approaches its relationship banks, which form the majority of the syndicate and holds informal talks with each one. The banks agree to an extension of the term and slightly different conditions, reflecting the current position of the market. One bank decides that it no longer wants to lend but another bank offers to take its place. There is also a small juggling of commitments between lenders.

The amended facility agreement is negotiated and signed and this is an example of a club deal.

Example 4: Underwritten, deeply syndicated example
Imagine SA is a successful software house with no debt. It has identified a suitable acquisition target to fuel its growth for the next decade and decides that a financial strategy for the combined group would be to have modest gearing, with the debt provided from the banking sector. A suitable structure for the combined group would be to increase the equity base and have some bank debt. The acquisition is agreed in principle but Imagine needs to raise both fresh equity and bank debt at the same time so that when the announcement is made, there is certainty of financing for the acquisition.

Imagine needs confidentiality and so it approaches two banks to arrange both the equity and debt. The banks jointly underwrite 100% of the fresh equity issue and 100% of the debt financing. Each banks takes 50% each on an underwritten basis and the loan agreement and underwriting agreement (for the equity) are agreed prior to the public announcement of the acquisition.

By this means, Imagine assures itself of the finance it needs (naturally it pays a fee). By underwriting the equity issue, the banks agree to buy any and all unsold shares at the issue price; and by underwriting the debt facility the banks agree to fund the whole facility even if no other participants can be found.

The two banks have indicated that they target a “hold” amount of 10% of the debt facility, meaning that 80% of the debt amount is to be syndicated widely to other banks and perhaps non banks as well. Ideally the syndication will occur before the facility is drawn down, as the two lead banks do not want to physically fund the facility beyond the 10% ‘hold’ position. However this risk is with the banks, not with Imagine.

5 Bond finance (and medium term notes)

The public bond markets have been in existence in some form for hundreds of years. Corporations would issue loan notes for all sorts of reasons and the United States probably led the way in sophistication. Indeed the US corporate bond market is still the largest in the world and roughly 70 percent of all corporate debt in the US is sourced in the bond market. Bond markets were domestic until around the mid-1960s when the Eurobond market was born. This is when debt became international and spurred enormous growth in the bond markets.

Characteristics of bonds and bond markets
Bond markets, where borrowers deal direct with lenders, thus ‘disintermediating’ the banking market, have always been for the larger borrower, i.e. those wishing to source large amounts of capital. This is for several reasons. Firstly, the upfront cost has some fixed elements which only become cost-effective when spread over large amounts of capital. Secondly, the term of lending is usually quite long, certainly when compared to bank finance; this again only makes sense when large amounts are needed. Finally, a large issue is better received in the secondary markets, where the bonds will trade, as that is the only way to ensure sensible liquidity for investors. Investors are happy to invest for the long term, but generally prefer to be able to sell their bonds quickly if need be, which can only be done with good liquidity. Note, however, that in the mid 2010s, as regulation bites, liquidity in the secondary bond markets is

very low, threatening this approach.

Strategically then, bonds have a different feel to bank debt. No longer is the treasurer dealing with the bank relationship manager and the flexible bank, he is now dealing with a group of investors whose understanding of debt is based not on one relationship with the company but on the standards of the market as a whole. Issuing bonds is therefore a serious business, and with a term of up to 30 years and with little ability to amend terms, the treasurer must be sure of himself from the start. For example, bonds require registration with a listing agency if they are to be traded in the secondary market, which is after all one of the main selling points of a bond. Issuing bonds opens up a whole new world of investor relations and investor expectations, putting a lot of responsibility on the issuer. Issuing bonds is not a suitable way to raise funds in a hurry or as a last resort. Investors expect to hear a good news story. Neither is redeeming bonds simple.

Each major market is in practice split into two bond markets. The high-grade market, for investment grade borrowers, forms one market. The high yield market, for sub investment grade borrowers (also known as junk borrowers) forms another market. Each market has totally different aspects of for instance documentation, liquidity, size of possible issue amongst other things. And even within each of those markets there is a different psychology driven mostly by the rating. The AAA market, at the top end investment-grade, is very different from the BBB market and in the high yield space, the BB market is different again from the CCC market.

Remember that the cost of a bond is made up of three elements:

- the upfront cost, including lawyers, accountants, printers as well as management time
- the benchmark yield, such as gilts, treasuries or bunds
- the spread, or margin

It is the upfront cost that makes bond issuance a serious undertaking, and most of this is all about having the bonds registered. Bonds must be registered to be listed on the market and to allow secondary trading.

Analysis of the bond markets

Dimension	High grade	High yield	Practical effects
Constraints on liquidity and volume	The high-grade market has few liquidity constraints, except perhaps in the BBB sector and is rarely completely closed to issuance.	The high yield market has quite significant liquidity constraints and is sometimes completely closed for long periods. There is restricted liquidity in the low quality end (CCC).	A financial strategy which relies on continuous access to the bond markets and refinancing is not really feasible in the high yield markets. In that case treasurers need somewhere else to go.
For what kind of borrower / user is a source suitable	This market is mainly for the larger company which is committed to public debt issuance.	Classically used for structured finance or highly leveraged transactions, this market is however also used for routine refinancing by larger firms who are sub investment grade, especially when the market is strong.	Treasurers will probably know when either market is suitable as investment banks will be pressing to say that a deal is possible for the borrower. For many companies, such as utilities, bond issuance is routine.
The type of lender or investor, their approach, regulations affecting them	Investors are predominantly institutional, mainly from investment houses but also insurance companies. Pension schemes are often cited as investors but usually do so through investment houses. Some of these investors are now subject to regulation, typically Dodd Frank in the US and Solvency 2 elsewhere, which may constrain their investment appetite.	Investors are the same as for the investment grade market, but have different risk / reward requirements. .	Borrowers in these markets will need to establish skills in investor relations, where lenders like to be kept informed but do not like demands being made of them. The wave of fresh regulation is new to them and the effects may well take time to play through.

Dimension	High grade	High yield	Practical effects
Cost and the related issues of the risk and return trade-off	The cost of issuance is quite high, even for the very high grade borrowers. Issuance is also demanding in terms of time and involves many different parties. The margin, however, should be competitive when compared to other sources of finance. The volatility of the margin can be high. Underwriting is possible but expensive.	The cost of issuance is very high, one reason why it is often only seen in structured transactions. Again issuance involves many different parties. The margin, while probably competitive, may seem expensive to many. High yield bonds often trade like equities in terms of volatility. Underwriting is possible but expensive.	Investment banks thrive on issuing bonds for clients. Issuance is highly profitable for investment banks and they are meeting the needs of both investors and borrowers. Nevertheless bonds can be the cheapest source of finance for many and if / when bank credit is constrained then borrowers have to fund themselves with bonds.
Control and covenants / documentation	While documentation can be substantial, in reality bond investors have little control over the issuer. Major covenants include a negative pledge clause, cross default (with a large basket) and possibly change of control but there are no financial covenants. There may be an upwards ratchet in coupons (‘step up’ coupons) but these only have a weak effect on control.	High yield bond investors have real control over the issuer, with significant non financial covenants imposing quite heavy restrictions on the borrower. The financial covenants (‘cov-lite’) heavily restrict the issuance of new debt	The underwriting conditions are traditionally difficult to negotiate.

Dimension	High grade	High yield	Practical effects
Secondary market considerations and investor / bank relations	The secondary market is enormously important for high grade issuers. A liquid market gives a good indication of the true cost of the bonds and informs further issuance if required. Investor relations becomes the new skill for the treasurer.	The secondary market can be less important for high yield issues, where liquidity is lower and bonds are often held to maturity. Nevertheless investor relations is important.	Investor relations is always important and treasurers want an orderly market in their securities. You never know when you need investors on your side.
Any commitment to lend, underwriting possibilities and confidentiality	It is possible to underwrite a transaction but expensive, especially in difficult and illiquid markets. When marketing starts confidentiality is lost and so this type of finance is not used for acquisitions or large transactions which need to remain confidential. In such cases it is usual to raise money in the bank markets and refinance quickly in the bond markets.	As part of a structured transaction, the underwriting of high yield bonds is quite common. High yield has the same confidentiality issues as the high grade market.	Underwriting bonds can be quite messy and therefore expensive, probably therefore only feasible in a structured transaction.
The parties involved in an issue	A huge group of people is required to issue bonds. Brokers, advisers, investors, accountants / auditors, lawyers, publishers, listing authorities are all needed in the process, as well as the management of the firm.	As for High Grade	This group needs management and herding to a conclusion. Don't expect to get much else done in the course of a bond issuance, unless you are such a large issuer that you do it all the time.

Dimension	High grade	High yield	Practical effects
The ability to repay	Generally, it is not easy to repay a bond. There are techniques such as buying in the market and tendering and there are standard market practices and prices for this. Compared to bank finance however, where repayment is often a par, expect to pay more to redeem the bond, essentially meaning that the margin is paid for the life of the bond.	It is not easy to repay a high yield bond. Similar issues arise as with the high-grade market. There will often be call (prepayment) features in a high yield bond, e.g. 7 year debt callable after 4 years, but the call price is likely to be above par.	The difficulty in repaying a bond is one reason why the treasurer needs to be certain of the need for funds. You need to know that you will need this money.
Other	There is usually liquidity in most major currencies.	Most major currencies are represented in the high yield markets.	

Bond market fluctuations

The following exhibit is meant to show that even the investment grade bond market is subject to stresses as far as margin and liquidity are concerned. The graph shows margins for a BBB borrower over time and most readers will be surprised at the volatility of margins. This is also reflected in liquidity so that there will be times when even an investment grade borrower will not be able to raise funds or refinance, and even if they can, the spread will be very high. This shows that even gaining investment grade is sometimes not enough to ensure liquidity. In times such as this, however, banks probably will lend, even if only to bridge to the revival of the bond markets and possibly at high margins or costs.

This exhibit also demonstrates that timing entry into the markets is quite an art. Even after taking into account the long term swings in spread as shown in Exhibit 2, the market can quite easily show indigestion for short periods (the ‘pipeline’). The investment banks leading an issue are aware of the pipeline and need to manage it. During the time between deciding to issue the bond and actually doing it both interest rates and spreads can shift, exposing the borrower to risks, and many products (such as ‘Treasury locks’ which fix the underlying benchmark rate) have sprung up around it.

Exhibit 2: The ups and downs of bond markets

Types of bond

The classic bond is a fixed rate instrument and the term can be anywhere between 2 years (or even less) up to 50 years (although the borrower would have to be very high grade) There are many variations to this and these can include:

- Variable rate bonds (Floating Rate Notes, or FRNs), where the interest rate is linked to a floating rate benchmark e.g. LIBOR.
- Inflation linked notes, which provide a real return, often called a linker
- An ability to call (i.e. prepay) the bond after a certain period (e.g. 7, no call 4, meaning the bond has a life of 7 years but can be called (at a fixed price) after 4 years)
- Retail bonds – this mechanism allows any EU-domiciled company to issue bonds direct to retail investors. Not only does this open up a new class of investor, but it is also available to any group so long as they have an appropriate entity from which to issue.

Example 5: Inflation linked bond issuance

Many investors are concerned with inflation risk. Typically, holders of capital suffer this risk as do the older generation who essentially require an income that rises with inflation to fund their years in retirement. This also extends to providers of pensions where pension payments increase with inflation. Because of the historic popularity (now declining heavily) of Defined Benefit (DB) pension schemes which commit to inflation-linked pensions there is a huge demand for inflation linked bonds (and similar swaps) to provide income to match the payments stream. Any market needs buyers and sellers and natural sellers of inflation have turned out to be few and far between. Government is one such possible seller, because their income rises with inflation as income tax is a percentage of (rising) wages. Indeed governments have issued index linked gilts on a wholesale basis and bonds on a retail basis. Other sellers of inflation include utilities where their regulated businesses are permitted to raise prices based on inflation and who can therefore raise debt on that basis and achieve a match of interest expense to income. Thus utilities and governments are common issuers of inflation linked notes.

5.1 Medium term notes and Euro medium term notes

Although medium-term notes possibly require a section of their own, they are in reality a subset of the bond markets. The concept of 'shelf registration' or 'shelf programmes' has been around for some time. This allows a borrower, typically large, to issue at short notice based on a complete set of documents filed, up-to-date, and ready to go. So when conditions in the market are right, the borrower can issue quickly.

This is essentially what medium-term notes are. There is a base registration document (the shelf registration) and this is updated on a regular basis. The program will have a maximum size that it is usually set so high as to be meaningless. With the base documentation in place the borrower can then issue on an opportunistic basis as conditions become optimal and investors become available. (MTN issuance can be virtually immediate, restricted only by payment cut-off times.) The investors are those who would otherwise invest in the bond markets and generally the terms and conditions are all based around bonds. However, there is an ability in the MTN markets to customise a particular debt issuance to suit the terms of a particular investor. Thus instead of having to issue a large marketable amount in a bond, a deal can be struck for a small amount for a particular period. It is likely that such an issue will be illiquid and held to term by the investor. However larger more marketable deals can also be done under the program. To that extent it is almost a blend between the private placement market and the bond markets.

MTM programmes are pretty much designed for well-known borrowers with high credit status, which reduces the risk of a possible lack of liquidity to acceptable levels.

6 Non bank lenders

It is worth mentioning as a separate section the issues when non-financial corporations such as mutual funds and unit trusts become involved in bank type transactions. The most common situation where this can occur is in structured transactions where debt finance forms a large part of the capital structure. Non-bank debt fits in the gap between bond investors and bank investors, and structures are designed around non-bank lenders in term loans. Non-bank lenders are very useful because they make some deals possible where the combined capacity of the bank and bond markets would not have been enough, and non-bank lending is likely to become more important as Basel III and Solvency II regulation restricts banks' and bond investors' ability to lend.

The role of non-bank lenders

Non-banks are targeted lenders in Term B[2] and Term C type loan structures and can appear in Term A loans as well. Non-banks can even be in revolving credit facilities if they make special arrangements to put cash up front with an intermediary bank. While there are significant advantages in being able to tap such investors there are two disadvantages which need managing.

[2] In a bank type loan agreement, term loans may be split into different tranches, A, B and C, for example, with slightly different characteristices, designed to appeal to different types of lender. For example Term A loans may be amortising and aimed at bank lenders while B and C loans may have bullet maturity and be aimed at non bank lenders.

Example 6: Invensys plc

In 2004, Invensys plc was a BB rated borrower with substantial amounts of debt whose maturity was fast approaching. The majority of that debt was on investment grade terms because Invensys had been investment grade while the debt had been negotiated. One issue that had to be faced was that new lenders were required to refinance this tranche of debt. The bank lenders in the transactions had originally set their "name" limits for Invensys as though it were investment grade and these inevitably had to fall as the company fell below investment grade. Invensys therefore had to find a much larger number of lenders to meet the funding requirement. This was despite a concurrent issue of equity which would reduce the overall debt funding requirement.

This number of lenders was found by including non bank lenders in bank type deals. The structure for the bank debt comprised:

A revolving facility	provided by bank lenders
A guarantee facility	provided by bank lenders
Term A facility	aimed at bank lenders
Term B facility	aimed at non-bank lenders, tradable and of a term longer than the A facility
Term C facility	aimed at non-bank lenders, tradable and of a term longer than the B facility

In addition, a subordinated facility was aimed at non-bank lenders, with a second charge over assets over which the Revolving and term lenders had a first charge.

Disadvantages of non-banks

Non-bank lenders can find the concept of an amendment difficult. Bank loan agreements can be so complicated that amendments are often necessary, not necessarily at the high profile covenant level but quite commonly in the detail of negative pledges, security or acquisitions or corporate re-organisations for example. Some non-banks (and indeed some banks) may charge for an amendment, but the main effect of the presence of non-bank lenders is to change the relationship dynamic. Non-bank lenders, with whom there is no relationship, may hold the balance of power in any voting situation, rather than the bank lenders who will understand the borrower more thoroughly. A possible solution to this is to adjust the voting dynamics, so that lenders who do not vote are excluded from the franchise ('snooze you lose'), making the percentage required easier to get.

The second disadvantage is the issue of confidential information. Generally (most) treasurers are happy to share confidential ('inside') information with their relationship banks and requirements may be formalised under the information requirements of the loan agreement. This may mean that confidential information is also disclosed to the non bank lenders, some of whom may have equity interests in the company or simply not have the procedures (such as Chinese Walls) to be able to deal with this. A possible solution is to accommodate two

types of information ('insider' and 'public') and allow lenders to elect which type they are from the outset. Meetings may also be split into two, a 'public' meeting followed by an 'insider' meeting.

7 Private Placements

For term finance, that is funds that can be used as longer-term capital, the next most important market is the private placement (PP) market. The bond market can provide finance for up to 50 years, although the BBB borrower will probably be limited to around 10 or 15 years. The bank market will go generally to 5, maybe to 7 and perhaps longer for structured finance. The private placement market is the only other market with a significant term available, perhaps up to 15 years with some liquidity, although the most common term is from 7 to 12 years.

The PP market is best described as being between the bank and the bond markets. The investors are typically insurance companies, i.e. similar to the bond markets, but PP investors typically have a buy and hold mentality for their investments, which is similar to the bank markets (or at least the bank markets as treasurers like to think of them) and PP issuance can feel almost like a syndicated bank deal. Documentation is also closer to the bank markets, which is why private placement is often a first diversification from the bank market for many borrowers aspiring to join the 'big' club. Two aspects, however, are closer to the bond markets, around early redemption and the ability to amend documents.

The early redemption of a private placement requires a "make-whole" payment, where all future payments are discounted at Treasury rates. This means that the margin is paid for the life of the loan even if the loan is repaid early. This is a significant disadvantage compared to the bank markets. The second aspect is that amendments are traditionally quite difficult to achieve, in contrast to the bank markets. Some treasurers find these disadvantages an overwhelming reason not to issue through the PP market. However, because it is generally open to both high-grade and high yield borrowers, it remains popular and indeed growing. While most liquidity is in the US there is a growing market in Europe and the UK.

Analysis of the PP market

Dimension	Comment	Practical effects
Constraints on liquidity and volume	One feature of the PP market is that it is generally open, famously during the 2008 credit crisis. Liquidity is strong and now the minimum amount is coming down. Whereas it used to be around USD 50 million, USD 20 million is possibly a minimum size	This liquidity makes the PP market a very useful borrowing diversification from both bank and bond finance
For what kind of borrower / user is a source suitable	The PP market really is suitable for all kinds of borrower, as long as they have a track record. However, the really top grade borrowers will not use this market as the conventional bond markets suit their needs better. .	Typical feedback from the PP market is that treasurers sing its praises when they first use it. When they want to do an amendment or redeem early, however, they usually swear they would never use it again.
The type of lender or investor, their approach, regulations affecting them	Investors are predominantly institutional, mainly insurance companies. Some of these investors are now subject to regulation, typically Dodd Frank in the US and Solvency 2 elsewhere.	A major issue is around amendments, which can cause difficulty. Borrowers in the PP market need to establish skills in investor relations similar to the public bond markets, where lenders like to be kept informed but do not like demands being made of them. The wave of regulation is new to them and the effects may well take time to play through.

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Dimension	Comment	Practical effects
Cost and the related issues of the risk and return trade-off	The cost of issuance is normally similar to that of bank finance. For borrowers new to the market it can be demanding in terms of time but is generally a straightforward process. Margin should be competitive when compared to other sources of finance. Underwriting will not usually be possible but deals can be timed to fit with other financings.	While it is possible to go direct to investors, it is still usual for these transactions to be channelled through banks. The process is usually well oiled (similar to a bank syndication). One beauty of the PP market is that the lenders will not seek ancillary business.
Control and covenants / documentation	Documentation will be very similar to that found from the banking sector but because the deals are often quite long-term the extensive control that usually comes with this can become a millstone. There are likely to be financial covenants but negotiation is possible.	The major issue here is around the ability to make amendments, which can be quite difficult.
Secondary market considerations and investor / bank relations	There is very little secondary trading of PP deals and investor relations should not be forgotten.	Investor relations is as important as with the public bond markets.
Any commitment to lend, underwriting possibilities and confidentiality	It is not usually possible to underwrite a PP transaction, and the flexibility of the syndicated bank market is not available. The market is, however, confidential	PP transactions are normally done as part of routine refinancing. Riskier acquisition finance or structured transactions are typically handled in the banking sector.
The parties involved in an issue	The process is similar to bank finance, so really only management and lawyers are required. Bankers, as	Issuance is a relatively simple process in this sector.

	intermediaries are often present.	
Dimension	**Comment**	**Practical effects**
The ability to repay	The lack of ability to repay is a serious disadvantage in the PP market, the make whole often being seen as prohibitively expensive. However it is only a cost issue, unlike prepaying a bond issue which can involve significant investor relations issues.	As with the public bond market, you need to be as sure as possible that you need the funds for the full term.
Other	Most liquidity is in USD and the euro with some emerging capability in GBP	The issuer may well need to swap the issue proceeds into a more appropriate currency. The bank intermediary should be able to assist with the swap, but the treasurer also needs to consider accounting and tax implications as well as issues around the capital and credit risk requirements of trading derivatives..

Example 7: First diversification from bank example

Recycle and Refuse SA (R&R) is a waste management company operating over North West Europe. It is quite highly geared and also uses banks for the issuance of letters of credit which are required to back the restoration of landfill sites (underwriting the capital spend post landfill and to cover possible subsequent claims). R&R is finding that capacity in the bank market is limited, partly because of letters of credit using up borrowing lines and partly because of the lack of further business that R&R can offer as ancillary business to provide an adequate return on capital to its banks.

R&R therefore raises debt in the US private placement market, reducing refinancing risk and freeing up capacity for the issuance of letters of credit. The actual raising of finance and the swap from USD to EUR also provided ancillary business for two of its banks.

Example 8: Repayment of Private Placement Notes

Diablo plc has acquired a company which had issued some private placement debt, in which agreement there was a clause saying that no security would be given to any other lender (a negative pledge clause). This conflicts with the terms of the proposed financing following the acquisition and the noteholders will not relax the undertaking. So Diablo has no alternative

but to repay the notes. These were lent on floating rate plus 150 bp for a term of 10 years, of which 7 are remaining. Future payments are discounted back at the yield for 7-year treasuries to achieve the repayment amount, meaning effectively that the principal plus 7 years worth of 150bp are discounted back. This increased the cash amount repaid to 110% of the original principal.

8 Commercial paper

Commercial paper (CP) is fundamentally different to what we have seen so far. It is short term, mostly up to around three months, and it is uncommitted in that there is no certainty that funds can be raised on a particular day, at any price. The CP market is, however, so enormous, liquid and competitive that it is common for funds to be raised 'sub LIBOR'. It is this cost feature which is the driving force behind the value of CP.

Accessing the market

Only consider using commercial paper if you have a good recognisable name, a strong (very strong) credit rating and you can cope with the possible illiquidity. It has been standard practice for many years that to get a strong enough rating to enter the CP markets, a borrower needs committed back up bank lines ('swingline facilities') to allow repayment of CP that cannot be rolled over. To that extent CP is just bank finance, where the bank is actually the lender of last resort and the whole mechanism is just a cost reduction exercise. Having said that, some borrowers are strong enough to raise CP without bank back-up (possibly those where the borrower rating is stronger than most banks) but such borrowers are few and far between and really big.

Dimension	Comment	Practical effects
Constraints on liquidity and volume	Except in really difficult times, the CP market (especially the US market) has remained operational. Only the top segment (A1/P1 rating) has really good liquidity.	This liquidity at sub LIBOR pricing for the really top borrowers makes CP a really useful treasury tool
For what kind of borrower / user is a source suitable	CP is for the very strongest rated, possibly single A minimum long term, and A1/P1 plus some A2/P2 short term.	Skilled dealers are also needed to run a CP book and there is a certain give and take with the market to keep the good name up.
The type of lender or investor, their approach, regulations affecting them	Investors are predominantly institutional. In the US, CP is "the home" for short term cash and "the way" to diversify away from the financial sector. Money	Sometimes there is give and take in the market to meet investor needs and keep a "clean" name. Companies need to issue regularly, and should be prepared to do so even if

Dimension	Comment	Practical effects
	Market Funds (MMF) will also be heavy investors. Some of these investors are now subject to regulation, typically Dodd Frank in the US and Solvency 2 elsewhere, especially MMFs as part of the "shadow banking sector".	the price isn't the 'best' or if they don't really need the funds. Regulation is new to investors and the effects may well take time to play through.
Cost and the related issues of the risk and return trade-off	Issuance cost is low, and even up front cost is relatively low, being absorbed in the cost of the rating needed (and the capital structure needed to support the rating). The cost advantage is set off by the uncommitted nature of the market.	The process does need bank intermediaries ('dealers') although this can be useful ancillary business.
Control and covenants / documentation	Documentation is almost non-existent but the bank back up lines will have the same issues as for bank finance.	This is what makes CP bank finance in the end
Secondary market considerations and investor / bank relations	There is substantial secondary trading of CP and it can be traded by the issuer - this is all part of the push and shove of the market.	Once again, investor relations is important. In the CP market a regular presence is part of the investor relations message.
Any commitment to lend, underwriting possibilities and confidentiality	CP is not capable of being underwritten (although issuance is likely supported by a bank back up line) and is not confidential.	Swingline facilities tend to be a proportion of the total CP issuance permitted. So if the market collapses completely, relying just on the standby lines will not be enough.
The parties involved in an issue	After initial straightforward set up, only the bank dealer.	Issuance is a simple, quick process in this sector, limited only by payment cutoffs.

Dimension	Comment	Practical effects
The ability to repay	Because CP is short term, this is not really an issue.	If need be CP can just be repurchased in the market (at its current market value)
Other	Most liquidity is in USD and the euro	

Example 9: Costing of commercial paper
Friday Markets Inc operates a range of supermarkets in the US and is rated A+, long term and A1/P1 short term, giving it access to the very liquid CP market. To maintain the rating, however, FM must maintain a back up bank facility with a swing line component to fund CP should there be illiquidity in the market.
The bank facility costs 15bp per annum in commitment fees and FM can raise funds in the CP market at around LIBOR less 10bp. FM can thus raise funds at LIBOR plus 5bp, assuming that it borrows the full amount of the swingline facility.
Note that the increasing pressure on bank liquidity is likely to make this sort of bank facility more expensive.

Example 10: Shell plc
Shell is AA and A1/P1 rated and is a heavy issuer of Commercial paper. It does not, however, fully back up its CP issuance with dedicated swingline facilities. This is accepted by rating agencies as long as a certain coverage is maintained.

9 Asset finance, including leasing

Asset finance is of course, the financing of an individual asset with an individual piece of finance. Classic examples include:

- Transport assets, notably cars, aircraft and trains as well as ships
- Property, often following a sale and leaseback e.g. as part of a ‘prop co’ type transaction
- Productive machinery, such as manufacturing machines

Asset finance in any significant volume is usually restricted to businesses which are asset heavy, such as transport, manufacturing or property firms. It is normal when looking at an airline’s finances, for example, to see that the vast majority of its aircraft are leased rather than owned. Much of the approach in these firms therefore becomes quite technical and beyond what is intended to be achieved here. For example, aircraft leases can be ‘wet’ (i.e. aircraft, complete crew, maintenance and insurance - ACMI) or ‘dry’ (just the base machine) and for many different lengths. It is now commonplace to provide motor vehicles in most firms under operating leases which have become almost commoditised.

In other businesses, asset finance can be used to oil the wheels of trade in a firm but it cannot usually finance an acquisition, research and development, or the opening of a new office

somewhere in the world[3]. Within the elements of the trade however, it can be a powerful source of finance, the driving points of choosing asset finance usually being:

- Tax, if the owner (lessor) can pass on a tax advantage that is different between the lessor and lessee (asset user)
- Availability, frequently asset finance is available when bank finance is not
- Ease of use, finance can often be arranged by the supplier
- Cash flow, allowing the asset to be paid for out of its earnings stream

There are two fundamental types of leasing, classified by accounting standards:

- Finance Leasing
    - Economically, a loan secured on an asset
    - Asset and liability accounted for in the books of the lessee
    - Cash cost to lessee split between repayment of loan and finance charge to expenses
    - Loan amount (present value of loan payments) substantially the same as the cost of the asset (>=90%, usually 100%)
    - Loan substantially repays the full value of the asset to the lessor
    - Pricing may have tax advantages
    - Often available when bank borrowing is not

- Operating leasing
    - An asset is hired to the lessee
    - Asset and liability accounted for in the books of the lessor
    - Cash cost to lessee is rental through trading profit
    - Rental is finance based, but PV of rentals is < the asset cost
    - Loan term < asset life
    - Loan repays a fraction of the full value of the asset – the residual value stays with the lessor
    - The lessee is effectively hiring the lessor's balance sheet
    - Rating agencies capitalise future committed rental payments as debt (as will accounting standards in due course)

As accounting standards change (IFRS 16 is now published and will take effect over the coming years) then this accounting distinction will lapse and products will probably change accordingly.

Dimension	Comment	Practical effects

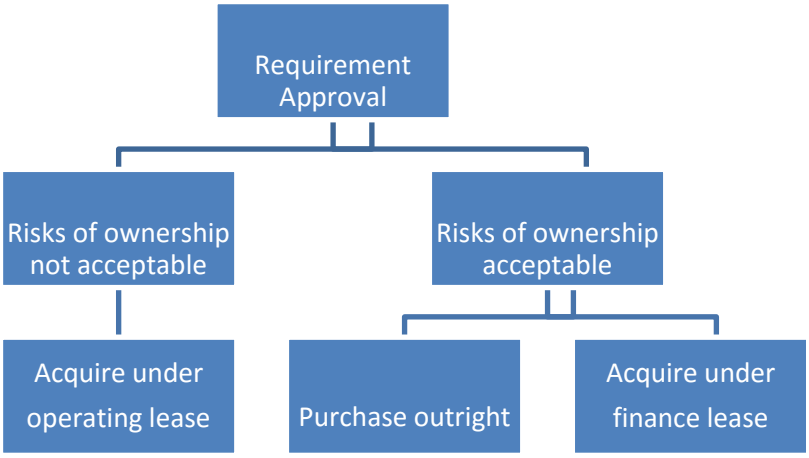
[3] However these items could be funded by secured lending, where security is taken over a basket of assets. This is not asset finance as such, but has similar characteristics.

Constraints on liquidity and volume	Asset finance is usually very liquid and a deal can always be done. The credit status of the lessor is usually important, but the quality of the assets is paramount	This can make asset finance a very useful tool in the toolkit
For what kind of borrower / user is a source suitable	Natural in some industries but for some assets, any borrower can use asset finance	A certain credit status is needed as the borrower (lessee / asset user) must maintain the asset and some assets (e.g. cars) fall in value below the financed amount during the lease term
The type of lender or investor, their approach, regulations affecting them	For some assets, e.g. transport assets, there are specialist lessors, and for property there are specialist landlords, otherwise this is run by generalist financial service sector firms such as GE Capital	Major users will get to know their lessors as general corporates know their banks. Regulations may well come to affect them.
Cost and the related issues of the risk and return trade-off	There is competition in these markets, so the price is generally competitive. Where the lessor takes ownership risk (as with an operating lease) this cost must be passed on.	In theory the cheapest way to source an asset is direct ownership and any involvement of third parties (the leasing industry) will raise costs. Some treasurers will object to leasing in principle on those grounds alone. Operating leases may provide benefits such as flexibility, servicing, upgrades etc. Contractors often hire in plant for a particular job; forklift trucks are routinely on operating leases, and the whole operating lease concept can be quite close to outsourcing – especially in the IT sector.
Dimension	**Comment**	**Practical effects**

Control and covenants / documentation	There is fairly substantial control over the use of the asset in leasing, but not of the borrower generally, although some control (e.g. in comfort letters) may have to be surrendered.	
Secondary market considerations and investor / bank relations	There is a small secondary market in leasing. Major lessees in specialised areas must treat lessors as banks and manage the relationship	Lessors are investors like any other, and maintaining relationships is just as important as elsewhere.
Any commitment to lend, underwriting possibilities and confidentiality	Asset finance is generally uncommitted until drawn and has few events of default, but specialised leases may be more complex	There is no guarantee that asset finance will be there to buy that ordered aircraft / ship / train etc
The parties involved in an issue	Asset finance is usually relatively easy to arrange, although the major ones can be complex	
The ability to repay	It is not that easy to repay because of tax and ownership complications	Usually the asset is returned, but that might attract penalties

A traditional question in finance has been “lease or buy” when considering the acquisition of an asset. That question is worked more properly in Exhibit 3 and is a useful guide.

Exhibit 3: Lease decisions



Example 11: Lease or buy
Gullible plc has a subsidiary which requires a key component for its computer architecture. Computer equipment has significant end of life costs such as data erasure and certification and hardware disposal, and Gullible would prefer not to own such equipment. The component is expected to be in place for at least three years and is disruptive to replace physically. Local subsidiary management is considering acquiring the component by an operating lease. The operating lease, with a term of three years, has lower rentals than a finance lease. At the end of the lease, the lessor would handle the disposal process for the asset.

The treasurer advised against this operating lease because unless the subsidiary can commit to returning the component at the three year point, expensive secondary period rentals would not only eliminate cost savings, but actually cost more than outright purchase. The component is difficult to replace and it may not be possible (or desirable) to do so at the three year point. Although company policy is not to own computer equipment, in this instance the financial advantage of leasing (assumed by policy) is outweighed by the disadvantage to the business of having to return the component at a specific time. Therefore, the additional expense of buying the component is effectively the cost of the real option to replace it when necessary or convenient.

10 Supply chain finance

As with asset finance, supply chain finance can be used to oil the wheels of trade but is really limited to funding working capital. Within the elements of trade however, it can be a powerful source of finance, or act to help in some other way, such as assisting customers or suppliers in commercial ways, increasing sales for example.

Supply chain finance aims to help trading corporations get either cheaper finance or finance which would not otherwise be available.

There are three broad ways in which supply chain finance can work:

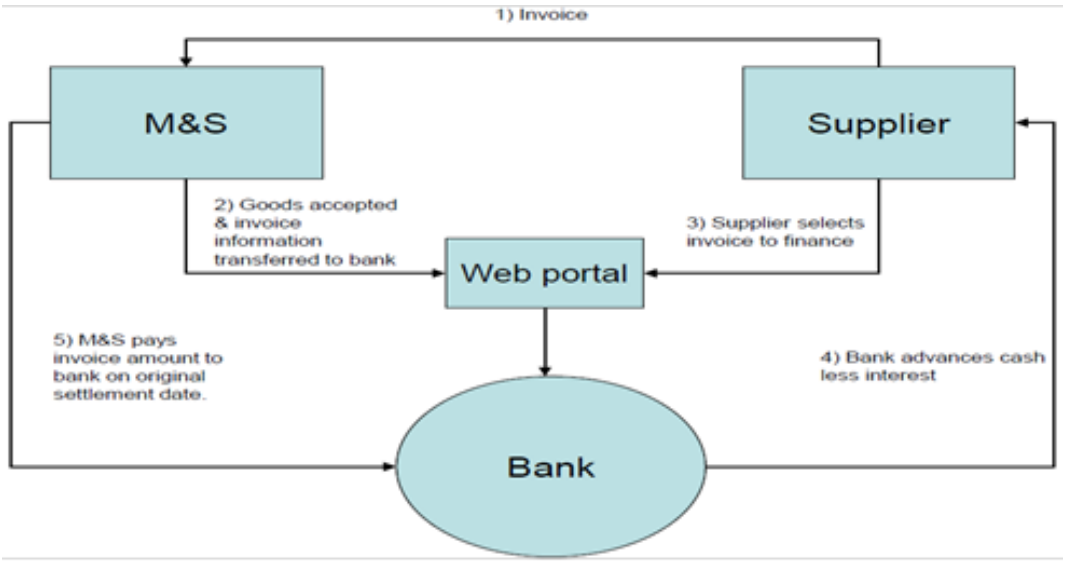
Exhibit 4: The broad mechanisms of supply chain finance

Problem	Mechanism	Comment	Practical implications
Dealing with a weak customer, the supplier has two problems. Firstly he has money tied up in receivables which the customer finds difficult to pay and secondly he suffers credit risk	The solution here is to find a lender who has money and is able to take the credit risk of the customer. Banks are usually good at this and devise products for the supplier. These can range from purchases of the	Banks are able to do this because they are essentially making secured loans, usually with a very diverse set of assets from a large customer base. This is less risky than direct lending. The product can be adapted to make	Products such as confidential invoice discounting have in the past been associated with failing firms but with the secular decline of bank lending, especially towards the SME sector, combined with poor payment record of

on the customer.	receivables (disclosed or confidential) to asset-backed commercial paper where the receivables secure public issuance.	sales easier, as for example in car loans, in the retail sector where a customer can be persuaded to buy only if they are also offered finance. This has led to the growth of e.g. GE Capital, Ford Motor Credit and so on. In this case the supplier is effectively acting as the bank.	multinational corporations, this sort of solution for suppliers is gaining ground. This is also the area where export credit agencies operate and, as many companies know, this is a vast area and has been known to spawn whole departments as the firm seeks to gain sales all over the world.
Dealing with a weak supplier, where the customer sees that their suppliers are unable to source sensible financing and the customer seeks to ensure continuity of supply from a partner that it knows and trusts.	The solution here is to use the credit strength of the customer to allow financing to enter the supply chain. This can range from paying early to arranging for a supplier to borrow money on the basis of the strong promise to pay by the customer.	This idea has led to the concept of “buyer driven receivable programmes” which can become very sophisticated. A major advance in recent years is that the bank, as well as being financier, becomes an information channel as well. Thus a buyer posts approved invoices to a website which is supplier can select to be paid early if desired.	The addition of information held by the bank as part of this process is a strong improvement and the facility can be used to better commercial relationships.
Financing inventory, particularly where inventory has a commodity element where volatility in prices can lead to significant swings in working	A solution here is simply to have the inventory owned by the bank or other lender. Some commodities where there is a ready market, such as gold, make this simple.	While perhaps limited to liquid types of inventory, there is probably more potential here. For ‘normal’ inventory concerns over retention of title – i.e. who	This is probably only available to a few companies, but consignment inventory, which has a high probability of conversion to sale, is also a candidate.

capital.		exactly owns the inventory at any particular time, reduces the amount of finance available	

Example 12: Marks & Spencer plc, buyer driven receivables programme



Marks & Spencer plc has many small suppliers, who find it difficult to raise finance, but who are important to Marks & Spencer as long-term partners in niche sectors. Marks & Spencer could of course pay the suppliers earlier but this would stress its own balance sheet. It is therefore established a buyer driven receivables programme with one bank. Invoices approved by Marks & Spencer from designated suppliers are uploaded into a bank sponsored database. These are essentially promises to pay by Marks & Spencer and now therefore easily discounted by the supplier. The supplier can choose whether to discount these or not, but if they do so,
then the interest rate will be based more on Marks & Spencer's credit status than the supplier.

Why has Marks & Spencer done this, when in fact they gain no financial advantage because they simply pay on the due date as they would have done without the arrangement? In fact the value generated for the supplier ("loan" of credit rating) provides a tool to negotiate commercial terms, so that better pricing or more bespoke products may be available from the supplier.

This kind of arrangement requires considerable co-operation between the treasurer and commercial units.

It can sometimes seem as though this kind of finance is the only kind finance available to the smaller company but it is also promoted heavily to the larger company. At many conferences banks will be pushing these products.

The addition of information as one leg of a product that has traditionally only comprised payments and finance is a welcome innovation. Treasurers have long been critical of the

banking sector for concentrating only on payments to the exclusion of the treasurer's need for information to make straight through processing a simple task. However treasurers should be aware that this adds significant value and banks will of course, like any other supplier, seek to charge for this value where they can.

11 Other sources of finance

There is insufficient space to cover the other major sources of finance in much detail but the major strategic points are important for the construction of a financial strategy so that treasurers do not emit a major source of finance. Some of these are also favourites as an exam question.

11.1 Convertibles

Convertibles are debt instruments where there is an embedded option for the instrument to be converted into equity in the issuer at a future date if the equity outperforms a particular level. They are really aimed at publicly quoted companies where the shares are easily traded. Because of pre-emption right restrictions, they can never be done in really large amounts but they are very useful nonetheless. They are popular where stock markets are liquid, predominantly Europe and North America. The embedded option may be for the company to put equity on the investor and call the bond; or for the investor to put the bond onto the company and call the equity.

A typical construction could be that the interest on the debt instrument is zero and the premium to conversion, when compared to the current share price, is around 20%. When interest rates are generally low adjustments need to be made to this. Usually when these instruments are issued, the market strips out the option so that the debt instrument is traded on the one hand and the option is traded on the other. Issuers need to be aware of how valuable options on their own stock can be and ensure that they get full value for this, as this is where the value of the trade lies.

Convertibles are often known as hybrids, because they are debt on the one hand but could become equity in the future.

11.2 Subordinated debt

In a conventionally financed company, most of the debt sits pari passu (i.e. the rights of all lenders are equal) at the parent level or is guaranteed by the parent if sitting at a subsidiary level. A key desire of lenders is to ensure that all such debt remains pari passu as one thing they fear is that a subsequent lender could be in a better position than them. However, a deliberate approach to issue subordinated debt (where that lender's rights come after those of the 'senior' lenders) has been popular in recent years, mainly as a way to support a particular credit rating but also to raise significant levels of financing.

To a senior lender, subordinated debt is effectively equity, and therefore the senior lender's own position is strengthened although subordinated debt holders cannot totally be ignored in a liquidation. Therefore, the credit rating of a senior lender can be enhanced. Conversely, for a subordinated lender there is a chance to earn higher coupons to compensate for the extra risk.

11.3 Mezzanine debt

Mezzanine debt is a form of subordinated debt, normally ranking just ahead of equity and behind other simpler forms of subordinated debt. Typical features of this debt include higher coupons and equity participation, or PIK (Payment in Kind) features. Mezzanine debt is usually part of a structured financing such as a private equity transaction or other highly geared structures such as project finance or infrastructure debt.

11.4 Islamic finance

Islamic finance remains a niche but growing part of the financing toolkit for many corporations. While not mainstream in the West it is important for several different reasons.

User	Comment
Subsidiaries of multinational corporations based in Islamic states	A subsidiary (or a branch) of multinational corporations, if funded locally, may use this
Corporations based in Islamic states	Naturally such corporations are obvious uses
Trade finance of any corporation, especially when dealing with counterparties in Islamic states	There are many products based around trade
Parents of multinational corporations	This will give access to lenders from Islamic countries and provide an additional source of finance

12 Non-lending uses of credit

This reading has been devoted to sources of finance, i.e. cash advances. However, there are many other products that almost all corporations use, typically sourced from banks and requiring credit status, but which are not physical lending. A possible full list of products and the risks to which the bank is exposed – i.e. the credit the bank must allocate includes:

- Foreign exchange derivatives
  - market risk
  - settlement risk
- Interest rate relatives
  - market risk
  - settlement risk
- Commodity derivatives
  - market risk
  - settlement risk
- Daylight risk on Treasury settlements
- Daylight risk on all routine payments
- Settlement risk on credit card sales (‘chargebacks’)
- Refund risk on credit card sales (consumer right for refunds)
- Trade letters of credit

- Standby letters of credit
- Bank guarantees

The financial strategy must take into account the needs of the corporation with regard to all these products, and the treasurer must be aware that bank credit is an increasingly scarce resource, with an increasing price. Consequently, companies need to budget for and optimise their bank credit, and can no longer assume that capacity is available.

Example 13: Standby letters of credit for insurance
Monday Blues SA operates a "captive" insurance company to achieve economies on its need for insurance underwriting and offers much legally required insurance through the captive. Monday Blues has to front this insurance through a regulated insurance company which therefore takes deductible risk on Monday Blues. Accordingly, Monday Blues provides standby letters of credit to several insurance companies which front this insurance. The nature of insurance means that the letters of credit must remain in place for several years following expiry of the insurance, even if the insurance provider changes. These letters of credit become a core part of the financial structure of Monday Blues and require committed finance (or cash backing) to provide. (The treasurer's hair has gone grey and is now starting to fall out)

Example 14: Surety bonds
Tuesday Tantrums Inc (TT) builds and operates infrastructure projects in the US. Its customers are required by law to seek security so that, should TT fail, there are funds available to continue the build or operate stage of the project. US banks cannot offer guarantees and so this market is occupied by insurance companies offering surety bonds, which work in a roughly similar way. Because the credit of TT is relatively weak, the
insurance companies insist on standby letter of credit support for part of the relevant facilities. These letters of credit become a core part of the financial structure of TT and require committed finance (or cash collateral) to back them.

Example 15: Credit card sales
Glorious Grocers (GG) sells organic produce to consumers. Of monthly sales of $100,000, 60% are credit card sales, and Card Scheme Regulations allow customers to charge back at any time until 120 days after purchase.

If a chargeback succeeds, GG must repay the customer and its card acquiring bank (i.e. the bank providing GG's ability to make sales to credit card customers) will claim the funds from GG's bank account. If GG is unable to pay, then the card acquiring bank will suffer the loss.

The maximum exposure of the bank is 60% of (say) 4 months' sales, i.e. $240,000. The card acquiring bank will use e.g. VaR techniques and its knowledge of GG to set a limit. The card acquiring bank will closely monitor the actual rate of chargebacks, and if they become excessive may have to withdraw its card acquiring facility.

With the exception of letters of credit and bank guarantees, treasurers have been used to having these facilities at an effective very low cost. For example, foreign exchange transactions with many corporations are conducted at inter-bank levels. It is likely that under

Basel III that many of these facilities become very expensive for banks to operate. Some banks may well withdraw from these operations as a result, leading to treasurers having to source new facilities.

Example 16: Payment habits around daylight exposure limits
Shockia AB (SAB) operates a Payment Factory for its worldwide operations and uses one bank for the remittance of all supplier payments. For cost saving reasons it tends to group all its payments on one day per month. Its bank has been forced to tighten up on intraday liquidity and is considering either reducing daylight exposure or charging for it or both, thus exposing SAB to extra cost. SAB decides to increase the number of payment runs to avoid this, at slightly higher cost and at the expense of accurate forecasting.

As with all uses of capital, a financial strategy needs to take into account the real value contribution from all products sourced from the financial services sector.