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Although great care has been taken to prepare these notes there may be errors and omissions. These notes are no substitute for attending lectures and scrutinizing the suggested and required readings. Enjoy.

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Introduction

What are the uses of capital? Capital is anything that you use in your business to create money. There are various forms of capital – inventory, employees, etc.,

Liquidity is how quickly a form of capital can be turned into cash. For instance, public shares in a company doing well are quite liquid. Price may be an issue and while the two terms are connected they ought to be divorced – separate the two terms. Real estate may be liquid, but depends upon geography and demand – how quickly can it be turned into capital? Thus, some investments are liquid and some are not.

Uses of Capital

What are the primary uses of capital by a business?

1. General Operations – Use of capital for general operations – in the example of a donut shop you might consider the pre-mix, sugar, wages etc.;
2. Investments – Use of capital for an investment – an investment is not consumed immediately but is intended to extend for a period of time to be used to generate more revenue;
3. Refinancing – Use of capital to refinance – money can be used in order to take advantage of a better deal. For instance, a credit card debt at 29% can be refinanced if you can find a lender willing to advance the necessary funds at a lower rate

Always keep in mind that there are different uses of capital each with particularly relevant considerations.

Purpose of Corporate Finance

There is no such thing as ‘money’ on its own – money is simply the concept of a bunch of dollars attached to a number of rights and obligations. Money has with it certain criteria – money differs based on the trade-offs required to get it. Money must be considered in light of all the options and constraints that you have and make a decisions based on what is best for the particular user. From the provider and user of capital’s perspective the important question to ask: which money most meets my needs?

The key to corporate finance is to raise the ‘right’ capital
The ‘right’ capital is that money, out of available options, with those conditions best suited to meet capital user’s/provider’s primary needs

Consider potential options on the provision of \$5,000 – which bucket of money would you go for?

Time of Repayment	Equal monthly payments	Lump Sum in One Year
Interest	7%	25%
Other	N/A	Security in a Bond

The user and provider have a number of options and restraints, which will affect what is available. Money is not free, all money is different – which money best fits the user? What is the right capital to be used in a particular situation?

The cheapest financing generally available is the commercial paper market – the problem is that it is over a very short period of time. The provider will only allow a rollover scheme if it has the confidence in you to be able to repay.

Cross-default provision – if you fail on one provision you will be deemed to have defaulted on all others.

Primary Objectives

The capital provider has certain fundamental objectives:

1. 'Certainty' of Return – how likely is the provider going to get a return?
2. Maximized Return – how much will the provider get back?
3. Security of Investment – how likely is it that the provider will ever see his/her money again?

The capital user has particular fundamental objectives:

1. Minimize Cost – the user does not want to pay any more than is required;
2. 'Certainty' of Meeting Obligations – terms ought not be so onerous that they cannot be met; and,
3. Minimizing Operational Restrictions

The practice of corporate finance requires an understanding of basic accounting and financial concepts along with an understanding of the relationship between different types of financial statements.

Measurement

The financial statements of the company are the roadmaps the company uses in order to determine whether it will be able to meet future obligations as they come due – both the user of the capital and the user are going to look at the user's financial statements as the roadmap.

The financial statement is a roadmap by which to analyze the ability to take on additional capital

There are two types of financial statements:

1. Audited; and,
2. Unaudited

The primary job of an accountant is to audit financial statements. The audited financial statements is one where an accountant has reviewed all relevant documents and certifies that the financial statements were prepared in accordance with the generally accepted accounting principles (GAAP). Any public company must have an audited financial statement.

Methods of Measurement (Cash v. Accrual)

There are two basic types of accounting:

1. *Cash* – “If the dollar don't come in or leave the till, it never happened.” Income/expenses/revenue are recognized when cash is actually received or spent. You will have a charge against income the very time it happens. The problem with this method is that it does not provide a fair picture of what is going on.
2. *Accrual* – revenues are recognized when a legal obligation is in place. Expenses are recognized when a legal obligation is in place, but also takes into consideration issues of depreciation and amortization. Expenses include:
 - a. Expenses incurred before payment made
 - b. Certain non-cash expenses
 - c. Depreciation
 - d. Amortization

Consider that a \$600 account receivable comes in to be paid in one month's time. A \$400 cash register is purchased in cash. \$200 is paid in wages.

On a cash basis:

Revenue - \$0
Expenses - \$600
Net Income – (\$600)

On an accrual basis:

Revenue - \$600 (account receivable)
Expenses - \$200 (wages) + \$40 (Full cost of cash register depreciated over 10 years)
Net Income – (\$360)

Simply because cash comes in the door and leaves at a certain moment, it does not mean that that is the moment you recognize it. The time is when the legal obligations are created. However, if there is a creation of an asset with an asset beyond the financial statement's timeframe it may be expensed over time (depreciated). Accrual accounting recognizes when legal obligations arise and how long particular assets arise – there is a timing difference.

To the extent that there are timing differences, how you manipulate those will affect hugely the amount of net income you have and, by extension, the amount of tax that you have to pay. Businesses today are recognized on the basis of accrual accounting.

Financial Statements

There are four primary financial statements:

1. *Income Statement* – history over stated period of earning performance. This statement sets out all the revenues against the expenses; deducting one from the other yields the net income. This has been expressed as the ‘earnings performance’ of a business;
2. *Balance Sheet* – a snapshot of all the assets purchased by a business. Thus, as of the date of the balance sheet the balance sheet shows all the assets ever purchased by the business that are still in its possession or control as well as an indication of where the money came from to purchase such assets (debt or equity);
3. *Statement of Changes in Financial Position* (Cash-Flow Statement) – converts earnings from income statement to cash history by removing non-cash transactions. Sets out all the cash-in and all the cash-out and the difference; and,
4. *Statement of Retained Earnings* – sets fourth the cumulative earnings of the business that was retained by the business and not paid out to shareholders

Cash is king! A business can be losing money, but as long as it still has cash it is still in business. Businesses want to know where its cash is and how much it has got. Without the money everything stops.

I. The Income Statement

The income statement is prepared in accordance with GAAP (generally accepted accounting principles). The intent is to enable the readers of financial statements to compare one company to another on the basis of the financial statements. This assumes that the statements have been audited. An audited statement is one that has been reviewed by a registered accountant who has done the relevant due diligence under the circumstances. The accountant then affirms that the statements accurately reflect the status of the company. Public companies are obliged by securities laws to prepare and circulate audited financial statements.

A principle of fundamental importance is that of ‘matching’. Matching requires that in respect of every dollar worth of revenue accounted for in a given period is equal to all the expenses used to generate that revenue in that particular period. The concept of matching comes into play through the notion of ‘depreciation’.

Depreciation

Suppose a Tim Horton’s franchise generates \$400 million revenue. In order to run the business they have particular expenses: wages, supplies, equipment etc., A number of the expenses will be used in the year, while a number of others will not (chairs, equipment, mixer, register etc.,).

Suppose a mixer costs \$20,000. The mixer will assist the franchise in generating revenue far beyond the one year. For instance, the mixer may last for ten years. Thus, accounting would not find it appropriate to reduce the accounting income by \$20,000 because that mixer will generate income for a period greater than that one year. Accounting rules have allowed for a number of optional formulas: the most common being straight line depreciation. Being a ten-year asset, for accounting purposes the franchise will write off only 10% of the cost of the mixer and apply this against the income. In other words, a deduction of \$2,000 will be made each year for 10 years.

It should be self-evident that what you are earning from an accounting net income position and a cash position are going to be radically different. Conceptually, the supplier wants the \$20,000 up front. The

franchise is actually \$20,000 cash poorer, but from an income statement position the franchise is only \$2,000 cash poorer. One of the primary reasons why a company's cash position is different from their net income position is the difference in accounting on long-term revenue generating expenditures.

It is quite possible that a company has a cash-flow problem, but from an income-statement point of view it is doing very well. The problem, however, is that without cash you are dead. The goal of corporate finance is to manage the cash flow and expenses. Income and cash is radically different – there are a number of other accounting differences that will drive that difference further.

Amortization

Amortization deals with intellectual property and intangible assets. A portion of the value of the asset may be written off over time, but the value will be reduced in proportion to the previous write-off.

Expense Allocations

The income statement will have two general categories: revenue and expenses. Each of these categories are likely to be broken down into further categories. Expenses are categorized because each category will tell you certain things.

Gross Profit

Expenses are firstly broken down into cost of goods sold (COGS). Revenue less COGS results in the gross profit. Gross profit is relevant to lenders because a lender will want to know how efficient a particular business is. Similar businesses may be differentiated with reference to a gross profit comparison based on the percentage of revenue required to sell the good.

EBITDA – Earnings before interest, taxes, depreciation, and amortization.

Anything that you are spending money on as part of the business, but not directly related to the creation of the product, is overhead. These expenses likely include administrative costs. Analysts will compare the totality of those administrative expenses as a percentage of total revenue as against other similar companies. Once analysts deduct cost of goods sold and administrative expenses from revenue they are left with EBITDA – Earnings before interest/taxes/depreciation/amortization. EBITDA is relevant because that number will resemble reasonably closely how much cash the business is generating. The expenses after interest, taxes, depreciation, and amortization will result in the massive fluctuations. Because cash is significant to survival, analysts will want to see this figure.

EBIT – Earnings Before Interest and Taxes

EBIT – earnings before interest and taxes. This will tell you the operational status of the business: are you making or losing money? Fundamentally, is the money making money based on its operations? Interest and taxes are not operational and are, therefore, excluded. These are items that can vary. Does the business make money accounting wise?

Net Income (pre-tax and after tax)

Net income is generally considered to be pre-tax. Since businesses pay taxes you will then apply the relevant tax rate and deduct that figure from the pre-tax net income.

II. The Balance Sheet

The purpose of the balance sheet is to indicate where a particular company put its money on the asset side and also where it got the money to finance those assets. In a balance sheet, assets will always equal liabilities and shareholder's equity. In other words, where you got money and where you put money.

The left side of the balance sheet divides assets into two categories: current and long-term. The two most common current assets are cash reserves and account receivables. Long-term assets will likely include equipment, buildings, and furniture (anything that will last for a period longer than one year). You will see in a balance sheet the listing of an asset or class of assets based on the amount of money paid for the assets less the amount of depreciation that has been written off up until the date of the statement (depreciation is deducted from the book value of the asset).

The right side of the balance sheet divides liabilities into debt and equities. Debt is generally broken down into current and long-term liabilities. The most common current liability is an account payable. Shareholder's equity is divided into two areas – shares and retained earnings.

The balance sheet is relevant for a number of analytical reasons. Particularly in measuring return or how efficient a business is in turning its raised capital into new earnings so that it can be compared to other businesses. There are a number of ratios that are analyzed, each of which focuses on a different piece of the balance sheet. Measuring revenue against liabilities, shareholder's equity, earnings, assets, etc. generally makes the relation. The more successful you are the more the market will reward you (public company) or that will be taken away as cash (private company).

The balance sheet is important in determining how efficiently have you converted the money you have made into profits. Also, the balance sheet is a good indicator to provide a measure of risk. One of the key indices in understanding risk is the debt equity ratio

D:E Ratio (Debt:Equity Ratio)

The debt equity ratio takes the company's long-term debt relative to the companies common share capital. How much debt does the company have relative to its equity? Suppose a debt:equity ratio is \$4:2. In other words, the shareholders have injected \$2 while lenders have provided \$4. If the number one concern of a person is the safety of the money about to be invested, you would rather have a lower debt:equity ratio. A company with a higher debt than equity is risky because a debt is riskier than equity. If you default on debt then the lender can foreclose, this risk does not exist with equity. A company with a high debt:equity ratio is likely riskier than one with a low debt:equity ratio.

One of the fundamental differences between debt and equity is that when default occurs it is the shareholder's equity that remains to satisfy the creditors of their debt. In other words, the equity is a cushion for the lenders if default were to occur. Debt:Equity is a quick snapshot that provides a risk measurement.

Leverage

The flip side of a debt:equity ratio that is high (nominally risky) is that with the high risk comes a greater potential instance of full return (leverage).

ROC = 25% ¹	<i>Revenue</i>	Option One	Option Two
2 Finance Choices 1) Borrow \$500 @ 10% 2) Common Shares – 500 @ \$50/share	Raising \$500 will generate \$125 EBIT	EBIT – \$125 Interest – \$50 Pre-Tax Income – \$75	EBIT - \$125 Interest – Nil Pre-Tax Income – \$125
	Shareholder Return ² (Earnings Per Share – EPS)	\$75	\$11.30

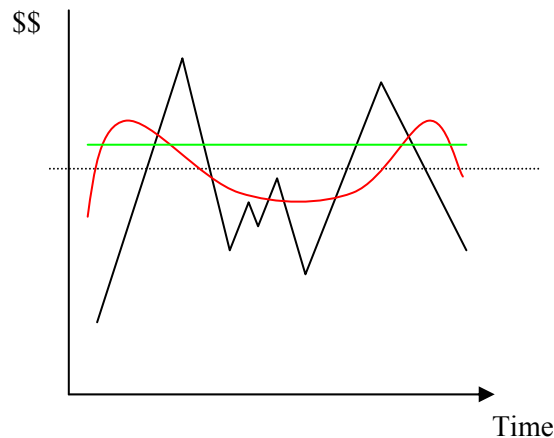
Where you get your money and how it impacts on earnings per share will differ radically. The higher the debt, the higher the leverage, which results in a higher EPS. Where the earnings potential is high, the risk potential is likely to be equally as high.

¹ ROC – Return on Capital – EBIT is 25 cents on the dollar

² Shareholder return is measured in terms of “Earnings Per Share” – the amount of EBIT divided by the number of shares.

Types of Capital

There are fundamentally two types of capital: debt or equity. Capital is either public or private. Thus, every form of capital referred to is either debt or equity and either publicly or privately raised. These characteristics drive a slew of consequences. The purpose of corporate finance is to raise the right type of capital.



How do you finance these three companies?

Note: capital is not just the money, but all the rights and obligations that come with it.

The basket of rights and obligations must be analyzed. The strategic issues with borrowing money is whether the company will be able to meet the obligations that come with the capital in light of the traditional performance of the company

Company 1 Company 2 Company 3

Primary Characteristics

The primary characteristic of capital is whether it is debt or equity or whether it is publicly or privately raised. There are tax rules that may treat something differently for accounting or legal purposes.

I. Debt or Equity

Debt has some characteristics that are quite different from equity:

1. Rights and obligations are by contract – whatever the debtor and creditor agree to;
2. The principal will be returned – debt gets repaid and is not permanent capital;
3. ‘Fixed’ Return – there will be a return to the creditor (usually interest) the terms of which can be negotiated; and,
4. Equity supports debt – when default occurs all of the assets of the business exist so that debt holders may be repaid before the shareholder gets any money. A shareholder will get nothing unless the debt holder is fully satisfied; and,
5. No guaranteed return – if there is default and not enough assets, then the lender will not fully recover; and,
6. Tax impact – the provider of debt capital earns interest. Interest is deductible for tax and accounting purposes. The recipient of interest is taxed at the normal tax rates.

Equity, on the other hand, has the following characteristics:

1. Rights – rights as a shareholder are statutory and by the shareholder’s agreement. Every common share is to be treated the same;
2. Equity supports debt – if there is a default and bankruptcy, the shareholder gets nothing;
3. Permanent equity – when you invest into share capital you will hold it *ad infinitum*;
4. Unlimited return – there is no cap when it comes to payment of a dividend;
5. Tax impact – A payout of dividends reduces retained earnings (not a deductible expense) and taxed at favorable rates for the recipient. Tax rates are much less on dividends.

There are various types of debt:

1. Bank loans
2. Capital Leases
3. Debentures and Bonds

There are various types of Equity:

1. Common Share
2. Special Shares
3. Partnership or Other Like Interests

Every corporation has to issue at least one class of shares: common shares. Every share in a class must have the same rights. Further to this, a company has the ability to create other shares and give those shares any provision it wants (can provide for interest rates, buy-backs, etc.). These special shares look quite a lot like debt.

Leverage

Leverage is a key financial concept. The concept is generally expressed by the debt/equity ratio – the amount of long-term debt against the equity. The ratio demonstrates, in relative terms, whether the assets purchased from the business have been financed by way of debt or by way of equity.

A key question to ask when looking at assets: of the money raised to pay for assets, how much was raised by debt and how much by equity? You can only compare and properly assess leverage when you have other similar peers to compare with.

Assessing Leverage

In general, a corporation is highly leveraged whenever the debt/equity ratio exceeds 3.5:1. However, this generality cannot be qualified unless you have a target peer corporation to compare the numbers with. Also, you have to consider the type of corporation that is being dealt with – the business might be one that generates a lot of cash. If a highly leveraged corporation does generate a lot of cash, the shareholders will reap huge rewards. If the business cannot continue to generate high amounts of cash, then it is likely the corporation will go insolvent.

Consider a 5:1 debt/equity ratio – this would generally be in a growth area of the economy. For every \$1,000 of earnings, there are few shareholders to share the profits with. In a 1:1 relation, the corporation is likely going to be much more secure (less risk of not meeting the principal and interest payments). If the corporation is consistently making money, it is likely going to share it with a large pool of people. The question: can this business sustain a bit more borrowing? The extra earnings generated by the extra borrowing would be distributed to the shareholders after the principal and interest is paid off.

In this regard, has the business made maximum earnings? The business might be better off by raising a bit more through the bank, opposed to shareholders, in order to maximize the returns to the shareholders. The goal is to make the most money that you can on any particular investment relative to the risk involved. The theory is that the corporation would rather pay the bank than have more shareholders in order to maximize the ability to make earnings for the shareholders.

Consider the following example. Jon speculates that the shares in a particular company will increase by \$10 within the month. The shares are currently \$100 per share and he wishes to raise money for 1,000 shares. Jon has the following options:

Option	Finances	Repayment	\$10,000 Gain	\$10,000 Loss
Borrow from Bank	\$100,000 bank	6% annual interest	\$9,500 Profit	\$10,500 Liability
Team of 4	\$25,000 each	1/4 th Yield	\$2,500 Profit	\$2,500 Liability

Every type of financing is debt or equity and either public or private.

Public/Private Capital

Public Trade

A ‘security’ is generally a right expressed on a piece of paper that gives the holder a claim in the assets or future earnings of a corporation. There are a number of types of securities and they are either debt or equity securities. Every trade of a security that amounts to a distribution will be subject to the *OSA*. There are a number of rules set out in the *OSA* requiring the following:

1. *Prospectus* – a prospectus is a specialized, highly-regulated document that provides information about the business, the business performance, the business plan, risk factors that are particular to the nature of the business, and the nature of the security (elements of the rights that go along with the security). The preparation of the prospectus involves the issuers, advisors, underwriters, lawyers, and accountants who try to uncover the right way of telling the story of a business’ future prospects in a fashion that complies with the regulations and rules. In addition to these detailed requirements, there is a general catch-all that provides that full, true and plain disclosure of all material facts must be made. A first draft (preliminary prospectus) is filed with the Securities Commission who will critique the report and demand a re-write on particular parts. Once satisfied the Commission will certify the prospectus.;
2. *Full, True and Plain Disclosure* – an issuer must provide full, true and plain disclosure of all the material facts of the corporation. The question: would a reasonable person be misled by the representation? If the fact is relevant to the business then it must be disclosed. The important question is where the line is drawn and how it is phrased – how do you give proper disclosure with minimal damage? A reputable business will want to provide the disclosure it should, but the financial interests will want to minimize any potential damage. Good counsel will have the experience, background, and knowledge to best characterize certain material facts;

Once the prospectus is complete a corporation may proceed to sell the particular shares listed. For instance, if the prospectus lists 2,000,000 common shares, the corporation may sell only 2,000,000 common shares. If the corporation decides that it wishes to sell another 1,000,000 shares, the corporation must go through the entire process again. A prospectus will only qualify the particular securities that it lists. In a public offering, the sale of any securities that have been qualified by a prospectus means that anyone who purchases the security can freely trade it at anytime without restriction – the public security is freely tradeable.

In order to have created and distributed a ‘public’ security, the issuer will have had to go through this entire song and dance. Every security has to be qualified if it is to be sold in Ontario unless, pursuant to the *OSA* or its regulations, there is an exemption available. There are a number of exemptions, which speak to certain types of security, certain types of issuers, and certain types of buyers.

Thus, if the security is exempt, the security will have been issued pursuant to an ‘exempt trade’. Depending on the type of exempt trade, the *OSA* has certain requirements (offering memorandum being a common requirement).

Private Trade

A trade of security that is exempt is considered to be a private trade (private placement). If you have issued pursuant to an exempt trade, you will be considered to be within the 'closed system'. A security issued in the closed system is not freely tradeable. If you purchase an exempt trade security you can only subsequently sell it pursuant to an exemption. In other words, a private placement security may only be sold if an exemption exists.

One of the most common exemptions is security in a private company. A private company is a company that has 50 or less shareholders, excluding employees or former employees, where there is some restriction in the constituting documents that restrict the sale of the shares. The constituting documents will usually provide that shares may not be sold to the public.

Private companies cannot advertise the sale of shares – the private company is not allowed to offer its shares for sale to the public. The term 'for sale to the public' has not been defined and is the subject of much litigation.

If a particular company issues shares to an individual that s/he buys pursuant to an exemption, that individual is in a closed system and will not be able to sell them unless s/he meets the requirements under the *OSA*.

Private or Public?

A public share is generally more liquid than a private share – liquidity equals value. One of the value hallmarks of a security is its liquidity. In the private versus public debate, the public share has more value than the private share.

If a public share is worth \$10, then a private share will be worth less because it is less liquid. For instance, consider a corporation looking to raise \$100 million. The corporation will have to sell 1,000,000 public shares at \$100 or, likely, 1,250,000 shares at \$80 in order to reach the \$100 million. In other words, in a private situation the corporation will have to sell more of its company to raise \$100 million than in a public.

However, there are much less administrative and procedural blocks to the private trade. The private trade is also much quicker than the public trade. Another advantage of the private trade is the opportunity to structure the corporation's finances in order to meet capital demands. The private transaction better lends itself out to a high degree of tailoring and structuring.

The public system might appear to cost more, but once a particular threshold is met than the per share cost is much less. On a per unit basis, the private trade is typically much more expensive.

Financing Alternatives

There are three general financing alternatives:

1. The Classics;
2. Growth Alternatives; and,
3. Specialty

The Classics

Debt and equity are key concepts in terms of financing. Another key concept is *term*. In finance terms there are four general terms:

1. Short-term – one year or less;
2. Mid-term – between one and three years and up to five;
3. Long-term – more than five years; and,
4. Permanent – there is no *obligation* to buy back (all equity capital is permanent financing)

All corporations will generally have equity and debt financing. The following is the basic picture of most major business:

Equity	Debt
Common Shares Special/Preferred Shares (For Estate Planning and less common in larger corporations)	Short-Term Debt – trade payables; bank operating line Long-Term Debt – loans; shareholder loans; bank term debt

Long-Term Debt

Amortization – how long do you want to pay the principal back? The length of time agreed to pay the loan off nominally.

Term – how long do you want this deal for?

Mortgage Options

Based on \$550,000

Option	Term	Amortization	Interest	POI/Yr	O/S Balance End
1	2	15	5%	52,000	520,000
2	2	25	5%	38,000	538,000
3	5	15	8%	63,000	433,000
4	5	25	8%	51,000	507,000

POI/Yr – Principal & Interest

O/S – Principal Outstanding at the End of Term

We reviewed how different amortizations and term periods will affect the options. With a low interest rate and savings you are able to take the risk of future high interest rates. However, if there is a low interest rate you would likely want to take the opportunity to pay down the debt.

The term that is chosen will generally drive the amount of interest charged on the principal. The longer the period then the greater the interest rate. The bank is taking an inflation risk by lending money over

the long term. Recall, there is no benefit without a commensurate detriment. In a term loan, whatever you have agreed to then that is it.

Recall: All money comes with certain rights and obligations – the key is to find the right money for the right situation.

Any business is going to borrow on a long-term basis only for a long-term asset. In long-term debt, provided the individual does not break any of the covenants, the lender cannot bother him/her. In interest rate on long-term debt is typically fixed.³ If, however, an event of default occurs the lender can demand repayment to be accelerated.

Long-term debt is invariably found within all business and is used to finance large capital purchases. In a small business the long-term debt may exist on the land and buildings.

Operating Line versus Capital Debt

What is the difference between an operating loan and the long-term capital debt?

Capital Debt

A long-term debt has certain specific uses and characteristics:

1. It is typically used for the purchase or financing of capital assets – because of the size of the debt relative to other expenses, persons typically engage in long term debt financing for certainty;
2. Bank cannot demand payment unless some event of default occurs;
3. Security – the capital asset may be used as security itself;
4. Guarantee – in terms of smaller businesses etc., there is likely going to be a personal guarantee on the loan. Consider also further security on the guarantee;
5. You may negotiate a pre-payment privilege;
6. Interest – the formula will be fixed; and,
7. Covenants – the covenants in a long-term debt are extensive

In the case that you are investing in a long-term asset that is sizeable in relation to the net-worth of the company, you will want the financing to mimic/relate to the long-term nature of the asset and its ability to generate income over the long-term. Long-term debt will be used to support that in order to gain some certainty. The security in the long-term debt will typically be the asset being acquired along with other assets.

In the term-debt, provided that you make the payments as agreed and you are in conformity with all other covenants, then no matter what the bank cannot call the loan. If, however, you are in breach of a covenant (in default) the bank has the right to declare default and demand an acceleration of the loan. If the loan obligations are not met, the bank can realize upon its securities.

Operating Line

The operating line (small business) is similar to the personal line of credit. An individual can borrow from his/her personal line of credit (up to the limit) any time s/he wants. The features of this line of credit include:

1. Interest is calculated daily;

³ Fixed interest generally refers to the same interest rate throughout the entire term; however, a fixed rate may refer to a fixed formula for determining the rate – if only the formula is fixed the interest rate will float within the formula

2. You are only obligated to pay the interest;
3. You can pay down the principal whenever you want (pre-payment privilege); and,
4. The term is typically set at one year (considered short-term debt), but is almost invariably rolled over

The nature of the short-term loan and the uses to which it may be put are such that it lends itself to an entirely different purpose. You generally will not purchase a large capital asset on an operating line. Its essential purpose is to assist a business with its *short-term operating* cash needs. These needs typically include wages, taxes, purchases of supplies etc, The purpose of the operating line is fundamentally to underwrite:

1. Accounts Receivable; and,
2. Inventory

For these reasons, the security in an operating line is typically the accounts receivable and the inventory.

Suppose Jon starts with \$10,000 on day one. By day 27 Jon has spent all of his money creating inventory. Jon can sell his inventory for \$15,000, but must wait 60 days for the payment. What does Jon do in the interim? Jon will underwrite the account receivable with the credit from the operating line. The operating line will provide Jon with funds to finance the creation of inventory or accounts receivable. It is likely that the bank will take a security in the accounts receivable and the inventory that is created.

The operating line allows the individual to draw down the funds needed as those needs arise. However, in terms of the capital assets, you do not want to finance it with an operating line. Because it is a capital asset and will be generating revenue over the long-term, the protection and certainty of the long-term deal provides the better option. Once you decide long-term, then the options will depend on the term, interest rate, and amortization period.

An operating line of credit is always on demand. This reduces the risk of the lender and, thus, the operating line interest reflects this risk reduction. This is why the interest on the operating line of credit is lower than the term-debt.

Lending Rates

How does a bank know how much to lend you? The financial institution will look at the company's balance sheet and analyze:

1. Inventory – the nature of the inventory is of the utmost importance
 - a) How much is the inventory worth?
 - b) How liquid is the inventory?
2. Accounts Receivable – what is the company's average monthly account receivable?
 - a) Average Receivables – What is the average amount monthly?
 - b) Realization Risk – What is the company's market base/distribution of accounts receivable – will they actually realize upon the account receivable?
 - c) Where does the borrower draw his/her business from – important to know whether the accounts receivable will be realized:
 - i. If Alberta – how is Oil and Gas doing?
 - ii. If BC – how is Timber doing?
 - iii. If Maritimes – how is fishing doing?

Suppose the Accounts Receivable is, on average, \$500,000 per month. The banks will typically apply a discount based on its risk assessment and analysis. The bank will arrive at a figure that will provide them with security. For instance, suppose the potential risk might leave the company with a \$300,000 revenue stream, the bank will lend \$300,000 on the accounts receivable. As well, if the inventory is valuable and

fairly liquid and stable, the bank is more likely to lend on the inventory. Essentially, you add the two numbers together and that is how much the bank will lend for the operating line of credit. Finally, the operating line will typically be the lesser of a certain sum or a percentage of the total accounts receivable and inventory.

The bank will also consider the debt/equity ratio of the business. A bank may decide that it will not lend to a client unless the debt/equity ratio is held to a certain number.

These two concepts are the building blocks of any business.

There are a number of issues to consider in structuring long-term debt (sophisticated loan arrangement – *facilities*). The term ‘facilities’ attempts to convey that a single agreement contains a number of different options for accessing capital. There are various ways that cash needs can be met within the same lending structure. The agreement is going to be created whereby flexibility for the client is built in so that s/he can access capital in a number of different ways. Each of those ways has attached to it a basket of rights and obligations. Our discussion will be restricted to the most common facilities differentiated by the following factors:

1. Pricing;
2. Maturity;
3. Right to Pre-Pay;
4. Revolving;
5. Convertible;
6. Reducing; and,
7. ‘Other’

Every form of financing has three characteristics:

1. Public/Private;
2. Debt/Equity; and,
3. Short/Medium/Long

The Public Market

There are a number of important players that are involved in the public markets:

1. Securities Commission – a public body that regulates the securities industry through rules and regulations;
2. Exchange – there are many different types of exchange (stock and future) and the fundamental purpose is to assist in the purchase and sale of public securities;
3. Indices –

Securities Commission

The Securities Commission exists to regulate the securities market through rules and regulation. The Commission establishes a number of requirements relating to trades and distributions establishing the informational and registration requirements of the parties involved.

Exchanges

An exchange is generally privately owned and each country in the Western world has one or more exchanges. These are places that you go to assist in the sale of securities. In the past the exchange was a physical place, but today most trades are done electronically. Notionally, however, the process is the same. An individual would call his or her broker and the broker would then organize the deal. The fundamental purpose of the exchange is to assist in the purchase and sale of public securities.

Exchanges known to have good sellers tend to attract better buyers. In terms of business and trade, this tends to result in greater efficiency and liquidity, which drives up value. Recall, any particular benefit comes with it a cost to the user. Exchanges generally charge a premium based on its volume and liquidity benefits to clients. In this respect, exchanges tend to compete with each other.

The assumptions are as follows:

1. If a particular exchange has a larger market, there is a greater likelihood that shares can be sold at higher prices;
2. Costs are reduced in the larger market due to economies of scale

There used to be a number of exchanges in Canada – typically an exchange in each major Canadian market (Montreal, Toronto, Alberta, Manitoba, and Vancouver). However, there are a finite number of companies issuing shares.

Because of the competition Toronto and Montreal became the big boards, while Alberta became the venture market, and the West Coast exchange was associated with smaller enterprise. There was a fierce battle between Toronto and Montreal in the 1980s. The 1990s ushered in the electronic trading era. The technology to run an online market is hugely expensive. As a result, nobody could compete with the Toronto Exchange anymore and Toronto became the big board. Alberta and Vancouver merged to become the Venture Exchange, which was subsequently acquired by Toronto. The Canadian market rationalized because of the cost pressures and the issuing companies were no longer prepared to fund the smaller boards.

If you want to list on an exchange you have to apply to do so. Each exchange has its own set of rules and regulations that must be followed. Provided that the board is confident that the issuer's shares will achieve certain liquidity (list for a minimum amount) they will provide a listing agreement. The listing agreement obliges the issuer to make a number of promises and, to a certain extent, mimics a number of

the obligations in the *Securities Act*. A properly run exchange does due diligence on its issuers to ensure that they are good corporate citizens.

Another role of the exchange is to purvey information – information is that which drives fear and greed. The more accurately and fairly that information is purveyed all drive the credibility of the exchange. The greater the credibility, the greater the confidence, which results in more people willing to invest and translates into greater liquidity.

It is important for the exchange to endeavor to capture all shares that are going on from an issuer in order to ensure the most accurate pricing. For instance, suppose BMO shares are trading for \$36.10 on the TSX – the investor wants to ensure that \$36.10 is an accurate reflection of their worth. It would disturb the investor if large trades occurred outside of the exchange at prices unknown (they could be at \$35 per share). If an investor felt this was happening, his or her confidence in the particular exchange would be hurt. There are a number of means whereby trades in Canada are affected not through an exchange, which is harmful to the exchange. What will often happen is that a large buyer will purchase after the markets close.

In Canada, markets used to be retail whereas today they are pension and mutual funds. Pension funds run the country today. The top two pension funds are municipal funds and teachers and are run by pension managers who move massive blocks of share from time to time. These individuals have enormous power in Canada – very few players in Canada are generating the liquidity.

In Canada we have the:

1. Toronto Stock Exchange
2. Toronto Venture Exchange
3. Montreal Stock Exchange (Options and Futures)
4. Manitoba

In the United States there are three major exchanges:

1. New York Stock Exchange;
2. NASDAQ (high-tech); and,
3. American Stock Exchange

Volume – indicates the number of shares that are traded daily in a particular exchange. 200 million shares are typically traded on the TSX while approximately 1.3 billion shares are traded on the NYSE. If the volume of a market makes a difference, why do companies even bother trading in Toronto?

This is becoming a very good question for Canadian issuers. The TSE is under siege for its large issuers because New York is competing with Toronto for its big listings. The same arguments that Toronto used to beat out Montreal and Vancouver are being used:

1. More liquidity;
2. Better share price; and,
3. Economies of Scale

Every time a large company leaves the TSE and moves to NYSE the TSE loses liquidity and the NYSE increases its liquidity. If all the banks and mining companies left for the NYSE, the TSE will be left with poor liquidity. The survivors will suffer because investors will be less interested in the exchange. The liquidity of the Canadian market would begin to contract and as the liquidity in the market contracts it means that there is less money for other businesses to tap into, resulting in less money for business, less business for jobs etc., This capital drain is becoming a very serious issue – liquidity is everything.

The more liquid a system is, the easier it is to access capital cheaply. The net effect is that the capital cost in Canada will increase. If the cost increases and capital becomes a strategic resource then American competitors are able to trump Canadian counter-parts.

Exchanges do a number of things:

1. Assist in the purchase and sale of shares;
2. Act as market police;
3. Purveyor of Information

Without a solid exchange you cannot ensure liquidity or the maximization of share price. In Canada, the big exchange is under serious competitive pressures from all other exchanges and particularly New York.

What is the big deal – so what, what if all the big issuers go to the U.S?

Indices

The Strategy of Investment Money

Investment managers must make decisions as to where to put the money. There are a number of studies that suggest that somewhere between 60-80% of the value of an investment is driven by the allocation decision – not the specific investment. In other words, if you bet heavy in equity markets when those markets are doing poorly, you will do very poorly as well – allocation drives the bulk of value-added. As a result, a lot of money managers spend time reviewing money allocation and a general strategy.

The first question to ask is what percentage is equity and what percentage is debt. Generally speaking, large pools of capital in this country run at a rate of 40-65% allocated to equity and 60-45% allocated to debt. This is an equity market driven decision – the decision is typically made on the estimate relating to how the equity market will do. The focus is on the equity position.

Once you get into debt, the key issues are:

1. Term – in large pools of capital you work on ‘average’ term – they will decide whether they want a longer or shorter term program. Is the debt maturity, on average, more or less than a 5-7 year maturity? Typically, the longer the term the higher the yield (the greater the interest rate return); and,
2. Quality – a debenture issued by a particular issuer will be perceived differently than one issued by another. The risk tolerance must be settled on (this is where rating agencies come in)

Every fund is going to decide what they want for an average rate of return, which changes over time. On the equity side you also have to decide where to go. The key issues are:

1. Percentage in Large Companies – company size is based on market capitalization;
2. Percentage in Small Capital Companies; and,
3. Percentage in Foreign Capital Companies – generally broken down into U.S., (Europe, Australia, Far East) EAFE, and emerging markets

Once the strategic allocation is done, the investor has to decide where to go. Analysts generally assist with this decision. One of the key elements to assist in allocation is the index. Indices are critically important in assisting the analysts in allocating the investment.

An index is an attempt by a company to come up with some ability to accurately determine whether a particular market is doing well or not. There are approximately 500 shares listed on the Toronto Stock

Exchange. Assume the TSE handles the senior public companies in Canada – how do you know how well, in general, the large capital market is doing in Canada? We need a short-hand way to convey to the investing public how things are going.

The index takes a small sample of the securities traded on a particular exchange. The S&P/TSX Composite Index has taken 60 companies on the TSX and tracks the value of those 60 shares each day to create an index. For each share, they take the share price and market capitalization and come up with a weighted average. Everyday from there on the same formula is applied to those same 60 shares. This yields the following: Have most of the shares gone up or down?

If the index is an accurate reflection of the aggregate, then someone can look at the composite and determine whether the market is generally up or down. These figures are tracked over the year in order to compare the particular market's performance longitudinally. The index acts as a substitute for an aggregate analysis.

The NYSE uses the Dow Jones Industrial index. The Dow Jones Industrial uses 30 of the companies on the NYSE. The S&P500 in the U.S. use 500 of the companies. Over time the two indices were found to be accurate with each other.

The indices can make or break a market – if investors lose confidence in an index, capital tends to flee. Any perception of a problem means a potential loss of confidence in the index, which is just as bad as the problem actually occurring.

Rating Agencies

The rating agency determines the quality of the public debt that is being issued.

When a company issues public debt and preference shares a rating agency will be employed to analyze the debt securities. The rating agency will review the financial performance, prospects, economic climate, and other relevant information in order to provide a rating. The higher the rating, the higher the quality of the issuance – a better risk (it is less likely that this company will default on its risk compared to a company with a lower rating).

The issue with a higher rating is going to be more expensive because of the reduced risk. At the same time, however, the premium paid for the reduced risk will erode the potential return on the share. To compensate for the discrepancies in risk, an issuer will adjust the yield on a particular issue. The lower the rating, the more the risk and the greater the return. The higher the rating, the lesser the risk and the lesser the return. At times the rating agency will revise its rating.

Pension plans are by law restricted to investing in quality debt securities only (investment grade). Each bond rating service has its own rating scheme. At some point along the scheme the ratings are divided between investment grade and junk grade. Pension plans and insurance companies cannot bid for the junk grade (liquidity in the junk market is hammered down).

If these rating agencies do not qualify you as investment grade, the liquidity of your issue is going to go way down. Rating agencies play a critically important role by determining the quality of debt offerings. Quality drives the liquidity, which ultimately drives the interest rate.

The indices and rating agencies make or break the market.

Reading an Investment Stock Table – BCE Inc Example

The following is a summary of the stock table:

365 day high	365 day low	Stock	Symbol	Dividend	Highest Bid	Lowest Asking	Close	Change	Volume 100s	Yield	P/E Ratio
34.95	22.97	BCE Inc.	BCE	1.20	28.96	28.65	28.83	+0.08	9880	4.2	10.5

365 high/low – highest and lowest intra-day price in past 52 weeks

Stock – abbreviated company name

Symbol – Ticker symbol assigned to issue by exchange

Dividend – Indicated annual dividend (as reported by the exchange) for firms with no regular dividend policy, number will be total of dividends paid in latest 12 months

High – highest intra-day trading price

Low – lowest intra-day trading price

Close – closing price

Change – Change between closing price and previous closing price

Volume (100s) – number of shares traded in 100s

Yield – Yield expressed as percentage, calculated by dividing the dividend by the current market price

P/E Ratio – price/earnings ratio – current stock price divided by the earnings per share from continuing operations for the latest rolling 12 months

Yield – if you bought the shares at the closing price the day before, the dividend is yielding a 4.2% dividend rate. In other words, 1.2 is 4.2% of the closing price.

P/E Ratio – for each share how much of the company's earnings are attributed to that share. Suppose the P/E ratio is \$6 and each share is trading at \$30. If you bought the share for \$30 today and that share earned \$6, it would take five years to earn all the money back. For every dollar invested in the company you can expect to get it back in (P/E Ratio) years. Or for every one dollar of earnings it will cost \$(P/E Ratio).

It is understood that every business has a certain return profile that is typical for that business. For instance, real estate looks to pay back in a 6-7 time horizon, which would result in a P/E Ratio sitting between 6 and 7. Some businesses have P/Es of 80, 90 and 100s – this might occur where people think that a particular issuer will have unlimited growth. You would buy a high P/E Ratio if you expect the issuer to be a growth company.

The price earnings (P/E Ratio) are really what all the analysts will be looking at for the quick and dirty. P/E is fundamentally driven off the earnings. Earnings do not tell the entire story, but earnings are what the analysts will typically rely on.

Mutual Funds

Either a trust or corporation will purchase assets using money from the investors and then give each investor a unit of the fund that they put together. Some kind of trust is created with the investing public and for a fee anybody can support the fund by purchasing units in the fund. The essential advantage of the mutual fund is that it allows an individual shareholder to diversify his or her own portfolio without investing a great deal of money. Without having a lot of money or having to make personal choices, the individual may invest in a number of organizations.

Thus, the individual purchases units in a mutual fund being run by a trust or corporation. The trust or corporation will take the aggregate capital and develop a diversified portfolio. The trust or corporation buys into 40-60 different companies and the investor is given the opportunity to purchase a piece of that. The units will be valued based on the value of the all of the investments divided by all the units that have been issued.

A mutual fund allows the investor to invest a small amount of money and gain the ability to manage risk in a more sophisticated fashion. Some people take this one step further and develop a portfolio in mutual funds themselves – risk profile is actually risk profiling the mutual funds.

Bonds

Bonds are basically a debt from the issuer's perspective. A bond is typically secured while a debenture is unsecured. Companies, governments and other entities will issue debt instruments, called bonds, which is a contract with some basic essential elements:

1. Face Value – the bond will have a particular face value that reflects the initial investment;
2. Coupon Rate – the percentage interest that the issuer agrees to pay to the holder; and,
3. Maturity Date – when the loan/debt comes due

Generally speaking, the best risk in Canada is through the Canadian Government – the typical benchmark for all risk. This is followed generally by provincial bonds and then corporate bonds. All bonds and debt instruments are looked at in terms of their maturity date and are priced on that basis. The term and original date of issue is irrelevant.

Yield – the higher the yield the more risky the investment is considered. Yield means what the individual is earning on the investment.

Public Bond – all the bonds listed in the Globe are freely tradable having gone through the prospectus process and qualified.

Coupon Rate versus Yield?

How is it that the coupon rate and the yield on a particular bond differ? The difference is based on the perceived risk involved in investing – the greater the perceived risk then the greater the yield required to encourage investment.

Consider the following example:

	Face Value	Coupon Rate	Maturity
(Anne) Bond A	\$1,000	6%	February 13, 2004
(Bob) Bond B	\$1,000	8%	February 13, 2004

For Bond A the yield is 6% and for Bond B the yield is 8%.

Assume Company A spent all their money and needs to go back to the market. The interest rates in the market are fairly volatile and Company A needs money at a time when those interest rates have increased to 10%. Company A will have to offer its new bonds at 10%. Suppose Anne needs money and decides that she wants to sell her bond. The problem is that other bonds in the same company are being offered at 10%. Anne might be able to entice other buyers by lowering the price on her bond. In other words, Anne can make the yield on her bond identical to that of the new bonds.

In essence, the investor will get \$60 of interest at the end of the first year, \$60 of interest at the end of the second year, and \$1,000 at the end of year two. The new bond will provide \$100 of interest at the end of the first year, \$100 of interest at the end of the second year, and \$1,000 at the end of year two.

Everything in finance is translated into cash flow – the yield. This is why it does not matter what the term or original date of issue is.

What is the right amount to pay for Anne's bond? It will depend on *present value*:

1. How much today is \$1 payable to me at a future time worth? Or,
2. Would you rather have \$1 today or \$1 one year from now?

What happens when the issue is an amount of cash in the future as opposed to a return based on some percentage? \$X in the future is going to be worth less than \$X today.

Security

Priorities

By offering up assets the debtor has s/he will minimize risk to the lender. If a debtor goes bankrupt, (unable to pay their debt as and when required) they are no longer in control of their business and a trustee becomes responsible for the distribution of the assets to the debtor's creditors. The trustee's concern is not with the best interest of the owner but the interest of the creditors and to best maximize the assets of the business in order to make cash available for the creditors.

Note: Some businesses are more valuable when they are broken down and sold.

However, an asset that is subject to a security agreement do no go into the asset pool that the trustee will deal with. Those assets are held only for the benefit of the creditors who have secured the loan.

Unsecured creditors, including trade creditors (goods and services), employees (beyond their statutory owed money) are the ones concerned with what the trustee has to work with.

Technical Requirements

Some basic technical requirements and types of security in order to create a security interest.

I. Bank Act Security

Only certain types of creditors can access this security, which is provided for under section 427 of the *Bank Act*:

1. Section 178 of the Bank Act provides that the only type of creditor who can use this tupe of security will be the banks. They are all standard forms. If you are a section 178 debtor, the bank will take security (inventory) and you will get a loan. Unlike a mortgage, the mortgagee supersedes the owner's rights;
2. Notionally, as a s.178 borrower, the bank becomes the owner. General security agreement, self contained documents, lots of provisions, etc. from the bank basically saying that assets owned now and in the future will become the bank's if you default. GSA important to make sure that it is the same as the borrower's in respect to default provisions.

II. Personal Property Security Act (PPSA)

If you are taking a security interest in certain assets, you register that interest based on certain legislation. Remember the basic mantra: He who comes first, gets the interest first!

A general security agreement has to be signed and then you register. Prior to registering or closing, you will have to check the registration to see who else the debtor has borrowed from before. If applicable, you must deal with each registered debtor before you register yourself.

Note: Any borrower that has any relation to any bank will have registered against it. The bank travels at the speed of light in this regard.

III. PPSA PMSI

The PMSI was developed in order to break the situational monopoly of a secured party. Suppose a bank has a security agreement covering a very broad range of assets with an after-acquired property clause and a future transactions clause with a registered filing statement. Consider a debtor who is a large furniture reseller. At the relevant time there is two million dollars owing to the bank. The debtor has asked the secured party to advance another \$500,000, but the debtor is denied because of the high-risk exposure. The debtor can go out and borrow money, but if the debtor is going to borrow on a secured basis, the lender's security interest would seem to be subordinate to the bank's interest by virtue of the original security agreement. If the debtor receives something from the second lender, the bank would obtain an interest in the monies lent – this creates a situational monopoly for the bank.

If the debtor goes out and gets another security interest, and if that other security interest is a PMSI and in addition if the debtor does the right things, then the lender will be given priority over any other secured party in the collateral given by the same debtor.

What is the purpose of the PMSI? There are two reasons:

1. We want to break the situational monopoly that SP1 has through after-acquired property clauses and futures by allowing a new creditor to finance the debtor; and,
2. It would be unfair to allow SP1 to have new value come into the collateral pool and thus gain the windfall over the secured party who has sent it in.

There are two types of PMSI – purchase money security interests: (1) Inventory and (2) Non-Inventory.

In order to get super-priority in the case of an inventory PMSI the secured party must jump through the following hoops:

1. File a financing statement before the debtor gets possession of the goods (this time constraint is inserted because;
2. In addition to being perfected at the date that the debtor gets possession, when you have filed the financing statement do a PPSA search against the debtor and find out if there are any financing statement's filed against the debtor's name that check off the inventory box and provide notice to any party with a security interest in that inventory

IV. Assignments

Often you will find that business especially smaller ones, bigger ones have massive business. But smaller ones will be involved in assigning certain security to cash receivables, so in order to get financing they have assigned all their rights in an agreement. That assignment is a security interest, security interest is registered in accordance with the PPSA. They are just mini-financing arrangement and it is very specific and cash flow. It may not be a loan, you may be deferring payments, or make a deal as to how to pay off the winner of the case in small amounts on a regular basis.

V. Debenture

Pure instrument of security. It is not the same as that which we will talk about in the future. Prior to the PPSA in Ontario, you would enter into a debenture and register under the CSRA and only available to corporate lenders. First registered first served kind of thing. Because these debentures are for 25 or 50 years you must search the CSRA even now.

VI. Guarantees

Often loans are backed up by personal guarantees in small business and corporate guarantees by larger companies.

For ex. if Holding company and operating company, holding company controls the operating company, often you will see for a variety of reasons including tax, organizing themselves with different holding companies and operating companies. If Chili's restaurant wants to go and borrow money, the restaurant's holding company will provide a guarantee for the bank or the other operating company who owns the real estate for the Chili's restaurant. The borrower is the company the bank is advancing the money to but they may not be the company that if the company tanks will be owing to the bank. So the operating company may get the money but the holding company will provide the guarantee, stating that operating company will not go in default and if it does, assets will be taken from another operating company under the holding company or from the holding company.

Guarantees are common b/c the bank really wants the assets of another operating company within that family of companies or the assets of the holding company.

Hypothetical – Chili's

Suppose Chili's is interested in expanding and needs some more money. What will Chili's need to do? In order to get the money chili's (operating company 2) will need:

1. Loan agreement
2. General sales agreement,
3. Financing statement
4. Bank Act (does not apply)
5. If the creditor goes two ways (both assets of HoCom and Real estate from Operating company 1)

The Holding company will provide:

1. Guarantee
2. Share Pledge (fancy name for pledging shares as security) right to do what the creditor wants with the shares and with the business
3. Financing statement (exception to the PPSA, if you take physical possession of the shares, registration is not going to drive it but as lawyers you will register anyway)

The Operating Company (Number One) will provide:

1. Guarantee
2. Mortgage (backstopping the guarantee) if this real estate was set up as a rental place, then
3. Assignment of the rents
4. Financing statement
5. KIM: S. 44 of CBCA and S. 20 OBCA, the tests for liquidity must be met otherwise the guarantee is not legitimate
6. Financial Liquidity test is through the auditor but these days it's so risky that they don't want to give their opinion.

As counsel for the bank, as part of your due diligence, in the case of the chili's loan you must search all the registry offices to see if that chili's restaurant has give security to other creditors. For the security to be valid, three corporate searches have to be conducted. Address whether any of the three, Op Com 1, 2 or Ho Com have registered under the Bank Act, (not likely) CSRA and land registry and title office and then the PPSA.

Ex. under the PPSA let's say you find

- 1) ABC Leasing – ensure that there are no other assets with a PMSI that will trump yours;
- 2) Bank of Nova Scotia – ensure prior credit facility/mortgage etc., is expunged;
- 3) DC Credit – search the security interest in the car;
- 4) Xerox – check all the leased items (fax machine and photocopiers)
- 5) Canon – same

You must deal with first that it will not apply or that even if they are there you will come in first on the list. Let's say under ABC Leasing, there is such and such equipment, you will discern from that is that it is a PMSI that means only that piece of equipment is secured. You will have to follow up with ABC Leasing; hard to do because they have no obligation to you really. But you want the security agreement, must hound them.

Bank of Nova Scotia is the next creditor – client says loan paid off just hasn't been expunged. Go to it and must expunge it prior to the closing. If let's say only \$20K left of the loan, must be paid off before closing and if it's let's say \$5M and it can't be paid off before closing, then deal is off.

DC Credit for the car. Xerox, again sure that it is let's say only for the fax machine and photocopier, but must check all those leased items.

Private Placements: Bonds

You may do a private placement for debt than equity. Bank may only want to go 2:1 for debt equity. But it may be sound for your company to go higher, but there may be non-bank parties willing to lend you money.

Often you will access this money by way of going to joint venture capitalist or capital provider. Banks are also in this business (TD Securities, quite large). They will go in and lend you money over and above bank financing and on different terms, may be more expensive and may want a piece of your company.

Any debtor is going to have a layer of debt, operating line and term debt and above that is PMSI (not Y, I) down at the bottom may be shareholder debt, for tax reasons may want to lend money instead of providing equity. But in the middle of those two areas bank and shareholder, there is room for more debt. Shareholders are so low on the priority list that they are the last ones to get anything. The business may be able to go 4:1 or even 5:1, it in respect to cash flow there is room but banks are not going there b/c they have a limit.

Venture capitalist will come in and design and tailor a debt or equity program that is tailored to your business. The package will meet your needs, ex. a winery, if you are planting the vineyard you will have to wait 7 years. A bank will not be interested in waiting for 7 years but a venture capitalist will wait. A whole list of reasons why the venture capitalist will be interested in investing. They will operate by way of private placement, whereby they will want a pp of bond or debenture and they will be on certain terms and conditions. The venture capitalist is lending on the cash flow of the business and therefore will do a very specific financial search of the company. Their price is going to be much higher when they give you money. Not unusual to have 30% interest, on top of that they may want shares or bonuses or fees. Just KIM: s.347 of criminal code, can't have interest higher than 60% per annum which means everything listed above, fees, and bonuses, etc. plus the interest cannot add up to 60%.

Bonds are promissory notes with a whole bunch of covenants in it. The additional terms are essentially the same as a loan agreement.

A real return bond, rare in a venture capital situation but will see them in international loans like South America. Notionally a bond that says the interest rate is inflation plus something. Must explain inflation. National CPI- average for the country not just for let's say Toronto where housing is included in the CPI. That something is for example 2% and that is the real profit.

All the terms below are called sweeteners, the issuer (borrower) will throw these in on the advice of a financier, b/c may reduce the interest rate if offered one of these sweeteners below. For ex. it may be a 10 year bond but it may be retractable only for the first 3 years.

Retractable bonds – means the holder of the bond is given the right to sell the bond back to the issuer during a specified period. Investor may like this but will have to accept less interest for this freedom.

Puttable – sell bond back to issuer only if certain things happen, such as when the borrower does not meet certain financial test, or if it takes on secured debt, or secured debt above a certain amount.

Call right – where the issuer has the right to purchase back the bond from you at a certain time or after a certain event for the face value of the bond plus some. Good for the issuer or borrower.

Sinking Fund – if it is a large public offering of bonds or if it is a longer term bond, the market may

KIM: Bond for let's say 10 years, you only pay interest for the ten years no principal and then at the end of 10 years you have to pay the whole amount owing.

The sinking fund will specify that the issuer (borrower) will have to put aside money for a portion of the bond each year so that there isn't the whole amount at the end of the 10 years.

Depends on the analysis of interest rates and where they are going, if you are in an environment where the wisdom of the day, where interest rates are going down sinking fund to the investor is not going to be a real sweetener, unless the security aspect weighs out the lower interest.

Convertibility – allows the holder to convert all or part of the bond into common shares of the company. Again it can be tailored under certain terms that it can be done at certain times or certain events. You see this in venture capital, b/c it will always be more money. Attractive to a venture capitalist, offers the opportunity to convert debt to capital gains. The greater the perception of growth projections of the business the more likely that the lender will want common shares.

What would be the strike price (the price the lender has the right to convert his bond into shares, the strike price never changes, written into the agreement from the beginning).

Value to investor, interest savings to the borrower, if convertibility is too sweet the borrower is out of luck.

For both sides, you have to see the pluses and minuses.

Credit Facilities

Every business has two essential bank financings:

1. Operating Line
2. Long-Term Debt – relatively inflexible as most of the terms are fixed and/or predetermined

Almost invariably the same bank will provide both types of financing. As the business grows and the capital needs become more sophisticated, a company might seek out a credit facility agreement (bank facility agreement). A credit facility agreement is a loan agreement document that:

1. Combines both the operating line and the long-term debt in one agreement – some advantages in terms of simplicity of covenants; simplicity in terms of events of default; and, the security;
2. Within the same agreement the lender and the borrower agree upon a number of different ways that specific loans can be taken advantage of – specific amounts can be borrowed in different ways within the purview of the same agreement, thus providing flexibility

Flexibility allows a borrower, each time s/he needs money, to select the option that best suits it at that particular point in time for the particular purpose. In other words, the borrower will have different ways to borrow within the same agreement.

A portion of the agreement will be directed to operating line (working capital facility) and another portion to term debt:

1. *Working Capital* – borrower will be permitted to borrow up to certain amounts (upper limit) in one or more of the prescribed manners. The purpose of the loan will be prescribed and is generally for operating purposes; and,
2. *Term Debt* – borrower may from time to time the following amounts for the prescribed purpose.

I. Operating Line

Within this line there will be a number of different limits in terms of how much can be borrowed. This will turn on what the company legitimately needs and what it can post as security. While some maximum will be reached, it will be further reduced by other factors such as a percentage of accounts receivable.

II. Term Debt

In term debt there will be a maximum amount, but it will also have other limitations. For instance, the agreement may include a ratcheting down of the amount or a reduction of the limitation as time goes on. Often, term debt is subject to the debt:equity ratio and other financial formulas that will be inserted to manage that maximum amount of debt (asset coverage etc.,).

There are other considerations to consider, such as how can the person borrow?

Draw Down

Every time you exercise the right to borrow money you have a draw down. A credit line is a draw down.

Operating Line

There are two classic types of draw down under an operating line:

1. *Prime Advance* – this is the simple borrowing of Canadian dollars. The notion of prime comes in because how the loans are priced will be based on an interest rate defined as a bank's prime

interest rate. The prime interest rate is generally the best rate that it offers commercial customers for Canadian dollar loans made in Canada. Some definition will be used to define prime advance. In terms of pricing you will pay the bank prime interest plus X basis points (spread – the difference between the bank's prime and what has been agreed to be paid). The rating that a public company has will affect the type of spread it will get. In other words, there will be a formula in place to set the interest rate based on the credit rating. The better the credit rating, the less the risk and the better the interest rate that you will get. Another formula you might see is some other formula that speaks to how risky a company is: cash-flow:interest, debt:equity, etc.,. The advantage of the *prime advance* is the flexibility and interest rates tend to be low. One of the risks of the prime advance is that payment is on-demand and can be called in anytime by the bank. Interest is owed for each day that the money is outstanding;

2. *Letters of Credit* – there are two types of letter of credit:
 - a. *Documentary* – the purpose is to allow international purchases and sales of goods to take place by eliminating the risk of goods not being delivered;
 - b. *Stand-By* – this is merely a form of security that is offered to back-stop promises. This is commonly used in development work (real estate development) where a corporation is required by the municipality to develop certain amenities as a guarantee that it will fulfill those obligations. The money will be drawn upon by the municipality if the corporation does not do what it has undertaken to do. The key thing is to ensure that the terms upon which it can be drawn down are very clear. The bank will want to ensure that there is absolutely zero discretion held by the bank to decide whether or not to honor the letter – the bank will insist on a very clear trigger. The triggering certificate will likely be settled and form part of the letter of credit. Once issued you do not pay interest until it is drawn upon.

A documentary letter of credit is an engagement by one party (the issuer who is normally a bank) made at the request of another party (the applicant who is normally the bank's customer) requiring the issuer to honor drafts or other demands for payment in compliance with the conditions specified by the letter. The letter of credit has traditionally been used in international sales of goods. A letter of credit so used is a promise by the issuer directly to the seller, made at the request of the buyer, to pay the purchase of the goods to the seller, or to accept a draft drawn by the seller for an equivalent amount.

Letters of credit may be revocable or irrevocable. The issuer without notice may cancel a revocable letter. Cancellation, however, does not affect the rights already acquired by reliance, payment or acceptance prior to cancellation. An irrevocable letter commits the issuer to honour the credit, notwithstanding any contrary instruction by the applicant.

In connection with commercial credit, a letter of credit, when issued and subsequently accepted by a seller, operates as a conditional payment of the price – not an absolute payment. If the bank does not honor the letter of credit when the documents are presented to it, the seller has a claim in damages against both the issuer and the applicant.

With respect to the beneficiary, the issuance of the documentary credit generally binds the issuer and confirmation binds the confirming bank as soon as the credit is communicated to the beneficiary.

The letter of credit has a number of advantages:

1. Upon issuance of the letter of credit there is a fee (negotiable)
2. Interest is only paid once the real money is paid-out – gets converted to a prime advance

The moment the letter of credit is issued it is treated as cash – at the moment it is converted to cash you begin to pay interest, which is an advantage.

The purpose of the credit facility is to allow the borrower to maximize his or her borrowing power by borrowing capital as it becomes needed. The borrower can mix and match various drawdowns in order to meet his or her needs.

A credit facility is a loan agreement with two components:

1. Operating Line
 - a. *Purpose* – general business purposes and working capital;
 - b. *Limits* – the amount that may be borrowed expressed in terms of maximum amount in addition to a formula;
 - c. *Drawdowns* – prime rate advances and letters of credit
 - d. *Special Covenants* – promises or terms that apply to the operating line only and all components of that line;
 - i. Other than those that apply to the specific drawdowns is that operating lines are issued on a demand basis, which means that the bank can call the loan at any time
2. Term Line
 - a. *Purpose* – the purchase of particular capital assets or shares that make up a larger amount of money;
 - b. *Limits* – expressed as a general amount and may be subject to a ratcheting down as time goes on (reducing);
 - c. *Drawdowns* –
 - d. *Special Covenants* – term debt is never demand, but rather repayment is over a specified period of time and so long as the borrower is not in breach the bank cannot simply call the loan (accelerate the loan). Typical special covenants include an assurance that the debt:equity ratio does not fall to a certain amount.

In addition to the general covenants, both lines share:

1. Security
2. Covenants
3. Events of Default
4. Representations and Warranties
5. Notice Provisions

Operating Line Drawdowns

There are three specific considerations that differentiate drawdowns in a certain category from each other:

1. Term
2. Cost
3. Prepayment Privileges
4. Other

Prime Rate Advance

A prime rate advance is a simple line of credit where the borrower may borrow and repay from the agreed amount so long as the maximum is not exceeded. The amount may be paid down and drawn down as the borrower wishes. The bank, however, may call the loan at any time. Pricing on a prime rate advance will always be prime, as defined by the banks, plus a certain amount of agreed basis points (spread). The rate may be variable depending upon a person's or corporation's credit rating.

Letters of Credit

The documentary letter of credit may sit for a number of months. The moment the letter of credit is converted into cash by the holder it will be treated as a prime rate advance and the borrower will begin paying interest on it from that day forward. The letter of credit reduces the borrower's prime rate advance maximum by its amount – it has a cost in terms of the borrower's borrowing capacity. A fee is charged in exchange for the letter of credit service. You cannot prepay a letter of credit once it has been issued.

U.S. Considerations

If you do business in the U.S. you may have set up the possibility to borrow from your bank in U.S. dollars. In this instance, you may have U.S. Base Rate or U.S. Prime Rate advances. Notionally similar to the Prime Rate Advance, the U.S. Base Rate is the advancing of U.S. dollars in Canada requiring the payment of an interest rate set by the bank for U.S. base rate opposed to the prime rate. A U.S. Prime Rate is for U.S. dollar advances in the U.S. The rates will be different because the banks will be taking money in U.S. currency and in one case it will be staying in the U.S. and in the other case the U.S. currency will be drawn from the bank's reserve funds.

Long-Term Drawdowns

There are many different ways you can have drawdown in a term loan. Every dollar that you do not borrow under the term facility will attract a standby fee.

Prime Rate Advances

This is the same as the advance in the operating line with a few exceptions: Not on demand – you can pull down the prime rate advance for the entire duration of the term, subject only to special covenants;

The cost will be prime plus the spread, but this poses potential problems as interest rates fluctuate. In other words, prime plus the spread might be lower than a traditional fixed rate you would get today, but might be much higher than that fixed rate in the future.

The benefit is the potential flexibility of the floating prime rate, which may go down. The disadvantage is the exposure to the interest rates, which might go up. The prime rate advance is typically revolving and the amounts borrowed and repaid may go up and down as the individual wishes without any penalty.

Fixed Advance

Within a seven-year deal with a maximum of \$50 million, for instance, you can come in on day one and borrow \$20 million for two years. The terms will be there for whatever period of time the money is taken. The cost will be whatever the two year fixed rate advance is plus an arbitrary number of basis points. You will hold that money for the duration of the term and at the end of the period the interest must be paid with the repayment. A borrower might come in on day one of year three and then borrow \$40 million for two years. The interest rates might have increased and, therefore, the borrower will pay the higher fixed rate advance at the end of the term.

The fixed advance allows the borrower to create within the security of a seven-year umbrella a number of mini term-loans. This is in line with the purpose of the credit facility, which is to allow the borrower to *mix and match* various drawdowns that best suit the needs of the operation of his or her enterprise. This

allows the borrower to be flexible and choose the best combination of loans for him or her. The basis upon which this is done is the key thing.

The benefit is the security of locking in the interest over a period at the same time. The disadvantage, however, is that the interest is locked in over a period of time.

Under the term debt you will also have a fee for any unused credit (stand-by fee). In other words, if you borrow \$50 million, but only drawdown \$20 million, there will be a fee for any of that unused credit. Payment of the fee is typically made monthly based on the principal outstanding at the point in time. This is rare under operating lines. All of the advances at any point in time cannot exceed \$50 million.

The bank will often consider allowing the borrower prepay the fixed rate advance, provided the average term of all the fixed rate advances do not drop below a particular number. If you want to reduce the fixed rate advance period it will cost the bank because they have committed their money.

Banker's Acceptances

The banker's acceptance is a very flexible instrument. There is a market for short-term investment instruments (money market). The money market is a market that buyers and sellers nominally meet to buy and sell one or more of the following (Each of these instruments is in large dollar amounts):

1. Government of Canada Treasury Bonds – a bond issued by the government due in 91 days paying a particular interest rate;
2. Commercial Paper – ; and,
3. Banker's Acceptances -

The banker's acceptance starts as a basic "i.o.u." from a commercial borrower. The borrower will issue a promissory note promising to pay to the holder on a particular date some particular sum.

Review the provisions of the *Bills of Exchange Act* relating to the holder in due course. A clean promissory note is a bill of exchange. The holder in due course is a holder, the payee or endorsee in possession or the bearer, who meets the requirement of section 55(1):

1. S/he must be a 'holder' of a bill as defined in section 2;
2. The bill must be complete and regular on the face of it;
3. Must have become the holder before the instrument was overdue;
4. The holder cannot have had notice that the bill was previously dishonored;
5. The instrument must have been taken in good faith;
6. The instrument must have been taken for value;
7. The instrument must have been negotiated; and
8. There cannot have been any notice of a defective title

This is the historic bona fide purchaser for value of the common law system. A holder who meets these requirements shall be deemed a holder in due course.

There is a credit risk issue, in that the borrower might not be able to pay the funds, but from a legal standpoint there is no risk. The banker's acceptance is a promissory note that has been issued and stamped by the bank as a banker's acceptance. The moment the bank stamps the promissory note, the bank becomes the primary obligor (the party liable under the note). As such, the security issues disappear and such notes are very liquid (billions of dollars per year trade in banker's acceptances). This note is now saleable in the market for whatever the market will pay for it.

In theory, the Bank could stamp the promissory note (which traditionally costs a fee, a percentage of the amount, because of the increased liquidity in the note) and the original obligor of the promissory note can have the banker's acceptance sold in the money market (it is now a fungible commodity). The Bank will pay any holder who has the banker's acceptance (the note), but will then demand the money from the original obligor. Interestingly, the bank does not pay anything it only does so for a very short period of time (the point at which the holder demands the money until the money is paid back to the bank from the original obligor).

The process has changed:

1. Issuer takes the promissory note into the bank and promises to the holder a certain sum at a certain point in time;
2. Bank looks at its information and determines that such a banker's acceptance is trading at a certain rate;
3. Bank then typically purchases the note at a discounted rate and can either:
 - a. Hold the note; or,
 - b. Sell the note in the money market – if the interest rates move in the favor of the bank it will sell the note so that it has the capital to lend and accrue interest on it from the borrower

Banker's acceptances are not interest-bearing instruments, but rather they are cash-flow. The banker's acceptances generally run in Canada for a period of 30-90 days and also 180 days are fairly common. The present-value question rears its ugly head again: how much today is \$1 in one year's time worth? All things being equal an individual would rather have the dollar today and invest it. You would discount the value of \$1 by the applicable prevailing interest rate. The value of the banker's acceptance is typically discounted by the prevailing interest rate over the relevant period of time.

Advantages of the banker's acceptances:

1. These are the cheapest things that can be borrowed under a credit facility agreement – these are market driven;
2. Gives the borrower a great deal of flexibility - Interest is locked in for short periods of time, which in effect creates a number of short-term borrowings under the security of a seven year deal

Disadvantages of the banker's acceptances:

1. If interest rates go against you;
2. You can only issue such notes in certain minimum amounts (typically \$500,000 in increments of \$100,000);
3. You are locked in for a determined period of time;
4. The revolver will invariably limit the number of Banker's Acceptances that may be outstanding at any given point in time; and,
5. Prepayment – make whole provisions will require you to pay all of the costs and all of the lost interest

With the advent of foreign banks entering into the Canadian Market, you will typically see in large credit facility agreements that numerous banks are involved. Always in these agreements there will be an 'investor protection' or 'investor yield and protection' clause. When a bank offers you its pricing, the bank has determined its cost of funds and its profit piece. This calculation is based on a number of factors, most of which are based on the provisions of the *Bank Act*. There are also issues of tax effectiveness – the bank has factored in the fact that it will pay tax on its business income and certain risks. These clauses, thus, provide that if the laws change such that they have an effect on the bank's costs, then the borrower's costs will increase and be charged more.

This can become a major issue when you come into the issue of withholding taxes. If the tax regime were to change such that the withholding tax agreements with a particular country increases, then this increased cost will be passed along to the borrower – you have to be concerned and keep this in mind when you are dealing with foreign banks.

Preference Shares

Bonds are debt instruments – a contract where one party invests some money to the issuer of the bond. The bond will contain a number of terms like the loan agreement (repayment, interest, security etc.). The bond also has a number of unique features (sinking funds etc.).

	Common	Preferred	Bonds
Return	o Dividend	o Dividend	o Interest
Vote	o Yes	o Maybe	o No
Convert	o No	o Maybe ⁴	o Yes, if a term of the bond
Priority	o Last (Ultimate Risk)	o Up from Common	o First (different debt differs)
Debt:Equity	o Improve (Calculation)	o Improve	o Worsen
Maturity	o Never	o Never ⁵	o Fixed Date (Variable)
Tax Investor	o Favorable (31.67%)	o Favorable (31.67%)	o Full Tax Rate
Tax Issuer	o Not deductible	o Not deductible	o Fully deductible interest
Impact of Not Paying	o Nil	o Depends	o Proceed to bankruptcy

Convertible means whether the bond is convertible to common shares. A preference share is a hybrid – a share that is not a common share the terms of which are whatever they have been stated to be. The preferred share may be issued pursuant to either a private or public placement. Depending on how the terms are devised, the preference share can be fully equity or all but debt (legally, tax wise and accounting wise the preference share is equity). For instance, preference shares will generally have a dividend rate expressed as a percentage. Thus, you might have a \$100 preference share with a dividend of \$4.50 per year. Also, a preference share will also save the corporation from liability from missing a payment except for those provisions set out in the share agreement itself – the terms of the share are often drafted to include the consequences. The common consequences include:

1. Accumulation of dividends – if a dividend is missed, it is not lost forever, but instead will accumulate and will be paid. The notion is that the corporation will eventually catch up;
2. No dividends are payable on the common shares unless and until cumulative dividends are paid on the preference shares – there will never be a case where the common share holders will strip the cash out to the detriment of the preferred share owners;
3. If dividends are missed more than three in a row or three times in two years (etc.), then the preference share holders will be entitled to vote as if they were common share holders – this provides more protection for the preference share holders as the vote gives the preference share holders the ability to influence the company;
4. Pursuant to some formula, the preference shareholders have the ability to convert into common shares at some fixed ratio

One of the things that will always be considered is whether you are prepared to give to the investors in these preference shares an ability to convert to common. If you do, the more favorable the terms of the

⁴ The better the convertibility option, the more the preferred share will look like a common share

⁵ There is one exception to the no maturity rule:

convertibility are looked upon, the more the preference share begins to move like pure common share equity. How attractive will the convertibility be? It depends:

1. What is the conversion ratio;
2. What is the value of the common share;

Sinking Fund

One of the terms you might see in a bond is a sinking fund – an obligation of the bond issuer to set aside an agreed amount of money each year to be used each year for repurchasing bonds that it issued. Similarly, you can have a sinking fund in a preferred share. As part of the terms you might set aside a particular sum for a particular duration to be used to repurchase a number of preference shares. The reason for this is that the investing money feels that less money is at risk if money is being paid down over a period of time. On the other hand, if the dividend rate is high an investor will not want to be cut out.

General Advantages

Preference shares are useful where a corporation does not have the capacity to borrow. Suppose the debt:equity is such that no finance institution will lend. Preference shares improve the debt:equity ratio. Also, if the capacity to borrow is very low, it is likely because financially the corporation cannot assume the risk of interest payments. The beauty of the preference share is that there is no requirement to pay a dividend – it will not put you in bankruptcy if you fail to make the agreed fix payment. There is no requirement to share the equity upside.

Participating – the preference share has a feature that allows the holder to earn some additional upside over and above the agreed dividend. If a certain sum is paid as a dividend to the common shareholders, then every other dollar that is declared as a dividend will be issued to the preferred shareholders on a *pro rata* basis. This is a further ability to participate in the earnings of the company.

Thus, the preferred share is a hybrid instrument that is purely equity for legal instruments, but also has the flexibility to be structured like debt and have virtually no consequences in the instance of a failed dividend payment.

Term-Preferred Share

This is a preference share that is issued for a specific term. The problem with these was that banks took advantage of this practice. Banks discovered that if they lent a borrower money and accrue interest that they would pay the full tax on the amount. Instead, they would purchase term-preferred shares from the corporation and get the dividend on them and redeem them at the end of the term. It would seem to be the same thing as a loan, but through the term-preferred share they were able to circumvent the taxation.

The CCRA responded with a number of term-preferred share provisions in the *ITA* requiring that dividends received by a financial institution from a term-preferred share would be fully taxable as income received as a dividend.

Multi-Creditor Arrangements

From the bank's perspective, when they make a loan it is an investment (it may take the form of a loan, but that is simply the form). Multi-creditor financing is a recognition that in today's capital environment, some users are so large that a single institution is not ready to expose themselves to the loan proposal.

For instance, suppose you have a proposal for a \$400 million loan over five years in the oil industry. Depending upon the amount of exposure the institution wants to the particular individual or the particular industry, the single institution may agree to expose themselves to only \$250 million. In order to provide the full financing, groups of banks may come together to split up a particular facility.

There are three primary types of arrangements:

1. Club Lending
2. Syndications
3. Participations

I. Club Lending

This is a situation where the borrower will negotiate with different institutions separately for a piece of the larger loan sum (\$400 million). Each of the banks will be aware that the borrower requires \$400 million, but the particular institution is being negotiated for a fractional sum. The goal is to end up with an aggregate financing of \$400 million.

Suppose you end up with four loan agreements for \$100 million each. This will result in four separate loan agreements, four separate covenant lists etc. However, at some point the banks will require an appropriate arrangement in terms of what will be done with the assets in the event of default. This all comes together in what is called an 'intercreditor' agreement. This agreement will be signed by the four lending participants and the borrower: this is where the 'club' notion comes in.

In most cases, the issue of security will be settled by providing a pro rata interest in the assets of the borrower in the event of default.

While there is privity between the borrower and each institution, there is generally no relationship between the lending institutions within the club. With the intercreditor agreement, however, each institution will have some privity with each other:

1. All lenders get same security
2. Lenders agree to make security pro rata
3. The agreement will be cross-default
4. Provide for an administrative process

Cross-Default Provisions

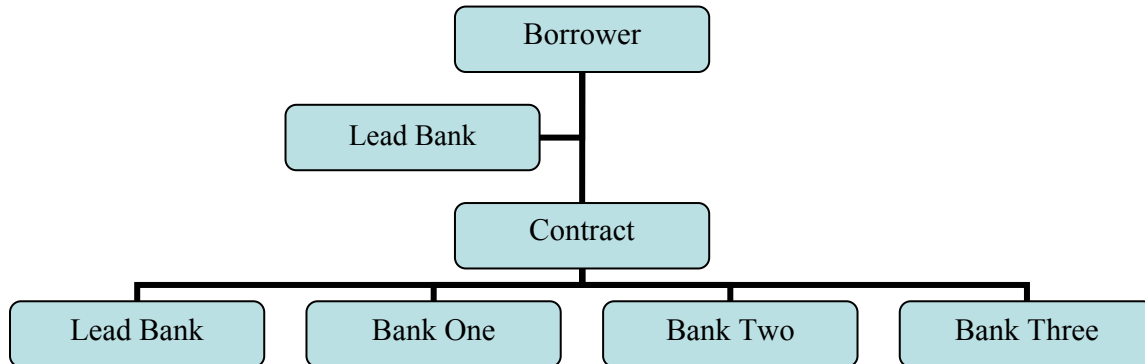
The banks will want to ensure that if the borrower goes into default with any other lender such that the other lender will be entitled to accelerate the amounts owing to the lender, the other institutions can minimize their exposure. The intercreditor agreement will ensure that if there is default under anyone of the other loan agreements it is as if there is default under any and all agreements. If one institution is in the position to accelerate, then all institutions will be in the position to accelerate.

Note: Another common way to deal with this is with the trust deed (appointed person acts as trustee) The notional advantage to club-lending is that it gives the borrower a bit of negotiating leverage – the borrower may play off one institution against the other (within reasonable limits). There are some disadvantages, though:

1. A great deal of administrative overlay – time has to be dedicated to the managing of the intercreditor agreement – this translates into costs
2. It is time consuming to negotiate with a number of different parties
3. Greater risk and legal costs because of the increased number of agreements

II. Syndications

Rather than the borrower going to four banks for the \$400 million, all the banks band together and create one loan agreement to lend the borrower money.



Typically, the lead bank on syndication will be the borrower's regular bank. The lead bank will put together the syndication agreement and seek to facilitate the negotiation between various lenders. The lead bank will send out to the group and then the group will send comments and concerns. The lead bank will negotiate with the other banks in the group and attempt to come to an agreement that is good for the borrower. The lead bank acts as the notional middle-man for the agreement.

The advantages:

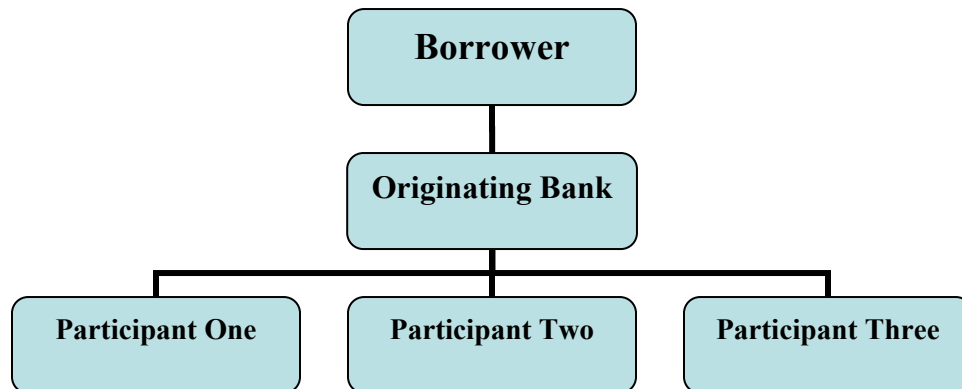
1. Easier for the Borrower to Manage
2. Legal Costs will Generally be Cheaper
3. Quicker – this process happens really fast as the negotiating parties are relatively sophisticated

One of the key issues in a syndication is who will be allowed to enter into the borrowing group. While the covenants may be the same, not all of the institutions will have the same 'triggers' as everyone else. For instance, if you get an off-shore bank with limited knowledge there is a risk that they will quickly pull the trigger on the agreement.

The sophisticated borrower may have a sense that some banks are banks that you do not want to borrow from – ensure that the bank is not part of the banking group (you should deal with this issue right up front).

III. Participation Rights

Participation is a provision in a loan agreement – it can be in any loan agreement. Participation refers to a way of sharing, but is devised as a clause within any loan agreement. A participation right is the right for a lender to sell off, at its discretion, a portion of the loan to another lender without the borrower's approval. This could arise in a straight one-on-one loan or in a situation where one or more of the agreements in the club scenario have the right or one or more of the syndication.



Suppose you have a 7-year loan with TD bank for \$400 million. TD may take on that credit from day one, but will insist upon participation rights – the right to sell to other institutions a piece of the loan. The moment the deal is closed, or subsequently, TD may approach another institution(s) and offer a portion of the loan to the other institutions. There is no privity between the borrower and the new participant institution. The lead institution will pay an interest premium to the new participant – the payments between the two institutions may not be the same as they are between the lead lender and the borrower. These types of agreements between the lending institution and new participants may be mixed and matched both vertically and horizontally.

Upon default, the participants will only get a pro rata share as all the other participants (the lending institution will act as an agent for the participant when this occurs).

Funded Participation – Participations where the second, third, and fourth banks actually provide money to the original lending bank.

Risk Participation – Participations where the originating lender sells to new participants the opportunity to back-stop the failure of repayment. The risk participant will, upon the event of default and no recovery, reimburse the originating lender up to a certain maximum (notionally, this works like a type of insurance). This risk participation amount may vary according to the term. The participant would be getting a fee from the originating lender – the participant would analyze their potential exposure and then set the premium to reflect the exposure and inherent risk.

Although, as the borrower, you have no privity with the other institutions, you may have concerns about your money going to them:

1. Some institutions are trigger-happy
2. Although there is no privity, you could face other consequences

A loan is simply a form of cash stream. These arrangements allow you to view the loan as a stream of cash. In the participation agreement, you can really see how the cash flow is characterized as an asset and moved like one.

Public Offerings

An IPO is an initial public offering of common shares. The regulators are especially vigilant with new issuers. As a result there has been a technique developed to assist companies that intend to go public to get their money a little more quickly: special warrants.

Warrants

A warrant is basically a certificate that entitles the holder to purchase a share or shares in a company for a fixed price within a specified time-period. There can be privately offered warrants and publicly offered warrants. The purchaser will pay a premium for the warrant – the warrant is typically listed at the most current average trading price.

Suppose IBM issues a one-year warrant for \$1 while the shares are currently trading at \$56. It is not until the share price increases to \$57 that s/he can break even. Should the share price increase to \$60, then the investor may trigger the warrant and essentially make \$3 on an investment of \$1. Such a warrant will trade in the public market.

Special Warrants

The issue is always timing in an offering. While the regular warrant may sell for \$1, which provides the right to purchase the shares for a fixed sum, the notion of special warrant is almost the obverse of the typical warrant.

Suppose a company is issuing an offering for shares valued at \$19. The special warrant might be offered to a number of private investors at \$18.50 per special warrant. At the option of the private investor, the share may then be purchased for 50 cents. Also, as part of this deal the company will agree to go public – to qualify all of the common shares that all of the warrants could be converted into so that if and when the warrant is exercised it will be freely tradeable. The company will also agree to go public/qualify the shares by a certain fixed date.

The issuance of the warrant will be done pursuant to an exempt trade – the warrant itself, which is the right to purchase a share in a company, may only be sold pursuant to some other exemption. Thus, you have a warrant that is not freely tradeable, but what you want is a freely tradeable share. The conversion from a warrant to the common share is also a ‘trade’, but it is an exempt trade.

The ability to qualify the shares is not within the company’s control – but the company must use reasonable efforts to do so. At the end of the day, however, the securities regulator may control whether or not the shares are properly offered by prospectus and freely tradeable.

In considering this, if there is no public offering, there may be a penalty clause changing the conversion ratio – giving the warrant holder 1.3 shares per warrant instead of 1 share.

Finally, if there is success in going public, there might be an automatic conversion from warrant to share. If you stand back, this has allowed someone who wants to get a publicly traded share to get together with someone who wants to give a publicly traded share with the added benefit of getting the issuer of the warrant the capital more immediately.

Suppose that a company has gone public and wants to issue shares again. The company will have to go through the entire offering process again. However, there is another option that is open to senior and mature public companies in Canada.

A senior or mature public company is one that is already known by the market – the same amount of information is not required from this company as would be needed from the newer company. There is a body of information through the continuous disclosure regime that anyone can access.

POP – Prompt Offering Qualifying Prospectus System

POP sets out certain criteria: Offering value must be at least \$75 million. If you qualify, then you can take advantage of POP. The POP qualifying company need only put together a short-form prospectus. An abridged form of prospectus. The principal difference is the section referred to as the documents incorporated by reference. Those are the continuous disclosure documents that are required to be submitted. Those documents are not included, but instead referred to. Those referred to documents have liability attached to them. Those who can use those documents have certain qualifications attached to them.

There is a huge difference in the amount of time required to raise capital through the use of such documents. The long-form requires a wait period of 85 days, while there is a commitment after three weeks in the short-form. **Note:** There is a requirement to provide an MD&A in the AIF that is to be submitted in the short-form prospectus (it is supposed to be in the interims as well).

Commercial Papers

A commercial paper is really just a commercial i.o.u. Similar to the banker's acceptance, the commercial paper is issued at a discount. The market will have an interest rate upon which it will be prepared to buy commercial papers with particular terms and rates: the interest is built into the discount that will be deducted from the paper's face value.

Because these papers are unsecured this is the ultimate risk adverse capital in the market. Companies will buy banker's acceptances and commercial papers because they are convenient short-term investments (typically 30 to 90 days). For instance, suppose the Bank of Montreal needs \$300 million – it will sell \$300 million worth of commercial papers and they then get filtered down the line to various investors.

This is also the cheapest capital that exists on the market – this is essentially the borrower going directly to the public. Because of the risk exposure, the commercial paper is only really available to the most credit-worthy and mature of companies. The commercial paper is only available to public companies because the debt:equity ratio of the company needs to be known so that the price of the commercial paper can be set.

The company will work with a dealer group and a number of banks to put in place a backup commercial paper facility designed to back-stop or provide some liquidity in the event that the borrower cannot make good the repayment of that commercial paper when due. The borrower will typically get a stand-by line of credit for a particular sum and then issue the commercial paper to the market. There is no intention to ever draw upon the newly created bank facility. The commercial papers will be issued and when the money is due it will typically be reissued and then reissued and then reissued again. So long as the company's credit worthiness is maintained the company will be able to reissue. However, the second that the market perceives that the company is potentially not credit worthy, then it will not be able to reissue.

Exam Review/Discussion

There will be between 16 to 22 questions. The majority of the questions will be very straightforward, such as 'what is the U.S. Bank Rate'. Only describe the terms very briefly – does not require any analysis in these answers.

There may be another type of question requiring a comparison or contrast of terms. There will be two or three questions that require some thought – advise the client.

Off Balance Sheet Financing

This is a form of financing that allows a capital user to obtain capital in a manner that does not require for accounting purpose, to account for the capital it obtains on its balance sheet. This is, in effect, a means to get debt that does not show up on the balance sheet.

Equity is the cushion supporting debt on the balance sheet. Suppose a company needs more money for a capital acquisition. If the company borrows the money it will fit under liabilities as a debt, but if it raises it through shares it will fit under liabilities as equity. In order to balance this out, there must be an accounting entry in the balance sheet to reflect where that capital has gone. For instance, on Day One the capital might be accounted for under assets as cash. If the money was borrowed, the company's debt:equity ratio will have increased, which translates into greater risk. Suppose on Day Two the capital is used to purchase equipment. The equipment will be accounted for under assets as equipment. This will result in an entry change, but all other things, such as the debt:equity ratio stay the same. Regardless of the type of financing (debt or equity), the raising of the money *must* show up on the balance sheet.

There are three general techniques to undertake financing that does not show up as debt on the balance sheet:

1. Lease
2. Securitization
3. Receivable Financing

I. Sell the Accounts Receivable – Receivable Financing

A simple technique is to sell the account receivable. If the account receivable is being used as security why not just sell it? Suppose you have accounts receivable for \$100 million, which are sold at \$75 million. Where does the other \$25 million go? This is covered on other parts of the balance sheet designed for 'bad debts' and other items. The sale has built into it aspects of financing, because the amount you will get from it has built into it accounting for timing. The amount of money you get has factored into it not only the fair value, but also the time value before the purchaser of goods will pay the account receivable (in effect this is interest). In other words, part of the purchase price takes into account that the purchaser of the account receivable will have discounted the accounts to take into account the time delay – the discounted amount can be considered the interest.

The advantages:

1. No impact on the debt:equity ratio – this is important if you are fully leveraged;
2. The interest rate that you will effectively pay is invariably better than any loan rate that you will get (cheaper than other loans);

The disadvantages:

1. Are you able to do this – what are the other lending and loan arrangements that you have already signed? If you have another credit facility you will likely have pledged the asset as security (accounts receivable);

II. Lease

Suppose you are going to lease 26 Xerox DocuCentres. One approach is to lease the equipment from Xerox. Xerox will take PMSI superpriority. The impact of the balance sheet in terms of assets and liabilities is zero – the lease does not have to be reflected on the balance sheet. However, a new expense is added in the amount of the lease, which is perhaps \$30,000.

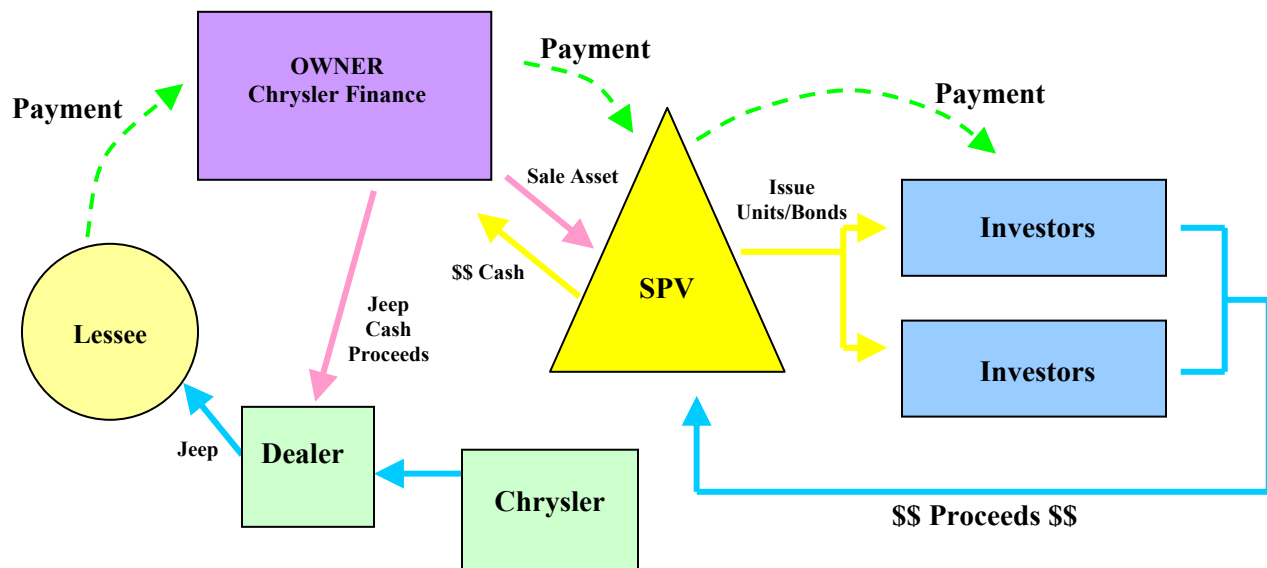
When you lease something, the vending institution essentially charges a premium each year for the depreciated cost of the asset plus an interest component. This entire lease payment (comprise of a capital retirement plus interest) is show on their statement. In effect, you will get a beneficial tax treatment from a lease than from ownership – you get a faster write down. However, if the lease is a disguised form of financing, accounting and tax rules provide that the present value of the lease payments ought to be treated as an asset to be stated on the balance sheet and an equivalent amount ought to be reflected under the liabilities.

III. Securitization

When you lend money to a business and you take security, you analyze the value of the security and determine what kind of a cushion the security will provide. Also, in the analysis you must analyze the viability of the business itself as an operating unit. If the security is accounts receivables, you must understand that there is an entire business to be made of in terms of realizing upon each account receivable.

Almost invariably, the quality of the account receivable (in terms of its measure of risk) will be higher than the quality of the business. This is so because the business incorporates the quality of the accounts receivable in addition to all the other things that the business generally does. In other words, the accounts receivable of the business might be rates as AA while the business itself might be trading at a rating of B+. Therefore, if you have a good quality account receivable and can strip it from the business it is less risk. If the account receivable is less risk, it will demand a lower interest from lenders. For instance, if the company’s risk profile results in a best interest rate of 7% on a loan, the accounts receivable risk profile might result in a best interest rate of 5% on the sale.

The idea, then, has been to offer these types of products to the market. Securitization means to take an asset out of a business and convert the asset into an interest bearing security. This is a huge part of finance markets today. Securitizations are generally very large – in the neighborhood of \$100 million.



Suppose Daimler Chrysler sells the dealer a Jeep. Suppose Jon decides he wants the car and will take it for a lease over 3 years at \$600 per month. Chrysler Finance will pay the dealer the amount of the entire vehicle (\$40,000) and Jon will pay Chrysler Finance according to the terms discussed. Thus, the Lessee

will pay Chrysler Finance \$600 per month, which is a cash-flow to Chrysler Finance. Chrysler Finance analyzes what the car will be worth in three years time (\$20,000) and determines that it must get the remaining value back from Jon in the intervening period in addition to interest on the entire amount. Thus, the lease payment is comprised of:

1. The amount of value being consumed (Original Value less Remaining Value); and,
2. Interest rate charged for the use of the money for the duration of the lease

It is a fact that auto-leases happen to be one of the most high quality accounts receivable cash-flow assets that there is today – people do not like to give up on their cars if they can do anything about it. Therefore, auto-leases are highly desirable by the market because they tend to be paid and paid on time. A company like Chrysler Finance (with a particular credit rating) upon realizing that it has thousands of auto-leases (with a higher credit rating) might decide to play the securitization game.

Step One – If you are going to get the full value of the quality of the receivable (pay the least amount of interest possible) then the asset must be stripped clean from the corporation so that someone buying it knows that they own it and if anything were to happen to the corporation the purchaser must know that no other security exists on the accounts receivable.

Step Two – How do you sell a number of leases to the public? The Owner (Chrysler Finance) will create a Special-Purpose Vehicle (SPV), which is often a trust or partnership (for tax reasons) and agree to sell them a certain pool of its accounts receivable to it. The SPV will purchase the accounts receivable from Chrysler Finance. The SPV will finance the transaction by issuing to the public, through a prospectus offering, either trust units, debentures, partnership units, or bonds (some security) that are interest bearing. The investor will purchase the interest-bearing security which will finance the transaction between SPV and Chrysler Finance. The SPV is limited by its constating documents to collect the money from the investor and transfer it to Chrysler Finance and issue the security to investors and pay out the interest.

Recall that Chrysler Finance in its lease with Jon is receiving \$600 per month (this is an asset paying \$600 per month). In effect, Chrysler Finance is turning around to sell an asset yielding \$600 per month. The investor will pay an amount that takes into consideration the yield in addition to the fact that it is not receiving the money immediately. Because this is such a high quality asset the amount paid might be discounted by only 6%.

What makes this interesting is that Chrysler Finance is receiving 8% on the lease, but is receiving the financing to do so at only 6%!

In addition, the debt is no longer on Chrysler Finance's books – the SPV has a debt on its books, but the SPV is independent. Chrysler Finance only has the cash from the sale. As well, the Owner will enter into an agreement with the SPV called a "services agreement" providing that that Owner will agree to manage the entire process: the collection of the leases, administration, book-keeping, and paying the investors as per the terms of their investment. It does not have to be the owner, but it will invariably be the owner.

A very big player in this process is the rating agency – the success or failure of the securitization will be the rating applied. The rating is going to be analyzed by the rating agencies by a number of factors:

1. They will want to see a nice bell curve in the accounts receivable – typically a geographic dispersion;
2. They will want to see a dispersion in the terms of the leases – you will want a good cash-flow curve;
3. They will want to ensure that the average duration of the leases is at least 30 months – investors in the market are looking for something that will exist for 30 to 36 months;

4. The value of the pool of leases must be large enough just to warrant the cost of legal, accounting, and brokerage costs to make this all happen; and,
5. Credit Enhancement.

Note: The key to the success of a securitization is the credit rating. You want the credit rating to be higher than your own so that the savings outplay the costs to such an extent that this is worth it to you.

Credit Enhancement

Anything the owner does, any form of advantage that the owner provides, to lessen the risk of lessee default to the investor. There are a number of ways an owner can provide such enhancement:

1. *Guarantees* – if the cash-flow drops below a certain level the owner will bring it back up beyond a certain threshold;
2. *Over-Collateralize* – if the pool of accounts receivable is worth \$100 million, the owner may put in \$110 million in the pool that will sit there just in case there are defaults as time goes on to replace them; or,
3. *Promissory Note* – Where the assets are sold, instead of taking the full value in cash, the owner can take 90% in cash and take a 10% promissory note and make the note subordinate to any claim the investors might take against you

The key to the success of the securitization is that the sale of the asset be considered a ‘true sale’ for accounting and tax purposes. If it is a true sale, it means the risks and obligations of the asset have truly transferred to the special purpose vehicle. If it is not a true sale, it would allow the creditors of Chrysler Finance to trace through and make a claim on the leases, which the investors lent money against. In other words, the investors who have invested on the basis of having the first interest might find themselves subordinate to the creditors of Chrysler Finance.

Some of the key factors of a ‘true sale’ are:

1. Have the risk and rewards been transferred? What is the degree of credit enhancement – rules have developed regarding credit enhancement. As a rule of thumb, the total value of credit enhancement cannot exceed 10%; or,
2. Are there any aspects of the entire transaction that do not pass the fair market value test? For instance, is the services agreement being offered and carried out at fair market value? There can be no back-door profiteering for Chrysler Finance

Great care is taken to ensure that there is a true sale to ensure that the assets only become available to the investors and not the creditors of Chrysler Finance.

Advantages

There are a number of reasons you would do this:

1. Cheaper Financing – get your money at one rate and lend it at another
2. The debt is no longer on your balance sheet, but the SPV’s balance sheet (only if it is a true sale). If it is not a true sale it is as if there is no sale and the debt remains with Chrysler Finance

Asset-Back Transaction – Where you have taken a single asset or pool of assets, created a security whereby the assets themselves form the security.

Derivatives

A derivative is an instrument that derives its value from an underlying benchmark – the happening of something else. The benchmark could include an asset, an index, an option in shares, or an economic indicator.

A fairly common form of derivative is the mutual fund. A mutual fund is a pool of money that various people invest into – the managers of the fund invest in a basket of shares. The value of the mutual fund unit will fluctuate relative to the total value of all the shares purchased in the mutual fund.

Financial Purposes

There are two primary financial purposes for derivatives:

1. To engage in hedging programs – ‘hedging’ means to take action to better the likelihood of a desired outcome. In financial terms, you engage in certain financial steps/transactions to better ensure that a certain occurs or never happens. Primarily, cash-flow or capital budget projections are hedged;
2. To take full advantage of leveraging possibilities in a speculation – you are speculating and leveraging the ability to maximize some gain.

Suppose that shares in IBM are trading at \$40. Suppose options holding the share value at \$45 for trading in IBM are selling at 25 cents. You can purchase one share at \$40 or 160 options for \$40. In both cases you have spent \$40, but the returns on each transfer may differ tremendously. Suppose that the value of the IBM shares increases to \$50. The person who purchases the single share will make \$10. The person who purchased the options has the potential to make \$800 (160 shares multiplied by \$5 increase on the immediate purchase of 160 shares at \$45 and sale at \$50).

Leverage – the notion that you only have \$40, so you can either invest \$40 in the share itself or invest \$40 in the options, Investing in the options provides more earning capacity for the particular dollar investment. Thus, same amount of investing in the same fundamental thing. The downside to this is that the investment in the options might be worthless should the share value not increase.

Common Derivative Products

Derivatives break down into a matrix and are generally one of four types:

1. Traded through an exchange – one which has very highly standardized terms and not too much flexibility in the terms;
2. Over-The-Counter (OTC) – similar to the private market, which makes transacting more complicated and, thus, reducing their liquidity;
3. Options – broken down into either puts and calls
4. Forward Contracts – the obligation to buy a certain amount of something at a particular price on a fixed date

I. The ‘Option’ – Puts and Calls

With every option contract you must have someone selling and someone buying. Options are either put options or call options. You look at the option from the purchaser’s eye (there is an ‘option writer’ and a purchaser). If the option, from the purchaser’s eyes, is the right to buy shares it is called a call. If, however, from the purchaser’s eyes the option is to sell shares, then the option is called a put.

Call Options

The derivative in options, be them put or calls, works in the following way. Suppose X, the option writer, engages in the market and writes an option to sell 100 shares in IBM over the next six months for \$52. The purchaser, then, has bought something requiring the option writer to sell 100 shares of IBM for \$52 at any time over the next six months. From the eyes of the purchaser, the purchaser has the right to buy and, thus, it is a call option. A classic use of this type of scheme is having a leveraged investment.

Covered – if the option writer actually has the 100 shares, s/he is covered

Naked – if the option writer does not actually have the 100 shares, s/he is naked

One of the reasons that there are a lot of issues surrounding this is because the downside of the naked option is endless. You can suffer tremendous loss. If X sees that share price is increasing, s/he is likely to go out and buy them.

Put Options

Suppose X will purchase 100 shares of IBM at \$52 within the next six months. The purchaser will have bought the right to sell to X 100 shares of IBM at \$52 within the next six months. From the eyes of the purchaser, the purchase has the right to sell and, thus, it is a put option.

If the shares go above \$52 then the purchaser would not exercise the option – the purchaser would rather sell his/her shares. Buying a put is like buying insurance – by paying for the options the individual has protected the value of the shares at the time of the put for the duration of the put. There are a number of purposes: the option writer might structure both puts and calls in order to shield him or herself from tremendous loss – hedging his/her downside.

One type of common derivative is the option – the put and the call. You determine which is which from the buyer's point of view. If the buyer has the right to purchase it is a put, if the buyer has the right to sell then it is a call. The purpose for puts and calls vary: there are speculative purposes and protecting of position purposes. To the extent that you are buying a put, you are protecting something.

Forward Contract

The forward contract is basically an exchange trade in commodities or indices. Thus, we are dealing with pork bellies, gold, interest rates etc., Thus, you might have an agreement to sell 100 ounces of gold at a particular price at a certain point in time.

A writer of a forward contract in pork bellies might agree to sell in 90 days 1000 pounds of pork bellies at 62 cents per pound. The buyer of that contract must buy 1000 pounds of pork bellies at 62 cents per pound in 90 days. This might get a little more difficult when you are dealing with exchange rates.

Swaps

A swap is a form of derivative. A swap occurs in a trade of either exchange rates or interest rates. The notion regarding interest rates is that two parties, A and B, will agree that in respect of some nominal amount (\$100 million) over a specified period of time (generally 1 to 5 years), A will pay B a floating rate of the Banker's Acceptance rate plus 50 basis points and in exchange B will pay A a fixed amount.

At the end of the year, they would determine how much would have been payable if the person was paying banker's acceptance plus 50 basis point on the nominal amount and A will pay B that amount. B will pay the amount that accrues on the fixed rate. In fact, the two will set-off the difference and whoever owes more will pay the set-off. In other words, A and B have swapped interest rates.

Who would do this? Somebody who has floating coverage and wants to get fixed coverage or someone with fixed coverage who wants to get floating coverage. The difference between a floating rate and a fixed rate might be favorable for floating at a particular point in time. This may change – they do not go up and down together (the spread differential).

Hypothetical

Suppose a borrower needs \$100 million and it is cheaper today to go floating. The borrower would rather have the certainty – business risk might force the borrower into a fixed interest rate. Thus, the borrower might actually borrow \$100 million at 7%. The borrower is going to enter into a swap whereby the borrower will promise to pay a floating rate on the \$100 million to B and B will promise to pay the borrower the 7%. At the end of the year, B knows that an amount is coming to it to cover off the real interest rate exposure (B is going to be paying A the \$7 million). A, however, has promised to pay to B the floating rate.

If one borrows at fixed for 7%, the rate is 7%. If the individual engages in a swap transaction, there are differentials in the pricing that it is ultimately cheaper for the borrower.

The purpose of the swap, where one promises float and one promises fixed, is to limit exposure to the floating rate. If you want to borrow float, but cannot afford the exposure, you might try to arrange a swap in order to limit the exposure to the floating rate. You will endeavor to minimize your downside to the floating rate interest.

Caps – the writer of the contract agrees that in respect of a specified nominal amount for a specified period of time (typically one year) will promise that a floating interest rate will not exceed a certain percent. The percentage will usually be expressed in banker's acceptance terms. At the end of that year a calculation is made and if the actual floating rate on the nominal amount is higher than the specified amount, then the writer of the cap will pay to the buyer the difference.

Thus, X might pay \$1,000 to Y for a cap providing that if floating interest rates exceeds 7% on \$1 million at the end of the contract, Y will pay X the difference. Thus, if the interest rate at the end of the year (based on some calculation) is 8.5%, Y will have to pay the difference. In this way, the actual yield is \$85,000, but is capped up to \$70,000 and Y will have to pay X \$15,000.

In effect, X has capped his/her financial exposure at 7%. Who would do this? Someone who has exposure to floating rate interest who wants to hedge him/herself.

Floors – the writer promises that interest rates will not follow below a certain level. If interest rates on the nominal amount go lower than the specified rate, then the writer will pay the difference. Who would do this? Someone wanting to protect the base line value of their assets – someone who has bought debentures, or some other interest bearing instrument, who wants to protect the rate of return on that investment.

Collars – these are contracts that protect both the upside and the downside. For instance, it might promise that the interest rate will stay between 5 to 7%.

Gold Hedging Programs

Gold is a highly liquid commodity. While liquid, the problem with gold is that the gold market fluctuates very rapidly. The entire industry, as well, is capital intensive. A gold company might engage in a number of programs in assisting them to create an oppression regime by forward-selling their product.

The gold company knows what its production will be for a certain period of time and will agree to sell the production for a fixed price in the future. The gold company will create a number of forward contracts. The gold company knows what it is going to get for its gold regardless of what the price is.

Suppose the spot price is \$340 an ounce and the company has to supply to the contract for \$360. The company might decide to go into the spot market, purchase at \$340 and sell at \$360, make \$20 per ounce without having to sell a single ounce of its own gold. However, if gold was trading at \$380 per ounce, the company will use some of its own reserves and deliver the gold at \$360 (still making money).

If gold is trading in the spot market for less than the price promised to the company, the company will go out into the spot market in order to purchase and sell at the price promised. Thus, the company has the ability to leverage on its own product because of the nature of the product.

Gold companies will enter into gold facilities with banks. Banks typically have a great deal of gold. The gold company will enter into a facility whereby the gold company will have the right to borrow the bank's gold and will agree to pay an interest rate for that privilege.

What are the gold company's options? Consider the following three:

1. Deliver the gold as promised;
2. If the spot market is less than the agreed price, buy from the spot market and make the difference; or,
3. Borrow the gold from the bank and give that gold to the purchaser for the price of the forward contract, pay the bank the interest rate for the dollar equivalent amount of loan that it translates into, speculate that gold prices will increase and sell it at the profit or if there is a decrease buy it at that low rate and use it to repay the bank

The futures market has gotten so sophisticated that you can purchase futures and options on just about anything. Take a look at the following exchanges: <http://www.tradesports.com>, <http://www.newsfutures.com>, and <http://www.foresightexchange.com>