Cash Flow statement

-how a company acquire and spend its cash over a given period of time

-Cash flow from operating activities, cash flow from financing activities, cash flow from investing activities

-Cash flow from operating activities is generated from the general operations of the company

Ex. Account payables, Inventories, Income tax

-Cash flow from investing activities is generated from sale of property, plant and equipment

-Cash flow from financing activities is generated from short term debt, long term bank loans, paying dividends

Depreciation is a noncash expense so you have to add depreciation back to net profit

-Cash flow statement is useful to see if company has changed profit to cash, whether company is solvent

10-K is an annual report of a company



Velocity is how fast a particular asset moves through a business to the customer

Velocity is important too

Inventory turns = number of times the inventory is turned over

Managers need to think of business as a whole, how different departments link together and what is happening in the economic world

Ratio analysis Profitability ratios:

Return on Assets (ROA): divide net income by total assets

Return on Equity (ROE): profit as percentage of shareholder's equity

Return on Sales (ROS): Divide net income by revenue, shows how well company is controlling costs

Gross profit margin: Gross profit divide by revenue

Earnings before interest and tax margin (EBIT margin) or operating profit margin: divide EBIT by revenue

Can pay suppliers in	Cash is an underproductive asset so	Cannot service debt, possibly lead
advance and get	value is destroyed	to default or bankruptcy
discount on raw		
materials ex. Apple	Temptation for fraud or outright theft	Cannot pay top talent on time and
pays its Chinese		they go off to competitor
manufacturer Foxtron		
in advance	Company becomes an acquisition	Pay suppliers late or not at all,
	target	losing preferential credit terms

Uses of Working Capital

1. Ensure sufficient liquidity to support daily operations (financial grease required to keep the gears of the corporate profit mechanism running smoothly)

Law firm and steel manufacturing firm differ in nature of trade and inventory

- 2. In support of the company's business plan (Not viable business plan won't work)
- 3. Overall barometer of company operating performance (poor WC indicated poor internal controls and reporting practices
- 4. Reduce company's reliance on expensive long term financing (WC is a reliable in cheap source of semi-permanent capital)
- 5. Towards maximising ongoing shareholders' wealth (Compary well too much cash, too slow inventory turnover rate, too much uncollectible to the stand obsolete inventory decreases future cash flow)

Sources of WC: Trade credit by goods on credit) and bank overdrafts are easily obtainable sources Both appear as a ables (current liabilities)

From raw materials to cash: VE kine constal/cash cycle

Raw material to Work in process to finished goods/inventory to debtors to cash \$\$

If we can reduce the speed, surge (oversized WIP) and bottleneck (debtor to cash, bad debts), the cycle becomes more efficient.

Ex. Dell increases the efficiency of its cash conversion cycle by only manufacturing computers when there is down payment of an order (do not keep obsolete inventory)

Can have conservative credit terms to customers to ensure DSO (days sales outstanding) is low.

DSO = (account receivable/sales) x 365 days

**EXAM QNS: What is DSO and why is it necessary to analyse it?

DSO analysis: Timing of debtors, Credit terms given to customers as compared to rivals, Bad debt indicators

Zero stock-outs (always available goods) policy is BAD: high prohibitive costs to maintain inventory, incredibly wasteful

CFO/FD has a value role = maximise shareholders' value in the long term

-collection costs increase as quality of customer declines

-interested in customer's short term financing well being

-credit scoring (numerical evaluation of each applicant based on applicant's current debts and history of making payments on a timely basis)

Identify delinquent accounts and collect them

Managing Inventories

Control of assets that are produced to be sold in the normal course of operations

Raw materials inventory, Work in progress (WIP) inventory and finished goods inventory

Inventory is usually 5% of all assets

Reduce WIP inventory by not focusing excessively on production quality

Lecture 3: Leverage and WACC

Capital Asset Pricing Model (CAPM): A systematic way of calculating company cost one uity (CoE) which comprised of three components (risk-free rate RfR, Equity risk premium EVP, beta)

Cash flow: the basic measure of whether a company is the provide or not for its owners (NOPAT + Depreciation + Amortisation)

Discounted Cash flow: CF calculated on present value basis with a size based on WACC

Free cash flow if the investment outlay for that period

Ne operating profit after ta (NGPAT) = reported net income, but excluding any non-continuing sources of extraordinary income

Weighted average cost of capital WACC = commonly used as the discounting rate for DCF determination

WACC = WACE (weighted average cost of equity) + WACD (weighted average cost of debt)

Beta = covariance of the return of firm's share with return of market portfolio

Beta = volatility of firm's share price wrt market

Company's cost of capital

Objective set for management in a value-based organisation = maximising of long term shareholder wealth

-achieving a return on the money invested that is greater than shareholders can obtain somewhere else with the same risk

Cost of capital = rate of return that a company has to offer finance providers to induce them to buy and hold a financial security

Calculating a company's cost of capital requires judgement at many stages in the process

Short term debt is temporary and is offset by cash and marketable securities held by the firm so it may be excluded

Higher degree risk investment demand higher return and low risk activity should require lower rate of return. Cannot demand all divisions to achieve the same rate of return

Firm should not use a single discount rate for all its activities: very difficult to quantify likely risk

Some venture capitalist use hurdle rates (minimum rate of return) such as WACC+ inflation or WACC+ safety margin

Best way to measure a company's performance (Hagel and Brown)

ROE = return on shareholder's equity (good measure that is consistent with maximising shareholder's wealth but should not focus too much on it)

Companies can resort to financial strategies to artificially inflate ROE, ROE is subjected to manipulation

If underlying profitability deteriorate, more debt leverage will be needed to maintain ROE and this creates more risk

High leverage increase ROE but not ROA

.co.uk

When you increase leverage to increase ROE, more cash is neared a national servicing and these cash cannot be used for investment which can increase fully end to end of its. This hurts shareholder's wealth.

Better to use ROA (return on assets in indise long term pro

ROA explicitly takes note a count the assets used to support the business and shows asset utilisation

Managers have to focus on a finite they are best qualified to manage and spin out other activities or assets to more specialised companies

Focus on capability leverage: variable cost outsourcing arrangements support scaling back in a downturn

BUT ROA is a broad measure and sometimes many companies of the same industry have the same ROA

In conclusion, use both ROA and ROE and other indicators such as CFROI (Cash flow return on investment) and productivity measures of the company and compare with industry standards and past performances

Does Capital Asset Pricing Model work?

CAPM used to measure cost of equity capital to determine expected returns on capital invested

Market is populated by highly sophisticated well informed sellers and buyers and investors care more about their wealth (assume no imperfections like transaction costs)

Portfolio diversification: Portfolio is less risky than any of its components – reduce unsystematic risk

Unsystematic risk is risk perculiar to the investment or company ex. Company's tech wizard got killed in freak accident

At high leverage, there is increased financial risk of default, bankruptcy and increased operating risk (company has to pay debt instead of investing in new products)

Not a straight positive line between leverage and return due to transfer costs between equity and leverage, risk of bankruptcy, deductible interest, acquisition

Optimal capital structure (OCS)

- 1. As a company's **cost of equity is usually 2.5 times greater than the relative cost of long term debt**, value is created if all else is equal with more debt and less equity in the capital mix
- 2. However, heightened risk of default and bankruptcy has to be taken into account. **Destabilising levels of borrowing destroys value**.
- 3. Look at multiple year discounted cash flow analysis (Increase product price and capped payrolls may increase CF in the short run but it can cause permanent loss of market share, loss of key talent)

Effective Value management (VM) = continuing pursuit of maximum continuing value for the shareholders of the subject company

Requirement to service extra debt may instil cost discipline that may be missing (tithe ed cost management and reduce waste can be used to create new CF to finance more deby

-but it has disadvantages and cannot be used just for 11 P

A highly geared company only makes some in ple-crisis era with table frowth and easy credit not in an era with frequent recessions

Company's carlot covalue lifespan (CVP) At offerent stages, we would require different capital structure

At the start of the company (high innovation), WACC is high because of nearly 100% equity and 0% gearing to expand

At the peak of the company's life, up to 80% gearing to consolidate role as segment leader ex. Twitter

At mature stage, the company has to be selective of investment and reduce gearing to scale back borrowing

At failing business model stage, there should be net disinvestment and gearing levels should be low (rights offer is the only type of equity financing to save the company)

Uses of WACC

- 1. Evaluate the company by discounting CF with WACC
- 2. Helps in capital expenditure decision making (whether to make new investment)

The lower the WACC, the higher the value of the company with all things being equal

Minimise WACC throughout the corporate value lifespan of a company

Where x is the discounted free cash flow, WACC is the weighted average cost of capital, g is growth rate

Hence, we can work backwards to calculate WACC or cost of equity. This is an alternative to using CAPM.

However, it depends on a single price and assumed constant and stable cash flow and growth rate of the company

Project appraisal and systematic risk

What determines the systematic risk of a share is the underlying activities of the firm

Some firms engage in high risk ventures and to shareholders, in exchange of accepting the possibility of a large loss, will expect a high return.

Alternative perspectives to risk

Risk can take into consideration

- 1. Probability that investment you choose will preserve the capital over time you end to invest your funds
- 2. Probability it outperform alternative investments
- ø 3. Whether the after tax receipts from the investm m at least as much purchasing power as he had to begin with
- Certainty with which long term e usiness can be evaluated om naracteristics 👖
- 5. Ability of managemene ' o ea the full potent the usiness and wisely employ cash flow
- e of business Certainty that managemen of in channel rewards of business to shareholders
- 8. Levels of taxation and inflation
- 9. Companies with such global power, might of brand names, attributes of projects, strengths of distribution system Ex. Coca cola with 44% market share of soft drinks, Gillete with 60% of blade market and Wrigley dominating chewing gum market
- 10. Distinction between systematic and unsystematic risk is important
- 11. Over simplistic academic models are poor substitute for judgement recognising the imperfections of reality
- 12. Portfolio theory: There is an efficient frontier that contains all the optimal bundles. For every level of expected return, we can solve the portfolio combination of assets with the lowest risk. However, this assumes that all assets are risky. Investors choose their portfolio on the efficient frontier, given their beliefs on expected returns and risks.
- 13. Expected returns cannot depend on stand-alone risk solely

EXAM QNS = Identify the primary supportive (2m) and opposing (8m) points to Cook's 14bn buyback programme of Apple shares in Jan-Feb 2014.

- 1. Share prices will increase by 10%
- 2. Individual shareholder will be delighted as share prices increase
- 3. Buyback of shares at the beginning of the cycle
- Too much cash is not good and Apple should not keep the cash since cash cost WACC

- 5. New Normal
- 6. New emergence of standardized financial evaluative criteria
- 7. Synergies = improvement in combined company gained from merger
- 8. Best time to make acquisition is at the beginning of the cycle

Capital investment projects can be classified into

1. Revenue enhancement investments = expansion of existing business

Ex. Apple's decision to add smaller Nano iPods

Large firms have R & D departments that search for ways to improve existing products and create new ones

Most common investment project = taking an existing product and selling it to a new market

Ex. KMB, manufacturer of Huggies, made its disposable diapers more waterproof and began marketing them as disposable swim pants called Little Swimmers

2. Cost reduction investments

Ex. Wal-Mart located a regional distribution center in Texas while provided lower costs of supporting stores within the region (does not expand firm's revenues)

Other types of costs reducing investments arise when equipment either terms out or becomes obsolete due to development of new and improved equipment

Ex. Intel is continually evaluating the replacement of existing equipment

3. Mandatory or non-discretic any investments as a result of government mandates

Companies the safety and environmental regulations

These are required for the company to continue to do business

Ex. Scrubbers that are installed on smoke stacks of coal fired power plants to reduce airborne emissions to meet government pollution guidelines

Net Present Value (NPV)

Time value of money

Net present value (NPV) is the difference between the present value of cash inflows and cash outflows

NPV = difference in present value of investment's future cash flows and the cost of making the investment (initial cash outlay)

NPV estimates the amount of wealth the project creates = investment projects should be accepted if NPV is positive and rejected if NPV is negative. If NPV = 0, project neither create nor destroy value

Since NPV is an estimate of the impact of investment opportunity on value of the firm, NPV is gold standard of criteria for evaluating new investment opportunities

Cvclicality

Clear cycle pattern in volume and number of shares

There is a greater need for capital in times with more growth opportunities than in times with fewer growth opportunities. Magnitude of swings is huge. Number of IPOs is not solely driven by demand for capital. Sometimes, firms and investors seem to favour IPOs and at other times firms rely on alternative sources of capital.

Global Market for IPO was hot in late 2010 has cooled now. In just a few months, the market has gone from raising record amounts of money to reaching a 10 year high in the number of proposed offerings being withdrawn because there is no market.

Volume of withdrawn offerings provides clear indication of rapid changes in the market.

However, unlike the collapse of market in 2000, the latest decline did not follow a widespread collapse in prices of previous IPO. Nine offerings actually doubled in price on the first day of trading in 2010. Ex. Youku.com

Cost of an IPO

A typical spread is 7% of issue price. Total cost of issuing stock for the first time is substantially larger than costs of other securities. There is a lack of sensitivity of fees to issue size. Although larger issue requires some additional effort but one would not expect increased effort to be rewarded by atively.

In support that the quality of the underwriter is important, underwriter charge high fees gain n Notesal market shares.

Recent IPOs

Facebook had a big of 103bn but it ell sharply to about 49bn after its first day_This

- 1. FD listened to whispers numbers that Facebook is worth a lot even though there was no change in the foundation of the company
- 2. People who had already invested in Facebook wanted a guick return and hoped Facebook have a high initial IPO price
- 3. IPO market was not hot yet
- 4. Using DCF, Facebook is only worth 53bn (this is verified by the fund managers who aren't in Facebook yet)
- 5. If one enthusiast is willing to pay high for FB shares, it does not mean that everyone is willing to pay high for it
- 6. Foundations are fake and FB made the mistake of listening to zealots that represent a small share of the market

Currently, the IPO market is hot. AO, the electrical manufacturer, went into IPO and prices just kept increasing. Candycrush is going IPO. Poundland is going IPO. AliBaba will be the biggest IPO coming.

Bankers have vested interest in keeping price high for IPO as they want to continue to attract clients to enter IPO so that bankers can earn commission and underwriting fees out of it.

***EXAM QNS: The phrase IPO means that a company of that name has never, ever traded shares before. As a consequence, founders of the company are frequently concerned about losing control as a consequence of dilution

Debt Financing

In the middle of 2005, Ford Motor company decided to put one of its subsidiaries, Hertz Corporation, up for comepetitive bid. CDR, a private equity firm, purchased Hertz's outstanding equity for 5.6bn. In addition, Hertz had 9.1bn in existing debt that needed to be refinanced as part of the deal. This is a public company becoming private through a leveraged buyout (LBO).

In a LBO, a group of private investors purchases all the equity of a public corporation. The Hertz LBO is the second largest transaction of its kind and it requires issuing large amounts of corporate debt.

Public Debt

Corporate bonds are securities issued by corporations.

A public bond issue is similar to a stock issue. A prospectus or offering memorandum must be produced that describes the details of the offering. In addition, for public offerings, the prospectus must include an indenture, a formal contract between the bond issuer and a trust company. The trust company represents the bond holders and makes sure that the terms of the indenture are enforced.

While corporate bonds almost always pay coupons semiannually, a few corporations ex. Coca cola have issued zero coupon bonds.

Face value of bond does not always correspond to the actual money raised because of underwriting fees and possibility that the bond might not actually sell at face all other it is offered for sale initially.

If a coupon bond is issued at discourt, in college an original issued, count (OID) bond.

Bearer Bonds and Poppered Bonds Bearer bonds a enhancement Whoerer Cosicowy holds the bond certificate owns the bond and to revolve coupon payment, the bond and are bearer bond must provide explicit proof of the ownership. Holder does so by literally clipping a coupon off the bond certificate and remitting it to paying agent. Anyone producing the coupon is entitled to the payment but there are obvious hassles and serious security concerns. Losing bearer bonds is like losing currency.

Registered bonds: Issuer maintains a list of all holders of its bonds and brokers keep issuers informed of any changes in ownership. On each coupon payment date, the bond issuer consults its list of registered owners and mails each owner a check. This facilitates tax collection too.

Types of Corporate Debt

- 1. Debentures and Notes = unsecured debt, which means that in the event of a bankruptcy, bondholders have a claim to only assets of the firm that are not already pledged as collateral on other debt (Notes have shorter maturities [less than 10 years] than debentures)
- 2. Mortgage bonds = secured debt that are secured by real property
- 3. Asset-backed bonds = secured debt where any kind of assets have been pledged as collateral that bondholders have a direct claim to in event of bankruptcy

Junk bonds are bonds rated below investment grade

The **bondholder's priority in claiming assets in the event of default**, known as **bond's seniority**, is important.

Ex. Investors in junior tranche of an asset-backed security do not receive cash flows until investors in the senior tranche of an asset-backed security received their promised cash flows.

Bond Covenants

Covenants are restrictive clauses in a bond contract that limit the issuer from taking actions that may undercut its ability to pay bonds.

Some actions benefit equity holders at the expense of bond holders

Ex. A company issues a bond and immediately liquidates its assets and pays out the proceeds in the form of a dividend to equity holders and declares bankruptcy. In this case, equity holders receive the value of firm's assets + proceeds from the bond while bondholders are left with nothing.

Bond agreements often contain covenants that restrict the ability of management to pay dividends. Other covenants restrict the level of further indebtedness and specify that the issuer must maintain a minimum amount of working capital. If the issuer fails to live up to any covenant, the bond goes into default.

The stronger the covenants, the less likely the issuer will default on the bond so the lower the interest rate required by investors who buy the bond. Including more covenants can reduie cost of

Reduction in firm's borrowing cost can more than outweigh the top of the loss of flexibility associated with covenants.

fraction of the outstanding bonds in the market or make a contract. or issuer can also tender offer for the entire issu

Issuer can also repay bonds by exercising a call provision that allows the issuer to repurchase the bonds at predetermined price. Bonds that contain such provision are known as callable bonds.

Call Provisions

A call feature allows the issuer of the bond the right (but not obligation) to retire all outstanding bonds on or after a specific date (call date) for the call price. The call price is generally set at or above and expressed as a percentage of the bond's face value.

An issuer can always retire one of the bonds early by repurchasing the bond in the open market. If the call provision offers a cheaper way to retire bonds, the issuer will then call the bonds instead.

If yields have dropped, it is cheaper to retire callable bond. Issuer will exercise call option only when the coupon rate of the bond exceeds the prevailing market rate.

When market yields are high relative to bond coupon, investors anticipate the likelihood of exercising the call is low and the bond price is similar to an otherwise identical non-callable bond. I market yields are low relative to bond coupon, it is likely that the bond will be called and its price will be close to the price of a noncallable bond that matures on the call date.

The callable bond price is always below that of the non callable bonds.

Summary

	Equity	Bonds	Bank debt
Return of funds	 No obligation to return funds 	 Bonds must be repaid upon maturity 	 Bank dabt must be repaid upon maturity
Ralotice cost	• High	Low Hoed interest rate	 Low Aimost always at a toating rete
Information disclosure	 Quoted companies public, formal disclosure 	 More private, even for a public bond issue Private placements are more private still and suitable for smaller issues 	 More private than equity and bonds but amount of information high, even including business plans
Covenent requirements	* None	 Investment gode bonds have tewer conditions and generally no financial dovenants Sub-investment grade bonds have more covenants 	 More covenants and more operaus even to investment grade borrowers Fasiar and chaspar to discuss amendments with banks then with possibly unknown bond holders
Hexibility of usage	* Parc	 Early poor 	* Good

Wigglesworth and Lucas Nestle Loan highlights funding dispatite Nestle, world's largest food company, has signed a loan with Europe's lowest borrowing costs in more than 4 years, showing how eager banks are colonic to bluechip companies = 4bn revolving credit facilities cost Nestle only 10 basis agents above the Europeanir terbank lending rate

Smaller, riskier companies faced ougher fundings in

Note the Proved even sovercise of it was since it has a strong balance sheet (Double A from Standard and Poor)

Companies like AT&T, Walt Disney and Coca Cola Enterprises also sold sizeable bonds with the lowest coupons on record despite mayhem in global markets.

Banks prefer to lend to large multinationals = companies' safety + prospect of further banking work derived from lending relationship such as advisory services, underwriting, cash management

Nonetheless, banks still require higher returns on credit lines as a result of their increased funding costs Ex. Nestle have to pay a margin of 40basis points if it calls on all the funds in the credit facility

Smaller companies are facing more uncertain lending market and banks are under pressure to deleverage and have to set aside more capital for riskier loans. High yield bond markets that companies relied on tumbled during Global Financial Crisis.

Lindsay 2009 HSBC rights offer

HSBC lost 8% to fall to a nine year low of 586.5p after Morgan Stanley analysts say that it has to raise at least 20bn in a rights offer and halve its dividend. Its surplus capital are all but gone at a time when it should be increased. It does not expect HSBC to recover earnings until 2011

Some talk that HSBC believes Morgan Stanley note is based on accounting measures that are not in force and there is no need for a rights issue

M&A is the best casino in the world which is operated by the major international banks led by JPMorgan Chase, Goldman Sachs which have sufficient capital and reputation to support a Merger Megaboom between 2011 and 2019.

A sentiment changing event like LinkenIn IPO (2011) and Facebook IPO (2012) help to spur merger activities by communicating to the world that the financial markets have moved forward from last recession

Dotcom wave I created major corporations like Amazon, Google, eBay, Yahoo

Dotcom wave II will create major corporations like Twitter, LinkenIn, Facebook

Dotcom wave II may start with Facebook acquisition of Instagram with 1bn dollars

There is significant correlation between increase in stock price and increase in merger activity

Wait for the shakeout period to be completed and for the market sense of true valuation to appear

The initial IPO price is based upon thin markets and abysmally incomplete information about the company's true future prospects and fundamentals. These are dominated by earlier investors looking to cash out fast. Only after a few quarters of the IPO, sufficient information emerges to evaluate the company on true fundamentals.

Acquisition Purchase Premium (APP) = amount paid for a target firm in excess of the firms indicated market value (Market capitalisation)

Mauboussin and Paul Johnser Competitive Advartage report (the neglected value driver) Competitive Advance Period (CAP) = number of years a company is expected to generate excess reported for mental investments (& value growth duration)

Competitive advantage period is important as it weds competitive advantage (strategy) to valuation (finance)

- 1. Vast number of market participants attempt to understand valuation and stock market prices with accounting based methods thus CAP is seldom addressed
- 2. Many companies use a forecast period that is different from their competitive advantage period

CAP is affected by

- 1. Industry structure
- 2. Company's competitive position in the industry
- 3. Management strategies that define CAP
- 4. Government regulations and anti-trust policies that affect level of competition in the industry
- 5. Company's current return on invested capital (higher ROIC business are positioned best)
- 6. Rate of industry change (technology) = high returns in a highly changing sector are unlikely to be valued as generously as high returns from a more prosaic business like beverages
- 7. High barriers of entry help to sustain high ROIC

Market Implied CAP (MICAP) = get the company's internal cash flow from the share price since it is easy to calculate from the 0.94 correlation between share price and internal cash flow

between projects. However, it is difficult to come up with the specific hurdle rates itself and it is difficult to adjust for risk and size of projects.

WACC

-book approach: see from balance sheet the CoE and CoD

-market/spot approach: look at the cost of financing from market conditions and calculate based on proportions of equity and debt in the company

Rate projects by comparing their rate of return with company's internal WACC

However, if market expects a higher rate of return such as 10% as compared to company's WACC of 8% then FD should use 10%

There is organic/internal investment and external investment (mergers). External investment is usually more expensive as you need to pay acquisition purchase premium costs of about 20% higher than the actual cost. It is riskier.

Extraordinary Dividend

Extraordinary dividend (one off) does not create any corporate value!

co.uk

Corporate value depends on free cash flow but dividends compare trained earnings that costs the price of CoE or WACC. By giving the dividend to share in ders, the company gained nothing. This does not affect cash flow at all. Dividends are merely the distribution of funds after it has been earned. One-off dividend is likewory task. There is only a temporary onort buzz effect that has no changes to the market contails atom of the company.

Dimends are bod only when hove a twon on a long term basis (recurring). This creates positive extectations of the company. For instance, Utilities always give back dividends as it is part of their operations and it is a good signalling effect. If giving a dividend is a customary industry procedure then it is alright to give a dividend just like other industry players.

BUT Warren Buffet is notorious not to give a dividend.

Supply Side VS Demand Side Financing Orientation

Supply side focus first on available forms/costs of external financing

Today, supple perspective is dominated by record low long term interest rates. Ex. Nestle recently got a 4bn revolving credit facility for the cheapest lending rate in Europe (only 10 basis points above the interbank lending rate)

By focusing on supply side, FD will have the most updated knowledge on new forms of financial instruments and have the advantage of opportunistic accumulation of debt but this can lead to company taking up too much debt

Demand side focus on which financing plan best matches the business plan followed by internal sources of financing then external (start with retained profits, reduce bad inventories, delay trade payable payments, factoring bad receivables then bank loans)

However, sometimes, investors took dividends as a signal that the companies had run out of growth opportunities.

Resolution of uncertainty

Myron Gordon argued that investors perceive that the company is replacing a certain dividend flow to shareholders now with a more uncertain distant flow in the future hence they are subjected to more risk and investors apply a higher discount rate

-market places a greater value on shares offering higher near term dividends

-Investors are showing a preference for the early resolution of uncertainty

Crucial factor here is the perceived risk (investors may overestimate the risk of distant dividends and thus undervalue them) = investors prefer a higher dividend in the near term

This is also known as 'bird in the hand fallacy'

The riskiness of a firm's dividend is derived from the risk associated with the underlying business and this risk is already allowed for through the risk adjusted discount rate k_E hence to discount future income even further is excessive

To discount at a higher rate would be to undervalue the shares and pass up an er so tuntly of a good investment

Ownership control (agencyther) UK firms pay out an excessive proportion of their earnings at dividends and this stifles investment because of the proper ation rate

Concern should be many firme na coperity of paying high dividends and issuing new shares to raise cash for investment since cost of issuing shares can be burdersome and shareholders generally pay tax on receipts of dividends = agency cost

Managers may not always act in the best interests of the owners and one way for <u>owners to regain</u> some control over the use of their money is to insist on relatively high payout ratios then if managers need funds for investment they have to ask

A firm who wishes to raise external capital for investment have to be scrutinised by a number of experts such as investment bankers, underwriters, analysts at credit rating agencies, analysts at stockbroking houses and shareholders.

Hence, when a company asks for fresh capital, investors can tease out more information and can examine managerial action and proposed actions.

OR managers are merely over-confident and optimistic about their ability to invest the money wisely.

From the viewpoint of the lenders, there is also an agency problem. Managers pay out excessive dividends to keep money out of reach of the lenders – particularly in the case when the company is about to fail thus lenders' agreements often restrict dividend payments

In real life: There are both direct and indirect costs to bankruptcy.

Direct costs of bankruptcy

Outside professionals such as legal and accounting experts have to be generally hired. Investment bankers may also assist in a potential financing restructuring in a Chapter 11 reorganisation. These outside experts are costly. Lehman Brothers bankruptcy is expected to entail fees of over 900 million.

Direct costs of bankruptcy may reduce the value of assets that the firm's investors ultimately receive. Average direct costs of bankruptcy is approximately 3 to 4% of prebankruptcy market value of total assets.

Costs are higher for firms with more complicated business operations and with large number of creditors.

Alternatives: Negotiate directly with creditors or have a prepackaged bankruptcy in which a firm will first develop a reorganisation plan with the agreement of its main creditors and file for Chapter 11 to implement the plan.

Indirect costs of bankruptcy

- 1. Loss of customers = customers may be unwilling to purchase products whose value depend on future support or service from the firm since firm may fail to honor the warranties or provide replacement parts. Producers of raw materials have smaller costs associated with loss of customers as the value of the foods does not depend on the collect continued success
- 2. Loss of suppliers = suppliers are unwilling to provide growth inventory as they fear they will not be paid
- 3. Loss of employees = firm cannot provice b security with king term employment contracts and retaining key employees an se costly. This is especially costly for firms that depend on human resources.

Loss of recorables = many custo persident owe small amounts will hide as they know that
 the company's resource are served thinly and they have an opportunity to avoid obligations to the firm

- 5. Fire sale of assets = Sell assets quickly to raise cash so firms may accept a lower price than would be optimal
- 6. Inefficient liquidation = management may be allowed to continue to make negative NPV investments while in bankruptcy and companies in bankruptcy may be forced to liquidate assets that would be more valuable if held
- 7. Cost to creditors = if the loan to the firm was a significant asset for the creditor, default of the firm can lead to financial distress of the creditor

When securities are fairly priced, the original shareholders of the firm pay the present value of the costs associated with bankruptcy and financial distress.

Trade-off Theory

Trade-off theory weighs the benefits of the debt that result from shielding cash flows from taxes against the costs of financial distress.

According to this, total value of a levered firm is equal to the value of the firm without leverage + present value of the tax savings on debt – present value of financial distress costs

Present value of financial distress costs is affected by