

1. Explain the following terms:

a- passive residual theory of dividends

The company would invest in all positive npv projects, and payout any earnings that were left as dividends – dividends would be unpredictable.

b- Clientele effect

The company will attract particular types of shareholders due to their dividend preferences. Companies establish a track record for paying divs, shareholders recognize this. Companies should not try to change div policy to attract new clientele

c- Signaling effects

There is a problem with asymmetric information; managers can use the div to give indication about future performance of company

d- 'bird-in-the-hand' view

Said that near dividends were less risky than distant payouts, a certain payment now is more valuable than an uncertain gain in the future. But discount rate values all div at the same risk adjusted rate.

The decision over how much to payout and how much of earnings to retain is a key decision for managers. Identify and discuss the important factors that management should consider when deciding on the size of dividend to be paid to investors.

Main factors: profitability of company (and prospects for profits over business cycle), company's need for additional finance (liquidity position), the ability of the company to raise additional finance on the markets, its shareholders dividend preferences. The dividend decision would also take into account the gearing level which might limit the company's ability to pay divs.

Three old lags are from business school meet up to spoil a good walk by playing a round of golf. During the game they discuss the profitable companies they now run. The conversation drifts towards dividend policy...

Boss A says his dividend policy is to pay no dividends at all.

Boss B says that he always pays a dividend of 50% of earnings after tax.

Boss C says that she maintains a low but constant dividend per share, offers scrip dividends, and shareholder perks.

One of the companies is a tech company, one is a utility.

Discuss the advantages and disadvantages of the alternative dividend policies.

Which boss runs the tech company, the utility, and which sector would you think the other company might come from (for the third company - more of a judgement call)?

Which type of shareholder would be attracted to these companies?

Boss A – high growth Co – tech co. – is using earnings to plough back into the business to speed the growth of the company. Is good policy for growing co – will probably be hungry for capital.

Boss B – paying out 50% of earnings every year as a div may not be acceptable if profits are volatile – div would be changeable, so this would be more appropriate for a mature, stable company like a utility where the 50% payout would not be subject to much fluctuation.

Boss C – low div, scrip divs suggests that the company still has growth opportunities, and needs cash to finance the growth. The shareholders have the predictability of the div, the company can retain most of the earnings to finance the growth. Scrip divs save cash flow for the co, and shareholder perks would suggest it is the kind of company that might appeal to small shareholders – retailers, transport, leisure companies (perks = discount vouchers to use on company products, stores etc).

What is the agency concerns surrounding the dividend decision?

The div payment represents cash flow leaving the company and going to s/holders. In certain situations bondholders may be worried that the cash leaving the company might impair the company's ability to service its debt obligations. As a result there are clauses in debt contracts that will limit the amount companies can payout in cash to shareholders.

Do flotation costs favors high dividends or low dividends – discuss.

If flotation costs (fees for selling new equity, and the discount at which new shares might have to be sold at) are high, companies will not want to be raising cash by this method unless they can help it. That would mean they would pay low divs, and they would retain earnings for investment in the business.

(a) What are the direct costs of bankruptcy? What are the indirect costs of bankruptcy? Which are more of a burden on companies? Can you illustrate with an example.

Direct costs are the fees charged by the lawyers, accountants etc which actually only make up a small part of the costs of financial distress. The indirect costs are the costs of not being able to carry on business normally – credit drying up, suppliers and customers cancelling orders, loss of reputation, management time spent trying to resolve financial distress, asset sales at low prices. The indirect costs are far more damaging to the company. The company can go into administration (or Chap 11 bankruptcy in US) to get protection from creditors while it reorganises the business.

(b) How much protection should companies in Chapter 11 Bankruptcy (US) or in Administration (UK) be given to carry on their business? – talk through with an example to back up your argument.

When companies are given protection from creditors in the bankruptcy process they are given considerable scope to reorganise the business and start winning back market share from rivals. They are given protection from creditors and can renegotiate contracts (labour). They can reduce costs dramatically. They can undercut non-bankrupt firms, putting them under pressure. The bankruptcy process does not seem to remove capacity from an industry – it tries to preserve the industry set up. This may not be the healthiest outcome for the long run.

What are the agency concerns surrounding the capital structure decision? What impact would the following have on the decision; managers are rewarded largely by earning per share growth, managers are rewarded by economic value added created, managers rewarded largely by share options.

A company might have a capital structure that does not maximize wealth for shareholders. A company may be too conservatively financed, ie they have too little debt. This would be a very safe company. They would not face the discipline of debt and they would not be maximizing the interest tax shield.

If managers are rewarded for meeting eps targets, then the managers might look to do share buybacks, which will reduce the equity (number of shares) in the company. By buying back shares, the share price does not suffer the fall when shares go ex-dividend when dividends are paid. Instead of equity financing managers should use debt finance. This means relative to a company that finances with equity, the geared company should grow eps faster under reasonable to good economic conditions (but underperform when the economy performs poorly). Managers can take actions that will grow eps quicker – share buybacks and fund with debt.

Managers are rewarded on the basis of Economic Value Added (EVA). EVA is an economic charge on the invested capital of the company. The company WACC is calculated (this is the basis for the economic charge) and the net operating profits after tax (NOPAT) are established – these are the operating profits of the company (revenues minus expenses, don't include interest), then take off taxes. This gives you NOPAT. Invested capital is the capital employed by the firm, this is all short term and long term assets. The invested capital is multiplied by the WACC to give the economic return the company should make to satisfy shareholders. This is then subtracted from the NOPAT. If the answer is positive, the managers have added value (created wealth), if it is negative they have destroyed wealth.

If managers are rewarded on the basis of EVA, they can increase EVA by focusing on operating efficiency; they have to make more profit without using more capital, or they use less capital, or they invest capital in high return projects.

If the EVA is worked out on a year by year basis, managers may be reluctant to invest in long term projects that take some time to deliver their full value – because the EVA will be low or negative in the early years.

If managers are rewarded with executive options, they are more likely to cut back on dividends – the option holder does not get the dividend – so they will favour share buybacks (in the US the value of buybacks was recently running at double the value of dividends, twenty years ago, buybacks were about a fifth of the level of dividends). With options the managers may be more likely to finance with debt, expecting eps to grow quicker and the managers would think that the price earnings ratio (P/E) would rise with growing eps. With a rising P/E ratio the share price will be moving up, making the options more value

12.If a company has too high a level of gearing, how can they quickly reduce their gearing – how easy is this to do?

To reduce gearing a company needs to retire or repay debt. The dividend could be sacrificed to free up cash to pay off debt. A rights issue or other equity issue could raise cash, which could be used to pay off debt. Divisions, subsidiaries, assets could be sold for cash. Capital expenditure could be cut to release cash for debt repayment.

Shareholders would complain about the dividend being cut but the company can push that through if it means reducing pressure on the company. The equity issues may be more difficult, because the company may be perceived as being in trouble already and the share price would have fallen. A rights issue may have to take place at a very low price. Again selling assets may be difficult. If the company is seen to be in trouble they will not fetch good prices for assets in the market – they will be seen as a distressed seller.

13.It is argued that debt adds discipline to management. Why?

Which of the following types of companies will most benefit from debt adding this discipline?

- a) Conservatively financed, privately owned companies
- b) Conservatively financed, stock market listed companies, with a wide and diverse group of shareholders
- c) Conservatively financed, stock market listed companies, with an activist and primarily institutional holding

Co. with wide and diverse shareholders. Private Cos. Invest their own money and institutional investors have their own ways of disciplining managers.

16.In the period 2002 – 2004 companies like BT, Marconi, NTL, Granada, SMG, British Airways, France Telecom, Deutsche Telecom, Vivendi, Scottish Power, Lucent, Nortel, Alcatel, TXU, Invensys, British Energy, Leeds United, Colt Telecom, faced huge debt problems and financial distress. Why was the amount of debt a problem and what were their options to get out of the financial mess?

The companies took on too much debt believing that the economic backdrop would remain favourable to their business. They wanted to use the leverage to expand rapidly, to outpace rival firms. By 2000 when the debt was been ratcheted up, the economy was in the 8th or 9th year of an expansion, the financial markets were at the peak of the dotcom bubble. Things could not continue at that pace. They didn't.

To reduce debt the firm has a number of options;

Rights issue, but share prices are depressed, high cost in that will incur extra div payments. Shareholders would demand a price for this.

Cut the div. BT did this, saving £1.4bn, but it will be under pressure from shareholders to reinstate it as soon as possible, as BT has an army of small shareholders who hold the share for the big div that they get.

Sell a division, eg. Yell or BT mobile (now O₂), difficulty is that there are not many willing buyers, so they would get a poor price – may be more damaging to BT in long run. Both BT and Marconi did this, getting very poor prices in the process.

Sell one of their joint-venture stakes, eg, BT with Japan Mobile, which was sold to Vodafone. Granada closed down their joint venture with Carlton – ITV Digital – losing £1bn + in the process (after being put out of business by BSkyB).

Takeover a cash rich company, eg. BT could have tried to takeover Cable & Wireless. Not likely to be supported by the markets.

Do nothing. If they do nothing their debt will be downgraded and they will pay higher interest charges as a result of bond covenants. But if they can see light at the end of the tunnel, it may be better paying the higher charges in the short term rather than sacrificing some of its assets in such a poor market (This is what France Telecom & Deutsche Telecom did – but 8 years on their share prices are still 80 -85% below their highs of 2000).

Debt for equity swap – this is what NTL have done and virtually wiped out the original shareholders – they will only get a share in the company if the value rises above £10.5bn.

Dec2010

3. You have to advise the company what it should do with the surplus cash. What are the alternatives? What effects would your recommendations have on the capital structure? Discuss the factors have you taken into consideration in your analysis.

(8 marks)

The company has surplus cash; it can keep the money for future investments / expenditure; it can invest the money in the short term money markets; it can increase the dividend; it could repay outstanding debt; it could repurchase shares, or announce a special dividend. The answer should analyse each of these options within the context of this company and industry.

The main decisions surround:

(i) increasing the dividend, and (ii) repaying debt.

(i) Factors to consider:

- ☐ *Shareholder preferences*
- ☐ *Future liquidity/expectations – will there be the possibility of projects in the reasonably near future – and a need to finance these? If cash is paid out as dividend, it will then incur flotation costs raising new finance.*
- ☐ *Stock market reaction to the higher dividend. Can it be sustained? What signal does the company want to send out? Maybe consider share repurchase or special dividend if unsure about future cash flows.*
- ☐ *Tax position of shareholders*
- ☐ *Restrictive covenants – are there clauses restricting the level of dividend cover?*

(ii) Factors to consider:

- ☐ Tax shield – repaying part or all borrowing will result in the loss of the tax shield benefits
- ☐ Expectations of interest rates – if rates are going up, the company may have to borrow at higher rates in the future
- ☐ Loan covenants – may be penalties for early redemption
- ☐ Stock market reaction – the company is not heavily geared at the current time, so it probably wouldn't be rewarded for reducing debt.

Dec 2007

1-Comment on return and risk to the company from these actions, and discuss more generally returns and risk with regard to managing a company's working capital.

The company in the question is being very aggressive to its working capital management. -short term debt usually has lower cost than longer term debt, but it's riskier

Dec 2009

1. Explain clearly what is meant by 'dividend irrelevancy'.

(6 marks)

Modigliani and Miller outlined conditions under which dividend policy would become irrelevant.

There would be no taxes, transaction costs, or flotation costs, information would be freely available and investors could borrow or lend at the same rate. If a company had positive NPV projects it could

invest in and had the choice of paying a dividend to shareholders, and then raising new cash from a share sale, or not paying the dividend and using the cash to invest in the projects, there would be no difference to the wealth of the shareholder. It does not matter which route the company takes.

If shareholders wanted a dividend and the company used it for investment purposes, the shareholder could create a 'homemade' dividend by selling shares in the market place. The shares would reflect the positive NPV project because of the free flow of information and there would be no costs associated with the selling.

Leaving other financial decisions intact, higher dividends require more new shares to be sold, lower dividends require fewer.

2. Discuss the ways in which taxation will impact on the company's dividend decision.

(7 marks)

The explanation for Part (1) works when there is perfect markets; it works less well when there are market frictions. One of these is taxation. Taxation will impact on dividend decisions in different ways in different countries depending on the tax regime. Debt has a tax benefit in the tax deductibility of interest payments. Dividends have no such deduction, and in some countries the dividend is taxed twice; once on the company's profits, and then again when the shareholder receives it. In those countries there would be an incentive not to pay large dividends as it would not be in shareholder's interests. The US was like this up until the tax reforms of 2003. A consequence of this was that by the end of the 1990s companies were buying back (share repurchases) more shares in value terms than they were paying out in dividends.

Some countries work on an imputation system, whereby the dividend is only taxed once, so there is less bias against dividends.

The aim of the company is to maximise the wealth of their shareholders and if that means returning cash to them in ways other than dividend payments because of the tax environment, then that is what they should do.

*3. What are the agency concerns surrounding the dividend payment and the share repurchase?
(7 marks)*

The dividend represents cash leaving the company. This is a concern to bondholders. They want their interest paid each period and they want their capital repaid at the end of the bond's life. If by paying (large) dividends the company weakens that likelihood, then this is against the interests of the bondholders. They will usually insert clauses in the bond contract limiting the amount that can be paid out as dividends.

As far as shareholders are concerned, the dividend is part of the return they would expect to receive from the company. They are not guaranteed a dividend since the bondholders come first. But if the company is making good profits, then the shareholders would expect a cash dividend.

If the company decides to make a share repurchase instead of a dividend payment, it may be for the benefit of the directors who have executive options, which don't receive dividends. For the directors the payment of the dividend does not particularly help them, whereas the share buyback should push the share price higher (although it shouldn't affect the overall value of the company).

The directors may also decide to pay a share dividend rather than a cash dividend. The shareholders do not benefit here. They own the same stake in the company, and they don't have a cash dividend.

Dec 2010

*1. Explain what you understand by the terms 'operational gearing' and 'financial gearing'.
(5 marks)*

Operational gearing: the higher the proportion of fixed costs relative to variable operating costs, the higher the operational gearing. This results in greater business risk. A retailer has high fixed costs relative to variable costs, so has a lot of business risk. Financial gearing: reflects any borrowing that the company may have undertaken. Operating income will become more volatile with increased financial gearing (borrowing). Thus the shares will have more risk attached to them. More borrowing implies more risk.

*2. What explanation can you give for different levels of gearing in different industries? Discuss the factors involved.
(7 marks)*

Factors to consider: risk of the industry, strength of cash flows, and variability of cash flows, levels of fixed operating costs (operational gearing), levels of taxation, nature of the assets held in the company/industry – tangible or intangible. Expand on these factors and maybe demonstrate with examples.

2. Explain why in a company that is in financial distress managers may favour a riskier project to a safe project?

(6 marks)

If a company is in financial distress, there will already have been a large fall in the value of the equity.

If the company were to be liquidated at that point most, if not all, of the value would probably go to the bondholders. The shareholders would be left with nothing. If the choice of projects arose at this point, the safe project may just earn enough money to further improve the bondholder's position, leaving the shareholders no better off. The safe project may even have a higher expected NPV than the risky project, but there is a small chance that the risky project would payoff, in which case the shareholders would gain.

Managers' aim is to maximise shareholders wealth, and since it is effectively the shareholders who pay the managers the managers would favour the riskier project in the hope of a payoff for the shareholders. This is an agency problem in the capital structure.

3. Discuss the likely capital structure implications of the following two examples:

(a) A company earns very little profits and pays no tax.

(b) Managers at a company believe the shares to be undervalued.

(6 marks)

(a) If the company is not making any profits and is paying no tax, then there are no benefits to borrowing to the company. The reason for borrowing is to take advantage of the tax shield. If you can't take advantage of it, there is no point in borrowing. The company should be equity financed.

(b) If the managers at a firm believe that the shares are undervalued, then they are more likely to fund themselves with debt. Any new projects would be financed with debt as the markets do not recognise the actual worth of the company. The company may also borrow money to buy back shares, thus increasing the gearing element.

Dec 2011

(e) There are agency problems in the process of capital budgeting. Discuss what these are and how they can be overcome.

(5 Marks)

The agency problems here may result in the wrong projects being selected.

Managers at different levels in the organisation may have pet projects that they would like to see undertaken. It may result in them having command over a larger part of the business. If the cash flows were too optimistic it would give the project a healthier NPV and make it more attractive. Takeovers are just like large capital budgeting projects. They have a very poor record of wealth creation for bidding shareholders.

The managers may also fail to abandon poor projects, instead pouring shareholders cash into a losing situation. NPV analysis would give an indication whether these projects are worth more alive or dead to the company. Proper scrutiny of the estimated cash flows of projects may lead to better project selection and wealth creation for shareholders.