

## Introduction to Primary Markets Qualification (IPMQ) - Slide Script

**Section 1: An Introduction to International Financing**  
**Module 3: Sources of Finance & Key Company Decisions**

Welcome to Module 3, Section 1 of Introduction to Primary Markets.

In Modules 1 and 2 of this Section we discussed the capital market function and the fundamentals of debt and equity products. In this module we will consider the sources of finance available to a borrower and the key decisions that it needs to make when assessing its financing options.

A company's source of finance includes its retained earnings – which represent the amount of net income left over in the business after it has paid out dividends to shareholders or other distributions paid to investors, its equity financing and debt financing.

Capitalization refers to the process of generating the money that allows a business to open its doors. In finance, capitalization is the sum of a company's debt and equity. A reasonable, proportional use of debt and equity to support its assets is a key indicator of a company's balance sheet strength. A healthy capital structure is defined by low levels of debt and a high level of equity. Such a structure is a positive sign of financial fitness.

When considering its financing alternatives, a company must consider the cost of obtaining the capital. With Debt, this is the interest expense a company pays on its borrowing. With equity, the cost of capital refers to the claim on earnings provided to shareholders for their ownership stake in the business. Provided a company is expected to perform well, debt financing can usually be obtained at a lower effective cost. As discussed previously, debt is also – tax deductible – never forget how important this is. If tax rates are high, using debt finance is generally more attractive.

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As discussed in the previous slide, retained earnings represent the amount of net income left over in the business after a company has paid out dividends to shareholders.

In other words, retained earnings are the company's non-distributed profits. However, it is not free money, it has a cost. If the company retains earnings instead of paying a dividend, shareholders *will* be happy provided the firm's investments have a positive net present value. If not, they may be inclined to sell their shares and look for a better investment.

Every positive NPV outlay increases shareholder value. It is important for a Company to estimate the cost of its retained earnings. Retained earnings somewhat reflect a company's dividend policy, since they illustrate a company's decision to either reinvest profits or pay them out to shareholders.

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As outlined in previous module, Equity financing is the process of raising capital through the sale of shares in a company. Effectively, investors exchange their money for an ownership interest. Equity financing may range from a few thousand dollars from a private investor, to an IPO transaction involving a multitude of investors and running into several billions of dollars.

An equity investor is essentially participating in the risks inherent in the company and expects to be compensated for this risk in the form of dividends and capital appreciation. That risk can be high. As discussed earlier, in the event of liquidation, equity shareholders are paid out only after all other commitments are met; they are ranked last in terms of payout and therefore want a higher return versus an investment in debt securities.

From an issuer's perspective, equity has no maturity or fixed coupon payments – interest payments on bonds represent a fixed expense for the company and therefore increases its risk. If a company fails to generate enough cash, the fixed cost nature of debt can prove too burdensome. Thus, whilst equity may be more-risky for an investor, it is generally less risky for the issuer.

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As discussed, shareholders own shares in the company, not its assets, and they receive dividends once all prior rights are satisfied.

From an issuer's perspective, equity financing don't create a fixed burden on the cash flow. Nevertheless, Companies are never totally certain of what future earnings will be generated and, as such, the more uncertain their future earnings, the more risk is presented. As a result, companies in stables industries with constant cash flows may make heavier use of debt compared to companies in riskier industries or companies who are small and just starting up.

Equity issuance tends to be infrequent and is usually done for specific strategic reasons. The cost of equity can be tricky to calculate since share capital does not have an explicit value and, unlike debt, there is no concrete return that the company must pay to investors. This does not mean, however, that there is no cost of equity. Shareholders expect to receive a certain return on their investment in the company and thus, this expected rate of return is a cost from the company's perspective. As discussed, if the company does not pay a dividend, shareholders may sell their shares, the share price will fall and the company's value will decrease.

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By contrast, debt investors provide financing in exchange for an agreed rate of interest over an agreed period of time and the eventual repayment of the debt. The payment of interest represents a regular income stream for the investor.

Whilst the lender gains now ownership interest, they can legally claim assets of the borrower if the debt is not repaid. From an issuer's perspective, interest costs are tax deductible, so the net cost of debt is the amount of interest payable less the amount saved in taxes.

However, the issuer is liable for the risk of making regular interest payments, so raising debt creates a fixed commitment. In terms of relative risk, debt is risky for the firm while equity is risky for the investor.

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So, what are the considerations that a Company must make when deciding upon its financing options? We touched on this in Module 1 but, as a reminder:

- a company must consider its optimum level of debt i.e., its gearing;
- a company must consider the tax efficiency of its borrowing;
- whether there are any restrictions on its ability to borrow;

- the potential for dilution of existing shareholders;
- efficiencies in the way it raises capital in the market;
- market sentiment and investor appetite
- the use of proceeds; financing a major acquisition, for example, may make equity or long term debt more suitable. Likewise, current operations may point towards short or medium term debt, and, lastly;
- regulatory capital treatment if they are a financial institution. Since the 2008 financial crisis there has been increased focus on regulatory capital requirements which are designed for protection, allowing banks to sustain unanticipated losses. These requirements also limit the extent to which banks can lend money.

The optimum mix of debt and equity is essential. Too much debt will impair its credit rating and ability to raise finance, thus a commercially acceptable ratio between debt and equity financing should be maintained.

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The fundamental financial objective of the firm is to maximise the value of cash invested in the firm by shareholders. Shareholders are happy to contribute cash as outlined in point (1) only if decisions made at point (2) generate 'adequate' returns at (3)

Investors require returns at least equal to returns available to other investors in financial markets. Companies can reinvest their returns, i.e., its retained profits – outlined at point 4 or they can pay out a dividend to investors, point 5. A company's capital structure is influenced by business risk. For example, If we compare two companies – the first with a stable revenue stream and the second with a variable or seasonable revenue stream - the latter should have a lower optimal debt ratio given the uncertainty of its cash flows. On the other hand, the stable, mature firm typically needs less debt, as its revenues are stable and proven. They are more likely to be able to cope with the burden of debt repayment.

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So, the company's challenge is to decide what real assets it should invest in. This is the investment or budgeting decision, it should decide how the cash for the investment should be raised, the financing decision and whether the project is worth the cost of financing it.

An investment decision revolves around spending capital on assets that will yield the highest return for the company over a desired time period – or put simply – what to buy so that the company will gain the most value. A company needs to strike a balance between short term and long-term goals – in the very short term, it needs money to pay bills, but keeping all its cash means it is not investing in things that will help it grow. If taking the long-term view, a company that invests all its money will maximize long-term growth prospects, but if it holds no cash, it might not be able to pay its bills and go out of business. So, a balance needs to be found.

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Let's take a look at the investment decision versus the financing decision. The investment decision has to be based on expected returns (as there is no guaranteed return on most investments) – and must meet 3 criteria.

- Firstly, does it maximise the value of the firm considering the amount of risk it is comfortable with;
- Secondly, is it financed appropriately;
- and thirdly, if it is unable to satisfy 1 and 2, a company should return cash to investors in order to maximise shareholder value.

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Key decisions made by a corporation help it to achieve the primary goal of maximising the value of the firm. In making the key decisions, the company needs to be clear about why it is in business and what it wants to achieve. The key decisions include, the investment decision, the financing decision and the dividend decision.

When making the investment decision, a company needs to invest in projects with a return greater than the hurdle rate. A hurdle rate is the minimum rate of return on a project or investment required by a manager or an investor.

A company then needs to decide how to pay for its activities i.e., its financing decision, i.e., does it use existing capital, borrow or sell shares?. A company needs to choose a financing mix that maximises the value of the projects undertaken

A company needs to determine how best to allocate its capital (i.e., what to invest in) and what to do with profits created – its dividend decision. A company should invest in projects with a return greater than the minimum acceptable hurdle rate. Investors need to be compensated for risk, the riskier the project, the higher the hurdle rate. If there aren't enough projects to earn the hurdle rate, then the company needs to decide whether to return the cash to its shareholders. Every decision needs to be put into this context. Basically, a company's decisions boil down to how it should spend money and how it should borrow it. Every decision needs to be put in the context of achieving its primary aim of maximising shareholder value.

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Essentially, a company's investment decision revolves around spending capital on assets that will yield the highest return for the company over a desired time period.

Companies invest in long-term assets (primarily property, plant and equipment) and in net working capital (current assets minus current liabilities). So, as highlighted on the previous slide, a firm may invest in a project or pay the cash out to shareholders who can then invest on their own. The investment decision represents a fine balance between short-term and long-term goals. Whilst a company needs to ensure that it has sufficient cash in the short term to pay bills – keeping all of its cash means a company may mean that it is not investing enough to be able to grow. Likewise, if it invests all its funds for the longer term this can create cash-flow problems in the shorter term.

The rate of return shareholders could receive by investing on their own, at the same level of risk, is the opportunity cost of capital. So, discounting the expected cash flows of a project by the opportunity cost of capital determines how much investors are prepared to pay for a security that produces a similar stream of future cash flows.

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Capital budgeting is the process of analyzing projects in order to decide which ones should be undertaken. A company needs to look at the cost of the project; make an analysis of which projects should be undertaken, evaluate its cash inflows and outflows and consider the timeframe for the project. This involves making a decision as to how many years it will take to cover the cost of the project and when it will begin to reap benefits.

The criterion on which a capital budgeting decision is based is the maximization of the firm's value. But, how do we calculate the value of the project?

The Internal Rate of Return or IRR is a relative measure and is expressed as a percentage. It can be used to evaluate the attractiveness of a particular project or investment.

The Net present value refers to the fact that money in your hands now is more valuable than money promised in the future. Why? Because you can put this money to use now by investing and earning interest. NPV – is an absolute measure. It is the present value of the cash inflow less the cost of acquiring the investment

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In summary IRR is the discount rate that equates the present value of the cash flows generated by a project to the present value of the cash outlays required by the project. It is the return that makes the net present value of a project equal to zero.

A couple of points of note:

- Actual calculation of IRR usually involves trial and error, and;
- The IRR rule states that companies should accept any investment offering an IRR in excess of the opportunity cost of capital. In other words, if the IRR exceeds a company's rate of return, then the project is desirable

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NPV is the present value of all the cash flows associated with the project (including the investment itself), using the cost of capital for the project as the discount rate.

Net present value is the maximum that can be spent now whilst allowing the project to cover its costs. So, whilst IRR answers the question: *"what rate of return will I achieve, given the following stream of cash flows"*, then, NPV answers the question: *"what is the following stream of cash flows worth at a particular discount rate, in today's dollars / euros?"*

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In summary, Net present value is generally regarded as the best method for ranking investment projects, because:

- The IRR method assumes that the cash flows will be reinvested at the IRR of the project, whereas:
- The NPV method assumes that the project's cash flows will be reinvested at the project's cost of capital

*But how do we calculate the cost of capital?* This question will be answered in Module 4.

Please proceed to the concept checking questions.