

Part One

An Introduction

1 Finance – An Overview

Introduction

In a world of geo-political, social and economic uncertainty, strategic financial management is in a process of change, which requires a reassessment of the fundamental assumptions that cut across the traditional boundaries of the subject.

Read on and you will not only appreciate the major components of contemporary finance but also find the subject much more accessible for future reference.

The emphasis throughout is on how strategic financial decisions *should* be made by management, with reference to classical theory and contemporary research. The mathematics and statistics are simplified wherever possible and supported by numerical activities throughout the text.

1.1 Financial Objectives and Shareholder Wealth

Let us begin with an idealised picture of investors to whom management are ultimately responsible. All the traditional finance literature confirms that investors *should* be rational, risk-averse individuals who formally analyse one course of action in relation to another for maximum benefit, even under conditions of uncertainty. What *should* be (rather than *what is*) we term *normative theory*. It represents the foundation of modern finance within which:

Investors maximise their wealth by selecting *optimum* investment and financing opportunities, using financial models that *maximise* expected returns in absolute terms at *minimum* risk.

What concerns investors is not simply maximum profit but also the *likelihood* of it arising: a *risk-return trade-off* from a portfolio of investments, with which they feel comfortable and which may be unique for each individual. Thus, in a sophisticated mixed market economy where the ownership of a company's portfolio of physical and monetary assets is divorced from its control, it follows that:

The normative objective of financial management should be:

To implement investment and financing decisions using risk-adjusted wealth maximising criteria, which satisfy the firm's *owners* (the shareholders) by placing them all in an equal, optimum financial position.

Of course, we should not underestimate a firm's financial, fiscal, legal and social responsibilities to all its other *stakeholders*. These include alternative providers of capital, creditors, employees and customers, through to government and society at large. However, the satisfaction of their objectives should be perceived as a *means to an end*, namely shareholder wealth maximisation.

As employees, management's own *satisficing* behaviour should also be *subordinate* to those to whom they are ultimately accountable, namely their shareholders, even though empirical evidence and financial scandals have long cast doubt on managerial motivation.

In our ideal world, firms exist to convert inputs of physical and money capital into outputs of goods and services that satisfy consumer demand to generate money profits. Since most economic resources are limited but society's demand seems unlimited, the corporate management function can be perceived as the future allocation of scarce resources with a view to maximising consumer satisfaction. And because money capital (as opposed to labour) is typically the limiting factor, the strategic problem for financial management is how limited funds are allocated between alternative uses.

The pioneering work of Jensen and Meckling (1976) neatly resolves this dilemma by defining corporate management as agents of the firm's owners, who are termed the *principals*. The former are authorised not only to act on the behalf of the latter, but also in their best interests.

Armed with *agency theory*, you will discover that the function of strategic financial management can be deconstructed into four major components based on the mathematical concept of expected *net present value* (ENPV) maximisation:

The investment, dividend, financing and portfolio decision.

In our ideal world, each is designed to maximise shareholders' wealth using the market price of an ordinary share (or common stock to use American parlance) as a performance criterion.

Explained simply, the market price of equity (shares) acts as a control on management's actions because if shareholders (principals) are dissatisfied with managerial (agency) performance they can always sell part or all of their holding and move funds elsewhere. The *law of supply and demand* may then kick in, the market value of equity fall and in extreme circumstances management may be replaced and takeover or even bankruptcy may follow. So, to survive and prosper:

The over-arching, normative objective of strategic financial management should be the maximisation of shareholders' wealth represented by their ownership stake in the enterprise, for which the firm's current market price per share is a disciplined, universal metric.

1.2 Wealth Creation and Value Added

Modern finance theory regards capital investment as the springboard for wealth creation. Essentially, financial managers maximise stakeholder wealth by generating cash returns that are more favourable than those available elsewhere. In a mature, mixed market economy, they translate this strategic goal into action through the capital market.

Figure 1:1 reveals that companies come into being financed by external funding, which invariably includes debt, as well as equity and perhaps an element of government aid.

If their investment policies satisfy consumer needs, firms should make money profits that at least equal their overall cost of funds, as measured by their investors' desired rates of return. These will be distributed to the providers of debt capital in the form of interest, with the balance either paid to shareholders as a dividend, or retained by the company to finance future investment to create capital gains.

Either way, managerial ability to sustain or increase the investor returns through a continual search for investment opportunities should then attract further funding from the capital market, so that individual companies grow.

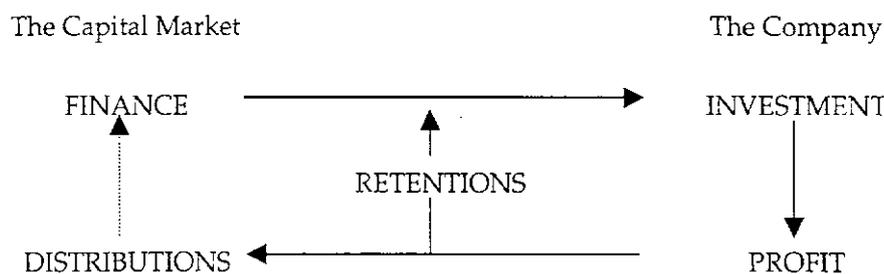


Figure 1.1: The Mixed Market Economy

If firms make money profits that *exceed* their overall cost of funds (positive ENPV) they create what is termed *economic value added* (EVA) for their shareholders. EVA provides a financial return to shareholders in excess of their *normal* return at no expense to other stakeholders. Given an efficient capital market with no barriers to trade, (more of which later) demand for a company's shares, driven by its EVA, should then rise. The market price of shares will also rise to a higher equilibrium position, thereby creating *market value added* (MVA) for the mutual benefit of the firm, its owners and prospective investors.

Of course, an old saying is that “the price of shares can fall, as well as rise”, depending on economic performance. Companies engaged in inefficient or irrelevant activities, which produce periodic losses (negative EVA) are gradually starved of finance because of reduced dividends, inadequate retentions and the capital market's unwillingness to replenish their asset base at lower market prices (negative MVA).

Figure 1.2 distinguishes the “winners” from the “losers” in their drive to add value by summarising in financial terms why some companies fail. These may then fall prey to take-over as share values plummet, or even implode and disappear altogether.

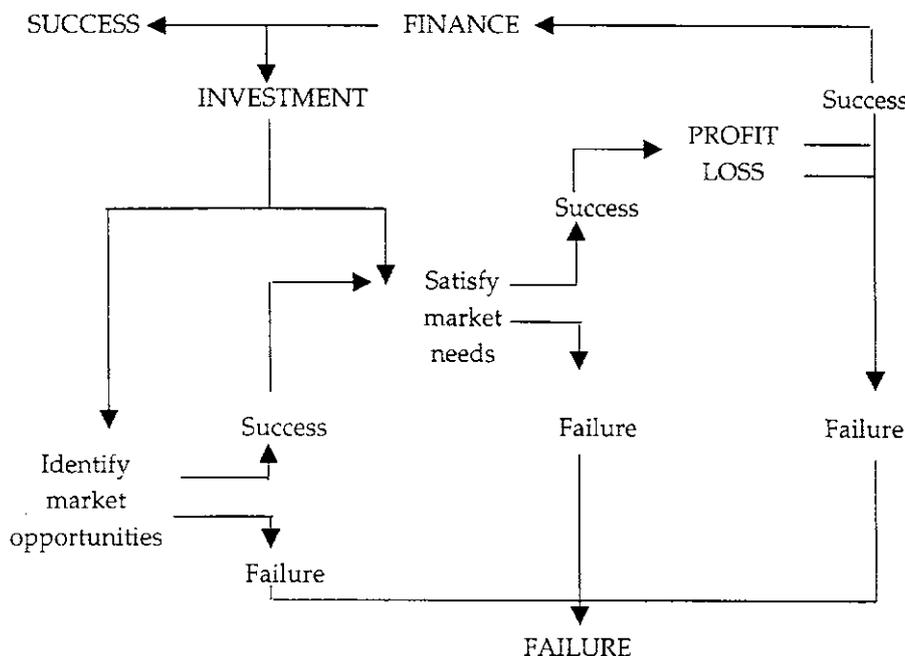


Figure 1.2: Corporate Economic Performance, Winners and Losers.

1.3 The Investment and Finance Decision

On a more optimistic note, we can define successful management policies of wealth maximisation that increase share price, in terms of two distinct but inter-related functions.

Investment policy selects an optimum portfolio of investment opportunities that *maximise* anticipated net cash inflows (ENPV) at *minimum* risk.

Finance policy identifies potential fund sources (equity and debt, long or short) required to sustain investment, evaluates the risk-adjusted returns expected by each and then selects the *optimum* mix that will *minimise* their overall weighted average cost of capital (WACC).

The two functions are interrelated because the *financial* returns required by a company’s capital providers must be compared to its *business* returns from investment proposals to establish whether they should be accepted.

And while investment decisions obviously *precede* finance decisions (without the former we don’t need the latter) what ultimately concerns the firm is not only the profitability of investment but also whether it satisfies the capital market’s financial expectations.

Strategic managerial investment and finance functions are therefore inter-related *via* a company's weighted, average cost of capital (WACC).

From a financial perspective, it represents the overall costs incurred in the acquisition of funds. A complex concept, it embraces *explicit* interest on borrowings or dividends paid to shareholders. However, companies also finance their operations by utilising funds from a variety of sources, both long and short term, at an *implicit or opportunity* cost. Such funds include trade credit granted by suppliers, deferred taxation, as well as retained earnings, without which companies would presumably have to raise funds elsewhere. In addition, there are implicit costs associated with depreciation and other non-cash expenses. These too, represent retentions that are available for reinvestment.



"I studied English for 16 years but...
...I finally learned to speak it in just six lessons"
Jane, Chinese architect

ENGLISH OUT THERE

Click to hear me talking before and after my unique course download



In terms of the corporate investment decision, a firm's WACC represents the overall *cut-off* rate that justifies the financial decision to acquire funding for an investment proposal (as we shall discover, a *zero* NPV).

In an ideal world of wealth maximisation, it follows that if corporate cash profits exceed overall capital costs (WACC) then NPV will be *positive*, producing a *positive* EVA. Thus:

- If management wish to increase shareholder wealth, using share price (MVA) as a *vehicle*, then it must create positive EVA as the *driver*.
- Negative EVA is only acceptable in the short term.
- If share price is to rise long term, then a company should not invest funds from any source unless the *marginal* yield on new investment at least equals the rate of return that the provider of capital can earn elsewhere on comparable investments of equivalent risk.

Figure 1.3: overleaf, charts the strategic objectives of financial management relative to the investment and finance decisions that enhance corporate wealth and share price.

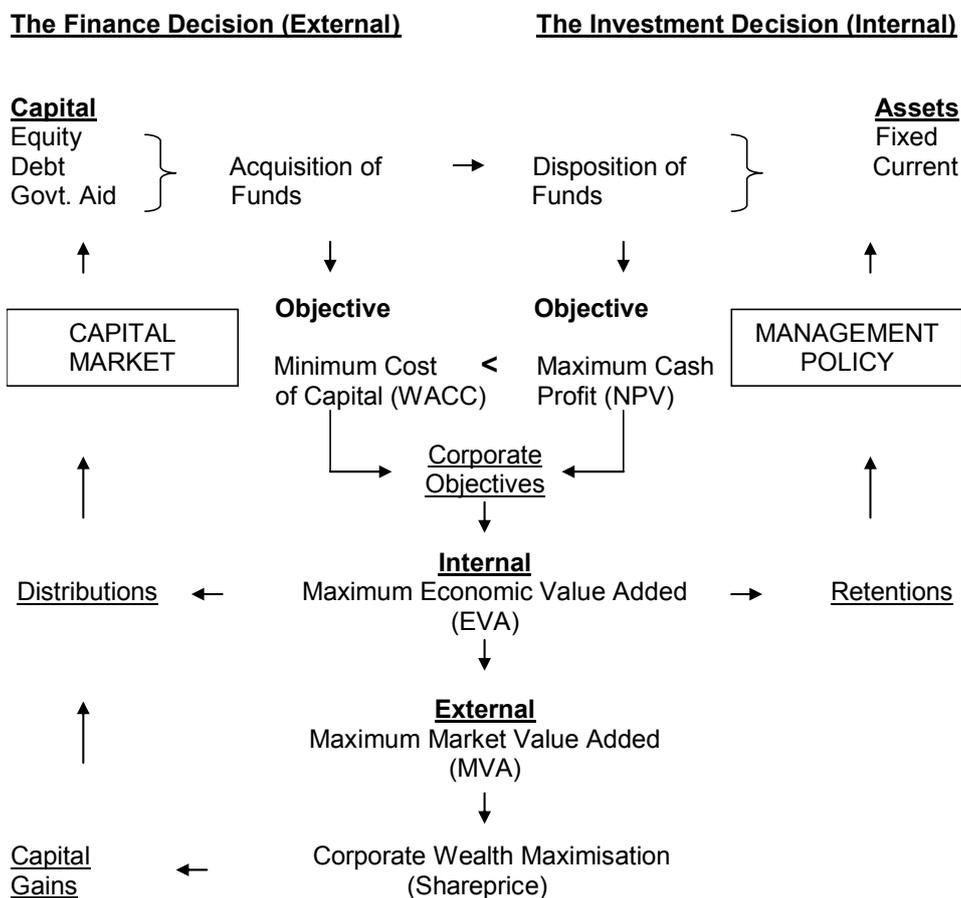


Figure 1.3: Strategic Financial Management

1.4 Decision Structures and Corporate Governance

We can summarise the normative objectives of strategic financial management as follows:

The determination of a maximum inflow of cash profit and hence corporate value, subject to acceptable levels of risk associated with investment opportunities, having acquired capital efficiently at minimum cost.

Investment and financial decisions can also be subdivided into two broad categories; longer term (strategic or tactical) and short-term (operational). The former may be unique, typically involving significant fixed asset expenditure but uncertain future gains. Without sophisticated periodic forecasts of required outlays and associated returns, which incorporate *time value of money* techniques, such as ENPV and an allowance for risk, the subsequent penalty for error can be severe; in the extreme, corporate death.

Conversely, operational decisions (the domain of working capital management) tend to be repetitious, or infinitely divisible, so much so that funds may be acquired piecemeal. Costs and returns are usually quantifiable from existing data with any weakness in forecasting easily remedied. The decision itself may not be irreversible.

However, irrespective of the time horizon, the investment and financial decision process should always involve:

- The continual search for investment opportunities.
- The selection of the most profitable opportunities, in absolute terms.
- The determination of the optimal mix of internal and external funds required to finance those opportunities.
- The establishment of a system of financial controls governing the acquisition and disposition of funds.
- The analysis of financial results as a guide to future decision-making.

Needless to say, none of these functions are independent of the other. All occupy a pivotal position in the decision making process and naturally require co-ordination at the highest level. And this is where *corporate governance* comes into play.

We mentioned earlier that empirical observations of agency theory reveal that management might act irresponsibly, or have different objectives. These may be sub-optimal relative to shareholders wealth maximisation, particularly if management behaviour is not monitored, or they receive inappropriate incentives (see Ang, Rebel and Lin, 2000).

To counteract *corporate mis-governance* a system is required whereby firms are monitored and controlled. Now termed corporate governance, it should embrace the relationships between the ordinary shareholders, Board of Directors and senior management, including the Chief Executive Officer (CEO).

In large public companies where *goal congruence* is a particular problem (think Enron, or the 2007–8 sub-prime mortgage and banking crisis) the Board of Directors (who are elected by the shareholders) and operate at the interface between shareholders and management is widely regarded as the key to effective corporate governance. In our ideal world, they should not only determine *ethical* company policies but should also act as a *constraint* on any managerial actions that might conflict with shareholders interests. For an international review of the theoretical and empirical research on the subject see the *Journal of Financial and Quantitative Analysis* 38 (2003).

1.5 The Developing Finance Function

We began our introduction with a portrait of rational, risk averse investors and the corporate environment within which they operate. However, a broader picture of the role of modern financial management can be painted through an appreciation of its historical development. Chronologically, six main features can be discerned:

- Traditional
- Managerial
- Economic
- Systematic
- Behavioural
- Post Modern

Traditional thinking predates the Second World War. *Positive* in approach, which means a concern with *what is* (rather than normative and what should be), the discipline was Balance Sheet dominated. Financial management was presented in the literature as merely a classification and description of *long term* sources of funds with instructions on how to acquire them and at what cost. Any emphasis upon the use of funds was restricted to *fixed asset* investment using the established techniques of *payback* and *accounting rate of return* (ARR) with their emphasis upon liquidity and profitability respectively.

Managerial techniques developed during the 1940s from an American awareness that numerous wide-ranging military, logistical techniques (mathematical, statistical and behavioural) could successfully be applied to *short term* financial management; notably inventory control. The traditional idea that long term finance should be used for long term investment was also reinforced by the notion that wherever possible current assets should be financed by current liabilities, with an emphasis on credit worthiness measured by the *working capital ratio*. Unfortunately, like financial accounting to which it looked for inspiration; financial management (strategic, or otherwise) still lacked any theoretical objective or model of investment behaviour.

Economic theory, which was *normative* in approach, came to the rescue. Spurred on by post-war recovery and the advent of computing, throughout the 1950s an increasing number of academics (again mostly American) began to refine and to apply the work of earlier economists and statisticians on *discounted revenue theory* to the corporate environment.

The initial contribution of the financial literature to financial practice was the development of capital budgeting models utilising *time value of money* techniques based on the *discounted cash flow* concept (DCF). From this arose academic suggestions that if management are to satisfy the objectives of corporate stakeholders (including the shareholders to whom they are ultimately responsible) then perhaps they should maximise the net inflow of cash funds at minimum cost.

Excellent Economics and Business programmes at:



university of
 groningen




“The perfect start
 of a successful,
 international career.”

CLICK HERE
 to discover why both socially
 and academically the University
 of Groningen is one of the best
 places for a student to be

www.rug.nl/feb/education



By the 1960s, (the *golden era* of finance) an *econometric* emphasis upon investor and shareholder welfare produced competing theories of share price maximisation, optimal capital structure and the pricing of equity and debt in capital markets using *partial equilibrium analysis*, all of which were subjected to exhaustive empirical research.

Throughout the 1970s, rigorous analytical, *linear* techniques based upon investor *rationality*, the *random* behaviour of economic variables and stock market *efficiency* overtook the traditional approach. The managerial concept of working capital with its emphasis on solvency and liquidity at the expense of future profitability was also subject to economic analysis. As a consequence, there emerged an academic consensus that:

The normative objective of finance is represented by the maximisation of shareholders' welfare measured by share price, achievable through the maximisation of the expected net present value (ENPV) of all a company's prospective capital investments.

Since the 1970s, however, there has also been a significant awareness that the ebb and flow of finance through investor portfolios, the corporate environment and global capital markets cannot be analysed in a *technical vacuum* characterised by mathematics, statistics and equilibrium analysis. Efficient financial management, or so the argument goes, must relate to all the other functions within the *system* that it serves. Only then will it optimise the benefits that accrue to the system as a whole.

Systematic proponents, whose origins lie in management science, still emphasise the financial decision-maker's responsibility for the maximisation of corporate value. However, their most recent work focuses upon the interaction of financial decisions with those of other business functions within imperfect markets. More specifically, it questions the economist's assumptions that investors are rational, returns are random and stock markets are efficient. All of which depend upon the *instantaneous* recognition of interrelated flows of information and non-financial resources, as well as cash, throughout the system.

Behavioural scientists, particularly communications theorists, have developed this approach further by suggesting that perhaps *we can't maximise anything*. They analyse the reaction of individuals, firms and stock market participants to the impersonal elements: cash, information and resources. Emphasis is placed upon the role of competing goals, expectations and choice (some *quantitative*, others *qualitative*) in the decision process.

Post-Modern research has really taken off since the millennium and the dot.com-techno crisis, spurred on by global financial meltdown and recession. Whilst still in its infancy, its purpose seems to provide a better understanding of how adaptive human behaviour, which may not be rational or risk-averse, determines investment, corporate and stock market performance in today's volatile, chaotic world and *vice versa*.

So, what of the *future*?

Obviously, there will be new approaches to financial management whose success will be measured by the extent to which each satisfies its stated objectives. The problem today is that history tells us that every school of academic thought (from traditionalists through to post-modernists) has failed to convince practising financial managers that their approach is always better than another. A particular difficulty is that if their objectives are too broad they are dismissed as self evident. And if they are too specific, they fail to gain general acceptance.

Perhaps the best way forward is a *trade-off between flexibility and uniformity*, whereby none of the chronological developments outlined above should be regarded as *mutually exclusive*. As we shall discover, a particular approach may be more appropriate for a particular decision but overall each has a role to play in contemporary financial management. So, why not focus on how the various chronological elements can be combined to provide a more *eclectic* (comprehensive) approach to the decision process? Moreover, an historical perspective of the developments and changes that have occurred in finance can also provide fresh insights into long established practice.



LIGS University
based in Hawaii, USA

is currently enrolling in the
Interactive Online **BBA, MBA, MSc,**
DBA and PhD programs:

- ▶ enroll **by October 31st, 2014** and
- ▶ **save up to 11%** on the tuition!
- ▶ pay in 10 installments / 2 years
- ▶ Interactive **Online** education
- ▶ visit www.ligsuniversity.com to find out more!

Note: LIGS University is not accredited by any nationally recognized accrediting agency listed by the US Secretary of Education. More info [here](#).



As an example, consider investors who use *traditional* published accounting data such as dividend per share without any reference to *economic* values to establish a company's performance. In one respect, their approach can be defended. As we shall see, evidence from statistical studies of share price suggests that increased dividends per share are used by companies to convey positive information concerning future profit and value. But what if the dividend signal contained in the accounts is designed by management to mislead (again think Enron)?

As *behaviourists* will tell you, irrespective of whether a positive signal is false, if a sufficient number of shareholders and potential investors believe it and purchase shares, then the demand for equity and hence price will rise. *Systematically*, the firm's *total market capitalisation of equity* will follow suit.

Post-modernists will also point out that irrespective of whether management wish to maximise wealth, stock market participants combine periodically to create "crowd behaviour" and *market sentiment* without reference to any rational expectations based on actual trading fundamentals such as "real" profitability and asset values.

1.6 The Principles of Investment

The previous section illustrates that modern financial management (strategic or otherwise) raises more questions than it can possibly answer. In fairness, theories of finance have developed at an increasing rate over the past fifty years. Unfortunately, unforeseen events always seem to overtake them (for example, the October 1987 crash, the dot.com fiasco of 2000, the aftermath of 7/11, the 2007 sub-prime mortgage crisis and now the consequences of the 2008 financial meltdown).

To many analysts, current financial models also appear more abstract than ever. They attract legitimate criticism concerning their real world applicability in today's uncertain, global capital market, characterised by geo-political instability, rising oil and commodity prices and the threat of economic recession. Moreover, post-modernists, who take a *non-linear* view of society and dispense with the assumption that we can maximise anything (long or short) with their talk of *speculative bubbles*, *catastrophe theory* and *market incoherence*, have failed to develop comprehensive alternative models of investment behaviour.

Much work remains to be done. So, in the meantime, let us see what the "old finance" still has to offer today's investment community and the "new theorists" by adopting a historical perspective and returning to the fundamental principles of investment and shareholder wealth maximisation, a number of which you may be familiar with.

We have observed broad academic agreement that if resources are to be allocated efficiently, the objective of strategic financial management should be:

- To maximise the wealth of the shareholders' stake in the enterprise.

Companies are assumed to raise funds from their shareholders, or borrow more cheaply from third parties (creditors) to invest in capital projects that generate maximum financial benefit for all.

A capital project is defined as an asset investment that generates a stream of receipts and payments that define the total cash flows of the project. Any immediate payment by a firm for assets is called an initial cash outflow, and future receipts and payments are termed future cash inflows and future cash outflows, respectively.

As we shall discover, wealth maximisation criteria based on expected net present value (ENPV) using a *discount rate* rather than an *internal rate of return* (IRR), can then reveal that when fixed and current assets are used efficiently by management:

If ENPV is positive, a project's anticipated future net cash inflows should enable a firm to repay cheap contractual loans with accumulated interest and provide a higher return to shareholders. This return can take the form of either *current* dividends, or *future* capital gains, based on managerial decisions to distribute or retain earnings for reinvestment.

However, this raises a number of questions, even if initial issues of *cheap* debt capital increase shareholder *earnings per share* (EPS).

- Do the contractual obligations of larger interest payments associated with more borrowing (and the possibility of higher interest rates to compensate new investors) threaten shareholders returns?
- In the presence of this *financial* risk associated with increased borrowing (termed *gearing* or *leverage*) do rational, risk-averse shareholders prefer *current* dividend income to *future* capital gains financed by the retention of their profit?
- Or, irrespective of leverage, are dividends and earnings regarded as *perfect economic substitutes* in the minds of shareholders?

Explained simply, shareholders are being denied the opportunity to enjoy current dividends if new capital projects are accepted. Of course, they might reap a future capital gain. And in the interim, individual shareholders can also sell part or all of their holdings, or borrow at an appropriate (market) rate of interest to finance their preferences for consumption, or investment in other firms.

But what if a reduction in today's dividend is not matched by the profitability of management's future investment opportunities?

To be consistent with our overall objective of shareholder wealth maximisation, another fundamental principle of investment is that:

Management’s minimum rate of return on incremental projects financed by retained earnings should represent the rate of return that shareholders can expect to earn on comparable investments elsewhere.

Otherwise, corporate wealth will diminish and once this information is signalled to the outside world *via* an efficient capital market, share price may follow suit.

1.7 Perfect Markets and the Separation Theorem

Since a company’s retained profits for new capital projects represent alternative consumption and investment opportunities foregone by its shareholders, the corporate cut-off rate for investment is termed *the opportunity cost of capital*. And:

If management vet projects using the shareholders’ opportunity cost of capital as a cut-off rate for investment:

- It should be irrelevant whether future cash flows paid as dividends, or retained for reinvestment, match the consumption preferences of shareholders at any point in time.
- As a consequence, dividends and retentions are *perfect substitutes* and dividend policy is *irrelevant*.

.....Alcatel-Lucent 

www.alcatel-lucent.com/careers




Remember, however, that we have assumed shareholders can always sell shares, borrow (or lend) at the market rate of interest, in order to transfer cash from one period to another to satisfy their needs. But for this to work implies that there are no *barriers to trade*. So, we must also assume that these transactions occur in a *perfect capital market* if wealth is to be maximised.

Perfect markets, are the bedrock of traditional finance theory that exhibit the following characteristics:

- Large numbers of individuals and companies, none of whom is large enough to distort market prices or interest rates by their own action, (i.e. *perfect competition*).
- All market participants are free to borrow or lend (invest), or to buy and sell shares.
- There are no material transaction costs, other than the prevailing market rate of interest, to prevent these actions.
- All investors have free access to financial information relating to a firm's projects.
- All investors can invest in other companies of equivalent relative risk, in order to earn their required rate of return.
- The tax system is neutral.

Of course, the real world validity of each assumption has long been criticised based on empirical research. For example, not all investors are risk-averse or behave rationally, (why play national lotteries, invest in techno shares, or the sub-prime market?). Share trading also entails costs and tax systems are rarely neutral.

But the relevant question is not whether these assumptions are observable phenomena but *do they contribute to our understanding of the capital market?*

According to seminal twentieth century research by two Nobel Prize winners for Economics (Franco Modigliani and Merton Miller: 1958 and 1961), of course they do.

The assumptions of a perfect capital market (like the assumptions of perfect competition in economics) provide a sturdy *theoretical* framework based on *logical* reasoning for the derivation of more sophisticated *applied* investment and financial decisions.

Perfect markets underpin our understanding of the corporate wealth maximisation process, irrespective of a firm's distribution policy, which may include interest on debt, as well as the returns to equity (dividends or capital gains).

Only then, so the argument goes, can we relax each assumption, for example tax neutrality (see Miller 1977), to gauge their differential effects on the real world. What economists term *partial equilibrium* analysis.

To prove the case for normative theory and the insight that logical reasoning can provide into contemporary managerial investment and financing decisions, we can move back in time even before the *traditionalists* to the first economic formulation of the impact of perfect market assumptions upon the firm and its shareholders' wealth.

The *Separation Theorem*, based upon the pioneering work of Irving Fisher (1930) is quite emphatic concerning the *irrelevance* of dividend policy.

When a company values capital projects (the managerial investment decision) it does not need to know the expected future spending or consumption patterns of the shareholder clientele (the managerial financing decision).

According to Fisher, once a firm has issued shares and received their proceeds, it is neither directly involved with their subsequent transaction on the capital market, nor the price at which they are traded. This is a matter of negotiation between current shareholders and prospective investors.

So, how can management pursue policies that perpetually satisfy shareholder wealth?

Fisherian Analysis illustrates that in perfect capital markets where ownership is divorced from control, dividend distributions should be an irrelevance.

The corporate investment decision is determined by the market rate of interest, which is separate from an individual shareholder's preference for consumption.

So finally, let us illustrate the dividend *irrelevancy hypothesis* and review our introduction to strategic financial management by demonstrating the contribution of Fisher's theorem to the maximisation of shareholders' welfare with a simple numerical example.

Review Activity

A firm is considering two mutually exclusive capital projects of equivalent risk, financed by the retention of current dividends. Each costs £500,000 and their future returns all occur at the end of the first year.

Project A will yield a 15 per cent annual return, generating a cash inflow of £575,000, whereas Project B will earn a 12 per cent return, producing a cash inflow of £560,000.

All individuals and firms can borrow or lend at the prevailing market rate of interest, which is 14 per cent per annum.

Management's investment decision would appear self-evident.

- If the firm's total shareholder clientele were to lend £500,000 elsewhere at the 14 per cent market rate of interest, this would only compound to £570,000 by the end of the year. – It is financially more attractive for the firm to retain £500,000 and accumulate £575,000 on the shareholders' behalf by investing in Project A, since they would have £5,000 more to spend at the year end.
- Conversely, no one benefits if the firm invests in Project B, whose value grows to only £560,000 by the end of the year. Management should pay the dividend.

But suppose that part of the company's clientele is motivated by a policy of distribution. They need a dividend to spend their proportion of the £500,000 immediately, rather than allow the firm to invest this sum on their behalf.

Armed with this information, should management still proceed with Project A?



Maastricht University

Leading in Learning!

**Join the best at
the Maastricht University
School of Business and
Economics!**

Top master's programmes

- 33rd place Financial Times worldwide ranking: MSc International Business
- 1st place: MSc International Business
- 1st place: MSc Financial Economics
- 2nd place: MSc Management of Learning
- 2nd place: MSc Economics
- 2nd place: MSc Econometrics and Operations Research
- 2nd place: MSc Global Supply Chain Management and Change

Sources: Keuzegids Master ranking 2013; Elsevier 'Beste Studies' ranking 2012; Financial Times Global Masters in Management ranking 2012

Maastricht University is the best specialist university in the Netherlands
(Elsevier)

Visit us and find out why we are the best!
Master's Open Day: 22 February 2014

www.mastersopenday.nl



1.8 Summary and Conclusions

Based on economic wealth maximisation criteria, corporate financial decisions should always be *subordinate* to investment decisions, with dividend policy used only as a means of returning surplus funds to shareholders.

To prove the point, our review activity reveals that shareholder funds will be misallocated if management reject Project A and pay a dividend.

For example, as a shareholder with a *one per cent* stake in the company, who prefers to spend now, you can always borrow £5,000 for a year at the market rate of interest (14 per cent).

By the end of the year, one per cent of the returns from Project A will be worth £5,750. This will more than cover your repayment of £5,000 capital and £700 interest on borrowed funds.

Alternatively, if you prefer saving, rather than lend elsewhere at 14 per cent, it is still preferable to waive the dividend and let the firm invest in Project A because it earns a superior return.

In our Fisherian world of perfect markets, the correct investment decision for wealth maximising firms is to appraise projects on the basis of their shareholders' *opportunity cost of capital*.

Endorsed by subsequent academics and global financial consultants, from Hirshliefer (1958) to Stern-Stewart today:

- Projects should only be accepted if their post-tax returns at least equal the returns that shareholders can earn on an investment of equivalent risk elsewhere.
- Projects that earn a return less than this opportunity rate should be rejected.
- Project yields that either equal or exceed their opportunity rate can either be distributed or retained.
- The final consumption (spending) decisions of individual shareholders are determined independently by their personal preferences, since they can borrow or lend to alter their spending patterns accordingly.

From a financial management perspective, dividend distribution policies are an irrelevance, (what academics term a *passive residual*) in the determination of corporate value and wealth

So, now that we have separated the individual's *consumption* decision from the corporate *investment* decision, let us explore the contemporary world of finance, the various functions of strategic financial management and their analytical models in more detail.

1.9 Selected References

Jensen, M.C. and Meckling, W.H., “Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure”, *Journal of Financial Economics*, 3, October 1976.

Ang, J.S., Rebel, A. Cole and Lin J.W., “Agency Costs and Ownership Structure” *Journal of Finance*, 55, February 2000.

Special Issue on International Corporate Governance, (ten articles), *Journal of Financial Quantitative Analysis*, 38, March 2003.

Miller, M.H. and Modigliani, F., “Dividend policy, growth and the valuation of shares”, *The Journal of Business of the University of Chicago*, Vol. XXXIV, No. 4 October 1961.

Modigliani, F. and Miller, M.H., “The cost of capital, corporation finance and the theory of investment”, *American Economic Review*, Vol. XLVIII, No. 3, June 1958.

Miller, M.H., “Debt and Taxes”, *The Journal of Finance*, Vol. 32, No. 2, May 1977.

Fisher, I., *The Theory of Interest*, Macmillan (New York), 1930.

Hirshliefer, J.,” On the Theory of Optimal Investment Decisions”, *Journal of Political Economy*, August 1958.

Stern, J and Stewart, G.B. at www.sternstewart.com.