A THEORY OF FINANCE FOR THE GROWTH COMPANY

Primary Objective of Management

A large corporate entity, such as B.H.P. or C.S.R., has an existence separate from that of its shareholders and probably will be carrying on operations long after the demise of the last of its present shareholders. This requires the implementation of certain policies, such as the commitment of funds for research to develop long-range new products, which will primarily benefit the entity and its future shareholders. Nevertheless, as the present ordinary shareholders supply the basic equity capital and bear a large part of the risk of poor performance or failure, they are, both legally and actually, the real owners of a company. Management should direct its efforts toward a primary objective of maximizing the value of the investment of its ordinary shareholders.

Conspicuously absent from the above discussion is the position of the preference shareholders. While legally and technically owners of a company, along with its ordinary shareholders, in actuality the preference shareholders are not owners, but have a nebulous status somewhat like that of junior or subordinated debenture holders. As the preference shareholders supply capital to a company for which they are entitled to receive only a fixed and limited payment per year (assuming a non-participating and non-convertible preference issue) company management and ordinary shareholders rightfully consider them as a source of funds to be used to enhance the return for the ordinary shareholders through the gearing or leverage that their fixed cost capital provides. Their legitimate concern with the affairs of their company is limited to its being operated ethically and at a degree of efficiency which will ensure the payment of their preference divided, even under difficult conditions. A company should treat its preference shareholders fairly and consider the preference dividend as a moral obligation to be met unless its payment would seriously endanger the life of the company.

The purpose of this paper is to present a comprehensive theory of finance for the growth company which will permit the achievement of this primary objective of maximizing the value of the investment of the ordinary shareholders.

What is a Growth Company?

Growth companies have been defined in many ways, including:

1. those companies "whose earnings move forward from cycle to cycle".
2. "a corporation whose earnings per share have shown an annual rate of increase, over several years, of more than four percent (in constant dollars) or 6.5% (in current dollars)."
3. "a growth company's sales and earnings should be expected to show a rising trend, and the trend should climb more steeply than the average."
4. "stocks whose earnings and dividend payments on a per-share basis show an average long-term growth rate well in excess of the average three percent annual growth of (the American) economy."

As an extensive attempt to develop a precise definition of a growth company is outside the scope of this paper, our purposes will be satisfied by reference to the following broad definition from Security Analysis by Graham, Dodd and Cottle.

"In general terms growth stocks are those which have maintained a pronounced (substantially above average) rate of growth over a period of years and are expected to continue to do so. In our opinion, the past span ordinarily should be in excess of five years."

Capital Gains are the Key to Maximizing Investment Value

There are two means by which the ordinary shareholder secures a return on his investment—cash dividends and capital gains. Dividends provide him with periodic cash income consisting of distributions of net profit earned by his company. Capital gains give the shareholder an increment to the amount which he has invested in his company and are obtained when the price of the ordinary shares rises, permitting sale of his shares at more than the purchase price.

Until fairly early in this century it was generally assumed that at best an average company's operating results would be static over the long-term while fluctuating widely from year to year in response to then current business conditions. It was further assumed that almost all of net profits would be paid out in dividends and that, granting moderate success, ordinary shares would sell at or near par value, as there was nothing which would cause them to rise. These appear to have been the assumptions which created the now erroneous idea that there is a relationship between par value and the actual value of an ordinary...
share and that par value is of importance in measuring the adequacy of net profit and dividends. Perhaps, however, that haphazard indicator of company performance, the earning rate, was a useful, if rough, guide to the success of a company in those days when little was known that par value is of importance in measuring the adequacy of net profit and dividends. Perhaps, however, that haphazard indicator of company performance, the earning rate, was a useful, if rough, guide to the success of a company in those days when little was known.

Company in those days when little was known.

This attitude can be substantiated by a consideration of the “reverse yield gap” in the American stock market.

In consideration of the higher risk incident to investment in ordinary shares, investors have traditionally required a higher dividend yield when investing in ordinary shares than the interest yield then currently available from high-quality debentures. This difference existing at any one time between the average dividend yield on ordinary shares and the interest yield on high grade debentures is known as the “yield gap”. In the past when speculative market excesses have pushed ordinary share prices to a level where dividend yield dropped below the interest yield on quality debentures, creating a “reverse yield gap”, it has been a harbinger of stock market and economic trouble. Such a reverse yield gap came into existence shortly before the great market crash of 1929.

Since the late 1950s, however, a reverse yield gap has existed in the American market and now appears to be a permanent fixture. Not only does a reverse yield gap exist, but it is a wide gap—average ordinary share dividend yield is now approximately 3½% while interest yield on top-quality debentures is now approximately 6%. A complete change in investment thought would thus be required to close this gap. If American investors are willing to accept a substantially smaller return in the form of ordinary dividends on a riskier investment, they are obviously expecting to obtain most of their return from another source, i.e., capital gains.

Examples of Actual Capital Gains

Consider the following examples of the benefits which have been reaped by ordinary shareholders of growth companies whose management possessed sufficient financial sophistication to secure for them by means of capital gains these benefits of growth:

(1) A $1,000 investment in the ordinary shares of International Business Machines (I.B.M.), world’s largest computer maker, in the early 1920s would now be worth approximately $1,000,000.8

(2) A $1,000 investment in the ordinary shares of Litton Industries, giant American diversified technology company, at the time of its founding in 1954 would have been worth $85,000 by May, 1963 and more than $175,000 today.10

(3) A $3,500 investment in the ordinary shares of Republic National Life in 1953 would have been worth close to $500,000 by 1964.11

(4) A $1,000 investment in the ordinary shares of each of a group of major American life insurance companies in 1947 would have appreciated sharply by 1961 (see table below).

All of the companies in the above four examples have one thing in common, they plough back all or substantially all of their net profits to finance future growth and pay out little or nothing in cash dividends to their shareholders.

The superior benefits which will accrue from an investment in a growth company which is retaining

MAJOR U.S. LIFE COMPANIES

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<tbody>
<tr>
<td>Franklin Life</td>
<td>1,000</td>
<td>$69,779</td>
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<tr>
<td>Gulf Life</td>
<td>1,000</td>
<td>62,000</td>
</tr>
<tr>
<td>Continental Assurance</td>
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<td>California-Western States Life</td>
<td>1,000</td>
<td>32,551</td>
</tr>
<tr>
<td>Lincoln National Life</td>
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<td>32,190</td>
</tr>
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<td>Connecticut General Life</td>
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</tr>
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<td>West Coast Life</td>
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</table>

The Australian Security Analysts’ Journal

June, 1967
a large proportion of its earnings as opposed to a company which is paying out substantially all of its earnings in dividends are illustrated in the following example involving a $1,000 investment in the ordinary shares of each of companies A and B. In each case assume:

1. that a Rate of Return on Ordinary Shareholders' Funds of 20% will be earned, a reasonable performance for a growth company.
2. that a multiplier of 20 times (a capitalization rate of 5%) will be applied to earnings by the market, which is not unreasonable considering the consistently higher multipliers accorded Mount Isa Mines, Herald and Weekly Times, Tooth, Litton Industries and other growth stocks, and
3. that dividends will be reinvested by shareholders to yield 20%.

The combination of a 20% rate of return and a multiplier of 20 times automatically results in net asset backing of $250 for the $1,000 investment in each company. The sole difference between the two companies is that Company A retains 100% of its earnings while Company B pays out 100% of its earnings in dividends.

To show the higher return available from capital gains, the results from investment in Company B are first calculated as though there were no individual income tax liability upon the part of its shareholders. Finally, to emphasize the additional advantage of capital gains which is provided by the tax laws, computations for Company B are shown in which the average shareholder is assumed to pay income tax on marginal income at a 40% rate.

Why has Company A far outperformed Company B in maximizing the value of its ordinary shareholders' investment? The answer is simply because each dollar of earnings retained by Company A produces 20 cents of additional earnings during the following year (at the assumed 20% Rate of Return on Ordinary Shareholders' Funds) and investors are valuing the 20 cents of additional earnings at four dollars (at the assumed multiplier of 20 times). Thus, the retention of one dollar of earnings by Company A results in capital gains of four dollars in the following year—and will result in further capital gains in the future—due to the highly successful utilization of retained earnings and the consequent anticipation by the financial community of substantial future growth.

Recently a Business Finance student from the University of Queensland attended an accounting meeting where he was able to talk with the managing director of a large mining company. The student asked if the managing director considered an increase in the market price of his company's ordinary shares to be important. The managing director replied that he did not, as his company was interested in investors, not speculators. This is an unfortunate attitude, because most share buyers who are looking for capital gains are not speculators, but intelligent sophisticated investors. It is not necessary that there be a capital loss for every capital gain and every dollar made need not be offset by a dollar lost. Most capital gains represent solid value added onto the market price of ordinary shares by virtue of management decisions made in pursuit of this goal. It was neither the result of speculation nor accident that the shareholders of I.B.M., Litton Industries and the American life insurance companies achieved the extraordinary increases in the value of their investments. These capital gains were made possible by management decisions consciously designed to increase the value of the company and the market price of its ordinary shares.
How is Market Price Determined?

To determine how a growth company can maximize the value of its owners' investment, it is necessary to identify the components which determine the market price of its ordinary shares. This market price is largely based upon two factors: the earnings per share and the multiplier.

Earnings per share is simply that part of the net profit attributable to each ordinary share and is calculated by dividing net profit available for ordinary shareholders (net profit after tax and after deducting any preference dividend requirements) by the number of ordinary shares outstanding. The earnings-per-share concept is designed to recognize the individual share as the unit of ownership, of trading and of price and to relate the success of a company to the number of ordinary shares outstanding. It is a far more significant figure than net profit. If two companies are exactly alike in every way, including net profit, except that one has 1,000,000 ordinary shares outstanding and the second 2,000,000 ordinary shares outstanding, then the value of each share of the first must be twice that of the second.

The multiplier or price-earnings ratio is the valuation given each cent of earnings per share by the market and is calculated by dividing the market price of an ordinary share by the earnings per share. It is not, however, the market price which determines the multiplier, but rather the multiplier which determines the market price. Although there are many factors which temporarily affect the multiplier including general economic conditions, war, drought, politics and emotional considerations, such as greed and fear, the two primary determinants are: (1) past and expected future rate of growth of earnings per share and (2) general investment consensus as to the quality of a company and stability of its operations. Well-thought-of growth companies, such as Mount Isa Mines, I.B.M. and Litton Industries, command multipliers of 20, 30, 40 or 50 times or more. An average company usually has a multiplier of approximately 10 to 12 times while a below-average company's multiplier will generally be less than 8 times.

How Can a Company Increase the Market Price of its Shares?

Obviously, if the market price of the ordinary shares of a growth company is determined by earnings per share and the multiplier, the market price will be maximized by maximizing both earnings per share and the multiplier.

Earnings per share can be maximized by maximizing the number of ordinary shares outstanding.

Net profit can be maximized by maximizing Rate of Return on Ordinary Shareholders' Funds which is computed by dividing net profit (after tax and after deducting any preference dividend requirements) by Ordinary Shareholders' Funds (Ordinary Capital, Unappropriated Profits and Reserves). The use of the following expanded formula, however, gives a better understanding of the components which combine to determine this rate of return.

\[
\text{Profit Margin \times Asset Turnover \times Capitalization Ratio} = \text{RROS/HF}
\]

or

\[
\frac{\text{Net Profit}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Ordinary Shareholders' Funds}} = \text{RROS/HF}
\]

Profit Margin is the number of cents net profit per dollar of sales and shows how effectively sales revenue is being converted to profit.

Asset Turnover is the number of dollars of sales per dollar of assets and indicates how effectively assets are being used to generate sales.

Capitalization Ratio is the number of dollars of assets per dollar of Ordinary Shareholders' Funds and demonstrates the extent to which assets are financed by debt and preference capital or the amount of gearing used.

Profit Margin and Asset Turnover should both be maximized. Capitalization Ratio, however, should only be increased to a predetermined level consistent with the dictates of safety because of the risk of violent fluctuation of net profit or even bankruptcy caused by the legal necessity of making periodic interest payments on debt regardless of the success of operations.

Minimize Shares Outstanding

The number of ordinary shares can be minimized by limiting the ordinary capital raised upon the formation of a company to the smallest amount with which the company can safely and efficiently commence operations and by refraining from selling additional ordinary shares thereafter. Additional finance for expansion and growth should be obtained by a balanced blend of funds generated through depreciation and retained earnings and gained from the sale of debentures and preference shares. Only in a few highly limited situations would it be desirable for a company to dilute its ordinary equity by raising cash through the sale of additional ordinary shares. The above discussion, however, should not be taken as opposing splits, bonus issues and stock dividends, all of which, when properly used, are of benefit to the ordinary shareholder.

In the United States where companies are permitted to repurchase their own shares, the importance of minimizing the number of ordinary shares outstanding is widely recognized. In recent years more shares have been repurchased than issued by the 1,400 or so companies whose shares are listed on the New York Stock Exchange. Some of the largest companies in...
the world, such as General Motors, General Electric and Standard Oil of New Jersey, have reacquired millions of their own shares either (1) for retirement to reduce the number of ordinary shares outstanding, or (2) for some other use, as for example an employee share purchase plan, to prevent an increase in the number of ordinary shares which would otherwise be outstanding. Unfortunately, Australian company law, following the English example, does not permit repurchase of ordinary shares. Until this archaic restrictive legislation has been done away with, Australian companies can only limit the number of ordinary shares outstanding by controlling carefully their issuance.

The second component of market price, the multiplier, is maximized primarily by **growth** in earnings per share. The greater the rate of growth, the greater the multiplier.

Earnings per share growth can be maximized by maximizing two factors, Ordinary Shareholders' Funds and the Rate of Return on Ordinary Shareholders' Funds.

Ordinary Shareholders' Funds are generally increased in either of two ways: by the sale of additional ordinary shares, either to existing shareholders or to the investing public, or by the retention of earnings in the company, the ploughing back of profits. As has been discussed, the alternative of bringing a new issue of ordinary shares to market is undesirable because of the adverse effect on earnings per share. Thus, Ordinary Shareholders' Funds must be increased by retaining earnings.

**Dividend Payout Policy**

Given a well-managed company which:

(1) earns a high Rate of Return on Ordinary Shareholders' Funds,
(2) has ample opportunities for capital investment at high returns — and well-managed companies seem to generate their own capital investment opportunities,
(3) has sufficient management depth to undertake many new investment projects, then substantially all of net profit should be retained. For this type of company a dividend payout ratio of from 0 to 25% would be appropriate. The dividend payout ratio measures the proportion of net profit available for ordinary dividend (net profit after tax and after deducting any preference dividend requirements) actually paid out in ordinary dividend.

The accompanying table shows examples of dividend payout ratios for selected growth companies:

<table>
<thead>
<tr>
<th>Year</th>
<th>Litton Industries</th>
<th>I.B.M.</th>
<th>Polaroid</th>
<th>Xerox</th>
<th>Big Sister Foods</th>
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<td>1957</td>
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<td>30</td>
<td>11</td>
<td>14</td>
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<td>24</td>
<td>11</td>
<td>40</td>
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<td>1959</td>
<td>0</td>
<td>20</td>
<td>7</td>
<td>33</td>
<td>54</td>
</tr>
<tr>
<td>1960</td>
<td>0</td>
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<td>10</td>
<td>18</td>
<td>50</td>
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<tr>
<td>1962</td>
<td>0</td>
<td>34</td>
<td>8</td>
<td>15</td>
<td>42</td>
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<td>1963</td>
<td>0</td>
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<td>1964</td>
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<tr>
<td>1965</td>
<td>0</td>
<td>44</td>
<td>7</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>1966</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>16</td>
</tr>
</tbody>
</table>

Some may object to a low dividend payout ratio as unrealistic, saying that investors will not commit money in a company which does not pay a cash dividend, but this viewpoint places all investors in one large unsophisticated group. Consider the hypothetical example of a hardware merchant with several stores who opens a small store in a newly established suburban area near a large city. In the first several years of operation, he earns a modest profit and ploughs it all back into the business to upgrade and increase his stocks. As his area is more thickly settled, his profit increases, and he decides to enlarge his building. Over a few years he does this twice and increases the earning power of the new hardware store to many times what it had been. During this time he has never taken one cent from the earnings of the new store, but has reinvested all net profit to finance future growth. Obviously, the value of the store has been enhanced, rather than reduced, by the emphasis on developing earning power. Surely, investors are not so naive as to refuse to buy shares in a company which is so managed for their greatest good simply because it does not make an annual or semi-annual distribution of cash benefits to them.

American shareholders have reached this level of sophistication. Shares of many of that country's better growth companies, paying little or no dividend, are in such demand that they sell at multiples of 30, 40 or 50 to 1. Litton Industries, previously discussed in this paper, is an example. Litton has never paid a cash dividend and its management has stated that there are no plans to pay a cash dividend in the foreseeable future; yet its shares sell at a multiplier of approximately 35 to 1 and its shareholders have made fantastic capital gains.

A dividend policy which is favoured by many American growth companies — and their shareholders — consists of increasing the cash dividend each year as net profit increases, but only maintaining, or even decreasing the dividend payout ratio.

Masco Corporation, a relatively small diversified American manufacturer of building equipment, automotive components, toys and air-treatment products, uses this type of dividend policy.

This dividend policy satisfactorily provides capital for growth and gives the ordinary shareholder a small but steadily increasing cash dividend. Masco's dividend policy (Continued inside back cover)
SHARE PRICE CHARTS – from page 8

share prices only very rarely break out of a rising trend and immediately initiate a falling trend; a period of sideways movement almost always occurs. That such an area of trading is forming does not necessarily point to an impending reversal of trend—it could well be the beginning of a neutral period of trading prior to a resumption of the up-trend. Thus an element of caution is called for in simply following trends.

As a general rule security analysts should avoid bullish recommendations on stocks in a downtrend as the extent is never precisely known, and a base may form over eighteen months and often longer. Even perhaps five years, before a favourable trend emerges. While uptrends are pleasing to investors concerned, they do not continue for ever and tops often occur much more quickly than bases. The cynic would liken following trends to studying past examination papers. However, candidates are usually well advised to look at past papers.

The analyst should be particularly concerned with stocks which begin to look interesting on charts, such as where a large base has formed and where the current price is now above most of the base trading. Increased volume would enhance the technical position. Almost all marked changes in sentiment as shown on a chart occur through a changing fundamental situation, admired, of course, with emotion and other investor irrationality. The analyst should then take the tip from his chart that something has probably changed and try to find out what that development might be. It will require considerable salesmanship to persuade an investor to buy a stock because the chart has said the price is going up.

In short, charts help the analyst to do his work more economically in that he is not looking at stocks which appear unlikely to move significantly in either direction for some time. Rather, he is concentrating his researches on shares with short-term promise of recovery, enjoying a strong technical position, or conversely, on those stocks which appear vulnerable and show a weak technical situation. There are two principal dangers of using charts hand in hand with fundamental theory. There is sometimes a temptation for the analyst to see in charts what he wants to believe as a result of his fundamental researches. Charts are of value only where the analyst is sufficiently disciplined to be completely honest with himself. The second danger is that the fundamentalist will allow charts to stifle his thinking. It should always be remembered that charts are a lag indicator and are no better at picking the bottom or top of a market than any other system. Charts are a facet of security analysis, not a substitute but an integral part.

A THEORY OF FINANCE FOR THE GROWTH COMPANY – from page 6

has met the ultimate test, as the market price of its ordinary shares increased by more than four times from the 1962 low to the 1966 high.11

Over the years consistent dividend increases, based upon increased earning power, can boost dividends to a remarkable level. A $1,000 investment in International Business Machines ordinary shares in the early 1920s would now yield annual cash dividends of approximately $10,000.

**Summary**

Management must formulate its policies primarily for the benefit of its ordinary shareholders who are the real owners of any company.

Ordinary shareholders can make substantially higher returns on their investment through capital gains than through cash dividends.

Capital gains are not achieved by accident, but by use of financial policies deliberately developed and implemented to increase the market value of the ordinary shares. These policies are designed to maximize net profit; concentrate this profit on a small number of ordinary shares, increase future earnings per share and cause investors to appraise present earnings liberally in valuing shares.

**FOOTNOTES**

1. From the 1948 Annual Report of National Investors Corporation, an American investment trust. This represents one of the earliest recognitions of, and attempts to identify, growth companies.

2. "Those Delicious 'Growth Stocks'," Fortune, April, 1930, p.130.


