Part IV: Valuation and Takeover

6 A Stock Exchange Listing

Introduction

In Part Three we explained how share price listings based on valuation theories that encompass dividends (the yield and cover) and earnings (the P/E ratio) are analysed by private investors and financial institutions to implement their trading decisions (*i.e.*" buy, sell or hold").

We shall now apply these dynamics to the corporate sector and the specific case of a firm seeking a stock exchange listing and hence a market valuation for the first time. In Chapter Seven we shall develop this corporate theme with an analysis of the most important trading decision subsequently undertaken by corporate management: namely *the takeover of one firm by another*.

Exercise 6: Coming to the Market

At Board meetings of the privately owned Bowie Company, the recurrent question is how to finance future growth. The rational solution would appear to go public with a listing on the London Stock Exchange. Mr. David, the company chairman, produces the following information recently obtained from a Manhattan consultancy concerning two listed companies, Eno plc and Ronson plc. Both firms are similar to Bowie in respect to size, asset composition, financial structure and product mix.

		Eno ($)	Ronson ($)
2012	Earnings per share	1.50	2.50
2008 -12	Average earnings per share	1.00	2.00
2008 -12	Average market price per share	9.00	20.00
2012	Dividends per share	0.75	1.25
2008 -12	Average dividends per share	0.60	1.20
2012	Book value of assets per share	9.00	18.00

On the basis of this information, Mr. David asks what you think the Bowie Company was worth in 2012. The only other data that you have available at the moment are the company's final accounts, which disclose the following ($ million)

Share capital	100	$1.00 Ordinary shares
Post-tax earnings	400	
Gross dividend	100	
Book value of assets	3,500	

From memory, you also recall that the post-tax earnings and dividends for 2012 were one third higher than the average for the previous four years.

Required:

As a basis for more detailed analysis;

1. Calculate *valuation multipliers* for Bowie based on those for Eno and Ronson.
2. Produce a range of values for Bowie using these multipliers.
3. Evaluate your results and advise the Chairman on the feasibility of going public.

An Indicative Outline Solution

The key to answering these questions is an understanding of the term *valuation multiplier*, which should be familiar, given our detailed discussion of the P/E ratio elsewhere in this text and its CVT companion. Using the concept of the capitalisation of a perpetual annuity (maintainable yield):

Value (price) is simply a *multiple* of earnings that may be interpreted as the number of years required to recoup your investment. Likewise, value can also be defined as a multiple of dividends, the price-dividend (P/D) ratio.

1. The Valuation Multipliers
   The competitors' P/E and P/D ratios (past, present or future) provide multipliers that can be applied to a company's earnings and dividends per share to determine a possible range of share prices if it is to go public. With the information available we can also use an *asset valuation ratio* (market value of assets over book value) to determine a *benchmark* price. Our over-arching objective is the derivation of a share price that ensures the successful launch of Bowie on the market as a going-concern. This two stage process can be summarised as follows:

Earnings and dividends per share for Bowie ($million)

2012	EPS	= 400 / 100	= 4.00
2008 -12	Av EPS	= 320 / 100	= 3.20
2012	Div PS	= 100 / 100	= 1.00
2008 -12	Av DPS	= 80 / 100	= 0.80

This data has been derived as follows;

$ million		Earnings	Dividends
2012		400	100
2008 -11	Annual Averages	300	75
2008 -12	Total	1,600	400
2008 -12	Overall Average	320	80

Valuation Multipliers

Basis	Eno	Ronson
EPS	9.00 / 1.50 = 6	20.00 / 2.50 = 8
Av EPS	9.00 / 1.00 = 9	20.00 / 2.00 = 10
DPS	9.00 / 0.75 = 12	20.00 / 1.25 = 16
Av DPS	9.00 / 0.60 = 15	20.00 / 1.20 = 16.7
Market Price / Book Value	9.00 / 9.00 = 1.0	20.00 /18.00 = 1.1

2. A Range of Share Prices for Bowie: based on multiples for Eno and Ronson ($)

Earnings per share	24.00	32.00
Average Earnings per share	28.80	32.00
Dividends per share	12.00	16.00
Average Dividends per share	12.00	13.36
Market Price/Book Value	35.00	38.50

Note the calculation of Market Price/Book Value:

35 x 1.0	35 x 1.1

3. A Data Evaluation
   Any discussion of your results should initially highlight the following points:

- Price per share varies widely from $12.00 to $38.50.
- The lower price range reflects *trailing* low dividend payout ratios.
- Prices still vary from $24.00 to $38.50, if we ignore dividend policy.
- Using the earnings multipliers (P/E ratios), price ranges narrow from $24.00 to $32.00 with an average of $28.00 for 2012.
- The highest price of $38.50 is defined by an *asset valuation ratio* (market value of assets over book value).

Bowie therefore has two problems that must be resolved before coming to the market.

Can you explain them?

Summary and Conclusions

To determine a realistic issue price, management must translate a company's financial history and current status disclosed by published accounts into a desirable *investment* profile, based on stock exchange listings for similar firms already quoted on the market. As a basis for valuation, this profile should encompass the dividend yield, the P/E ratio (or its reciprocal, the earnings yield) and latest asset position. These are factors upon which the company will be judged by prospective investors to ensure full subscription when it comes to the market.

In our illustration, the company has two dilemmas.

First, the lower range of valuations for Bowie reflects a history of low dividend payout ratios, which could deter prospective investors. After all, a share's price is ultimately determined by the discounted sum of expected future dividends. And adequate dividend yields are necessary to attract investors, now as well as in the future, who seek regular income.

On the other hand, it can be argued that the dividend valuations currently prepared for Bowie are obviously low because they are based on the *capitalisation of a perpetual annuity*, which is *constant*. It ignores any allowance for *growth* and the possibility of capital gains incorporated into future share prices when the stock is eventually sold. The provision of further data using the Gordon growth model explained in Chapter Three can remedy this situation. But it is worth noting that a low dividend payout ratio should not necessarily worry the company. The market may interpret a low yield relative to earnings as a *signal* by Bowie that it has a profitable re-investment strategy.

You will recall from *CVT* that many companies offer high prospective dividend yields because they have no growth prospects and little idea of what to do with any cash surplus. Indeed, we have already observed theoretically, why Modigliani and Miller (MM) way back in the 1960s maintained that the purpose of a dividend is to return unused funds to shareholders. This is not to say that companies should ignore distribution policy altogether. But eventually, a company is more likely to fail if dividends are excessive, leaving too little earnings for investment.

However, this leads to our second point.

If companies seeking a stock exchange listing regard earnings as their *primary* valuation driver (which incorporates shareholders' future dividend and growth expectations to match those of its competitors) surely an earnings valuation should also exceed an asset valuation?

Without further information on the prospect of higher forecast levels of earnings for Bowie, the asset valuation multipliers, based on the relationship between market value and book value, produce the *highest* prices per share. But surely if the company is to expand and finance future growth, an earnings valuation should exceed an asset valuation, with the difference represented by what accountants' term "goodwill".

Unless there is something special about the firm's asset mix (such as a high proportion of recently valued property or investments) data drawn from its accounts is the least reliable measure of corporate worth, given the deficiencies of financial reporting based on GAAP analysis.

To conclude, the question that the company's chairman (Mr David) should address is not whether Bowie should seek a stock exchange listing, but whether it is worth more "dead than alive"?

Selected References

1. Hill, R.A., *Corporate Valuation and Takeover*, bookboon.com (2011).
2. Gordon, M. J., *The Investment, Financing and Valuation of a Corporation,* Irwin, 1962.
3. 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.