B.H.P. IN PERSPECTIVE

Part II
LONG TERM INVESTMENT

From the beginning of the period in 1910 the growth of the investor's holding in B.H.P. shares has been substantial. A holding of 1,000 shares in January, 1910, would have grown, without the investor making any further cash outlays, to between 15,000 and 16,000 shares in 1966. This assumes that the investor had done no more than to sell some of his rights to each new issue at the mean price level in order to purchase the remaining rights. (Table 1).

Although the market price of B.H.P. shares in the years immediately following 1910 fluctuated by up to 200%, 1,000 shares in 1910 could have been purchased for £1,700 to £2,200, the exact outlay depending on time of purchase. The par value at this time was 8/-. In 1919 shares were converted, by way of a bonus issue, into 20/- units. These shares, if all the free-of-cost bonus elements to future issues had been retained would have grown, in 55 years, to a holding valued at between £35,000 and £40,000.

In this same period, the total annual dividends of £100 received by this same shareholder in 1911 have grown to approximately £1,200 in 1965 (2). The combination of these two elements results in an overall yield (3) for the 50 years' period 1916-1965 of approximately 9.0%. Although these rates of growth appear quite satisfactory, it must be realised that over many shorter periods the fortunes of an investor would fluctuate widely, depending upon the date of purchase of stock and the date of resale.

As an indication of the range encountered, rates of return for 12 months periods (from 1948 to 1965) have fluctuated from gains of 70% to losses of 27%. The reason for such variability lies in changes in the market price of the shares which are responsible for substantial capital gains or losses. For example, share prices reached an all-time low for the period considered in September / October, 1931, when sales were made at 11/5. The high was reached in September, 1960, when shares sold at 101/-. The variations between these extremes are best appreciated by reference to Graph 1.

But shareholders' returns are obviously determined by factors other than just changes in price. To the long-term investor, they are dependent primarily on the flow of dividends received. This cash flow is the product of the dividend rate per share and the growth of the shareholding. As price fluctuations increase, the possibility of significant capital gains or losses rises. Under these conditions the importance of the dividend flow decreases relative to the total possible gain or loss. For the shareholder's yield on his investment to be calculated all three of these variables must be considered. This is the purpose of this part of the study.

Dividend Flow

The declared dividend rate for B.H.P. shares since 1910 has been as high as 1/6 per 8/- share (1/6 dividend + 6d. "Bonus") for a quarterly payment (4). This occurred in 1912 and 1913. It is equivalent to an annual rate of 75%. This rate was never maintained for a full financial year, although it was closely approached in the year ended 31st May, 1913, when dividends totalling 5/6 were paid on the 8/- shares. In period 1911 to 1919 four quarterly payments of 1/- per share were the rule rather than the exception, the shares then having a par value of 8/-. Such a dividend policy appears less remarkable when it is realised that the company at that time was primarily a mining company which had only recently ventured into steel-making.

Graph 1 indicates the changes in the dividends received by an investor holding 1,000 shares in 1921, and who takes up the bonus element of each new issue. Each dividend received, whether a half-yearly or a quarterly payment, is plotted at its equivalent annual rate. Breaks in the line correspond to periods in which no dividend was paid.

From 1913 to 1935 the dividend record was poor. For five of these years no dividend at all was paid, and a shareholder at the end of the period was receiving less in dividends than at the beginning. In "real" terms he was faring even more poorly, as the gap between "real" dividend received (5) and the actual dividend received was larger at the end of the period than at the beginning. 1936 saw the beginning of dividend increases which were to continue until shortly after the commencement of war. Consum-

---

1) At December, 1965.
2) Year ending 31st May.
3) i.e. Redemption Yield. See Appendix, section 4.
4) Quarterly Dividend payments were discontinued after August, 1921.
5) The company's original shares were 20 units. The 8/- shares came into being in 1930.
6) The actual dividend adjusted for changes in its purchasing power by the retail price index.

2 September, 1966

The Australian Security Analysts' Journal
Income rose sharply. At the same time the rate at which inflation was occurring declined to less than 2% per year in the 10 years to 1965. Shareholders' "real" income, in consequence, rose strongly. This was only the second period since 1910 in which this had occurred for more than two or three consecutive years.

It is worth noting that the dividends received by an investor in 1912 were not again realised, in real terms, until 1962-63, despite a growth in shareholding of approximately 1200%. However, the dividend rate in 1912-1913 was the highest declared in the period being considered, and dividends at that time were very variable. A comparison with the dividend paid in the 1910-1911 year, for instance, show them to be, in real terms, amongst the lowest received in the 55-year period.

But a history of dividends is only a part of the relevant story in assessing investors' returns. However satisfactory the income, a shareholder may eventually be forced, or may choose, to sell his holding, and the capital gains or losses which result can be of greater consequence than dividends when the final yield is assessed. The significance of this point emerges if an investment in B.H.P. stock made in February, 1959, is compared with one made in February, 1960, both being held to February, 1965. The former produced a yield of 15.2%, the latter of 4.9%. The difference is due to the timing of the purchases, not to the dividend experience. The following section discusses investments in B.H.P. from this point of view.

**Yields on Terminated Investments**

To gain a more complete understanding of the fluctuating profits made by investors, redemption yields have been calculated for shares previously traded on the exchange. For B.H.P. stock made in February, 1959, is compared with one made in February, 1960, both being held to February, 1965. The former produced a yield of 15.2%, the latter of 4.9%. The difference is due to the timing of the purchases, not to the dividend experience. The following section discusses investments in B.H.P. from this point of view.

**TABLE I**

<table>
<thead>
<tr>
<th>Growth in Shareholding — 1910-1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>A holding of 1,000 shares in 1910 would become, after the issue of:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Price</td>
<td>1,114</td>
<td>1,119</td>
<td>1,559</td>
<td>1,930</td>
<td>2,261</td>
<td>3,708</td>
<td>4,115</td>
<td>5,458</td>
<td>5,213</td>
<td>5,458</td>
<td>6,047</td>
<td>7,389</td>
<td>8,179</td>
<td>9,185</td>
<td>10,917</td>
<td>15,430</td>
<td>16,710</td>
<td></td>
</tr>
<tr>
<td>Mean Price</td>
<td>1,097</td>
<td>1,109</td>
<td>1,552</td>
<td>1,899</td>
<td>2,208</td>
<td>3,621</td>
<td>4,001</td>
<td>5,165</td>
<td>4,948</td>
<td>5,165</td>
<td>5,702</td>
<td>6,967</td>
<td>7,691</td>
<td>8,613</td>
<td>10,917</td>
<td>15,430</td>
<td>15,587</td>
<td></td>
</tr>
<tr>
<td>Lowest Price</td>
<td>1,082</td>
<td>1,103</td>
<td>1,544</td>
<td>1,862</td>
<td>2,146</td>
<td>3,519</td>
<td>3,870</td>
<td>4,861</td>
<td>4,670</td>
<td>4,861</td>
<td>5,342</td>
<td>6,527</td>
<td>7,186</td>
<td>8,033</td>
<td>10,917</td>
<td>15,430</td>
<td>14,481</td>
<td></td>
</tr>
<tr>
<td>Conditions of Sale</td>
<td>11 for 58;</td>
<td>32/- premium</td>
<td>16 for 59;</td>
<td>32/- premium</td>
<td>1 for 5;</td>
<td>25/- premium</td>
<td>1 for 2;</td>
<td>10/- premium</td>
<td>1 for 3;</td>
<td>10/- premium</td>
<td>35 for 100;</td>
<td>bonus.</td>
<td>22 for 100;</td>
<td>par.</td>
<td>1 for 3;</td>
<td>10/- premium</td>
<td>1 for 5;</td>
<td>10/- premium</td>
</tr>
</tbody>
</table>

(7) This excludes the 1965 issue.

(8) See Appendix, section 4.

**The Australian Security Analysts' Journal**

*September, 1966* 3
From January, 1910, to November, 1913, actual prices have been taken from T. J. Thompson and Sons' Stock and Share Report (Sydney), which provides end of the month information. From January, 1914, to March, 1937, inclusive, the data is based on the mid-month values quoted by the Sydney Stock Exchange "Official Gazette" and "Stock and Share List". From April, 1937, prices come from the Melbourne Stock Exchange Melbourne Record, and are based on end-of-month data.

The method of producing "adjusted" share prices is explained in the Appendix. The graph indicates high and low values reached in each month as well as the final "Buying" offer.

The "Dividend Received" line is a plot of dividends paid (quarterly to 1921, thence half-yearly) to a shareholder whose holding is increased by the bonus element of each issue made. The values of the "Dividends Received" have been calculated on a base of 1,000 shares held in 1921. Each dividend declared has been plotted at the equivalent annual rate. The plot, therefore, gives only an indirect measure of the total dividends received annually by a shareholder. Each dividend plotted has been projected forward over the period between it and the next expected dividend, so that, other things being equal, it indicates the expected level of future dividends in the short term. The "Adjusted Dividend Received" line is a plot of the same data after adjustment with the Retail Price Index provided by the Commonwealth Bureau of Census and Statistics. It uses 1911 as a base year.

B.H.P. Dividend Yields from July, 1928, onwards come from the Sydney Stock Exchange Gazette. Prior to July, 1928, they were obtained from calculations based on prices quoted on the Sydney Stock Exchange and the Company's declared dividend rate. The "Ordinary Share Yields" were taken from a paper published by the Sydney Stock Exchange Research and Statistical Bureau, Security Prices and Yields 1875-1955 (D. McL. Lamberton) and from the Sydney Stock Exchange Official Gazette. The share yield is the arithmetic mean of the yields of all ordinary shares for which data were available in the last month of each quarter. The Australian Government Security Yields from 1910 to 1925 inclusive come from Security Prices and Yields 1875-1955 (D. McL. Lamberton). The yields quoted are for all New South Wales and Commonwealth Government issues maturing in more than six months. From 1926 to 1965 the information comes from publications of the Reserve Bank of Australia. The figures quoted are:

from 1926-1940, the average redemption yield on fully taxed securities maturing in 10 or more years;
from 1941 to January, 1948, the theoretical redemption yield on a fully taxed security maturing in 12 years;
from February, 1948, to June, 1959, the average redemption yield on securities subject to current tax maturing in 10 or more years;
from July, 1959, the theoretical redemption yield on a security subject to current tax maturing in 15 years.

In all cases the yields plotted are those for the final month of each quarter. It should be noted that the Bond yield (a redemption yield) is not comparable with the B.H.P. Dividend Yield and the Ordinary Share Yield.
10-year periods, taken at 5-year intervals, from 1911 to 1965. The results are summarised in Table 2. Included for purposes of comparison are figures indicating bond yields, which are reasonably comparable, and a further series in which all money values used have been adjusted with the relevant retail price index-figure to provide an approximate indication of the “real” level of returns.

A glance is sufficient to show the high variability of the returns on terminated investments in B.H.P. Two successive decades, 1921 to 1930, and 1931 to 1940, produced the lowest, minus 6.2%, and the highest, 27.3%, yields. An examination of the adjusted share prices in Graph 1 shows that either higher or lower yields are not likely to be found in any other 10-year periods, as the two decades taken end and begin, respectively, with prices close to the lows of 1930 and 1931.

Again, with an eye to the chart, it seems reasonable to suggest that all decades concluding outside the period from approximately July/February, 1930, to September/October, 1932, would have provided positive yields.(9).

By no means all such periods, however, would have provided yields in excess of bond yields. 1916-1925 and 1921-30 are two periods in which investors apparently would have fared better by investing in bonds rather than in B.H.P. shares.

Table 2 indicates the probable trend. From 1911 onwards, investment over 10-year periods appears to show successively poorer returns until the date of selling moves beyond 1932, when the trend reverses.

Yields then climb in conjunction with rising terminal share prices until, in the decade ending 1940, a growth yield of approximately 27% per annum was realised. Graph 1 visually confirms this pattern; it shows the fall and the following steep rise in share prices (adjusted) from approximately 1920 to 1940, together with the dividends received. The results in Table 2 relating to decades in the '40s, '50s and '60s do not allow much comment as to possible trends beyond stating the obvious, which is that the '50s saw a rapid growth in yields which rose to levels that must have been extremely gratifying to shareholders.

It is relevant to comment here that the excellent and very rewarding performance of B.H.P. shares during the 1950s and early '60s was undoubtedly a factor giving rise to the discontent of shareholders which has been growing slowly over the last two years, and which was recently expressed so forcefully by Mr. Shepherd. A large number of investors, noting the growth in returns coming from B.H.P. stock during this period, came to believe that this performance was going to be at the least a medium-term characteristic, and bought on the strength of this opinion. Though dividend growth is still continuing at a steady rate, the post-1961 fall in prices now prevents these investors from realising on their holding without accepting either a loss, or a very low final yield. For example, a purchase made in August, 1960, and sold in August, 1965, realised approximately 1.7% p.a. if the same purchase had been made only six months earlier, and also sold six months earlier, the yield would have been approximately 4.9%, which again emphasises the importance of timing.

A comparison of the retail price-adjusted yield figures with the unadjusted figures is of particular interest for the three periods 1921-30, 1926-35 and 1931-40. For the first two of these periods the “real” returns were greater than the cash flow received, while for the third, both were equal. This unusual situation, in which the price index moved slowly but almost constantly downwards for almost 13 years, came to an end in 1934. Since then, the retail price index has risen in all years except three—1944, 1945 and 1962. In these years the downward shift in the index was so small as to be quite insignificant.

The most outstanding characteristic of the yields is their variability. Admittedly, results for only 10 overlapping decades must be regarded with some reserve when general conclusions are to be drawn, but nevertheless variations of this kind are responsible for increasing the risk element normally associated with such investments. It must be borne in mind also, that these risks associated with fluctuating returns are not simply short-term risks.

Table 2 indicates that trends can continue for at least 10 years before turning points are reached.

Part of the explanation of the fluctuating yields realised on the shares can be found in the changing role which B.H.P. has played. (9) A computer study, at present being conducted, will provide growth yield figures for 10 year periods taken at monthly intervals. These results will allow this point to be re-examined objectively.
in the Australian share market. At the time at which this study begins, the dividend yield for B.H.P. was almost exactly equal to the average ordinary share yield (Graph 2). B.H.P. was at this time regarded, from the shareholder’s point of view, as a company of “average” present and future performance. Only 12 months after this time, risks associated with investing in the company (it was still a mining company, though steelmaking was on the horizon), together with increasing dividends pushed dividend yields to a high of 16% in early 1913. Over the following 3 years dividend yields fell back to the level of the ordinary share yield. There was, as yet, no indication of the “blue-chip” reputation that the company was later to earn. Dividends were passed from November, 1929, until November, 1932. Immediately payment of dividends pushed dividend yields around the level of the average ordinary share yield. There was, as yet, no indication of the “blue-chip” reputation that the company was later to earn. Dividends were passed from November, 1929, until November, 1932. Immediately payments resumed the dividend yield began to fall rapidly. The fall continued, with intermittent pauses, until 1937. The reason can be found on Graph 1. Adjusted share prices rose nearly 800%, from 1931 to 1937. Market prices in this period, in which one new issue was made, rose from approximately 11/6 in 1931 to 93/- in 1937. The significant point is that the fall in B.H.P. dividend yields occurred in years in which the average ordinary share yield was virtually steady. This change in investors’ attitude towards the company was due to specific conditions pertaining to the company itself and the nature of its industry, rather than to conditions affecting the market as a whole. It would seem that the growth which was to characterise the company, post-war, had already been sensed. As measured by the ratio of B.H.P.’s dividend yield to that of the average ordinary share yield, B.H.P. stock possessed substantially more investor appeal than the “average” stock on the market could provide. B.H.P. held this position almost without change until early in 1957, when its “superiority” started to increase, i.e., the gap between its dividend yield and the average ordinary share yield began to widen.

### TABLE 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1911-1920</td>
<td>3.8%</td>
<td>15.5%</td>
<td>9.5%</td>
</tr>
<tr>
<td>1916-1925</td>
<td>5.3</td>
<td>4.2</td>
<td>1.0</td>
</tr>
<tr>
<td>1921-1930</td>
<td>6.8</td>
<td>-6.2</td>
<td>-5.3</td>
</tr>
<tr>
<td>1926-1935</td>
<td>5.3</td>
<td>14.5</td>
<td>16.6</td>
</tr>
<tr>
<td>1931-1940</td>
<td>6.8</td>
<td>27.3</td>
<td>27.3</td>
</tr>
<tr>
<td>1936-1945</td>
<td>3.8</td>
<td>8.0</td>
<td>4.8</td>
</tr>
<tr>
<td>1941-1950</td>
<td>3.3</td>
<td>8.0</td>
<td>2.3</td>
</tr>
<tr>
<td>1946-1955</td>
<td>3.3</td>
<td>5.7</td>
<td>1.0</td>
</tr>
<tr>
<td>1951-1960</td>
<td>3.2</td>
<td>14.2</td>
<td>8.7</td>
</tr>
<tr>
<td>1956-1965</td>
<td>4.6</td>
<td>18.5</td>
<td>12.1</td>
</tr>
<tr>
<td>1916-1965</td>
<td>Approx. 9.0%</td>
<td>Approx 6.0%</td>
<td></td>
</tr>
</tbody>
</table>

The “blue-chip” classification was now quite unchallenged.

In addition to local forces pushing up the price of the stock in the late ’50s and in ’60 and ’61, the stimulus of overseas buying was also at work. The interest was predominately American; U.S. analysts felt that B.H.P.’s stated profits, being calculated after allowing for the increased costs of plant replacement, were a conservative estimate of the company’s position. Their re-assessment of the company’s accounts appeared to indicate a highly favourable investment potential. This led to some of the large-scale buying of 1960 and 1961. The peak in overseas demand was passed in mid-1961 (see Graph 1) and the withdrawal of American support and their gradual selling of stock has had a widely known and much bewailed effect on B.H.P. share prices since 1962.

Since 1962 the gap between the B.H.P. dividend yield and the average ordinary share yield has been narrowing, although B.H.P. dividend rates have, in these years, risen from 6½% (financial year ending May, 1962) to the present level of 9 1/6%. This is in marked contrast with the period of peak U.S. buying, which was spread over late 1960 and early 1961, when the B.H.P. dividend yield and the ordinary share yield were moving apart in opposite directions at a rapid rate (see Graph 2).

**Conclusion:**

In the longer term, the shares appear to have been an investment of only mediocre quality until the mid-1950s, although one decade prior to this period (the 1930s), saw much capital appreciation. It was not until the mid-1950’s that the rate of increase of dividend income began to outpace the rate of inflation of retail prices, and the shares became an attractive growth investment. In the 30 years prior to the 1950s the level of dividend income rose by only approximately 50%.
most of this occurring in the late 1930s.

It is not until the mid '50s that a definite growth trend emerges. Since this date a shareholder's dividend income has been growing at the nearly constant rate of approximately 12% per annum and with the recent developments in iron ore, natural gas and possibly oil there would seem little likelihood of a significant fall in either the dividend income of a shareholder or in the value of the shares in the near future.

APPENDIX

1. Growth of Share Holding:
The basic assumption used throughout the paper is that the shareholding of an investor increases, (except for the issue of 10.1,2, the rights to which were virtually worthless) with each new issue made without any cash expenditure being required of the investor. It is assumed that the investor sells some of his rights to each new issue in order to finance the purchase of the remainder. The net increase in his holding will obviously depend on the conditions of the issue and the market price of the rights. This assumption is made so that a shareholder be considered to bear only a single investment "cost", which is the outlay on his original purchase of shares.

Table 1 indicates the range of growth when rights have been sold at the highest price reached, at the lowest price, and at the mean price. Brokerage charges relevant to the dates of issue have been taken into account; fractions of shares have been ignored.

2. Adjusted Share Prices:
The actual trading prices of shares have been adjusted with cumulative Bonus factors to indicate, as shown on Graph 1, the theoretical price of one of today's shares assuming it could have been traded at the time shown.

3. Dividend Payments:
To facilitate yield calculations it has been assumed that dividends are received in a single payment in February of each year although usually declared in May and November since 1925. In a few instances when calculating yields, it has been assumed that the year's dividends have been received in August rather than February. From 1911 to 1921 dividends were usually declared quarterly: here, again, annual payment was assumed.

The values of the dividends received used on Graph 1 and used also in calculating the yields, were derived from a base of 1,000 shares held in 1921.

4. Redemption Yield:
The word "redemption" is used to emphasize that figures reported have been calculated in the same way as are calculated the yields on Government bonds, taking the proceeds of the sale of the shares as the redemption payment. Redemption yield is synonymous, as far as the method of calculation is concerned, with "internal rate of return" and "dividend growth yield". Wherever "yield" appears in this paper it refers to redemption yield unless otherwise stated.

The yield is defined as that rate of discount which equates the sum of the present values at year zero of all future dividends and of the revenue from the final sale of the stock to the outlay cost of making the investment. It is directly comparable with Bond yield.

The yield figures calculated relate to a stock-holding which grows as a proportion of rights to new issues is sold at the average of the highest and lowest rights trading prices reached. Yields have been calculated for ten-year periods, taken at five-year intervals, from 1911 to 1965. A yield has also been calculated for the 50-year period 1916-1965.

A similar series of yield figures based on the same data but which have been corrected for changes in the value of money is also represented. This adjustment uses the Retail Price Index series provided by the Commonwealth Bureau of Census and Statistics. It uses 1911 as a base year. As dividends were assumed received in February of each year, the figure used for correcting money values is the mean of that index figure for the calendar year being considered and the remaining year. Share prices and dividends have been deflated by the direct application of this index figure.

5. Dividend Yield, Ordinary Share Yield and Bond Yield:
The B.H.P. dividend yield figures were taken from Sydney Stock Exchange records. Where these were not available dividend yields were calculated. Monthly values are graphed.

The Ordinary Share Yields come from Security Prices and Yields 1875-1955 (D. McL. Lamberton); published by the Sydney Stock Exchange Research and Statistical Bureau. Values are graphed at 3 monthly intervals.

The Bond Yield series comes from the above source until 1952, and thereafter from publications of the Reserve Bank of Australia. The yields plotted are for the final month of each quarter.

SYDNEY PROGRAMME
It is proposed to conduct analysis of the undermentioned companies in the year 1966/1967:

- Chemical Materials Limited
- Hanimex Corporation Limited
- Peko-Wallsend Investment T.N.T.
- Hunter Douglass

EQUITIES A HEDGE?
"Are equities a hedge against inflation? One often hears generalisations about the connection between monetary developments and the behaviour of stock prices.

"For one thing, many share the all too common thought that investment in equities simply provides the answer to hedging against inflation—a concept which needs careful examination."

"Recent developments in Europe and the United States have borne out once again that the connection is indeed much more complicated than is usually assumed.

"Since 1961/62 share prices in Europe have generally been on the decline, whereas wages and prices have tended to rise sharply. After 1962, and particularly since the introduction in July, 1963, of the U.S. Interest Equalisation Tax, the movements of the European and U.S. stock markets have run counter. Moreover, the trends of corporate profits in Europe and the U.S.A. also differ markedly.

"These phenomena, which are of paramount importance to the financial analyst, are grounds for bringing up for discussion at this the Fourth Congress the significance of monetary developments, specifically of "inflation" (= excessive money creation) and of "depreciation" (= declining purchasing power of money), in regard to investment in equities in general, and more in particular with regard to the behaviour of equity prices."

"A panel of well-known economists, who are in regular contact with the investment community, have been invited to dwell on these problems at the Congress and to exchange views with the Delegates."

—From Preliminary Programme of the Fourth Congress of The European Federation of Financial Analysts' Societies to be held at Noordwijk, the Netherlands, September, 1966.