

Off-market share buy-backs revisited

While previous research using the discount capital gain method has illustrated the benefits for low marginal tax rate shareholders of participating in off-market share buy-backs, we explore some alternative scenarios in which it may also be beneficial for higher individual marginal tax rate shareholders to participate. This highlights the need for all shareholders to obtain prudent financial advice.



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OFF-MARKET SHARE BUY-BACKS have become an increasingly contentious issue within the investment community, attracting criticism from respected financial commentators (McCrann, Dunn, 2006) with the benefits appearing to favour charities, superannuation funds and lower marginal tax rate (MTR) individuals. On 10 October 2006, the former Federal Treasurer, Peter Costello, requested that the Board of Taxation (BOT) review the taxation treatment of off-market share buy-backs (Costello 2006). The review was to examine the growing number of off-market share buy-backs, the tax treatments for investors on differing MTRs, capital gains tax (CGT) implications and the split between dividend and capital components (Costello 2006). The BOT released a discussion paper on 16 July 2007 and is expected to provide its final report to the Government by June 2008.

The main question that shareholders raise with their financial advisor is whether they should accept a buy-back offer. Previous research has revealed that off-market share buy-backs (Brown and Davis, 2006) have generally only been advantageous for charities, superannuation funds and individual shareholders on low MTRs. High MTR individual shareholders are usually better off selling on the market at the close of the tender period than participating in the buy-back.

Wyatt and McDonald (JASSA, 2004) developed a model that compared the share buy-back price, comprising the capital and dividend component, with the price that would be obtained by selling the shares on the market. They found that only individual shareholders with a MTR of 18.5% (tax rates have changed since then) or less and superannuation funds

should have participated in the buy-back rather than selling on the market.

The model made the following assumptions:

1. The MTRs include a Medicare Levy of 1.5%.
2. Individual and superannuation funds are fully entitled to the franking credits.
3. Capital losses incurred can be fully offset against capital gains.
4. The discount capital gain method applies.
5. The market price for each company is at close of trading on the last day of the buy-back offer. Brokerage of 1% has been allowed for the alternative of selling on the open market.
6. Amounts have been rounded to the nearest cent.

This analysis focused on the decision to either accept the buy-back offer or sell on the market. It does not consider the investment in a long-term perspective.

BHP Billiton's 2007 off-market share buy-back

The above model has been applied to the 2007 BHP Billiton off-market share buy-back. BHP Billiton announced on 26 March 2007 that it had completed its off-market share buy-back of A\$3.5 billion at \$24.81 per share. The buy-back price of \$24.81 comprised a capital component of \$2.50 and a \$22.31 fully franked dividend.

In accordance with Tax Determination TD2004/22, the tax value of the shares bought back for tax purposes was \$29.70¹ per share which exceeded the buy-back price by \$4.89. For CGT purposes, participating BHP Billiton shareholders will be deemed to have disposed of each share for \$7.39. This additional \$4.89 will reduce the tax benefit for individuals taking up the buy-back by $[(1/2 \times \$4.89) \times \text{MTR}]$ per share. That is, a shareholder's benefit in taking the buy-back offer will now be reduced by 40.3 cents or \$1.14 for MTRs of 16.5% or 46.5% respectively, due to the introduction of TD2004/22. The reduced benefit for superannuation funds is $[(2/3 \times \$4.89) \times 15\%]$; being 48.9 cents per share or \$2,445 for a holding of 5000 shares.

Table 1 summarises the tax implications of opting to participate in the BHP Billiton buy-back versus selling on the open market using the discount capital gain method. Superannuation funds and shareholders with a MTR of 16.5% or less should have participated in the buy-back rather than selling on the market. As indicated in Wyatt and McDonald (JASSA, 2004) these differences as reported in Table 1 remain the same even with varying cost bases.

First change in assumptions – no discount capital gain method available

Whether to accept an off-market buy-back or not largely depends on an individual's tax circumstances. Previous research and analysis has always assumed that the discount capital gain method applied (i.e. assumption no. 4). That is, in the case of a shareholder holding a capital loss this would be offset against current or future capital gains from assets that had been held for longer than 12 months. Where a capital gain was achieved from the sale on market, then it was assumed that the shareholder had held the shares for more than 12 months.

By varying this assumption, there are now a couple of scenarios that may result in it being advantageous for a high MTR shareholder to participate in the share buy-back. We have again used the 2007 BHP Billiton share buy-back for our example.

In our first scenario, we assume that the discount capital gain method is not applied. That is, in the case of a shareholder holding a capital loss then this would be offset against current capital gains from assets that had been held for less than 12 months. Where a capital gain was achieved from the sale on market, then it was assumed the shareholder had held the BHP Billiton shares for less than 12 months.

This scenario would increase the attractiveness of participating in the share buy-back as the value of the capital loss would now *not* be discounted by half for individuals and one-third for superannuation funds, thereby adding greater value to the holding of a capital loss. In regard to the sale on market, the tax on the capital gain will now be higher as the capital gain would no longer be discounted, reducing the total after-tax proceeds and

TABLE 1. Tax implications of participating in BHP Billiton buy-back compared with selling on market on day tender closes using the discount capital gain method

| | | | | | | Super fund |
|--|----------|---------|----------|-----------|-----------|------------|
| MTR | 0.0% | 16.5% | 31.5% | 41.5% | 46.5% | 15.0% |
| Gain/Loss per per share if accept buy-back | \$5.46 | \$1.98 | -\$1.19 | -\$3.30 | -\$4.35 | \$2.83 |
| Gain/Loss for if accept buy-back | \$27,317 | \$9,899 | -\$5,935 | -\$16,491 | -\$21,769 | \$14,173 |

TABLE 2: Tax implications of participating in BHP Billiton buy-back compared with selling on market on day tender closes and not applying the discount capital gain method

| | Super fund | | | | | |
|---|-----------------|-----------------|-----------------|----------------|----------------|-----------------|
| Variables | | | | | | |
| BHP buy-back price | \$24.81 | \$24.81 | \$24.81 | \$24.81 | \$24.81 | \$24.81 |
| Tax value | \$ 29.70 | \$29.70 | \$29.70 | \$29.70 | \$29.70 | \$29.70 |
| MTR | 0.0% | 16.5% | 31.5% | 41.5% | 46.5% | 15.0% |
| Mkt price | \$29.20 | \$29.20 | \$29.20 | \$29.20 | \$29.20 | \$29.20 |
| 1% brokerage | \$0.29 | \$0.29 | \$0.29 | \$0.29 | \$0.29 | \$0.29 |
| Mkt price less brokerage | \$28.91 | \$28.91 | \$28.91 | \$28.91 | \$28.91 | \$28.91 |
| Assumed cost base* | \$23.86 | \$23.86 | \$23.86 | \$23.86 | \$23.86 | \$23.86 |
| Capital component of buy-back | \$2.50 | \$2.50 | \$2.50 | \$2.50 | \$2.50 | \$2.50 |
| Take BHP offer dividend consequences | | | | | | |
| Fully franked dividend | \$22.31 | \$22.31 | \$22.31 | \$22.31 | \$22.31 | \$22.31 |
| Franking credit | \$9.56 | \$9.56 | \$9.56 | \$9.56 | \$9.56 | \$9.56 |
| Assessable Income | \$31.87 | \$31.87 | \$31.87 | \$31.87 | \$31.87 | \$31.87 |
| Tax on that assessable Income | — | \$5.26 | \$10.04 | \$13.23 | \$14.82 | \$4.78 |
| After tax proceeds | \$31.87 | \$26.61 | \$21.83 | \$18.64 | \$17.05 | \$27.09 |
| Capital gains consequences | | | | | | |
| Capital component of buy-back | \$2.50 | \$2.50 | \$2.50 | \$2.50 | \$2.50 | \$2.50 |
| Adjust for excess tax value | \$4.89 | \$4.89 | \$4.89 | \$4.89 | \$4.89 | \$4.89 |
| Assumed cost base* | \$23.86 | \$23.86 | \$23.86 | \$23.86 | \$23.86 | \$23.86 |
| Nominal capital gain/loss | -\$16.47 | -\$16.47 | -\$16.47 | -\$16.47 | -\$16.47 | -\$16.47 |
| Tax impact of gain/loss | — | -\$2.72 | -\$5.19 | -\$6.84 | -\$7.66 | -\$2.47 |
| After tax proceeds | \$2.50 | \$5.22 | \$7.69 | \$9.34 | \$10.16 | \$4.97 |
| Total after tax proceeds | \$34.37 | \$31.83 | \$29.52 | \$27.98 | \$27.21 | \$32.06 |
| Sell on market | | | | | | |
| Mkt price less brokerage | \$28.91 | \$28.91 | \$28.91 | \$28.91 | \$28.91 | \$28.91 |
| Nominal capital gain/loss | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 |
| Tax impact of gain/loss | — | \$0.83 | \$1.59 | \$2.09 | \$2.35 | \$0.76 |
| Total after tax proceeds | \$28.91 | \$28.08 | \$27.32 | \$26.81 | \$26.56 | \$28.15 |
| Gain/Loss per share if accept buy-back | \$5.46 | \$3.76 | \$2.20 | \$1.17 | \$0.65 | \$3.91 |
| Gain/Loss for 5000 shares if accept buy-back | \$27,317 | \$18,776 | \$11,010 | \$5,834 | \$3,245 | \$19,552 |

* 12 month low of BHP Billiton's share price

therefore decreasing its attractiveness. By combining these two differences, our analysis reveals that all shareholders, no matter what their MTRs, should participate in the share buy-back rather than sell their shares on the market. This is reported in Table 2. These differences remain the same even with varying cost bases. For example, a cost base of \$30 will result in a capital loss under the share buy-back and selling on the market, however, the differences will still be the same as that reported in Table 2. (See Appendix 1 for an illustration of this concept.)

The difference between Table 1 and Table 2 is a result of not applying the discount capital gain method in Table 2 to the two alternatives of either participating in the share buy-back or selling on the market. For the 46.5% MTR shareholder, this has resulted (should they participate in the share buy-back) from a loss of \$4.35 per share under the assumptions in Table 1 to a gain of 65 cents per share under the assumptions in Table 2. This change of \$5.00 per share is a result of the:

- difference between the no discount on a capital gain (100%) and the discount (50% for individuals) on a capital gain;
- taxpayers MTR; and
- difference between the market price less brokerage and the ATO determined capital component of the buy-back.

This is shown as $50\% \times \text{MTR} \times (\text{Market price less brokerage} - \text{ATO determined capital component of the buy-back})$. Applying this to a 46.5% MTR shareholder, the difference between Table 1 and Table 2 is $[50\% \times 46.5\% \times (\$28.91 - \$7.39)] = \5.00 .

The above calculation can be proved mathematically and is explained in Appendix 2.

This advantage of participating in the buy-back compared to selling the shares on the market diminishes as the cost base of the share is reduced (or increases as the cost base of the share is increased). The break-even point can be derived at the various MTRs.

Second change in assumptions – no discount capital gain method available in regard to share buy-back but discount gain method available to on-market sale

While less favourable than the first scenario, the second scenario may still produce a result that will allow higher MTRs shareholders to participate in and take advantage of the share buy-back. The only difference in this second scenario is that we assume that if the shareholder was to sell on market, then the BHP Billiton shares have been held for more than 12 months and a capital gain (not loss) will be realised. This would therefore decrease the attractiveness relative to the first scenario as the tax on the capital gain will be lower due to the capital gain now being discounted. This would increase the total after-tax proceeds from the alternative of selling on the market resulting in a reduction in the difference between

TABLE 3a and 3b: Tax implications of participating in the BHP Billiton’s buy-back compared with selling on market on day tender closes, applying the capital loss from the buy-back to other capital gains made within 12 months and assuming the BHP Billiton shares have been held for more than 12 months

TABLE 3a. Assumed cost base \$23.86

| | Super fund | | | | | |
|--|------------|--------|--------|--------|---------|--------|
| MTR | 0.0% | 16.5% | 31.5% | 41.5% | 46.5% | 15.0% |
| Gain/Loss per share if accept buy-back | \$5.46 | \$3.34 | \$1.41 | \$0.12 | -\$0.52 | \$3.66 |

TABLE 3b. Assumed cost base \$22.86

| | Super fund | | | | | |
|--|------------|--------|--------|---------|---------|--------|
| MTR | 0.0% | 16.5% | 31.5% | 41.5% | 46.5% | 15.0% |
| Gain/Loss per share if accept buy-back | \$5.46 | \$3.26 | \$1.25 | -\$0.09 | -\$0.76 | \$3.61 |

participating in the buy-back and selling on market. The reduction will be 50% of the capital gain made from the sale on the market per share times the individual shareholder's MTR, or one-third of the capital gain made from the sale on the market per share times 15% for superannuation funds. Results are summarised and reported in Table 3a.

This advantage reduces by 50% times the individual shareholder's MTR for every dollar reduction in capital loss for the share buy-back or conversely for every dollar of additional capital gain by selling on the market. That is, for every decreasing dollar in the cost base of the shares, the advantage of participating in the share buy-back will reduce by 50% times the individual shareholder's MTR. On the other hand, for every increasing dollar in the cost base of the shares, the advantage of participating in the share buy-back will increase by 50% times the individual shareholder's MTR. Table 3b reports these findings and uses the same variables as Table 3a except that the cost base has now been reduced by one dollar to \$22.86. The results show, for example, that the advantage to the 31.5% MTR shareholder has now decreased by 16 cents per share from \$1.41 to \$1.25 being $50\% \times 31.5\% \times \1 .

This advantage of participating in the buy-back compared to selling the shares on the market diminishes as the cost base of the share is reduced (or increases as the cost base of the share is increased). The break-even point

can be derived at the various MTRs, where under the above assumptions from our second scenario, it would no longer be advisable to participate in the share buy-back. This is not relevant for the 0% and 16.5% MTR individual shareholder or superannuation funds as even at a cost base of zero, as shown in Table 4, they would still be advised to take up the share buy-back offer rather than to sell directly on the market. Table 4 illustrates the break-even points for all other shareholders at varying MTRs.

Conclusion

Previous research, which restricted the analysis to employing the discount capital gain method, has illustrated the benefits for low MTR shareholders of participating in off-market share buy-backs. We have explored some alternative scenarios to the discount capital gain method in which it may be beneficial for higher individual MTR shareholders to participate, highlighting the need for all shareholders to obtain prudent financial advice. Each shareholder faces a unique financial situation and therefore careful analysis of their current tax position along with forecasted year-end tax scenarios is crucial when evaluating the merits of a particular off-market share buy-back.

TABLE 4: Break-even analysis of cost base tax implications of participating in the BHP Billiton's buy-back compared with selling on market on day tender closes, applying the capital loss from the buy-back to other capital gains made within 12 months and assuming the BHP Billiton shares have been held for more than 12 months

| | Super fund | | | | | |
|--|-------------------|--------|---------|--------|---------|--------|
| MTR | 0.0% | 16.5% | 31.5% | 41.5% | 46.5% | 15.0% |
| Cost Base | — | — | \$14.93 | 23.29 | \$26.12 | — |
| Gain/Loss per share if accept buy-back | \$5.46 | \$1.37 | \$0.00 | \$0.00 | \$0.00 | \$2.47 |

Appendix 1: Varying the cost base

The following proof shows that varying the cost base of BHP Billiton shares will not affect the difference between the after-tax proceeds of selling on the market and the after-tax proceeds of accepting the buy-back offer where no discount capital gain method is available.

Let: c = Cost Base of Shares
 m = Marginal Tax Rate

Accept BHP Billiton buy-back

The fully franked dividend of \$22.31 will raise an imputation credit of \$9.56 resulting in an assessable income of \$31.87 per share. This will be taxed at the MTR. The after-tax proceeds will be:

$$\$31.87 (1 - m) = \$31.87 - \$31.87m$$

The capital component is \$2.50 and the deemed disposal price is \$7.39. Then the after-tax proceeds will be:

$$\$2.50 - [(\$7.39 - c)] m = \$2.50 - \$7.39m + cm$$

Therefore the total after-tax proceeds of the deemed dividend of \$22.31 and the capital component of \$2.50 is:

$$\$34.37 - \$39.26m + cm$$

Sell the shares on market at \$29.20 per share

Here the disposal price is \$28.91 after brokerage. The after-tax proceeds will be:

$$\$28.91 - [(\$28.91 - c)] m = \$28.91 - \$28.91m + cm$$

The difference between accepting BHP Billiton buy-back offer and selling on the market is:

$$\begin{aligned} & \$34.37 - \$39.26m + cm - (\$28.91 - \$28.91m + cm) \\ = & \$34.37 - \$39.26m + cm - \$28.91 + \$28.91m - cm \\ = & \$5.46 - \$10.35m \end{aligned}$$

Therefore, in calculating the difference, the original cost base of the shares is not in the formula.

Proof: Let m = MTRs of 16.5%, 31.5%, 41.5% and 46.5%

At 16.5%, difference = \$5.46 - (\$10.35 x 16.5%) = \$3.76

At 31.5%, difference = \$5.46 - (\$10.35 x 31.5%) = \$2.20

At 41.5%, difference = \$5.46 - (\$10.35 x 41.5%) = \$1.17

At 46.5%, difference = \$5.46 - (\$10.35 x 46.5%) = \$0.65

These results are consistent with Table 2.

Appendix 2: Mathematical proof of formula

Let: c = Cost Base of Shares
 m = Marginal Tax Rate
 A = ATO determined capital component of the buy-back
 M = Market price less brokerage

Additional tax benefit (gain) on the capital loss from participating in the share buy-back is:

$$1/2 (A - c)m = 1/2 Am - 1/2 cm$$

Note

1. BHP Billiton reached an agreement with the ATO, whereby the tax value of \$29.70 was calculated as A\$26.37 adjusted for the movement in BHP Billiton Plc shares from the close of trading in London on 6 February 2007 to the opening of trading in London on 23 March 2007.

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