
Share Buybacks and Shareholder Equity



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Background – off market share buybacks

- Recent popularity in Australia
 - 46 between 1997 and mid 2006
- Unusual tax treatment
 - Franked dividend and low capital components
 - Only attractive to low tax rate shareholders
- Concerns about shareholder equity
 - High tax rate shareholders lose out?
- Typically occur at discount to current market price
 - Sometimes a fixed price offer
 - More common recently is tender process
 - Capital component specified, indicative amount and price range specified, dividend component is residual.
- Is there inequitable treatment of shareholders?

Buyback Example

ASX Code	BHP
Date announced	5/10/2004
Final Buyback Price	\$12.57
Capital component	\$3.47
Discount to Market Price	15.3% (at announcement) 16.0% (at ex date)
Shares bought back	4.8% (of total outstanding) 100% (of shares sought)
Dutch Auction	

Table 1

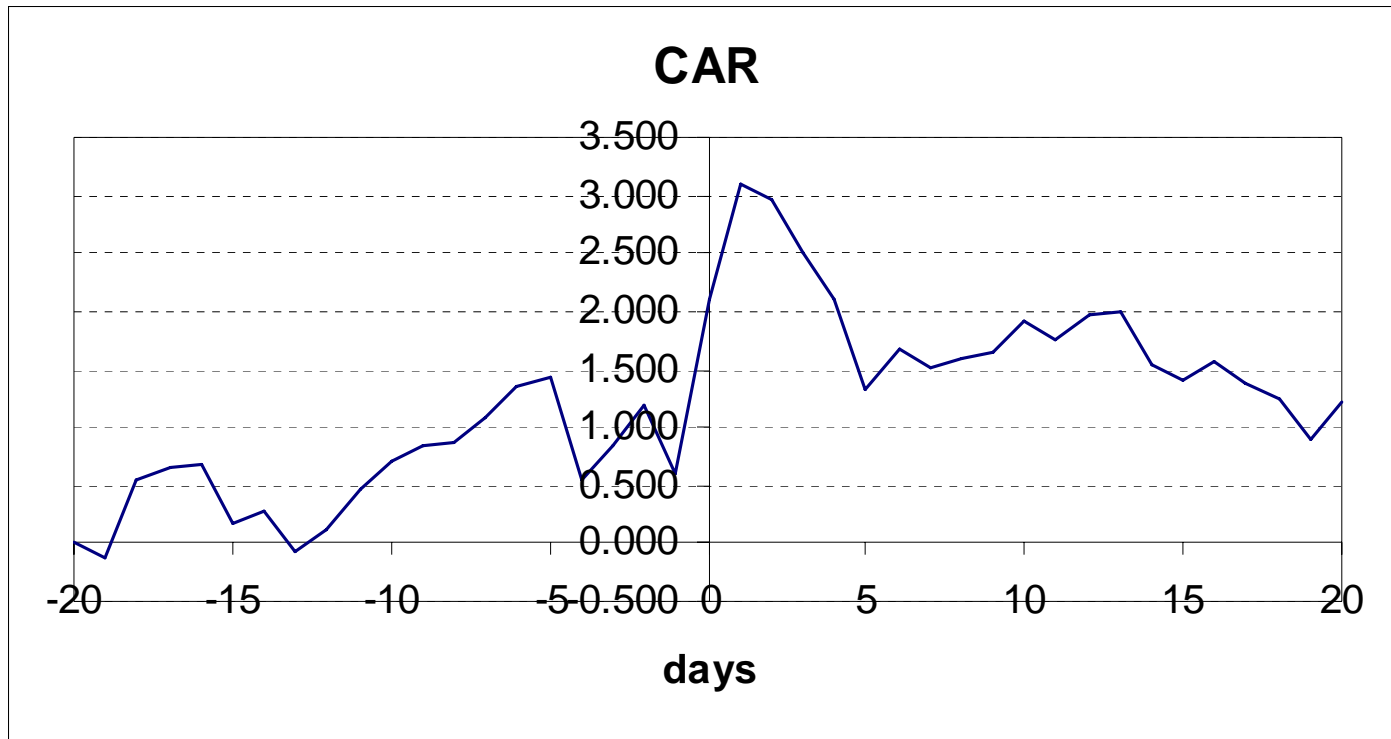
ASX Code	Date announced	Final Buyback Price	Capital component (\$)	Discount Market Price at		Shares bought back as % of		Dutch Vs fixed
				t=0	ex-date	Shares issued	Shares sought	
CBA	12/11/1997	\$17.08	\$7.00	-0.1%	1.6%	4.0	100	Fixed
CBA	10/02/1999	\$23.78	\$9.00	4.2%	6.3%	2.9	100	Fixed
SEV	11/03/1999	\$5.00	\$5.00	-13.6%	1.8%	20.4	100	Dutch
CBA	30/09/1999	\$27.00	\$27.00	-11.8%	-11.0%	2.2	74	Dutch
WOW	14/02/2000	\$4.92	\$2.45	3.9%	3.0%	8.7	100	Fixed
LLC	18/08/2000	\$19.88	\$7.00	2.6%	1.6%	17.2	69	Fixed
CBA	13/02/2001	\$27.84	\$10.00	7.2%	6.5%	2.0	100	Fixed
IAG	2/03/2001	\$2.72	\$1.78	2.5%	1.4%	9.6	100	Fixed
BOQ	6/04/2001	\$6.45	\$3.15	-3.0%	1.7%	5.9	100	Fixed
WOW	30/04/2001	\$8.70	\$2.88	3.1%	4.7%	3.7	100	Fixed
IAG	6/05/2002	\$3.05	\$1.78	11.3%	10.0%	7.0	70	Fixed
SEV	27/08/2002	\$5.80	\$2.03	-13.7%	-12.8%	13.4	67	Dutch
WOW	24/02/2003	\$11.40	\$2.88	-1.2%	0.3%	4.4	68	Dutch
TLS	3/10/2003	\$4.20	\$1.50	15.8%	14.1%	1.9	92	Dutch
SEV	24/10/2003	\$5.80	\$3.48	-0.2%	2.2%	13.4	67	Dutch
FGL	6/11/2003	\$4.00	\$1.81	8.7%	8.9%	7.6	88	Dutch
CBA	11/02/2004	\$27.50	\$11.00	13.2%	14.6%	1.5	91	Dutch
IAG	30/04/2004	\$4.40	\$1.78	9.5%	7.0%	5.6	94	Dutch
WBC	6/05/2004	\$14.50	\$4.00	16.7%	14.6%	2.1	96	Dutch
TLS	27/09/2004	\$4.05	\$1.50	13.8%	12.7%	3.0	100	Dutch
BHP	5/10/2004	\$12.57	\$3.47	15.3%	16.0%	4.8	100	Dutch

The Buyback Participation Decision

	15 % tax rate (superfund)		45 % tax rate	
	On-market sale	Buyback participation at \$7.929	On-market sale	Buyback participation at \$7.929
Sale Price	10.000	2.000	10.000	2.000
Purchase Price	5.000	5.000	5.000	5.000
Capital Gain	5.000	-3.000	5.000	-3.000
Tax on gain	0.500	-0.300	1.125	-0.675
Cash amount of Dividend		5.929		5.929
Tax payable/redeemable on dividend		-1.271		1.271
Net After Tax Cash Flow	9.500	9.500	8.875	7.334

Table assumes holding period of more than one year
 Superfunds pay tax at 15 per cent on two-thirds of capital gain
 Others pay tax on half of capital gain

Cumulative abnormal returns for 36 buybacks over 1997-2004

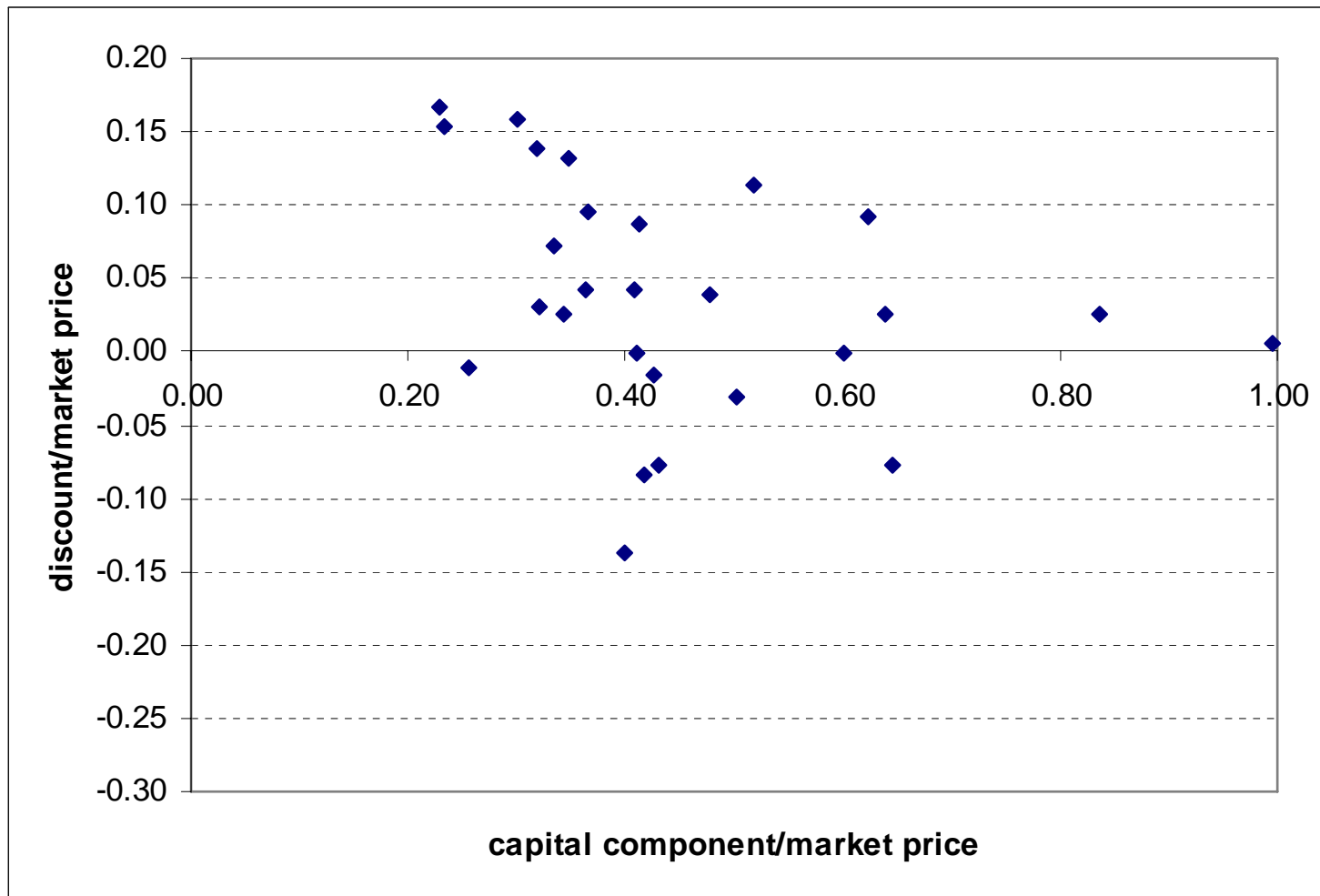


Source: Brown (2006)

The relationship between buyback discounts and capital components

- (Not in paper)
 - Let x = discount, c = capital component, t = marginal tax rate (assume applies to capital gains) t_c = corporate tax rate
- Approximately, the participant
 - loses $\$x$ (discount)
 - gains tax benefit of capital loss and tax credits
 - $(P-c)t + (P-c)(t_c - t) = (P-c)t_c$
 - Indifferent at $x/P = t_c - t$ c/P

The relationship between buyback discounts and capital components



Corporate value and buybacks

- $V = p(n_c + n_n) = V_A + \gamma FC$
 - V = initial equity value
 - n_c (n_n) = no of shares held by potential participants (non participants)
 - p = initial share price
 - V_A = value excluding undistributed franking credits (FC)
 - γ = valuation of FC

Corporate value and buybacks

- α of n_c repurchased at discount of x
 - β of franking credits distributed
 - New equity value and share price given by:
 - $V^* = V_A - (p-x) \alpha n_c + \gamma(1-\beta)FC$
 - $V^* = p(n_c + n_n) - (p-x) \alpha n_c - \gamma \beta FC$
 - $p^* = p + (x \alpha n_c - \gamma \beta FC) / (n_n + (1-\alpha) n_c)$
 - $p^* > p$ and non-participants better off if
 - Aggregate discount ($x \alpha n_c$) $>$ Value of franking credits distributed ($\gamma \beta FC$).
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Discount v Distribution

ASX Code	Date announced	Amount Spent (\$m)	Total discount (\$m)		Franking credits distributed (\$m)
			t=0	Ex date	
CBA	12/11/1997	650.63	-0.38	10.32	164.56
CBA	10/02/1999	650.77	28.19	43.79	173.35
SEV	11/03/1999	325.00	-39.00	5.85	0.00
CBA	30/09/1999	553.14	-58.33	-55.03	0.00
WOW	14/02/2000	491.96	20.00	15.20	105.85
LLC	18/08/2000	1754.94	46.79	28.25	487.29
CBA	13/02/2001	699.96	54.31	48.30	192.23
IAG	2/03/2001	404.16	10.40	5.94	59.86
BOQ	6/04/2001	24.97	-0.74	0.43	5.47
WOW	30/04/2001	348.21	11.21	17.05	99.83
IAG	6/05/2002	298.47	38.16	33.27	53.26
SEV	27/08/2002	193.87	-23.40	-22.06	54.01
WOW	24/02/2003	531.91	-6.07	1.87	170.37
TLS	3/10/2003	1000.57	188.20	164.38	275.67
SEV	24/10/2003	193.87	-0.33	4.35	33.23
FGL	6/11/2003	668.43	63.50	65.17	156.84
CBA	11/02/2004	532.42	81.12	91.00	136.91
IAG	30/04/2004	413.96	43.28	31.05	105.64
WBC	6/05/2004	558.58	112.10	95.15	173.35
TLS	27/09/2004	750.40	120.43	109.32	202.49
BHP	5/10/2004	2271.61	410.23	431.91	704.98

Conclusion

- For 36 buybacks aggregate discount is \$1069.7 m and franking credits distributed total \$3477.9m.
- Valuation of undistributed franking credits (γ) crucial to assessment
- If $\gamma = 1$, high tax rate shareholders lose out
- If $\gamma < 1/3$ (approx) high tax rate shareholders gain.
- Questions
 - What can be inferred when discount determined by tender?
 - What determines decision of size of capital component?