

SUIT NO. 1441 of 2001 Q

TAN CHIN SENG & 9 OTHERS

VS

RAFFLES TOWN CLUB PTE LTD

SUPPLEMENTARY

EXPERT REPORT

OF

DR. IVAN PAAK-LIANG PNG

Raffles Town Club:

Analysis of Membership Price Changes

Issues to be addressed

1. In my affidavit sworn on August 14, 2004, I provided an expert report, exhibit marked “IPP-2”, that analyzed changes in the market price of an ordinary membership in Raffles Town Club (“RTC membership”) at or around the following dates (“event dates”):
 - a. 30 December 1996,
 - b. 31 March 1997,
 - c. March 2000,
 - d. March 2001,
 - e. November 2001,
 - f. August 2003, and
 - g. June 2004.

2. I have been instructed to supplement my earlier report by addressing the following issues:
 - a. Why I compared changes in the value of an ordinary membership in Raffles Town Club (“RTC membership”) with an index of eight social clubs rather than the two or three clubs used by the Defendant’s experts;

- b. Why I compared changes over periods of one, two, three, and four months from the various event dates; and
- c. What checks I made regarding the reliability of my analysis.

Sources relied upon

3. I have reviewed and relied upon the following documents:
 - a. the judgment dated 11 August 2003 by the Court of Appeal in Civil Appeal 148/2002 (“the CA Judgment”);
 - b. Affidavit of Phua Geng Hoon of Tee Up Marketing Enterprises (“Phua’s Affidavit”);
 - c. “May golf club membership prices hit plateau”, *Business Times*, May 24, 2002, a copy of which is attached as Annex I;
 - d. “Berjaya in talks to buy 87% of Pinetree Town and Country Club”, *Business Times*, August 1, 2001, a copy of which is attached as Annex II;
 - e. Chart entitled “No of Monthly Transfers (excluding intra family and intra corporate transfers)”, exhibit marked “MSK-9” referred to in the affidavit of Moh Siang King sworn on August 16, 2004 (“Transfer Chart”), a copy of which is attached as Annex III;

- f. Spreadsheet entitled “Raffles Town Club (“RTC”): Comparison of Average Monthly Transacted Membership Prices”, prepared by RSM Nelson Wheeler (“RSMNW Spreadsheet”), a copy of which is attached as Annex IV; and
- g. Untitled Table in paragraph 72 in expert report, exhibit marked “TCC-1” referred to in the affidavit of Tam Chee Cheong sworn on August 16, 2004, a copy of which is attached as Annex V.

Basis of Comparison

- 4. In stock market analysis, it is typical to compare the movements in the price of particular share with the movements in an index, which is the average price of a basket of comparable shares. Construction of indexes is an art: if the index includes too few shares, it would be unduly influenced by idiosyncratic changes in the constituent shares, while if the basket includes too many shares, the degree of comparability would be diminished. The Straits Times Index of the Singapore stock market includes 45 shares.
- 5. In the case of clubs, the construction of an index is an accepted practice. Specifically, I understand that, since October 1992, the *Business Times* has published an index of golf club prices. I attach as Annex I the index for May 2002, the most recent that I could procure. The index is based on the prices of *eleven* golf clubs, includes such diverse clubs as the Singapore Island Country

- Club and Tanah Merah Country Club (then priced at \$147,000 and \$117,000 respectively) and Keppel Club and Changi Club (then priced at \$34,000 and \$13,000 respectively).
6. In the present RTC matter, I constructed a Social Club Index, based on the prices of eight clubs specified in Phua's Affidavit (paragraph 22), viz., American Club, British Club, Europa Country Club, Fairway Club, Hollandse Club, Singapore Polo Club, Singapore Recreation Club, and Superbowl Golf and Country Club.
 7. In constructing the Index, I specifically excluded the Pinetree Club and the Fort Canning Country Club, although they were mentioned in Phua's Affidavit (paragraph 22). I did not include these two clubs as during part or all of the period being analyzed, 2000-2004, the market prices of these two clubs were affected by the financial difficulties of their respective proprietors.
 8. Regarding the Pinetree Club, Phua's Affidavit (paragraph 11) stated that its price was affected "during the first half of 2002". Moreover, on August 1, 2001, the *Business Times* reported the club proprietor, Mr Chng, had been in financial difficulties, and further that, he had "quietly started looking for buyers for the popular club a few months ago" (a copy of the article is attached at Annex II).

9. Regarding the Fort Canning Country Club, Phua's Affidavit (paragraph 11) stated that its price was affected "during the period around December 2000 to June 2001".
10. Stock market indexes are routinely revised to remove the shares of companies that cease to be representative of the market. By the same reasoning, I excluded the Pinetree Club and the Fort Canning Country Club from the Social Club Index.
11. In summary, the Social Club Index is representative of the market for social club memberships. It includes a sufficient number and range of clubs, and excludes two that would cause bias.

Comparison Period

12. By comparison with the market for shares, the market for clubs is relatively illiquid. Whereas shares are traded actively on a daily basis, club memberships are bought and sold much less frequently. In the case of RTC, according to the "Transfer Chart" prepared by Moh Siang King, attached as Annex III, from April 2001 onward, the number of monthly transfers was mostly in single digits, and dropped as low as 1 in May 2003.
13. In addition to the issue of illiquidity, information about clubs is quite poor and disseminates slowly. For instance, the *Business Times* article quoted above,

which is attached as Annex II, reported events that took place *several months before*.

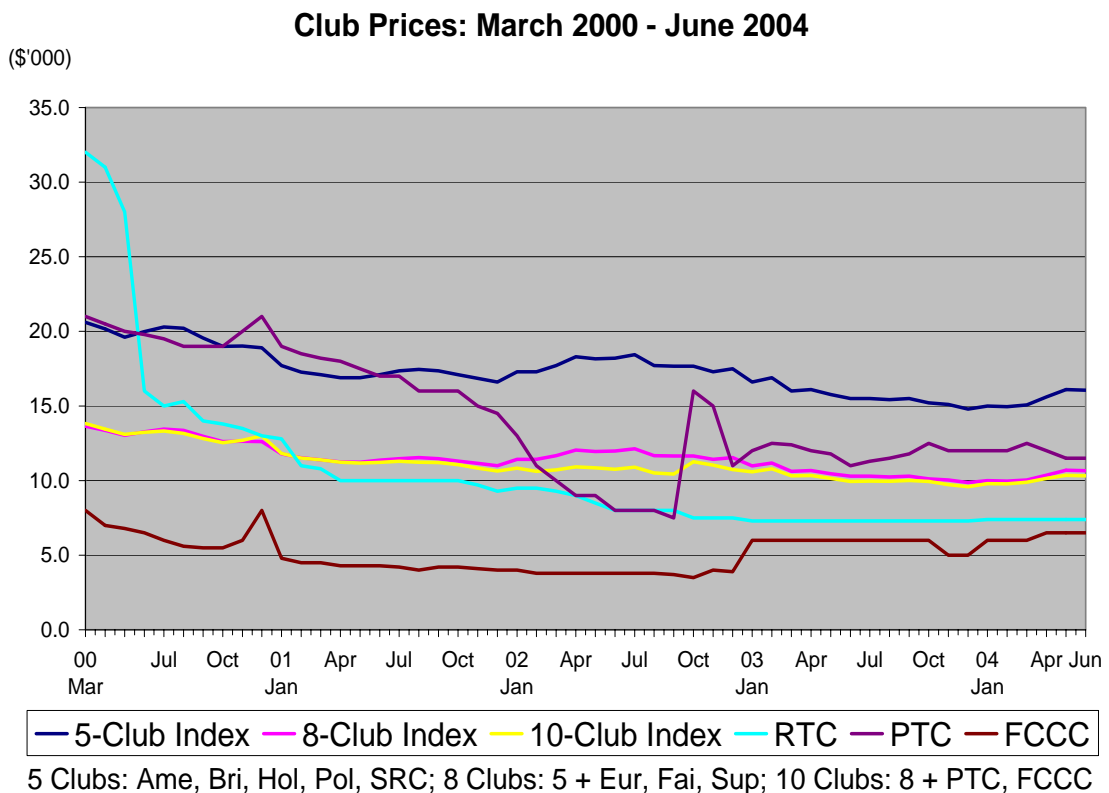
14. For the two reasons above, in measuring the impact of any event on the price of a club membership, it is advisable to consider the prices with a delay. Stock market analysis typically considers the impact within one to three days of an event. In the case of clubs, I have considered periods of one, two, three, and four months from the various event dates. This is reasonable and necessary for market prices to fully incorporate the effect of the relevant events.

Reliability

15. The apportionment of changes in the price of an RTC membership to (i) changes in general market conditions, and (ii) changes in factors specific to RTC is as much an art as science. In part, because it depends on the construction of an appropriate index. Although the analysis is an art, I have taken a scientific approach as far as possible, by conducting the following tests of the reliability of my analysis.
16. I constructed two alternative indexes – an index of five clubs and an index of ten clubs. The five-club index is based on the prices of the American Club, British Club, Hollandse Club, Singapore Polo Club, and Singapore Recreation Club. As of June 2004, according to Phua's Affidavit, exhibit P-1 page 20, all

of these were priced above RTC. The five-club index excludes Europa Country Club, Fairway Club, and Superbowl Golf and Country Club.

17. The chart displayed next shows the movements of the five-club index over the period March 2000 to June 2004 in blue. For comparison, it also shows the movements of the eight-club index (Social Club Index), and the prices of RTC, Pinetree Club, and Fort Canning Country Club.



18. Using the five-club index instead of the eight-club index, I then replicated Table 2, “Analysis of Price Changes Relative to March 2000”, of my earlier report. This is presented in Table S1.

Table S1: Analysis of Price Changes Relative to March 2000 (5-Club Index)						
(a) Month	(b) % Change in 5-club index	(c) % Change in RTC (PGH)	(d) % relative change (PGH)	(e) Dollar relative change (PGH)	(f) % Change in RTC (RSMNW)	(g) % diff in dollar relative change from 8-club index
1996 Dec	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jan	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Feb	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Apr	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Apr	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 May	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jun	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jul	n.a.	n.a.	n.a.	n.a.	n.a.	
2000 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
2000 Apr	-2.1%	-3.1%	-1.0%	-\$317	n.a.	10.9%
2000 May	-4.9%	-12.5%	-7.6%	-\$2,447	n.a.	3.5%
2000 Jun	-3.0%	-50.0%	-47.0%	-\$15,037	n.a.	0.4%
2000 Jul	-1.5%	-53.1%	-51.7%	-\$16,534	n.a.	0.2%
2001 Mar	-17.0%	-66.3%	-49.3%	-\$15,763	n.a.	1.0%
2001 Apr	-18.0%	-68.8%	-50.8%	-\$16,252	n.a.	0.7%
2001 May	-18.0%	-68.8%	-50.8%	-\$16,252	n.a.	0.6%
2001 Jun	-17.0%	-68.8%	-51.8%	-\$16,563	n.a.	0.4%
2001 Jul	-15.7%	-68.8%	-53.0%	-\$16,967	n.a.	-0.4%
2001 Nov	-18.2%	-69.7%	-51.5%	-\$16,490	n.a.	-0.1%
2001 Dec	-19.4%	-70.9%	-51.5%	-\$16,486	n.a.	0.0%
2002 Jan	-16.0%	-70.3%	-54.3%	-\$17,374	n.a.	-0.5%
2002 Feb	-16.0%	-70.3%	-54.3%	-\$17,374	n.a.	-0.5%
2002 Mar	-14.1%	-70.9%	-56.9%	-\$18,195	n.a.	-0.7%
2003 Aug	-25.1%	-77.2%	-52.0%	-\$16,653	n.a.	0.5%
2003 Sep	-24.8%	-77.2%	-52.4%	-\$16,778	n.a.	0.4%
2003 Oct	-26.2%	-77.2%	-51.0%	-\$16,312	n.a.	0.6%
2003 Nov	-26.7%	-77.2%	-50.5%	-\$16,156	n.a.	0.6%
2003 Dec	-28.2%	-77.2%	-49.0%	-\$15,690	n.a.	0.8%
						0.0%
2004 Jun	-22.0%	-76.9%	-54.8%	-\$17,548	n.a.	0.3%
					Average	0.9%

19. In Table S1, column (d) reports the percentage changes in the RTC membership price *relative* to the percentage changes in the five-club index. Then, column (e) calculates the impact of changes in any factors specific to RTC in dollar terms from March 2000 to any particular month as simply \$32,000 multiplied by the corresponding percentage in column (d). Next, column (g) compares the calculations in columns (e) of Table S1 and Table 2 of my earlier report. As seen from column (g), there is, on average, less than a 1% difference between using the 5-club and 8-club indexes.

20. I also constructed a ten-club index based on the eight clubs in the eight-club index (American Club, British Club, Europa Country Club, Fairway Club, Hollandse Club, Singapore Polo Club, Singapore Recreation Club, and Superbowl Golf and Country Club), *plus* Pinetree Club and Fort Canning Country Club.

21. As may be seen from the chart above, “Club Prices: March 2000 – June 2004”, the ten-club index (graphed in yellow) tracked the eight-club index (graphed in pink) quite closely, except for the period between late 2001 and early 2003. During this period, the sharp fall and then partial recovery of the price of Pinetree Club caused the two indexes to diverge.

22. Using the ten-club index instead of the eight-club index, I replicated Table 2, “Analysis of Price Changes Relative to March 2000”, of my earlier report. This is presented in Table S2.

Table S2: Analysis of Price Changes Relative to March 2000 (10-Club Index)						
(a) Month	(b) % Change in 10-club index	(c) % Change in RTC (PGH)	(d) % relative change (PGH)	(e) Dollar relative change (PGH)	(f) % Change in RTC (RSMNW)	(g) % diff in dollar relative change from 8-club index
1996 Dec	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jan	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Feb	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Apr	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Apr	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 May	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jun	n.a.	n.a.	n.a.	n.a.	n.a.	
1997 Jul	n.a.	n.a.	n.a.	n.a.	n.a.	
2000 Mar	n.a.	n.a.	n.a.	n.a.	n.a.	
2000 Apr	-2.7%	-3.1%	-0.4%	-\$143	n.a.	-59.7%
2000 May	-5.2%	-12.5%	-7.3%	-\$2,333	n.a.	-8.0%
2000 Jun	-4.2%	-50.0%	-45.8%	-\$14,657	n.a.	-2.9%
2000 Jul	-3.6%	-53.1%	-49.5%	-\$15,842	n.a.	-4.3%
2001 Mar	-17.6%	-66.3%	-48.7%	-\$15,573	n.a.	-2.2%
2001 Apr	-18.7%	-68.8%	-50.0%	-\$16,003	n.a.	-2.3%
2001 May	-19.2%	-68.8%	-49.6%	-\$15,864	n.a.	-2.9%
2001 Jun	-18.8%	-68.8%	-49.9%	-\$15,980	n.a.	-4.0%
2001 Jul	-18.2%	-68.8%	-50.5%	-\$16,165	n.a.	-4.4%
2001 Nov	-21.6%	-69.7%	-48.1%	-\$15,400	n.a.	-6.5%
2001 Dec	-22.9%	-70.9%	-48.0%	-\$15,360	n.a.	-6.8%
2002 Jan	-21.6%	-70.3%	-48.7%	-\$15,600	n.a.	-9.7%
2002 Feb	-23.2%	-70.3%	-47.2%	-\$15,090	n.a.	-12.7%
2002 Mar	-22.4%	-70.9%	-48.5%	-\$15,522	n.a.	-14.1%
2003 Aug	-28.0%	-77.2%	-49.2%	-\$15,739	n.a.	-5.9%
2003 Sep	-27.5%	-77.2%	-49.7%	-\$15,901	n.a.	-5.6%
2003 Oct	-28.1%	-77.2%	-49.1%	-\$15,716	n.a.	-4.2%
2003 Nov	-29.5%	-77.2%	-47.7%	-\$15,253	n.a.	-6.2%
2003 Dec	-30.6%	-77.2%	-46.6%	-\$14,905	n.a.	-5.8%
2004 Jun	-25.3%	-76.9%	-51.6%	-\$16,519	n.a.	-6.1%
					Average	-8.7%

23. Table S2 was constructed by the same procedures as Table S1. For brevity, I shall proceed directly to the main implication. Column (g) compares the calculations in columns (e) of Table S2 and Table 2 of my earlier report. As seen from column (g), using the 10-club index, the dollar relative change is, on average, *8.7% lower*. Referring to my observations above, this difference is principally attributable to the inclusion of the Pinetree Club in the 10-club index.
24. Based on the foregoing analysis, I conclude that the conclusions in my earlier report on the impact of changes in any factors specific to RTC in dollar terms from March 2000 to any particular month are somewhat sensitive to the construction of the index of clubs. The key sensitivity is to the inclusion or otherwise of the Pinetree Club as a basis for comparison.
25. Finally, I should also mention that my conclusions are also sensitive to the price of an RTC membership in March 2000. I have used \$32,000, as stated in Phua's Affidavit, at paragraph 12, "Sometime in March 2000, I recall that due to the hype about the club, there were 1 or 2 customers who ... were prepared to pay the sum of up to \$32000", and also in exhibit P-1, page 16.
26. By contrast, Mr Tam Chee Cheong in an untitled Table in paragraph 72 of his expert report, attached here as Annex V, reports the first transaction in an RTC membership to have taken place in April 2000 at a price of \$23,840. I note, however, this was the only *one* of 93 transactions that month for which a price

was disclosed. Moreover, it diverges from the price of \$31,000 reported for April 2000 in Phua's Affidavit, exhibit P-1, page 16, by over 30%.

27. In any case, whatever is deemed to be the representative price of an RTC membership in March 2000, my analysis above can then be replicated using that as the starting price to calculate the impact of changes in any factors specific to RTC in dollar terms from March 2000 to any particular month.

Ivan Paak-Liang Png

Date: