

SUIT NO. 1441 of 2001 Q

TAN CHIN SENG & 9 OTHERS

VS

RAFFLES TOWN CLUB PTE LTD

EXPERT REPORT OF

DR. IVAN PAAK-LIANG PNG

Raffles Town Club:

Analysis of Membership Price Changes

Issues to be addressed

1. I have been instructed to provide an opinion that analyzes changes in the market price of an ordinary membership in Raffles Town Club (“RTC membership”) at or around the following 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.

and apportion the changes to (i) changes in general market conditions, and (ii) changes in factors specific to RTC, respectively.

Sources relied upon

2. I have reviewed and relied upon the following documents:

Expert Report of Dr. Ivan Paak-Liang Png

- 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”); and
- c. 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 I.

Opinion

3. The market price of an RTC membership can change as a result of either (i) changes in *general market conditions*, or (ii) changes in *factors specific to RTC*, or both. The most appropriate way to measure changes in general market conditions is to construct an average of the prices of other social clubs. Then, for any given time period, the impact of changes in factors specific to RTC may be measured by the difference between the change in the price of an RTC membership and the change of the average price of other social clubs.
4. To cite just one parallel, in stock market analysis, it is typical to assess the performance of a particular share by comparing it with that of an average of the prices of other shares in the same or similar industry quoted in the same stock market.

Expert Report of Dr. Ivan Paak-Liang Png

5. For the present case, I have constructed an average of the monthly prices of eight Singapore social clubs whose memberships were bought and sold during the period 1996-2003. I used eight clubs specified and data provided in the Phua's Affidavit. The eight clubs were the American Club, British Club, Europa Country Club, Fairway Club, Hollandse Club, Singapore Polo Club, Singapore Recreation Club, and Superbowl Golf and Country Club.
6. It is typical for statisticians and economists to name such an average as an "index". Accordingly, I have given the name "Social Club Index" to the average of the monthly prices of the eight Singapore social clubs.
7. Changes in the Social Club Index measure *general market conditions* that affect the prices of *all* social club memberships.
8. Table 1 below reports the Social Club Index and the price of an RTC membership (in thousand Singapore dollars) for four-month periods beginning at each of the seven dates. Column (c) reports monthly RTC membership prices using data provided in Phua's Affidavit, while column (d) reports monthly RTC membership prices using data provided in the RSMNW Spreadsheet.

Expert Report of Dr. Ivan Paak-Liang Png

Table 1: Social Club Index and RTC Membership Price (in \$'000)			
(a) Month	(b) Social Club Index	(c) RTC (Phua's Affidavit)	(d) RTC (RSMNW Spreadsheet)
1996 Dec	22.79		
1997 Jan	22.60		
1997 Feb	22.33		
1997 Mar	22.38		
1997 Apr	22.33		
1997 Mar	22.38		
1997 Apr	22.33		
1997 May	20.94		
1997 Jun	19.91		
1997 Jul	19.58		
2000 Mar	13.65	32.00	n.a.
2000 Apr	13.38	31.00	n.a.
2000 May	13.03	28.00	23.61
2000 Jun	13.26	16.00	21.33
2000 Jul	13.46	15.00	19.19
2001 Mar	11.40	10.80	10.60
2001 Apr	11.25	10.00	9.50
2001 May	11.24	10.00	9.50
2001 Jun	11.36	10.00	n.a.
2001 Jul	11.48	10.00	n.a.
2001 Nov	11.16	9.70	0.00
2001 Dec	11.00	9.30	6.44
2002 Jan	11.43	9.50	5.16
2002 Feb	11.43	9.50	n.a.
2002 Mar	11.68	9.30	n.a.
2003 Aug	10.25	7.30	7.30
2003 Sep	10.30	7.30	7.23
2003 Oct	10.11	7.30	7.40
2003 Nov	10.05	7.30	7.36
2003 Dec	9.86	7.30	7.40
2004 Jun	10.66	7.4	n.a.

Expert Report of Dr. Ivan Paak-Liang Png

9. There were no prices for RTC membership in December 1996 and March 1997, and hence no relevant data to analyze. Accordingly, notwithstanding my instructions, I focus my analysis on changes in the RTC membership price at or around March 2000, March 2001, November 2001, August 2003, and June 2004.

10. Further, the data in the RSMNW Spreadsheet for the RTC membership prices and transaction dates were incomplete. Specifically, the RSMNW Spreadsheet does not provide prices for March and April 2000, June and July 2001, February and March 2002, and June 2004.

11. Further, I understand that the RSMNW Spreadsheet is based on information extracted from the Transfer Application Forms provided by the Defendant in the discovery process.
 - a. For the period March 2000 to December 2003, 616 of the 781 Transfer Application Forms (a proportion of 78.9%) did not report the transacted price, while 319 of the 781 Forms (a proportion of 40.8%) did not report the date of approval. For the latter, it was assumed that the transfer was effected and approved on the date that the new membership account was created.

Expert Report of Dr. Ivan Paak-Liang Png

- b. Similarly, for the period January 2004 to April 2004, a number of the Transfer Application Forms provided by RTC omitted the transacted prices and approval dates.
12. Owing to the incompleteness of the RSMNW Spreadsheet data, I focus on the RTC membership prices as provided in Phua's Affidavit.
13. I calculated the percentage changes in the Social Club Index from March 2000: to April 2000 and the following three months; to March 2001 and the following four months; to November 2001 and the following four months; to August 2003 and the following four months; and to June 2004. I report these changes in Table 2, column (b). I performed the corresponding calculations for percentage changes in the RTC membership price from March 2000 and report them in Table 2, column (c).

Expert Report of Dr. Ivan Paak-Liang Png

(a) Month	(b) % Change in Social Club Index from Mar 2000	(c) % Change in RTC from Mar 2000 (Phua's Affidavit)	(d) % relative change = (c)-(b)	(e) Dollar relative change = \$32,000 x (d)	(f) % Change in RTC (RSMNW Spreadsheet)
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	-2.0%	-3.1%	-1.1%	-\$355	n.a.
2000 May	-4.6%	-12.5%	-7.9%	-\$2,535	n.a.
2000 Jun	-2.8%	-50.0%	-47.2%	-\$15,092	n.a.
2000 Jul	-1.4%	-53.1%	-51.8%	-\$16,560	n.a.
2001 Mar	-16.5%	-66.3%	-49.8%	-\$15,925	n.a.
2001 Apr	-17.6%	-68.8%	-51.2%	-\$16,374	n.a.
2001 May	-17.7%	-68.8%	-51.1%	-\$16,344	n.a.
2001 Jun	-16.8%	-68.8%	-52.0%	-\$16,637	n.a.
2001 Jul	-15.9%	-68.8%	-52.8%	-\$16,901	n.a.
2001 Nov	-18.2%	-69.7%	-51.5%	-\$16,468	n.a.
2001 Dec	-19.4%	-70.9%	-51.5%	-\$16,488	n.a.
2002 Jan	-16.3%	-70.3%	-54.0%	-\$17,284	n.a.
2002 Feb	-16.3%	-70.3%	-54.0%	-\$17,284	n.a.
2002 Mar	-14.5%	-70.9%	-56.5%	-\$18,070	n.a.
2003 Aug	-24.9%	-77.2%	-52.3%	-\$16,729	n.a.
2003 Sep	-24.5%	-77.2%	-52.6%	-\$16,847	n.a.
2003 Oct	-25.9%	-77.2%	-51.3%	-\$16,407	n.a.
2003 Nov	-26.4%	-77.2%	-50.8%	-\$16,260	n.a.
2003 Dec	-27.7%	-77.2%	-49.4%	-\$15,821	n.a.

Expert Report of Dr. Ivan Paak-Liang Png

2004 Jun	-21.9%	-76.9%	-55.0%	-\$17,596	n.a.

14. In Table 2, column (d), I report the percentage changes in the RTC membership price *relative* to the percentage changes in the Social Club Index. For instance, between March-April 2000, the Social Club Index fell by 2.0%, while the RTC membership price fell by 3.1%. Hence, the percentage fall in the RTC membership price *relative* to the Social Club Index was $3.1 - 2.0 = 1.1\%$.
15. As stated above in paragraph 3, for any given time period, the impact of changes in factors specific to RTC may be measured by the difference between the change in the price of an RTC membership and the change of the average price of other social clubs. Accordingly, Table 2, column (d) measures the impact of changes in any factors specific to RTC from March 2000 onward in percentage terms.
16. Referring to Table 1, in March 2000, the RTC membership price was \$32,000. The impact of changes in any factors specific to RTC in dollar terms from March 2000 to any particular month is simply \$32,000 multiplied by the corresponding percentage in Table 2, column (d). I report these dollar changes in Table 2, column (e).
17. I analyze the changes in the RTC membership price *relative* to the Social Club Index for four month periods following March 2000, March 2001, November 2001, and August 2003 because, generally, information about factors specific to

Expert Report of Dr. Ivan Paak-Liang Png

a club may take time to spread and club memberships are infrequently traded, hence the price of a club may take some months to adjust.

18. Hence, depending on whether I assume a one, two, three, or four-month period for price adjustment, I conclude that the impact of changes in any factors specific to RTC from March 2000 onward in dollar terms was as follows:

- a. Around March 2000: a loss ranging between \$355 (up to April 2000), \$2,535 (up to May 2000), \$15,092 (up to June 2000), and \$16,560 (up to July 2000);
- b. Around March 2001: a loss ranging between \$16,374 (up to April 2001), \$16,344 (up to May 2001), \$16,637 (up to June 2001), and \$16,901 (up to July 2001);
- c. Around November 2001: a loss ranging between \$16,488 (up to December 2001), \$17,284 (up to January 2002), \$17,284 (up to February 2002), and \$18,070 (up to March 2002);
- d. Around August 2003: a loss ranging between \$16,847 (up to September 2003), \$16,407 (up to October 2003), \$16,260 (up to November 2003), and \$15,821 (up to December 2003);

Expert Report of Dr. Ivan Paak-Liang Png

e. Around June 2004: a loss of \$17,596.

19. The margin of difference in each estimate reflects the sensitivity of the RTC membership price to the time period considered for price adjustment. To the extent that information about factors specific to a club takes time to disseminate and that club memberships are infrequently traded, it is appropriate to apply a longer period for price adjustment.

Clarifications and provisos

20. My opinion is limited to the diminution in the value of an RTC membership at or around the five dates (March 2000, March 2001, November 2001, August 2003, and June 2004), and does not cover other heads of loss and damages relating to loss of amenities, loss of accessibility, and loss of enjoyment, or otherwise.

Ivan Paak-Liang Png

Date: