Poh Fu Tek and others *v* Lee Shung Guan and others
[2017] SGHC 212

Case Number	: Suit No 387 of 2015
Decision Date	: 25 August 2017
Tribunal/Court	: High Court
Coram	: Vinodh Coomaraswamy J
Counsel Name(s)	: Ian Lim, Nicole Wee and Grace Chan (TSMP Law Corporation) for the plaintiffs; Simon Dominic Jones (Grays LLC) for the defendants.
Parties	: Poh Fu Tek — Koh Seng Lee — Sino Bio Energy Pte Ltd — Lee Shung Guan — Tenda Equipment & Services Pte Ltd — Biofuel Industries Pte Ltd

Companies – oppression – minority shareholders

Companies – oppression – purchase of shares – valuation of shares

Civil procedure – offer to settle – late offer

[LawNet Editorial Note: The appeal to this decision in Civil Appeal No 131 of 2017 was withdrawn.]

25 August 2017

Vinodh Coomaraswamy J:

Introduction

1 The plaintiffs bring this action against the first and second defendants seeking relief from oppression under s 216 of the Companies Act (Cap 50, 2006 Rev Ed) ("the Act"). The oppression is said to arise from the manner in which the first and second defendants have conducted the affairs of the third defendant, Biofuel Industries Pte Ltd ("Biofuel"). The plaintiffs claim that they are entitled to relief because the first and second defendants allotted shares in Biofuel to an entity related to the first defendant without giving the plaintiffs an opportunity to take up shares to avoid dilution of their shareholding. The result is that the plaintiffs' minority shareholding in Biofuel has been diluted from 25% to under 3%.

2 As matters have turned out, there is no longer any real issue as to whether the plaintiffs are entitled to a remedy under s 216 or even as to the nature of the remedy. It is common ground that the plaintiffs were oppressed and that I should, as a result, order the first and second defendants to buy the plaintiffs' shares in Biofuel. The only real issue which remains is the question of valuation. The plaintiffs say that their shares should be valued at $3.47 per share. The defendants say that the plaintiffs' shares are effectively worthless.

3 Having considered and analysed the parties' submissions and evidence, and in particular the expert evidence from both parties, I find that the value of the plaintiffs' shares in Biofuel, rounded off to two decimal places, is $1.86 per share. The first and second defendant will therefore have to purchase the plaintiffs' 1,666,667 shares in Biofuel at a total price of $3.1m, disregarding fractions of a dollar.

4 I have arrived at a value of $1.86 per share by taking the value ascribed to each share in Biofuel by the plaintiffs' expert in his final report and making the adjustments to that value which I consider justified by the evidence, and in particular the evidence of the defendants' expert. In brief, I have adjusted the plaintiffs' expert's value to take into account two risks which I find he failed to consider adequately. First, I have adjusted his value to take proper account of the risk that Biofuel may not be able to remain indefinitely at the premises from which it now conducts its key operations. Second, I have adjusted it to take proper account of the risk that Biofuel may not be able to continue its business relationship with a particular significant client in the Philippines. I have made these adjustments by modifying the discount rate and the discount factors applicable under the plaintiffs' expert's valuation.

5 I now set out the full reasons for my decision, beginning with the factual background to the parties' dispute. This background will include only a summary of my findings on oppression. The details of the oppression have little consequence of the valuation exercise which is now the central issue before me.

Background

6 Biofuel's business is collecting and processing wood waste. The first defendant is today Biofuel's sole director and majority shareholder. However, Biofuel was initially a wholly-owned subsidiary of the second defendant ("Tenda"). [note: 1] Tenda has, in turn, always been wholly owned and controlled by the first defendant's family. [note: 2]

7 The first and second plaintiffs made their investments in Biofuel by being allotted new shares in Biofuel. [note: 3] The result of these investments was that in 2014, just before the acts of oppression which triggered this action, Tenda held 75% of Biofuel and the plaintiffs held 25%. In early 2015, Tenda transferred all of its shares in Biofuel to the first defendant. The first defendant thereby became and remains to date the majority shareholder of Biofuel.

8 The circumstances in which the plaintiffs first invested in Biofuel are as follows. In 2007, Biofuel was in negotiations with a listed Indonesian company called PT Medco Energi Internasional Tbk ("PT Medco") to agree the terms of a joint venture to build a biomass power plant in Singapore. At the same time, a creditor applied to wind up Biofuel based on an unpaid debt of about $1m. PT Medco required Biofuel to address the winding up application before any joint venture could proceed.

9 Biofuel was therefore looking for an investor to inject fresh capital to allow it to stave off the winding up application. [note: 4] The first and second plaintiffs were approached. They agreed to invest in Biofuel in the hope of a successful joint venture with PT Medco. In January 2008, they entered into a share subscription agreement under which each of them subscribed for 300,000 new shares in Biofuel at $1.67 per share. The share subscription agreement also included an anti-dilution clause. The concern at that time was that certain parties who were brokering Biofuel's potential joint venture with PT Medco may be issued shares in Biofuel. [note: 5] Biofuel used the proceeds of the share subscription to repay the creditor who had applied to wind them up. The winding up application was withdrawn.

10 In February 2008, Biofuel ran into financial difficulties again. Biofuel solicited a further investment from the first and second plaintiffs. [note: 6] They were still concerned that their shares might be diluted. This time, the concern was that certain debts which Biofuel then owed Tenda might be converted to equity. The first defendant assured the first and second plaintiffs that this would not

happen. As a result, they subscribed for a further 1,066,667 shares in Biofuel at $0.94 per share, yielding a total consideration of $1m. This time, they used the third plaintiff, Sino Bio Energy Pte Ltd ("Sino Bio"), as the vehicle to hold these additional 1,066,667 shares. The first and second plaintiffs were and remain equal shareholders of Sino Bio.

11 The global financial crisis in 2008 meant that Biofuel's joint venture with PT Medco did not materialise. From 2008 to 2009, Biofuel faced further demands from creditors to repay substantial debts. The plaintiffs and Tenda extended loans to Biofuel to allow it to repay those debts. One of these loans was a loan of $1m pursuant to a convertible loan agreement ("CLA") dated 25 November 2008. Under this agreement, Biofuel took on an express obligation to keep Sino Bio informed on a regular basis of Biofuel's financial situation and business prospects. [note: 7]

12 The parties had an understanding that Tenda's loan to Biofuel would not be converted to equity without the plaintiffs' consent. This understanding is reflected in cl 4.1.2 of a Deed of Arrangement which the parties executed in July 2011. [note: 8] Additionally, Article 41 of Biofuel's Articles of Association requires the first defendant, as a director of Biofuel, to notify the plaintiffs in writing of the opportunity to subscribe for more shares in Biofuel before any shares could be issued to Tenda. [note: 9] Biofuel expressly acknowledged that it owed this obligation to the plaintiffs in cl 3.1 of an agreement between Biofuel and Tenda dated 1 August 2014 which governed Biofuel's issuance of 51m shares to Tenda. [note: 10]

13 By virtue of these agreements and understandings, the plaintiffs had a legitimate expectation that: (a) they would be invited to participate in any new issue of shares in Biofuel; and (b) their shareholding would not be unfairly diluted. These expectations, taken together with the anti-dilution clauses in the first and second plaintiffs' share subscription agreements, the first defendant's oral assurances to the plaintiffs, and Biofuel's obligations under the CLA dated 25 November 2008, subjected Biofuel to equitable considerations which made it unfair for those conducting its affairs – principally the first defendant – to rely on their strict legal powers and rights to defeat those expectations: *Lim Kok Wah and others v Lim Boh Yong and others and other matters* [2015] 5 SLR 307 at [102]. Yet, after Biofuel became profitable in 2012, the defendants did just that.

14 On 29 July 2014, an Extraordinary General Meeting ("EGM") of Biofuel's members took place. The purpose of the meeting was to discuss three resolutions which the first defendant had proposed. [note: 11] One resolution was to approve a transfer of all of Tenda's 75% shareholding in Biofuel to himself. Another resolution proposed to issue Tenda a substantial quantity of new shares by way of discharging the substantial debts owed by Biofuel to Tenda. The final resolution approved the impairment in Biofuel's accounts of a number of its significant assets. The intended effect of the impairment was to depress Biofuel's net asset value so as to maximise the number of new shares to be issued to Tenda in discharge of its debt.

15 Realising that their shares were about to be diluted, the plaintiffs offered to sell their 1,666,667 shares to the defendants for a total price of $2m (at $1.20 per share) before the resolutions were put to a vote. [note: 12] The first defendant rejected this offer.

16 The first defendant, holding Tenda's proxy, pushed the resolutions through. [note: 13] The dominant purpose in all this was to dilute the plaintiffs' shareholding. While dilution is not in itself oppressive (Margaret Chew, *Minority Shareholders' Rights and Remedies* (LexisNexis, 2nd ed, 2007) ("*Margaret Chew*") at p 199), the plaintiffs had a legitimate expectation that their shares would not be diluted unfairly (see [13] above). The first defendant's conduct breached this expectation. It

therefore amounted to oppressive conduct within the meaning of s 216 of the Act: *Re Cumana Ltd* [1986] BCLC 430 at 435*c*; *Over & Over Ltd v Bonvests Holdings Ltd and another* [2010] 2 SLR 776 ("*Over & Over*") at [76].

17 Significantly, there was no commercial justification for these transactions. The first defendant said at the EGM that the impairment of the assets and the debt-for-equity swap were needed to raise capital for an urgent redevelopment project to house Biofuel's wood waste ("the Project") to meet pollution control standards imposed by the National Environmental Agency ("NEA"). [note: 14] But the plaintiffs have demonstrated that there was in fact no such urgency in July 2014. Indeed, even as of April 2016, when the plaintiffs visited Biofuel's premises with their expert witness, [note: 15] no such redevelopment had even commenced. [note: 16] Further, the first and second defendants did not consider any alternative method for raising the necessary capital which would not dilute the plaintiffs' shareholding. This is confirmatory evidence that their dominant purpose in proposing and passing these resolutions was to dilute the plaintiffs' shareholding: *Over & Over* at [109].

18 The plaintiffs received the minutes of the EGM only in August 2014. As a minority, they could do nothing more than record their disagreement with the resolutions and ask in vain for a further EGM to be held. [note: 17] Importantly, at no point before, during or after the EGM did the first defendant give the plaintiffs any opportunity to subscribe for sufficient shares to prevent their shareholding being diluted. He has since accepted that this was a breach of Article 41 of Biofuel's Articles and cl 3.1 of the agreement dated 1 August 2014. [note: 18]

19 Within days, the first and second defendants began implementing the resolutions passed at the EGM. In August 2014, Tenda and Biofuel entered into an agreement under which Biofuel agreed to allot and issue 51,905,720 new shares to Tenda at $0.05 per share for a total consideration of $2,595,286. In exchange, Tenda accepted the shares as discharging in full the debt of $2,595,286 which Biofuel owed Tenda. [note: 19] In September 2014, Biofuel duly allotted and issued the 51,905,720 new shares to Tenda. [note: 20] That diluted the plaintiffs' shareholding from 25% to 2.84%. Also in September 2014, Tenda transferred its original 5,000,000 shares to the first defendant. [note: 21] Finally, in January 2015, Tenda transferred the remaining 51,905,720 shares to the first defendant. [note: 22] The first defendant thus became the direct holder of 97.15% of Biofuel's shares.

20 The evolution in Biofuel's shareholding which I have just described is summarised in the following table adapted from the plaintiffs' closing submissions. In this table, "Lee" refers to the first defendant while "Poh" and "Koh" refer to the first and second plaintiffs respectively.

	Number of shares held (%)					
	Tenda	**Lee**	**Poh**	**Koh**	**Sino Bio**	**Total**
Before the investment in 2007	5,000,000 (100%)	0	0	0	0	5,000,000
After the investment in 2007	5,000,000 (89.29%)	0	300,000 (5.36%)	300,000 (5.36%)	0	5,600,000

After the investment in 2008	5,000,000 (75%)	0	300,000 (4.5%)	300,000 (4.5%)	1,066,667 (16%)	6,666,667
1 Sep 2014	56,905,720 (97.15%)	0	300,000 (0.51%)	300,000 (0.51%)	1,066,667 (1.82%)	58,572,587
6 Sep 2014	51,905,720 (88.62%)	5,000,000 (8.54%)	300,000 (0.51%)	300,000 (0.51%)	1,066,667 (1.82%)	58,572,587
26 Jan 2015	0	56,905,720 (97.15%)	300,000 (0.51%)	300,000 (0.51%)	1,066,667 (1.82%)	58,572,587

21 In January 2015, by a letter before action, the plaintiffs complained to the defendants formally of a breach of s 216 of the Act. [note: 23] In February 2015, the defendants responded by belatedly offering to purchase the plaintiffs' shares at $0.05 per share. [note: 24] The plaintiffs rejected the offer. This offer has no bearing on the first and second defendants' liability under s 216 of the Act. As the plaintiffs correctly submit, [note: 25] an offer to buy a minority's shares which is not a reasonable offer will not operate to negate prior acts of oppression: *Lim Swee Khiang and another v Borden Co (Pte) Ltd and others* [2005] 4 SLR(R) 141 at [97]. This offer was clearly not a reasonable offer, not least because it was, as I find, at a deep discount to the true value of the plaintiffs' shares.

22 In the circumstances, I find that the first defendant's conduct amounted to a visible departure from the standards of fair dealing and a violation of the conditions of fair play which the plaintiffs as shareholders of Biofuel were entitled to expect: *Over & Over* at [77]. He engaged in that conduct as a director of Biofuel and is therefore personally liable for its consequences. In addition, he engaged in that conduct also as the controlling mind and will of Biofuel's majority shareholder, Tenda. That conduct is therefore attributable to Tenda, making Tenda liable for its consequences. The result is a finding that the first defendant and the second defendant are jointly and severally liable to the plaintiffs for the consequences of conducting the affairs of Biofuel in a manner oppressive to the plaintiffs. I find that the following specific acts amounted to oppression within the meaning of s 216 of the Act:

(a) The first defendant's act as director of Biofuel in formulating a scheme to dilute significantly the plaintiffs' shareholding and convening an EGM to implement the scheme;

(b) Tenda's passing of the three resolutions at the EGM on 29 July 2014 and the first defendant's participation in that with the intention to dilute significantly the plaintiffs' shareholding;

(c) The first defendant's failure as director of Biofuel to invite the plaintiffs to participate in the allotment of shares approved at the July 2014 EGM in order to maintain their shareholding, which is a breach of Article 41 of Biofuel's Articles; and

(d) Biofuel's allotment and issue of 51,905,720 new shares to Tenda in September 2014, carried out in order to dilute the plaintiffs' 25% shareholding to 2.84%.

23 This leaves me now to consider the plaintiffs' remedy.

Issues to be determined

24 It is common ground that the appropriate remedy for the plaintiffs is for me to exercise my power under s 216(2)(*d*) of the Act and order the first and second defendants to purchase the plaintiffs' shares in Biofuel. I agree. The plaintiffs should not be compelled to keep its capital locked in a company controlled by a majority shareholder who has betrayed the plaintiffs' trust: *Over & Over* at [131]. The plaintiffs equally should not be made to choose between having their shareholding unfairly diluted and selling their shareholding at what I find to be a gross undervalue. That is the dilemma which the defendants presented to the plaintiffs by their belated offer of a buy-out in February 2015 (see [21] above): *Lian Hwee Choo Phebe and another v Maxz Universal Development Group Pte Ltd and others and another suit* [2010] SGHC 268 at [118]. Accordingly, the defendants should now be ordered to purchase the plaintiffs' shareholding.

25 The only remaining issue before me now is to determine the price at which the defendants should be ordered to buy the plaintiffs' shares. I have before me three reports prepared by the plaintiffs' expert, Mr Richard Hayler, and two reports prepared by the defendants' expert Mr Timothy Reid. These reports address the value of shares in Biofuel at or around the date of the EGM. Some arguments have been made as to the time at which the reports were produced (see [95] and [148] below). I therefore set out the details of the reports very briefly here:

(a) Mr Hayler's first report is dated 5 May 2016. Its purpose is to answer a set of questions, which are financial or accounting in nature, concerning the first and second defendants' conduct in relation to Biofuel. The report values Biofuel's shares at $1.50 to $1.65 per share without a discount for non-marketability. [note: 26]

(b) Mr Reid's first report is dated 10 June 2016. Its purpose is to critique Mr Hayler's report and to assess Biofuel's market value. [note: 27] It gives Biofuel's shares a nil value. [note: 28]

(c) Mr Hayler's second report is dated 8 July 2016. Its purpose is to respond to Mr Reid's first report. [note: 29] Mr Hayler does not depart from his valuation in his first report, although he does say that certain information in Mr Reid's first report has led him to believe that his original valuation was an underestimate: see [96] below.

(d) Mr Hayler's third report is dated 27 September 2016 and was served on the defendants on the same date. Its purpose is to set out a modified valuation of Biofuel's market value in the light of new information which came to the plaintiffs. [note: 30] It values Biofuel's shares at $3.47 per share without a discount for non-marketability. [note: 31]

(e) Mr Reid's second report is dated 1 October 2016 and was served on the plaintiffs on the same date. Its purpose is to respond to Mr Hayler's third report. [note: 32] It again gives Biofuel's shares a nil value. [note: 33]

26 Although this evidence was adduced as part of the parties' cases on liability under s 216 of the Act, it is common ground that I may use this evidence to determine the fair value of the plaintiffs' shares. I now set out the applicable principles before analysing that evidence.

Purchase price

Applicable principles

27 The valuation exercise is governed by a handful of principles which can be gleaned from the

cases. The overriding principle for determining the purchase price for a buy-out order under s 216(2)(*d*) of the Act is that the price should be a "fair value" for the plaintiffs' shareholding. Subject to this, value will ordinarily be a matter of expert evidence. But the court must not defer too readily to expert evidence. First, the court must assess for itself the reasonableness of an expert's opinion against the criteria of fact and logic. This will sometimes require the court to go deeper into the technical basis upon which the expert valuation has been performed and to consider whether that basis for valuation has been applied using assumptions which are reasonable and justified by the facts. Second, the court must bear in mind the statutory purpose behind its powers under s 216(2). That purpose is to remedy or to bring to an end the oppression suffered by a successful plaintiff. The court therefore has the necessary degree of flexibility to adjust an expert's value to arrive at a value which is fair and just in the particular circumstances of the case, even if those adjustments do not accord with strict accounting principles.

28 I will now elaborate on these principles.

Fair value and expert evidence

29 The most important and commonly granted remedy under s 216(2) of the Act is an order for the plaintiffs' shares to be purchased. The power to make this order is conferred expressly by s 216(2)(*d*), which states:

> (2) If on such application the Court is of the opinion that either of such grounds is established the Court may, with a view to bringing an end or remedying the matters complained of, make such order as it thinks fit and, without prejudice to the generality of the foregoing, the order may —
>
> …
>
> (*d*) provide for the purchase of the shares or debentures of the company by other members or holders of debentures of the company or by the company itself; …

30 The principal virtue of this order is that the plaintiff can realise the value of his interest in the company without having the company wound up. The purchaser *ex hypothesi* receives fair value in exchange for the price paid: Robin Hollington QC, *Hollington on Shareholders' Rights* (Sweet & Maxwell, 7th ed, 2013) ("*Hollington*") at para 8-44; *Margaret Chew* at p 236. In this regard, the remedial distinction between a share purchase order and a winding up order is illustrated by the contrast between the width of the court's powers when it considers an application for an order under s 216(2) and the narrowness of its powers when it considers an application to wind up a company on just and equitable grounds. As Mummery J (as he then was) explained in *Re a Company (No 00314 of 1989), ex parte Estate Acquisition and Development Ltd and others* [1991] BCLC 154 at 161*f*:

> Under ss 459 to 461 [of the English Companies Act 1985] the court is not, therefore, faced with a death sentence decision dependent on establishing just and equitable grounds for such a decision. The court is more in the position of a medical practitioner presented with a patient who is alleged to be suffering from one or more ailments which can be treated by an appropriate remedy applied during the course of the continuing life of the company.

31 The width of the court's powers under s 216(2) serves to accommodate the limitless varieties of possible oppressive behaviour and the need for the court to achieve justice in the particular circumstances of individual cases: *Re Bodaibo Pty Ltd* (1992) 6 ACSR 509 at 515. That width goes beyond the terms of the share purchase order and the manner in which the value of the shares is to

be assessed: *In re Bird Precision Bellows Ltd* [1986] Ch 658 ("*Bird*") at 669E. Accordingly, the Court of Appeal has said that that determination need not be in accordance with "strict accounting principles", because the role of the court is "merely to determine a price that is fair and just in the particular circumstances of the case": *Yeo Hung Khiang v Dickson Investments (Singapore) Pte Ltd and others* [1999] 1 SLR(R) 773 ("*Yeo Hung Khiang*") at [72]. The overriding principle is that the price should be "fair, just and equitable as between the parties", and the court's discretion is "otherwise unfettered": *Koh Keng Chew and others v Liew Kit Fah and others* [2017] SGHC 52 ("*Koh Keng Chew*") at [5].

32 Subject to this overriding principle, the value of a plaintiff's shares will usually be a matter of expert evidence. In some cases, the court's determination of what is fair, just and equitable is contained in the terms of reference framed by the court for an independent valuer: see, *eg*, *Lim Swee Khiang and another v Borden Co (Pte) Ltd and others* [2006] 4 SLR(R) 745 at [92]; *Lim Chee Twang v Chan Shuk Kuen Helina and others* [2010] 2 SLR 209 at [150]. In other cases, the court may take the price which an independent valuer has arrived at and make adjustments to it out of considerations of fairness, justice or equity: see *eg*, *Yeo Hung Khiang* at [73]. And in yet other cases, the court will be faced with conflicting expert evidence adduced by the parties as to the value of the shares. These are the most difficult cases. The court must take a substantive view on conflicting expert evidence, which inevitably involves undertaking an analysis of a technical and mathematical nature: see *eg*, *Asia Hotel Investments Ltd v Starwood Asia Pacific Management Pte Ltd and another* [2007] SGHC 50 at [361] (albeit in the context of assessment of damages). Whereas "strict accounting principles" do not in themselves determine the purchase price, it is often necessary to understand and analyse those accounting principles in order properly to evaluate the parties' submissions on the expert evidence.

33 In addition, while the valuation of shares is a wide and specialist subject, the temptation to defer too readily to the expertise of share valuers must be resisted because there are questions of law and principle involved: *Hollington* at para 8-128. These questions include whether the court should order a discount for a minority shareholding, whether the court should provide allowances for the consequences of oppressive or unfairly prejudicial conduct and how the court should fix the appropriate date of valuation (which I address at [50] below). The answers to these questions are legal in nature, driven by the statutory aim of bringing an end to or remedying the consequences of the oppression: s 216(2) of the Act.

34 Moreover, it is the court's duty to assess the reasonableness of an expert's opinion by considering whether it is logical in its own context, whether it is justified by the facts on which it is based, and whether it is compromised by any other evidence including an opposing opinion: Jeffrey Pinsler SC, *Evidence and the Litigation Process* (5th ed, LexisNexis, 2015) at para 8.052; *JSI Shipping (S) Pte Ltd v Teofoongwonglcloong (a firm)* [2007] 4 SLR(R) 460 at [51].

35 An expert's opinion on the value of shares is no exception to this general principle. The court must bring a critical eye to bear on all aspects of the opinion, even on the technical formulae applied by the expert to arrive at a conclusion. In *Singapore Finance v Lim Kah Ngam (S'pore) Pte Ltd (Eugene HL Chan Associates, third party)* [1983-1984] SLR(R) 403, Lai Kew Chai J had to assess conflicting expert evidence on whether excavation works had caused cracks to a neighbouring building. He put the matter this way (at [33]):

> My approach in evaluating the conflicting experts' evidence is to examine the scientific grounds and basis, on which they rely, in connection with: (a) the permeability of the first stratum of the soil in the vicinity; (b) the applicability of the *Rankine* formula and *Teng* formula relating to sheet pile failure and the occurrence of base heave; (c) the behaviour of underground water in the dewatering process; and (d) the nature of the plaintiff's building and foundation and the effect on

them of any ground settlement. Where the opinion of the expert is based on reports of facts and empirical observations, I have endeavoured to satisfy myself, on a balance of probabilities, whether those facts did in truth exist and whether any inference or inferences drawn from those facts, taken individually and collectively, were sound or not.

36 The central part of the logic of an expert's opinion, in the context of share valuation, is contained in the basis of the valuation and the application of that basis to the facts of the case to determine the value of a company as a whole, from which the value of each share may then be derived rateably. It is these aspects of the expert's opinion which the court will most closely scrutinise. Accordingly, the law takes cognisance of the different bases on which a minority shareholding may be valued in a company whose shares have no public market. Lord Millett set out three possible bases in *CVC/Opportunity Equity Partners Ltd and another v Demarco Almeida* [2002] 2 BCLC 108 ("*CVC*") at [37]:

> There are essentially three possible bases on which a minority holding of shares in an unquoted company can be valued. In descending order these are: (i) as a rateable proportion of the total value of the company as a going concern without any discount for the fact that the holding in question is a minority holding; (ii) as before but with such a discount; and (iii) as a rateable proportion of the net assets of the company at their break up or liquidation value.

37 Lord Millett's first and third options represent two fundamentally different approaches to valuing shares: see *Hollington* at para 8-135. His first option adopts the earnings basis of valuation. This basis is usually appropriate where the company is a going concern: *CVC* at [38]. It can be based on the company's profits or future cash flows. Lord Millet's third option adopts the assets basis of valuation. It is usually appropriate for valuing a loss-making company or a company whose assets have a readily realisable value independent of its business: *Yeo Hung Khiang* at [65]. A combination of both approaches may be employed to value shares in a private company: *Gillatt v Sky Television Ltd* [2000] 2 BCLC 103 at 112*g-h*.

38 For completeness, I note that Lord Millett's second option is not relevant on the facts of this case because of the general rule that the court will not apply a discount for non-marketability when making a share purchase order under s 216(2) of the Act: *Low Janie v Low Peng Boon and others* [1998] 2 SLR(R) 154 at [63]; *CVC* at [40]. The principle behind this rule is that an oppressed minority should not be treated as having elected freely to sell his shares to a party external to the company. Therefore, fixing the price for the minority's shares *pro rata* according to the value of all the shares in the company as a whole is the only fair method of compensating him: *Bird* at 667F-G. After all, an order for a buy-out on terms is an exercise of the coercive power of the court: *Maniach Pte Ltd v L Capital Jones Ltd and another* [2016] 3 SLR 801 at [166]. The parties in this case also agree that no discount for non-marketability should be applied. [note: 34]

39 In the present case, Mr Hayler has adopted the earnings basis of valuation in valuing shares in Biofuel. This is unobjectionable because Biofuel is in fact a going concern. Specifically, Mr Hayler has employed what is known as the discounted cash flow or "DCF" method. Mr Reid does not object to that method. Instead, the thrust of Mr Reid's evidence is that Mr Hayler, in applying the DCF method to Biofuel and its business, has assumed certain facts without support and has overlooked other facts without basis. Mr Reid says that if Mr Hayler's valuation is adjusted for these errors and omissions, the value of shares in Biofuel is in fact nil.

40 The submissions of each party correspond closely with the expert evidence that that party has adduced. In order properly to assess the expert evidence, it is necessary first to understand the DCF method of valuation before considering how Mr Hayler has applied it to Biofuel and analysing Mr Reid's

criticisms of that application. I turn now to address this.

Discounted cash flow

41 The DCF method is derived directly from the fundamental theory of value which states that "the value of a financial asset is the sum of the present values of the future cash flows [*ie*, dividends, profits, proceeds of sale] stemming from ownership": Christopher Glover, *The Valuation of Unquoted Companies* (4th ed, Thomson, 2004) ("*Glover*") at p 232. This theory of value necessarily depends on projections, *ie* looking into the future. This method is, therefore, inevitably speculative to some degree. The underlying projections must therefore rest on assumptions which are reasonable and on contingencies which can be weighted in light of all the evidence and all the circumstances. Nevertheless, the value which the DCF method yields is a real value. "Like all values", said Justice Oliver Wendell Holmes in *Ithaca Trust Co v United States* 49 S Ct 291 (US Supreme Court, 1928) at 292 col 1, the value of property at a particular valuation date "depends largely on more or less certain prophecies of the future, and the value is no less real at that time if later the prophecy turns out false than when it comes out true."

42 Accordingly, part of the task of the court in evaluating an expert's application of the DCF method is to evaluate the reasonableness of the assumptions underlying the expert's projections into the future. I do not say that the expert must establish each assumption as true on the balance of probabilities. That cannot be the test, because there is no provable truth with regard to the future. But where an expert makes an assumption as to a future event, the court must consider both qualitatively whether the expert's assumption is reasonable in light of the evidence and also quantitatively the likelihood of the assumed event actually materialising. For the purpose of the DCF analysis, that likelihood – to the extent that it is found to be less than a certainty – represents a risk to the business which the expert must account for in his analysis. If the court finds that he has failed to do so, it will have to make an appropriate adjustment to account for the risk.

43 The DCF method may be described as consisting of two distinct parts: *Glover* at p 232. First, an estimate must be made of the amount and timing of all cash flows during the likely period of ownership. I will refer to this concept as "the estimate". Second, a discount rate must be selected and applied to the future cash flows to convert them into present values. The sum of these present values is the value of the asset. As Mr Hayler explains in his first report: [note: 35]

> In the DCF approach, the cash flows expected to be generated by a business are typically modelled over a discrete period, followed by an assumption of a mature state on which a "terminal" or "continuing" valuation is based. The cash flows in each year and during the terminal period are then discounted back [to the valuation date] at the Weighted Average Cost of Capital ("WACC").
>
> DCF analysis requires the construction of reliable projections of the company's expected financial performance as at the date of valuation. These projections are commonly based upon projections prepared by company 'insiders' who are often in the best position to assess the company's expected performance.

44 A key consideration, of course, is the date at which the company's shares are to be valued. In the present case, the parties agree that the valuation date should be 29 July 2014. [note: 36] That is the date of the EGM where the debt-to-equity swap was approved which significantly diluted the plaintiffs' shareholding and thus constitutes the principal act of oppression the plaintiffs now complain of (see [14] above). I am aware that the parties instructed their experts to assess Biofuel's value as at that date in large part to ascertain whether there had been any oppression at all. But this does

not detract from the fact that the valuation date which the parties agreed was relevant to the issue of oppression also accords with the well-established and sensible practice of valuing the shares as if the oppressive conduct had not taken place by choosing a date of valuation shortly before the oppressive conduct began: *Hollington* ([30] *supra*) at para 8-162, citing *Scottish Co-operative Wholesale Society v Meyer* [1959] AC 324 at 364 and *Re OC (Transport) Services Ltd* [1984] BCLC 251 at 258*d-g*.

45 Thus, to arrive at his estimate of the value of shares in Biofuel as at 29 July 2014, Mr Hayler models the cash flow which Biofuel is expected to generate over a discrete forecast period comprising six financial years ("FYs") [note: 37] after 29 July 2014. Mr Hayler's forecast period is therefore FY2015 to FY2020. The value of the discounted cash flow for the last financial year of that forecast period is then treated as the normalised level of annual discounted cash flow after the forecast period and used as the base for calculating the terminal value. The terminal value in turn represents an estimate of the present value of the future cash flows after FY2020.

46 The discount rate which Mr Hayler has chosen to apply is Biofuel's weighted average cost of capital ("WACC"). The WACC of a company is the average cost of the company's debt and equity which is weighted, respectively, by the market values of debt and equity. [note: 38] Simply put, the WACC is the company's rate of return to those who finance its business through both debt and equity, *ie* its lenders and its shareholders. To put it another way, risk being directly related to reward, WACC is a measure of the risk presented by the company to the holders of its debt and equity by virtue of its business, its location or other circumstance. Mr Hayler has calculated the WACC of Biofuel to be 13.2%. [note: 39]

47 Mr Hayler applies the discount rate of 13.2% to Biofuel's free cash flows for the forecast period to obtain a present value for the cash flow for each financial year in that period. As I have mentioned, the last discounted cash flow value in that period, *ie* for FY2020, is then used as the base for calculating the terminal value. The formula for calculating the terminal value (set out at [127] below) takes into account the discount rate as well as what is called the terminal growth rate, which is the rate at which Biofuel's cash flow is expected to grow on an annual basis in perpetuity. Mr Hayler adopts a terminal growth rate of 4.99%, basing it on the projected long-run nominal growth rate of the Singapore economy as at 2014. [note: 40]

48 Mr Hayler then sums the discounted cash flows for the forecast period and the terminal value to yield $31.9m as the enterprise value of Biofuel. He then deducts Biofuel's net debt of $8.8m from that amount to yield $23.1m as Biofuel's equity value. [note: 41] The equity value represents Biofuel's true value to its shareholders as a going concern as at 29 July 2014. The value of the plaintiffs' shareholding as at that date is therefore 25% of $23.m or $5.78m. Implicit in that is a share price of $3.47 per share. [note: 42] This is the price which the plaintiffs say represents the value of their shares and is therefore the price at which they ask to be bought out. [note: 43]

Hindsight information

49 Mr Hayler's DCF analysis and Mr Reid's critique of it both rely extensively on evidence of events occurring after the valuation date, *ie* 29 July 2014. That evidence has been referred to in these proceedings as "hindsight information". This raises the issue of whether a court may take such information into account in assessing the value of shares for the purpose of making a buy-out order under s 216(2)(*d*) of the Act. Mr Hayler correctly says in his third report that "[w]hether it is appropriate to take into account such hindsight information is a legal matter." [note: 44] The plaintiffs

say that the width of the court's remedial discretion under s 216(2) entitles it to take into account hindsight information. [note: 45] The defendants take a more equivocal position, suggesting (without attempting to put forward any principle) that Mr Reid may not have used hindsight information had Mr Hayler not done so. [note: 46] At the same time, I am aware that the basic rule in valuing shares is to reject hindsight information and consider only what a hypothetical purchaser would pay on a hypothetical sale in the open market on the valuation date: *In re Holt* [1953] 1 WLR 1488 ("*In re Holt*"). In my view, however, the plaintiffs are correct. I will elaborate.

50 The key to resolving the issue of hindsight information as a matter of principle lies in a proper understanding of the purpose in fixing a valuation date for a buy-out order under s 216(2)(*d*). The valuation date is, after all, the sole basis on which to characterise particular information as hindsight information. As the court is not engaging purely in an accounting exercise, the purpose in fixing that date must be more than merely functional in the sense I have described at [41] above, *ie* simply to be a reference point for valuing the asset in question in the light of its future income.

51 In the context of the broader remedial function of s 216(2), that purpose is to fix a reference point for valuation which most fairly and effectively remedies or brings to an end the oppression suffered by a successful plaintiff. This purpose, however, may only be realised in accordance with the nature of a buy-out order appreciated against the conceptual and normative backdrop of the general law. A buy-out order is not only a compensatory order for the plaintiff. It is also a mandatory transaction imposed on the majority, supported by consideration involuntarily furnished (see [38] above). Therefore, the very least that the purchase price ought to reflect is the true value of what the shareholder is being compelled to sell. And the valuation date plays a significant part in reflecting that value. This explains why the High Court has recently held that the starting point for valuing a company which is a going concern is the date on which the buy-out order is made, provided that if the plaintiff can show that that date would result in unfairness, the court may opt for some other date which would achieve a fairer result: *Koh Keng Chew* ([31] *supra*) at [9] to [10], adopting the approach of the English Court of Appeal in *Profinance Trust SA v Gladstone* [2002] 1 BCLC 141 ("*Profinance*") at [60].

52 Accordingly, the court ought to take into account evidence of events occurring after the date of valuation if that evidence would help the court remedy oppression suffered by the plaintiffs or achieve a more accurate estimate of the value of the plaintiffs' shares. The basic rule in *In re Holt* does not apply where such purposes, especially that of reversing the effects of oppression, are in play. Where however shares are being valued to determine for example the estate duty payable (*In re Holt*) or the damages payable for breach of contract (*Joiner and another v George and others* [2002] EWCA Civ 160), the basic rule will apply. That is because in those situations, the market value of the shares is the sole concern of the valuation.

53 The above analysis explains why there is no immutable rule on the appropriate date of valuation for the purposes of a buy-out order. The latitude in choosing that date can be seen in the authorities. For a summary of examples see *Profinance* at [61] and also *Koh Keng Chew* at [7] to [8], where Chua Lee Ming J said:

> In *Profinance*, the English Court of Appeal reviewed a number of English decisions and agreed (at [60]) with Nourse J's general proposition in *Re London School of Electronics* (at 224) that "[p]rima facie an interest in a going concern ought to be valued at the date on which it is ordered to be purchased".
>
> I was referred to several Singapore cases. The choice of the reference date does not appear to have been a contested issue in these cases and the decisions have gone in both directions. The

Filing Date was chosen as the reference date in *Lim Swee Khiang v Borden* at [92] and *Lim Chee Twang v Chan Shuk Kuen Helina and others* at [150(a)]. However, the Buyout Order Date was chosen in *Over & Over Ltd v Bonvests Holdings Ltd and another* [2014] 4 SLR 140 at [132], *Eng Gee Seng v Quek Choon Teck and others* at Annex A, *Sharikat Logistics Pte Ltd v Ong Boon Chuan and others* at [243] and *Lim Seng Wah and another v Han Meng Siew and others* at [176]. In *Tullio Planeta v Maoro Andrea G*, there was some discussion of the general rule stated in *Re London School of Electronics Ltd* but the court did not express any clear view on it (at [15]–[20]). In any event, the general rule was inapplicable in that case because the company in question was not a going concern.

54 My final observation on hindsight information is that the DCF method relies heavily on an accurate forecast of free cash flow of the company, as I have alluded to at [44] above. Therefore, if hindsight information helps me better to assess whether a forecast is accurate, it also enables me to arrive at a more accurate finding of the value of the plaintiffs' shares as at 29 July 2014 and enables me better to remedy the oppression suffered.

55 I therefore hold that it was proper for both Mr Hayler and Mr Reid to rely on hindsight information in their respective assessments of the value of shares in Biofuel, and it is proper for me now to take into account hindsight information in analysing their expert evidence and arriving at my findings as to value.

Analysis

56 There are three parts to my analysis of the parties' submissions on the value of the plaintiffs' shares. The first part considers the basic assumption of Mr Hayler's DCF analysis, namely, that Biofuel will experience growth in perpetuity. The second and third parts will consider arguments which may properly be regarded as going towards either of the two fundamental components of the DCF analysis, namely, the estimate and the discount rate: see [43] above. I will not discuss in a separate section the issues relating to the experts' credibility. I have found no reason to form an overall view on the credibility of either expert. Their credibility therefore turns very much on the reasonableness of the opinions they have expressed on the various issues which they have considered. It is therefore appropriate to address credibility issue by issue, together with my analysis of the parties' submissions as to whose opinion I should prefer on that issue.

57 I therefore turn now to the main analysis, bearing in mind the principles and concepts I have set out at [27] to [54] above. I will elaborate on the finer details of Mr Hayler's calculations when I address the submissions which go specifically towards those details.

Growth in perpetuity

58 The issue here is whether it is reasonable for Mr Hayler to have calculated Biofuel's terminal value on the assumption of growth in perpetuity. This issue arises from uncertainties relating to Biofuel's interest in two properties from which it operates its waste collection and processing business and export business respectively. I will first describe the two properties and then consider the parties' submissions on the issue raised.

59 First, Biofuel conducts its wood waste collection and processing business at 51 Shipyard Crescent. This property is factory land of about 20,000 m^2 owned by the Jurong Town Corporation ("JTC"). I will refer to this as the Shipyard site. Under a building agreement between the JTC and Biofuel dated 10 August 2005, Biofuel was granted a three-year licence to use the Shipyard site commencing 1 January 2005. [note: 47] The agreement obliges JTC to grant Biofuel a 30-year lease of

the Shipyard site commencing on the same date if Biofuel complies with a number of conditions. [note: 48] One of these conditions, set out in cl 2.24(d) of the agreement, is that Biofuel must ensure that no waste is sorted in the open and that all waste is stored in sheltered enclosures. [note: 49] Biofuel did not comply with this condition. It was even served a formal notice by the NEA to construct a full enclosure for the storage of waste by June 2014. [note: 50] As at the time of the trial, Biofuel continues to be in breach of this condition. [note: 51]

60 Biofuel's three-year licence to use the Shipyard site has long since expired. Biofuel continues to occupy the Shipyard site under a discretionary extension of its licence by the JTC. Biofuel has no express right to any extension of the licence. [note: 52] So Biofuel remains in occupation of the Shipyard site purely as a licensee or, at best, a tenant at will, of the JTC. There is therefore a risk that it will lose possession of the Shipyard site so long as it continues to be in breach of the building agreement; although, for the reasons set out at [61] below, I find that this risk is more theoretical than real. But assuming that Biofuel complies with all of the conditions set out in the agreement, including the condition in cl 2.24(d), it will be entitled to obtain from the JTC a lease of the Shipyard site terminating on 31 December 2034. Beyond 2034, it is common ground that there is no certainty as to whether Biofuel will be able to find new premises from which to operate.

61 Second, Biofuel conducts its export business at a property at Jalan Samulun. In these proceedings, that property has been referred to as the Waterfront premises. It is essentially a jetty. Biofuel hauls wood chips from the Shipyard site to the jetty to be loaded onto barges and prepared for delivery to clients in the region. [note: 53] The Waterfront premises are also owned by the JTC. Biofuel has a ten-year licence to use the Waterfront premises which expires in 2024. [note: 54] Before it went into occupation of the Waterfront premises, Biofuel conducted its export operations from a private jetty. [note: 55]

62 The defendants say that Mr Hayler was reckless to value Biofuel on the assumption of growth in perpetuity. [note: 56] Indeed, the defendants were able to extract a concession from Mr Hayler in cross-examination that his discount rate did not specifically take into account the risk that Biofuel will be unable to continue to occupy the Shipyard site and the Waterfront premises in perpetuity. [note: 57] As I have mentioned, there are two aspects to this risk. First, Biofuel is at risk of being dispossessed of the Shipyard site for as long as it continues to be in breach of the building agreement. Second, even if the JTC does go on to grant Biofuel a lease of the Shipyard site, the lease will expire in 2034, and there is no guarantee that the lease can be renewed. The risk of non-renewal, the defendants say, is enhanced by the strained relationship between Biofuel and the JTC and the NEA caused by Biofuel's continuing breach of the agreement. [note: 58]

63 Accordingly, the defendants urge me to adopt Mr Reid's proposal to truncate Biofuel's free cash flows at 2034. They urge this on the basis that there is no guarantee that Biofuel will be able to continue its business after 2034. On Mr Reid's proposal, the discount rate is essentially enhanced to reflect a limited, as opposed to a perpetual, period of free cash flow after the final year in the discrete forecast period, *ie*, FY2020. [note: 59] The effect of this is that $7.46m is deducted from the equity value at which Mr Hayler has arrived. [note: 60]

64 I accept the defendants' point that Mr Hayler has gone too far in the plaintiffs' favour by not adequately taking into account Biofuel's risk of losing the Shipyard site and the Waterfront premises. But I agree with Mr Hayler that Mr Reid's outright truncation at 2034 goes too far in the defendants'

favour. Mr Reid's approach assumes with absolute certainty that Biofuel will not be able to carry on business when the prospective lease for the Shipyard site expires in 2034. [note: 61] While Mr Reid grants that JTC may well not eject Biofuel before 2034, it also incorrectly excludes the possibility of Biofuel finding alternative premises from which to continue its operations beyond 2034. Moreover, if the assumption is valid, then one should also allow for the possibility that Biofuel's directors will facilitate a managed wind-down of Biofuel's business in anticipation of its closure. [note: 62] This would involve cutting back expenses, cashing in debts and paying off creditors. All of this may lead to a valuation of Biofuel in 2034 or in the years leading up to 2034 that is higher than a valuation premised on Biofuel abruptly stopping business in 2034. [note: 63] Mr Reid's simple truncation assumes, without adequate basis, that Biofuel will simply step off a cliff edge in 2034.

65 The reality is that neither party is able adequately to state the likelihood that Biofuel can continue its business up to and beyond 2034. Therefore, whether Mr Hayler is correct to assume in his DCF analysis that Biofuel will experience growth in perpetuity turns on whether that assumption is a reasonable one: see [42] above. And in my judgment, it is reasonable. I say this for four reasons. The reasons are:

(a) First, the JTC still appears to be willing to support Biofuel's business by granting it a new licence in 2014 to operate from the Waterfront premises despite its continuing breach of cl 2.24(d) of the building agreement. This suggests to me that the defendants' view of the instability of Biofuel's tenure at the Shipyard site, allegedly due to the JTC's unhappiness with Biofuel over its failure to observe cl 2.24(d), is somewhat exaggerated.

(b) Second, Biofuel recycles almost half the horticultural and wood waste produced in Singapore. This is reported by Biofuel itself in its corporate profile. [note: 64] If Biofuel is able to maintain this level of business, that will be a fact which the JTC is likely to consider favourably in exercising their discretion to allow Biofuel to remain on the Shipyard site, where the collection and processing of waste wood takes place, and in deciding whether to renew Biofuel's lease for the site when the time comes.

(c) Third, the JTC has demonstrated a degree of latitude as regards Biofuel's use of the Shipyard site. At the time Biofuel was granted its licence for the Shipyard site, it was contemplated that Biofuel would build a biomass power plant. This was to be pursued under a joint venture with PT Medco. After the joint venture fell through, Biofuel developed on the Shipyard site an alternative business in the disposal of construction waste, with an emphasis on wood waste disposal. And the JTC consented to this change in use of the Shipyard site. [note: 65]

(d) Fourth, Biofuel has been performing well in recent years. Its financial statements show that its revenue increased from $10m in 2012 to $12.2m in 2013 and to $14.9m in 2014. [note: 66] Its gross profit more than doubled from $1.98m in 2012 to $3.9m in 2014. Its net profit more than tripled in the same period, from $390,901 in 2012 to $1.3m in 2014. Therefore, as at the valuation date, Biofuel's business shows no clear sign of slowing down which could justify an inference that its business may not last beyond 2034.

The first three of these reasons relate specifically to the JTC's relationship with Biofuel and therefore have a bearing on the likelihood of Biofuel's remaining on the Shipyard site and the Waterfront premises and the JTC's renewal of the lease (if granted) and the licence for each property respectively.

66 For these reasons, I find that Mr Hayler made a reasonable assumption that Biofuel's business

would grow in perpetuity. But I also find that the risk of losing the Shipyard site and the Waterfront premises should be reflected in the DCF analysis. I accept the defendants' submission that this risk should be reflected in the discount rate. [note: 67] In my judgment, increasing the discount rate by 2 percentage points ("pp") suffices to address this risk. I elaborate on this point at [126] below.

The estimate

67 I turn now to the estimate component of Mr Hayler's DCF analysis. Essentially, the parties disagree whether and to what extent the estimate should take into account the following three principal items:

(a) the cost of carrying out the Project (see [17] above);

(b) possible future business with a specific customer in the Philippines, Roxol Bioenergy Corporation ("Roxol"); and

(c) an alleged fall in Biofuel's tipping fees.

68 I address each of these in turn.

(1) Cost of the Project

69 The first issue is whether the cost of the Project, which the defendants place at $20.3m, should be reflected in Mr Hayler's DCF analysis. The issue turns largely on whether the Project is properly to be regarded as "value accretive" or merely "value enhancing" for Biofuel. A project is value accretive if it brings in enough cash flow to cover its cost and also to yield a profit. A project is value enhancing if it brings in additional cash flow but that cash flow is insufficient to cover its cost. [note: 68] It follows that if the Project is assumed to be value accretive, its cost need not be taken into account in the DCF analysis. The opposite would be true if the Project were assumed merely to be value enhancing.

70 While Mr Hayler thinks that there is evidence that the Project would be value accretive, he takes what the plaintiffs have described as a conservative approach of assuming the Project to be "value neutral". [note: 69] In other words, he assumes the revenues which the Project will generate will equal its costs: no more, but no less. The Project therefore plays no part in his calculations.

71 The plaintiffs submit that Mr Reid agreed with Mr Hayler in cross-examination that the Project would be value accretive or, at the very least, value neutral. The defendants' response is that Mr Reid meant "value enhancing" when he used the term "value accretive". [note: 70] In my judgment, there is no basis for the defendants' reading of Mr Reid's evidence. I find that he did accept that the Project was value accretive in the sense I have explained above.

72 This can be seen by considering Mr Reid's evidence in its full context. The immediate background to that evidence begins with Mr Hayler's evidence on the ninth day of trial. In that evidence, he used the term "value accretive" consistently to describe a project which would yield a net profit for the company. [note: 71] Counsel for the plaintiff, Mr Ian Lim, then cross-examined Mr Reid. Mr Reid responded to the term "value accretive" for the first time in his cross-examination by Mr Lim. And when he did, he gave no indication that he understood or used the term in a sense different from Mr Hayler: [note: 72]

MR LIM: ... So would you not agree with me that on this basis, just building the enclosure alone, even without the MRF machinery and production lines, is not just purely remedial and could also be value accretive to the company? So I'm saying just building a shelter alone without anything else?

MR REID: Potentially, yes.

MR LIM: Okay, and would you also agree with me, Mr Reid, that being remedial or value accretive isn't a binary proposition. It's not necessarily mutually exclusive? What I mean is that something which is remedial can also be value accretive; would you accept that?

MR REID: I would.

73 Mr Reid in this extract expressed no confusion about what the term "value accretive" meant. He was careful to hedge his agreement with Mr Lim by saying that the enclosure was only "potentially" value accretive precisely because he understood the term "value accretive" in the same way Mr Hayler did. Mr Reid repeated the same caution moments later in his evidence by accepting that the enclosure component of the Project could be "marginally" value accretive. [note: 73] To put the matter the opposite way, if Mr Reid had understood the term "value accretive" to mean no more than "value enhancing", then he would have agreed readily with the points which Mr Lim put to him and said simply that the Project's being "value accretive" (in the sense of value enhancing) did not mean that it was not a loss-making project because the revenue it brought in did not exceed its cost. But that is not what Mr Reid did.

74 Moreover, being an accounting expert, Mr Reid must be assumed to be familiar with these accounting terms of art and sensitive to the context in which they are used. If at any time Mr Reid thought that he and Mr Lim were talking at cross purposes, he would reasonably be expected to have asked Mr Lim to clarify the sense in which Mr Lim was using "value accretive" in his questions. He did not do so. That is because, I find, he understood precisely what Mr Lim meant by the term.

75 That that was Mr Reid's understanding is further shown by his decision to decline Mr Hayler's invitation – extended in witness conferencing – to express his own expert opinion on whether the Project would be value accretive: [note: 74]

MR HAYLER: ... to the extent that my report is aimed at dealing with new evidence that came in with the witness statements – and that I'm saying this is value accretive – Mr Reid is actually disagreeing with me and continuing to deduct the cost of the structure.

I mean, Mr Reid is his own man, I can't – but I'd say it seems strange that he wouldn't at least comment on whether the project would be value accretive.

MR LIM: Mr Reid, I put it to you that the redevelopment project comprising the enclosure and the MRF facility is value accretive.

MR REID: Management have advised that that is the case.

76 I therefore reject the defendants' submission that Mr Reid used the term "value accretive" to mean no more than merely "value enhancing". [note: 75] Mr Reid's evidence, read in context, contains unambiguous responses to points put to him by Mr Lim on behalf of the plaintiffs to the effect that the Project or some component of it would be value accretive, albeit only in a potential or marginal sense. Moreover, the plaintiffs correctly point out that Mr Reid had later to agree reluctantly that the Project would stabilise Biofuel's possession of the Shipyard site (see [59] above) and thereby add value to the company. [note: 76] That is consistent with an understanding and use of the term "value accretive" in its true sense. Further, during cross-examination, Mr Reid accepted the force of the plaintiffs' suggestion that the first defendant would have been foolish and irrational to invest in a project which was not expected to be value accretive. [note: 77]

77 I also find that Mr Reid was unreasonable in assuming in his reports that the Project was purely remedial in nature in the sense that it was conceived only to address NEA's requirement that Biofuel house its wood waste: see [59] above. As the plaintiffs have pointed out, [note: 78] that assumption was based solely on instructions from the first defendant. [note: 79] If that assumption were true, then the Project can only have been value negative. But the objective evidence shows that the Project is value accretive, and more broadly, that Biofuel had good financial prospects at or around the valuation date. Mr Hayler summarised this objective evidence, which I accept as credible, in his third report. His point was that this evidence was inconsistent with Mr Reid's opinion that Biofuel was in dire financial straits, arising chiefly from the cost of the Project: [note: 80]

> Mr Reid's position however appears inconsistent with the facts below:
>
> · Tenda converted its debt to equity despite the fact that debt has a higher claim on winding up, whilst equity benefits from improved performance;
>
> · in May 2015, Maybank was willing to grant the Company various credit facilities in excess of SGD 20 million, subject to certain conditions (the "Maybank Offer");
>
> · [The first defendant] was willing to consider providing his private residence as security under the terms of the Maybank Offer;
>
> · the forecasts presented by Biofuel Industries to Maybank indicate revenue growth far exceeding the historical growth;
>
> · during my site visit, [the first defendant] explained that the management of Biofuel Industries had plans to invest in the business through the Redevelopment Project;
>
> · two years have passed since the valuation date and the business continues to operate, and further, no sale, for any sum, or voluntary liquidation of Biofuel Industries has occurred;
>
> · the FY2015 profit and loss and balance sheet appear to indicate that hire purchase equipment had been taken on; and
>
> · this case continues to be fought at, I assume, considerable expense over shares that according to Mr Reid are worthless.

78 Mr Hayler mentions two facts relating specifically to the Project which I should elaborate on. These are: (i) the offer of a loan to Biofuel by Malayan Banking Berhad ("Maybank") and (ii) the first defendant's willingness to guarantee the loan. First, it is clear to me that Biofuel, in the eyes of

independent and reputable third party lenders, had a viable and profitable business and was capable of servicing substantial loans in or around July 2014. In February 2014, Hong Leong Finance Ltd ("Hong Leong") was sufficiently confident to lend Biofuel $5.3m by way of a mortgage loan to repay a debt. [note: 81] Then in 2015, Maybank was willing to offer Biofuel a loan in the sum of $23m to finance the Project. Maybank's offer is contained in a letter of offer dated 10 April 2015, superseded in short order by a letter of offer dated 13 May 2015. [note: 82] Biofuel's directors resolved on 21 December 2015 to accept the offer contained in Maybank's second letter. [note: 83] In my judgment, Hong Leong's and Maybank's willingness to extend substantial loans to Biofuel around the valuation date (*ie* 29 July 2014) is a clear expression of their confidence in Biofuel's financial and commercial value. [note: 84] I cannot ignore that confidence in assessing whether the Project was value accretive and whether, more broadly, Biofuel's share value at that time was indeed nil as Mr Reid suggests. This is despite the fact that Biofuel, for unknown reasons, did not eventually draw down on the Maybank loan. [note: 85] The important point is that Maybank was prepared to lend, and not whether Biofuel actually borrowed.

79 The defendants submit that I cannot draw any inference from Maybank's willingness to lend to Biofuel because Maybank did not perform due diligence before issuing its letters of offer to Biofuel. [note: 86] They raise in their written submissions, for the first time in these proceedings, the allegation that Maybank in making the offer relied on a valuation report on Biofuel which was based on an erroneous title search which misrepresented Biofuel's legal interest in the Shipyard site. [note: 87] This allegation was untested at trial. I therefore accept the plaintiffs' invitation to disregard it. [note: 88]

80 In any event, Mr Bryan Lee, Biofuel's financial manager, [note: 89] accepted during cross-examination that Biofuel had accepted Maybank's offer knowing it was capable of satisfying the conditions which Maybank had attached to it. [note: 90] Those conditions comprise Maybank's standard terms and conditions as well as conditions specifically relating to Biofuel requiring it to maintain a certain level of business. [note: 91] After that concession, he was unable credibly to maintain his position, set out in his affidavit of evidence in chief, that Biofuel's acceptance of Maybank's offer was a mere formality performed at Maybank's specific request. [note: 92] Moreover, banks are not in the habit of issuing letters of offer with conditions which they know cannot be fulfilled. There is therefore no merit to the defendants' suggestion that the Maybank letters of offer are no evidence of Biofuel's financial standing at or around the valuation date.

81 Next, connected to Maybank's letters of offer is the fact that the first defendant represented his unconditional willingness to Maybank to guarantee personally Biofuel's debts to Maybank as a condition of the Maybank loan. [note: 93] As the plaintiffs correctly observe, the first defendant was not in any way compelled, whether by the JTC or the NEA, to take on that guarantee. He did so as a freely-made business decision. [note: 94] This means that the first defendant personally considered that guaranteeing the loan taken out to finance the Project was a risk worth taking. Mr Reid accepted this point. [note: 95] Given that the first defendant obviously thought guaranteeing a loan to pursue the Project to be worthwhile, Mr Hayler was more than justified in regarding the Project as, at the very least, value neutral for the purpose of his DCF calculation.

82 Finally, even if the cost of the Project should be taken into account, it would be wholly inappropriate to deduct the entire $20.3m estimated cost from Biofuel's equity value. This is so for two reasons. First, Mr Reid took the figure of $20.3m from an outdated quotation which was obtained nearly two years before the date of his and Mr Hayler's reports. [note: 96] If Mr Reid was able (and, as

I have held, is permitted) to take into account hindsight information for other aspects of his report (see *eg* [98] to [108] below on tipping fees), there is no reason he could not have obtained a more recent quote for the cost of the Project. Second, Mr Reid has admitted that, contrary to the position taken in his reports, even if the figure of S$20.3m were assumed to be accurate and to be properly deducted from the equity value, the deduction should be amortised and time-valued: [note: 97]

MR LIM:	So Mr Reid, do you still think it's appropriate or reasonable for you to summarily deduct and truncate Mr Hayler's valuation by 20.3 million, all at one shot?
MR REID:	The more correct method would be to time value the payments when the project is actually starting and put that into the cash flow exactly when the project is going to do and then discount those – the cash outflows.
MR LIM:	And this was not done in your estimations, correct?
MR REID:	No it wasn't. I don't know when the project is to begin.
COURT:	Could you have made a reasonable assumption upon enquiry with the management?
MR REID:	I could have, Your Honour, and frankly, that could have been a better approach. I accept that.

83 For these reasons, I find that Mr Hayler was justified in not considering the cost of the Project in his DCF analysis on the basis that the Project would have been at least value neutral. There is therefore no basis for Mr Reid's position that a sum of $20.3m should be deducted from Biofuel's equity value.

(2) Future business with Roxol

84 The next issue is whether it is reasonable for Mr Hayler to take into account Biofuel's future business with Roxol in his DCF analysis. That resulted in the most significant change which Mr Hayler made to his DCF analysis between his second and his third report. While Mr Hayler in his third report moderated the projection of revenue arising from Biofuel's usual business in view of Biofuel's modest actual growth in FY2015, his decision to include for the first time cash flows arising from Biofuel's future business with Roxol resulted in a net increase in the value of both Biofuel's free cash flows in the discrete forecast period and in the terminal value. That in turn enhanced Biofuel's equity value.

85 The evidence for Biofuel's business with Roxol is contained in five sets of documents, corresponding to five sales of wood chips by Biofuel to Roxol between November 2015 and May 2016. [note: 98] Each sale involved the delivery by Biofuel to Roxol of anywhere between 5,293 mt and 6,593 mt of wood chips. Each set of documents includes a written contract between Biofuel and Roxol for the sale of 5,500 mt of wood chips (more or less 10%) to be delivered on a certain date at the price of US$52.50 per tonne. [note: 99] Each contract is accompanied by a certificate attesting to its authenticity [note: 100] and by two invoices. One invoice shows the purchase price payable by Roxol to Biofuel. The other invoice shows the freight payable by Biofuel for delivery of the goods. [note: 101]

86 On the basis of the sales figures contained in these documents, Mr Hayler revised his forecast of Biofuel's annual gross profit for the discrete forecast period to include profit received from the sale

to Roxol of a postulated average of 5,500mt of wood chips every month in perpetuity beginning from FY2017. For convenience, I will call this the "Roxol projections". Next, to factor in "additional export business risks", Mr Hayler assumed no growth, not even for inflation, in the value of Biofuel's future business with Roxol. [note: 102] Mr Hayler also made the point in his report that Biofuel in substance had two businesses: (i) a low-risk collection and processing business; and (ii) a higher risk export business. [note: 103] He said that each of the two businesses could, with sufficient information, be modelled separately with a separate discount rate for each, rather than being modelled together using a single discount rate of 13.2% as he had earlier done.

87 The defendants make two principal arguments against Mr Hayler's Roxol projections. First, they submit that the court should give no weight to Biofuel's possible future business with Roxol because there is no guarantee that Roxol will be a returning customer. [note: 104] Second, they submit that Mr Hayler in any event overestimated the gross profits arising from Biofuel's future business with Roxol.

88 On the first point, the defendants argue that in the absence of a long-term sales agreement between Biofuel and Roxol or an established history of both entities doing business together, there is no basis for Mr Hayler's assumption that sales to Roxol will produce income in perpetuity for Biofuel. In response, the plaintiffs say that there is equally no evidence that Biofuel will have no new customers. [note: 105] The plaintiffs also add that the Roxol business is part of Biofuel's goodwill, and therefore Mr Hayler was entitled to take it into account in his DCF analysis. [note: 106]

89 I reject the defendants' submission that Mr Hayler had no basis on which to make the Roxol projections. The fact that Biofuel entered into and performed five contracts for the sale of wood chips to Roxol over the six months from November 2015 to May 2016 constitutes sufficient evidence upon which to infer some degree of regularity in demand by Roxol for Biofuel's wood chips. I accept, however, that it is more difficult to say that this evidence justifies projecting a monthly income from Roxol in perpetuity. Mr Hayler accepted that it was possible that Roxol may never place another order for wood chips with Biofuel again. [note: 107] I may have taken a different view had it been proven that Roxol had placed regular and frequent orders with Biofuel for a substantially longer period of time, say at least two or three years. That was not, however, the evidence.

90 But I also disagree with the plaintiffs that the possibility of attracting new customers other than Roxol may properly be taken into account in, or otherwise used to justify, the Roxol projections. These projections amount to a specific forecast of future business with a specific customer. It cannot legitimately be used by a side wind as a proxy for a general increase in sales with Biofuel's general body of customers. The Roxol projections must therefore be justified by evidence pertaining to Roxol and not by evidence pertaining to any other customer or to Biofuel's general body of customers. Nevertheless, for the overarching purpose of arriving at a fair value, I accept the plaintiffs' general point here and bear in mind that even the first defendant agreed that it was possible for Biofuel to continue to find new customers in the future as it had over the years. [note: 108] On a balance, I therefore find that Mr Hayler had a reasonable but weak basis for making the Roxol projections, and I will have to take into account this weakness below: see [42] above.

91 The defendants say that Biofuel's last shipment to Roxol was in August 2016 and that, since then, there have been no more sales or shipments to Roxol. [note: 109] The defendants make this assertion to undermine an existing factual basis for the Roxol projections, and so they bear the evidential burden of proof or the "tactical onus to contradict, weaken or explain away the evidence that has been led" by the plaintiffs: *Cooperatieve Centrale Raiffeisen-Boerenleenbank BA (trading as Rabobank International), Singapore Branch v Motorola Electronics Pte Ltd* [2011] 2 SLR 63 at [30]. I

find that they have failed to discharge this burden. The basis for the allegation is hearsay evidence which was not tested at trial: Mr Reid simply states in his second report that he was instructed by Mr Bryan Lee that this allegation was true. [note: 110] Mr Bryan Lee did not himself make that allegation either in his affidavit of evidence-in-chief or at trial. I therefore disregard it.

92 I appreciate that Mr Hayler attempted to take into account some of the risks concerning the Roxol business which I have alluded to by assuming no growth in that business. But Mr Reid is correct to point out that Mr Hayler's calculation of the terminal value assumes some growth in the Roxol business after FY2020. [note: 111] This is because the terminal value incorporates a terminal growth rate of 4.99%, and the base value used to calculate the terminal value is the value of discounted cash flow for the final year in the discrete forecast period, and that value takes into account the gross profits from the Roxol business that year: see [47] above. And Mr Hayler accepted this criticism at trial. [note: 112] Accordingly, I have to agree with the defendants that the Roxol projections are overly optimistic.

93 I turn now to the defendants' second principal submission on the Roxol projections. They submit that Mr Hayler in any event failed to take into account the cost of goods sold, comprising the cost of agent commission and the cost of preparing and processing the wood chips for sale to Roxol, thereby overestimating the gross profits of this business. While Mr Hayler does not concede that he has overlooked these costs, he accepts that Mr Reid is asserting these as additional costs which Mr Hayler should have taken into account. [note: 113] In other words, Mr Hayler does not take the position (although the plaintiffs do) that he has already taken some or all of these additional costs into account in making the Roxol projections. So the only question here is whether the evidence of these additional costs is credible.

94 In my judgment, the evidence of the cost of agent commission and cost of goods sold is inadmissible as hearsay. The hearsay point is plain from Mr Reid's second report. He says there simply that he was "advised by Mr Bryan Lee" on the likely cost of agent commission. [note: 114] During cross-examination, Mr Reid admitted that he had simply received instructions from Mr Bryan Lee, without documentation, on the freight charges for Biofuel's Thailand customer which he had used to estimate the likely cost of goods sold for Roxol. [note: 115] In any event, even if it is not hearsay, the evidence is unsupported by any documentation.

95 In response, the defendants contend that Mr Reid's unsubstantiated calculations of the cost of agent commission and cost of goods sold were the best the defendants (and Mr Reid) could do in the time available given that the Roxol projections were produced late in the proceedings. The Roxol projections are contained in Mr Hayler's third report dated 27 September 2016, which was produced on the fifth day of trial. Mr Reid received the report only on the evening of that day. [note: 116] The defendants submit that since the Roxol invoices had been annexed to Mr Reid's first report dated 10 June 2016, Mr Hayler ought to have sought more information on Roxol if he had regarded it as a key customer of Biofuel and ought to have made the Roxol projections earlier in his second report dated 8 July 2016. [note: 117]

96 Apart from the fact that these arguments do not change the quality of the evidence, it appears that the defendants themselves were in fact largely responsible for the lateness of Mr Hayler's third report. The plaintiffs point out that the defendants provided Biofuel's unaudited financial statements for FY2015 to them only on 13 September 2016. [note: 118] It is those statements, containing significant hindsight information, which led Mr Hayler to produce his third report with a modified

forecast of Biofuel's discounted cash flow. [note: 119] Moreover, it is not as if Mr Hayler made no mention of Roxol in his second report dated 8 July 2016. While he did not make a new projection, he said specifically in that report: [note: 120]

> Further, the new customer, Roxol, generates more than four times the gross profit per tonne …. On that basis my forecast growth and hence valuation may be significantly understated.

This statement, in my view, would have given the defendants at least some notice (since 8 July 2016) that the profits generated by Roxol were going to be a fact relevant to the assessment of Biofuel's value. They therefore cannot be said to have had little time to prepare to meet the substance of the Roxol projections. I therefore reject the defendants' submissions on this point.

97 For these reasons, I find that the Roxol projections are rightly included in the DCF analysis but are, as I have said, overly optimistic. The projections do not sufficiently take into account the possibility that Roxol may not be a returning customer. To take this risk into account, I increase by 3% at a compounded rate the discount factors applicable to the free cash flows for FY2017 to FY2020 and by 3pp the discount rate for determining the terminal value. This adjustment is explained in greater detail below at [129]. I reject the defendants' other submissions on the Roxol projections.

(3) Alleged fall in Biofuel's tipping fees

98 An essential part of Biofuel's business is the fee it charges to receive waste wood at its premises for disposal. The evidence is that customers pay Biofuel an average tipping fee of $60 per tonne of waste wood so disposed. [note: 121] The defendants say that since the time at which the plaintiffs invested in Biofuel, the average tipping fee it earns has fallen from $60 per tonne to $45 per tonne. This appears to be supported by Biofuel's cash flow budget for October 2008 to February 2009. [note: 122] This is ultimately irrelevant to the valuation exercise because the fall took place before the valuation date. In any event Mr Reid accepts that Mr Hayler performed his DCF analysis on the footing of the tipping fee being $45 per tonne. [note: 123] But the defendants also say that after June 2016, Biofuel's average tipping fee fell further from $45 to $10 per tonne. [note: 124] The issue is therefore whether this allegation has been proven on the balance of probabilities. If it has, then the fall in tipping fees should be taken into account in the estimate by reducing Biofuel's projected annual revenue in the discrete forecast period, as Mr Reid proposes. [note: 125]

99 The defendants' main evidence of the fall consists of 15 tax invoices addressed to various clients who delivered waste to Biofuel's premises for disposal. [note: 126] The defendants did not disclose these invoices in discovery before trial. Instead, they tendered them only at trial, and even then at a very late stage. Four of the invoices bear dates between June 2014 and June 2015 and show tipping fees between $45 and $48 per tonne of "timber waste" or "horticultural waste". [note: 127] The remaining 11 invoices all bear the same date, 26 September 2016, and show tipping fees of between $5 and $15 per tonne for the same type of waste. [note: 128]

100 The plaintiffs say that the latter 11 invoices are unreliable evidence for a number of reasons. First, the plaintiffs say that not only are these invoices disclosed very late, they are all dated the same day, being 26 September 2016, during the course of the trial. They invite me to draw the inference that these invoices are not genuine but are recent fabrications to support the defendants' case. Second, even if the invoices are genuine, there is no evidence that the tipping fee of $10 applied any time before or after 26 September 2016. It is possible that the 11 invoices are evidence

merely of a one-off or one-day special rate charged only on 26 September 2016. The plaintiffs rely in particular on the fact that Biofuel's business development manager, Mr David Lee, specifically checked, approved and countersigned each of these 11 invoices but not the four other invoices which are dated between June 2014 and June 2015 and which show significantly higher tipping fees of $45 to $48 per tonne. [note: 129] The plaintiffs then highlight the following part of Mr Bryan Lee's cross-examination in which he accepts the limits of what the invoices tendered could prove: [note: 130]

Q. Okay. Mr Lee, when did the price change?

A. Somewhere in early of 2016.

Q. Early of 2016, is it?

A. Yes.

Q. Is there any document here today to prove that?

A. I didn't bring it here.

Q. In fact, Mr Lee, for all we know, the price only changed on 26 September itself, correct?

A. Yes, based on these 15 invoices.

101 I reject the plaintiffs' submission that these invoices are fabricated. If the defendants had intended to fabricate invoices, it appears to me unlikely that they would have fabricated 11 invoices for a single date.

102 However, I agree with the plaintiffs that the invoices do not prove that there has been a permanent drop in the tipping fees that Biofuel could charge its customers. This appears instead to me to be a case of selective disclosure. What strikes me about these invoices is that the defendants have shown themselves capable of producing invoices issued as far back as June 2014. Yet, in order to persuade me that there has been a permanent drop in tipping fees, they have chosen not to produce any invoices issued in 2016 other than the 11 invoices issued on that single day, 26 September 2016. I accept the plaintiffs' submission that the general import of these invoices is highly suspect.

103 The plaintiffs further contend that even if the drop in tipping fees did take place, it happened only in 2016, *ie* after the valuation date, so the drop "should not be retrospectively utilised by the Defendant now to justify a low valuation at the time of the oppressive acts in July 2014". [note: 131] I disagree. As a matter of principle, for the reasons I have explained at [52] and [54] above, I would have taken the drop in tipping fees into account, if I was of the view that the drop had been proven on the balance of probabilities, as hindsight information relevant to my assessment of Mr Hayler's DCF analysis. In fact, the plaintiffs are taking inconsistent positions if they ask me to disregard a drop in tipping fees in 2016 but at the same time to consider Biofuel's business with Roxol, both of which happened (or are said to have happened) after the valuation date. I therefore reject the plaintiffs' submission in this regard.

104 My final observation here relates to Mr Reid's view of his adjustment of Mr Hayler's DCF analysis to take into account the alleged drop in tipping fees. It appears to me that Mr Reid did not himself believe that the equity value of negative $33.9m which he derived after that adjustment was a realistic representation of its true value at all. This emerged after I asked Mr Reid a short series of

questions, as I was fully entitled to do (s 167 of the Evidence Act (Cap 97, 1997 Rev Ed); *Hum Weng Fong v Koh Siang Hong* [2008] 3 SLR(R) 1137 at [29]), especially since the evidence was technical in nature. As Denning LJ (as he then was) said in *Jones v National Coal Board* [1957] 2 QB 55 at 65:

> [A] judge is not only entitled but is, indeed, bound to intervene at any stage of a witness's evidence if he feels that, by reason for the technical nature of the evidence or otherwise, it is only by putting questions of his own that he can properly follow and appreciate what the witness is saying.

105 To elaborate, I note that the alleged fall in tipping fees accounts for the most significant adjustment which Mr Reid made to the projected annual revenue in the discrete forecast period in Mr Hayler's DCF analysis. This can be seen from the table in Mr Reid's second report which sets out this deduction, and the resulting equity value of negative $33.9m. [note: 132] Mr Reid's adjustment is in effect to deduct $57m from the equity value of $23.1m which Mr Hayler calculates (see [48] above). [note: 133] A reasonable observer would have considered this highly unrealistic given that Biofuel continues today to be a going concern and given that Mr Bryan Lee testified that the company has had excellent prospects since 2012. [note: 134]

106 That aside, it appears from the following exchange I had with Mr Reid that even he did not believe that Biofuel was worth negative $33.9m: [note: 135]

COURT:	… I'm asking about your report, or at least this table [*ie* the table summarising Mr Reid's proposed adjustments to Mr Hayler's DCF analysis], then. Aren't you putting it forward to me as a realistic representation of the company's prospects over the next five years, four years?
MR REID:	I'm putting it to your Honour as it is adjusting Mr Hayler's projections for one – one scenario and the scenario is that the 2015 FY results had tipping charges at $45 a tonne and it is on that basis that the – he has prepared his forecast based on FY 2015 plus 5 per cent. Now, if FY 2015 included tipping charges at $45 a tonne, and they are now $10, there is a need to adjust the forecast to reflect the drop of the tipping charges by $35 a tonne, and this is what this does.
COURT:	Right, and you've adjusted it and you put this forward as being accurate with that adjustment?
MR REID:	I have put it as a scenario, as I have done throughout my report. My report –
COURT:	Mr Reid, is it accurate or not accurate?
MR REID:	It amends Mr Hayler's projections to reflect my understanding of a drop in the tipping charges.
COURT:	To reflect your understanding of the accurate position of the defendants, today and for the next four years?

MR REID: To reflect – I can't do any more, I'm sorry, your Honour by saying that it adjusts the tipping charges. That's what it does, from 45 to $10.

COURT: So that's all it does?

MR REID: Yes, it does.

COURT: That's all it does?

MR REID: Yes.

COURT: So you're not putting it forward as an accurate reflection of the company's state going forward?

MR REID: That is right.

COURT: You are not putting it forward on that basis?

MR REID: I'm putting forward as one of many scenarios that I'm putting forward to the court to say if this adjustments are made, this is the impact.

COURT: Okay.

107 It is clear from this exchange that Mr Reid was not prepared to commit himself to the position that his adjustment for the alleged fall in tipping fees yielded a fair equity value for Biofuel. This lack of commitment applies to all the results he obtained for all the adjustments he proposed. But it is most stark in relation to his adjustment for the alleged fall in tipping fees because of the size of that adjustment ($57m), because of the effect of the adjustment on the equity value (turning a significantly positive equity value significantly negative) and because of his own answers in the exchange I have quoted above. And that is why I have chosen to make this observation here. In positive terms, Mr Reid was prepared to say only that he had arrived at his results by taking into account instructions on Biofuel's business which he had received from Mr Bryan Lee. The inference that I draw from this aspect of Mr Reid's expert opinion evidence, therefore, is not that his opinion is incredible, but that Mr Bryan Lee's instructions to him on the tipping fees are unlikely to have been accurate in the light of the objective evidence concerning Biofuel's good prospects (see [77] above). This, together with the fact that those instructions are hearsay, further undermines the defendants' case in relation to the alleged fall in tipping fees.

108 For this reason and the reasons above, I disregard the alleged fall in tipping fees in my assessment of the fair value of Biofuel's shares. I find that the defendants have not succeeded in proving on the balance of probabilities that there was in fact such a fall.

The discount rate

109 I turn now to the discount rate. There is one main issue here, which is whether Mr Hayler used a reasonable cost of equity in calculating the appropriate discount rate to be applied in his DCF analysis. I will first briefly explain the method for calculating a company's cost of equity before examining the parties' submissions on the expert evidence.

110 The discount rate chosen by Mr Hayler is the weighted average cost of Biofuel's capital or WACC. As I have mentioned (at [46] above), WACC is a measure of a company's return to those who finance its business by both debt and equity, *ie* its lenders and shareholders. It is common ground

that the formula for calculating the WACC of a company is set out and explained in Mr Hayler's first report as follows: [note: 136]

> The formula for calculating a post-tax WACC is:
>
> $$WACC = K_e\left(\frac{E}{D+E}\right) + K_d(1-T)\left(\frac{D}{D+E}\right)$$
>
> Where:
>
> K_e is the cost of equity, i.e. the return required by shareholders;
>
> K_d is the pre-tax cost of debt, i.e. the return required by debt holders;
>
> E is the market value of equity;
>
> D is the market value of debt; and
>
> T is the marginal tax rate on profits.

111 The defendants contest the value of the cost of equity (K_e) which Mr Hayler uses in applying the above formula. A company's cost of equity essentially denotes the rate of return expected in the capital market on investments that have similar relevant risks. [note: 137] It can be seen from the formula above that the greater the cost of equity, the greater the WACC, *ie*, the greater the discount rate to be applied to Biofuel's free cash flows.

112 Cost of equity is commonly estimated using the capital asset pricing model ("CAPM"). This model hypothesises that the expected or required rate of return on an individual security is equal to the risk-free return plus an equity market risk premium adjusted to reflect the systemic volatility of the particular security concerned. For the purposes of Biofuel, Mr Hayler modifies the CAPM approach to take into account the risks associated with smaller companies and also the country-specific risks of investing in Singapore. His modified formula for calculating Biofuel's cost of equity, which again is not disputed by the parties, is set out and explained in his first report as follows: [note: 138]

> Under the traditional CAPM approach, the cost of equity of a company may be expressed as follows:
>
> $$K_e = R_f + \beta_e x\left[E(R_m) - R_f\right]$$
>
> Where:
>
> R_f represents the risk-free ratio (usually taken as the market yield on a government security of the same maturity as the investment being considered);
>
> β_e ("beta") represents the relative risk of the company being valued as compared to the risk of the market portfolio – a security with a beta of 1 would be expected to change value in line with the market;
>
> $E(R_m)$ represents the expected rate of return on a market portfolio; and

$E(R_m) - R_f$ represents the equity market risk premium ("EMRP") i.e. the return the market portfolio is expected to generate in excess of the risk free rate.

Empirical studies indicate that the CAPM may understate the estimated cost of equity (K_e) for smaller companies. I have therefore modified the CAPM formula to include what is termed a small stock risk premium ("SSRP").

Additionally I have considered whether it is necessary to apply a country risk premium ("CRP") to account for the country-specific risks of investing in Singapore.

Adjusting for the above, the cost of equity is expressed as follows:

$$K_e = R_f + \beta_e x\left[E(R_m) - R_f\right] + SSRP + CRP$$

(1) Small Stock Risk Premium

113 The parties disagree on whether Mr Hayler has used an appropriate small-stock risk premium ("SSRP") for calculating Biofuel's cost of equity. The SSRP reflects the excess return that investing in small companies provides over a risk-free rate. Excess return compensates investors for taking on a higher risk of equity investing. The more specific relevant risk which the SSRP reflects is risk associated with smaller firm size. Accordingly, SSRP values are derived from statistics on premiums which are ordered by firm size.

114 According to Mr Hayler, the best-known and probably most widely used series of statistics about firm size premiums is published by Ibbotson Associates, a financial research and information firm. [note: 139] The Ibbotson statistics estimate the size of the SSRP using a historical analysis of US share prices. The statistics are divided into ten deciles of companies, ranked by market capitalisation. In the following passage, Mr Hayler explains his reason for choosing for Biofuel the SSRP for companies in the 10th decile or Decile 10, which is 6.01%: [note: 140]

> Companies in the 10th decile of Ibbotson Associates' analysis have market capitalisations of USD 339 million or below. Biofuel Industries' equity value falls within this range. Ibbotson Associates estimates that SSRP for companies in this decile is 6.01%. I have adopted this SSRP in my analysis.

115 The defendants submit that Mr Hayler unreasonably omitted to consider placing Biofuel into smaller sub-categories within Decile 10 in any of his reports, and in so doing, he attempted deliberately to mislead the court. [note: 141] Ibbotson divides Decile 10 into four sub-deciles, classified by smaller ranges of market capitalisation of between zero and US$300m. Relying on Mr Reid's opinion, the defendants submit that Mr Hayler should have adopted the SSRP for Decile 10z which is for companies with a market capitalisation between US$3m and USD$115.9m. [note: 142] The SSRP for Decile 10z is 11.98%. The difference between this figure and the SSRP for Decile 10 (6.01%) is 5.97pp. Using the SSRP for Decile 10z would therefore increase Biofuel's cost of equity by close to 6pp. This is because the SSRP is incorporated into the cost of equity by simple addition, as can be seen from the formula at [112] above. Applying the formula at [110] above, the defendants' suggested adjustment has the effect of increasing Biofuel's WACC from 13.2% to 18.1%. [note: 143] These figures are not disputed by the parties.

116 I reject the defendants' submission that Ibbotson's Decile 10z is appropriate. I prefer instead

Mr Hayler's explanation in cross-examination as to why Decile 10z is clearly inappropriate. He explained that Decile 10z generally applies to large companies which are on the brink of insolvency or actually in liquidation. [note: 144] Mr Reid was expressly given an opportunity to rebut Mr's Hayler's view on Decile 10z. But he declined to address that point, preferring instead to state only that he believed that it was appropriate in principle to use sub-categories within Decile 10: [note: 145]

MR JONES:	I'd like Mr Reid to comment generally on the … SSRP in general, your Honour, please. Mr Reid, please comment, please give your expert opinion.
...	
MR REID:	… I believe that there is a good basis for smaller companies to have a higher risk premium and if within the 10th decile there is a subcategory, I believe it is appropriate to use it and I have in the past.
COURT:	So you don't want to address Mr Hayler's specific point that subcategory 10z is for companies that are virtually on the brink of insolvency or in insolvency?
MR REID:	No, I don't want to address that.
COURT:	Okay.

117 Given that Mr Hayler had good reasons for not using the SSRP for Decile 10z, I find that it was appropriate for him not to have referred to it in any of his expert reports. If he had referred to it, his analysis would no doubt have appeared more persuasive and complete. But he cannot be expected to have anticipated in his reports every issue which the defendants would raise, not least when Decile 10z itself was not even mentioned in Mr Reid's first report. Mr Reid wrote that report in part to respond to Mr Hayler's first report in which Mr Hayler had referred to Decile 10. In any event, any omission in regard to Decile 10z was remedied by Mr Hayler's oral evidence in which he explained why he thought Decile 10z was unsuitable. Accordingly, there is no basis on which the defendants may impugn Mr Hayler's credibility for his failure to refer to Decile 10z in any of his reports.

(2) Additional firm-specific risk premium

118 There is a second adjustment to the cost of equity proposed by Mr Reid which the defendants advanced at trial but did not pursue in their submissions. I should however discuss it briefly as it is of some substance and is relevant to the credibility of both experts.

119 In Mr Reid's second report, he suggested that 9pp should be added to Biofuel's cost of equity representing an additional risk premium to reflect the fact that Biofuel is a small undiversified private company. This is in addition to the additional 6pp from using the SSRP for Decile 10z which I have discussed and rejected above. Mr Reid relies on the second edition of a valuation treatise authored by Aswath Damodaran, a noted finance professor: Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (2nd Ed, 2002, John Wiley & Sons, Inc.) at 669. [note: 146] Professor Damodaran explains that statistically, from 1990 to 2000, there was a difference of 9pp between the average annual return on private equity and the average annual return on publicly-quoted stocks in the United States, and that this difference can be viewed as the premium for private firm risk which should be added to the cost of equity for a private company.

120 Mr Reid's reliance on this book was proven to be mistaken. The plaintiffs produced at trial the latest edition of the same book: Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (3rd Ed, 2012, John Wiley & Sons, Inc.). [note: 147] At page 674, Professor Damodaran revises materially the view expressed in the earlier edition. During cross-examination, Mr Reid accepted that he had cited an outdated authority and apologised for it. [note: 148] Mr Hayler explained that the figure of 9% was based on the significant returns achieved by private equity from investments in small and undiversified technology companies before the dot-com bubble burst. That took place around or shortly before the second edition of *Investment Valuation* was published. The result is the second edition overstated the difference between private equity and publicly quoted companies because it could not take into account the sharp declines in private equity returns after the dot-com bubble burst. [note: 149]

121 In the third edition of *Investment Valuation*, Professor Damodaran puts forward three alternative methods of making adjustments for private firm risk. The second of these methods is called the "build up approach". Although Mr Hayler did not refer to the third edition of Professor Damodaran's book in his reports, the build up approach is consistent with Mr Hayler's approach to calculating Biofuel's cost of equity and confirms its soundness. Professor Damodaran describes the build up approach (at 674) as follows:

> *Build up approach:* In this approach, you again start with the expected return from a conventional risk and return model, and add premiums to reflect the special risks associated with investing in small, private businesses. Two commonly used premiums are the small cap premium, reflecting the actual premium earned by very small, publicly traded companies over and above the market rate (about 4 percent to 5 percent between 1928 and 2010) and the illiquidity premium, reflecting the higher returns earned by less liquid, public investments (with liquidity measured in trading volume and bid-ask spreads).
>
> Adjusted cost of equity = Risk-free rate + Market beta × Equity risk premium + Small cap premium + Illiquidity premium

122 It can be seen that this formula corresponds broadly to the modified CAPM formula (see [112] above) which Mr Hayler used to calculate Biofuel's cost of equity. Instead of applying a small cap premium and an illiquidity (or lack of marketability) premium, Mr Hayler applied an SSRP of 6.01%. This is clearly permissible under the build up approach. Professor Damodaran does not seek to limit the types of premium which can be applied only to the small cap premium or the illiquidity premium. He gives these only as non-exhaustive examples. Moreover, Mr Hayler did attempt to take into account the lack of marketability of Biofuel's shares by proposing a deduction of 10% to 20% from the share price he arrived at. [note: 150] But as I have explained at [38] above, no discount for lack of marketability will apply in a share valuation exercise for the purpose of s 216(2) of the Act.

123 In the light of the above, I am satisfied that Mr Hayler's approach to and conclusions on Biofuel's cost of equity and WACC are reasonable. The defendants' criticisms of them and of Mr Hayler's credibility are unsupported and are rejected.

Calculation

124 The upshot of my analysis is that I accept that Mr Hayler's DCF analysis is broadly correct in its approach and in its assumptions, but needs to be adjusted in two important respects. First, it

should be adjusted to take into account the risk of losing the Shipyard site before and after 2034 and the Waterfront premises in 2024. Second, it should be adjusted to take into account the risk that Roxol may not place any orders with Biofuel in the future. As these are specific risks affecting specific parts of the DCF analysis, the proper approach in my view is to make adjustments to those specific parts in order to arrive at a fair value of Biofuel's shares. This I will call the targeted method of making adjustments. Next, to check the result I have obtained using the targeted method, I will calculate the fair value of Biofuel's shares using a more broad-brush approach, which I will call the extrapolation method.

Targeted method

125 I make two principal adjustments to Mr Hayler's DCF analysis to take into account the two risks I have mentioned above.

126 First, I increase the discount rate from Mr Hayler's original 13.2% to 18.2%. This increase of 5pp comprises two increases in the discount rate which I find appropriate to make. The first is an increase of 2pp representing the risk of losing the Shipyard site before and after 2034 and the Waterfront premises in 2024. In my judgment, 2pp is a fair figure given that neither party is able adequately to state the likelihood that Biofuel will be able to continue its operations at its two key properties. The second is an increase of 3pp representing the risk that Roxol may not place any orders with Biofuel in the future. Mr Hayler himself recommended a 3pp increase in the event that the court came to the view that Biofuel's business relationship with Roxol was riskier than he had considered it to be. Thus he states in his third report: [note: 151]

> If the Court perceives additional risk associated with the Philippines customer or the business as a whole, for illustrative purposes, a blended discount rate of 16.2% (i.e. with an indicative 3% premium over my 6% small company risk premium) would lead to an equity value of SGD14.2m, closer to the SGD10m to SGD11m in [my first report].

127 I then apply the adjusted discount rate of 18.2% to determine the terminal value. The formula for calculating the terminal value is well-established. While the formula is not stated in Mr Hayler's report, it is applied explicitly by Mr Reid when he calculates in his first report an alternative terminal value on the basis that Biofuel's free cash flows ought to be truncated at 2034: see [63] above. [note: 152] The formula may be expressed as follows:

$$TV = \frac{FCF_n(1+g)}{r-g}$$

In this formula, *TV* refers to terminal value. FCF_n refers to the free cash flow for the final year in the discrete forecast period. *g* refers to the terminal growth rate. In this case, it is undisputed that *g* is 4.99%. And *r* refers to the discount rate, which I have adjusted from 13.2% to 18.2%.

128 I do not apply the 18.2% discount rate to the free cash flows in the discrete forecast period. I take this approach for two reasons. First, I consider that the risk of losing the Shipyard site materialises significantly only beyond 2020, since the JTC has shown no signs of wishing to evict Biofuel in the near term, for the reasons provided at [65] above. In the same vein, I consider that the risk of losing the Waterfront premises materialises only in 2024 when the licence expires. That is beyond FY2020, being the final year of the discrete forecast period. Therefore, the added 2pp should feature as late as possible in the DCF analysis, and the latest possible component is the terminal value, which is an estimate of the present value of the future cash flows beyond the discrete

forecast period: see [44] above. Second, the risk of losing the Roxol business again materialises only from FY2017 onwards. Biofuel did perform actual sales with Roxol in FY2016 and the revenue from those sales contributes to Biofuel's free cash flow in that year. So the 3pp should be added to the discount rates applicable only to the free cash flows for FY2017 onwards.

129 Accordingly, the second principal adjustment I make is to increase by 3% at a compounded rate the discount factors applicable to the free cash flows for FY2017 to FY2020. At this point, I must state that neither expert has explained the method for calculating the discount factor applicable to the free cash flows in each year in the discrete forecast period. In particular, they have not explained how the discount factor takes into account the applicable discount rate or WACC, which is a different concept. If it were only the discount rate or WACC I were adjusting for the discrete forecast period, there would be no need to compound it, because the compounding effect is already taken into account in the standard DCF analysis. But what is clear to me from the evidence is that the discount factor is a multiplier which is applied to a year's free cash flow, which is the multiplicand. This is the method by which a discounted cash flow is derived from a free cash flow within the discrete forecast period. It is therefore fair and reasonable to increase the discount factor, *ie* the multiplier, by 3% at a compounded rate, for the years FY2017 to FY2020 to take into account the risk of losing the Roxol business from FY2017 onwards.

130 The two principal adjustments which I have made to Mr Hayler's DCF analysis are summarised in the following table. The original values, found in the rows labelled "Free Cash Flow" and "Original discount factor", are taken from Annexure B of Mr Hayler's third report, which sets out his calculation of Biofuel's equity value. Cash flow, value and debt figures are expressed in millions of SGD unless otherwise stated.

	FY2015	**FY2016**	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**Terminal value**
Free Cash Flow	-74	2,408	2,812	3,146	3,269	3,397	3,397
Original discount factor	0.94	0.84	0.74	0.65	0.58	0.51	0.51
Adjusted discount factor	0.94	0.84	0.72	0.61	0.53	0.45	0.45
Discount-ed FCF	-70	2,023	2,018	1,920	1,720	1,515	12,041
Enterprise value			21,168	*Share value rounded off to two decimal places* *Purchase price rounded off to nearest ten dollars*			
Net debt			8,790	**Share value**			$1.86
Equity value			12,378	**Purchase price**			$3,100,000

131 Therefore, applying the targeted method, I arrive at a purchase price of $3,094,580.45, on the basis that the plaintiffs own 1,666,667 out of the 6,666,667 existing shares in Biofuel or approximately 25% of Biofuel's shareholding as at the valuation date, 29 July 2014. I round that number up to $3.1m

for ease of computation, bearing in mind that this is necessarily an imprecise exercise. That is equivalent to rounding the price per share to $1.86.

Extrapolation method

132 I turn now to explain extrapolation method, which I have employed purely to cross-check the result I have obtained using the targeted method.

133 I begin by noting that in Mr Hayler's third report and in Mr Reid's second report, each expert has arrived at a different equity value by applying a different discount rate to the same set of free cash flows, *ie* the set calculated by Mr Hayler in his third report. I have found no reason to make adjustments to that set of free cash flows given that my findings on the cost of the Project, Biofuel's future business with Roxol and the alleged fall in Biofuel's tipping fees are largely against the defendants. Moreover, nobody has suggested in these proceedings that either expert has made any arithmetical errors in applying the DCF method in these two reports. Therefore, those equity values may be assumed to have been calculated from reliable base values and to have been calculated without arithmetical error. And I therefore have before me four plot points:

(a) A discount rate of 13.2% yields an equity value of $23.1m, according to Mr Hayler's third report at para 36;

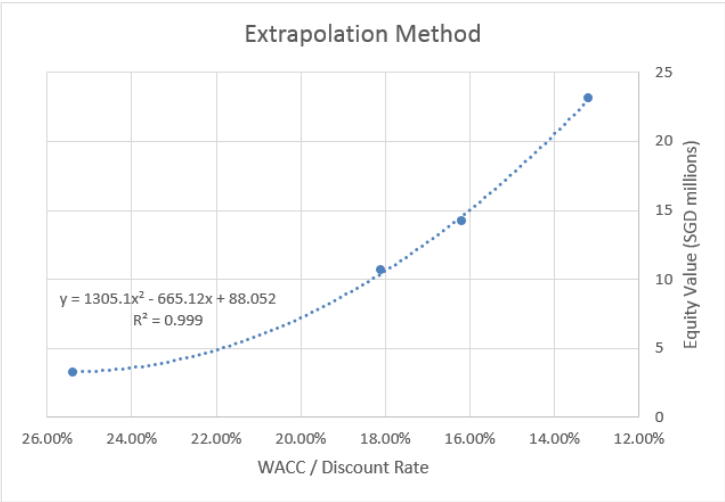
(b) A discount rate of 16.2% yields an equity value of $14.2m, according to Mr Hayler's third report at para 29;

(c) A discount rate of 18.1% yields an equity value of $10.695m, according to Mr Reid's second report at para 62; and

(d) A discount rate of 25.4% yields an equity value of $3.289m, according to Mr Reid's second report at para 62.

134 The extrapolation method, in essence, cuts through all of the variables in all of the equations in the DCF analysis and, assuming a particular set of free cash flow values, seeks to identify a direct mathematical relationship between a given discount rate and a given, correctly-derived, equity value.

135 I have plotted on a graph (reproduced below) the four plot points from the two experts. Each point represents one of the pairs of values stated at [132] above. I have also used a spreadsheet program to plot the trend line which best accommodates these four plot points.



136 It can be seen that the trend line enjoys a very close fit with the four plot points. The closeness of the fit, indicated by the coefficient of determination ($R^2 = 0.999$) on the graph, suggests that both experts used the same method to calculate Biofuel's equity value. That is only to be expected. It also suggests that the trend line can be used to approximate Biofuel's equity value for Mr Hayler's set of free cash flow values at other discount rates with a fairly high degree of accuracy.

137 Using the same spreadsheet program yields the following equation for the equity value, with *y* representing the equity value and *x* representing the discount rate: $y = 1305.1x^2 - 665.12x + 88.052$. Thus, solving the equation for a given discount rate as *x* enables one to obtain a close approximation of the equity value as *y*. The issue is therefore the proper discount rate which should be plugged in as *x*.

138 I take as my starting point the adjusted discount rate of 18.2% which I derived under the primary targeted method. I note that under the targeted method, the discount rate was used only to determine the terminal value, although specific adjustments were made to the discount rates in the discrete forecast period starting from FY2017. On the other hand, the discount rates which serve as plot points in the graph above were applied by the experts comprehensively (in accordance with the DCF method), *ie* to all free cash flows in the discrete forecast period as well as to determine the terminal value. It is therefore necessary to compensate for the difference in the premises upon which I have applied the discount rate under the targeted method to derive a discount rate to use in the extrapolation method. This can be done approximately by using a value for *x* which is slightly lower than 18.2% in the equation. In my judgment, 17% is a suitable value.

139 Setting *x* equal to 17% or 0.17, the equation yields approximately 12.699 as the value of *y*. This means that applying a 17% discount rate under a DCF analysis of the type undertaken by both experts, all other things being equal, would yield an equity value of approximately $12.7m. That translates to a purchase price of $3.17m for the plaintiffs' 25% shareholding. These figures are very close to the equity value and purchase price which I have derived under the targeted method, which are $12.38m and $3.1m. In my view, this verifies the correctness of the latter figures as well as the process by which they were calculated.

140 As the targeted method founded on the experts' evidence is my primary method for making adjustments based on my assessment of the parties' submissions and the evidence, I use the results obtained under that method to make the buy-out order in the present case.

Judgment

141 I therefore make the following orders, having regard to the plaintiffs' prayers for relief in their amended Statement of Claim dated 2 September 2016: [note: 153]

(a) I order the first and second defendants, under s 216(2)(*d*) of the Act, to purchase the plaintiffs' 1,666,667 shares in the third defendant at $1.86 per share at a total purchase price of $3.1m broken down as follows:

(i) The first and second defendants shall be jointly and severally liable to purchase 300,000 shares in the third defendant from the first plaintiff at a total consideration of $558,000;

(ii) The first and second defendants shall be jointly and severally liable to purchase 300,000 shares in the third defendant from the second plaintiff at a total consideration of $558,000; and

(iii) The first and second defendants shall be jointly and severally liable to purchase 1,066,667 shares in the third defendant from the third plaintiff at a total consideration of $1,984,000.

(b) I dismiss prayer 3, which seeks as an alternative remedy an order to wind up the third defendant under s 216(2)(*f*) of the Act; and

(c) I dismiss prayers 4 and 5, which seek damages, equitable compensation, and an account of profits for the first defendant's alleged breach of fiduciary duty.

I dismiss prayers 4 and 5 on the basis that the plaintiffs have abandoned these prayers. [note: 154]

Costs

142 Having foreshadowed my judgment and a summary of my reasons to the parties, I then heard them on costs. I have, somewhat unusually under the current costs regime, ordered that the costs which I have awarded be taxed. It appears to me that taxation is necessary because the cost schedules for both parties appear to propose excessive sums for party and party costs. I therefore asked the parties to focus their costs submissions on liability for costs.

143 The trial of this matter commenced on Tuesday, 20 September 2016. Just before trial commenced, on Friday, 16 September 2016, the plaintiffs served an offer to settle on the defendants. [note: 155] They offered to settle this matter by selling their shares in Biofuel to the first and second defendants at $1.30 per share. That offer did not expire, was not withdrawn and was not accepted by the plaintiffs. The plaintiffs have, of course, beaten their offer. I have ordered the defendants to purchase the plaintiffs' shares at $1.86 per share. Therefore, pursuant to O 22A r 9(1) of the Rules of Court (Cap 322, R 5, 2014 Ed), the plaintiffs ask for their costs: (a) assessed on the standard basis from 21 April 2015 (when they commenced suit) up to the date on which they served their offer to settle (16 September 2016); and (b) assessed on the indemnity basis from 16 September 2016 until the date of my decision. Needless to say, regardless of the plaintiffs' having beaten the offer to settle, I retain the ultimate discretion whether to order costs on these bases: O 22A r 12 of the Rules of Court.

144 The defendants submit that I should disregard the plaintiffs' offer to settle because it was not a genuine attempt to reach a compromise for two reasons: (i) because of the price at which the plaintiffs offered to sell their shares; and (ii) because the plaintiffs made the offer on the eve of the trial. [note: 156] I reject both reasons.

145 I find that the price of $1.30 which the plaintiffs offered was a genuine attempt at compromise. That price incorporated a substantial discount both to the plaintiffs' best case when the offer was put forward and also to the ultimate price which I have now found. In his first report, Mr Hayler opined that the value of shares in Biofuel was $1.50 to $1.65, if there was to be no discount for non-marketability. [note: 157] I have held that there is to be no such discount (see [38] above). Mr Hayler's first report was available to the defendants at the time of the offer. The price which the plaintiffs offered, of $1.30 per share, is about 20% below the prices put forward by Mr Hayler in that report. The price which the plaintiffs offered is also lower than what I have found to be the true value of Biofuel's shares, which is $1.86 per share. The plaintiffs' offer was eminently reasonable at the time it was made.

146 Further, there is no basis – whether as a matter of principle or authority – to argue that an offer to settle is not a genuine attempt to compromise simply because it is served shortly before the trial and regardless of the content of the offer. The defendants rely on *CCM Industrial Pte Ltd v Uniquetech Pte Ltd* [2009] 2 SLR(R) 20 at [15] to argue the opposite. The argument is misconceived. In that case, the Chan Sek Keong CJ criticised an appellant for wasting time and generating unnecessary costs. The appellant rejected the respondent's offer to settle only to serve – many months later and in the week before trial – a counter-offer on exactly the same terms. That set of circumstances is very different from those before me. The defendants in the present case at no point offered to buy the plaintiffs out at or around $1.30 per share. The only offer to settle which the defendants made was an offer made on 18 May 2015, within one month of the plaintiffs commencing this action, offering to purchase the plaintiffs' shares at $0.05 per share. [note: 158] If any offer which has been made in this action can be correctly characterised as containing no genuine attempt to compromise, it is this offer by the defendants. *CCM Industrial* does not assist the defendants. I therefore hold that the plaintiffs' offer to settle was a genuine offer to compromise.

147 The defendants also ask me to depart from the general principle that costs should follow the event. They do so for two principal reasons. First, the defendants say that the plaintiffs in their pleadings made baseless accusations of misconduct against the first defendant. [note: 159] The plaintiffs accused him of overpaying himself and depriving Biofuel of its capital allowances, among other things, only to abandon their claim against him for breach of fiduciary duty when they belatedly acknowledged that there was insufficient evidence to make the allegations, let alone to make good the allegations. One particularly serious allegation which was abandoned was that the first defendant improperly and dishonestly disposed of Biofuel's assets, including a forklift and an excavator. The defendants point out the particular seriousness of this allegation and ask specifically that I award to them the significant costs which they incurred to refute it.

148 Second, the defendants argue that Mr Hayler's third report was produced on the fifth day of (an eleven-day) trial as a tactical move to undermine the quality of any rebuttal Mr Reid would be able to give as he would have only a short time to prepare it and even that while distracted by the ongoing trial. The defendants repeat their submission that Mr Hayler ought to have addressed the evidence on Roxol in his second report, served before the trial, because that evidence was already available to him through Mr Reid's first report, but for tactical reasons chose not to. I have considered and rejected this submission at [96] above.

149 I was initially inclined to accept the plaintiffs' submission and award the plaintiff standard costs up to the date of its offer to settle and indemnity costs after that date. However, I accept the defendants' submission that the plaintiffs' preparation and presentation of their case on the first defendants' alleged breaches of fiduciary duty and fraud – and the late withdrawal of those aspects of its case – put the defendants to unnecessary expense for an unnecessarily long period of time. This includes the defendants' costs in having to refute the specific allegation concerning Biofuel's forklift and excavator. Therefore, I exercise my discretion not to award the plaintiffs the order for costs which they seek. Instead, I award the plaintiffs standard costs for the entire action. The margin between the costs I would have otherwise awarded to the plaintiffs and the costs which I have actually awarded to the plaintiffs takes into account the additional wasted costs to which the defendants have been put.

150 I therefore order that the first and second defendants shall pay to the plaintiffs their costs of and incidental to the entire action, such costs to be assessed on the standard basis and to be taxed if not agreed.

[note: 1] Goh Teik Liang's Affidavit of Evidence-in-Chief dated 8 August 2016 at para 8.

[note: 2] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016 at paras 8–9.

[note: 3] Goh Teik Liang's Affidavit of Evidence-in-Chief dated 8 August 2016 at paras 21 and 24.

[note: 4] Goh Teik Liang's Affidavit of Evidence-in-Chief dated 8 August 2016 at para 18.

[note: 5] Goh Teik Liang's Affidavit of Evidence-in-Chief dated 8 August 2016 at para 22.

[note: 6] Goh Teik Liang's Affidavit of Evidence-in-Chief dated 8 August 2016 at paras 28–29.

[note: 7] Agreed Bundle of Documents Vol 1 dated 13 September 2016 at pp 154, 158 and 160.

[note: 8] Agreed Bundle of Documents Vol 1 dated 13 September 2016 at p 239.

[note: 9] Agreed Bundle of Documents Vol 1 dated 13 September 2016 at p 31.

[note: 10] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 821.

[note: 11] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at pp 810–811.

[note: 12] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 840.

[note: 13] Certified Transcript dated 28 September 2016, Day 6, p 35 at lines 1–3.

[note: 14] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 839; Richard Hayler's Affidavit of Evidence-in Chief dated 10 August 2016 at p 221, p 228 at para 3(n), and p 242.

[note: 15] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 49 at para 4.9.

[note: 16] Plaintiffs' Closing Submissions dated 23 December 2016 at para 133.

[note: 17] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 828.

[note: 18] Certified Transcript dated 28 September 2016, Day 6, p 13 at lines 23–25 and p 16 at lines 7–12.

[note: 19] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at pp 818–827.

[note: 20] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 1177.

[note: 21] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at pp 833–834.

[note: 22] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at pp 882–883.

[note: 23] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016 at pp 323–333.

[note: 24] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016, p 342 at para 57.

[note: 25] Plaintiffs' Closing Submissions dated 23 December 2016 at para 92.

[note: 26] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 26 at para 1.43.

[note: 27] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016, p 19 at para 7.

[note: 28] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016, p 22 at para 23.

[note: 29] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 763 at para 1.3.

[note: 30] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016, p 1 at paras 3–4.

[note: 31] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016, p 7 at para 36.

[note: 32] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016, p 1 at para 1.

[note: 33] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016, p 9 at para 67.

[note: 34] Certified Transcript dated 20 February 2017, Day 12, p 75 at lines 13–19 and p 97 at lines 7–13.

[note: 35] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 48 at paras 4.4–4.5.

[note: 36] Certified Transcript dated 20 February 2017, Day 12, p 75 at line 9 and p 98 at lines 3–17.

[note: 37] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 780 at paras 4.3 and 4.4.

[note: 38] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 102 at para A6.2 (Appendix 6).

[note: 39] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 110 at para A6.43 (Appendix 6).

[note: 40] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 101 at para A5.29 (Appendix 5).

[note: 41] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at Annexure B.

[note: 42] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016, p 7 at para 36.

[note: 43] Plaintiffs' Closing Submissions dated 23 December 2016 at para 255.

[note: 44] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at para 22.

[note: 45] Certified Transcript dated 20 February 2017, Day 12, p 29 at lines 11–26.

[note: 46] Defendants' Closing Submissions dated 23 December 2016 at para 636.

[note: 47] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016, p 217 at para 1.

[note: 48] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016, p 230 at cl 3.1(b).

[note: 49] Lee Shung Guan's Affidavit of Evidence-in-Chief dated 3 August 2016, p 228 at cl 2.24(d).

[note: 50] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016 at p 242.

[note: 51] Certified Transcript dated 4 October 2016, Day 8, p 144 at lines 10–19.

[note: 52] Certified Transcript dated 4 October 2016, Day 8, p 91 at lines 17–23 and p 92 at lines 9–17.

[note: 53] Certified Transcript dated 4 October 2016, Day 8, p 139 at lines 8–15.

[note: 54] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at p 360.

[note: 55] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016, p 26 at para 32.

[note: 56] Certified Transcript dated 20 February 2017, Day 12, p 53 at line 7.

[note: 57] Certified Transcript dated 4 October 2016, Day 8, p 100 at lines 8–9.

[note: 58] Defendants' Closing Submissions dated 23 December 2016 at paras 591 and 594.

[note: 59] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016, p 48 at para 124.

[note: 60] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016, p 9 at para 65.

[note: 61] Certified Transcript dated 4 October 2016, Day 8, p 117 at lines 8–10 and p 117 at lines 22 to p 118 at line 8.

[note: 62] Certified Transcript dated 4 October 2016, Day 8, p 118 at lines 9–18.

[note: 63] Certified Transcript dated 4 October 2016, Day 8, p 118 at lines 15–18.

[note: 64] Agreed Bundle of Documents Vol 2 dated 13 September 2016 at p 791.

[note: 65] Defendants' Opening Statement dated 13 September 2016 at paras 29–30.

[note: 66] Agreed Bundle of Documents Vol 2 dated 13 September 2015 at pp 1099, 1124 and 1148.

[note: 67] Certified Transcript dated 20 February 2017, Day 12, p 65 at lines 13–19.

[note: 68] Certified Transcript dated 4 October 2016, Day 8, p 171 at lines 9–23.

[note: 69] Plaintiffs' Reply Submissions dated 20 January 2017 at para 116.

[note: 70] Defendants' Reply Submissions dated 20 January 2017 at para 50.

[note: 71] Certified Transcript dated 5 October 2016, Day 9, p 34 at lines 25 to p 35 at line 3, p 59 at line 23 to p 61 at line 2, p 66 at line 21 to p 67 at line 18.

[note: 72] Certified Transcript dated 6 October 2016, Day 10, p 37 at line 14 to p 38 line 2.

[note: 73] Certified Transcript dated 6 October 2016, Day 10, p 48 at lines 19–23.

[note: 74] Certified Transcript dated 6 October 2016, Day 10, p 52 at lines 10–24.

[note: 75] Defendants' Reply Submissions dated 20 January 2017 at para 56.

[note: 76] Plaintiffs' Closing Submissions dated 23 December 2016 at para 188.

[note: 77] Certified Transcript dated 6 October 2016, Day 10, p 153 at line 17 to p 154 at line 2.

[note: 78] Plaintiffs' Closing Submissions dated 23 December 2016 at para 189.

[note: 79] Certified Transcript dated 6 October 2016, Day 10, p 36 at line 8 to p 37 at line 13.

[note: 80] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at para 34.

[note: 81] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 211 at para 2.

[note: 82] Lee Yoke Loong's Affidavit of Evidence-in-Chief dated 5 August 2016 at pp 32–46 and pp 47–61.

[note: 83] Lee Yoke Loong's Affidavit of Evidence-in-Chief dated 5 August 2016 at pp 63–64.

[note: 84] Plaintiffs' Reply Submissions dated 20 January 2017 at para 131.

[note: 85] Certified Transcript dated 29 September 2016, Day 7, p 47 at lines 9–11.

[note: 86] Defendants' Closing Submissions dated 23 December 2016 at para 679.

[note: 87] Defendants' Closing Submissions dated 23 December 2016 at paras 703–704.

[note: 88] Plaintiffs' Reply Submissions dated 20 January 2017 at para 135.

[note: 89] Lee Yoke Loong's Affidavit of Evidence-in-Chief dated 5 August 2016 at paras 3 and 13.

[note: 90] Certified Transcript dated 29 September 2016, Day 7, p 47 at line 6–11 and p 49 at line 6–10.

[note: 91] Lee Yoke Loong's Affidavit of Evidence-in-Chief dated 5 August 2016 at pp 41–44.

[note: 92] Lee Yoke Loong's Affidavit of Evidence-in-Chief dated 5 August 2016 at para 50(g).

[note: 93] Certified Transcript dated 27 September 2016, Day 5, p 91 at line 19 to p 92 at line 23.

[note: 94] Plaintiffs' Reply Submissions dated 20 January 2017 at para 139.

[note: 95] Certified Transcript dated 4 October 2016, Day 9, p 158 at lines 10–12.

[note: 96] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at p 379.

[note: 97] Certified Transcript dated 6 October 2016, Day 10, p 65 at lines 1–17.

[note: 98] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at pp 166–236.

[note: 99] See *eg*, Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at p 173.

[note: 100] See *eg*, Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at pp 169–171.

[note: 101] See *eg*, Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016 at pp 166– 167.

[note: 102] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at para 27 and Annexure B.

[note: 103] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at para 28.

[note: 104] Defendants' Reply Submissions dated 20 January 2017 at paras 109–110.

[note: 105] Plaintiffs' Reply Submissions dated 20 January 2017 at para 128.

[note: 106] Certified Transcript dated 20 February 2017, Day 12, p 96 at lines 2–28.

[note: 107] Certified Transcript dated 5 October 2016, Day 9, p 118 at lines 17–22.

[note: 108] Certified Transcript dated 29 September 2016, Day 7, p 58 at lines 21–25.

[note: 109] Defendants' Reply Submissions dated 20 January 2017 at para 107.

[note: 110] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 3 October 2016 at para 28.

[note: 111] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 3 October 2016 at para 17.

[note: 112] Certified Transcript dated 4 October 2016, Day 8, p 17 at line 23 to p 18 line 5.

[note: 113] Certified Transcript dated 5 October 2016, Day 9, p 115 at lines 1–8.

[note: 114] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 3 October 2016 at para 7.

[note: 115] Certified Transcript dated 6 October 2016, Day 10, p 114 at lines 15–20.

[note: 116] Defendants' Reply Submissions dated 20 January 2017 at para 103.

[note: 117] Defendants' Closing Submissions dated 23 December 2016 at para 659; Defendants' Reply Submissions dated 20 January 2017 at paras 97–98.

[note: 118] Plaintiffs' Reply Submissions dated 20 January 2016 at para 124.

[note: 119] See Trial Exhibit P6, Richard Hayler's Third Expert Report dated 26 September 2016 at para 3.

[note: 120] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 784 at para 4.31.

[note: 121] Certified Transcript dated 23 September 2016, Day 4, p 13 at lines 6–9.

[note: 122] Agreed Bundle of Documents Vol 1 dated 13 September 2016 at p 167.

[note: 123] Certified Transcript dated 6 October 2016, Day 10, p 144 at lines 11–15.

[note: 124] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016 at paras 35.

[note: 125] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016 at para 49.

[note: 126] Trial Exhibits D17 to D31.

[note: 127] Trial Exhibits D17, D18, D30 and D31.

[note: 128] Trial Exhibits D19 to D29.

[note: 129] Certified Transcript dated 7 October 2016, Day 11, p 22 at line 18 to p 24 at line 17.

[note: 130] Certified Transcript dated 7 October 2016, Day 11, p 34 at lines 8–16.

[note: 131] Plaintiffs' Reply Submissions dated 20 January 2017 at para 123.

[note: 132] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016 at para 49.

[note: 133] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016, p 9 at para 65.

[note: 134] Certified Transcript dated 28 September 2016, Day 6, p 110 at lines 1–4.

[note: 135] Certified Transcript dated 6 October 2016, Day 10, p 144 at line 6 to p 145 line 20.

[note: 136] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 102 at para A6.3.

[note: 137] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 102 at para A6.6.

[note: 138] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 102 at para A6.7

[note: 139] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016 at p 107 at para A6.25.

[note: 140] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016 at p 107 at para A6.27.

[note: 141] Defendants' Closing Submissions dated 23 December 2016 at paras 557, 561, 565 and 569.

[note: 142] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016 at para 56.

[note: 143] Trial Exhibit D12, Timothy Reid's Second Expert Report dated 1 October 2016 at para 62.

[note: 144] Certified Transcript dated 5 October 2016, Day 9, p 12 at lines 4–23.

[note: 145] Certified Transcript dated 5 October 2016, Day 9, p 16 at line 14 to p 17 at line 25.

[note: 146] Trial Exhibit D16 dated 5 October 2016.

[note: 147] Trial Exhibit P10 dated 6 October 2016.

[note: 148] Certified Transcript dated 6 October 2016, Day 10, p 133 at line 25 to p 134 at line 11.

[note: 149] Certified Transcript dated 6 October 2016, Day 10, p 134 at line 21 to p 135 at line 12.

[note: 150] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 93 at para A4.28.

[note: 151] Trial Exhibit P6, Richard Hayler's Third Expert Report dated 27 September 2016 at para 29.

[note: 152] Timothy Reid's Affidavit of Evidence-in-Chief dated 4 August 2016, p 48 at para 124.

[note: 153] Statement of Claim (Amendment No 1) dated 2 September 2016 at p 25.

[note: 154] Certified Transcript dated 20 February 2017, Day 12, p 8 at lines 24–29 and p 9 at line 4.

[note: 155] Notes of Evidence dated 3 July 2017, p 10 at lines 13–31.

[note: 156] Notes of Evidence dated 3 July 2017, p 14 at lines 22–23 and p 16 at lines 10–19.

[note: 157] Richard Hayler's Affidavit of Evidence-in-Chief dated 10 August 2016, p 26 at para 1.43.

[note: 158] Notes of Evidence dated 3 July 2017, p 14 at lines 5–10.

[note: 159] Defendants' Skeletal Submissions on Costs dated 3 July 2017 at paras 10–15 and paras 18–37.