Application No. 2 of 2012

IN THE SECURITIES AND FUTURES APPEALS TRIBUNAL

IN THE MATTER OF a Decision made by the Securities and Futures Commission under section 194 of the Securities and Futures Ordinance, Cap. 571

AND IN THE MATTER OF section 217 of the Securities and Futures Ordinance, Cap. 571

BETWEEN

CHRISTIAN DENK	Applicant
And	
SECURITIES AND FUTURES COMMISSION	Respondent

Tribunal: The Hon Mr Justice Hartmann, JA, Chairman

Dates of Hearing: 11, 12 and 20 December 2012

Date of Determination: 20 February 2013

Date of Reasons for Determination: 20 May 2013

REASONS FOR DETERMINATION

Introduction

1. In the early part of 2009, the stock exchange of Hong Kong operated a system in terms of which, at the close of each day's normal trading, there followed a short trading session known as the closing auction system. The system had been in operation since May 2008. According to the Hong Kong Stock Exchange, the purpose of the closing auction system was "to provide an accessible, fair and market-driven method of closing a trading session and determining closing prices". As for derivatives traders, it was hoped that the system would make it "easier for derivatives traders to unwind their positions and effect more precise hedging." The system – a product of computer science – employed algorithms to provide continuously updated 'indicative equilibrium prices' together with an estimate of the total number of shares (of any particular stock) that could be matched at that price.

2. The closing auction system operated at the close of each day's trading for just 10 minutes. In those last 10 minutes after the close of continuous trading both 'sell' orders and 'buy' orders were entered into the system. In some shares there may be a greater volume of 'sell' orders, in other shares there may be a greater volume of 'buy' orders.

3. During the first eight minutes of the closing auction system bids and offers could be entered into the system in the form either of

'at-auction limit' orders (orders to buy or sell at specific prices or better) or 'at-auction' orders (orders carrying no specific price that would be matched if possible when the final auction price was calculated at the end of the session). In those first eight minutes either type of order could be entered into the system, amended or cancelled. However, in the last two minutes of the session, only at-auction orders could be entered into the system and no order entered into the system, or already in it, could be amended or cancelled.

4. For reasons which will be considered later in this judgement, although the closing auction system was intended to allow an orderly matching of supply and demand to determine closing prices, it possessed an inherent instability and was shut down at the end of March 2009. In all therefore it was in operation for just one year.

5. In March 2009, when the closing auction system was still in operation, the applicant for review, Mr Christian Denk, was licensed to act as a representative in respect of Type I and Type II regulated activities under the Securities and Futures Ordinance, Cap. 571. As such, he was accredited to Deutsche Securities Asia Limited, part of the Deutsche Bank group. He held a senior position with that company in its equity derivatives department.

6. As a derivatives trader, the applicant had responsibility for managing a derivatives book which, among some 50 different stocks, included positions in HSBC. In a letter sent to the Securities and Futures

Commission (the 'SFC') by his then solicitors, Linklaters, the nature of the applicant's hedging responsibilities were described as follows:

> "At the end of each trading day, [the applicant] needed to execute sufficient trades in each of the stocks in respect of which he held positions in order to offset the 'delta' [i.e. the mathematical means of measuring the rate of change of option values with respect to changes in the underlying asset price] on his vanilla options book. Such trading needed to be executed at the end of the trading day because that was the point at which the delta in the variance swap book managed by [the applicant] in the same stock would cease to offset the delta in the vanilla options book. It was therefore one of [the applicant's] trading purposes to execute 'precise hedging' in order to properly manage the risk on his books…"

7. For the purposes of this review, it is not necessary to fully understand the terms of art or the mathematical dynamics contained in the passage above. It is sufficient if two preliminary matters are understood. First, that it was accepted by the SFC that the applicant, as a derivatives trader, had a legitimate need to close off his books at the end of each trading day by means of "precise hedging" and, second, that such hedging required him to delay his hedge orders until the closing auction session.

8. It is perhaps an understatement to say that in about March 2009 the markets presented particular difficulty. Less than six months had elapsed since the collapse of Lehman Brothers. Financial stocks, such as banks, were experiencing heightened volatility. HSBC had announced an unprecedented rights issue to raise capital for its operations.

9. When the market opened on 9 March 2009, HSBC shares were trading at $41 (down from $124.10 six months earlier) and during

the day the price continued to decline to around $37. Late in the trading day, it was known to the applicant that, on the opening of the London market, HSBC shares would be trading at around 6% lower than the Hong Kong indicative equilibrium price, that is at about $35, and the likelihood was that this would push the Hong Kong price lower.

10. At the end of the day's normal trading on 9 March 2009, in seeking to hedge his risk in HSBC, the applicant at first considered placing sell orders in the closing auction session for 7 million HSBC shares.

11. The closing auction system, however, permitted him only a narrow view of the 'sell' orders and 'buy' orders being entered into the system and therefore of the changing market from second to second. He, and other traders, did not have a full view of the state of the market. Traders therefore had to work to a material degree on assumptions made of the state of the market at any given moment. On this occasion, having regard to what he knew of the trading during the course of the day in HSBC shares and what he could glean from the information thrown up on his computer screen in respect of the closing auction system, the applicant determined not to sell the full 7 million HSBC shares needed to perfect his hedge but to reduce his sell orders to 5.4 million shares. On all the evidence, it is clear that the applicant made this decision because he believed the reduced order was more viable and would therefore avoid the risk of unnecessary or unwarranted increased volatility.

12. In order to execute "precise hedging", the applicant followed a well-established pattern of his of holding his sell orders until the final seconds of the last two minutes of the session. Indeed, he held back his five orders (totalling 5.4 million shares) until the final three seconds of the session - a matter of central relevance to this review.

13. During the course of the hearing before myself, no attempt was made to convince me, directly or indirectly, that this pattern was peculiar to the applicant only and was not followed by other traders in the market. It is to be assumed therefore that the pattern of holding the shares back until the final seconds of the closing auction system was a tactic adopted by other traders if they considered the conditions to be appropriate.

14. At the time when the applicant entered his first order at 16.09.57, the indicative equilibrium price stood at $37. It seems that the applicant anticipated that, having regard to trading in London, the share price would (in all probability) slip to nearer the London price: in the circumstances not a drop that would artificially distort the market.

15. What was *not* known to the applicant however at the time when he entered the sell orders, and which he had no means of knowing, was that a local brokerage house, acting on behalf of a retail investor, had earlier entered into the closing auction system an at-auction limit order for a comparatively small quantity of HSBC shares (just 3000) at an asking price of $33, albeit on a stop-loss basis. Even to the lay person

such as myself, there are two strange aspects to this small 'outlier'. First, the asking price was set unreasonably low: $4 below the trading price. If it was intended to make a sale but not at any price a sell order closer to the indicative equilibrium price would have achieved that object. Second, if the retail investor wished to achieve execution without regard to price, why was a limit order entered at all, surely an appropriate order would be an at-auction order.

16. During the course of the review, a number of expert opinions were put before me. One of the opinions was provided by Dr Fitzgerald, an expert with impressive experience academically and professionally in derivatives equity trading and risk management. I found his report to be well structured, detailed and highly persuasive. In respect of this outlier, Dr Fitzgerald said the following (paragraph 38(e) of the report):

> "[The applicant] had no knowledge of potential outlying limit sell orders at $33 or $34. Indeed, an experienced trader such as [the applicant] would have seen such limit sell orders as completely irrational, and therefore more likely not to be present in the market."

17. Dr Fitzgerald was of the view that, having regard to the market circumstances prevailing at the time the applicant entered his five sell orders totalling 5.4 million HSBC shares, it was reasonable for the applicant to assume his total order would be filled at a price no worse than the London price, that is, at a price of around $35 per share. In short, there would (in all probability) be a further drop in the price but that was anticipated and was within viable limits. In any event, it was not in any way part of the applicant's duties to avoid any loss in the share price.

18. At this juncture, it is important to take into account that on some 29 previous occasions when the applicant had followed the same essential pattern, placing sizeable orders into the system in the dying seconds, his sell orders had always been filled. In short, although denied a complete view of conditions as they changed from second to second in the closing auction system, the applicant's skill and experience in such matters had on all earlier occasions ensured that his sell orders were met without undue volatility being occasioned to the market, certainly not volatility that attracted criticism from the regulators.

What then happened on this occasion?

19. It appears that the presence in the closing auction system of the single small 'outlier' related to just 3000 HSBC shares triggered the inherent instability to which I have earlier made reference, producing a disproportionate shift in the indicative equilibrium price of HSBC shares and ultimately the closing price for the day. Mr Bell SC, counsel for the SFC, described what happened in the following terms:

> "Immediately prior to [the applicant's] first sell order at 16.09.57 the indicative equilibrium price stood at $37. At 16.09.58, one second later, when [the applicant] had finished inputting his last order, the indicative equilibrium price was driven down to $33 (which under the closing auction system algorithm was the lowest it could go, $33 being the lowest at-auction limit selling price input). This amounted to a drop in the price of HSBC shares of over 10% in two seconds."

20. The result caused alarm in the markets and the following day, the SFC commenced an investigation into the propriety of the applicant's actions.

21. Pausing at this moment, it is to be noted that about four days earlier, on 5 March 2009, the SFC issued a joint press release with Hong Kong Exchanges and Clearing Limited warning that any order that was input during the closing auction session at a price significantly away from the nominal price at the opening of the session had the potential to cause disruption to the market. It urged market traders not to input orders significantly away from the prevailing price without first seeking full clarification from the client. The press release was therefore targeted at at-auction limit orders which, unlike at-auction orders, were input into the system with a particular price. The $33 outlier was therefore a direct subject of such warning.

22. No warning, however, concerning the broader instability of the system was drawn to the attention of market participants in the position of the applicant whose relevant orders were at-auction orders only, no price being attached to them, those orders therefore being met by the matching process of the system. On this matter, the regulators had remained silent.

23. On 14 July 2010, a little more than a year after the precipitous events of 9 March 2009, the SFC served the applicant with a Notice of Proposed Disciplinary Action, stating that in its preliminary view the applicant was guilty of misconduct in that he appeared to have failed to exercise due skill, care and diligence in the manner in which he entered his sell order for 5.4 million HSBC shares into the closing auction system, his actions being contrary to the interests of market integrity in

that they caused the price of HSBC shares to fall precipitously at the market close. In its Notice, the SFC asserted that the applicant's actions constituted a breach of General Principle 2 of the 'Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission'. General Principle 2 states that:

> "In conducting its business activities, a licensed or registered person should act with due skill, care and diligence, in the best interests of its clients and the integrity of the market."

24. Initially, the SFC proposed to suspend the applicant's licence for a period of nine months. However, after the applicant had made representations, the SFC revised its proposed sanction to that of a public reprimand and a fine of $1,100,000. The applicant made further representations in light of which the SFC further revised its proposed penalty to that of a public reprimand only.

25. In the result, on 24 May 2012 the SFC issued its Decision Notice, finding that the applicant had acted contrary to General Principle 2 of the Code of Conduct and that he would be the subject of a public reprimand.

26. On 12 June 2012, the applicant applied for a review of the SFC's decision as to both culpability and penalty, doing so pursuant to s. 217 of the Securities and Futures Ordinance.

27. With the consent of the parties given pursuant to s. 31 of Schedule 8 of the Ordinance, the review was conducted by myself, as Chairman, sitting alone.

28. By letter dated 20 February 2013, the parties were informed that I had determined the review in favour of the applicant, being satisfied that the decision of the SFC as to culpability (and consequent penalty) should not be permitted to stand. The parties were informed that an order *nisi* for costs in favour of the applicant had been made. The parties were further informed that reasons for my determination would be given in due course.

29. The reasons are contained in this judgment.

Negligence

30. At this stage, it is important to recognise that, when the SFC came to make its final decision, it fully accepted that there had been no intent on the part of the applicant to manipulate the market. As I have said earlier, it was accepted that the applicant had placed his at-auction sell orders for a total of 5.4 million HSBC shares for genuine and legitimate hedging purposes. It was therefore the SFC's final determination that the applicant's conduct had not been deliberate but negligent. Negligence, therefore, is the issue at the heart of this review.

31. The negligence alleged on the part of the applicant was to the effect that he put in his five at-auction sell orders for a very significant volume of HSBC shares almost literally as the guillotine blade on the session was falling. This prevented normal market forces from reacting; as I understand it, for 'buy' orders to be entered. In the result, the integrity of the market was undermined.

32. In its Statement of Disciplinary Action, the SFC said the following:

> "In this case [the applicant] placed large sell orders in the last seconds of the closing auction. As an experienced trader, [the applicant] knew the features and trading mechanism of the closing auction system and should have known that there was a real risk such large sell orders would move the closing price downward. His experience should have told him that this could have a disproportionate price impact on the market for HSBC shares.
>
> [The applicant] was *negligent* in not paying sufficient regard to the market impact of the large orders which he chose to place at the last seconds." [my emphasis]

33. As I have indicated earlier, during the course of the review before myself, it was readily accepted that the applicant had no duty to avoid moving the market downwards. If, in order to protect the best interests of his employer, it was necessary to put in sell orders that would result in a decline in the share price then so be it. His duty under the Code of Conduct was simply to ensure that the integrity of the market was not undermined, in short that there was no artificial distortion of the market.

Standard of proof

34. Disciplinary proceedings are not criminal in nature. As such, it may be said that the starting point imposed on a determining tribunal is the civil standard of a balance of probabilities. That however is the starting point. Although disciplinary proceedings are not criminal in nature, they may give rise to charges which would also found serious criminal charges. There is authority for the proposition that in such instances it may be appropriate to apply the criminal standard or a standard which for all practical purposes amounts to the criminal standard. In short, in disciplinary proceedings a flexible approach must be adopted by the determining tribunal. Put succinctly, the standard of proof must be commensurate with the gravity of the charge: see *Tse Lo Hong v The Attorney-General* [1995] 3 HKC 1 per Litton VP at page 13D.

35. In the present case, the 'charge' was one of negligent conduct, that negligence undermining the integrity of one of the world's most active stock markets. As I have said earlier, initially the SFC proposed to suspend the applicant's licence for a period of nine months. Thereafter, looking to matters of mitigation, the SFC determined that an appropriate sanction would be a public reprimand and a fine of over a million dollars. Potentially, therefore, the allegation made against the applicant was one of fairly grave consequence. I say that because, if the applicant had been suspended for a period of nine months, he would have been unable to earn his living for that period of time and would thereafter have carried with him the stigma of suspension. As such, he may never have been able to re-enter the profession, one in which he held a position

of some responsibility and status. It is not therefore an exaggeration to say that the applicant's career stood in jeopardy.

36. As to the standard of proof, therefore, I am satisfied that something more than a mere balance of probabilities was required in the present case. The reputation (and career prospects) of a professional person should not be lightly destroyed by a charge of negligence. In some measure at least, the SFC appear to have been aware of this. In its Decision Notice (paragraph 41) it said:

> "In taking disciplinary actions, the SFC is mindful that the burden of proof rests with the SFC. The SFC will not impose a disciplinary sanction unless it is satisfied that on balance of probabilities there is cogent evidence to prove its allegations against you."

37. With respect to the SFC, there appears to have been a conflation of two concepts here, the quality of evidence on one hand and the standard of proof on the other. I accept of course that the concepts may be complementary. The stronger the evidence, the easier it will no doubt be to discharge a burden of proof, at whatever level that burden may have been set. The more ambiguous and weaker the evidence, the less likely it is that the burden will be met. But it must be emphasised that the two concepts are not identical: see, in particular, *Hong Kong Institute of Certified Public Accountants v Disciplinary Committee, Price Waterhouse and Ho Chi Keung* (unreported) HCAL 135/2005, the judgment of Reyes J being dated 11 November 2005. In summary, on a strict reading of what the SFC said, it appears that it was looking for cogent evidence (evidence that is forcefully convincing) in order to discharge a standard no higher than a balance of probabilities. There are

numerous judicial references to the fundamental requirement for a determining tribunal to understand the standard of proof that must be discharged if a person appearing before the tribunal is to be found culpable and for the tribunal to make it plain, first, that it has determined the level of that standard of proof and, second, that it understands what the setting of that level entails.

38. Regrettably, in the present case, I have been drawn to the conclusion that the direction as to the standard of proof that the SFC gave to itself was not determined in a straightforward, direct way as it should have been nor was it stated in plain language, that is, language understandable to the applicant and third parties. In the result, having considered all the evidence in the light of the arguments and counter arguments, I have been left with the unsettled sense that, despite the reference to ‘cogent evidence’, the burden of proof was held to have been discharged simply on a balance of probabilities, that being too low a burden.

39. More than that, although on its own it would not have been determinative of this review, I have been left with the unsettled sense that the wisdom of hindsight played a disproportionate role in the SFC’s determination.

40. The requirement imposed on a trader to act with due skill, care and diligence in the best interests of his employer and the integrity of the market does not require him to be proved correct on all occasions by

looking to the results of his actions. Traders, such as the applicant, must exercise judgement in difficult and pressing circumstances; they must act as they see matters, doing so in the light of their experience and skill. The fact that the market may act against them is not of itself evidence that they have failed to act with due skill, care and diligence. Nor is the fact that, with the benefit of hindsight, it may be said that they could have adopted a safer tactic.

The instability of the closing auction system

41. I believe that something more needs to be said of the inherent instability of the closing auction system. That it was an unstable system capable of bringing about disproportionate results if serendipity brought together an unfortunate coincidence of factors that could not be known or anticipated by traders does not appear to have been disputed.

42. As I have understood it, it was essential to the applicant's case that he had to exercise judgment in order to fulfil his responsibility of squaring his book at the end of the day and that, when he placed the sell orders for 5.4 million HSBC shares in the closing seconds of the closing auction system, he did not do so blindly. To the contrary, he did so taking due note of the information available to him on his computer screen as the closing auction system progressed, especially the apparent depth of the market, taking due note also of the broader landscape, for example, the position on the London Stock Exchange. He needed to wait until the dying seconds of the closing auction system in order to be able to assess with the best possible accuracy how many shares he needed to sell in order to meet his responsibilities to his employer. On some

29 previous occasions he had been able to read all relevant data correctly. On this particular occasion he employed the same skill and experience, acting with due diligence. The unfortunate result, therefore, lay in the instability of the system which failed to protect against an unfortunate coincidence of factors that he could not have known of or anticipated, factors which on another occasion may have been equally lethal even if he had placed his orders into the session at an earlier stage.

43. In an expert opinion dated 28 June 2010, Mr Cheng Kai Sum said the following (paragraphs 124 and 125):

> "The order placing pattern persistently adopted by [the applicant] gave rise to a real risk of severe and unnecessary fluctuation in the closing price of HSBC shares when his order size was big. My research shows in general such deviations (market impact) could be a few percentage points. However, there is simply no basis to expect that such impact would always be contained. On any particular day, if the order depth is scant and there exist some significantly deviated at-auction limit orders, the deviation could be phenomenal. This was exactly what happened on 9 March 2009."

In other words, sizeable orders entered into the closing auction system towards the very end of that system always gave rise to a real risk of distortion of the market.

44. Mr Cheng continued by commenting:

> "It is hard to believe such a risk could have escaped [the applicant's] attention given his seniority and trading experience for a major investment bank. Although there is no evidence to show that [the applicant] could have anticipated a $33 closing price on 9 March 2009, there is also no basis for [the applicant] to have the comfort that the closing price would stop at any other levels, say $20."

45. Without intending unnecessary hyperbole, Mr Cheng's observations appear to suggest that the closing auction system had built into its architecture of algorithms an 'Armageddon scenario'. In the two paragraphs that I have just cited he speaks of phenomenal deviations and the closing price dropping to completely irrational levels: from $37 to say $20 in a matter of seconds.

46. Mr Cheng commented that it is hard to believe that the risk was unknown to the applicant. The reasonable implication of that comment is that on some 29 previous occasions, when all of the applicant's input orders were met, he must have known that he was running the same sort of risk but continued oblivious with his tactic even though objectively it was bound to lead to disaster in due course.

47. If that was the case, and if the applicant, as an experienced trader, must have known of the risk being a real risk, it raises the question of why it was that the regulators did not issue any warning to traders in the position of the applicant. Although there was no evidence on point during the course of the review before me, it must be the case that regulators have an obligation to act not only after the event but before the event too when they can foresee a real risk to the integrity of the market. I accept of course that a press release was issued on 5 March 2009 warning traders not to input at auction limit orders that were significantly away from the prevailing price. It may be said that the warning should have alerted traders in the position of the applicant to be beware of outliers such as the $33 outlier that triggered the instability in the system on

9 March 2009. However, in my view, more strength lies in the counter proposition, namely, that such a warning would have given comfort to traders in the position of the applicant that the risk of such outliers would in future be significantly diminished.

48. Dr Fitzgerald, the expert of whom I have already spoken, gave an opinion dated 23 September 2010. In that opinion, he demonstrated that, if there are outliers present on the bid or ask sides of the market, a very small shift in the amount of at-auction orders on either side can produce extreme shifts in the indicative equilibrium price and ultimately the closing price. In this regard, Dr Fitzgerald commented (paragraph 14):

> "… in my view, such a system puts a trader with a large order to fill late in the day in a virtually impossible position. Since he would not be provided with complete information on bids and offers in the market, he has no means of knowing whether there are outlying bids and offers at unusual prices which would cause discontinuities in the equilibrium price. As I understand it, on the relevant dates of 9 March 2009 the trader would simply know the indicative equilibrium price, the matched value at the indicative equilibrium price, the next five bids and offers, and the aggregate quantity of bids and offers at those bid and ask prices. If his order is going to be an at-auction order, and the size is greater than the sum of the five next bids and offers, he has no means of knowing whether his order will be matched by other bid and offers and prices near those shown, or whether there will be an abrupt shift to a new and very different indicative equilibrium price. In my view, this makes it impossible for a trader to determine rationally the potential impact of the trade on the indicative equilibrium price."

49. Mr Cheng, in his opinion of 28 June 2010, in explaining the workings of the system, said the following (paragraph 30):

> "This movement of the indicative equilibrium price caused by the input of a big sell order can be easily replicated by any person with a reasonable understanding of the closing auction system algorithm and

> *full knowledge of all the relevant order information*. The extent of the potential shift in the indicative equilibrium price hinges on the size of the orders and the existence of a low limit sell order." [my emphasis]

50. The implication appears to be that an experienced trader such as the applicant should have understood the inherent instability of the closing auction system algorithms and been in a position to avoid triggering that instability inputting large orders placed in the dying seconds of the closing auction session. But, as Dr Fitzgerald pointed out (paragraph 15 of his opinion), a trader operating in the closing auction session is denied access to "full knowledge of all the relevant order information" and is therefore not able to replicate the impact of a large buy or sell order to see what it would be on the indicative equilibrium price.

51. Dr Fitzgerald was also forthright in his opinion that the applicant could not be expected to take into consideration (paragraph 41) –

> "… the existence of an irrational and absurd limit sell order at a price more than 10% below the prevailing indicative equilibrium price in determining his trading strategy. The fact is that the Hong Kong closing auction system was fundamentally flawed in that it created high levels of indicative equilibrium price instability in the presence of limit order outliers. [The applicant] was unlucky enough to trigger such an instability through his trading strategy. But he could equally well have triggered it, other things equal, if he had inputted three 1,000,000 share orders earlier in line with [an alternative trading tactic suggested by Mr Cheng in his expert opinion] and then put in a 500,000 share order at 16.09.50. Would he then be criticised for his trading in the same way? Moreover if he had done that, and the indicative equilibrium price had shifted accordingly, then he would have had to recalculate his required amount of selling of HSBC shares, and the new amount would have been well in excess of 5.4 million shares."

52. As I have understood it, it was never disputed by the applicant that he had to have an understanding of the depth of the market if he was going to enter his sell orders in the last seconds of the closing auction system and expect them to be met. It was always the applicant's contention that he applied due diligence allied to his experience in the market to ensure as best as he could that his sell orders would be met by buy orders already in the system or that, even if his orders were not completely filled there would be no distortion in the market. In his expert report, Dr Fitzgerald went into considerable detail as to the state of the market at the time when the applicant input his sell orders. He argued that "it was reasonable for [the applicant] to assume that the final indicative equilibrium price on the Hong Kong exchange would be no lower than the London HSBC price" and that, even if a quantity of the stock remained unsold, it would not cause a distortion in the market.

53. I confess that it has taken me some time to consider the conflicting expert opinions. In the end result, however, I am more persuaded by the opinion of Dr Fitzgerald. Certainly, in my judgement, it cannot be dismissed. For myself, having regard to the evidence before me, and taking into account that the applicant had no intention to manipulate the market, I do not see that it has been clearly demonstrated that the applicant, in adopting his tactic of placing his buy or sell orders in the last few seconds of the closing auction session, must on all occasions (especially on day in question) have appreciated that it was a very risky tactic, one capable of artificially distorting the market. I am persuaded that he judged the volume of his orders with an experienced judgment of the data available to him, even though the data was incomplete, the very

incompleteness being (naturally) one of the factors that would influence his actions.

Conclusions

54. In the final analysis, I am satisfied that the conclusions to be drawn from the evidence, although closely balanced, tend towards the exoneration of the applicant as to the allegation that he acted negligently. I do not therefore dismiss the SFC position as detailed by Mr Bell. As Mr Bell put it, the applicant must have understood the workings of the closing auction system and, whether or not there had been any specific warning issued by the regulators, should have known that an abnormally low selling at-auction limit order – an outlier - may lower the closing price and may do so in a markedly disproportionate manner. Although therefore, when he entered his at-auction sell orders for 5.4 million HSBC shares in the closing seconds of the closing auction system, leaving no time for the market to react – if that was, in fact, necessary - the applicant must have been aware of the risk of an outlier, even if set at an irrational price, being out there. Moreover, the fact that the closing auction system was imperfect did not absolve the applicant from his obligation to act with due skill and care. Indeed, it may be argued that the greater the degree of imperfection in the system, the greater the need for due skill and care. In my view, however, that approach begs the central question: on what basis is it demonstrated that the applicant must have known of the inherent risk – an irrational risk – despite the care he took? Yes, he was an experienced trader but that fact goes two ways. As an experienced trader, surely, in so far as it was possible to assess, he would have appreciated the limits of what he could or could not do without

putting the market at risk while at the same protecting the position of his employer. As I have said, the evidence tends towards the conclusion that on numerous previous times the applicant was acutely aware, as the closing auction sessions drew to a close, of all information relevant to his hedging decisions. On the occasion in question, he decided to hold back a substantial number of HSBC shares. As it was put during the review, the true issue therefore is not whether he was negligent in ignoring the integrity of the market on this occasion but whether he paid sufficient heed to the risk of undermining that integrity.

55. In putting matters into context, what must also be taken into account, in my opinion, is the fact that it does not appear to have been seriously disputed that, even if the applicant had entered a lesser volume of sell orders into the system, the same instability - with the same precipitous drop in the closing price of HSBC shares - may have been occasioned if another player had also entered sell orders. If that had been the case, the *immediate* cause of the instability would have been the additional sell orders put in by a third party even if the volume of those orders were of themselves of no great consequence.

56. Put simply, I am persuaded on the evidence that the instability of the closing auction system did not require a batch of large at-auction sell orders entered into the system in the last one or two seconds of the session by one trader in order to be triggered; the instability could equally be triggered if serendipity brought together a number of traders, each putting in at-auction sell orders in the last minute or two of the auction.

57. In my judgment, there has always been a respectable argument for saying that the inherent instability of the closing auction system meant that it was an accident waiting to happen and that, although – with the benefit of hindsight - because of the applicant's pattern of trading he may have been more likely to trigger the instability in the system, he was for all intents and purposes a victim of that instability not a perpetrator of it.

58. By way of conclusion, I return to the core issue of the lateness of the applicant's sell orders, a matter central to the SFC's determination. In this regard, in an internal review conducted by senior representatives of Deutsche Bank shortly after 9 March 2009 into the propriety of the applicant's conduct on that date, the following was said in respect of this timing of the at-auction sell orders (paragraphs 3.4 to 3.6 of the report):

> "The importance of the closing price of the underlying stock of a variance swap, and the impact of that price on the exposure of a portfolio of shares and vanilla options, renders the closing auction an important element in the trader's exposure management. The trader needs to obtain the most accurate available information about the likely closing price on the day which is only available during the final minutes of the closing auction system.
>
> The primary purpose of the trader's participation in the closing auction system is to help manage the overall exposure of his book. The trader enters either limit or at-auction orders in the closing auction almost every trading day. However, where he enters limit orders, such orders do not always result in concluded trades as his prices can be away from the final closing price at which other orders are executed.
>
> In the opening eight minutes of the closing auction system, the indicative equilibrium price is not as predictive of the final closing price (the information of most importance to the trader) because orders placed in this period can be cancelled and amended. However, the

> trader might enter orders in the opening period of the closing auction system in respect of shares where he has a less significant exposure because subsequent movements in the share price before closing have a lesser impact on his total portfolio exposure."

59. The internal review went on to say the following (paragraph 3.7):

> "Where he [the trader] has a larger exposure, however, it becomes more important to finalise and place the order as shortly as possible prior to the conclusion of the closing auction system so that when the closing price (the final indicative equilibrium price) is determined, it is more likely that he will have sold or bought the correct number of shares to achieve the desired hedge. The trader will endeavour to predict what he believes the closing price will be so that he can calculate the number of shares to place in the order. In the trader's experience, this task is most accurately undertaken very near to the close of the closing auction system when it is anticipated that there will be less movement in the price subsequent to the placement of the order. If the trader places the order much earlier than the close of the closing auction system, he faces the risk of further price movements subsequent to the placement of his order. He would then have to continue to revise the number of shares to be placed in the order in response to the revised indicative equilibrium price and he might not be able to sell or buy the correct number of shares to achieve the desired hedge. If the trader has a significant exposure to a particular share, the trader's main focus will therefore be on the final two minutes of the closing auction system."

60. As concerns the timing of five HSBC at-auction sell orders, the internal review continued by saying (paragraph 4.10):

> "The trader placed the HSBC order about three seconds before the close of the closing auction system. By placing his order at this time, the trader would have been able to make the most accurate assessment of how many shares he needed to sell in order to reduce the exposure in his book by the desired amount."

61. The applicant therefore – on the evidence before me – had reason to place his orders in the final seconds. His tactic was not an eccentricity.

62. By way of conclusion, while no doubt the wisdom of the applicant's actions may form a basis for heated debate among derivative traders, I have not determined this review on a simple balance of the evidence. I have granted the applicant's review because, in my judgment, the evidence pointing to negligence on the applicant's part was simply not sufficiently cogent and did not therefore reach the required standard of proof for an allegation of such impropriety.

The Hon Mr Justice Hartmann, JA
Chairman, Securities and Futures Appeals Tribunal

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