



SECURITIES AND
FUTURES COMMISSION
證券及期貨事務監察委員會

Consultation Paper on Proposed Risk Management Guidelines for Licensed Persons Dealing in Futures Contracts

November 2022



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Foreword

The Securities and Futures Commission (SFC) invites market participants and interested parties to submit written comments on the proposals discussed in this consultation paper or to comment on related matters which might have a significant impact upon the proposals by no later than 31 January 2023. Any person wishing to comment on the proposals on behalf of any organisation should provide details of the organisation whose views they represent.

Please note that the names of the commentators and the contents of their submissions may be published on the SFC's website and in other documents to be published by the SFC. In this connection, please read the Personal Information Collection Statement attached to this consultation paper.

If you do not wish your name or submission to be published by the SFC, please state that you wish your name, submission or both to be withheld from publication when making submission.

Written comments may be submitted:

By mail to: The Securities and Futures Commission
54/F, One Island East
18 Westlands Road
Quarry Bay, Hong Kong

Re: Consultation Paper on Proposed Risk Management Guidelines for
Licensed Persons Dealing in Futures Contracts

By fax to: (852) 2523 4598

By online submission: <https://apps.sfc.hk/edistributionWeb/gateway/EN/consultation/doc?refNo=22CP4>

By e-mail to: 2022_FuturesConsultation@sfc.hk

Please submit comments to the SFC in writing on or before 31 January 2023. All submissions received before the expiry of the consultation period will be taken into consideration in the finalisation of the proposals and a consultation conclusions paper will be published together with the finalised guidelines when the proposals are finalised.

Securities and Futures Commission
Hong Kong

25 November 2022

Personal Information Collection Statement

1. This Personal Information Collection Statement (PICS) is made in accordance with the guidelines issued by the Privacy Commissioner for Personal Data. The PICS sets out the purposes for which your Personal Data¹ will be used following collection, what you are agreeing to with respect to the SFC's use of your Personal Data and your rights under the Personal Data (Privacy) Ordinance (Cap. 486) (PDPO).

Purpose of collection

2. The Personal Data provided in your submission to the SFC in response to this consultation paper may be used by the SFC for one or more of the following purposes:
 - (a) to administer the relevant provisions² and codes and guidelines published pursuant to the powers vested in the SFC;
 - (b) in performing the SFC's statutory functions under the relevant provisions;
 - (c) for research and statistical purposes; or
 - (d) for other purposes permitted by law.

Transfer of Personal Data

3. Personal Data may be disclosed by the SFC to members of the public in Hong Kong and elsewhere as part of the public consultation on this consultation paper. The names of persons who submit comments on this consultation paper, together with the whole or any part of their submissions, may be disclosed to members of the public. This will be done by publishing this information on the SFC's website and in documents to be published by the SFC during the consultation period or at its conclusion.

Access to data

4. You have the right to request access to and correction of your Personal Data in accordance with the provisions of the PDPO. Your right of access includes the right to obtain a copy of your Personal Data provided in your submission on this consultation paper. The SFC has the right to charge a reasonable fee for processing any data access request.

¹ Personal Data means personal data as defined in the Personal Data (Privacy) Ordinance (Cap. 486).

² The term "relevant provisions" is defined in section 1 of Part 1 of Schedule 1 to the Securities and Futures Ordinance (Cap. 571) and refers to the provisions of that Ordinance together with certain provisions in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32), the Companies Ordinance (Cap. 622) and the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (Cap. 615).

Retention

5. Personal Data provided to the SFC in response to this consultation paper will be retained for such period as may be necessary for the proper discharge of the SFC's functions.

Enquiries

6. Any enquiries regarding the Personal Data provided in your submission on this consultation paper, or requests for access to Personal Data or correction of Personal Data, should be addressed in writing to:

The Data Privacy Officer
The Securities and Futures Commission
54/F, One Island East
18 Westlands Road
Quarry Bay, Hong Kong

7. A copy of the Privacy Policy Statement adopted by the SFC is available upon request.

Introduction

1. The SFC proposes to issue risk management guidelines for futures brokers' dealing activities under section 399 of the Securities and Futures Ordinance (SFO) to supplement the existing risk management requirements. The proposed Risk Management Guidelines for Licensed Persons Dealing in Futures Contracts (Proposed Guidelines) are attached in the Appendix. The Proposed Guidelines will apply to all licensed corporations which are licensed for Type 2 regulated activity (dealing in futures contracts) (futures brokers), whether they deal in financial or commodity futures.
2. In the past two years, both the financial and commodity futures markets have experienced extreme market volatility. For example,
 - (a) on 16 March 2020, following the outbreak of the COVID-19 pandemic, the HSI Volatility Index (VHSI)³ reached 64.8, the highest closing value since its launch in February 2011. Moving into 2022, markets continued to demonstrate substantial volatility amidst concerns over the global economic slowdown, the tightening of US monetary policy, the evolving pandemic situation and geopolitical tensions. The Hang Seng Index closed at a five-year low of 18,415 on 15 March 2022. On 17 March 2022, the Hang Seng Index soared about 5.8% at mid-day and that morning, a large futures broker was unable to settle a mandatory intra-day variation adjustment and margin call from the HKFE Clearing Corporation Limited before the deadline after its affiliated established clients⁴ entered into significant opposite bets which caused a sudden surge in the margin requirement imposed on the futures broker by the clearing house;
 - (b) on 9, 12, 16 and 18 March 2020, the Standard and Poor's 500 (S&P 500) plunged significantly and triggered market-wide circuit breakers⁵. The causes of the extreme volatility reportedly included concerns caused by the outbreak of the COVID-19 pandemic and the drop in oil prices;
 - (c) in April 2020, the price of the West Texas Intermediate Light Sweet Crude Oil futures contract (WTI Contract) traded on the New York Mercantile Exchange went negative. The day before the contract expired, the price of the immediate month (May 2020) WTI futures contract fell to negative for the first time in the contract's 37-year history. The causes of this extreme volatility reportedly included worries of a shortage in physical storage facilities for taking delivery under the contract and the weak demand for energy during the COVID-19 pandemic; and

³ VHSI aims to measure the 30-calendar-day expected volatility of the Hang Seng Index implicit in the prices of near-term and next-term Hang Seng Index options which are traded on the derivatives market of Hong Kong Exchanges and Clearing Limited.

⁴ Clients to whom Rule 617(b) of the Rules of Hong Kong Futures Exchange Limited (HKFE) applies.

⁵ The Securities and Exchange Commission mandated the creation of market-wide circuit breakers to prevent a repeat of the market crash on 19 October 1987 when the Dow Jones Industrial Average plunged 22.6%. Since then, circuit breakers were only triggered once, in 1997, prior to the four times they were triggered in March 2020. The market-wide circuit breaker mechanism provides for trading halts in all cash equity and equity options markets in the US during a severe market decline as measured by a single-day decline in the S&P 500.

- (d) on 8 March 2022, the London Metal Exchange (LME) made an unprecedented move to halt trading and cancel trades in nickel contracts after the price of the LME benchmark three-month nickel contract suddenly spiked. This extreme volatility was reportedly due to worries over the supply of nickel, among other reasons.
3. Some of these events prompted headline stories about the hits taken by some futures investors and their brokers. In our follow-up on the impact on futures brokers, we noted that some of their clients suffered losses and failed to meet margin calls. In some cases, the futures brokers were significantly affected and required emergency funding or financial assistance to prevent defaults on their obligations to the clearing houses or to ensure compliance with the Securities and Futures (Financial Resources) Rules (FRR).
4. These incidents demonstrated the following issues:
 - (a) the futures markets, irrespective of the nature of the underlying assets, can be highly volatile at times;
 - (b) the commodity futures markets are exposed to risks which are very different from those in the financial futures markets;
 - (c) the margin requirements set by clearing houses, usually with the help of statistical models⁶, are not fool-proof and are subject to tail risk following extreme market movements; and
 - (d) a futures broker may be exposed to significant financial and compliance risks when the market encounters extreme volatility, especially when its exposure is concentrated in a single client (whether affiliated with the futures broker or not).
5. The SFC attaches great importance to futures brokers' risk management and financial integrity. However, a number of slack risk management practices have been noted in the SFC's supervision of some futures brokers. For example:
 - (a) a futures broker allowed clients who had outstanding margin calls to establish new positions;
 - (b) a futures broker allowed certain clients to open futures positions with margin requirements which were lower than those set by the clearing house;
 - (c) a futures broker did not establish any risk limits to control the exposure of its futures dealing business and manage concentration risk;

⁶ Margin requirements for futures contracts are usually calculated by exchanges or clearing houses using statistical models, such as the SPAN portfolio margining system. They are designed to adequately cover potential losses over a specific time period (usually one or two trading days) within a defined confidence level (usually 95%-99%). For instance, a margin requirement designed to cover one-day losses at a 95% confidence level is statistically expected to be exceeded on 12 days over a year of 250 trading days. If the margin requirement is increased to cover 99% of one-day losses, it is statistically expected to be exceeded on two to three days over a year.

- (d) a futures broker applied the same risk limit to every client without considering individual clients' circumstances, such as their creditworthiness, trading needs and financial situations;
 - (e) a futures broker did not implement any controls to monitor its clients' positions against the limits assigned to them;
 - (f) a futures broker did not force-liquidate a client's positions after the client's net equity balance fell below the pre-set threshold for forced liquidation;
 - (g) a futures broker failed to properly assess its clients before they were treated as established clients, or to conduct regular reviews of their eligibility;
 - (h) a futures broker did not have proper stress testing in place to evaluate the potential losses of its option portfolios under extreme but plausible market conditions; and
 - (i) a futures broker kept some clients' excess margins in its omnibus account with the clearing broker resulting in the excess margins being used to offset futures trading losses of other clients or meet the clearing broker's margin requirements for other clients' futures trading.
6. These findings suggest that further guidance on futures brokers' risk management is necessary.
7. The existing risk management requirements for futures dealing activities are mainly set out in:
- (a) the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (Code of Conduct);
 - (b) the Management, Supervision and Internal Control Guidelines for Persons Licensed by or Registered with the Securities and Futures Commission; and
 - (c) the Suggested Control Techniques and Procedures for Enhancing a Firm's Ability to Comply with the Securities and Futures (Client Securities) Rules and the Securities and Futures (Client Money) Rules.
8. These requirements were mainly designed for financial futures and do not contain specific risk management guidance for commodity futures trading. The SFC noted that the trading of overseas commodity futures contracts has increased in the past decade. The SFC considers it as an opportune time to set out the regulatory standards for the risk management of commodity futures trading.
9. For the purpose of drafting the Proposed Guidelines, the SFC conducted a fact-finding exercise in late 2021 to collect up-to-date business information from over 40 futures brokers of different sizes, including their turnover data, client base, and margining and other risk management practices such as limit setting mechanisms and stress testing. The SFC took this information into consideration in devising the Proposed Guidelines.
10. In addition, the SFC has discussed the key proposals with representatives of a number of futures brokers, both global and local, to gauge the challenges in



implementation. We also made reference to regulations in other jurisdictions. The SFC has also discussed some of the key requirements of the Proposed Guidelines with HKFE in formulating its proposals.

11. The SFC invites comments on the Proposed Guidelines from market participants and other interested parties.

Proposals

Overall framework

12. The Proposed Guidelines will apply to futures brokers licensed for Type 2 regulated activity and cover the following areas:
 - (a) risk management framework;
 - (b) market risk management;
 - (c) commodity futures trading;
 - (d) client credit risk management;
 - (e) concessionary margining;
 - (f) counterparty risk management;
 - (g) funding liquidity risk management;
 - (h) safeguarding client assets;
 - (i) trading in futures markets outside Hong Kong;
 - (j) stress testing; and
 - (k) notification requirements.

13. The Proposed Guidelines mainly consist of qualitative requirements, with a few quantitative requirements for the control and management of key risks arising from futures dealing activities. Most of the requirements institutionalise existing industry risk management practices or elaborate on the practical application of existing requirements in the Code of Conduct.

14. Comments are specifically invited on the following requirements:
 - (a) coordination between Responsible Officers (ROs) and Managers-In-Charge (MICs) in the risk management of futures business;
 - (b) specific requirements relating to commodity futures business;
 - (c) system controls relating to client risk limits;
 - (d) margin controls and restrictions on granting margin call or forced liquidation waivers;
 - (e) controls and thresholds for applying concessionary margining to clients;
 - (f) due diligence reviews of executing or clearing agents;
 - (g) safeguarding client assets;
 - (h) controls relating to trading in futures markets outside Hong Kong and handling client assets outside Hong Kong; and
 - (i) stress testing.

Coordination between ROs and MICs in the risk management of futures business

15. Risks relating to futures business (including house trading⁷ and client trading), such as client credit risk, funding liquidity risk and trading risk, may be overseen by different departments of a futures broker as the first line of defence, with the risk management team or department led by the MIC of Risk Management acting as the second line of defence. To avoid any gap in risk management, futures brokers must ensure the risks are properly managed by responsible departments.
16. The Proposed Guidelines require a futures broker, for each material risk relating to futures business, to designate either a RO or an MIC to manage the risk⁸. The designated ROs and MICs should be delegated with sufficient authority and report directly to the board of directors or MIC of Overall Management Oversight (MIC OMO). The board of directors or MIC OMO should ensure that there is clear documentation of and proper coordination between the risk management roles of the designated ROs and MICs and there is no material gap between their respective areas of responsibility.

Question 1

Do you agree that a RO or an MIC should be designated to manage each material risk relating to futures business?

Specific requirements relating to commodity futures business

17. A commodity futures product may be exposed to risks which are unique to the underlying commodity market. In particular, a commodity's price volatility may depend on:
 - (a) supply and demand;
 - (b) the commodity's physical properties (eg, its perishability and seasonability);
 - (c) production or extraction infrastructure and life cycle;
 - (d) supply and price volatility of raw materials for manufacturing the commodity (eg, natural gas, coal or oil for electricity production);
 - (e) environmental and climate factors (eg, diseases, pollution and extreme weather);
 - (f) supply and price volatility of storage and delivery facilities; and
 - (g) political and economic factors.
18. The Proposed Guidelines require futures brokers to maintain a list of commodity futures products that they can deal. The list should be approved by the board of directors. They should understand the nature and risks of the products and the underlying commodity markets and take these into account in determining risk limits for house trading and client trading in the products.
19. The Proposed Guidelines provide a high level, non-exhaustive list of factors that futures brokers should consider:
 - (a) physical properties of the commodity;

⁷ Including position-taking, arbitrage trading and market-making activities.

⁸ For example, funding liquidity risk may be managed by the MIC of Finance and Accounting and trading risk may be managed by a RO.

- (b) factors which may affect the supply and demand of the commodity, such as its production or extraction infrastructure and life cycle, environmental and climate factors, supply and price volatility of raw materials for manufacturing the commodity, and supply and price volatility of storage and delivery facilities;
- (c) the structure, organisation and operation of the commodity market, including:
 - (i) the composition and role of participants in the commodity market, including providers of specific services which enable the commodity market to function (such as production, extraction, delivery, storage and settlement services); and
 - (ii) storage and delivery arrangements, such as whether the commodity can be delivered only to specific delivery points and related administrative requirements, and the capacity constraints of specific delivery points; and
- (d) political, macroeconomic and other related factors which may affect the operation of the commodity market.

Question 2

Do you agree that the aforesaid factors should be taken into account by futures brokers in understanding the nature and risks of the underlying commodity market of commodity futures products? If not, please explain.

System controls relating to client risk limits

- 20. In the fast-paced, highly-g geared futures market, it is necessary for futures brokers to monitor client exposures using real-time risk management system, order management system or trading platform. Currently, paragraph 2.1.1(a) of Schedule 7 to the Code of Conduct requires a licensed corporation to put in place automated pre-trade controls on all client orders when providing internet trading and direct market access services.
- 21. The Proposed Guidelines require futures brokers (regardless of whether electronic trading is provided to clients) to incorporate client risk limits into their risk management system, order management system or trading platform so that client exposure can be monitored on a real-time basis and any orders exceeding the limits can be stopped for follow-up action.
- 22. During the soft consultation, some futures brokers, which belong to large financial groups and act as an execution arm of their overseas client-facing group entities for futures trading in Hong Kong, indicated that their risk management including client credit risk assessments and risk and capital allocation was performed on a group level basis with risk limits set for end clients of the overseas group entities in the order chains or trading desks. Therefore, the proposed requirement to enforce risk limits on a futures broker's direct clients (ie, the group entities) would create practical difficulties for these futures brokers.
- 23. While we maintain the view that measures to monitor exposures to direct clients are crucial, having considered the feedback received and for the purpose of the Proposed Guidelines, we propose to allow futures brokers to adopt alternative arrangements for clients which are group entities regulated or supervised by a financial regulator in Hong

Kong or a prescribed country (as defined in section 2(1) of the FRR). For its affiliate clients, the futures broker should adopt compensating measures to ensure its credit risk exposure to these clients is not excessive, including to have in place policies and procedures for the timely settlement of obligations to counterparties, to conduct regular reviews on the affiliate clients' trading activities and their ability to timely settle obligations to the futures broker and to put in place a contingency funding plan to prepare for any settlement delay or failure by the affiliate clients.

Question 3

Do you agree that incorporating client risk limits into a futures broker's risk management system, order management system or trading platform will enable the futures broker to better manage its exposure to clients' trading?

Question 4

Do you agree that the alternative requirements for a futures broker's affiliate clients (clients which are group entities regulated or supervised by a financial regulator in Hong Kong or a prescribed country) will enable the futures broker to manage its exposure to their trading activities? If not, please provide the rationale and any alternative suggestions.

Margin controls and restrictions on granting margin call or forced liquidation waivers

24. Margin control is an important risk management tool. The SFC considers that it is necessary for futures brokers to collect sufficient collateral from clients before trading futures contracts for them.
25. The SFC's fact-finding exercise revealed that all respondent firms had imposed margin requirements on clients which were equal to or higher than those set by their counterparties⁹. Some of them also charged additional mark-ups, taking into account the prevailing market conditions (eg, heightened market volatility) or based on specific considerations for clients or products. Most respondent firms reported that they had measures in place to monitor the margin shortfall of each client account at least daily. More than half of the respondent firms set trigger levels to close out or liquidate client positions.
26. The Proposed Guidelines institutionalise futures brokers' common margin controls. For example, the Proposed Guidelines require a futures broker to impose on clients a margin requirement (both an initial margin requirement and maintenance margin requirement) for futures contracts which is not lower than the amount set by its counterparty. The amount to be collected from a client should take into account the circumstances of the client and the futures broker, the risk of the product and prevailing market conditions. A higher client margin requirement than that mandated by the counterparty may be necessary in individual cases.

⁹ "Counterparty" includes executing agents, clearing agents or the exchanges or clearing houses executing or clearing the futures contracts. The term is defined in paragraph 19 (Note 2) of the Proposed Guidelines in Appendix.

27. In addition, the Proposed Guidelines require a futures broker not to trade futures contracts for a client unless the client has provided sufficient collateral to cover the minimum margin requirement. However, this upfront margin requirement is not applicable to clients meeting the eligibility criteria prescribed by the Proposed Guidelines for concessionary margining¹⁰.
28. The Proposed Guidelines further provide that a futures broker should not grant any credit facilities or loans to any clients or make any other arrangements¹¹ to enable any clients to meet their margin requirements for futures contracts. This requirement does not apply to concessionary margining granted by the futures broker to clients pursuant to the Proposed Guidelines.
29. During the soft consultation, some futures brokers indicated that there may be delays in the collection of margins owing to circumstances which are beyond the control of the clients or the futures brokers, eg, delays in cheque clearance or remittance. The SFC considers that futures brokers should exercise judgement in determining whether collateral has been collected taking into account the relevant circumstances such as evidence of payment¹².
30. A futures broker should regularly determine whether the net equity balance¹³ of each client account is lower than the margin requirement set by it for the open positions in the account. A margin call should be issued as soon as reasonably practicable if the net equity balance in the client account is lower than the margin requirement. Upon receiving an ad-hoc margin call from its counterparty in respect of a client's futures positions, the futures broker must also calculate the total amount of margin call outstanding in the client account and issue a margin call to the client as soon as practicable.
31. If a client fails to meet a margin call before the deadline set by the futures broker, the futures broker may close out any of the client's positions in the client account to ensure the net equity balance can meet the margin requirements set by it for the remaining open positions in the account.
32. The SFC understands that there may be occasions where a futures broker finds it appropriate to waive a margin call or forced liquidation in relation to a client account, for example, reduction of margin shortfall due to favourable price movements or the closing out of positions by a client voluntarily. To prevent abusive use of such waiver powers, the Proposed Guidelines require a futures broker not to waive any margin calls or forced liquidation for a client who has failed to meet two margin calls by the settlement deadlines without reasonable excuse in the preceding 30 calendar days. Once this requirement is triggered, the futures broker should insist on collecting any outstanding

¹⁰ See paragraphs 27 (Note 6) and 36 of the Proposed Guidelines in Appendix for the meaning of "concessionary margining" and the eligibility criteria.

¹¹ For example, a futures broker should not provide financial support to an affiliated company to facilitate the latter to grant a credit facility or loan to the broker's client to help the client meet the margin requirements on futures contracts.

¹² For example, a cheque received by a futures broker in good faith which it has no reason for suspecting that it will be dishonoured may be treated as cash.

¹³ See paragraph 31(b) (Note 7) of the Proposed Guidelines in Appendix for the meaning of "net equity balance".

margin call from the client, prevent the client from opening any new positions in futures contracts before the margin call is settled and, where applicable, follow their in-house policy of forced liquidation. For this purpose, reminders issued to the client on the day of the settlement deadline of an outstanding margin call would not be treated as new margin calls. All subsequent reminders must be treated as new margin calls.

33. The Proposed Guidelines further provide that margin call and forced liquidation waivers as well as any deviation from the margin policies should be approved by senior management with appropriate justifications after assessing the impact on the firm's financial position. In addition, approvals of margin call and forced liquidation waivers must be supported by an assessment of the creditworthiness of the clients based on their financial positions and past records in meeting margin requirements.

Question 5

Do you agree that no waivers of margin calls or forced liquidation should be allowed for clients who have failed to meet two margin calls by the settlement deadlines without reasonable excuse in the preceding 30 calendar days? If not, what different threshold would you suggest?

Controls and thresholds for applying concessionary margining to clients

34. The SFC's fact-finding exercise found that more than half of the respondent firms had applied concessionary margining to clients. Specific to dealing in futures contracts traded on HKFE, Rule 617(b) of the Rules of HKFE sets out the conditions under which an exchange participant of HKFE may trade futures contracts for clients without having received from them adequate collateral to cover the minimum margin requirement.
35. The SFC expects that before a futures broker applies concessionary margining to a client, it should assure itself that the client has the financial capacity to meet the obligations arising from his or her trading activities. A futures broker should only apply concessionary margining to clients who maintain sound financial positions and have demonstrated a record of consistently meeting margin obligations, in addition to complying with other requirements including the client eligibility criteria prescribed by the rules of the exchange or clearing house.
36. The SFC has made reference to HKFE's guidance to exchange participants on the client eligibility criteria under Rule 617(b) of the Rules of HKFE¹⁴, and the Proposed Guidelines provide specific guidance to futures brokers that consistently meeting margin obligations shall mean no failure to meet margin obligations within an immediately preceding record period of at least one year, or if the client account has been opened for less than one year, within an immediately preceding record period of a least three months. For new clients, account statements and other formal documentation issued by other licensed or regulated entities may be acceptable forms of record for assessment. The Proposed Guidelines also require futures brokers to set a prudent trading limit for each client with concessionary margining and to strictly enforce the trading limit.
37. Futures brokers which apply concessionary margining may be required to settle the margin obligations arising from clients' open positions with their counterparties before

¹⁴ The [circular "Margin Requirements under Rule 617"](#) issued by HKFE on 22 June 2017.

the clients meet their margin requirements. In times of market volatility, the futures brokers may be subject to intra-day margin calls from their counterparties and therefore the margins to be pre-funded by the futures brokers may increase rapidly. If any clients subsequently default, the futures brokers may also suffer financial losses. As such, excessive exposure to client positions with concessionary margining exposes futures brokers to undue liquidity and credit risks.

38. In light of the above, it is desirable to limit the liquidity and credit risks of futures brokers by preventing them from applying concessionary margining beyond their financial capabilities and ensuring that they have a sufficient buffer against a potential surge in liquidity needs in a tail market event. To this end, the SFC proposes to set a quantitative benchmark to limit a futures broker's exposure to concessionary margining based on its financial position.
39. Paragraph 40 of the Proposed Guidelines requires a futures broker to limit the aggregate uncovered client margin amount of all clients' ledger accounts¹⁵ which are subject to concessionary margining to 10% of the higher of the futures broker's excess liquid capital (ELC) or available funding¹⁶ at the close of any trading day. The uncovered client margin amount shall mean the total amount of margin required to be deposited by a futures broker with its counterparties in respect of the trading of futures contracts in a client's ledger account which is not covered by the net equity balance of that ledger account. Paragraph 66 of the Proposed Guidelines requires a futures broker to report to the SFC when it is unable to comply with the limit.
40. During the soft consultation, some futures brokers sought clarification of the timing for calculating the day-end aggregate uncovered client margin amount. The SFC expects a futures broker to adopt an appropriate cut-off time for the calculation to allow for the completion of its post-trade operations which are necessary for reasonably estimating the margin requirement for each ledger account which is subject to concessionary margining. The futures broker should consistently adopt this timing for this calculation on each trading day.
41. Some futures brokers also raised a specific question about whether the trading of futures contracts by clients in HKFE's after-hours trading (AHT) session should be captured in the calculation of the aggregate uncovered client margin amount. They commented that the margin requirement for each ledger account as of the close of the AHT session could only be reasonably estimated the next morning (Hong Kong time). The SFC understands that compared to the day session, the turnover on HKFE is typically lower in the AHT session. Furthermore, market protection mechanisms (eg, the +/-5% price limit for futures trading) are in place for the AHT session to prevent extreme market volatility. Having considered the feedback from the soft consultation and the risk mitigating factors set out above, we consider that for the purpose of calculating the day-end aggregate uncovered client margin amount, it would suffice for a futures broker to estimate its exposure to client trading on HKFE based on the margin requirement for each ledger account as of the close of the day session. To this end, the Proposed Guidelines have provided that futures brokers are not expected to take into account the

¹⁵ Paragraphs 17 and 19 of Schedule 4 to the Code of Conduct which are applicable to exchange participants of HKFE set out the requirement to maintain separate ledger accounts in respect of HKFE Trade and Non-HKFE Trade. The term "HKFE Trade" is defined under the Rules of HKFE.

¹⁶ See paragraph 39(d) of the Proposed Guidelines in Appendix for the meaning of "available funding".

trading of futures contracts if the trading hours of the trading session extend beyond midnight of the trading day.

42. The SFC has been mindful of the need to strike a balance between prudent risk management and the competitiveness of the futures market in Hong Kong. By setting the limit in paragraph 40 of the Proposed Guidelines against the higher of a futures broker's ELC and available funding, the futures broker will be allowed flexibility in its capital structure considering its specific circumstances. Based on the SFC's fact-finding exercise, over 90% of the respondent firms which reported to have applied concessionary margining to clients had their exposure within the proposed limit.

Question 6

Do you agree that 10% of the higher of ELC or available funding is an appropriate limit for a futures broker's exposure to concessionary margining? If not, what limits would you suggest? Please provide reasons.

Question 7

Do you agree to exclude from the calculation of the aggregate uncovered client margin amount the trading of futures contracts in a trading session of a futures market which extends beyond midnight? If not, please provide reasons.

Due diligence reviews of executing or clearing agents

43. The Proposed Guidelines require futures brokers to regularly conduct due diligence reviews of executing or clearing agents. They should assess the capability of the executing or clearing agent taking into account material information relevant to their dealings with the agent, including the agent's:
- (a) licensing or authorisation status and the regulations of the jurisdiction in which the agent is licensed or authorised, including the regulations of the exchange or clearing house of which the agent is a member or participant;
 - (b) financial background;
 - (c) client margin and risk management policies;
 - (d) execution or clearing capacity;
 - (e) disaster recovery procedures; and
 - (f) client assets segregation policies.
44. Futures brokers should properly manage their exposure to executing or clearing agents and avoid relying on a single agent. Futures brokers should identify at least one back-up executing or clearing agent (back-up agent) and, where possible, establish and maintain a mutual understanding or formal agreement with the back-up agent on the back-up arrangement. Having a back-up arrangement in place would greatly enhance the futures broker's ability to continue its client services if its executing or clearing agent ceases services abruptly.

45. During the soft consultation, some futures brokers indicated that it may not be easy to obtain the internal policies of executing or clearing agents. The SFC suggests that a futures broker may obtain an understanding of the agent's policies through meetings or questionnaires. Alternatively, futures brokers may look up the regulations of the jurisdiction in which the agent is licensed or authorised for the relevant information.

Question 8

Do you agree that futures brokers should conduct due diligence reviews of executing or clearing agents and have a back-up agent? If not, please provide reasons.

Safeguarding client assets

46. Depositing different clients' assets into an omnibus account with a counterparty may result in the return or transfer of a client's assets being subject to the futures broker or its other clients fulfilling their obligations to the counterparty (commingling risk). We expect futures brokers to duly take this risk into consideration in handling client assets and take steps to protect the interest of each client who deposits assets with it.
47. In particular, when a client's futures trading account has trading losses which exceed the account's net equity balance (ie, the client account has an overloss), futures brokers should put in place appropriate procedures to prevent or remedy any shortfall arising in the client assets held for other clients as a result of any set-off carried out by the counterparty between the client's overloss and other clients' assets in the omnibus account.
48. The Proposed Guidelines require futures brokers to take reasonable steps to prevent assets belonging to one client account from being used to set off or settle another client account's overloss. Where a client account's overloss and other client accounts' assets in a futures broker's omnibus account are set off by a counterparty, the futures broker should as soon as reasonably practicable deposit into the omnibus account or a designated trust bank account an amount of its own cash which is equal to the amount of the overloss which remains unsettled by the client to remedy the shortfall arising in client assets caused by the set-off. The payment would not be treated as a credit facility or loan to enable the client to meet his or her margin requirements for the purposes of the Proposed Guidelines unless the futures broker waives the margin call on the client.
49. The Proposed Guidelines also prohibit a futures broker from using assets belonging to one client to secure or settle transactions of another client.
50. In order to alert clients to the relevant risks, the Proposed Guidelines require futures brokers to disclose in the client agreement:
- (a) the extent of its liability to the client in respect of client assets held by its executing or clearing agent when the latter defaults; and
 - (b) the risk of the client's rights to assets held by it in an omnibus account with a clearing house or executing or clearing agent may be subject to it, its other clients, the executing or clearing agent, and other clients of the executing or clearing agent (as the case may be) fulfilling their obligations to their

counterparties, despite the fact that the client did not default on his or her obligations to it.

Question 9

Do you agree that a futures broker should deposit its own funds into an omnibus account with an executing or clearing agent or clearing house or a designated trust bank account to remedy a shortfall in client assets caused by set-off of clients' overlosses with other clients' assets?

Controls relating to trading in futures markets outside Hong Kong and handling client assets outside Hong Kong

51. The SFC's fact-finding exercise found that more than half of the respondent firms offered trading of futures contracts in overseas markets, including the US, Europe and Singapore. Futures brokers providing services to clients in an overseas futures market may face operational challenges due to the time difference between Hong Kong and the overseas markets, the use of other intermediaries' execution or clearing services and the differences between local and overseas regulations.
52. Moreover, client assets will be transferred outside Hong Kong for margin purposes for overseas futures trading. Once client assets are transferred outside Hong Kong, they will fall outside the protection of the Securities and Futures (Client Money) Rules (CMR) and the Securities and Futures (Client Securities) Rules (CSR). In respect of client assets transferred outside Hong Kong, futures brokers should take all necessary measures to safeguard those assets in accordance with the Code of Conduct.
53. The SFC further noted that as a buffer for meeting future margin calls (including upfront margin requirements) or charges, a number of futures brokers deposit into their omnibus accounts with overseas counterparties client assets in excess of the amount required for meeting clients' settlement or margin obligations (the excess amount of client assets are referred to as "client margin excess" in the Proposed Guidelines). If the overseas counterparty is a direct or indirect clearing member of a clearing house, the client assets (including the client margin excess) of the futures broker may be further deposited by the overseas counterparty into its omnibus account with the clearing house or direct clearing member for similar reasons. As a result, these client assets may be commingled with the assets of other clients of the overseas counterparty or the direct clearing member.
54. If the overseas counterparty, direct clearing member or any of their clients defaults, the futures broker's client assets may be withheld or even used by the clearing house to offset the liabilities of the defaulting party, despite the fact that the futures broker's clients did not default on their obligations (this risk is referred to as "overseas commingling risk" in this paper). For example, the bankruptcy of MF Global in 2012 caused significant delays as well as uncertainty in the transfer of the positions and assets of its clients, some of which were SFC-licensed brokers acting on behalf of their clients.
55. The SFC considers it necessary for futures brokers to take steps to minimise the exposure of client assets received in or transferred to an overseas jurisdiction to reduce overseas commingling risk. However, the SFC also understands that futures brokers

may find it necessary to maintain client margin excess with their overseas counterparties so that the counterparties' upfront margin requirements are met readily when clients conduct trading. Segregation of such client margin excess may cause delays to the clients' trading.

56. The Proposed Guidelines require a futures broker providing services to clients in a futures market outside Hong Kong through an overseas executing or clearing agent to carry out the following measures as far as practicable:
- (a) open and maintain a segregated or trust account with a bank or custodian regulated by the authority of the jurisdiction in which the futures market is located;
 - (b) deposit client margin excess received in or transferred to that jurisdiction into that segregated or trust account as soon as reasonably practicable;
 - (c) handle client assets in that segregated or trust account in a similar manner as the CMR or CSR (where applicable) prescribe for client assets held in Hong Kong; and

Note

A futures broker is exempt from the requirements in paragraphs 56(a), (b) and (c) above in respect of client margin excess held by an overseas executing or clearing agent who imposes upfront margin requirements on clients.

- (d) refrain from holding an amount of client margin excess with a single overseas executing or clearing agent which exceeds the futures broker's ELC reported in its latest monthly financial returns. The futures broker is expected to address the concentration risk as far as practicable, such as using different agents for different futures markets or products.
57. The Proposed Guidelines further require futures brokers providing services to clients in an overseas futures market to disclose to clients:
- (a) preferably on its website, the names of all overseas executing or clearing agents who may hold the futures broker's client assets in an omnibus account with the agent's counterparty; and
 - (b) in the client agreement the key risks of conducting transactions in a futures market outside Hong Kong, including but not limited to:
 - (i) the risks of client assets received or held outside Hong Kong, as set out in the Risk Disclosure Statement in Schedule 1 to the Code of Conduct;
 - (ii) the return or transfer of a client's assets may be subject to restrictions imposed by the regulation of that futures market or law or regulation of the jurisdiction in which the futures market is located;
 - (iii) its overseas counterparties and that futures market are outside the jurisdiction of the SFC and may be subject to regulation which is different from the SFO; and

- (iv) other material risks of conducting transactions in that futures market.

Question 10

Do you agree that the amount of client margin excess held by an overseas executing or clearing agent should not exceed the futures broker's ELC reported in its latest monthly financial returns? If not, what limit would you suggest?

Stress testing

58. Even if a futures broker collected margins from a client according to the clearing house's requirements, it can still be exposed to significant risks when a substantial loss arises in the client's account following an extreme market event. The risks are two-fold:
- (a) the futures broker may be required to meet intra-day margin calls from the counterparty on short notice; and
 - (b) the futures broker's liquid capital may deplete quickly if the client defaults.
59. The SFC considers that futures brokers should monitor and prepare for these risks in their risk management and business continuity planning. This should include regularly conducting stress tests to help them identify any excessive exposure to individual clients or groups of connected clients and assess their vulnerability to extreme market volatility.
60. The SFC's fact-finding exercise revealed that a majority of respondent firms had stress testing policies and most of them conducted stress tests daily, weekly or on an ad-hoc basis. Most respondent firms with house trading activities performed stress tests on their proprietary positions. More than half of respondent firms' stress tests assess the potential impact on their liquidity and compliance with regulatory capital requirements under different stressed scenarios.
61. The Proposed Guidelines require a futures broker to conduct stress tests at least daily if concessionary margining is applied to any clients, and at least weekly in other cases. Stress tests should also be conducted during a volatile market.
62. Stress tests should be designed to identify the futures broker's financial vulnerability and any excessive exposure to individual clients or groups of connected clients. In particular, stress tests should be capable of:
- (a) projecting the amount of loss which might arise in each client account under a particular stress scenario and estimating the impact of material projected overlosses¹⁷ in client accounts on the futures broker's ELC¹⁸ and available funding¹⁹. This requirement is not applicable to the positions in the account of any client which is:

¹⁷ See paragraph 56(a) (Note 9) of the Proposed Guidelines in Appendix for the meaning of "projected overloss".

¹⁸ The impact should be calculated in accordance with sections 40(1) and (2) of the FRR on the assumption that the client fails to meet the margin call by the settlement deadline.

¹⁹ See paragraph 39(d) of the Proposed Guidelines in Appendix for the meaning of "available funding".

- (i) a licensed corporation;
- (ii) a registered institution; or
- (iii) a futures dealer (as defined in section 2(1) of the FRR) outside Hong Kong,

if those positions are carried on behalf of its clients;

- (b) projecting the amounts of trading losses and margin calls which might arise on the futures broker's proprietary positions under a particular stress scenario and estimating the impact of the total amount of projected trading losses and margin calls on its ELC and available funding; and
 - (c) appropriately estimating the potential losses of products with non-linear payoffs (eg, options).
63. A futures broker should design its stress scenarios for stress testing positions in futures contracts based on assumptions of extreme but plausible price movements or volatility shifts²⁰, past market stress events which are relevant to the futures contracts traded by it or its clients²¹ and hypothetical events based on emerging risks²². Where an exchange or a clearing house specifies or suggests minimum parameters for a futures broker's stress testing on a futures contract²³, the futures broker should ensure that its parameters for stress testing positions in such futures contract are at least as stringent as those specified or suggested by the exchange or clearing house.
64. We understand that Hong Kong Exchanges and Clearing Limited (HKEX) specifies stress parameters for some HKEX products for their clearing participants. These brokers should apply the stress parameters specified by HKEX in their stress tests for such products.
65. Regarding other HKEX products and overseas futures products, given their diversity, smaller-sized futures brokers may not have the resources to design their own stress scenarios for each product if the exchange or clearing house does not specify stress parameters for the product. The Proposed Guidelines provide a simple alternative approach whereby a futures broker may choose to conduct a simplified stress test by making the following assumptions:
- (a) the projected loss of a client account under a stress scenario equals 200% of the margin requirement set by its counterparty on the positions in the account; and
 - (b) the projected loss of a house account under a stress scenario equals 200% of the margin requirement set by its counterparty on the positions in the account.

²⁰ For options contracts only.

²¹ For example, the 2008 global financial crisis and 2020 volatility in WTI crude oil price.

²² For example, a significant rise or fall in commodity price due to the outbreak of a new disease.

²³ For example, the underlying price movements to be assumed for index options traded on HKFE are $\pm 20\%$ when these Proposed Guidelines were prepared.

66. Given that margin requirements are usually calibrated to cover maximum historical loss with a high confidence level, we believe margin requirement is a prudent and suitable basis for estimating stress loss.
67. During the soft consultation, some futures brokers suggested that the multiplier applied to estimate projected loss under the alternative approach should not be too high. We note that the stress parameters specified for mainstream futures products for clearing participants by HKEX currently represent more than two times of the price movements that clearing house margin requirement can cover. Given the diversity of overseas and other HKEX futures products, we consider it desirable to apply a prudent multiplier to ensure that the projected loss estimated by the stress test reflects the tail risks.
68. A futures broker should promptly and diligently review all the stress test results, identify and assess any potential risks, and take prompt follow-up action. In particular, it should:
- (a) compare the total projected losses in client accounts and total projected losses in house account with the results of previous stress tests to identify any significant trends;
 - (b) assess the credit risk of any client or group of connected clients who has a projected overloss (total projected overlosses in the case of a group of connected clients) exceeding 30% of its ELC or available funding²⁴ and any other clients or groups of connected clients to whom its exposure is considered excessive by it;
 - (c) assess its ability to absorb the aggregate impact on its ELC or available funding of:
 - (i) the projected overlosses of the two clients or groups of connected clients who have the largest projected overlosses in their accounts; and
 - (ii) the projected loss in its house trading²⁵; and
 - (d) take follow-up action to ensure its financial integrity.
69. The SFC's fact-finding exercise found that it was common for futures brokers within a group to rely on stress tests conducted centrally at the group level for risk management purposes. The SFC is concerned that these stress tests may not appropriately capture the potential impact on futures brokers under stress scenarios if they do not properly take into account the futures brokers' specific risk exposure and financial positions. For example, a group-level stress test based on a group's consolidated financial positions and risk exposure netted across group entities may not accurately reflect a futures broker's ability to settle its own margin obligations with counterparties. To this end, paragraphs 60 and 61 of the Proposed Guidelines require that a futures broker which relies on the group-level stress tests should:
- (a) ensure that the stress tests have taken into account the futures broker's risk exposure and financial position, and appropriately project the stressed impact on its ELC and available funding;

²⁴ Notification requirement applies, please see paragraphs 66 and 67 of the Proposed Guidelines.

²⁵ Notification requirement applies, please see paragraphs 66 and 67 of the Proposed Guidelines.

- (b) ensure that the approach adopted by the stress tests is substantially consistent with or more stringent than the requirements for stress testing set out in the Proposed Guidelines; and
- (c) submit the group-level stress test reports to the SFC upon request, explain the test results relating to the futures broker's exposure and respond to other related enquiries from the SFC in a timely manner.

Question 11

Do you agree with the proposed requirement to conduct stress tests at least daily if concessionary margining is applied to any client, and at least weekly in other cases, and that stress testing should also be conducted during a volatile market?

Question 12

Do you agree with the alternative approach suggested in paragraph 65 above to estimate the projected losses of client and house accounts? If not, please provide the rationale and any alternative suggestions.

Question 13

Do you agree with the threshold for excessive exposure to individual clients or groups of connected clients set out in paragraph 68(b) above? If not, please provide the rationale and any alternative suggestions.

Question 14

Do you agree with the stress scenario set out in paragraph 68(c) for assessing a futures broker's ability to absorb the projected overlosses of client accounts and the projected losses of house trading? If not, please provide the rationale and any alternative suggestions.

Question 15

Do you foresee any challenges for futures brokers relying on the group-level stress tests to comply with paragraphs 60 and 61 of the Proposed Guidelines, including the submission of stress test reports to the SFC upon request? If so, please explain the challenges and provide alternative suggestions.

Proposed implementation timetable

70. The SFC appreciates that some of the requirements in the Proposed Guidelines may take time to implement or require system changes. It is proposed to provide a nine-month transition period for implementing the following requirements and a three-month transition period for all the other requirements:
- (a) the requirement to implement system controls on client risk limits set out in paragraph 21(d) of the Proposed Guidelines; and

- (b) the requirements to conduct due diligence reviews of executing or clearing agent and establish back-up arrangement with executing or clearing agents set out in paragraphs 42 and 43 of the Proposed Guidelines.

Question 16

Do you think that a nine-month transition period is appropriate for the requirements set out in paragraphs 70(a) and (b) above? If not, what would be an appropriate transition period? Please give your reasons.

Question 17

Do you think that a three-month transition period is appropriate for all other requirements in the Proposed Guidelines? If not, what would be an appropriate transition period? Please give your reasons.

Seeking comments

71. The Proposed Guidelines will be subject to a two-month public consultation. The SFC welcomes any comments from the public and the industry on the Proposed Guidelines.

Appendix – Draft Risk Management Guidelines for Licensed Persons Dealing in Futures Contracts

Introduction

1. These Guidelines are published by the Securities and Futures Commission (SFC) under section 399 of the Securities and Futures Ordinance (SFO) for the purposes of supplementing the existing control requirements for licensed persons dealing in futures contracts.
2. These Guidelines apply to persons licensed for Type 2 regulated activity (dealing in futures contracts) (futures brokers).
3. These Guidelines should be read in conjunction with, and apply without prejudice to, all relevant laws, legislation, codes, regulations or guidelines that are applicable to futures brokers²⁶.
4. A failure by any futures broker to comply with any applicable provision of these Guidelines:
 - (a) shall not by itself render it liable to any judicial or other proceedings, but in any proceedings under the SFO before any court, these Guidelines shall be admissible in evidence, and if any provision set out in these Guidelines appears to the court to be relevant to any question arising in the proceedings, it may be taken into account in determining the question; and
 - (b) may cause the SFC to consider whether such failure adversely reflects on the futures broker's fitness and propriety and the need for regulatory action.
5. The requirements specified in these Guidelines are the minimum standards the SFC expects of futures brokers and are not meant to be exhaustive. The SFC will adopt a pragmatic approach taking into account each futures broker's particular circumstances when assessing its compliance with these Guidelines and determining the regulatory response to any non-compliance.

²⁶ Including but not limited to the SFO, the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (Code of Conduct), the Management, Supervision and Internal Control Guidelines for Persons Licensed by or Registered with the Securities and Futures Commission, and the Suggested Control Techniques and Procedures for Enhancing a Firm's Ability to Comply with the Securities and Futures (Client Securities) Rules and the Securities and Futures (Client Money) Rules.

6. Unless specified otherwise, terms used in these Guidelines bear the same meaning as defined in the SFO²⁷. Any definition provided in these Guidelines applies to the whole Guidelines unless otherwise stated.

Risk management framework

7. A futures broker should ensure its risk appetites and risk limits are consistent with its strategic objectives as well as financial and management capabilities. It should establish an effective risk governance framework to manage the risks to which it and its clients are exposed.
8. A futures broker should, for each material risk relating to futures business, designate either a Responsible Officer (RO) or a Manager-In-Charge (MIC) to manage the risk²⁸. Such designated ROs and/or MICs should report directly to the board of directors or MIC of Overall Management Oversight (MIC OMO).
9. Where a futures broker designates more than one individuals to oversee the risk management function, the board of directors or MIC OMO should ensure that:
 - (a) there is clear documentation of and proper coordination between the risk management roles of each designated ROs and/or MICs; and
 - (b) there is no material gap between the respective areas of responsibility of the designated ROs and MICs.
10. The board of directors or MIC OMO should delegate the designated RO and/or MIC with sufficient authority to implement policies and procedures to monitor and manage all material risks arising from the futures broker's house trading²⁹ and client trading in futures contracts in a timely and effective manner. The risk management policies and procedures should cover the following areas:
 - (a) identification and assessment of material risks and determination of risk appetites and risk limits;
 - (b) ongoing risk monitoring and reporting;
 - (c) escalation and resolution procedures for potential breaches of risk limits; and
 - (d) stress testing and contingency planning.
11. The risk management policies and procedures should be subject to regular reviews, particularly before introducing any new services or products or when there are

²⁷ For example, "futures contract" includes a contract or an option on a contract made under the rules or conventions of a futures market.

²⁸ For example, funding liquidity risk may be managed by the MIC of Finance and Accounting and trading risk may be managed by a RO.

²⁹ Including position-taking, arbitrage trading and market-making activities.

significant changes to the products, services, or relevant legislation, rules or regulations which may affect the futures broker's risk exposure.

Market risk management³⁰

12. In these Guidelines, "market risk" means the risk of loss due to adverse movements in the level or volatility of market prices of products or the underlying exposures³¹ of products held by a futures broker for its own account.
13. A futures broker's senior management should ensure that all market risks arising from house trading are properly quantified, monitored and controlled.

Note 1

In these Guidelines, "senior management" includes the ROs and MICs designated to oversee the risk management function.

14. A futures broker should ensure that all proprietary positions in futures contracts are marked-to-market on a real time basis. Also, day-end revaluation of proprietary positions should be carried out by an independent risk control unit or back office staff who are independent of the front office, and the prices used for revaluation purposes are obtained from a source independent of the front office or are independently verified.
15. A futures broker should establish a market risk measurement system to evaluate the probable impact on its proprietary positions of adverse changes in market conditions over a holding period suitable for the positions. A futures broker which is exposed to significant market risks or deploys complex trading strategies should use an appropriate quantitative model (eg, value-at-risk model), scenario analysis, sensitivity analysis or stress testing to measure its market risks.
16. A futures broker should regularly compare the estimated market risk exposures with the actual performance of its house trading. If the estimated and actual performances differ significantly, the market risk measurement system or model should be thoroughly reviewed and improved as appropriate.
17. A futures broker should also establish prudent market risk limits which are commensurate with its financial and management capabilities. The limits must be properly approved by its senior management and board of directors. Any breach of the limits should be promptly escalated to senior management and remedial action should be taken in a timely manner.

Commodity futures trading

18. A futures broker dealing in a futures contract on commodity should maintain a list of commodity futures products that they can deal. Such list should be approved by the board of directors. It should understand the nature and risks of the products

³⁰ Applicable only to a futures broker engaging in house trading in futures contracts.

³¹ For example, an index or a securities underlying a futures contract.

and the underlying commodity markets. When determining the risk limits for house trading and client trading in the products, it should take into account the following factors:

- (a) physical properties of the commodity;
- (b) factors which may affect the supply and demand of the commodity, such as its production or extraction infrastructure and life cycle, environmental and climate factors, supply and price volatility of raw materials for manufacturing the commodity, and supply and price volatility of storage and delivery facilities;
- (c) the structure, organisation and operation of the commodity market, including:
 - (i) the composition and role of participants in the commodity market, including providers of specific services which enable the commodity market to function (such as production, extraction, delivery, storage and settlement services); and
 - (ii) storage and delivery arrangements, such as whether the commodity can be delivered only to specific delivery points and related administrative requirements, and the capacity constraints of specific delivery points; and
- (d) political, macroeconomic and other related factors which may affect the operation of the commodity market.

Client credit risk management

19. In these Guidelines, “client credit risk” means the risk of a futures broker suffering losses due to a client defaulting on his or her obligations under a futures contract. A futures broker may suffer a loss if a client defaults on his or her obligation to it or it is required to meet the obligation of a defaulting client to a counterparty.

Note 2

In these Guidelines, a “counterparty” includes executing agents, clearing agents or the exchanges or clearing houses executing or clearing the futures contracts.

Client risk limits

20. A futures broker should:
- (a) put in place prudent risk limits, including trading and position limits, for each client or each group of connected clients to mitigate client credit risk. Client risk limits for a group of connected clients should holistically take into account the circumstances of all the clients in the group. The risk limits should be based on appropriate risk factors, eg, the client’s total or net position in a single futures contract or related futures contracts or total or net margin requirements; and

- (b) set position limits for preventing any breach of statutory or regulatory position limits for each client or each group of connected clients, where applicable.

Note 3

In these Guidelines, a “group of connected clients” means:

- (a) a group of two clients when one is the spouse of the other;
- (b) any two or more clients who are natural persons (other than spouses) and act on behalf of the same third party, who is not a client of the futures broker but is the beneficial owner of these clients’ accounts or stands to gain the commercial or economic benefit or bear the commercial or economic risk of the transactions in those accounts;
- (c) any two or more clients who are natural persons (other than spouses) where one acts through the others and is the beneficial owner of the others’ accounts, or stands to gain the commercial or economic benefit or bear the commercial or economic risk of the transactions in those accounts;
- (d) any two or more clients which are corporations of which a natural person, either alone or with his spouse, controls 35% or more of their voting rights;
- (e) any two or more clients which are members of the same group of companies; or
- (f) any two or more clients who are financially connected by guarantee arrangements under which the financial liabilities of one or more of these clients are guaranteed by one or more of the others, or the financial liabilities of these clients are guaranteed by the same guarantor who is not a client of the futures broker.

To ascertain whether two or more clients who are natural persons (other than spouses) are part of a group of connected clients, a futures broker is not required to conduct proactive searches for the beneficial owners of their accounts but it should make appropriate enquiries where there is indication that a client is not acting on his own behalf.

21. A risk limit of a client or a group of connected clients should:
- (a) in the case of a position limit for preventing any breach of statutory or regulatory position limits, be determined having regard to the relevant law or regulation;
 - (b) not exceed the statutory or regulatory position limit and the corresponding position limit set by the relevant counterparty;
 - (c) not be excessive taking into account the following:
 - (i) the financial and management capabilities of the futures broker;

- (ii) the financial situation of the client or group of connected clients demonstrated by appropriate objective proof, such as tax returns, salary advices, bank or broker statements and audited financial statements;
 - (iii) any internal and external credit reference information or credit history of the client or group of connected clients;
 - (iv) the investment objective, risk appetite, trading patterns or strategy of the client or group of connected clients;
 - (v) any known event which reflects adversely on the financial situation or default risk of the client or group of connected clients;
 - (vi) the historical volatilities of the price or level of the underlying exposure of the futures contract or contracts and other products traded by the client or group of connected clients in past market stress events;
 - (vii) in relation to physically settled futures contracts on a commodity, the readiness of the client or group of connected clients to deliver or take delivery of the underlying commodity, given the characteristics of the underlying commodity market;
 - (viii) the potential financial impact on the futures broker of client default and market shocks (for example, a significant increase of margin requirements by counterparties on the positions of the client or group of connected clients); and
 - (ix) prevailing market conditions;
- (d) be incorporated into the futures broker's risk management system, order management system or trading platform to prevent any breach; and
- (e) be subject to regular reviews at least annually and whenever there is a significant change in any determining factors, including those set out in paragraphs 21(a), (b) and (c).
22. For an affiliate client of a futures broker which is regulated or supervised by a financial regulator in Hong Kong or a prescribed country (as defined in section 2(1) of the Securities and Futures (Financial Resources) Rules (FRR)), the futures broker will be regarded as having complied with paragraphs 20 and 21 if it has put in place:
- (a) measures to prevent any breaches of statutory or regulatory position limits for the affiliate client, and the corresponding position limits set by the relevant counterparty;
 - (b) policies and procedures to ensure timely settlement of obligations to the relevant counterparty, taking into account any sudden surges in the margin requirement for the trading of futures contracts by the affiliate client and settlement obligations to the relevant counterparty;

- (c) regular reviews on the affiliate client's ability to timely meet settlement obligations to the futures broker taking into account its business and financial circumstances, including the affiliate client's:
 - (i) trading pattern or strategy;
 - (ii) investment objective and risk appetite;
 - (iii) financial situation and credit history;
 - (iv) funding resources allocated for the purpose of dealing in futures contracts;
 - (v) margin and risk management policies applied to its underlying clients; and
 - (vi) licensing or authorisation status and any regulatory actions taken by the relevant authority or regulatory organization in the jurisdiction in which the affiliate client is licensed or authorised;
- (d) regular assessments to ensure the level of trading activities of the affiliate client is commensurate with the funding resources in (c)(iv) above;
- (e) ad-hoc reviews on its exposure to the affiliate client's trading activities with reference to the factors set out in (c) upon significant market events or market volatility to ensure that the futures broker's client credit risk is not excessive taking into account its own financial and management capabilities; and
- (f) a contingency funding plan to ensure the futures broker has adequate sources of liquidity in place to fulfil its settlement obligations to the relevant counterparty and comply with the minimum liquid capital requirements under the FRR under a scenario of settlement delay or failure by the affiliate client.

Note 4

In these Guidelines, an "affiliate client" of a futures broker means any company within the same group of companies as the futures broker.

- 23. A futures broker should clearly document in its risk management policy and procedures the methodology adopted and factors considered in determining client risk limits.
- 24. Any waivers or increase of a client risk limit should be properly justified by a written risk assessment and endorsed by senior management.

Collection of margins from clients

25. A futures broker should not trade futures contracts for a client unless the client has provided sufficient collateral³² to cover the minimum margin requirement³³.
26. A futures broker should impose on clients a margin requirement (both an initial margin requirement and maintenance margin requirement) for futures contracts which is not lower than the amount set by its counterparty.

Note 5

The amount to be collected from a client should take into account the circumstances of the client and the futures broker, the risk of the product and prevailing market conditions. A futures broker may demand a higher level of margin from clients than the margin requirements set by its counterparties as it deems appropriate.

27. A futures broker should not grant any credit facilities or loans to any clients or make any other arrangements³⁴ to enable any clients to meet their margin requirements for futures contracts. This requirement does not apply to concessionary margining granted by the futures broker to clients pursuant to paragraph 36.

Note 6

In these Guidelines, “concessionary margining” means an arrangement between a futures broker and a client in respect of margining a futures contract whereby the client is not required to comply with an upfront collateral requirement prescribed in the rules of the exchange or clearing house executing or clearing the futures contract if he meets the eligibility criteria prescribed in those rules.

28. A futures broker should put in place special margining arrangements to mitigate the client credit risk caused by:
 - (a) volatile market conditions; or
 - (b) movements of a market which opens during the public holidays of the place where a client is based³⁵.

³² For example, a cheque received by a futures broker in good faith which it has no reason for suspecting that it will be dishonoured may be treated as cash.

³³ Except for any client meeting the eligibility criteria prescribed in paragraph 36 for concessionary margining.

³⁴ For example, a futures broker should not provide financial support to an affiliated company to facilitate the latter to grant a credit facility or loan to the broker’s client to help the client meet the margin requirements on futures contracts.

³⁵ For example, a Hong Kong client trading in an European futures market may not be able to transfer funds to the futures broker during the Chinese New Year holidays. Similarly, an overseas client trading in the Hong Kong futures market may not be able to transfer funds to the futures broker during his local public holidays.

29. A futures broker should determine its special margining arrangement based on a reasonable assessment of its exposure for the period between the last margin call issued on its clients and the next margin call. The assessment should take into consideration all material risks and operational factors³⁶ and the implications of client default to its financial position and compliance with the relevant laws and regulations. Special margining arrangement may include temporarily raising margin requirements or collecting additional margins before public holidays.
30. A futures broker should set prudent thresholds for issuing margin calls, for stopping clients from opening further positions and for force-liquidating clients' positions. It should document in its risk management policies and procedures the methodology adopted and factors considered in determining the thresholds and the procedures of notifying the clients of the actions triggered.
31. A futures broker should:
- (a) regularly determine whether the net equity balance of each client account is lower than the margin requirement set by it for the open positions in the account;
 - (b) issue a margin call as soon as reasonably practicable if the net equity balance in the client account is lower than the margin requirement. Upon receiving an ad-hoc margin call from its counterparty in respect of a client's futures positions, the futures broker must also calculate the total amount of margin call outstanding in the client account and issue a margin call to the client as soon as practicable;

Note 7

In these Guidelines, "net equity balance" of a client account means the sum of collateral³⁷ held in the account and the floating profits or losses of all open positions in the account, after adjusting for any amount of interest and levy or commission due from the client.

- (c) collect promptly from clients any amounts due as margin. The deadline for settling a margin call should be prudent and reasonable in the circumstances. In this regard, futures brokers are generally expected to collect the margin within one business day of issuing the margin call;
- (d) prevent a client from opening any new positions in futures contracts when the client has an unsettled margin call or the net equity balance of his account is lower than the margin requirement set by the futures broker for the open positions in the account; and

³⁶ Including but not limited to the latest market condition and historical volatilities of the market, its ability to meet ad-hoc margin calls or settle margin calls during Hong Kong public holidays from counterparties within the required timeframe.

³⁷ Including cash collateral and non-cash collateral subject to prudent haircuts.

- (e) maintain detailed records of margin calls for each client, including the amount and time of issuance of each margin call, the client's response and settlement history, and any follow-up action taken.
32. If a client fails to meet a margin call before the deadline set by the futures broker, the futures broker may close out any of the client's positions in the client account to ensure the net equity balance can meet the margin requirements set by it for the remaining open positions in the account.
33. A futures broker should strictly enforce its margin and forced liquidation policies and procedures. It should obtain senior management's approval for:
- (a) any deviation from its policies; or
 - (b) any margin call or forced liquidation waiver.
34. A futures broker should maintain detailed records for an approval of deviation or waiver which document:
- (a) the reason of granting the approval;
 - (b) in the case of an approval of waiver, the assessment of the creditworthiness of the clients based on their financial positions and past records in meeting margin requirements;
 - (c) the impact of the approval on its liquidity and ability to comply with the liquid capital requirements under the FRR; and
 - (d) the steps it has taken, is taking or will take to address the risks resulting from the approval.
35. In any cases, a futures broker should not waive any margin calls or forced liquidation for a client who has failed to meet two margin calls by the settlement deadlines without reasonable excuse in the preceding 30 calendar days. For this purpose, reminders issued to the client on the day of the settlement deadline of an outstanding margin call would not be treated as new margin calls. All subsequent reminders must be treated as new margin calls.

Concessionary margining

36. A futures broker may apply concessionary margining to a client in respect of his trading in a futures market if:
- (a) the client has a record of consistently meeting margin requirements, maintains a sound financial position relative to the size of his portfolio and trades, and meets the eligibility criteria set out in the rules of the relevant exchange or clearing house for concessionary margining;
 - (b) it strictly follows all the requirements relating to concessionary margining in the rules of the exchange or clearing house; and

- (c) it has sufficient liquidity and financial capability to settle its counterparties' margin requirements on the trading of futures contracts of all clients which are subject to concessionary margining.
37. For the purpose of paragraph 36(a), "consistently meeting margin requirements" means the client has no records of failure to meet the margin requirements, forced liquidation or returned cheques:
- (a) if the account has been opened for one year or more, within an immediately preceding period of at least one year; or
 - (b) if the account has been opened for less than one year, within an immediately preceding period of at least three months.
38. A futures broker should assign a prudent trading limit to each client which is subject to concessionary margining. The trading limit should not be excessive taking into account the futures broker's financial capabilities and the client's specific circumstances, including his financial situation, credit history, investment objective, risk appetite and trading pattern or strategy.
39. In these Guidelines –
- (a) "Uncovered client margin amount" of a client's ledger account means the total amount of margin required to be deposited by a futures broker with its counterparties for trading of futures contracts in the account which is not covered by the account's net equity balance.
 - (b) For the purpose of calculating the "uncovered client margin amount" of a client's ledger account as at the close of a trading day, a futures broker is not expected to take into account the trading of futures contracts in a trading session of a futures market if the trading hours of the trading session extend beyond mid-night of the trading day.
 - (c) "Excess liquid capital" (ELC) of a futures broker means its liquid capital less required liquid capital under the FRR.
 - (d) "Available funding" of a futures broker means the sum of unencumbered cash beneficially owned by it and amount of its undrawn bank lines allocated by it for the purposes of dealing in futures contracts.
40. For the purpose of paragraph 36(c), a futures broker should ensure that the sum of uncovered client margin amounts of all clients' ledger accounts³⁸ which are subject to concessionary margining as at the close of any trading day does not exceed 10% of the higher of its ELC and available funding (concessionary margining limit). A futures broker should use its latest available ELC or available funding for the above calculation.

³⁸ Please refer to paragraphs 17 and 19 of Schedule 4 to the Code of Conduct applicable to exchange participants of Hong Kong Futures Exchange Limited (HKFE) for the requirement to maintain separate ledger accounts in respect of HKFE Trade and Non-HKFE Trade. The term "HKFE Trade" is defined under the Rules of HKFE.

41. A futures broker should strictly enforce and monitor daily its compliance with the concessionary margining limit set out in paragraph 40. Any breach of the limit should be reported to the senior management immediately and rectified on the next trading day (eg, by closing out client positions, increasing the futures broker's liquid capital or available funding).

Counterparty risk management

42. If a counterparty defaults, the futures broker may be required to bear the losses caused by the default if it guarantees the counterparty's performance in favour of its clients.
43. When a futures broker engages an executing or clearing agent to execute or clear futures contracts, it should:
- (a) establish written policies and procedures to ensure proper management of exposure of the firm and its clients to the agent;
 - (b) regularly conduct due diligence reviews of the agent and assess the agent's capability taking into account material information relevant to its dealings with the agent, including the agent's:
 - (i) licensing or authorisation status and the regulations of the jurisdiction in which the agent is licensed or authorised, including the regulations of the exchange or clearing house of which the agent is a member or participant;
 - (ii) financial background;
 - (iii) client margin and risk management policies;
 - (iv) execution or clearing capacity;
 - (v) disaster recovery procedures; and
 - (iv) client assets segregation policies;
 - (c) avoid relying on a single executing or clearing agent. A futures broker should identify at least one back-up executing or clearing agent (back-up agent) and, where possible, establish and maintain a mutual understanding or formal agreement with the back-up agent on the back-up arrangement; and
 - (d) monitor the impact on the capability of the agent to provide services of changes in market conditions and other circumstances³⁹.

³⁹ For example, regulatory actions taken against the executing or clearing agent and changes in regulations of the exchange or clearing house of which the executing or clearing agent is a member or participant.

Funding liquidity risk management

44. In these Guidelines, “funding liquidity risk” means the risk of a futures broker failing to meet its financial obligation under a futures contract when it falls due⁴⁰.
45. A futures broker should employ prudent cash flow management and ensure that client money or collateral is sufficiently liquid for settling margin requirements for trading of futures contracts on behalf of clients.
46. A futures broker should regularly evaluate its liquidity needs to weather market-wide or idiosyncratic stresses and develop appropriate emergency funding plans. To ensure that adequate new funds are available in an emergency, it should refrain from relying on a single funding source.

Safeguarding client assets

47. The following requirements apply to futures brokers without prejudice to the requirements under the Securities and Futures (Client Money) Rules (CMR) and the Securities and Futures (Client Securities) Rules (CSR).
48. A futures broker should ensure that client positions in futures contracts and their related margins are booked separately from its proprietary positions and their related margins in accounts with its counterparties.
49. A futures broker should not use assets belonging to one client to secure or settle transactions of another client.
50. Where client positions and assets are held in an omnibus account with a counterparty, a futures broker should take reasonable steps to prevent assets belonging to one client account from being used to set off or settle another client account’s overloss (ie, any amount of trading losses of a client account which exceeds the account’s net equity balance).
51. Where a client account’s overloss and other client accounts’ assets in a futures broker’s omnibus account are set off by a counterparty, the futures broker should as soon as reasonably practicable deposit into the omnibus account or a designated trust bank account an amount of its own cash which is equal to the amount of the overloss which remains unsettled by the client to remedy the shortfall arising in client assets caused by the set-off.
52. A futures broker should disclose in the client agreement:
 - (a) the extent of its liability to the client in respect of client assets held by its executing or clearing agent when the latter defaults; and

⁴⁰ For example, a futures broker fails to meet a margin call issued by its counterparty on a futures contract by the deadline, which may be due to the failure of the underlying client in meeting its margin call timely and inadequate funds to settle the margin call on behalf of the client.

- (b) the risk of the client's rights to assets held by it in an omnibus account with a clearing house or executing or clearing agent may be subject to it, its other clients, the executing or clearing agent, and other clients of the executing or clearing agent (as the case may be) fulfilling their obligations to their counterparties, despite the fact that the client did not default on his or her obligations to it.

Trading in futures markets outside Hong Kong

53. Where a futures broker provides services to clients in a futures market outside Hong Kong, it should:

- (a) carry out the following measures as far as practicable to safeguard client interest and client assets:
 - (i) open and maintain a segregated or trust account with a bank or custodian regulated by the authority of the jurisdiction in which the futures market is located;
 - (ii) deposit client assets received in or transferred to that jurisdiction which are not required for meeting clients' settlement or margin obligations (ie, client margin excess) into that segregated or trust account as soon as reasonably practicable;
 - (iii) handle client assets in that segregated or trust account in a similar manner as the CMR or CSR (where applicable) prescribe for client assets held in Hong Kong; and

Note 8

A futures broker is exempt from the requirements in paragraphs 53(a)(i), (ii) and (iii) in respect of client margin excess held by an overseas executing or clearing agent who imposes upfront margin requirements on clients.

- (iv) refrain from holding an amount of client margin excess with a single overseas executing or clearing agent which exceeds the futures broker's ELC reported in its latest monthly financial returns. The futures broker is expected to address the concentration risk as far as practicable, such as using different agents for different futures markets or products;
- (b) disclose, preferably on its website, the names of all overseas executing or clearing agents who may hold the futures broker's client assets in an omnibus account with the agent's counterparty;
- (c) disclose in the client agreement the key risks of conducting transactions in a futures market outside Hong Kong, including but not limited to:

- (i) the risks of client assets received or held outside Hong Kong, as set out in the Risk Disclosure Statement in Schedule 1 to the Code of Conduct;
 - (ii) the return or transfer of a client's assets may be subject to restrictions imposed by the regulation of that futures market or law or regulation of the jurisdiction in which the futures market is located;
 - (iii) its overseas counterparties and that futures market are outside the jurisdiction of the SFC and may be subject to regulation which is different from the SFO; and
 - (iv) other material risks of conducting transactions in that futures market;
- (d) deal with client enquiries in a timely manner, particularly those relating to regulation of its overseas counterparties or that futures market and the status of client assets held outside Hong Kong; and
- (e) monitor material changes in the regulation of its overseas counterparties and that futures market that may affect the interests or assets of its clients and provide timely updates to the clients.

Stress testing

54. A futures broker should establish proper stress testing policies and procedures which clearly set out the testing methodology and frequency, and the review and escalation mechanisms. The policies and procedures should be approved by senior management.
55. A futures broker should conduct stress tests regularly (at least daily if concessionary margining is applied to any client and at least weekly in other cases) and during a volatile market. It should use appropriate methodologies and tools which are commensurate with the risk characteristics of products traded by it or its clients to identify its financial vulnerability and any excessive exposure to individual clients or groups of connected clients. It should also observe the stress testing requirements set by any exchange or clearing house of which it is a member or participant.
56. A stress test should be capable of:
- (a) projecting the amount of loss which might arise in each client account under a particular stress scenario and estimating the impact of material projected overlosses in client accounts on the futures broker's ELC⁴¹ and available funding;

⁴¹ The impact should be calculated in accordance with sections 40(1) and (2) of the FRR on the assumption that the client fails to meet the margin call by the settlement deadline.

Note 9

“Projected overloss”, in relation to a client account, means the amount by which any projected loss arising from positions in futures contracts in the account under an assumed stress scenario exceeds the net equity balance of the account.

Note 10

Paragraph 56(a) is not applicable to the positions in the account of any client which is:

- (i) a licensed corporation;
- (ii) a registered institution; or
- (iii) a futures dealer (as defined in section 2(1) of the FRR) outside Hong Kong,

if those positions are carried on behalf of its clients;

- (b) projecting the amounts of trading losses and margin calls which might arise on the futures broker’s proprietary positions under a particular stress scenario and estimating the impact of the total amount of projected trading losses and margin calls on its ELC and available funding; and
 - (c) appropriately estimating the potential losses of products with non-linear payoffs (eg, options).
57. Subject to paragraphs 58 and 59, a futures broker should design its stress scenarios for stress testing positions in futures contracts based on the following:
- (a) assumptions of extreme but plausible price movements or volatility shifts⁴²;
 - (b) past market stress events which are relevant to the futures contracts traded by it or its clients⁴³; and
 - (c) hypothetical events based on emerging risks⁴⁴.
58. Alternatively, subject to paragraph 59, a futures broker may choose to conduct a simplified stress test by making the following assumptions:
- (a) the projected loss of a client account under a stress scenario equals 200% of the margin requirement set by its counterparty on the positions in the account; and

⁴² For options contracts only.

⁴³ For example, the 2008 global financial crisis and 2020 volatility in WTI crude oil price.

⁴⁴ For example, a significant rise or fall in commodity price due to the outbreak of a new disease.

- (b) the projected loss of a house account under a stress scenario equals 200% of the margin requirement set by its counterparty on the positions in the account.
- 59. Where an exchange or a clearing house specifies or suggests minimum parameters for a futures broker's stress testing on a futures contract⁴⁵, the futures broker should ensure that its parameters for stress testing positions in such futures contract are at least as stringent as those specified or suggested by the exchange or clearing house.
- 60. Where a futures broker is part of a group and relies on stress tests conducted centrally at the group level, the futures broker will be regarded as having complied with paragraph 55 only if:
 - (a) the group-wide stress tests have taken into account the futures broker's risk exposure and financial position, and appropriately project the impact on its ELC and available funding under stressed scenarios; and
 - (b) the approach adopted by those stress tests is substantially consistent with or more stringent than the requirements set out in paragraphs 55 to 59.
- 61. Where a futures broker relies on the stress tests prescribed in paragraph 60 for compliance with paragraph 55, it should submit the group-level stress test reports to the SFC upon request. A designated RO or MIC should be responsible for explaining the test results relating to the broker's exposure and respond to other related enquiries from the SFC in a timely manner.
- 62. A futures broker should promptly and diligently review all the stress test results, identify and assess any potential risks and take prompt follow-up action. In particular, it should:
 - (a) compare the total projected losses in client accounts and total projected losses in house account with the results of previous stress tests to identify any significant trends;
 - (b) assess the credit risk of any client or group of connected clients who has a projected overloss (total projected overlosses in the case of a group of connected clients) exceeding 30% of its ELC or available funding and any other clients or groups of connected clients to whom its exposure is considered excessive by it;
 - (c) assess its ability to absorb the aggregate impact on its ELC or available funding of:
 - (i) the projected overlosses of the two clients or groups of connected clients who have the largest projected overlosses in their accounts; and

⁴⁵ For example, the underlying price movements to be assumed for index options traded on HKFE are $\pm 20\%$ when these Guidelines were prepared.

- (ii) the projected loss in its house trading; and
 - (d) take follow-up action to ensure its financial integrity.
- 63. Where the stress test results suggest that the futures broker might be exposed to significant risks under a stress scenario, it should take prompt and effective risk mitigating measures and prepare a detailed contingency plan to prevent settlement failure, insolvency or non-compliance with the minimum liquid capital requirements under the FRR in an emergency. It should ensure that the assumptions used in the contingency plan are realistic (eg, whether contingent funds will be made available by affiliated companies when the group is also under stress and whether the concurrent funding needs of other business lines⁴⁶ of the futures broker are duly considered).
- 64. A futures broker should document:
 - (a) the stress tests performed, including the methodology, data sources, data history, assumptions and stress scenario applied in each stress test and the findings of each test, including but not limited to:
 - (i) the amount of projected loss and overloss of each client account; and
 - (ii) the aggregate impact on its ELC or available funding of:
 - (A) the projected overlosses of the two clients or groups of connected clients who have the largest projected overlosses in their accounts; and
 - (B) the projected loss in its house trading;
 - (b) major risks identified by the stress tests and its assessments of the impact on it; and
 - (c) follow-up action it has taken, is taking or will take.
- 65. Stress test results should be promptly reviewed and approved by the futures broker's senior management and made available to the SFC upon request.

Notification requirements

- 66. A futures broker must notify the SFC in writing within one business day of becoming aware of any of the following matters:
 - (a) any of its failure to comply with paragraph 40 of these Guidelines;

⁴⁶ For example, a futures broker may conduct other regulated activities, eg, securities margin financing and dealing in stock options. These business lines may also have funding needs under a stress scenario.

- (b) any result of any stress test conducted by it in accordance with paragraphs 54 to 65 of these Guidelines which indicates that:
 - (i) the projected overloss (total projected overlosses in the case of a group of connected clients) of any client or group of connected clients exceeds 30% of its ELC or available funding; or
 - (ii) its ELC or available funding would not be able to absorb the aggregate impact referred to in paragraph 62(c); or
 - (c) any of its failure or potential failure to meet any margin calls from any counterparties.
67. A futures broker must include in the notification to the SFC filed under paragraph 66 full details of the matter, including:
- (a) in case of a notification filed under paragraph 66(a), the reasons for the failure and any measures it has taken, is taking or will take to rectify the situation and ensure future compliance;
 - (b) in case of a notification filed under paragraph 66(b),
 - (i) the stress test result referred to in paragraph 66(b)(i) or (ii) (as the case may be);
 - (ii) any risk mitigating measures to reduce any excessive exposure to any client or group of connected clients or proprietary positions; and
 - (iii) any follow-up action it has taken, is taking or will take, including its contingency plan to prevent settlement failure, insolvency or non-compliance with the minimum liquid capital requirements under the FRR; and
 - (c) in the case of a notification filed under paragraph 66(c), the reasons for the failure or potential failure, and any measures it has taken, is taking or will take to rectify the failure or prevent settlement failure.