

Consultation Conclusions on the Proposed Guidelines for Securities Margin Financing Activities

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Executive Summary

- On 17 August 2018, the Securities and Futures Commission (SFC) issued a consultation paper¹ inviting public comments on proposed Guidelines for Securities Margin Financing Activities. The Guidelines aim to clarify, codify and standardise the risk management practices expected of brokers conducting securities margin financing (SMF) activities (SMF brokers).
- 2. During the consultation period, which ended on 18 October 2018, the SFC received a total of 33 written submissions from industry associations, brokers, professional bodies, consultancy firms, banks and individuals. A list of respondents (other than those who requested anonymity) is set out in Appendix A.
- 3. The key comments received and the SFC's responses are discussed in this conclusions paper. In general, the respondents supported the SFC's initiative to provide guidance on the risk management practices expected of SMF brokers. A number of respondents also commented on some of the proposals or sought clarification of the details of their implementation.

Key comments

Total margin loans controls

- 4. The majority of the respondents agreed that SMF brokers should control their total margin loans and limit the total amount to a certain multiple of their capital (total margin loans-to-capital multiple). Most respondents suggested a multiple of five.
- 5. Some respondents suggested that other factors, such as the client's financial background and the quality of the underlying collateral, should also be taken into consideration in formulating total margin loans controls.
- 6. A few respondents suggested that loans to clients for the subscription of securities in initial public offerings prior to the commencement of trading of the securities on the exchange on which they are listed (IPO loans) should not be treated as margin loans for the purposes of the Guidelines.
- 7. The SFC maintains the view that SMF brokers should control their total margin loans based on the size of their capital, given that high leverage may pose significant financial risks to them if SMF risks are not properly managed. In the worst case scenario, the interests of clients may be threatened if an SMF broker experiences a liquidity squeeze or becomes insolvent.
- 8. The SFC considers that a maximum total margin loans-to-capital multiple of five is acceptable, provided that the SMF broker complies with all the other applicable provisions in the Guidelines and has high quality margin loan portfolio. SMF brokers with lower quality margin loan portfolio or weak SMF risk controls should adopt a lower multiple.

¹ Consultation Paper on the Proposed Guidelines for Securities Financing Activities



9. In response to the suggestion that IPO loans be excluded from margin loans, the SFC has clarified in the Guidelines that IPO loans would not be treated as margin loans because of their different risk characteristics.

Exposure to highly correlated securities

- 10. In general, the respondents did not object to the proposal which required SMF brokers to monitor concentration risk arising from exposure to highly correlated securities collateral. However, most of the respondents were concerned about the broad meaning of the term "highly correlated securities" and also the practical difficulty of identifying and monitoring exposure to such collateral.
- 11. The SFC is of the view that SMF brokers should prudently assess the quality of securities collateral including the correlation between different securities collateral. We have replaced the term "highly correlated securities" in the Guidelines with the term "group of connected securities collateral" and provided further guidance on the circumstances under which securities shall be regarded as connected. In short, two or more securities should be considered to be connected if they have the same issuer or are issued by members of the same group of companies, or if any adverse event affecting the issuer of any one of the securities is likely to materially affect the financial soundness of the issuers or the market prices of the rest of the securities concerned. SMF brokers should ensure the aggregate exposure to a group of connected securities collateral is maintained at a level which is commensurate with their financial capabilities.
- 12. Moreover, having considered the public comments, the Guidelines have been revised whereby SMF brokers are only required to set concentration limits for individual securities collateral and groups of connected major securities collateral. "Major securities collateral" refers to any of the ten largest securities collateral in terms of market value, excluding securities issued by a listed company whose share is a constituent of the Hang Seng Index and securities subject to a 100% haircut under the Securities and Futures (Financial Resources) Rules (FRR).

Haircuts for securities collateral

- 13. A number of respondents commented that it would be burdensome for re-pledging brokers to benchmark their internal haircut percentages for securities collateral to the average of the haircut percentages assigned by their top three lending banks minus certain percentage points (haircut benchmark), as the haircut percentages assigned by the lending banks may change from time to time.
- 14. A few respondents were concerned that banks might not accept the banks' own listed shares, newly issued shares and non-Hong Kong listed securities as collateral. If so, this would inflate the haircut benchmark.
- 15. In consideration of these operational concerns, re-pledging brokers will be required to benchmark their internal haircut percentages for securities collateral to the haircut benchmark at least quarterly and whenever there is a significant change in the quality of the securities collateral.
- 16. To address the concern about the impact on the haircut benchmark of a security not being accepted by one or more of the top three lending banks of a re-pledging broker, the broker will be allowed to adopt the average of the haircut percentages assigned by



the remaining top three lending banks² in the calculation of the haircut benchmark. Moreover, the benchmarking requirement will only apply to Hong Kong listed shares which have been listed for at least six consecutive months. We have revised the Guidelines accordingly.

Transition period

- 17. The majority of the respondents suggested extending the transition period to 12 months to allow more time for SMF brokers to revise their systems and policies and prepare for compliance.
- 18. In view of increasing market volatility, SMF brokers should implement the proposed requirements to manage their SMF risks as soon as practicable. Therefore, we will proceed with our original proposal to provide a six-month transition period.

Implementation

- 19. The SFC has carefully considered the responses and revised the Guidelines where appropriate. The marked-up texts of the revised Guidelines are set out in Appendix B.
- 20. The Guidelines will become effective six months from the gazettal date.
- 21. We would like to thank all respondents for their time and effort in reviewing the proposals and providing us with their detailed comments.
- 22. The consultation paper, the responses (other than those from respondents who requested their submissions be withheld from publication) and this paper are available on the SFC website at www.sfc.hk.

² However, if none of the top three lending banks accepts the security as collateral, the average bank haircut percentage for the security will be deemed to be 100%.



Comments received and the SFC's responses

I. Total margin loans controls

Question

1. Do you agree that an SMF broker should control its total margin loans with reference to the amount of its capital?

Public comments

- 23. Respondents generally supported the proposal to require SMF brokers to control their total margin loans and agreed that total margin loans advanced by an SMF broker should be limited to a certain multiple of its capital. A respondent considered that imposing a cap on total margin loans based on the broker's capital may hinder small brokers' business development.
- 24. Some respondents commented that this proposal had not taken into account the quality of the collateral for margin loans and the financial backgrounds of margin clients.
- 25. A few respondents suggested excluding IPO loans from the calculation of total margin loans in calculating the total margin loans-to-capital multiple.

- 26. As explained in the consultation paper, high leverage can pose significant risks to SMF brokers if they fail to prudently manage their risks. For an SMF broker which has a significant amount of margin loans funded by bank loans or other borrowings, its liquidity may be locked up, with the result that its solvency relies heavily on the liquidity and recoverability of the margin loans. If the broker is asked to repay the debts while experiencing significant client defaults, it may be caught in a liquidity squeeze. If the banks seize or force-liquidate the re-pledged client securities collateral, client interests would be prejudiced. Therefore, the SFC maintains the view that SMF brokers should properly manage their leverage risks to minimise the risk of a liquidity squeeze.
- 27. The SFC agrees that the quality of margin loan collateral and the financial backgrounds of margin clients are relevant considerations when it comes to controlling total margin loans exposure. Therefore, under the Guidelines, SMF brokers are required to take all relevant factors into account, including the risk profiles of their margin loan portfolios, in establishing their total margin loans limit.
- 28. Taking into account the differences in the risks of IPO loans and margin loans, especially considering that the tenors of IPO loans are generally much shorter (usually less than a week), the SFC agrees that IPO loans shall not be treated as margin loans for the purposes of the Guidelines. We have clarified this in the Guidelines accordingly.
- 29. Given the majority support, the SFC maintains the view that SMF brokers should control total margin loans based on the size of their capital.



Question

- 2. Do you agree that the proposed guidelines should provide a benchmark for the total margin loans-to-capital multiple?
- 3. During the soft consultations, some respondents recommended setting the benchmark for the total margin loans-to-capital multiple at two to five times. Within the suggested range of two to five times, what do you think is the appropriate quantitative benchmark for the total margin loans-to-capital multiple? Please provide the rationale for your comment or suggestion.

Public comments

- 30. Many respondents supported setting a benchmark for the total margin loans-to-capital multiple, with the suggested benchmarks ranging from two times to eight times of an SMF broker's capital. Most proposed a multiple of five. A few respondents recommended that the multiple should vary with the quality of the underlying collateral.
- 31. Some respondents were not amenable to the proposal for various reasons. Two respondents suggested that the SFC should instead tighten the FRR requirements, such as the FRR haircut percentages, while one respondent was concerned about the difficulty in monitoring compliance with the multiple since a broker's capital varies over time.

- 32. The proposal to establish a benchmark for total margin loans-to-capital multiple aimed to help SMF brokers assess whether their margin loan exposure is excessive. The SFC believes that the benchmark would ensure a level playing field and consistent risk management practices among brokers. We consider it reasonable to set different benchmarks according to the quality of the margin loan portfolio. The Guidelines have been revised to take into consideration the quality of the margin loan portfolio of SMF brokers in setting the benchmark for the total margin loans-to-capital multiple.
- 33. We do not take the view that tightening the existing FRR requirements can replace any of the proposed requirements set out in the Guidelines. The Guidelines aim to provide guidance on the expected risk management practices, while the FRR prescribe the minimum capital requirements.
- 34. We recognise that SMF brokers' capital (ie, shareholders' funds plus outstanding subordinated loans approved by the SFC) may fluctuate from time to time. In the consultation paper, we proposed allowing SMF brokers to refer to the amount of capital reported in their latest financial returns submitted to the SFC in monitoring their compliance with the proposed benchmark. This arrangement should make it simpler for SMF brokers to calculate their total margin-loans-to capital multiples.
- 35. We consider that setting the multiple at the high end of the suggested range for wellmanaged, high quality margin loan portfolio can give brokers the flexibility to run their businesses and promote good risk management. Therefore, having considered the comments received, the maximum total margin loans-to-capital multiple that an SMF broker can adopt will be set at five times, provided that it complies with all other



applicable provisions in the Guidelines and has high quality margin loan portfolio. An SMF broker with lower quality margin loan portfolio or weak SMF risk controls should adopt a lower multiple.

Question

4. Do you agree that a higher benchmark for the total margin loans-to-capital multiple should apply to a broker that does not use approved subordinated loans as regulatory capital than to a broker that does?

Public comments

- 36. Respondents generally disagreed with the proposal to apply different benchmarks for total margin loans-to-capital multiples according to SMF brokers' use of approved subordinated loans as regulatory capital. Some respondents commented that applying different benchmarks contradicted the FRR treatment of approved subordinated loans as capital. A few respondents considered that the proposal was impractical and it would be burdensome to monitor compliance.
- 37. One respondent suggested that to prevent brokers from using excessive amounts of subordinated loans as capital, the amount of the approved subordinated loans to be treated as an SMF broker's capital should not exceed the amount of its shareholders' funds.

The SFC's response

- 38. Having considered the comments, the benchmark for the total margin loans-to-capital multiple will not depend on an SMF broker's use of approved subordinated loans as regulatory capital.
- 39. We agree that the amount of outstanding subordinated loans approved by the SFC which can be treated as capital in the calculation of the total margin loans-to-capital multiple should not exceed the amount of an SMF broker's shareholder's funds. The Guidelines have been revised accordingly.

II. Margin client credit limit controls

Question

5. While "group of related margin clients" is defined in section 42(3) of the FRR, do you agree that the coverage of related margin clients should be extended, eg, to include margin accounts which are held by the same beneficial owner for the purposes of monitoring aggregate credit risk exposures?



Coverage of group of related margin clients

Public comments

40. A number of respondents supported extending the coverage of "group of related margin clients", in particular, to include margin accounts held by the same beneficial owner for the purposes of monitoring their aggregate credit risk. Some respondents were concerned about the compliance burden and operational difficulties of identifying the beneficial owner of a client account. They urged the SFC to clearly define the extended coverage of "group of related margin clients". A few respondents commented that the existing definition of "group of related margin clients" in section 42(3) of the FRR was sufficient to address the interconnectedness risk of related margin clients.

- 41. The requirement to identify beneficial owners of clients is not new. Licensed corporations are required to identify beneficial owners under the Guideline on Anti-Money Laundering and Counter-Financing of Terrorism (For Licensed Corporations) (AML Guideline) and Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (Code of Conduct):
 - Paragraph 4.3.1 of the AML Guideline requires that a financial institution must identify any beneficial owner in relation to a customer, and take reasonable measures to verify the beneficial owner's identity so that the financial institution is satisfied that it knows who the beneficial owner is.
 - Paragraph 5.4 of the Code of Conduct requires that a licensed corporation should be satisfied on reasonable grounds about the identity of the person or entity ultimately responsible for originating the instruction in relation to a transaction and the person or entity that stands to gain the commercial or economic benefit of the transaction and/or bear its commercial or economic risk.
- 42. In light of the above, the Guidelines will require SMF brokers to treat margin clients falling within any of the following descriptions as connected for credit risk management purposes, in addition to those margin clients falling within the definition of "group of related margin clients" in section 42(3) of the FRR:
 - (i) any two or more margin clients who are natural persons (other than spouses) and act on behalf of the same third party where the third party is not a margin client of the SMF broker but is the beneficial owner of their accounts, or stands to gain the commercial or economic benefit or bear the commercial or economic risk of the transactions in their accounts;
 - (ii) any two or more margin 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 the others' accounts;
 - (iii) any two or more margin clients that are corporations of which a natural person, either alone or with his spouse, controls 35% or more of their voting rights; or
 - (iv) any two or more margin clients who are financially connected by guarantee arrangements, whereby the financial liabilities of one or more of them are



guaranteed by one or more of the others, or their financial liabilities are guaranteed by the same guarantor where the guarantor is not a margin client of the SMF broker.

- 43. We have revised the Guidelines to replace "group of related margin clients" with "group of connected margin clients" and SMF brokers are required to aggregate the credit risks of connected margin clients for measuring the broker's exposure to them as a whole and determining the credit limits of each of the clients in the group and of the group as a whole.
- 44. According to paragraph 4.3.3 of the AML Guideline, a financial institution is not required to conduct proactive searches for beneficial owners of a client who is a natural person, but it should make appropriate enquiries where there are indications that the client is not acting on his own behalf. SMF brokers may adopt the same approach in identifying the beneficial owners of the account of a margin client who is a natural person to ascertain whether the margin client is connected with other clients.

Controlling the aggregate amount of margin client credit limits

Public comments

45. A few respondents expressed concerns about controlling the aggregate amount of client credit limits as they believed that credit limits were generally granted on a non-committed basis. They also considered that not all margin clients would fully draw down their credit limits and SMF brokers would monitor clients' actual usage of the approved credit limits.

The SFC's response

46. The SFC would like to clarify that the Guidelines do not require SMF brokers to impose a cap on the aggregate amount of margin client credit limits. The proposed requirements for the total margin loans limit will apply to outstanding margin loans but not margin client credit limits.

Annual review of margin client credit limits

Public comments

47. One respondent commented that it would be difficult for SMF brokers to review the credit limits granted to all their margin clients on an annual basis, and suggested that the annual review should only be performed on the top 25% of margin clients in terms of margin loan amounts.

The SFC's response

48. We maintain our view that SMF brokers should review margin client credit limits regularly because the underlying factors, such as the clients' credit history, the brokers' own financial capability and the prevailing market conditions, may change over time. Therefore, SMF brokers should review margin client credit limits regularly and at least once a year unless the brokers can properly justify not doing so.



III. Securities collateral concentration controls

Question

- 6. Do you agree that exposures to different securities held as collateral which are highly correlated should be aggregated for the purposes of monitoring concentration risk?
- 7. Do you agree with the definition of "highly correlated securities" set out in paragraph 38 of the consultation paper?

Public comments

- 49. Respondents generally agreed that exposure to highly correlated securities collateral should be aggregated for monitoring concentration risk. The majority of the respondents were concerned about the coverage of "highly correlated securities" but no alternative was suggested. One respondent expressed that the proposed definition of "highly correlated securities" might unintentionally penalise those SMF brokers who mainly provided margin financing for constituents of the Hang Seng Index because it only comprises four industry sectors, and the prices of its constituents are significantly correlated.
- 50. Some respondents opined that it would be burdensome for SMF brokers to compile and maintain their own list of highly correlated securities. Some suggested that the SFC provide additional guidance or regularly publish a list of highly correlated securities for brokers' reference.

- 51. The SFC is of the view that SMF brokers should perform proper due diligence on securities which they accept as collateral. The assessment should include the interconnectedness among securities collateral to avoid taking excessive risks on connected securities.
- 52. In view of the responses received, references to "highly correlated securities" in the Guidelines have been removed. Instead, brokers will be required to treat two or more securities held as collateral as "connected" if:
 - (a) they are issued by the same issuer or by members of the same group of companies; or
 - (b) any adverse event affecting the issuer of any one of the securities is likely to materially affect the financial soundness of the issuers or the market prices of the rest of the securities concerned. In making the assessment, an SMF broker should take into consideration all the relevant factors, for instance, whether the issuers of the securities are under common control (this does not apply to stateowned enterprises which are not members of the same group of companies), have significant business affiliations (eg, one is the major supplier or customer of the other), have significant investments in the others' securities, or have significant lending to or other financial relationships with the others.



- 53. We are mindful of the potential workload involved in setting a concentration limit for every group of connected securities collateral. We have revised the Guidelines whereby SMF brokers are only required to assess the interconnectedness of their "major securities collateral" (Note).
 - Note: "Major securities collateral", in relation to securities collateral held by an SMF broker, means any of the ten largest securities collateral, in terms of the aggregate market value of securities collateral of the same description provided by margin clients who have outstanding margin loan balances in their accounts (borrowing margin clients), excluding any securities issued by a listed company whose share is a constituent of the Hang Seng Index and any securities for which the FRR prescribe a haircut percentage of 100%.
- 54. SMF brokers will be required to assess if any two or more major securities collateral are connected regularly (at least monthly). SMF brokers should also set a prudent concentration limit for and monitor the aggregate exposure to each group of connected major securities collateral. If an SMF broker becomes aware that any other securities collateral are connected, it should take reasonable steps to manage the concentration risks and avoid building up excessive exposure to them.

Question

- 8. Do you consider that constituent stocks of any other stock indices should also be treated as index stocks for the purposes of paragraph 43 of the consultation paper? Please provide the rationale for your suggestion.
- 9. During the soft consultations, some respondents suggested setting X% at between 30% and 50%, and Y% at between 20% and 25%. Within these suggested ranges, what percentages do you consider as appropriate benchmarks? Please provide the rationale for your suggestion.

Public comments

- 55. In the consultation paper, we proposed requiring SMF brokers to regularly estimate the impact on its excess liquid capital (ELC) of the hypothetical stress scenario of a security held as collateral being valued at nil in the liquid capital calculation under the FRR and compare the result with a benchmark (ELC impact benchmark) set out in the Guidelines. Separate ELC impact benchmarks were proposed for index stocks and for other securities.
- 56. One respondent sought clarification of the number of securities collateral for which an SMF broker should perform the aforesaid analysis and expressed concerns about the practicability of performing an analysis for all securities collateral.
- 57. In relation to the ELC impact benchmark for index stocks (ie, X% in question 9 of the consultation paper), respondents' proposals ranged from 20% to 100%, with the majority proposing 50%. For the ELC impact benchmark for other securities (ie, Y% in question 9 of the consultation paper), respondents proposed 20% to 50%, with the majority proposing 25%.



58. A large number of respondents suggested that index stocks should also cover constituents of other major stock indices³. A few respondents suggested tiering stocks according to the haircut percentages stipulated in the FRR.

The SFC's response

59. Having considered the comments received, we have modified the proposal by stratifying securities collateral into three tiers, largely based on the haircut percentages stipulated in the FRR. The following table summarises the composition of securities collateral in each tier and the respective ELC impact benchmarks.

	Description	ELC impact benchmark
Tier 1 securities collateral	 Securities collateral being a constituent stock of: (i) Hang Seng Index; (ii) Hang Seng China Enterprises Index; (iii) FTSE 100 Index; (iv) Nikkei Stock Average; (v) S&P 500 Index; or (vi) Euro Stoxx 50 Index Securities collateral being qualifying debt securities, special debt securities or specified securities for which the FRR prescribe a haircut percentage of 15% or below 	50%
Tier 2 securities collateral	 Securities collateral not being a Tier 1 securities collateral but being a constituent stock of: (i) Hang Seng Composite Index; (ii) MSCI Hong Kong Index; or (iii) MSCI China Index Securities collateral being qualifying debt securities, special debt securities or specified securities for which the FRR prescribe a haircut percentage higher than 15% but not above 30% 	30%
Other securities collateral	Any securities collateral not being Tier 1 securities collateral or Tier 2 securities collateral	20%

60. The SFC believes that in practice, SMF brokers would not need to conduct a detailed ELC impact analysis for each and every security held as collateral to monitor compliance with the ELC impact benchmarks. The exact number of securities collateral which will require a detailed analysis may vary among SMF brokers. For instance, if an

³ Such as Hang Seng Composite LargeCap Index, Hang Seng Composite MidCap Index, Hang Seng Composite Index, MSCI Hong Kong Index, MSCI China Index, FTSE 100 Index, Nikkei 500 Index, S&P 500 Index, Shanghai Stock Exchange A Share 50 Index and Shenzhen 100 Index.



SMF broker's total amount of margin loans is small compared to its ELC and the securities collateral pool is well-diversified, the number of securities collateral likely to have an ELC impact exceeding the benchmarks would be limited. SMF brokers should identify all of the concentrated securities collateral they hold to determine the number of securities which should be covered by an ELC impact analysis.

IV. Margin client concentration controls

Question

10. Do you think that as a quantitative benchmark, margin client concentration should be measured with reference to the broker's shareholders' funds? If not, what is your alternative suggestion? Please provide the rationale for your suggestion.

Public comments

- 61. Some respondents supported our proposal to measure margin client concentration by brokers' shareholders' funds, while some suggested that margin client concentration should be controlled based on other factors, such as total margin loans or broker's capital (as defined for calculating the total margin loans-to-capital multiple).
- 62. A number of respondents commented that in controlling margin client concentration risk, the quality of underlying collateral and the clients' risk profiles should also be considered.
- 63. A number of respondents expressed that the FRR's capital charge for concentrated margin loans was sufficient to address margin client concentration risk.

- 64. The purpose of setting a quantitative benchmark for margin client concentration is to limit the financial impact on brokers in the event major margin clients default. If an SMF broker's shareholders' funds are completely wiped out by credit losses, it will immediately become insolvent. Subordinated loans, not being part of the company's equity, cannot save it from being treated as insolvent in this case. Therefore, it is appropriate for the benchmark to be based on brokers' shareholders' funds instead of any other factor.
- 65. The SFC echoes the respondents' suggestion that the quality of underlying collateral and clients' financial backgrounds be taken into account in controlling margin client concentration risk. The Guidelines require SMF brokers to set prudent client concentration limits with reference to a number of factors including clients' financial situations and the quality of underlying collateral. We maintain our original proposal to provide a simple margin client concentration benchmark based on brokers' shareholders' funds. However, we agree that the quality of SMF brokers' margin loan portfolio should be taken into consideration in setting the margin client concentration benchmark. The Guidelines have been revised accordingly.
- 66. As discussed in the consultation paper, the FRR's capital charge for margin client concentration risk cannot replace SMF brokers' concentration controls. SMF brokers should institute appropriate concentration limits as part of their risk management.



Question

11. During the soft consultations, some respondents recommended setting the quantitative benchmark for margin client concentration at between 20% and 40% of a broker's shareholders' funds. Within this suggested range, what percentage do you think is appropriate for benchmarking purpose? Please provide the rationale for your suggestion.

Public comments

67. A wide range of benchmarks for margin client concentration based on different denominators were suggested by the respondents⁴, but most also considered it acceptable to set the benchmark at 20% or 40% of SMF brokers' shareholders' funds.

The SFC's response

68. The SFC considers it acceptable to set the benchmark at the high end of the proposed range, ie, 40% of a broker's shareholders' funds, provided that the SMF broker complies with all other applicable provisions of the Guidelines and has high quality margin loan portfolio. An SMF broker with lower quality margin loan portfolio or weak SMF risk controls should adopt a lower margin client concentration benchmark.

Question

- 12. Do you have any comment on the basis for determining whether a margin loan is a significant margin loan?
- 13. What should be the appropriate percentage with reference to the broker's shareholders' funds for determining whether a margin loan is significant? Please provide the rationale for your suggestion.

Public comments

- 69. A number of respondents suggested that the definition of "significant margin loan" could be based on denominators other than SMF brokers' shareholders' funds, such as total margin loans or SMF brokers' capital (as defined for calculating the total margin loans-to-capital multiple). A few respondents also commented that the proposed definition did not take into consideration the quality of the underlying collateral and the clients' backgrounds.
- 70. For determining whether a margin loan is significant, a variety of thresholds based on different denominators were suggested by the respondents⁵. Some respondents supported the proposed threshold set out in the Guidelines, ie, 10% of the SMF

⁴ For example, 15% to 20% of total margin loans and 30% to 40% of the sum of SMF brokers' shareholders' funds and outstanding approved subordinated loans.

⁵ For example, 15% to 20% of total margin loans, and 10% to 50% of the sum of SMF brokers' shareholders' funds and outstanding approved subordinated loans.



brokers' shareholders' funds.

The SFC's response

71. In view of respondents' support and to ensure consistency with the calculation basis for the benchmark for margin client concentration, the SFC maintains the view that it is appropriate for the threshold for determining whether a margin loan is significant to be based on SMF brokers' shareholders' funds. The Guidelines will require SMF brokers to assess the impact of client defaults and stress situations on their ELC prior to granting a margin loan exceeding 10% of their shareholders' funds.

V. Haircuts for securities collateral

Question

14. During the soft consultations, some respondents commented that X% in paragraph 64(b) of the consultation paper should be set at 15% to 20%. What percentage point within this range do you think is appropriate? Please provide the rationale for your suggestion.

Public comments

- 72. The majority of the respondents commented on the proposal to require that the internal haircut percentage assigned by a re-pledging broker to a security held as collateral not be lower than the haircut benchmark, ie, the average of the haircut percentages assigned by its top three lending banks to the same security minus certain percentage points. Their views included:
 - The haircut percentages prescribed in the FRR served as guidance for SMF brokers to set their internal haircut percentages for securities collateral.
 - SMF brokers should have the discretion to set internal haircut percentages after due consideration of the quality of the collateral and their risk appetite. A respondent further suggested that qualified brokers should be allowed to use their internal models to determine internal haircut percentages.
 - The proposal may increase costs and require resources to track the haircut percentages applied by the top three lending banks, which may change from time to time.
 - Banks usually did not accept their own listed shares and newly issued shares as collateral. These practices would significantly inflate the average bank haircut percentages used for calculating haircut benchmark.
- 73. For the number of percentage points to be deducted from the average bank haircut percentages, ie, X% in question 14 of the consultation paper, only a few respondents provided comments, with most suggesting 20%.



- 74. We proposed a haircut benchmark because more brokers were applying imprudent haircut percentages to securities collateral, especially low quality and illiquid stocks. Currently, SMF brokers are not required to adopt the haircut percentages prescribed by the FRR in their margin policies or to benchmark their internal haircut percentages to the FRR haircut percentages. In fact, many SMF brokers reported significant FRR margin shortfalls, which suggested that their internal haircut percentages were lower than the haircut percentages prescribed by the FRR.
- 75. We are particularly concerned about the risk controls of re-pledging brokers, who rely on bank loans secured by client securities collateral to finance their businesses. Client interests would be prejudiced when a re-pledging broker failed to repay bank loans and redeem re-pledged client securities collateral. We believe that such risk could be mitigated by requiring re-pledging brokers to align, as far as possible, the haircut percentages they adopt internally with those applied by their lending banks. In our proposal, re-pledging brokers are already given the flexibility to set their internal haircut percentages lower than the average bank haircut percentages⁶ to enable them to remain competitive.
- 76. Brokers' initiatives to use advanced risk management tools (such as statistical risk measurement models) to manage SMF risks is commendable. Under the Guidelines, a re-pledging broker should have a proper justification when assigning an internal haircut percentage to securities collateral which is lower than the haircut benchmark determined in accordance with the Guidelines. In any event, the internal haircut percentage assigned by a re-pledging broker must not be lower than the applicable haircut percentage prescribed by the FRR, or 80% in the case of illiquid collateral.
- 77. In view of respondents' concerns about the compliance costs of tracking bank haircut percentages, re-pledging brokers will be required to review and update their internal haircut percentages with reference to the updated haircut benchmark regularly (at least quarterly) and when the quality of collateral has significantly changed.
- 78. To address the concerns about the impact on the haircut benchmark of securities not accepted by one of the top three lending banks of a re-pledging broker due to the bank's group affiliation with the issuer of the securities, the re-pledging broker will be allowed to use the average of the haircut percentages assigned to the securities by the remaining top three lending banks to calculate the haircut benchmark.
- 79. Similarly, for any security which is not accepted by one or two of the top three lending banks of a re-pledging broker as collateral, the broker may deem the average of the haircut percentages assigned to that security by the remaining top three lending banks to be the average bank haircut percentage. If a security is not on the lists of securities acceptable as collateral of any of a re-pledging broker's top three lending banks, the re-pledging broker should deem the average bank haircut percentage of that security to be 100%.
- 80. Moreover, re-pledging brokers will not be required to benchmark their internal haircut percentages for any listed shares which have been listed for less than six consecutive

⁶ Subject to the applicable FRR haircut percentages as the floor.



months to the haircut benchmark. However, their internal haircut percentages must not be lower than the FRR haircut percentages for the shares concerned.

81. Given that most of the respondents considered that 20% is the appropriate percentage points to be deducted from the average bank haircut percentage in the calculation of the haircut benchmark, the SFC has taken this recommendation and incorporated it into the Guidelines.

Operational issues

Public comments

- 82. Some respondents sought clarification of whether the proposed measure would apply to non-Hong Kong listed stocks. A few respondents asked whether it would apply only to securities collateral re-pledged to banks.
- 83. A respondent suggested that SMF brokers should be given a grace period to adjust their internal haircut percentages upon any change of the banks' haircut percentages.

The SFC's response

- 84. Considering that the majority of the stocks re-pledged by SMF brokers are stocks listed on The Stock Exchange of Hong Kong Limited (Hong Kong listed stocks), the proposed requirement for re-pledging brokers to benchmark their internal haircut percentages to the haircut benchmark will only apply to Hong Kong listed stocks.
- 85. We would like to clarify that the benchmarking requirement will apply to all securities collateral of re-pledging brokers, rather than only to securities collateral re-pledged to banks, in order to control the risks of those margin loans for which the underlying securities collateral have not been re-pledged.
- 86. Upon any change of the haircut percentages by any of the top three lending banks, SMF brokers will be given a month to implement changes to their internal haircut percentages, such as updating their systems, informing their margin clients about the new haircut percentages and collecting margin calls which may arise as a result of the changes.

VI. Margin calls, stopping further advances and further purchases of securities, and forced liquidation

Question

15. Do you agree that total unsettled margin calls should not exceed the shareholders' funds of an SMF broker? Please provide the reason for your comment.

Public comments

87. The majority of the respondents agreed that the total amount of outstanding margin calls should not exceed the shareholders' funds of an SMF broker. A few respondents suggested that the total amount of outstanding margin calls should be limited to the sum of the SMF broker's shareholders' funds and outstanding approved subordinated



loans. A few respondents were concerned that margin calls could be triggered by uncontrollable factors and that the proposal might induce SMF brokers to apply lower haircut percentages to collateral to reduce the amount of outstanding margin calls.

88. A respondent commented that the triggers for margin calls varied among brokers. Another respondent requested further guidance on the definition of "outstanding margin call".

The SFC's response

- 89. The proposal takes into consideration the possibility of margin calls being triggered by sudden market movements. Under the proposed requirement, a broker is required to take reasonable steps to avoid excessive exposure to outstanding margin calls. Exceeding the benchmarks set out in the Guidelines for exposure to outstanding margin calls raises questions about whether the SMF broker has taken reasonable steps to avoid such a situation. That said, the broker's controls and the circumstances leading to the benchmarks being exceeded would be considered in ascertaining the broker's compliance with the requirement.
- 90. We do not agree that instituting the benchmarks will induce SMF brokers to apply lower haircut percentages to collateral. In the Guidelines, paragraph 5.2 requires brokers to apply prudent haircut percentages to individual securities collateral and paragraph 6.3 specifies the circumstances where margin calls should be made. SMF brokers are expected to strictly comply with these requirements.
- 91. We are of the view that margin calls should be made immediately when the outstanding margin loan balance exceeds the margin value (ie, market value minus haircut amount) of the underlying securities collateral, the margin client's credit limit, or such other amount as may be determined by the SMF broker according to its margin call policy, whichever is the lower (the excess amount is referred to as margin shortfall), except where the margin shortfall is within the minimum transfer amount set by the SMF broker. "Amount of outstanding margin call" means the unsettled margin shortfall in the margin client's account in respect of which a margin call has been made or should have been made by an SMF broker.
- 92. In light of the support received, we maintain our view that the benchmark for the total amount of outstanding margin calls of all margin clients should be capped at the amount of the shareholders' funds of an SMF broker.

Question

16. During the soft consultations, some respondents indicated that a margin call which has remained outstanding for more than 30 days to 90 days should be treated as a long-outstanding margin call. Within this suggested range, at which point do you think a margin call should be treated as a long-outstanding margin call?

Public comments

93. The majority of the respondents suggested that a margin call which has remained outstanding for more than 90 days should be treated as "long-outstanding", while a few recommended 30 to 60 days. A few respondents suggested that a buffer should



be allowed for clients to settle outstanding margin calls, in particular, for overseas clients who may need time to arrange remittance.

The SFC's response

94. In light of the comments and suggestions, we agree to treat margin calls that remain unsettled for more than 90 days as long-outstanding margin calls.

Question

17. During the soft consultations, some respondents recommended limiting total longoutstanding margin calls to between 20% and 25% of an SMF broker's shareholders' funds. Within this suggested range, what percentage do you think is appropriate? Please provide the rationale for your suggestion.

Public comments

95. The majority of the respondents suggested limiting total amount of long-outstanding margin call of all margin clients to 25% of an SMF broker's shareholders' funds while a few suggested 20% or less. Some respondents opposed the proposal on the grounds that factors other than the outstanding period of a margin call were also relevant, such as the quality of the collateral, the client's settlement history and financial capabilities and the prevailing market conditions.

The SFC's response

96. While factors other than the outstanding period of a margin call may also be relevant in assessing a client's default risk, clients who habitually fail to settle or delay the settlement of margin calls are of higher default risk and these situations should prompt immediate follow-up action by SMF brokers. Taking into account the support of the respondents, the quantitative benchmark for the total amount of long-outstanding margin call of all margin clients will be set at 25% of SMF brokers' shareholders' funds.

Operational issues

Public comments

- 97. A few respondents commented that margin calls which are to be settled by instalment should be excluded from the calculation of total amount of outstanding margin call or total amount of long-outstanding margin call of all margin clients.
- 98. A few respondents sought clarification of the meaning of "poor history of settling margin calls" in paragraph 6.5(a) of the Guidelines.
- 99. A respondent sought clarification of whether a margin client with an amount of longoutstanding margin call in his account would be allowed to make further purchases if the client makes full payment of the purchases in advance.



The SFC's response

- 100. We consider that margin calls which are to be settled by instalment should be treated as outstanding margin calls. Whether an SMF broker which has agreed with margin clients to settle margin calls by instalment would be considered as having taken reasonable steps as required by the Guidelines would depend on the circumstances of the individual case.
- 101. In order to clarify the meaning of "poor history of settling margin calls", we have modified the example in the Guidelines and also provided an additional example, namely, when the margin client has failed to settle margin calls on a total of 15 days or more in the preceding 30 calendar days, has had an amount of long-outstanding margin call in one or more occasions in the preceding 12 calendar months or currently has an amount of long-outstanding margin call in his account. These are not exhaustive examples. Each case must be viewed in light of its circumstances.
- 102. The SFC considers that an SMF broker may allow a margin client with poor history of settling margin calls to make further purchases with full payment of the purchases made in advance, but only if they have the effect of reducing the risk of the margin loan, for example, improving the overall quality of the margin client's underlying collateral or reducing the margin shortfall.

VII. Stress testing

Question

- 18. During the soft consultations, some respondents suggested applying a 15% to 30% hypothetical price drop where the collateral pool mainly comprised index stocks, whereas for a collateral pool which comprised few index stocks, the hypothetical price drop should be between 30% and 50%. Do you have any suggestions on the hypothetical price drop percentage to be applied in each of the scenarios (ie, X%, Y% and Z%) suggested in paragraph 85 of the consultation paper? Please provide the reason for your suggestion.
- 19. As regards the weighting of index stocks in the collateral pool in each of the hypothetical scenarios suggested in paragraph 85 of the consultation paper (ie, 75% and 25%), do you agree with the suggested thresholds as the dividing line for distinguishing a high-quality collateral pool from a low-quality collateral pool? Please provide the reason for your suggestion.
- 20. Do you consider that constituent stocks of any other stock indices should be treated as index stocks for the purposes of paragraph 85 of the consultation paper? Please provide the reason for your suggestion.

Setting of hypothetical stress scenarios

Public comments

103. A number of respondents suggested a wide range of price drop percentages for the hypothetical stress scenarios to be applied in stress testing of collateral pools of the different compositions (ie, X%, Y% and Z% in paragraph 85 of the consultation paper):



	Hypothetical price drop percentages suggested by the respondents
X%	from 15% to 30% (most supported 15%)
Y%	from 20% to 40% (most supported 30%)
Z%	from 25% to 50% (most supported 30% and 50%)

- 104. A few respondents considered that SMF brokers should be allowed to determine their own stress test scenarios. A respondent suggested that the effect of having diverse collateral in the pool should also be taken into consideration in setting the hypothetical price drop percentage and that a lower price drop percentage should be applied to well-diversified collateral pools.
- 105. Regarding the proposal to distinguish a high quality collateral pool from a low quality collateral pool based on the weighting of index stocks in the pool, the majority of the respondents did not have specific comments.
- 106. Most respondents suggested including other major stock indices⁷, in addition to the Hang Seng Index and Hang Seng China Enterprises Index, under the definition of "index stocks".

- 107. The purpose of specifying hypothetical stress scenarios in the Guidelines is to help SMF brokers, particularly those with limited resources and experience, to conduct stress tests. The Guidelines do allow SMF brokers to apply their own stress testing methodologies and stress scenarios, provided that they are not less prudent than the methodologies and hypothetical stress scenarios suggested in the Guidelines.
- 108. We have carefully considered the respondents' recommendations for the hypothetical price drop percentages to be applied in the stress tests on collateral pools of different compositions and their suggestions to include constituents of other stock indices as "index stocks". We have slightly modified the stratification approach to collateral pools and assigned prudent hypothetical price drop percentages as summarised in the table below:

	Weighting in the collateral pool in terms of market value	Hypothetical price drop percentage
Tier 1 securities collateral	>75%	15%
Aggregate of Tier 1 securities	>75%	25%
collateral and Tier 2 securities	Between 25% and 75%	30%
collateral	<25%	50%

⁷ Such as the Hang Seng Composite LargeCap Index, Hang Seng Composite MidCap Index, Hang Seng Composite Index, MSCI Hong Kong Index, MSCI China Index, FTSE 100 Index, Nikkei 500 Index, S&P 500 Index, Shanghai Stock Exchange A Share 50 Index and Shenzhen 100 Index.



Question

- 21. Do you agree that 10% is an appropriate threshold for the definition of "significant group of highly correlated securities"? Please provide the reason for your suggestion.
- 22. Do you agree that 10% is an appropriate threshold for the definition of "significant re-pledged securities collateral" and "significant group of highly correlated re-pledged securities collateral"? Please provide the reason for your suggestion.

Public comments

- 109. Respondents were mainly concerned about the definitions of "highly correlated securities" and "highly correlated re-pledged securities collateral" and the practical difficulties of identifying such securities collateral.
- 110. Respondents suggested 10% to 20% as the threshold for determining whether a group of highly correlated securities, an individual re-pledged securities collateral or a group of highly correlated re-pledged securities collateral should be considered as "significant".

- 111. As discussed in the section "Securities collateral concentration controls" in paragraphs 49 to 54 of this paper, the concept of "highly correlated securities" has been replaced by "connected securities" in the Guidelines. Applying a similar concept, the Guidelines have been modified to require SMF brokers to regularly conduct stress tests on their ELC of the hypothetical stress scenario of *a significant group of connected securities collateral* (instead of a significant group of highly correlated securities collateral) losing all its value. For stress testing purposes, a group of connected securities collateral means a group of connected major securities collateral or any two or more other securities collateral where the SMF broker is aware that they are connected.
- 112. Regarding stress testing on a re-pledging broker's liquidity, the Guidelines have also been modified to require re-pledging brokers to regularly conduct stress tests on their liquidity under the hypothetical stress scenario of *a significant group of connected re-pledged securities collateral* (instead of a significant group of highly correlated re-pledged securities collateral) losing all its value⁸. For this purpose, a group of connected re-pledged securities collateral means any two or more major re-pledged securities collateral (Note) which are connected or any two or more other re-pledged securities collateral which the re-pledging broker is aware that they are connected.
 - Note: "Major re-pledged securities collateral", in relation to a re-pledging broker, means any of the ten largest re-pledged securities collateral, in terms of the aggregate market value of securities collateral of the same description re-pledged by the broker to its lending banks, excluding any securities issued by a listed company whose share is a

⁸ There is no change of the requirement to conduct stress tests to assess the impact on an SMF broker's liquidity under the hypothetical stress scenario of a significant individual re-pledged securities collateral losing all its value.



constituent of the Hang Seng Index and any securities to which the lending banks of the broker assign a 100% haircut percentage.

113. With regard to the threshold for when a group of connected securities collateral, an individual re-pledged securities collateral or a group of connected re-pledged securities collateral should be considered as "significant" for stress testing purposes, we are concerned that a high threshold may undermine the effectiveness of this control. Therefore, we maintain the view that 10% of the pool of securities collateral (or the pool of re-pledged securities collateral) in terms of market value is an appropriate threshold.

VIII. Implementation timeline

Question

23. Do you think that a six-month transition period is appropriate? Please provide the reason for your suggestion.

Transition period

Public comments

114. Some respondents agreed with our proposed six-month transition period, whereas the others suggested extending the transition period to 12 months or longer so that SMF brokers have more time to revise their systems, policies and procedures and prepare for compliance with the Guidelines.

The SFC's response

115. In view of increasing market volatility, we consider that it is imperative for SMF brokers to tighten their risk management controls in accordance with the proposed requirements as soon as possible. Hence, the SFC has decided that the proposed requirements shall become effective six months following the gazettal of the Guidelines. The SFC will take a pragmatic and holistic approach to deal with any non-compliance.

Conclusions and way forward

- 116. The SFC will proceed to implement the Guidelines with the revisions set out in Appendix B of this paper, and the Guidelines will become effective six months from the gazettal date.
- 117. The SFC would like to take this opportunity to thank all respondents for their contributions.



Appendix A

List of respondents

(in alphabetical order)

- 1. Bright Smart Securities International (H.K.) Limited
- 2. CompliancePlus Consulting Limited
- 3. Everbright Sun Hung Kai
- 4. Forthright Securities Company Limited
- 5. Hon Christopher Cheung Wah-fung
- 6. Hong Kong Association of Online Brokers
- 7. Hong Kong Securities & Futures Professionals Association
- 8. Hong Kong Securities Association
- 9. Hong Kong Securities Professionals Association
- 10. Pan Asia Securities Lending Association Limited
- 11. Shenwan Hongyuan Securities (H.K.) Limited
- 12. Success Securities Limited
- 13. The Institute of Securities Dealers
- 14. The Law Society of Hong Kong
- 15. Submissions of 17 respondents are published on a "no-name" basis upon request
- 16. Submissions of 2 respondents are withheld from publication upon request



Appendix B

Final form of the Guidelines for Securities Margin Financing Activities

The highlighted parts indicate revisions made to the Guidelines since the consulted draft

Introduction

- 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 conduct requirements relating to securities margin financing (SMF) activities. "Securities margin financing" (SMF) has the meaning assigned to it in section 2 of the Securities and Futures (Financial Resources) Rules (FRR).
- 2. These Guidelines should be read in conjunction with the requirements relating to the conduct of SMF activities, in particular paragraph 3.6 of and Schedule 5 to the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (Code of Conduct) and paragraphs 23, 30 and 32 of the Suggested Control Techniques and Procedures in the Management, Supervision and Internal Control Guidelines for Persons Licensed by or Registered with the Securities and Futures and Futures Commission (Internal Control Guidelines).
- 3. These Guidelines apply to persons licensed for:
 - persons licensed for Type 1 regulated activity (dealing in securities) that who provide financial accommodation to any of their clients in order to facilitate acquisitions or holdings of listed securities by the persons for their clients; and
 - persons licensed for Type 8 regulated activity (securities margin financing),

which are collectively referred to as "SMF brokers" in these Guidelines.

- 4. These Guidelines do not apply to the provision of financial accommodation by a licensed person to a client to facilitate an acquisition of securities in accordance with the terms of a prospectus prior to the commencement of trading of the securities on the exchange (in Hong Kong or elsewhere) on which they are listed (IPO loans).
- 5. A failure by any SMF 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 shall be taken into account in determining the question; and
 - (b) may cause the SFC to consider whether such failure adversely reflects on the SMF broker's fitness and properness and the need for regulatory action.



- 6. These Guidelines consist of qualitative guidance for margin lending policies and risk controls on SMF activities, supplemented by quantitative benchmarks. The control measures specified in these Guidelines are the minimum standards expected of SMF brokers and are not meant to be exhaustive. SMF brokers should observe these Guidelines. Any deviation from these Guidelines must be properly justified by equivalent or compensating controls which are no less at least as prudent and effective as than those set out in these Guidelines. The SFC will be guided by these Guidelines in assessing whether an SMF broker is fit and proper. In determining an appropriate regulatory response to an SMF broker's deviation from these Guidelines, the SFC will adopt a pragmatic and holistic approach and take taking into account all the circumstances, including but not limited to the cause, seriousness, duration and frequency of the deviations and any remedial measures taken by the SMF broker.
- 6. The controls and measures specified in these Guidelines are the minimum standards expected of SMF brokers and are not meant to be exhaustive. SMF brokers may adopt alternative measures which are as prudent and effective.
- 7. Interpretation of the terms in a specific paragraph of these Guidelines applies to the same terms in other paragraphs of these Guidelines.

1. Total margin loans controls

- 1.1. An SMF broker should avoid not granting margin loans beyond its financial capability or over-leverage itself in conducting SMF activities.
- 1.2. It An SMF broker should control the total amount of margin loans by implementing a prudent total margin loans limit which is commensurate with its liquidity profile and capital, the risk profile of its margin loan portfolio and the prevailing market conditions.
- 1.3. An SMF broker is strongly discouraged to over-leverage itself in conducting SMF activities. In general, an SMF broker should contain the aggregate margin loans advanced to margin clients within [2 / 3 / 4 / 5 times] of its capital (ie, total margin loans-to-capital multiple). An SMF broker should have exceptionally high-quality margin loans and comply with all other regulatory requirements and guidance in these Guidelines to justify a higher total margin loans-to-capital multiple. For this purpose, capital includes the broker's shareholders' funds and any outstanding subordinated loans approved by the SFC.

An SMF broker should ensure its total margin loans-to-capital multiple does not exceed the benchmark prescribed in paragraph 1.4.

Notes:

- (1) "Total margin loans-to-capital multiple", in relation to an SMF broker, means the total amount of margin loans granted by the SMF broker divided by the capital of the SMF broker. For this purpose, "capital" means the sum of the SMF broker's shareholders' funds and any outstanding subordinated loans approved by the SFC.
- (2) In the calculation of total margin loans-to-capital multiple, the amount of outstanding subordinated loans approved by the SFC which may be included in the calculation of an SMF broker's capital is limited to the amount of the SMF broker's shareholders' funds.



- (3) In the calculation of total margin loans-to-capital multiple, an SMF broker may refer to either (i) its latest amounts of shareholders' funds and outstanding approved subordinated loans approved by the SFC; or (ii) the amounts of shareholders' funds and outstanding approved subordinated loans approved by the SFC reported in its latest monthly financial returns submitted to the SFC in the calculation of its total margin loansto-capital multiple.
- 1.4. An SMF broker may adopt a total margin loans-to-capital multiple benchmark up to five only if it complies with all other applicable provisions in these Guidelines and has high quality margin loan portfolio. An SMF broker with lower quality margin loan portfolio or weak SMF risk controls should adopt a lower total margin loans-to-capital multiple benchmark.
- 1.5. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in the determination of the its total margin loans limit in its margin lending policy.
- An SMF broker should review its total margin loans limit regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.
- 1.7. An SMF broker should strictly enforce and closely monitor compliance with its total margin loans limit. It should take immediate rectification action on any material breach of the its total margin loans limit and promptly escalate the matter to senior management in a timely manner.
- 1.8. A Any waiver or increase of the total margin loans limit should be properly justified by a written risk assessment and be endorsed by senior management.

2. Margin client credit limit controls

2.1. An SMF broker should set prudent credit limits for individual margin clients or groups of related connected margin clients (as defined in section 42(3) of the Securities and Futures (Financial Resources) Rules (FRR)) to ensure the obligations of the margin clients arising from the financing provided by it are commensurate with the financial capability of its the margin clients.

Notes:

- (1) "Group of connected margin clients", in relation to an SMF broker, means:
 - a group of related margin clients (which has the meaning assigned to it in section 42(3) of the FRR);
 - (ii) any two or more margin clients who are natural persons (other than spouses) and act on behalf of the same third party where the third party is not a margin client of the SMF broker but is the beneficial owner of their accounts, or stands to gain the commercial or economic benefit or bear the commercial or economic risk of the transactions in their accounts;
 - (iii) any two or more margin 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 the others' accounts;

- (iv) any two or more margin clients that are corporations of which a natural person, either alone or with his spouse, controls 35% or more of their voting rights; or
- (v) any two or more margin clients who are financially connected by guarantee arrangements, whereby the financial liabilities of one or more of them are guaranteed by one or more of the others, or their financial liabilities are guaranteed by the same guarantor where the guarantor is not a margin client of the SMF broker.
- (2) For the purposes of ascertaining whether two or more margin clients who are natural persons (other than spouses) are within a group of connected margin clients, an SMF broker is not required to conduct proactive searches for the beneficial owners of their accounts but it should make appropriate enquires where there is indication that a client is not acting on his own behalf.
- 2.2. For the purposes of addressing the interconnectedness risks of related margin clients, An SMF broker should ensure the credit risks posed by of all the clients within a group of related connected margin clients are aggregated for the purposes of measuring the firm's broker's credit exposure to them the group as a whole and determining the credit limits of each client within the group and the credit limit of the group as a whole.
- 2.3. An SMF broker should have regard to its liquidity profile and capital, the risk profile of its margin loan portfolio and the prevailing market conditions in setting credit limits for margin clients.
- 2.4. An SMF broker should take into account, among others other things, the following specific factors about an individual margin client or individual clients within a group of related connected margin clients in setting credit limit for the client(s) or the group (as the case may be):
 - (a) the financial situation of the client(s), supported by objective proof;
 - (b) any internal and external credit reference information (eg, credit history) about the client(s);
 - (c) the quality of the underlying collateral and any other credit support (eg, third-party guarantee);
 - (d) the investment objectives, risk appetite and trading patterns of the client(s); and
 - (e) any known events which may reflect adversely on the financial status or default risk of the client(s).
- 2.5. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in determining its margin client credit limits in its margin lending policy.
- 2.6. An SMF broker should review the its margin client credit limits of margin clients regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.



- 2.7. An SMF broker should strictly enforce and closely monitor compliance with the its margin client credit limits granted to margin clients. It should take immediate rectification action on any material breach of the its margin client credit limits and promptly escalate the matter to senior management in a timely manner.
- 2.8. A Any waiver or increase of margin client credit limits should be properly justified by a written risk assessment and be endorsed by senior management.

3. Securities collateral concentration controls

3.1. An SMF broker should set prudent concentration limits to avoid building up excessive exposure to individual securities collateral or groups of highly correlated connected major securities collateral (Note 1). An SMF broker should assess if any two or more of its major securities collateral (Note 2) are connected regularly (at least monthly).

Note: "Highly correlated securities" refer to:

- (1) Two or more securities (including bonds, shares and other securities) issued by the same issuer or by different companies within the same group of companies (as defined under Section 1 of Part 1 of Schedule 1 to the SFO); or
- (2) Two or more securities which exhibit a high correlation in historical price movements and their issuers either have group affiliations, material crossshareholdings, significant business affiliations or are engaged in the same industry.

Notes:

- (1) "Group of connected major securities collateral" means any two or more of an SMF broker's major securities collateral which are considered to be connected.
- (2) "Major securities collateral", in relation to securities collateral held by an SMF broker, means any of the ten largest securities collateral, in terms of the aggregate market value of securities collateral of the same description provided by margin clients who have outstanding margin loan balances in their accounts (borrowing margin clients), excluding any securities issued by a listed company whose share is a constituent of the Hang Seng Index and any securities for which the FRR prescribe a haircut percentage of 100%.

3.2. Two or more securities collateral shall be considered as connected if:

- (a) they are issued by the same issuer or by members of the same group of companies; or
- (b) any adverse event affecting the issuer of any one of the securities is likely to materially affect the financial soundness of the issuers or the market prices of the rest of the securities concerned. In making the assessment, an SMF broker should take into consideration all the relevant factors, for instance, whether the issuers of the securities are under common control (this does not apply to stateowned enterprises which are not members of the same group of companies), have significant business affiliations (eg, one is the major supplier or customer of the other), have significant investments in the others' securities, or have significant lending to or other financial relationships with the others.
- 3.3. If an SMF broker becomes aware that any other securities collateral are connected, it should take reasonable steps to manage the concentration risks arising from such



connected securities collateral and avoid building up excessive exposure to such connected securities collateral.

- 3.4. In setting the concentration limits for individual securities collateral or a groups of highly correlated connected major securities collateral, an SMF broker should consider, among other things, the following factors:
 - (a) its own liquidity profile and capital;
 - (b) the risk profiles of the its margin loans secured by the securities concerned and the risk profile of its margin loan portfolio as a whole;
 - (c) the quality of the securities concerned;
 - (d) its holding in the each security securities concerned as a percentage of the total issue size of the securities security and the prospect of realisation;
 - (e) where applicable, its aggregated holdings in the highly correlated securities concerned collateral (in the case of a group of highly correlated connected major securities collateral);
 - (f) the potential financial impact on it in of stress scenarios concerning involving the securities concerned collateral, including where the stress scenarios include but not limited to a plunge in the market price or significant loss of market liquidity (eg, trading suspension, liquidity drain due to adverse news about the issuer or its senior management or delisting) of the securities concerned; and
 - (g) the prevailing market conditions.
- 3.5. An SMF broker should take into account, among other things, the following specific factors in evaluating the quality of an individual securities collateral or a group of highly correlated securities collateral:
 - (a) the financial situation of the issuer of the securities concerned;
 - (b) the historical price volatility of the securities concerned, and the reasonableness and sustainability of the their valuation, and market liquidity and its sustainability and the historical price volatility of the securities concerned;
 - (c) in the case of listed shares, the shareholding concentration of the listed company issuing the shares securities concerned, in the case of listed shares; and
 - (d) any adverse news about the issuer of the securities concerned or its the issuer's senior management.
- 3.6. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in determining the its securities collateral concentration limits in its margin lending policy.
- 3.7. An SMF broker should review its securities collateral concentration limits regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.



- 3.8. An SMF broker should strictly enforce and closely monitor compliance with the its securities collateral concentration limits. It should take immediate rectification action on any material breach of the its securities collateral concentration limits and promptly escalate the matter to senior management in a timely manner.
- 3.9. A Any waiver or increase of the securities collateral concentration limits should be properly justified by a written risk assessment and be endorsed by senior management.
- 3.10. In addition, to comply with the threshold set out in paragraph 3.9, An SMF broker should perform an impact analysis on its excess liquid capital (ELC) for assess the concentration risks of individual securities collateral by estimating the ELC impact on its excess liquid capital (ELC) of a the hypothetical stress scenario which assumes of the collateral security held as collateral concerned is no longer acceptable being valued at nil by the FRR for liquid capital calculation purposes(such as in the case of listed securities, where the securities have been suspended from trading for three business days or more). The SMF broker should assess the effectiveness of the its concentration limits for the securities collateral concerned by comparing the estimated ELC impacts (measured as the percentage reduction of the ELC) of the securities collateral with the applicable benchmarks described in the following paragraph prescribed below. This checking ELC impact analysis should be performed regularly (at least monthly) or more frequently if the when securities collateral concentration risks increases greatly significantly during the month.

	Description	ELC impact benchmark
Tier 1 securities collateral	 Securities collateral being a constituent stock of: (i) Hang Seng Index; (ii) Hang Seng China Enterprises Index; (iii) FTSE 100 Index; (iv) Nikkei Stock Average; (v) S&P 500 Index; or (vi) Euro Stoxx 50 Index 	50%
	 Securities collateral being qualifying debt securities, special debt securities or specified securities for which the FRR prescribe a haircut percentage of 15% or below 	
Tier 2 securities collateral	 Securities collateral not being a Tier 1 securities collateral but being a constituent stock of: Hang Seng Composite Index; MSCI Hong Kong Index; or MSCI China Index 	30%
	2. Securities collateral being qualifying debt securities, special debt securities or specified securities for which the FRR prescribe a haircut percentage higher than 15% but not above 30%	



Other	Any securities collateral not being Tier 1 securities	20%
securities	collateral or Tier 2 securities collateral	
collateral		

Notes:

- (1) An SMF broker may refer to either (i) its latest amount of ELC; or (ii) the amount of ELC reported in its latest monthly financial returns submitted to the SFC in estimating the ELC impact.
- (2) An SMF broker may, for the purposes of the ELC impact analysis, calculate and apply an adjusted ELC by eliminating the effects on its required liquid capital of bank loans drawn for initial public offering purposes.
- 3.11. An SMF broker should tighten the related concentration limits of a security held as collateral if the ELC impact estimated by the ELC impact analysis conducted on the security in accordance with referred to in paragraph 3.810 indicates that: exceeds the ELC impact benchmark specified in column 3 of the table in paragraph 3.10.
 - (a) in the case of securities collateral which are constituents of the Hang Seng Index or Hang Seng China Enterprises Index (index stocks), the ELC impact (measured as a percentage reduction of the ELC) on the broker under the hypothetical stress scenario described in the previous paragraph is greater than [30% / 40% / 50%]; and
 - (b) in other cases, the ELC impact (measured as a percentage reduction of the ELC) on the broker under the hypothetical stress scenario described in the previous paragraph is greater than [20% / 25%].
 - Notes: (1) An SMF broker may refer to either (i) its latest ELC; or (ii) the ELC reported in its latest monthly financial returns submitted to the SFC in assessing the ELC impact.
 - (2) An SMF broker may apply an ELC which is stripped of the effects on the required liquid capital arising from the IPO subscriptions and placement transactions in assessing the ELC impact.

4. Margin client concentration controls

- 4.1. An SMF broker should set prudent concentration limits to avoid building up excessive exposure to individual margin clients or groups of related connected margin clients.
- 4.2. In setting the concentration limits for an individual margin client or a group of related connected margin clients, an SMF broker should consider, among other things, the following factors:
 - (a) its liquidity profile and capital;
 - (b) the financial situation of the client(s) or clients concerned;
 - (c) the composition and quality of the underlying collateral;



- (d) the potential financial impact on it of client defaults and in stress scenarios situations, including but not limited to a significant drop in the market price or market liquidity of the underlying collateral;
- (e) the credit history of the client(s) or clients concerned;
- (f) the risk profile of its margin loan portfolio; and
- (g) the prevailing market conditions.

4.3. Margin loans advanced to an individual margin client or a group of related margin clients would be considered as excessive if their aggregate margin loans exceed [20% / 30% / 40%] of the broker's shareholders' funds).

An SMF broker's exposure to a margin client or a group of connected margin clients would be deemed to be excessive if the margin loan of the margin client or the total margin loans of the group exceeds a prudent percentage of the shareholders' funds of the SMF broker (margin client concentration benchmark). An SMF broker may adopt a margin client concentration benchmark up to 40% of its shareholders' funds only if it complies with all other applicable provisions in these Guidelines and it has high quality margin loan portfolio. An SMF broker with lower quality margin loan portfolio or weak SMF risk controls should adopt a lower margin client concentration benchmark.

Note:

In the calculation of the margin client concentration benchmark, an SMF broker may refer to either (i) its latest amount of shareholders' funds; or (ii) the amount of shareholders' funds reported in its latest monthly financial returns submitted to the SFC in the calculation of the ratio.

- 4.4. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in determining the its margin client concentration limits in its margin lending policy.
- 4.5. An SMF broker should review its margin client concentration limits regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.
- 4.6. An SMF broker should strictly enforce and closely monitor compliance with the its margin client concentration limits. It should take immediate rectification action on any material breach of the its margin client concentration limits and promptly escalate the matter to senior management in a timely manner.
- 4.7. A Any waiver or increase of the margin client concentration limits should be properly justified by a written risk assessment and be endorsed by senior management.
- 4.8. In addition, an SMF broker should assess the impact of client defaults and stress situations on its ELC prior to granting a significant margin loan. For this purpose, any margin loan amount in excess of exceeding [10%] of the broker's shareholders' funds would be deemed to be significant.



5. Haircuts for securities collateral

- 5.1. An SMF broker should maintain a list of securities acceptable by it as collateral for margin lending purpose.
- 5.2. An SMF broker should apply prudent haircuts percentages to each individual securities acceptable as collateral having regard to, among other things, the following factors:
 - (a) the financial situation of the issuer of the securities concerned;
 - (b) historical price volatility of the securities concerned, and the reasonableness and sustainability of the their valuation, and market liquidity and its sustainability and the historical price volatility of the securities concerned; and
 - (c) any adverse news about the issuer of the securities concerned or the issuer's senior management.
- 5.3. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in determining the haircuts percentages of securities collateral in its margin lending policy.
- 5.4. In general, an SMF broker should strictly consistently apply the established haircuts percentages stated in its margin lending policy to all margin clients' the securities collateral of all margin clients. A higher haircuts percentage than the stated rate may be applied to securities collateral provided by a margin client if doing so would be prudent in the where circumstances require. If a haircut percentage lower than the normal stated rate is applied to the any securities collateral provided by a margin client, the SMF broker should assess whether there would be the additional risk in of applying the lower haircut percentage and its financial capability to take up the additional risk, any and take risk mitigation to compensate for measures in respect of the additional risk and its financial capability to take up the additional risk. The assessment results should be properly documented and approved by senior management.
- 5.5. For an SMF broker which re-pledges margin clients' securities collateral (re-pledging broker), the haircut percentage assigned by it to an individual security securities held as collateral should not be lower than the average of the haircut percentages assigned by its top three lending banks (Note 1) to the same security securities collateral minus [15% / 20%] (haircut benchmark) (Notes 2, 3 and 4).

Notes:

- (1) Lending banks are ranked in terms of the amounts of the bank loans drawn by the repledging broker under credit facilities wholly or partly secured by securities collateral provided by its margin clients.
- (2) This benchmarking requirement applies to any share listed on The Stock Exchange of Hong Kong Limited except for any share which has been listed for less than six consecutive months (including the period during which the share is suspended from trading).
- (3) For any security which is not accepted by one or two of the top three lending banks of a re-pledging broker as collateral, the broker may deem the average of the haircut percentages assigned to that security by the remaining top three lending banks to be the average bank haircut percentage. If a security is not on the lists of securities acceptable



as collateral of any of a re-pledging broker's top three lending banks, the re-pledging broker should deem the average bank haircut percentage of that security to be 100%.

- (4) If the broker has less than three lending banks, the haircut should not be lower than the haircut assigned by its lending bank or the average haircut by its lending banks minus [15% / 20%]. If a re-pledging broker has only one lending bank, the haircut benchmark of a security held as collateral is the haircut percentage assigned by its lending bank to that security minus 20%. If it has only two lending banks, the haircut benchmark is the average of the haircut percentages assigned by its lending banks to that security minus 20%.
- 5.6. Where a re-pledging broker considers that an individual securities security held as collateral warrants a lower haircut percentage than that the haircut benchmark determined in accordance with the mechanism prescribed in paragraph 5.5 above, it should clearly document its justification, the its assessment of the impact on its financial position and its measures to mitigate the additional risks arising from applying the lower haircut percentage.
- 5.7. In any event, the haircut percentage assigned by a re-pledging broker to a security securities held as collateral should must not be lower than the applicable haircut percentage prescribed by the FRR for the security concerned for the purposes of calculating the haircut amount under section 22(1)(b)(i) of the FRR, or 80% in the case of illiquid collateral (as defined which has the meaning assigned to it in section 22(4) of the FRR), 80%.
- 5.8. An SMF broker should review the haircuts percentages assigned to securities collateral regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.
- 5.9. A re-pledging broker should review the haircut percentages assigned to securities collateral with reference to those assigned by its top three lending banks in accordance with paragraph 5.5 regularly (at least quarterly) and whenever there is a significant change of any of the determining factors, and implement any changes of its haircut percentages required within one month of the review.
- 5.10. For the purposes of paragraphs 5.5 and 5.9, any reference to "lending bank" shall include any securities dealer (which has the meaning assigned to it in section 2 of the FRR) to which a re-pledging broker re-pledges margin clients' securities collateral. Any reference to "bank loan" shall also be construed accordingly.

6. Margin calls, stopping further advances and further purchases of securities, and forced liquidation

- 6.1. An SMF broker should prudently set the triggers for margin calls, for stopping further advances to, and further purchases of securities by, margin clients, and for forced liquidation of margin clients' securities collateral.
- 6.2. An SMF broker should clearly document in its margin lending policy the methodology to be adopted and factors to be considered in determining the triggers for margin calls, for stopping further advances to, and further purchases of securities by, margin clients, and for forced liquidation of margin clients' securities collateral in its margin lending policy.



- 6.3. In general, margin calls should be made immediately when an the outstanding margin loan balance exceeds the margin value (ie, market value minus haircut amount) of the underlying securities held as collateral, or the margin client's credit limit granted to the client (the excess is referred to as margin shortfall), or such other amount as may be determined by the SMF broker according to its margin call policy, whichever is the lower (the excess amount is referred to as margin shortfall), except where the margin shortfall is within the minimum transfer amount for payment set by the SMF broker. The minimum transfer amount for payment should be reasonable and prudent in light of the client's and the broker's circumstances of both the margin client and the SMF broker.
- 6.4. An SMF broker should take reasonable steps to avoid circumstances where excessive exposure to outstanding margin calls, for example, the total amount of unsettled outstanding margin calls of all margin clients exceeds its shareholders' funds, and or the total amount of long-outstanding margin calls of all margin clients (ie, margin calls that have remained unsettled for more than [30 days / 60 days / 90 days]) exceeds [20% / 25%] of its shareholders' funds.

Notes:

- (1) "Amount of outstanding margin call" means the unsettled margin shortfall in the margin client's account in respect of which a margin call has been made or should have been made by an SMF broker in accordance with paragraph 6.3.
- (2) "Amount of long-outstanding margin call" means an amount of outstanding margin call in a margin client's account which has an age of more than 90 days. The age of the margin call should be counted from the first date a client's account has an amount of outstanding margin call.
- (3) An SMF broker may refer to either (i) its latest amount of shareholders' funds; or (ii) the amount of shareholders' funds reported in its latest monthly financial returns submitted to the SFC in the above calculations.
- 6.5. An SMF broker should must stop waiving a margin calls where a on any margin client:
 - (a) who has a poor history of settling margin calls (eg, failure to meet margin calls in more than 15 occasions in the preceding 30 days who has failed to settle margin calls on a total of 15 days or more in the preceding 30 calendar days, has had an amount of long-outstanding margin call in one or more occasions in the preceding 12 calendar months or currently has an amount of long-outstanding margin call in his account); or
 - (b) whose has an outstanding margin loan balance higher than exceeds the market value of the underlying collateral.
- 6.6. An SMF broker should avoid must stop any further advances to, and prevent any further purchases of securities using the margin facility by, a any margin client: where the margin client has a poor history of settling margin calls and there are outstanding margin calls yet to be met.
 - (a) whose outstanding margin loan balance exceeds the market value of the underlying collateral; or
 - (b) who has an amount of outstanding margin call in his account and a poor history of settling margin calls,



except where the further purchase has the effect of reducing the risk of the margin loan, for example, improving the overall quality of its underlying collateral or reducing the margin shortfall.

- 6.7. An SMF broker must stop further advances to and prevent further purchases of securities using the margin facility by a margin client where the client's outstanding margin loan balance is higher than the market value of the underlying collateral.
- 6.7. An SMF broker should strictly apply the triggers for its policies on margin calls, on stopping further advances to, and further purchases of securities, by margin clients, and on forced liquidation of margin clients' securities collateral. Where a deviation from this policy any of these policies is considered justified justifiable in respect of a client a particular case, the SMF broker should exercise its discretion prudently after duly assessing the additional risks resulting that may result from the deviation and its financial capability to take up the additional risk, any and taking risk mitigation to compensate for measures in respect of the additional risk taken and its financial capability to take up the additional risk. The assessment results should be properly documented and approved by senior management.
- 6.8. An SMF broker should immediately review the credit limit For of any margin clients with found to have a poor history of settling margin calls, an SMF broker should review the credit limits granted to them, and as well as the credit limit of any other margin clients related connected to them that client, in a timely manner.
- 6.9. An SMF broker should review its policies on triggers for margin calls, on stopping further advances to, and further purchases of securities by, margin clients, and on forced liquidation of margin clients' securities collateral regularly (at least annually) and whenever there is a significant change to of any of the underlying determining factors.

7. Stress testing

- 7.1. An SMF broker should regularly conduct stress tests on its ELC and liquidity regularly (at least on a monthly basis) and whenever upon the occurrence of any material adverse market event or securities-specific event occurs, (such as a sudden plunge in the market price of a significant securities security held as collateral), to quantify estimate the financial impact of the event on it changing market conditions.
- 7.2. An SMF broker should apply the applicable hypothetical stress scenario suggested in paragraphs 7.3 to 7.6 below in the regular stress tests on its ELC referred to in paragraph 7.1.
- 7.3. For the regular ELC stress tests referred in paragraph 7.1, an SMF broker should apply the applicable hypothetical stress scenario prescribed below according to the composition of the pool of securities collateral provided by all borrowing margin clients. For simplicity's sake, each hypothetical stress scenario prescribed below assumes adopts a uniform single percentage price drop percentage to represent the average price drop of for all the securities in the pool of collateral provided by all margin clients who have outstanding margin loan balances in their accounts (borrowing margin clients). An SMF broker should apply the applicable hypothetical stress scenario according to the composition of the collateral pool provided by its borrowing margin clients:



- (a) [15% to 30%] average price drop, if more than [75%] of the pool of securities collateral pool in terms of market value is comprised of index stocks Tier 1 securities collateral;
- (b) 25% average price drop, if more than 75% of the pool of securities collateral in terms of market value is comprised of Tier 1 securities collateral and Tier 2 securities collateral;
- (c) [a percentage within the percentages specified in (a) and (c)] 30% average price drop, if less than [75%] but more than [25%] 25% to 75% of the pool of securities collateral pool in terms of market value is comprised of index stocks Tier 1 securities collateral and Tier 2 securities collateral; and
- (d) [30% to 50%] average price drop, if less than [25%] of the pool of securities collateral pool in terms of market value is comprised of index stocks Tier 1 securities collateral and Tier 2 securities collateral.
- 7.4. An SMF broker should also conduct stress tests regularly on its ELC regularly (at least monthly) for the hypothetical stress scenario of a significant group of highly correlated connected securities collateral losing all its value.

Notes:

- (1) "Group of connected securities collateral" means a group of connected major securities collateral or any two or more other securities collateral which the SMF broker is aware that they are connected.
- (2) Any A group of highly correlated connected securities collateral with an aggregate market value which equals [10%] or more of the total market value of the pool of securities collateral provided by all borrowing margin clients would be considered as significant.
- 7.5. In addition, A re-pledging broker should regularly conduct stress tests regularly (at least monthly) on its liquidity to assess its ability to meet margin calls from that may be made by its lending banks in stress situations conditions, (unless its the total amount of outstanding bank loans obtained by re-pledging margin clients' securities collateral are is less than the sum of its cash and bank balances).
- 7.6. For the regular stress tests referred to in paragraph 7.5, a re-pledging broker should apply the applicable hypothetical stress scenario prescribed below according to the composition of the pool of securities collateral re-pledged to its lending banks. For simplicity sake, each hypothetical stress scenario prescribed below assumes adopts a uniform single percentage price drop percentage for all re-pledged to represent the average price drop of the pool of securities collateral re-pledged to lending banks: A re-pledging broker should apply the applicable hypothetical stress scenario according to the composition of its re-pledged securities collateral:
 - (a) [15% to 30%] average price drop, if more than [75%] of the pool of re-pledged securities collateral in terms of market value is comprised of index stocks Tier 1 securities collateral;
 - (b) 25% average price drop, if more than 75% of the pool of re-pledged securities collateral in terms of market value is comprised of Tier 1 securities collateral and Tier 2 securities collateral;



- (c) [a percentage within the percentages specified in (a) and (c)] 30% average price drop, if less than [75%] but more than [25%] 25% to 75% of the pool of repledged securities collateral in terms of market value is comprised of index stocks Tier 1 securities collateral and Tier 2 securities collateral; and
- (d) [30% to 50%] average price drop, if less than [25%] of the pool of re-pledged securities collateral in terms of market value is comprised of index stocks Tier 1 securities collateral and Tier 2 securities collateral.
- 7.7. A re-pledging broker should also regularly conduct stress tests regularly (at least monthly) on its liquidity to assess its ability to meet margin calls that may be made by its lending banks for the hypothetical stress scenario of a significant individual re-pledged securities collateral (or a significant group of highly correlated connected re-pledged securities collateral) losing all its value.

Notes:

- (1) "Group of connected re-pledged securities collateral" means any two or more major repledged securities collateral which are assessed to be connected or any two or more other re-pledged securities collateral which the re-pledging broker is aware that they are connected.
- (2) Two of more re-pledged securities collateral shall be considered as connected if they meet any of the criteria set out in paragraph 3.2.
- (3) "Major re-pledged securities collateral", in relation to a re-pledging broker, means any of the ten largest re-pledged securities collateral, in terms of the aggregate market value of securities collateral of the same description re-pledged by the broker to its lending banks, excluding any securities issued by a listed company whose share is a constituent of the Hang Seng Index and any securities to which the lending banks of the broker assign a 100% haircut percentage.
- (4) A re-pledging broker should assess if any two or more major re-pledged securities collateral are connected regularly (at least monthly).
- (5) Any-An individual re-pledged securities collateral or group of highly correlated re-pledged securities collateral with a market value or an aggregate market value which equals to [10%] or more of the total market value of all the pool of re-pledged securities collateral would be considered as significant.
- (6) A group of connected re-pledged securities collateral with an aggregate market value which equals 10% or more of the total market value of the pool of re-pledged securities collateral would be considered as significant.
- 7.8. An SMF broker may apply other stress testing methodologies and or hypothetical stress scenarios provided that they are no not less prudent than the methods methodologies and hypothetical stress scenarios suggested above in this section. It should clearly document the methodologies for its stress testing models methodologies, including and the data sources, data history and, assumptions and hypothetical stress scenarios applied as well as the justification for deploying them in lieu of the stress testing methods methodologies and hypothetical stress scenarios suggested above in this section.
- 7.9. An SMF broker should clearly document:



- (a) the details of each stress test performed, including but not limited to the stress testing methodologies, and the data sources, data history, assumptions, and hypothetical stress scenarios and financial data applied; and
- (b) the stress test results, including the amount of margin call that may be made by each of its lending banks and the aggregate amount of such margin calls, the assessment of its ability to meet such margin calls, the triggers for following follow-up action on the stress test results, the escalation procedures for reporting the stress test results to senior management, and any follow-up actions taken.
- 7.10. Where a stress test result suggests that an SMF broker's ELC position or liquidity would significantly deteriorate under the a stress conditions condition, it should take prompt and effective pre-emptive measures, including formulating a detailed contingency plan, to prevent a liquidity crunch squeeze, insolvency or non-compliance with its minimum liquid capital requirement under the FRR.
- 7.11. For the purposes of paragraphs 7.5, 7.6, 7.7 and 7.9, any reference to "lending bank" shall include any securities dealer (which has the meaning assigned to it in section 2 of the FRR) to which a re-pledging broker re-pledges margin clients' securities collateral. Any reference to "bank loan" shall also be construed accordingly.

8. Notification requirement

- 8.1. An SMF broker should report to the SFC immediately if upon becoming aware of the following matters:
 - (a) it does not comply with or exceeds the quantitative thresholds benchmark specified in paragraphs 1.2 4, 3.910, 4.3, 5.5, 5.7, or 6.4, 6.5 or 6.7 of these Guidelines; or
 - (b) it cannot does not pass the any stress test on ELC or liquidity performed conducted in accordance with paragraph 7 of these Guidelines.
- 8.2. An The SMF broker shall include in the report to the SFC filed under paragraph 8.1 full details of the matter, including: and
 - (a) in the case of a report filed under paragraph 8.1(a), the reasons therefor for failing to comply with or exceeding the quantitative benchmark in question;, and any measures it has taken, is taking or proposes to take to deal with the noncompliance or deviation reported under paragraph 8.1(a), and a detailed contingency plan if it cannot pass a stress test under paragraph 7. ensure compliance with the relevant requirements in these Guidelines or ensure the adequacy of its liquid capital and liquidity.
 - (b) in the case of a report filed under paragraph 8.1(b), any measure it has taken, is taking or proposes to take to prevent liquid squeeze, insolvency or non-compliance with its minimum liquid capital requirement under the FRR.