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

# Consultation Paper on the Proposed Guidelines for Securities Margin Financing Activities

August 2018

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# Foreword

The Securities and Futures Commission (SFC) invites market participants and interested parties to submit written comments on the proposals discussed in this consultation paper or to comment on related matters that might have a significant impact upon the proposals by no later than 18 October 2018. Any person wishing to comment on the proposals on behalf of any organisation should provide details of the organisation whose views they represent.

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

You may not wish your name or submission to be published by the SFC. If this is the case, please state that you wish your name, submission or both to be withheld from publication when you make your submission.

Written comments may be sent as follows:

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| By mail to: | Securities and Futures Commission<br>35/F Cheung Kong Center<br>2 Queen's Road Central<br>Hong Kong<br><br>Re: Consultation Paper on the Proposed Guidelines for Securities Margin Financing Activities |
| By fax to: | (852) 2523 4598 |
| By online submission: | www.sfc.hk/edistributionWeb/gateway/EN/consultation/ |
| By e-mail to: | 2018_SMFconsultation@sfc.hk |

All submissions received before expiry of the consultation period will be taken into account before the proposals are finalised and a consultation conclusions paper will be published in due course.

Securities and Futures Commission
Hong Kong

17 August 2018

## Personal Information Collection Statement

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

### Purpose of collection

2. The Personal Data provided in your submission to the SFC in response to this consultation paper may be used by the SFC for one or more of the following purposes:

   (a) to administer the relevant provisions[2] and codes and guidelines published pursuant to the powers vested in the SFC;

   (b) in performing the SFC's statutory functions under the relevant provisions;

   (c) for research and statistical purposes; and

   (d) for other purposes permitted by law.

### Transfer of personal data

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

### Access to data

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

### Retention

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

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

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

## Enquiries

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

   The Data Privacy Officer
   The Securities and Futures Commission
   35/F, Cheung Kong Center
   2 Queen's Road Central
   Hong Kong

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

## Introduction

1. The SFC invites comments on a draft set of guidelines for securities margin financing (SMF) activities, which the SFC proposes to issue under section 399 of the Securities and Futures Ordinance (SFO) to supplement the existing conduct requirements. The proposed guidelines comprise both qualitative requirements for seven key risk control areas and quantitative benchmarks for measuring and monitoring key SMF risks. The proposed guidelines will apply to all licensed corporations carrying on SMF activities (SMF brokers).

2. A recent review by the SFC revealed imprudent margin lending practices which give rise to concerns that a number of brokers are exposed to unacceptable financial and concentration risks. Through providing additional guidelines to the industry, the SFC aims to clarify, codify and standardise the risk management practices expected of brokers conducting SMF activities.

## Background

3. The current SMF regulatory framework was established in 2000 and then enhanced in 2002 and 2006 with additional measures to mitigate the risks of pooling and re-pledging securities collateral of margin clients. Total margin loans granted by brokers have grown nine times from $21 billion as at 31 December 2006 to $206 billion as at 31 December 2017 (review period). In the course of the SFC's broker supervision activities, a number of SMF brokers appeared to have pursued aggressive margin lending practices and slack risk controls.

4. Inadequate control of SMF risks may threaten a broker's financial stability and confidence in the brokerage community as a whole as well as market integrity in the event of an SMF broker failure. Against this backdrop, the SFC conducted a review of SMF activities in 2017 (SMF review). The SMF review comprised a macro analysis of trends in SMF activities based on the monthly financial returns submitted by SMF brokers in accordance with the Securities and Futures (Financial Resources) Rules (FRR) over the review period along with an in-depth study of the risk profiles and margin lending practices of the 20 largest SMF brokers.

5. The macro analysis revealed that over the review period, the financial risks of SMF activities were rising, as evidenced by the following findings:

   i) Deterioration in margin loan quality – FRR margin shortfall[3] as a percentage of brokers' shareholders' funds increased from 7% to 19%. As a percentage of total margin loans, FRR margin shortfall increased from 11% to 16%. Collateral coverage[4] also dropped from five times to four times;

   ii) The weighting of margin loans secured by single collateral nearly tripled – 30% of the major margin loans[5] were secured by a single collateral stock at the end of 2017, compared to 12% at the end of 2006;

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[3] The amount of a margin loan which cannot be counted as liquid capital under the FRR. A margin shortfall would arise if the market value of the securities collateral securing the margin loan after deducting the applicable FRR haircut amount is less than the outstanding margin loan.

[4] The ratio of the total market value of securities collateral deposited by margin clients with SMF brokers to total margin loans.

[5] The top 20 margin loans reported by SMF brokers in their financial returns.

iii) Reliance on non-index stocks[6] as collateral had increased – 89% of the top three collateral stocks underlying major margin loans (major collateral) at the end of 2017 were non-index stocks, compared to 73% at the end of 2006;

iv) The weighting of heavily pledged stocks (HPS)[7] as margin loan collateral doubled – HPS accounted for 50% of major collateral at the end of 2017, more than twice the level at the end of 2006; and

v) The number of illiquid collateral[8] stocks doubled – around 600 stocks were reported as illiquid collateral among major collateral at the end of 2017, nearly twice the level at the end of 2006. At the end of 2017, one-third of brokers held at least three stocks which were illiquid collateral.

6. The above trends are worrying as high stock concentrations, especially in HPS and illiquid collateral, may hamper the liquidity of SMF brokers. For example, when there is a significant drop in the share price of an illiquid collateral or HPS, a broker which has advanced significant margin loans to clients may find it hard to sell the collateral in the market due to a lack of liquidity or major selling pressure. Competing for a limited number of buyers in this situation could make it harder to recover margin loans secured by the stock, resulting in significant financial losses for brokers.

7. We also noted the following control deficiencies in the SMF review:

i) Absence of, or inadequate adherence to, an internal total margin loans limit, stock concentration limit and client concentration limit;

ii) Margin loans being granted to clients solely or mainly based on the value of collateral with little regard to the client's financial capability;

iii) More lenient haircut percentages for collateral than those of lending banks', with even lower haircut percentages being applied to collateral deposited by "special" clients;

iv) Slack control over the collection and waiver of margin calls and forced liquidation, with additional margin loans being granted to clients who have failed to meet margin calls; and

v) Stress testing not performed (or not regularly performed) to assess the financial impact on the broker of market stress or a plunge or suspension of collateral to which the broker has material exposure.

8. Slack risk controls can weaken SMF brokers' resilience in stress situations or when the share price of collateral plunges. Among the 318 SMF brokers as at 31 March 2018, it was estimated that 92 could lose 20% or more of their excess liquid capital (ELC) in the event of a collapse or trading suspension[9] of a single collateral stock held by them, with 28 losing more than half of their ELC, and seven brokers losing all of their ELC. In the latter scenario,

6 A stock which was not a constituent stock of the Hang Seng Index or Hang Seng China Enterprises Index.

7 A stock which was reported by an SMF broker in its monthly financial return as among the top three collateral for any of the top 20 margin loans, where the aggregate market value of the stock held by all SMF brokers was equal to or higher than 10% of the market capitalisation of the stock.

8 A stock will be treated as illiquid collateral in the liquid capital calculation if the broker's aggregate holdings of the stock as margin loan collateral exceeds either (i) 5% of total issued shares of the listed company concerned or (ii) the average monthly turnover of the stock.

9 Under the FRR, a stock that has been suspended from trading for three days or more is deemed to have zero value.

the brokers would breach the minimum liquid capital requirement under the FRR (FRR breach). Under section 146 of the SFO, a licensed corporation is required to cease carrying on any regulated activity for which it is licensed when an FRR breach occurs.

9. Compliance with the minimum liquid capital requirement is therefore crucial to the business continuity of licensed corporations. If an SMF broker ceases business, its clients would not be able to continue dealing through it. In addition, an FRR breach and business cessation could be viewed negatively by its bankers, who may tighten or even terminate credit facilities. This may result in a liquidity squeeze for the broker and affect its ability to return to clients any securities which it has re-pledged to banks. Among the 318 SMF brokers as at 31 March 2018, 63 brokers had re-pledged an aggregate $86.3 billion of client securities to banks.

10. In 2017, some brokers experienced a significant decline in their liquid capital due to share price drops or trading suspensions of their major collateral. For example:

    i) The trading suspension of the shares of China Huishan Dairy Holdings Company Limited in March 2017: the stock price plunged more than 80% on 24 March 2017 and the stock was suspended from trading shortly afterwards. A broker would have lost all of its ELC and breached the minimum liquid capital requirement because of material margin loans secured by this stock had it not taken prompt action to replenish its liquid capital; and

    ii) The crash of small cap stocks in June 2017: 19 listed companies' share prices plunged more than 50% (the steepest plunge was over 90%) on 27 June 2017. It was estimated that three brokers lost over 30% of their ELC.

11. It is imperative that SMF brokers maintain sufficient capital buffers as well as robust risk management systems which include prudent margin lending policies and control procedures, regular tests of their resilience in stress situations and prompt implementation of pre-emptive measures.

12. The existing conduct requirements for SMF activities are mainly prescribed in the following sections of the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (Code of Conduct), and the Management, Supervision and Internal Control Guidelines for Persons Licensed by or Registered with the Securities and Futures Commission (Internal Control Guidelines).

    (a) Schedule 5 to the Code of Conduct (Schedule 5) provides a set of high level principles-based guidelines on brokers' margin lending policy and related internal risk controls. For instance, brokers are required to avoid building up excessive exposures to individual stocks or clients. However, the Code of Conduct does not further define when an exposure will be considered excessive.

    (b) The Internal Control Guidelines provide general guidelines for risk management, such as setting credit limits and stress testing. They do not outline which stress scenarios should be used in stress testing.

13. Since these conduct requirements are high level or principles-based, brokers apply their own interpretations of the requirements and some fail to consider regulatory standards in designing their risk controls.

14. Over the past two years, market sentiment has picked up, with the Hang Seng Index rising nearly 50%[10] to a record high of 33,484 points on 29 January 2018, but then reversing by 14% to 28,955 points as at the end of June 2018. Currently, a number of potentially negative factors are in play, such as interest rate hikes, the widening of the gap between Hong Kong dollar and US dollar interest rates, geopolitical tensions and trade war concerns. For instance, in February 2018, the Hang Seng Index slid by more than 1,600 points in one day following the plunge in the US stock market. Volatility has increased, particularly for non-index stocks that constitute the bulk of collateral. Recently, some share prices have dropped by 80% or more in intraday trading and some shares have been suspended from trading. We believe this is an opportune time to communicate the SFC's expectations of prudent risk management systems and provide more guidance on the risk management practices expected of SMF brokers.

15. The proposed guidelines are intended to better inform SMF brokers of the general regulatory expectations in some critical risk control areas in relation to SMF activities and assist them in complying with the relevant requirements in the Code of Conduct and Internal Control Guidelines.

16. SMF is a complicated business. Risks are the result of factors specific to the broker, each margin client and the securities collateral provided by the client, market liquidity and volatility. In drafting these guidelines, we have been mindful of the need to strike the right balance among various competing priorities including standardisation of regulatory requirements, client protection, operability and business reality. To this end, the SFC has conducted soft consultations with a number of broker associations and industry representatives, major SMF brokers, banks which are active in providing funding to brokers and peer regulators to solicit their views and suggestions on the key proposals. These have been considered when formulating the proposed guidelines.

17. The proposed guidelines consist of qualitative guidance for margin lending policies and risk controls for SMF activities, supplemented by quantitative benchmarks. SMF brokers should observe the proposed guidelines in designing their margin policies and managing SMF risks. Any deviation from the guidelines must be properly justified by equivalent or compensating controls which are no less prudent than those set out in the guidelines. The SFC will be guided by the proposed guidelines in assessing whether an SMF broker is fit and proper. In determining an appropriate regulatory response, the SFC will adopt a holistic approach and take into account all the circumstances including the seriousness of the deviations, the level of risks, the potential impact on investors, the duration and frequency of the deviations and any remedial measures taken. In general, the SFC will allow a reasonable period of time for the broker to implement rectification and compensating measures. However, in urgent cases, the SFC may need to take immediate actions, such as imposing licensing conditions, to prevent the risks from deteriorating.

18. The detailed proposals and consultation questions are discussed in the following sections. An indicative draft of the proposed guidelines is set out in Appendix 1 for reference.

[10] Compared to 22,250 points at the beginning of 2017.

# Proposed Guidelines for Securities Margin Financing Activities

## Overall framework

19. The proposed guidelines provide qualitative guidance and, where appropriate, quantitative benchmarks on seven key risk control areas, namely:

    i) Total margin loans controls
    ii) Margin client credit limit controls
    iii) Securities collateral concentration controls
    iv) Margin client concentration controls
    v) Haircuts for securities collateral
    vi) Margin calls, stopping further advances and forced liquidation
    vii) Stress testing

## Total margin loans controls

20. Paragraph 2 of Schedule 5 requires an SMF broker to have a prudent margin lending policy. Paragraph 10(a) of Schedule 5 specifies that the margin lending policy should provide a basis for protecting the capital of the SMF broker.

21. In the SMF review, it was noted that the number of brokers with margin loans exceeding their shareholders' funds increased from 42 to 62 over the review period. The exceeded amounts increased by 15 times from $5 billion to $82 billion. This indicated that SMF brokers were increasingly reliant on external funding such as bank borrowings for financing.

22. While the use of leverage in business is common, high leverage in SMF brokers can be dangerous if the risks of their margin lending businesses are not properly managed. When an SMF broker with high leverage experiences client defaults, the defaulted margin loans would lock up part of its liquidity. In the worst case scenario, this may result in a liquidity crunch when the broker's lending bank calls for additional margin or the repayment of loans. The higher the broker's leverage, the riskier the broker's capital would be. This is because the broker's own fund and liquid capital may not be enough to absorb the shock of even a mild market correction or stock decline, or client defaults of a smaller magnitude.

23. It is therefore desirable to limit the leverage risk of SMF brokers to prevent them from expanding their margin loans beyond their financial capability. The SFC proposes to require an SMF broker to establish a total margin loans limit taking into consideration all relevant factors including, amongst others, its liquidity profile and capital, the risk profiles of margin clients and prevailing market conditions. The total margin loans limit should be reviewed and updated at least annually or when there is a significant change in the underlying consideration. An SMF broker is also required to clearly document the basis and methodology for setting its limit.

24. The SFC also proposes to set a quantitative benchmark called "total margin loans-to-capital multiple" to gauge whether a broker's total margin loans are excessive relative to its capital. To this end, the SFC has made reference to the regulatory requirements on the Mainland [11]

[11] As stated in "*Administrative Measures for Margin Financing and Securities Lending Services of Securities Companies*"（《證券公司融資融券業務管理辦法》）issued by the China Securities Regulatory Commission, the ratio of a securities company's margin financing and securities lending amounts to its net capital shall not exceed four times.

and in Singapore [12], where the size of a broker's SMF business is limited to three or four times its regulatory capital.

25. While it may seem reasonable to make reference to brokers' equity capital in calculating the total margin loans-to-capital multiple, we believe that SMF brokers should be given flexibility in their capital structures by allowing them to treat outstanding approved subordinated loans[13] as "capital" for the purpose of this quantitative benchmark.

26. During the soft consultations, some respondents were concerned that a quantitative benchmark such as the total margin loans-to-capital multiple would limit business development because:

    - small brokers do not have large capital, so the scale of their SMF business would be constrained by the size of their capital if they were to meet the benchmark;

    - the amount of a broker's capital may vary, making it administratively difficult to monitor its total margin loans-to-capital multiple; and

    - a prudent broker may cap the aggregate credit limit of margin clients at the maximum amount of margin loans permitted by the quantitative benchmark in order to ensure compliance. If clients only draw down a small fraction of their credit limits, then although total margin loans would fall well below the maximum amount permitted by the quantitative benchmark, the broker would not be able to take on additional margin clients due to the self-imposed cap.

27. Moreover, some respondents suggested that the quantitative benchmark should vary with the quality of the broker's margin loan portfolio and exclude initial public offering (IPO) loans.

28. The SFC takes note of the industry's concerns. We are mindful of the need to strike a balance between ensuring the adequacy of brokers' capital for covering their business risks, as their financial integrity is key to investor protection and market integrity, and maintaining brokers' competitiveness. The SFC would take into consideration each broker's own circumstances, including the quality of its margin loans and its compensating measures, in assessing whether non-compliance with the quantitative benchmark would pose undue risk to the broker.

29. To help reduce the workload involved in calculating the total margin loans-to-capital multiple, we propose that in the calculation of the total margin loans-to-capital multiple, SMF brokers may refer to either (i) their latest amounts of shareholders' funds and outstanding approved subordinated loans; or (ii) the amounts of shareholders' funds and outstanding approved subordinated loans reported in their latest monthly financial returns submitted to the SFC.

30. We appreciate that a compliant broker would strive to avoid exceeding the quantitative benchmark, such as by capping the aggregate credit limits of margin clients with reference to the benchmark. If client credit limits are granted on a committed basis, the broker's ability to stop the clients from drawing down the committed credit lines is limited. Accordingly, it is

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[12] As stated in the Securities and Futures (Financial and Margin Requirements for Holders of Capital Markets Services Licences) Regulations of Singapore, the holder of a licence for securities financing shall not cause or permit the aggregate of the margin exposures in the margin accounts of all customers to exceed 300% of its free financial resources.

[13] Subordinated loans are generally regarded as second-tier capital.

advisable for a broker to determine its desired business scale, manage client credit limits accordingly and put in sufficient capital to support its business plans.

**Question**

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

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 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 total margin loans-to-capital multiple? Please provide the rationale for your comment or suggestion.

4. Do you agree that a higher benchmark for 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?

## Margin client credit limit controls

31. Paragraph 3 of Schedule 5 requires an SMF broker to assure itself that the margin client has the financial capacity to meet obligations arising from the margin client's instructions. Paragraph 12(a) of Schedule 5 also requires an SMF broker to use objective proof of net income or net worth as a reference for setting credit limits. In addition, paragraph 23 of the Suggested Control Techniques and Procedures in the Internal Control Guidelines sets out the factors to be considered in setting appropriate credit limits.

32. Notwithstanding the above requirements, the SFC has encountered cases where SMF brokers determined their margin clients' credit limits based solely on the value of the securities collateral deposited by them, with little or no regard to their background and financial situation. In addition, among the 20 SMF brokers covered in the SMF review, 15 were found to have failed to strictly enforce the credit limits granted to clients.

33. Granting excessive credit limits to clients may expose SMF brokers to undue credit risks. We propose to elaborate our expectations underlying the existing requirements by requiring SMF brokers to be prudent in setting the credit limits for individual margin clients or groups of related margin clients[14] to ensure that margin clients have the financial capability to meet the obligations arising from the financing provided. The credit risks of related margin clients should be aggregated for the purposes of setting credit limits and monitoring their interconnectedness and aggregate risks.

34. The proposed guidelines also emphasise that to effectively manage the credit risks by way of credit limits, SMF brokers should ensure strict enforcement of client credit limits and any waivers must be justified by proper risk assessments, approved by management and properly documented.

[14] "Group of related margin clients" is defined in section 42(3) of the FRR.

**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?

### Securities collateral concentration controls

35. Paragraph 11(c) of Schedule 5 requires an SMF broker to have a margin lending policy to avoid building up excessive exposure to individual securities deposited as collateral. While this high level principle is indisputable, different SMF brokers may have a different understanding of what amounts to “excessive exposure”.

36. Some brokers take the view that the FRR already address securities collateral concentration risk by requiring a deep haircut (80%) for illiquid collateral. The FRR haircut requirements were intended to discourage brokers from accepting illiquid stocks as collateral or over-relying on a single stock as collateral. However, securities collateral concentration risks have worsened, particularly in relation to HPS, as noted in the SMF review.

37. In light of this, the SFC considers it necessary to provide additional guidance to help SMF brokers better manage securities collateral concentration risk. To this end, the proposed guidelines require SMF brokers to set prudent securities collateral concentration limits to avoid building up excessive exposure to individual securities held as collateral or groups of highly correlated securities held as collateral.

38. It is important to manage the concentration risk of highly correlated securities held as collateral on an aggregate basis. For this purpose, “highly correlated securities” refer to:

    (a) 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

    (b) two or more securities which exhibit a high correlation in historical price movements, and their issuers either have group affiliations, material cross-shareholdings, significant business affiliations or are engaged in the same industry.

**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 above?

39. The proposed guidelines provide a non-exhaustive list of factors which SMF brokers should take into consideration when setting securities collateral concentration limits. SMF brokers should clearly document the basis and methodology for determining the limits and monitor and strictly enforce the limits. In addition, the limits should be subject to review at least

annually or whenever there is a significant change to any of the underlying factors.

40. No specific formula for setting securities collateral concentration limits is suggested in the proposed guidelines, as the SFC believes flexibility should be given to brokers to set their own limits in light of their own circumstances. That said, the SFC proposes a set of quantitative benchmarks for evaluating whether an SMF broker's exposure to individual securities held as collateral is excessive.

41. The proposed guidelines require SMF brokers to perform an ELC impact analysis for securities held as collateral, by estimating the impact on ELC of a hypothetical stress scenario where the securities being tested is no longer acceptable by the FRR for liquid capital calculation purposes (such as when a listed stock has been suspended from trading for three days or more). By comparing the ELC impact of the scenario described above with the benchmarks, the broker can test the effectiveness of its concentration limits. SMF brokers should tighten their concentration limits if the ELC impact exceeds the proposed quantitative benchmarks.

42. The SFC proposes to require brokers to perform the ELC impact analysis on a monthly basis to minimise their compliance burden. However, a broker should perform the ELC impact analysis on a more frequent basis if the concentration risk increases greatly during the month.

43. More lenient benchmarks are proposed for higher-quality securities considering their lower event risk. This proposal also aims to encourage SMF brokers to take higher-quality securities as collateral. The proposed quantitative benchmarks are:

    i) for securities held as collateral which are constituents of the Hang Seng Index or Hang Seng China Enterprises Index (index stocks), the impact on the broker's ELC under the hypothetical stress scenario mentioned in the previous paragraph shall not be greater than [X%] of the ELC; and

    ii) for other securities held as collateral, the impact on the broker's ELC under the hypothetical stress scenario mentioned in the previous paragraph shall not be greater than [Y%] of the ELC;

    where X > Y.

**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 above? 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.

44. During the soft consultations, some respondents recommended restricting the exposure to each individual securities held as collateral to a certain percentage of the SMF broker's total margin loans. This method may work if all the margin loans are secured by single collateral. If a margin loan is secured by more than one collateral, brokers may find it hard to apportion

the margin loan to the underlying collateral. It would also be very burdensome to add up all the fractions of margin loans which are secured by the same securities across the whole margin loan book.

45. Moreover, some respondents were concerned about the difficulty in monitoring the ELC impact because brokers' ELCs tend to change over time. Concerns were also expressed about the compliance burden of performing the ELC impact analysis on an ongoing basis.

46. To alleviate these concerns, we propose that SMF brokers may refer to either (i) their latest ELC; or (ii) the ELC amount reported in their latest monthly financial returns submitted to the SFC in performing the ELC impact analysis. Moreover, the SFC notes that short-term events, such as IPO subscriptions or placement transactions, may cause significant fluctuations in a broker's ELC. It is proposed that the ELC to be applied in the ELC impact analysis can be stripped of the effects on the required liquid capital arising from the IPO subscriptions and placement transactions.

### Margin client concentration controls

47. Paragraph 11(b) of Schedule 5 requires an SMF broker to have a margin lending policy to avoid building up excessive exposures to individual margin clients or groups of related margin clients. It does not specify what amounts to "excessive exposure".

48. For significant margin loans, an SMF broker is subject under the FRR to a capital charge for the concentration risk when adjusted significant margin loans[15] exceed 10% of the aggregate amount of adjusted margin loans receivable from all clients. This requirement is not a concentration limit prohibiting a broker from lending more than 10% of its total margin loans to a single client. It only requires that more capital be put in to cover the additional capital charge.

49. The SFC noted that a number of SMF brokers had granted significant margin loans to individual margin clients, each of which exceeded 10% of the broker's total margin loans, with some exceeding half of the broker's shareholders' funds. It was also noted that some of these margin loans, even after deducting the aforesaid concentration capital charge, amounted to more than half of the broker's ELC. If such major margin clients default, the broker's liquidity can be significantly affected. The impact would be amplified if the margin loan's underlying collateral is highly correlated to the client (such as where the client is the senior management or controlling shareholder of the listed company concerned), ie, a wrong-way risk exists in the collateral. If the client has also defaulted on his other margin loans from other brokers, the first-mentioned broker would also be affected if any of those other brokers initiate forced liquidation of the same type of collateral.

50. The proposed guidelines require SMF brokers to set prudent client concentration limits with reference to a number of factors such as their liquidity profiles and capital and their clients' financial situations. In addition, as a quantitative benchmark, it is proposed that the aggregate margin loans advanced to any individual margin client or a group of related margin clients should not exceed a prescribed percentage of the broker's shareholders' funds.

[15] An adjusted margin loan equals the outstanding margin loan minus the FRR margin shortfall.

51. The above quantitative benchmark is similar to a requirement in the Banking Ordinance[16] which restricts an authorised institution's exposure to a single counterparty to 25% of its capital. There is also a similar regulatory requirement in Singapore[17] which restricts a single client's margin loan to 20% of the licence holder's regulatory capital.

> **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.
>
> 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.

52. During the soft consultations, some respondents recommended measuring margin client concentration with reference to total margin loans. The SFC is of the view that it would be more prudent to measure such concentration with reference to the broker's capital. Besides, measuring concentration with reference to total margin loans may be unduly restrictive for small brokers or brokers which are in the early stage of developing this business.

53. Under the proposed guidelines, an SMF broker would be required to estimate the ELC impact before granting a significant margin loan. A margin loan would be classified as significant if it is greater than 10% of the broker's shareholders' funds.

> **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.

## Haircuts for securities collateral

54. It is a common practice for brokers to apply a haircut to securities acceptable as collateral when deciding the amount of margin loan that can be granted against the collateral. The haircut provides a buffer against price fluctuations that would mitigate the risk of loss when the broker liquidates the collateral to recover the amount advanced.

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[16] According to section 81(1) of the Banking Ordinance, the financial exposure of an authorised institution incorporated in Hong Kong to (a) any one person; (b) two or more companies which are subsidiaries of the same holding company or have the same controller (not being a company); (c) any holding company and one or more of its subsidiaries; or (d) any one person (not being a company) and one or more companies of which that person is a controller, shall not exceed an amount equivalent to 25% of the capital base of the institution.

[17] According to the Securities and Futures (Financial and Margin Requirements for Holders of Capital Markets Services Licences) Regulations of Singapore, the holder of a licence for securities financing shall not cause or permit the debit balance in each customer's margin accounts to exceed 20% of its free financial resources.

55. Paragraph 12(b) of Schedule 5[18] provides general guidelines on the factors to be considered in setting haircut percentages for securities held as collateral. No specific haircut percentages are suggested in the Code of Conduct for SMF brokers to follow. Brokers can decide which securities are acceptable as margin loan collateral and the related haircut table.

56. However, some brokers have either applied very lenient haircuts to low quality or illiquid collateral, or else indiscriminately applied a uniform haircut to all types of securities collateral paying no regard to the differences in their liquidity, quality and volatility. The SMF review found that the haircut percentages some brokers assigned to most securities collateral were significantly lower than those applied by their lending banks to the same stocks. In addition, a broker was found to have applied a haircut of 20% to the collateral of some "special" clients when the normal haircut should be 100%.

57. The FRR prescribe haircut percentages for different types of stock held as collateral, ranging from 15% to 80%. If the market value of a collateral, after deducting the applicable FRR haircut, is less than the outstanding margin loan amount, the broker will be required to deduct the difference (the FRR margin shortfall) from its liquid capital.

58. The SFC noted that 228 SMF brokers reported FRR margin shortfalls as at 31 December 2017. Over the review period, total FRR margin shortfalls increased by 14 times from $2.3 billion to $33.7 billion, which surpassed the increase in total margin loans. In addition, total FRR margin shortfalls as a percentage of SMF brokers' shareholders' funds increased from 7% to 19% and total FRR margin shortfalls as a percentage of total margin loans increased from 11% to 16%. On an individual firm basis, around 30% of SMF brokers experienced increases in their ratios of FRR margin shortfalls to shareholders' funds or to total margin loans over the same period.

59. These statistics suggest that more broker capital had been put at risk due to imprudent haircuts on margin loan collateral and that this practice is common among SMF brokers.

60. Imprudent haircut policies undermine the important benefits of haircuts as a risk management tool. This is of particular concern in the case of a broker which re-pledges client securities collateral to banks (re-pledging broker). By applying lower haircuts to client securities collateral than the broker's lending bank, the broker would be lending more to clients than it can borrow from the bank by re-pledging the same collateral. The difference has to be funded by the broker's capital or other funding (such as unsecured bank loans). When credit losses occur, which is more likely to happen when insufficient buffer collateral is maintained, the losses would wipe out part of the broker's capital and liquidity at the same time, weakening its ability to repay its creditors (such as bank loans) and increasing the risk of re-pledged client securities (if any) being taken or force-liquidated by its lending banks.

61. The margin loan risks taken by a re-pledging broker (including the excessive risk taken due to insufficient buffer collateral being received from clients under lenient haircuts) may spill over to its margin clients due to the fact that margin client securities are re-pledged on a pooled basis. Those margin clients who have no outstanding loan balances in their margin accounts (non-borrowing margin clients) will be most at risk. The SMF review found that 80% of the re-pledging brokers had re-pledged non-borrowing margin clients' securities to banks as security for their credit lines.

[18] Paragraph 12(b) of Schedule 5 states that the margin lending policy framework of a licensed corporation should address, among other things, the list of securities acceptable as collateral and the different haircuts applicable to collateral, bearing in mind their liquidity and volatility in prevailing market conditions.

62. The spillover risk would be higher if the underlying collateral of margin loans are HPS or illiquid collateral. This is because when the broker or its peer brokers liquidate the stock, the share price of HPS or illiquid collateral may face a bigger discount than the haircut applied by the broker (or even the FRR haircut[19]) due to insufficient market depth to absorb the selling pressure.

63. The SFC notes that the Hong Kong Monetary Authority (HKMA)[20], Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE)[21] provide guidelines to their regulatees on the lending ratio (the reciprocal of haircut percentage) for collateral.

64. In light of the above concerns and other regulators' practices, the SFC proposes to:

    (a) enhance qualitative guidance for the haircut setting policy. The SFC proposes that an SMF broker should maintain a list of securities accepted for margin financing, document the basis and factors to be considered in setting haircut percentages for the margin lending policy, review the haircut percentages at least annually, strictly apply the haircut percentages, and document the risk assessment and risk mitigation measures to be adopted when a haircut percentage lower than the normal rate is assigned to collateral deposited by a margin client; and

    (b) establish quantitative benchmarks for re-pledging brokers to set in-house haircut percentages. It is proposed that the haircut percentage set by a re-pledging broker for collateral deposited by margin clients should not be lower than the average of the haircut percentages assigned by its top three lending banks[22] to the same collateral minus a prescribed percentage point [X%] and in any event, not lower than the corresponding haircut percentage prescribed in the FRR.

65. In order to strike a balance between prudent risk management and re-pledging brokers' business competitiveness, a buffer has been built into the above formula (ie, X%), which allows the brokers' haircut percentages to be lower than their lending banks' by certain percentage points, so that the brokers can lend more to clients than they can borrow from the banks with the same collateral using their own capital. However, we emphasise that the prescribed percentage point should not be excessive, otherwise it will defeat the purpose of the benchmark.

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[19] For example, the maximum FRR haircut for a stock classified as illiquid collateral is 80%, which was exceeded by the price drop of several small cap stocks on 27 June 2017.

[20] According to paragraph 7.1.4 in the module "New Share Subscription and Share Margin Financing" of the HKMA Supervisory Policy Manual, if the maximum loan-to-value ratios adopted by a lending Authorised Institution (AI) exceed the prevailing market norms, the AI should discuss the situation with the HKMA. As a reference, the current market norms are: (i) around 50-60% (equivalent to a 40-50% haircut) for blue chips (with higher ratios, say, 70% (equivalent to a 30% haircut) adopted by lending AIs which specialise in share margin financing and have the expertise and sophisticated risk management systems to control the risks involved); and (ii) around 30-40% or below (equivalent to a 60-70% haircut or above) for selected second and third liners.

[21] According to *"Detailed Rules for the Implementation of Securities Margin Trading of the Shanghai Stock Exchange"*（《上海證券交易所融資融券交易實施細則》）, the margin ratios assigned to collateral stocks which are constituent stocks of SSE 180 Index should not exceed 70% (equivalent to a 30% haircut) and other A-shares should not exceed 65% (equivalent to a 35% haircut). *"Detailed Rules for the Implementation of Securities Margin Trading of the Shenzhen Stock Exchange"*（《深圳證券交易所融資融券交易實施細則》）contains similar requirements.

[22] If the re-pledging broker has less than three lending banks, it refers to the haircut assigned by its lending bank or the average haircut assigned by its lending banks. The banks' rankings are determined by the amounts of the loans the re-pledging broker has drawn from each bank's credit facilities secured by client collateral.

66. In circumstances where a re-pledging broker determines that it is justified to assign a lower haircut percentage to a stock than the average percentage calculated in accordance with the formula in paragraph 64(b) above, it should clearly document its justification, assessment of the impact of the deviation on its financial position and measures taken to mitigate the additional risk arising from the deviation.

**Question**

14. During the soft consultations, some respondents commented that X% in paragraph 64(b) above 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.

## Margin calls, stopping further advances, forced liquidation

67. Paragraph 12(f) of Schedule 5 requires an SMF broker to establish a trigger for margin calls.

68. In the SMF review, it was noted that the selected SMF brokers' triggers for margin calls varied. Most brokers make a margin call when a margin loan balance exceeds the margin value[23] of its underlying collateral. But there were also brokers which make margin calls without considering the margin value of the underlying collateral.

69. It is considered that the margin value of collateral best reflects the risk appetite of the broker as decided by its management and represents the maximum amount of loan the management feels comfortable to grant against the collateral after considering all the relevant market factors as well as the specific factors relating to the collateral. Therefore, it is a best practice to make a margin call when the margin loan balance exceeds the margin value of the collateral. In general, brokers' risk management systems calculate margin calls based on the margin value of the collateral.

70. In contrast, to set margin call triggers based on the market value, instead of the margin value, of collateral is not prudent since the market value does not take into account the potential price movement which may occur between the last margin collection date to the time additional margin is deposited (ie, the margin period of risk). As such, the broker may expose itself to additional credit risk beyond the level approved by management.

71. In this connection, the SFC proposes that an SMF broker should document the basis and factors to be considered in setting margin call triggers in its margin lending policy. In general, an SMF broker should initiate a margin call when a margin loan exceeds the margin value of the underlying collateral or the client's credit limit.

72. Slack control over margin calls was noted in certain SMF brokers during the review. In particular, three SMF brokers reported numerous margin calls which remained unsettled for one month or longer amounting to more than 80% of their shareholders' funds. Such serious delays in collecting outstanding margins called into question whether the broker had taken reasonable steps to collect margins in a timely manner.

73. The SMF review also noted that the number of margin calls waived by some brokers was significant, with the total amounts waived amounting to 20% to 87% of their shareholders' funds. This indicated that the brokers' controls over granting waivers might be too lax, which

[23] Margin value equals market value minus haircut.

would undermine the effectiveness of their margin call policies in protecting themselves against credit losses. Paragraph 12(l) of Schedule 5 requires an SMF broker to put in place appropriate controls to deal with any deviations from its margin lending policy. If these deviations have an adverse effect on an SMF broker's liquid capital position, it should take steps to ensure that it will not, as a result, be in breach of the FRR.

74. In light of the above, the SFC further proposes that an SMF broker should stop granting waivers of margin calls to margin clients with poor settlement histories (eg, failure to meet margin calls on more than 15 occasions in the preceding 30 days) or whose outstanding margin loans exceeded the market value of the underlying collateral.

75. In addition, the SFC proposes to specify some thresholds for outstanding margin call amounts in order to encourage brokers to take steps to promptly collect margins. Specifically, the SFC proposes that SMF brokers should take reasonable steps to avoid:

    i) total unsettled margin calls exceeding the firm's shareholders' funds; and

    ii) total long-outstanding margin calls exceeding a prescribed percentage of the firm's shareholders' funds.

76. In designing this proposal, the SFC has taken into account that it may take time to collect margin from clients and margin calls may arise due to unexpected market movements. An SMF broker would not be treated as failing to meet these thresholds if it can prove that reasonable steps have been taken to follow-up on outstanding margin calls to protect its interests.

**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.

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?

17. During the soft consultations, some respondents recommended limiting total long-outstanding 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.

77. These thresholds do not specify how an SMF broker should design its margin call and follow-up procedures. SMF brokers should tailor-make their policies and procedures according to their business needs, subject to the overarching principle of prudence.

78. Paragraph 12(i) of Schedule 5 requires an SMF broker to set a trigger for stopping further advances to clients, for example, where there are outstanding margin calls yet to be met. However, the SMF review found that a number of SMF brokers allowed clients with unsettled margin calls to make further purchases using their margin facilities, which may exacerbate clients' credit risks.

79. To address this issue, the proposed guidelines specify the circumstances under which an SMF broker should stop providing further advances or allowing its clients to make further purchases, such as when the margin loan balance has exceeded the market value of the underlying collateral.

80. Apart from the above, it is also proposed that SMF brokers should strictly follow their policies on margin calls, stopping further advances and forced liquidation. Where deviation is granted, the broker should conduct and document its risk assessment in detail.

### Stress testing

81. Paragraph 30(c) of the Suggested Control Techniques and Procedures in the Internal Control Guidelines requires licensed corporations to establish and maintain effective risk management measures to quantify the impact of changing market conditions on the firm. Such measures may include stress testing to determine the effect of abnormal and significant changes in market conditions on the firm using various quantitative and qualitative variable assumptions.

82. Regular stress testing can help brokers gauge how market stress and extreme price movements may affect their financial positions and ability to comply with the minimum liquid capital requirement as well as identify potential risks and vulnerabilities so that they may take remedial or pre-emptive action and formulate necessary contingency plans. However, we noted that a few SMF brokers under review did not regularly conduct stress tests on their liquid capital position and most did not conduct stress tests on their liquidity.

83. The proposed guidelines require SMF brokers to regularly conduct stress tests on their ELC and liquidity (at least on a monthly basis) and whenever any material adverse event happens (such as a sharp drop in the price of the securities held as collateral) so as to quantify the impact of stress situations.

84. In order to assist SMF brokers which have limited resources and experience in conducting stress tests, hypothetical stress scenarios are provided in the proposed guidelines. Different scenarios are designed for collateral pools composed of different weightings of higher-quality stocks. A broker is required to choose the appropriate scenario according to the composition of its collateral pool.

85. For simplicity, each hypothetical scenario assumes a uniform percentage price drop for all the stocks in the pool of collateral provided by all borrowing margin clients. The suggested hypothetical scenarios are as follows:

    i) [X%] price drop, if 75% or more of the collateral pool in terms of market value are index stocks;

    ii) [Y%] price drop, if less than 75% but more than 25% of the collateral pool in terms of market value are Index Stocks; and

    iii) [Z%] price drop, if 25% or less of the collateral pool in terms of market value are index stocks;

    where $X < Y < Z$.

**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 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 above? 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 above (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 above? Please provide the reason for your suggestion.

86. The proposed guidelines further require an SMF broker to conduct stress tests on its ELC for the hypothetical scenario of a significant group of highly correlated securities held as collateral losing its value. Any group of highly correlated securities with an aggregate market value equals 10% or more of the total market value of the collateral pool provided by all borrowing margin clients would be considered as significant.

**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.

87. In addition, the proposed guidelines require re-pledging brokers to perform stress tests on their liquidity. It was noted that the total market value of securities collateral re-pledged by SMF brokers had increased 6 times and the total bank loans secured by re-pledged margin client securities collateral had increased 18 times over the review period. As at 31 December 2017, the total market value of margin client securities collateral re-pledged amounted to $85.6 billion and the related bank loans amounted to $26.9 billion.

88. Given the large amount of client securities being re-pledged and the fact that most brokers re-pledge margin client securities collateral on a pooled basis, it is incumbent on re-pledging brokers to ensure that they maintain sufficient liquidity to meet margin calls and repayment demands from their lending banks at all times and ensure that they can promptly redeem the re-pledged securities to return them to their clients upon request.

89. It is proposed that all re-pledging brokers be required to perform stress tests using the assumption that the values of all re-pledged margin client securities collateral plunge in a stress scenario. Similarly, hypothetical stress scenarios similar to those set out in paragraph 85 are provided in the proposed guidelines for use in the stress test, with the collateral pool substituted by the pool of margin client securities collateral re-pledged.

90. Moreover, a re-pledging broker would be required to assess the impact on its liquidity of stock concentration in the re-pledged portfolio by performing stress tests for the scenario of a significant re-pledged securities collateral or a significant group of highly correlated re-pledged securities collateral losing all its value. A significant re-pledged collateral is defined as having a market value amounting to 10% or more of the total market value of the re-pledged portfolio, and a significant group of highly correlated re-pledged collateral as having an aggregate market value amounting to 10% or more of the total market value of the re-pledged portfolio.

**Question**

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.

91. SMF brokers may apply their own stress testing models and stress scenarios provided that they are no less prudent than those suggested in the proposed guidelines. The broker should clearly document the methodology for stress testing models including the data sources, the assumptions applied and the justification for deploying them in lieu of the stress testing methods and scenarios suggested in the proposed guidelines.

92. The stress test results are indicators of the SMF broker's resilience under stress situations. Although it does not mean that a broker will immediately run into financial difficulties if it cannot pass a stress test, the broker must follow-up on the stress test results in a timely manner, examine its risk exposures, report the stress test results and any risk issues to senior management and, where appropriate, take pre-emptive action and plan for market contingencies. The SFC will take into account brokers' stress test results and follow-up actions in assessing their resilience under stress situations as well as the adequacy and effectiveness of their risk management.

## Notification requirement

93. Apart from the existing obligation under the Code of Conduct to notify the SFC of material breaches, it is proposed that an SMF broker should report to the SFC immediately if it fails to comply with the quantitative benchmarks specified in the proposed guidelines or pass the stress test on its ELC or liquidity performed in accordance with the proposed guidelines so as to enable the SFC to follow-up with it on any risk issue underlying the non-compliance. It shall include in the report to the SFC full details of the matter and the reason therefor; and any measures it has taken, is taking or proposes to take to deal with non-compliance. Where an SMF broker cannot pass a stress test, it shall provide the SFC with a detailed contingency plan.

## Implementation timeline

94. The SFC appreciates that the industry may need to update their risk management policies and procedures after the proposed guidelines are finalised. We propose to provide a six-month transition period for the industry to ensure compliance after the gazettal of the guidelines.

**Question**

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

## Seeking comments

95. The proposals set out in this paper will be subject to a two-month public consultation. The SFC welcomes any comments from the public and the industry on the proposals made in this paper and the indicative draft of the proposed guidelines set out in Appendix 1. Please submit comments to the SFC in writing no later than 18 October 2018. Taking into account the comments received, a consultation conclusions paper will be issued together with the finalised guidelines.

# Appendix 1 – Proposed draft of the Guidelines for Securities Margin Financing Activities

## Introduction

1. These Guidelines are published by the Securities and Futures Commission (SFC) under section 399 of the Securities and Futures Ordinance (SFO) for the purposes of supplementing the existing conduct requirements relating to securities margin financing (SMF) activities.

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 Commission (Internal Control Guidelines).

3. These Guidelines apply to persons licensed for:

   - Type 1 regulated activity (dealing in securities) that 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

   - Type 8 regulated activity (securities margin financing),

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

4. 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.

5. These Guidelines consist of qualitative guidance for margin lending policies and risk controls on SMF activities, supplemented by quantitative benchmarks. SMF brokers should observe these Guidelines. Any deviation from these Guidelines must be properly justified by equivalent or compensating controls which are no less prudent 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, the SFC will adopt a holistic approach and take into account all the circumstances, including the seriousness of the deviations, the level of risks, the potential impact on investors, the duration and frequency of the deviations and any remedial measures taken.

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.

## 1. Total margin loans controls

1.1. An SMF broker should avoid granting margin loans beyond its financial capability. It 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 prevailing market conditions.

1.2. 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.

Note: An SMF broker may refer to either (i) its latest amounts of shareholders' funds and outstanding approved subordinated loans; or (ii) the amounts of shareholders' funds and outstanding approved subordinated loans reported in its latest monthly financial returns submitted to the SFC in the calculation of its total margin loans-to-capital multiple.

1.3. An SMF broker should clearly document the methodology to be adopted and factors to be considered in the determination of the total margin loans limit in its margin lending policy.

1.4. An SMF broker should review its total margin loans limit at least annually and whenever there is a significant change to any of the underlying factors.

1.5. 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 limit and escalate the matter to senior management in a timely manner.

1.6. A waiver or increase of the 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 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 margin clients.

2.2. For the purposes of addressing the interconnectedness risks of related margin clients, an SMF broker should ensure credit risks posed by a group of related margin clients are aggregated for measuring the firm's credit exposure to them and determining credit limits of each client within the group and 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 prevailing market conditions in setting credit limits for margin clients.

2.4. An SMF broker should take into account, among others, the following specific factors about an individual margin client or a group of related margin clients in setting credit limit for the client(s) or group:

(a) 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) Quality of the underlying collateral and any other credit support (eg, third-party guarantee);

(d) 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 the methodology to be adopted and factors to be considered in determining margin client credit limits in its margin lending policy.

2.6. An SMF broker should review the credit limits of margin clients at least annually and whenever there is a significant change to any of the underlying factors.

2.7. An SMF broker should strictly enforce and closely monitor compliance with the credit limits granted to margin clients. It should take immediate rectification action on any material breach of the limit and escalate the matter to senior management in a timely manner.

2.8. A waiver or increase of 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 securities collateral.

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 cross-shareholdings, significant business affiliations or are engaged in the same industry.

3.2. In setting the concentration limits for securities collateral or a group of highly correlated securities collateral, an SMF broker should consider, among other things:

(a) Its own liquidity profile and capital;

(b) The risk profiles of the margin loans secured by the securities concerned and its margin loan portfolio as a whole;

(c) Quality of the securities concerned;

(d) Its holding in the securities concerned as a percentage of the total issue size of the securities;

(e) Its aggregate holdings in the highly correlated securities collateral (in the case of a group of highly correlated securities);

(f) Potential financial impact on it in stress scenarios concerning the securities collateral, including 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; and

(g) Prevailing market conditions.

3.3. 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) Financial situation of the issuer of the securities concerned;

(b) The reasonableness of the valuation, market liquidity and its sustainability and the historical price volatility of the securities concerned;

(c) The shareholding concentration of the listed company issuing the securities concerned, in the case of listed shares; and

(d) Any adverse news about the issuer or its senior management.

3.4. An SMF broker should clearly document the methodology to be adopted and factors to be considered in determining the concentration limits in its margin lending policy.

3.5. An SMF broker should review its concentration limits at least annually and whenever there is a significant change to any of the underlying factors.

3.6. An SMF broker should strictly enforce and closely monitor compliance with the securities collateral concentration limits. It should take immediate rectification action on any material breach of the concentration limits and escalate the matter to senior management in a timely manner.

3.7. A waiver or increase of the limit should be properly justified by a written risk assessment and be endorsed by senior management.

3.8. 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 securities collateral by estimating the ELC impact of a hypothetical stress scenario which assumes the collateral concerned is no longer acceptable 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 broker should assess the effectiveness of the concentration limits for the collateral concerned by comparing the estimated ELC impact with the benchmarks described in the following paragraph. This checking should be performed at least monthly or more frequently if the concentration risk increases greatly during the month.

3.9. An SMF broker should tighten the related concentration limits if the ELC impact analysis referred to in paragraph 3.8 indicates that:

(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 margin clients.

4.2. In setting the concentration limits for an individual margin client or a group of related margin clients, an SMF broker should consider, among other things:

(a) Its liquidity profile and capital;

(b) Financial situation of the client(s);

(c) Composition and quality of the underlying collateral;

(d) The potential financial impact of client defaults and in stress scenarios, including but not limited to a significant drop in the market price or market liquidity of the underlying collateral;

(e) Credit history of the client(s);

(f) The risk profile of its margin loan portfolio; and

(g) 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.

Note: An SMF broker may refer to either (i) its latest shareholders' funds; or (ii) the shareholders' funds reported in its latest monthly financial returns submitted to the SFC in the calculation of the ratio.

4.4. In addition, an SMF broker should assess the impact on its ELC prior to granting a significant margin loan. For this purpose, any loan amount in excess of [10%] of the broker's shareholders' funds would be deemed to be significant.

4.5. An SMF broker should clearly document the methodology to be adopted and factors to be considered in determining the concentration limits in its margin lending policy.

4.6. An SMF broker should review its concentration limits at least annually and whenever there is a significant change to any of the underlying factors.

4.7. An SMF broker should strictly enforce and closely monitor compliance with the concentration limits. It should take immediate rectification action on any material breach of the concentration limits and escalate the matter to senior management in a timely manner.

4.8. A waiver or increase of the limit should be properly justified by a written risk assessment and be endorsed by senior management.

## 5. Haircuts for securities collateral

5.1. An SMF broker should maintain a list of securities acceptable as collateral.

5.2. An SMF broker should apply prudent haircuts to each securities acceptable as collateral having regard to, among other things:

(a) Financial situation of the issuer of the securities concerned;

(b) The reasonableness of the valuation, market liquidity and its sustainability and the historical price volatility of the securities concerned; and

(c) Any adverse news about the issuer or its senior management.

5.3. An SMF broker should clearly document the methodology to be adopted and factors to be considered in determining the haircuts in its margin lending policy.

5.4. An SMF broker should strictly apply the established haircuts to all margin clients' securities collateral. Higher haircuts may be applied where circumstances require. If a haircut lower than the normal rate is applied to the collateral provided by a margin client, the SMF broker should assess whether there would be additional risk in applying the lower haircut, any risk mitigation to compensate for 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 assigned by it to an individual securities collateral should not be lower than the average haircut assigned by its top three lending banks to the same securities collateral minus [15% / 20%].

Note: Ranked in terms of the amounts of the bank loans drawn by the re-pledging broker under credit facilities secured by securities collateral provided by its margin clients. 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%].

5.6. Where a re-pledging broker considers that an individual securities collateral warrants a lower haircut than that determined in accordance with 5.5 above, it should clearly document its justification, the assessment of the impact on its financial position and measures to mitigate the additional risks.

5.7. In any event, the haircut assigned by a re-pledging broker to securities collateral should not be lower than the applicable haircut prescribed under the FRR, or in the case of illiquid collateral (as defined in section 22 of the FRR), 80%.

5.8. An SMF broker should review the haircuts assigned to securities collateral at least annually and whenever there is a significant change to any of the underlying factors.

## 6. Margin calls, stopping further advances, forced liquidation

6.1. An SMF broker should prudently set the triggers for margin calls, stopping further advances to clients and forced liquidation.

6.2. An SMF broker should clearly document the methodology to be adopted and factors to be considered in determining the triggers for margin calls, stopping further advances to clients and forced liquidation in its margin lending policy.

6.3. In general, margin calls should be made immediately when an outstanding margin loan exceeds the margin value (ie, market value minus haircut) of the underlying securities held as collateral or credit limit granted to the client (the excess is referred to as margin shortfall) except where the margin shortfall is within the minimum transfer amount for payment set by the broker. The minimum transfer amount for payment should be reasonable and prudent in light of the client's and the broker's circumstances.

6.4. An SMF broker should take reasonable steps to avoid circumstances where:

(a) the total unsettled margin calls exceed its shareholders' funds, and

(b) total long-outstanding margin calls (ie, margin calls that have remained unsettled for more than [30 days / 60 days / 90 days]) exceed [20% / 25%] of its shareholders' funds.

Note: An SMF broker may refer to either (i) its latest shareholders' funds; or (ii) the shareholders' funds reported in its latest monthly financial returns submitted to the SFC in the above calculation.

6.5. An SMF broker should stop waiving a margin call where a margin client:

(a) has a poor history of settling margin calls (eg, failure to meet margin calls in more than 15 occasions in the preceding 30 days); or

(b) has an outstanding margin loan balance higher than the market value of the underlying collateral.

6.6. An SMF broker should avoid further advances to and prevent further purchases of securities using the margin facility by a margin client where the margin client has a poor history of settling margin calls and there are outstanding margin calls yet to be met.

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.

6.8. An SMF broker should strictly apply the triggers for margin calls, stopping further advances to clients and forced liquidation. Where a deviation from this policy is considered justified

in a particular case, the SMF broker should exercise its discretion prudently after assessing the additional risks resulting from the deviation, any risk mitigation to compensate for 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.

6.9. For margin clients with a poor history of settling margin calls, an SMF broker should review the credit limits granted to them, and any other margin clients related to them, in a timely manner.

6.10. An SMF broker should review its triggers for margin calls, stopping further advances to clients and forced liquidation at least annually and whenever there is a significant change to any of the underlying factors.

## 7. Stress testing

7.1. An SMF broker should regularly conduct stress tests on its ELC and liquidity (at least on a monthly basis) and whenever any material adverse event occurs, such as a sudden plunge in the price of significant securities collateral, to quantify the impact of changing market conditions.

7.2. An SMF broker should apply the applicable hypothetical stress scenario suggested in paragraphs 7.3 to 7.6 below.

7.3. For simplicity, each hypothetical stress scenario below assumes a uniform percentage price drop 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%] price drop, if more than [75%] of the collateral pool in terms of market value is comprised of index stocks;

(b) [a percentage within the percentages specified in (a) and (c)] price drop, if less than [75%] but more than [25%] of the collateral pool in terms of market value is comprised of index stocks; and

(c) [30% to 50%] price drop, if less than [25%] of the collateral pool in terms of market value is comprised of index stocks.

7.4. An SMF broker should also conduct stress tests regularly on its ELC for the hypothetical stress scenario of a significant group of highly correlated securities collateral losing all their values.

Note: Any group of highly correlated securities collateral with an aggregate market value equals [10%] or more of the total market value of the collateral pool provided by all borrowing margin clients would be considered as significant.

7.5. In addition, a re-pledging broker should regularly conduct stress tests on its liquidity to assess its ability to meet margin calls from its lending banks in stress situations (unless its total outstanding bank loans obtained by re-pledging margin client securities collateral are less than the sum of its cash and bank balances). Each hypothetical stress scenario below assumes a uniform percentage price drop for all re-pledged securities collateral. 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%] price drop, if more than [75%] of the re-pledged securities collateral in terms of market value is comprised of index stocks;

(b) [a percentage within the percentage specified in (a) and (c)] price drop, if less than [75%] but more than [25%] of the re-pledged securities collateral in terms of market value is comprised of index stocks; and

(c) [30% to 50%] price drop, if less than [25%] of the re-pledged securities collateral in terms of market value is comprised of index stocks.

7.6. A re-pledging broker should regularly conduct stress tests on its liquidity for the hypothetical scenario of a significant re-pledged securities collateral or a significant group of highly correlated re-pledged securities collateral losing all its value.

Note: Any individual re-pledged securities collateral or group of highly correlated re-pledged securities collateral with a market value or an aggregate market value equal to [10%] or more of the total market value of all re-pledged securities collateral would be considered as significant.

7.7. An SMF broker may apply other stress testing methodologies and stress scenarios provided that they are no less prudent than the methods and hypothetical stress scenarios suggested above. It should clearly document the methodologies for its stress testing models, including the data sources and assumptions applied as well as the justification for deploying them in lieu of the stress testing methods and hypothetical stress scenarios suggested above.

7.8. An SMF broker should clearly document:

(a) details of each stress test performed, including but not limited to the assumptions, stress scenarios and financial data applied; and

(b) the stress test results, the triggers for following up on the stress test results, the escalation procedures for reporting the results to senior management and any follow-up actions taken .

7.9. Where a stress test result suggests that an SMF broker's ELC position or liquidity would significantly deteriorate under the stress conditions, it should take prompt and effective pre-emptive measures, including formulating a detailed contingency plan, to prevent a liquidity crunch, insolvency or non-compliance with its minimum liquid capital requirement under the FRR.

## 8. Notification requirement

8.1. An SMF broker should report to the SFC immediately if:

(a) It does not comply with or exceeds the quantitative thresholds specified in paragraphs 1.2, 3.9, 4.3, 5.5, 5.7, 6.4, 6.5 or 6.7 of these Guidelines; or

(b) It cannot pass the stress test on its ELC or liquidity performed in accordance with paragraph 7 of these Guidelines.

8.2. The SMF broker shall include in the report to the SFC full details of the matter and the reasons therefor; and any measures it has taken, is taking or proposes to take to deal with the non-compliance or deviation reported under paragraph 8.1(a), and a detailed contingency plan if it cannot pass a stress test under paragraph 7.