

## **Guidelines for Securities Margin Financing Activities**

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#### 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 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 Type 1 regulated activity (dealing in securities) 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 at least as prudent and effective as those set out in these Guidelines. In determining an appropriate regulatory response to an SMF broker's deviation from these Guidelines, the SFC will adopt a pragmatic and holistic approach taking into account all the circumstances, including but not



limited to the cause, seriousness, duration and frequency of the deviation, the level of risks, the potential impact on investors, and any remedial measure taken by the SMF broker.

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 not grant margin loans beyond its financial capability or overleverage itself in conducting SMF activities.
- 1.2. 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 should ensure its total margin loans-to-capital multiple does not exceed the benchmark prescribed in paragraph 1.4.

- (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 subordinated loans approved by the SFC; or (ii) the amounts of shareholders' funds and outstanding subordinated loans approved by the SFC reported in its latest monthly financial returns submitted to the SFC.
- 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 adopted and factors considered in the determination of its total margin loans limit.
- 1.6. An SMF broker should review its total margin loans limit regularly (at least annually) and whenever there is a significant change of any of the 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 its total margin loans limit and promptly escalate the matter to senior management.
- 1.8. 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 connected margin clients to ensure the obligations of margin clients arising from the financing provided by it are commensurate with the financial capability of the margin clients.

- (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. An SMF broker should ensure the credit risks of all the clients within a group of connected margin clients are aggregated for the purposes of measuring the broker's exposure to the group as a whole and determining the credit limit 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 other things, the following factors about a margin client or individual clients within a group of connected margin clients in setting credit limit for the client or the group (as the case may be):



- (a) the financial situation of the client, supported by objective proof;
- (b) any internal and external credit reference information (eg, credit history) about the client;
- (c) the quality of the underlying collateral and any other credit support (eg, thirdparty guarantee);
- (d) the investment objectives, risk appetite and trading patterns of the client; and
- (e) any known events which may reflect adversely on the financial status or default risk of the client.
- 2.5. An SMF broker should clearly document in its margin lending policy the methodology adopted and factors considered in determining its margin client credit limits.
- 2.6. An SMF broker should review its margin client credit limits regularly (at least annually) and whenever there is a significant change of any of the determining factors.
- 2.7. An SMF broker should strictly enforce and closely monitor compliance with its margin client credit limits. It should take immediate rectification action on any material breach of its margin client credit limits and promptly escalate the matter to senior management.
- 2.8. 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 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).

- (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 groups of connected major securities collateral, an SMF broker should consider, among other things, the following factors:
  - (a) its liquidity profile and capital;
  - (b) the risk profile of 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 each security concerned as a percentage of the total issue size of the security and the prospect of realisation;
  - (e) where applicable, its aggregated holdings in the securities concerned in the group of connected major securities collateral;
  - (f) the potential financial impact on it of stress scenarios involving the securities concerned, where the stress scenarios include but not limited to plunge in 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 factors in evaluating the quality of 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 their valuation and market liquidity;
  - (c) in the case of listed shares, the shareholding concentration of the listed company issuing the shares; and



- (d) any adverse news about the issuer of the securities concerned or the issuer's senior management.
- 3.6. An SMF broker should clearly document in its margin lending policy the methodology adopted and factors considered in determining its securities collateral concentration limits.
- 3.7. An SMF broker should review its securities collateral concentration limits regularly (at least annually) and whenever there is a significant change of any of the determining factors.
- 3.8. An SMF broker should strictly enforce and closely monitor compliance with its securities collateral concentration limits. It should take immediate rectification action on any material breach of its securities collateral concentration limits and promptly escalate the matter to senior management.
- 3.9. Any waiver or increase of securities collateral concentration limits should be properly justified by a written risk assessment and be endorsed by senior management.
- 3.10. An SMF broker should assess the concentration risks of individual securities collateral by estimating the impact on its excess liquid capital (ELC) of the hypothetical stress scenario of the security held as collateral being valued at nil by the FRR for liquid capital calculation purposes. The SMF broker should assess the effectiveness of its concentration limits for securities collateral by comparing the estimated ELC impacts (measured as the percentage reduction of the ELC) of the securities collateral with the applicable benchmarks prescribed below. This ELC impact analysis should be performed regularly (at least monthly) or when securities collateral concentration risks increase significantly.

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



	<ol> <li>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%</li> </ol>	
Other securities collateral	Any securities collateral not being Tier 1 securities collateral or Tier 2 securities collateral	20%

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 concentration limit of a security held as collateral if the ELC impact estimated by the ELC impact analysis conducted on the security in accordance with paragraph 3.10 exceeds the ELC impact benchmark specified in column 3 of the table in paragraph 3.10.

#### 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 connected margin clients.
- 4.2. In setting the concentration limits for a margin client or a group of 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 or clients concerned;
  - (c) the composition and quality of the underlying collateral;
  - (d) the potential financial impact on it of client default and in stress 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 or clients concerned;
  - (f) the risk profile of its margin loan portfolio; and
  - (g) the prevailing market conditions.
- 4.3. 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 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.

- 4.4. An SMF broker should clearly document in its margin lending policy the methodology adopted and factors considered in determining its margin client concentration limits.
- 4.5. An SMF broker should review its margin client concentration limits regularly (at least annually) and whenever there is a significant change of any of the determining factors.
- 4.6. An SMF broker should strictly enforce and closely monitor compliance with its margin client concentration limits. It should take immediate rectification action on any material breach of its margin client concentration limits and promptly escalate the matter to senior management.
- 4.7. Any waiver or increase of 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 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 haircut percentages to individual securities 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 their valuation and market liquidity; 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 adopted and factors considered in determining the haircut percentages of securities collateral.
- 5.4. In general, an SMF broker should consistently apply the haircut percentages stated in its margin lending policy to the securities collateral of all margin clients. A higher



haircut percentage than the stated rate may be applied to securities collateral provided by a margin client if doing so would be prudent in the circumstances. If a haircut percentage lower than the stated rate is applied to any securities collateral provided by a margin client, the SMF broker should assess the additional risk of applying the lower haircut percentage and its financial capability to take up the additional risk, and take risk mitigation measures in respect of 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 a security 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 minus 20% (haircut benchmark) (Notes 2, 3 and 4).

- (1) Lending banks are ranked in terms of the amounts of 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 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 a security held as collateral warrants a lower haircut percentage than the haircut benchmark determined in accordance with the mechanism prescribed in paragraph 5.5, it should clearly document its justification, 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 held as collateral 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 (which has the meaning assigned to it in section 22(4) of the FRR).
- 5.8. An SMF broker should review the haircut percentages assigned to securities collateral regularly (at least annually) and whenever there is a significant change of any of the 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 call, 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 adopted and factors considered in determining the triggers for margin call, for stopping further advances to, and further purchases of securities by, margin clients, and for forced liquidation of margin clients' securities collateral.
- 6.3. In general, 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. The minimum transfer amount should be reasonable and prudent in light of the circumstances of both the margin client and the SMF broker.
- 6.4. An SMF broker should take reasonable steps to avoid excessive exposure to outstanding margin calls, for example, the total amount of outstanding margin call of all margin clients exceeds its shareholders' funds, or the total amount of long-outstanding margin call of all margin clients exceeds 25% of its shareholders' funds.

- (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 must stop waiving margin calls on any margin client:
  - (a) who has a poor history of settling margin calls (eg, 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 longoutstanding margin call in his account); or
  - (b) whose outstanding margin loan balance exceeds the market value of the underlying collateral.
- 6.6. An SMF broker must stop any further advance to, and any further purchase of securities using the margin facility by, any margin client:
  - (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 should strictly apply its policies on margin call, 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 any of these policies is considered justifiable in respect of a client, the SMF broker should exercise its discretion prudently after duly assessing the additional risk that may result from the deviation and its financial capability to take up the additional risk, and taking risk mitigation measures in respect of 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 of any margin client found to have a poor history of settling margin calls, as well as the credit limit of any other margin client connected to that client.
- 6.9. An SMF broker should review its policies on margin call, 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 of any of the determining factors.

#### 7. Stress testing

- 7.1. An SMF broker should conduct stress tests on its ELC and liquidity regularly (at least monthly) and upon the occurrence of any material adverse market event or securities-specific event (such as a sudden plunge in the market price of a significant security held as collateral) to estimate the financial impact of the event on it.
- 7.2. An SMF broker should apply the applicable hypothetical stress scenario suggested in paragraph 7.3 in the regular stress tests on its ELC referred to in paragraph 7.1.



- 7.3. For the regular ELC stress tests referred to 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 adopts a single price drop percentage to represent the average price drop of securities collateral provided by all borrowing margin clients:
  - (a) 15% 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;
  - (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) 30% average price drop, if 25% to 75% of the pool of securities collateral in terms of market value is comprised of Tier 1 securities collateral and Tier 2 securities collateral; and
  - (d) 50% average price drop, if less than 25% of the pool of securities collateral in terms of market value is comprised of Tier 1 securities collateral and Tier 2 securities collateral.
- 7.4. An SMF broker should also conduct stress tests on its ELC regularly (at least monthly) for the hypothetical stress scenario of a significant group of connected securities collateral losing all its value.

- (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) A group of 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. A re-pledging broker should conduct stress tests regularly (at least monthly) to assess its ability to meet margin calls that may be made by its lending banks in stress conditions, unless the total amount of outstanding bank loans obtained by re-pledging margin clients' securities collateral 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 adopts a single price drop percentage to represent the average price drop of the pool of securities collateral re-pledged to lending banks:
  - (a) 15% 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;



- (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) 30% average price drop, if 25% to 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; and
- (d) 50% average price drop, if less than 25% 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.
- 7.7. A re-pledging broker should also conduct stress tests regularly (at least monthly) 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 connected re-pledged securities collateral) losing all its value.

- (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) An individual re-pledged securities collateral with a 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.
- (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 or hypothetical stress scenarios provided that they are not less prudent than the methodologies and hypothetical stress scenarios suggested in this section. It should clearly document its stress testing methodologies, and the data sources, data history, assumptions and hypothetical stress scenarios applied as well as the justification for deploying them in lieu of the stress testing methodologies and hypothetical stress scenarios suggested 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 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 follow-up action on 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 or liquidity would significantly deteriorate under a stress condition, it should take prompt and effective pre-emptive measures, including formulating a detailed contingency plan, to prevent liquidity 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 upon becoming aware of the following matters:
  - (a) it does not comply with or exceeds the quantitative benchmark specified in paragraphs 1.4, 3.10, 4.3, 5.5, 5.7, or 6.4 of these Guidelines; or
  - (b) it does not pass any stress test on ELC or liquidity conducted in accordance with paragraph 7 of these Guidelines.
- 8.2. An SMF broker shall include in the report to the SFC filed under paragraph 8.1 full details of the matter, including:
  - (a) in the case of a report filed under paragraph 8.1(a), the reasons for failing to comply with or exceeding the quantitative benchmark in question, and any measure it has taken, is taking or proposes to take to 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.