

# Introduction to Derivatives

STRICTLY PRIVATE AND CONFIDENTIAL

Copyright © 2023 Nomura

This document is the sole property of Nomura. No part of this document may be reproduced in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior written permission of Nomura.

## Contents

1.	Important Notice .....	1
2.	Introduction to Derivatives .....	2
3.	Options .....	6
4.	Equity Accumulators .....	16
5.	Equity Decumulator .....	21
6.	Interest Rate Swap .....	26
7.	Interest Rate Caps, Floors and Collars .....	30
8.	Cross Currency Swap .....	41
9.	Foreign Exchange (FX) .....	44
10.	Total Return Swap .....	46
11.	Credit Default Swap .....	54
12.	OTC Equity Swaps .....	62

## 1. Important Notice

This document, provided by Nomura International (Hong Kong) Limited (“NIHK”) / Nomura Singapore Limited (“NSL”) (together with their respective affiliates, directors, officers and employees shall be collectively referred to as “Nomura”), is provided for general client information purposes only. No account has been taken of your investment objectives, personal circumstances or needs. The information contained herein is not professional advice and should not be relied upon by any person as such. You should make and rely on your own assessment and undertake your own investigations and inquiries and seek all necessary independent advice if you consider desirable. No representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by Nomura as to the accuracy, completeness, merchantability or fitness for a particular purpose of the information contained herein or any other information provided by any person in connection with the securities or products described herein or their distribution. To the maximum extent permitted by applicable laws and regulations, Nomura relies on the disclaimers made herein, and expressly disclaims any and all liabilities (whether in tort, contract or otherwise) arising from or in connection with (i) any person relying on, acting or refraining from acting on the basis of any matter or information contained in this document or any omission from this document (ii) the provision to, or use by, any person of this document or any part of it. Neither the information nor the opinions expressed herein constitute or are to be construed as, an offer or solicitation of an offer to buy or sell any products or investments. In respect of NIHK and for the avoidance of doubt, this document shall not affect NIHK’s suitability obligations set out in its Standard Client Agreement or its terms of business with you (as applicable) and, if there is any inconsistency between this document and such suitability obligations of NIHK, the latter shall prevail. Please also note that NIHK may not have on its product list some of the products described in this document.

This document is intended to be brief and general and is not intended to be a comprehensive explanation of any investment or subject described herein or the risks involved. No part of this document may be copied, photocopied, or duplicated in any form, by any means, or redistributed without the prior written consent of Nomura

An illustration of the applicable risk rating of the product has been provided to guide the investor on the possible risk rating of the product. The following is a legend for the risk rating. Within each section, the possible ratings which the products may have are shaded in red.



Risk Level	Explanation
1	■ Very low level of risk with potentially limited returns
2	■ Low to Medium level of risk with low volatility and expecting below average to average level of returns
3	■ Medium level of risks with medium level of volatility and expecting average expected returns
4	■ Medium to high level of risk and volatility and with high variance in the returns
5	■ High level of risk and volatility with a very high variance in returns

## 2. Introduction to Derivatives

### 2.1 Introduction to Derivatives

The purpose of this introductory paper is to help you, the investor, understand more about derivatives – their nature, the various types of common derivative products available to the investor, benefits of trading derivative products and the key risks involved.

Derivatives are financial contracts for which prices are derived from assets and instruments with underlying such as equities, bonds, currencies, precious metals, commodities, interest rates, credit, benchmarks including indices, non-traditional asset classes, spot, forward contracts, swaps, options or any combination of the foregoing.

Derivatives are traded on exchanges or Over-the-Counter (“OTC”). OTC trading is done directly between two counterparties, without any supervision of an exchange. It is contrasted with exchange trading, which occurs via exchanges. In OTC market, contracts are bilateral; each counterparty has credit risk concerns with respect to the other counterparties.

The value of the derivatives to the investor depends directly on the value of the underlying asset. Factors which may affect the value of a derivative product include market factors like changes in interest rates, economic environment or geo-political landscape etc.

Derivatives are flexible instruments used for a variety of reasons. They can be used by the investor in the same way and for the same reasons as the underlying assets; the investor holds a view that the prices of the underlying would move in a certain direction in a predefined period. An investor can then enter into a derivatives instrument to “lock” in a predetermined price at which he will trade in that product in a future date.

However, a point to note is that the risks of losses might be amplified when the investor trades in derivative products instead of buying or selling the underlying asset in the market at spot. If the underlying asset price was to move greatly against the investor’s favor, the investor might still be required to purchase (sell) the underlying asset at the pre-determined price, which is at a great premium (discount) to the prevailing market price. The investor would incur a substantial loss accordingly.

### 2.2 Common Type of Derivatives

There are several types of derivatives available in the market. At the broadest level, we can classify them into two broad categories, namely futures or forward contracts and options contracts.

#### 2.2.1 Futures or Forwards

A futures or forward contract gives the buyer or holder the obligation to either buy or sell the underlying asset at a predetermined future date and at a predetermined price. The future date on which the transaction is to be consummated is the contract’s maturity date.

The differences between a futures and a forward contract are as follows: (1) Futures contracts are standardized contracts, with standard terms and are traded on exchanges while forwards are tailor-made to the investor’s preferences and are traded OTC. (2) The investor will face counterparty risk of the issuer when entering forward contracts as opposed to futures where the exchange clearinghouse acts as the counterparty, reducing counterparty risk. Swaps are a series of forward contracts used to exchange specified quantities of assets or cash flows at specified times in the future. There is a risk that a counterparty may default or not completely fulfil its obligations in addition to the general risk of settlement default.

One of the common uses for forward contracts is for the investor to hedge certain financial positions against market movements. For example, a Hong Kong based exporter can enter into a

foreign exchange forward contract to hedge its future earnings from the European markets. It can buy a 3 month currency forward contract to lock in his earnings in terms of Hong Kong dollars at a predetermined foreign exchange rate. Thus at the end of the contract, it will receive Hong Kong dollars in cash at the predetermined rate regardless of how the foreign exchange markets move. This reduces earnings fluctuations for the exporter.

### 2.2.2 Options

Options give its holder or buyer the right but not the obligation to conduct a transaction involving an underlying security at a predetermined future date at a predetermined price or strike price. The seller on the other hand, has the obligation to perform his side of the agreement if the buyer chooses to exercise the option.

Buyers would have to pay sellers a premium in return for sellers giving up the right to perform the specified act in the agreement at will and at the market price which may be more desirable than the strike price. A seller bears the risk of losing money as he has an opposite view of the underlying from the option buyer and he feels that the premium received is sufficient to compensate him for taking on the risk.

A call option gives the holder the right, but not the obligation, to *buy* the underlying security at a specified price within a specified period of time.

A put option gives the holder the right, but not the obligation, to *sell* the underlying security at a specified price within a specified period of time.

Common terminology

- (i) ATM: At-the-money  
An option is at-the-money if the strike price is the same as the spot price of the underlying asset on which the option is written.
- (ii) ITM: In-the-money  
A call option is in-the-money when the strike price is below the spot price. A put option is in-the-money when the strike price is above the spot price.
- (iii) OTM: Out-of-the-money  
A call option is out-of-the-money when the strike price is above the spot price of the underlying asset. A put option is out-of-the-money when the strike price is below the spot price.  
  
A deep out of the money option is one where the strike price is far from the underlying spot price. For instance, the call strike is far above the underlying spot price or the put strike is far below the underlying spot price.

## 2.3 Use of Derivative Products

### Speculation

The investor could enter into derivative positions for speculative reasons as the investor holds a view that markets and the price of the underlying security will move in his favor. As such, he is willing to take on a speculative bet so as to enhance his yield or participate in the performance of the underlying.

### Access to Various Asset Classes or Markets

The investor would be able to gain access to certain asset classes or markets the investor would not otherwise have access to. For example, the investor who has a view on the onshore China equity markets would be able to participate in the performance of the underlying market through a synthetic ETF. Synthetic ETFs attempt to track a certain index through the use of underlying derivatives like swaps and options instead of purchasing the underlying components of the index.

### **Leverage Effect**

Derivatives enable the investor to ride on the movement of the market prices of the underlying security without having to purchase the actual underlying security itself. The investor replicates the exposure to the underlying by using derivatives which only cost a fraction of the price of the underlying. This is commonly referred to as the “Leverage Effect”.

### **Hedging**

The investor could use derivatives to hedge his positions on the underlying security to preserve the value of his position against adverse market movements.

## **2.4 Key Risks**

Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of options (i.e., put or call) which they contemplate trading and the associated risks. The investor should calculate the extent to which the value of the options must increase for his position to become profitable, taking into account the premium and all transaction costs.

The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring (for call) or delivering (for put) the underlying asset. If the purchased options expire worthless, the investor will suffer a total loss of his investment which will consist of the options premium plus transaction costs. If the investor is contemplating purchasing deep-out-of-the-money options, the investor should be aware that the chance of such options becoming profitable is ordinarily remote.

Selling ('writing' or 'granting') options generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavorably against him. The seller will also be exposed to the risk of the purchaser exercising the options and the seller will be obligated to either settle the options in cash or to acquire or deliver the underlying asset.

### **Market Risk and Liquidity Risk**

Prices of derivatives are affected by the prices of the underlying securities. Hence, fluctuations in prices of these underlying assets will ultimately affect derivative product prices. In addition to that, the investor in derivatives may experience liquidity risk. Prior to expiry, the derivatives may be harder to be disposed of / unwound and the investor may have to wait until expiry before he can get his funds back.

### **Credit Risk**

Derivatives are usually issued/transacted by third party “issuers”/counterparties which are usually listed companies or financial institutions. In the event of default of the issuer or counterparty due to solvency issues, prices of the derivative products may be affected. In the worst case scenario, the investor might even lose all his investment.

Default can generally be defined as:

- (1) Bankruptcy
- (2) Failure to pay
- (3) Debt Restructuring
- (4) Obligation default
- (5) Repudiation

### **Event Risk**

Event Risk occurs because of rare, discontinuous and very large, unanticipated changes in the market environment. It could potentially increase both market and credit risks which would affect prices of derivative products as highlighted above. In the worst case scenario, derivative products might even lose all their value.

Event risk can be generally defined as:

- (1) A natural or manmade incident
- (2) A takeover or corporate restructuring
- (3) Regulatory change

### **Leverage Risk**

As derivative products can be leveraged, a small movement in the prices of the underlying might cause a larger change in the price of the derivative product.

### **Use of Credit Facility and Margin Call Risk**

The investor may utilize credit facilities of Nomura to enter into derivative transactions. The investor will need to put in collateral to meet the initial margin requirement. As the price of the underlying changes of market condition changes, additional collateral may be required. In such a situation, a margin call may be issued whereupon, if the investor is not able to meet such additional margin requirements, the position in the derivative transaction may be unwound. Such risks are referred to as margin call risk. The investor may lose part or all of his capital or more. Such leveraged activities have specific risks as described in General Product Introductory Material- Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions.

### 3. Options



An option is a financial derivative instrument that establishes a contract between two parties (option seller and option buyer). It offers the buyer the right, but not obligation, to buy (call) or sell (put) the underlying security.

A Call option gives the owner the right, but not the obligation, to buy the underlying security at a pre-determined price ("Strike Price") at or within a specified period of time. The call option seller would in turn have the obligation to sell the underlying security at a specified price at or within a specified time.

A Put option gives the owner the right, but not the obligation, to sell the underlying security at a pre-determined price ("Strike Price") at or within a specified period of time. The put option seller would in turn have the obligation to buy the underlying security at a specified price at or within a specified time.

The options may include a knock-in or a knock-out feature or both.

**Knock-In Option:** Option that is only in effect when a certain barrier or a pre-specified price level of the underlying security is reached

- On expiration date (European-style)
- Any time before expiration date (American-style)
- On a specified date during the tenor (Bermuda-style)

**Knock-Out Option:** Option that expires worthless when a certain barrier or a pre-specified price level of the underlying security is breached

- On expiration date (European-style)
- Any time before the expiration date (American-style)
- On a specified date during the tenor (Bermuda-style)

An option involving cash settlement is settled as cash amount equal to the difference between the strike price and the current market value of the underlying security, multiplied by the specified amount of underlying security stipulated for each option.

This product is not capital protected. The investor should be aware that in certain circumstances, the redemption amount (if any) payable to the investor at maturity may be less than the principal sum invested in the product. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of all or part of his original investment.



### 3.1 Introduction to Options

Summary of options features and characteristics

	Call	Put
<b>Buy</b>	<ul style="list-style-type: none"> <li>■ Call option buyer pays a premium in exchange for the right, but not the obligation, to buy the underlying security at the strike price at or within a specified period of time</li> <li>■ Call option buyer has a bullish view on the underlying security and expects that the price of the underlying security will rise by the expiration of the option</li> </ul>	<ul style="list-style-type: none"> <li>■ Put option buyer pays a premium in exchange for the right but not the obligation to sell the underlying security at the strike price at or within a specified period of time</li> <li>■ Put option buyer has a bearish view on the underlying security and expects that the price of the underlying security will drop by the expiration of the option</li> </ul>
<b>Sell</b>	<ul style="list-style-type: none"> <li>■ Call option seller receives a premium in exchange for the obligation to sell the underlying security at the pre-determined strike price at or within a specified time period</li> <li>■ Call option seller has a neutral to bearish view on underlying security and expects its price will not stay above the strike price when the option expires</li> </ul>	<ul style="list-style-type: none"> <li>■ Put option seller receives a premium in exchange for the obligation to buy underlying security at the pre-determined strike price at or within a specific time period</li> <li>■ Put option seller has a neutral-to-bullish view on the underlying security and expects its price will stay above the strike price when the option expires</li> </ul>
	<b>Knock-In</b>	<b>Knock-Out</b>
<b>Buy</b>	<ul style="list-style-type: none"> <li>■ Option that is only in effect when a certain barrier or a pre-specified underlying price level is reached               <ul style="list-style-type: none"> <li>– On expiration date (European-style)</li> <li>– Any time before expiration date (American-style)</li> <li>– On a specified date during the tenor (Bermuda-style)</li> </ul> </li> <li>■ A down-and-in barrier is one where the option becomes effective when the spot price moves downwards</li> <li>■ A up-and-in barrier is one where the option becomes effective when the spot price moves upwards</li> </ul>	<ul style="list-style-type: none"> <li>■ Option that expires worthless when a certain barrier or pre-specified underlying price level is breached,               <ul style="list-style-type: none"> <li>– On expiration date (European-style)</li> <li>– Any time before the expiration date (American-style)</li> <li>– On a specified date during the tenor (Bermuda-style)</li> </ul> </li> <li>■ A down-and-out barrier is one where the option becomes worthless when the spot price moves downwards</li> <li>■ A up-and-out barrier is one where the option becomes worthless when the spot price moves upwards</li> </ul>

### 3.2 Key Risks

Summary of product related risks

	Call	Put
<b>Buy</b>	<ul style="list-style-type: none"> <li>Call option buyer could lose the entire premium paid if the prevailing spot price closes below the strike price when the option expires</li> </ul>	<ul style="list-style-type: none"> <li>Put option buyer could lose the entire premium paid if the prevailing spot price closes above the strike price when the option expires</li> </ul>
<b>Sell</b>	<ul style="list-style-type: none"> <li>Call option seller could face unlimited losses should the price of the underlying security rise infinitely</li> </ul>	<ul style="list-style-type: none"> <li>Put option seller might lose the entire notional value of the option contract if the price of the underlying security falls to zero</li> </ul>

The investor will be exposed to the underlying security risk, and risk of adverse or unanticipated market, financial or political development risks which may negatively impact the underlying security.

The investor may not be able to terminate the contract prior to the expiration of the contract. There may be high early termination costs involved should the investor terminate prior to the expiration of the contract.

The investor is subject to corporate risks (e.g. market disruptions, mergers, tender offers, public offerings, delisting or any other appropriate actions) that may affect the security. This includes exposure to unanticipated changes in the operating environment such as legal matters, lawsuits, regulatory changes as well as man-made or natural disasters or incident. Such events may negatively impact the value of the product.

As the options are privately negotiated instruments with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterparty.

The investor may enter the transaction on a margin basis, or utilizing Nomura's credit facilities. As such, the investor would be bound by the terms of the credit facilities, including the requirements to make top up payments or meet margin calls which can be substantial in poor market conditions. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions.

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.

### 3.3 Worst-case Scenario

For an option buyer, his maximum loss amount is limited to the premium paid to the option seller.

For an option seller, his maximum loss amount may exceed the premium received for selling the option contract to the option buyer.

For the seller of a call option contract, his maximum loss is theoretically unlimited if the underlying security were to rise in value for an infinite amount.

For the seller of a put option contract, his maximum loss is the notional value of the option contract if the value of the underlying security was to reach 0.

### 3.4 Various Types of Options

Please see below for illustrations of the payoff of various option strategies. Please note that all figures shown are for illustration purpose only. For the diagrams below,

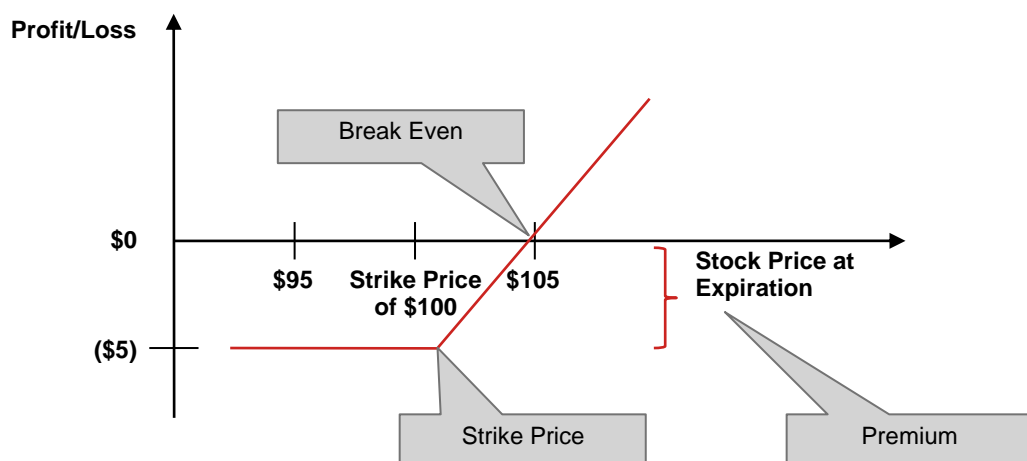
The x-axis represents the security price at expiration of the option.

The y-axis represents the profit and loss amount.

The strike price is indicated on the chart.

#### 3.4.1 Call Options – with Bullish View

Payoff Diagram

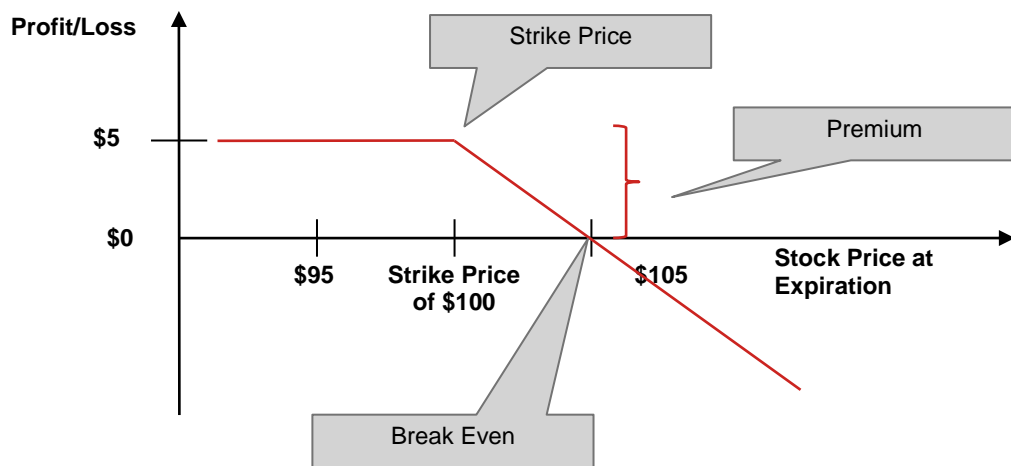


The investor is the buyer of the call option. The buyer of the call option has purchased the right to buy the underlying security with the view that the price of the underlying security will go up in the near term. The investor is expressing a bullish view. The above scenario shows the payoff at expiration for the investor. The investor pays a premium of \$5 for the right to buy a specified quantity of the security at the strike price of \$100. Where the underlying security price at expiration is above the strike price of \$100 and the buyer of the call option exercises the call option, the investor's net profit at expiration would be the difference between the final share price at expiration and the strike price, after deducting the premium paid up front. The break-even price of \$105 is the share price at expiration where the investor would have no profit or loss.

Where the price at expiration is below the strike price and the call option is not exercised, the loss incurred would be the upfront premium of \$5.

3.4.2 Call Options – with Mildly Bearish View

Payoff Diagram



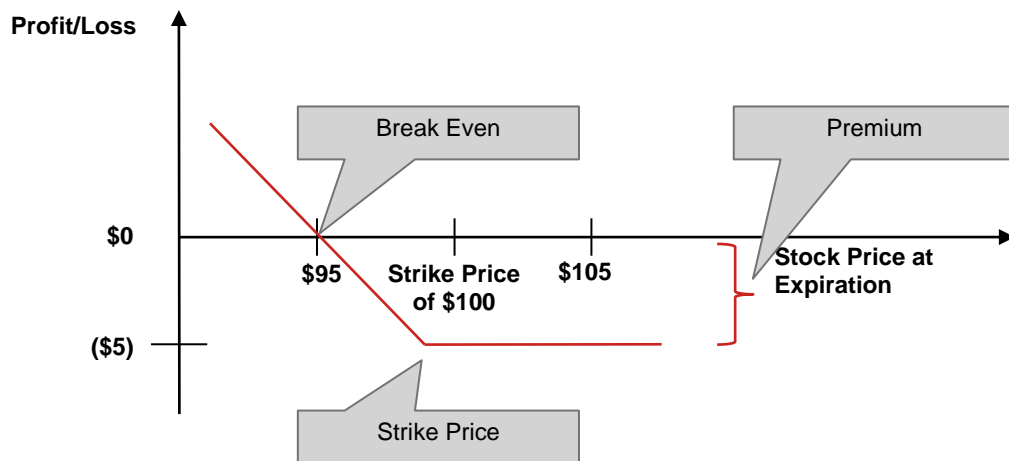
The investor is the seller of the call option. The seller of the call option has received an initial premium in exchange for having the obligation to sell the underlying security with the view that the price of the underlying security will be range-bound in the near term. The investor is expressing a mildly bearish view. The above scenario shows the payoff at expiration for the investor. The investor receives a premium of \$5 for the obligation to sell a specified quantity of the underlying security at the strike price of \$100.

Where the underlying security price at expiration is above the strike price of \$100 and the call option is exercised, the investor's net loss at expiration would be the difference between the final share price at expiration and the strike price, after taking into account the premium received. The break-even price of \$105 is the share price at expiration where the investor would have no profit or loss.

Where the price at expiration is below the strike price and the call option is not exercised, the investor's net profit would be the upfront premium of \$5.

3.4.3 Put Options – with Bearish View

Payoff Diagram



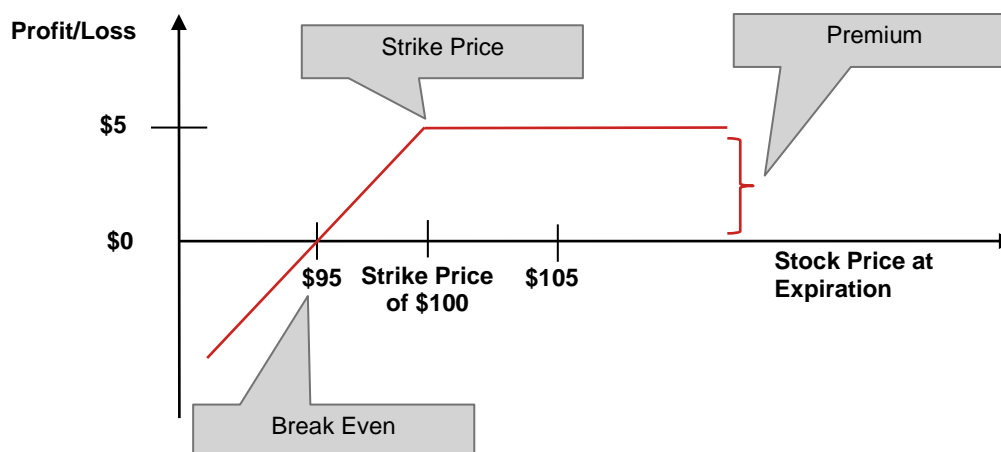
The investor is the buyer of the put option. The buyer of the put option has purchased the right to sell the underlying security with the view that the price of the underlying security will go down in the near term. The investor is expressing a bearish view. The above scenario shows the payoff at expiration for the investor. The investor pays a premium of \$5 for the right to sell a specified quantity of the security at the strike price of \$100.

Where the underlying security price at expiration is below the strike price of \$100 and the buyer of the put option exercises the put option, the investor's net profit at expiration would be the difference between the final share price at expiration and the strike price, after deducting the premium paid up front. The break-even price of \$95 is the share price at expiration where the investor would have no profit or loss.

Where the price at expiration is above the strike price and the put option is not exercised, the loss incurred would be the upfront premium of \$5.

### 3.4.4 Put Options – with Mildly Bullish View

Payoff Diagram



The investor is the seller of the put option. The seller of the put option has received an initial premium in exchange for having the obligation to buy the underlying security with the view that the price of the underlying security will be range-bound in the near term. The investor is expressing a mildly bullish view. The above scenario shows the payoff at expiration for the investor. The investor receives a premium of \$5 for the obligation to buy a specified quantity of the underlying security at the strike price of \$100.

Where the underlying security price at expiration is below the strike price of \$100 and the put option is exercised, the investor's net loss at expiration would be the difference between the final share price at expiration and the strike price, after taking into account the premium received. The break-even price of \$95 is the share price at expiration where the investor would have no profit or loss.

Where the price at expiration is above the strike price and the put option is not exercised, the investor's net profit would be the upfront premium of \$5.

### 3.4.5 Covered Call

A sell call option is covered if the call option seller owns the obligated quantity of the underlying security as well.

### 3.4.6 Naked (Uncovered) Call

A naked or uncovered call option occurs when the option seller sells the option without owning the obligated quantity of the underlying security. Since the investor would need to acquire the underlying security to be delivered or settle in the cash equivalent, naked short selling of call options is a high risk option strategy as the price of the underlying shares may, in theory, rise infinitely.

### 3.4.7 Covered Put

A sell put option is covered if the put option seller has the necessary amount of cash to purchase the obligated quantity of the underlying security.

### 3.4.8 Naked (Uncovered) Put

A naked or uncovered put option occurs when the option seller does not have the necessary amount of cash to purchase the obligated quantity of the underlying security.

### 3.5 Other Features for Options

Unlike “plain vanilla” put and call options, exotic options are subject to additional conditions and agreements. Exotic options are non-standard options and may include a combination of options, compound options (or option on an option), or options involving several underlying(s). Given the special composition of exotic options, their price movements can vary markedly from those “plain vanilla” options.

#### 3.5.1 Exotic Options - Barrier Options

Barrier options are options where the exercise rights for the option arise or expire if the underlying security reaches or breaches a fixed threshold (barrier) within a specified period. The style can be American, Bermudan or European.

- Any time before expiration date (American-style)
- On a specified date during the tenor (Bermuda-style)
- On expiration date (European-style)

A knock-in barrier option is an option that is only in effect when a certain barrier or a pre-specified underlying price level is reached.

A knock-out barrier option expires worthless if the underlying security breaches the barrier or pre-specified underlying price level.

### 3.6 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

#### 3.6.1 Call Option

Below are sample terms for a call option with a one month tenor. The strike price for the option is \$27, which is moderately higher than the current price of \$25. The premium paid for the option is \$2.

##### Sample Terms

Option Type	Call option
Underlying	Company A
Currency	USD
Tenor	1 month
Strike Price	\$27
Reference Spot	\$25
Premium	\$2

Number of Options	100
-------------------	-----

If the investor is the buyer of the option, he will only exercise the option if the price of the underlying at expiry is above \$27. If the price of the underlying is above \$27, the profit would be (Final price – Strike Price) x Number of options. If the price of the underlying at expiry is below \$27 and he does not exercise the option, his losses are limited to the initial premium he has paid.

Final Price	Strike Price	Profit/(Loss)	Calculation
20	27	(200)	2x100
25	27	(200)	2x100
30	27	100	(3x100)-2x100
35	27	600	(8x100)-(2x100)
40	27	1,100	(13x100)-(2x100)
45	27	1,600	(18x100)-(2x100)
50	27	2,100	(23x100)-(2x100)

If the investor is the seller of the option, the option will likely-be exercised by the buyer of the option if the price of the underlying at expiry is above \$27. His losses are potentially theoretically unlimited. If the price of the underlying is above \$27, the loss would be (Final price – strike price) x Number of options. If the price of the underlying at expiry is below \$27 and the buyer does not exercise the option, his returns are limited to the premium received when he sold the option.

Final Price	Strike Price	Profit/(Loss)	Calculation
20	27	200	2x100
25	27	200	2x100
30	27	(100)	(-3x100)+(2x100)
35	27	(600)	(-8x100)+(2x100)
40	27	(1,100)	(-13x100)+(2x100)
45	27	(1,600)	(-18x100)+(2x100)
50	27	(2,100)	(-23x100)+(2x100)

### 3.6.2 Put option

Below are sample terms for a put option with a one month tenor. The strike price for the option is \$23, which is moderately lower than the current price of \$25. The premium paid for the option is \$2.

#### Sample Terms

Option Type	Put option
Underlying	Company A
Currency	USD
Tenor	1 month



Strike Price	\$23
Reference Spot	\$25
Premium	\$2
Number of Options	100

If the investor is the buyer of the option, he will only exercise the option if the price of the underlying at expiry is below the strike price of \$23. If the price of the underlying is below the strike price of \$23, the profit would be (Strike Price – Final price) x Number of options. If the price of the underlying at expiry is above \$23 and he does not exercise the option, his losses are limited to the initial premium he has paid.

Please see the table below for an illustration of his final profit and loss (P&L).

Final Price	Strike Price	Profit/(Loss)	Calculation
0	23	2,100	$(23 \times 100) - (2 \times 100)$
10	23	1,100	$(13 \times 100) - (2 \times 100)$
20	23	100	$(3 \times 100) - (2 \times 100)$
30	23	(200)	$(-2 \times 100)$
40	23	(200)	$(-2 \times 100)$
50	23	(200)	$(-2 \times 100)$

If the investor is the seller of the option, the option will likely be exercised by the buyer of the option if the price of the underlying at expiry is below the strike price of \$23. The loss would be (Strike Price – Final Price) x Number of options. His losses are potentially the entire notional of the trade if the price of the underlying falls to zero. If the price of the underlying at expiry is above \$23 and the buyer does not exercise the option, his returns are limited to the premium received when he sold the option.

Final Price	Strike Price	Profit/(Loss)	Calculation
0	23	(2,100)	$(-23 \times 100) + (2 \times 100)$
10	23	(1,100)	$(-13 \times 100) + (2 \times 100)$
20	23	(100)	$(-3 \times 100) + (2 \times 100)$
30	23	200	$2 \times 100$
40	23	200	$2 \times 100$
50	23	200	$2 \times 100$

## 4. Equity Accumulators



### 4.1 Description

An over-the-counter (OTC) equity accumulator is a contract where the investor will be obliged to purchase the underlying equity at a specific forward (alternatively referred to as “strike”) price for the duration of the contract as long as the share price closes below the knock-out trigger (“KO level”).

The forward price is typically set below the prevailing market price while the KO level is typically set above the prevailing market price.

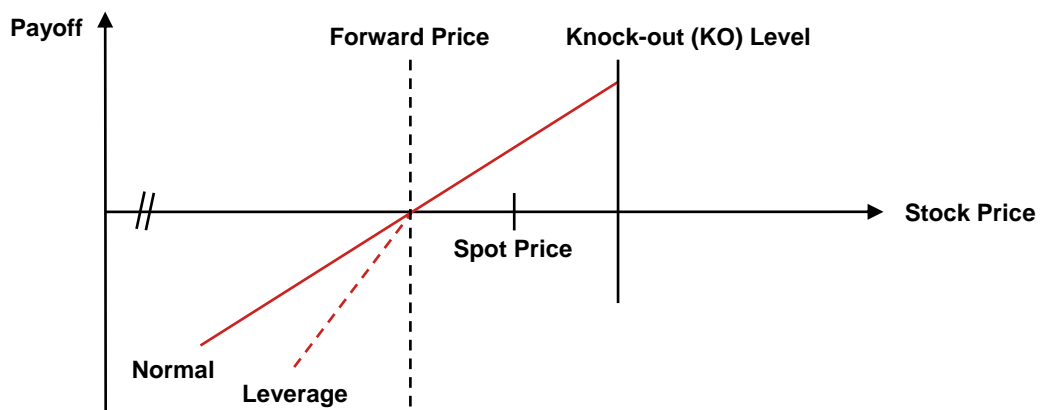
Once the knock-out price is triggered according to the terms set out in the term-sheet, the accumulator is deemed to have expired and the investor will not be able to continue buying the underlying equity although the investor would still be entitled to the shares which he has already accrued. The underlying shares will be credited to the account (“settled”) on a regular basis, for instance, every month.

Variations of accumulators may include protected periods where accumulation of shares during the protected period will continue regardless of whether the KO level has been triggered. Should the KO level be triggered, the contract will terminate immediately and the investor will receive the number of shares specified under the protected period.

Accumulator may have a “multiplier” condition (also referred to as “gearing” ratio). For those days where the prevailing market price falls below the forward price, the investor will need to purchase multiple times (for example, twice) based on the gearing ratio specified of the underlying share at the forward price.

The investor may enter the transaction on a margin basis, or to utilize Nomura’s credit facilities. As such, the investor will be bound by the terms of the credit facilities, including the requirement to top up payments or to meet margin calls.

#### Payoff Diagram



This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

## 4.2 Investor Profile

- The investor holds a neutral-to-positive view on the underlying equity and is prepared to purchase the equity at the strike or forward price over the tenor of the contract
- Should there be a multiplier factor, the investor is prepared to purchase multiple times of the regular number of shares if the share price falls below the forward price
- The investor is prepared for the removal of the obligation to purchase the equity if the knock-out conditions are triggered
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 4.3 Key Risks

- The investor will be exposed to equity risk, and risk of adverse or unanticipated market, financial or political development risks which may negatively impact underlying equity
- The investor is subject to corporate risks (e.g. market disruptions, mergers, tender offers, public offerings, delisting or any other appropriate actions) that may affect the shares. This includes exposure unanticipated changes in the operating environment such as legal matters, lawsuits, regulatory changes and manmade or natural disasters. Such events may negatively impact the value of the product
- As the product is a privately negotiated instrument with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterparty
- The product will be exposed to unanticipated changes in the operating environment such as legal matters including mergers, acquisitions, lawsuits and regulatory including manmade or natural disaster or incident. Such events may result in substantial costs or increased credit risk of the counterparty
- If there is a “multiplier” (or gearing) condition specified, the investor will need to purchase multiple times of the agreed amount of shares for each day the prevailing market price closes below the forward price. As a result, in a falling market, losses could be further magnified.
- Accumulators typically have a knock-out clause where the contract will terminate once the knock-out clause is triggered thereby capping the upside of the investor
- The accumulator has a specified contract tenor and the investor is expected to fulfil the entire duration of the contract. The investor may not be able to terminate the contract prior to the expiration of the contract. There may be high early termination costs involved should the investor terminate prior to the expiration of the contract
- The investor may enter the transaction on a margin basis, or utilize Nomura’s credit facilities. As such, the investor would be bound by the terms of Nomura’s credit facilities, including the requirements to make top up payments or meet margin calls which can be substantial in poor market conditions. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions
- **Worst-case scenario:** If the price of the underlying equity fall significantly and down to zero, the investor would suffer losses equivalent to the maximum exposure of the contract (equivalent to the maximum total shares multiplied by the forward price). The extent of the loss is magnified if the transaction is entered into on a margin basis. The loss could be multiple times of the initial capital committed

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.

#### 4.4 Scenario Analysis

To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.

##### Sample Terms

Terms	Details	
Underlying	Stock A	
Reference Spot Price (HKD)	60.00	
Forward Price (HKD)	51.4140	85.69% of spot price
Knock-out Barrier (HKD)	63.0000	105% of spot price
Shares Per Day	1,000	
Maximum Accumulation Days	250 days	
Gearing Ratio	2	
Maximum Total Shares without gearing	250,000	
Maximum Total Shares with gearing	500,000	
Notional Amount without gearing and based on strike (HKD)	12,853,500	
Notional Amount with gearing and based on strike (HKD)	25,707,000	
Protected Period	20 days	

The investor in the above product has a neutral-to-positive view on the underlying share (Stock A) and is prepared to purchase the daily shares per day at the forward price for the life of the contract. The investor is prepared to purchase two times the number of shares each day *if* the share price closes below the forward price as the investor may hold a positive view on the medium-to-long term basis. The investor wishes to deal in the product on a margin basis and is able to provide additional collateral in the event of a margin call.

##### 4.4.1 Scenario (a): No Knock-out and Official Closing Price on Each Scheduled Day is Trading Above the Forward Price

In the first scenario, no knock-out event has occurred and the official closing price on each scheduled trading day is above the forward price. Over the one year period, the investor would accumulate 250,000 shares (250 (number of days) x 1000 (shares per day)).

For illustration purpose, we assume that all shares are held until the end of the contract and sold at the final price and the profit and loss is indicated as below. Profit/Loss is calculated as the below formula (Final price – Forward Price) x No of Shares Accumulated.

Final Price (as a % of Reference Spot Price)	Final Price (HKD)	No. of Shares Accumulated	Profit/(Loss) (HKD)
85.69%	51.4140	250,000	0.00
92.00%	55.2000	250,000	946,500
98.00%	58.8000	250,000	1,846,500
104.00%	62.4000	250,000	2,746,500

#### 4.4.2 Scenario (b): No Knock-Out and Closing Price on Each Scheduled Day is Trading Below the Forward Price

In the second scenario, no knock-out event has occurred and the official closing price on each scheduled trading day is below the forward price. Over the one year period, the investor would accumulate 500,000 shares (250 (number of days) x 1000 (shares per day) x2 (gearing ratio)).

For illustration purpose, we assume that all shares are held until the end of the contract and sold at the final price and the profit and loss is indicated as below. Profit/Loss is calculated as the below formula (Final price – Forward Price) x No of Shares Accumulated.

Final Price (as a % of Reference Spot Price)	Final Price (HKD)	No. of Shares Accumulated	Profit/(Loss) (HKD)
80.69%	48.4140	500,000	(1,500,000)
75.69%	45.4140	500,000	(3,000,000)
70.69%	42.4140	500,000	(4,500,000)
65.69%	39.4140	500,000	(6,000,000)
–	–	–	–
15.69%	9.4140	500,000	(21,000,000)
10.69%	6.4140	500,000	(22,500,000)
5.69%	3.4140	500,000	(24,000,000)
0.69%	0.4140	500,000	(25,500,000)
0.00%	0.0000	500,000	(25,707,000)

#### 4.4.3 Scenario (c): Assuming the Knock-Out Event has Occurred on Day 10 During the Protected Period

In the final scenario, a knock-out event has occurred on day 10 during the protected period. The investor would receive 20,000 shares (20 x 1000 shares) as the protected period is the first 20 days after the inception of the contract.

For illustration purpose, we assume that all shares are held until delivery of the shares after knock-out and sold at the final price and the profit and loss is indicated as below. Profit/Loss is calculated as the below formula (Final price – Forward Price) x No of Shares Accumulated.

<b>Final Price (as a % of Reference Spot Price)</b>	<b>Final Price (HKD)</b>	<b>No. of Shares Accumulated</b>	<b>Profit/(Loss) (HKD)</b>
120.00%	72.0000	20,000	411,720
117.00%	70.2000	20,000	375,720
114.00%	68.4000	20,000	339,720
111.00%	66.6000	20,000	303,720
108.00%	64.8000	20,000	267,720
105.00%	63.0000	20,000	231,720
100.00%	60.0000	20,000	171,720

## 5. Equity Decumulator



### 5.1 Description

The over-the-counter (OTC) equity decumulator is a contract where the investor will be obliged to sell the underlying equity at a specified forward (alternatively referred to as “strike”) price for the duration of the contract as long as the closing price is above the knock-out trigger (“KO level”).

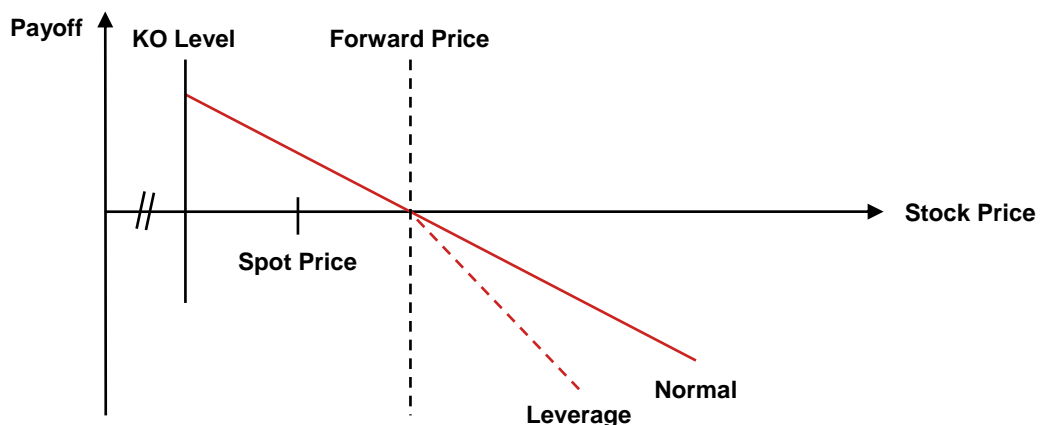
The forward price is typically set above the prevailing market price while the KO level is set below the prevailing market price. Once the knock-out price is triggered according to the terms set out in the term-sheet, the decumulator is deemed to have expired and the investor will not be able to continue selling the underlying equity.

Variations of decumulators may include protected periods where decumulation of shares will continue during the protected period regardless of whether the KO level has been triggered. Should the KO level be triggered, the contract will terminate immediately but the investor will be required to sell the number of shares specified in respect of the whole of the protected period.

Decumulator may have a “multiplier” condition (also referred to as “gearing” ratio). For those days where the prevailing market price rises above the forward price, the investor will need to sell multiple times (based on the gearing ratio specified) of the underlying share at the forward price.

To trade in Covered Decumulators, the investor will be required to hold the maximum amount of underlying shares (assuming full gearing) in his/her portfolio at the time of trade. The maximum number (assuming full gearing) of shares left to be sold will be blocked from further transactions in the investor’s portfolio until the next delivery date where the maximum number of underlying shares left to be sold will be recalculated and blocked. In contrast, when an investor enters into a Naked Decumulator, the investor may not be holding the maximum amount of underlying shares at the point of trade. As the investor would need to acquire the shares to be delivered or settle in the cash equivalent, the risk is magnified as the price of the underlying equity may rise infinitely beyond the strike or forward price.

#### Payoff Diagram



This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the

assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

## 5.2 Investor Profile

- The investor holds a neutral-to-negative view on the underlying equity and is prepared to sell the equity at the strike or forward price over the tenor of the contract
- Should there be a multiplier factor, the investor is prepared to sell multiple times of the regular number of shares if the share price rises above the forward price
- The investor is prepared for the removal of the obligation to sell the underlying equity at the strike/forward price removed if the knock-out condition is triggered
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 5.3 Key Risks

- The investor will be exposed to equity risk, and risk of adverse or unanticipated market, financial or political development risks which may negatively impact underlying equity
- The investor is subject to corporate risks (e.g. market disruptions, mergers, tender offers, public offerings, delisting or any other appropriate actions) that may affect the shares
- As the product is a privately negotiated instrument with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterparty
- The product will be exposed to unanticipated changes in the operating environment such as legal matters including mergers, acquisitions, lawsuits and regulatory including manmade or natural disaster or incident. Such events may negatively impact the value of the product and/or result in substantial costs or increased credit risk of the counterparty
- If there is a “multiplier” (or gearing) condition specified, the investor will need to sell multiple times of the agreed amount of shares for each day the prevailing market price closes above the forward price. As a result, losses could be further magnified
- A Decumulator typically has a knock-out clause where the contract will terminate once the knock-out clause is triggered thereby capping the upside for the investor
- A Decumulator has a specified contract tenor and the investor is expected to fulfil the entire duration of the contract. The investor may not be able to terminate the contract prior to the expiration of the contract. There may be high early termination costs involved should the investor terminate prior to the expiration of the contract.
- The investor may enter the transaction on a margin basis, or utilize Nomura’s credit facilities. As such, the investor will be bound by the terms of Nomura’s credit facilities, including the requirements to make top up payments or meet margin calls which can be substantial in poor market conditions. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions
- **Worst-Case Scenario:** Given the investor’s positions in the underlying shares, the opportunity cost will increase as prices of the underlying equities rise. The extent of loss is magnified if the transaction is entered into on a margin basis. The loss could be multiple times of the initial capital committed.

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.



#### 5.4 Naked Decumulator

The investor may enter the transaction on a margin basis, or utilize Nomura's credit facilities. As such, the investor will be bound by the terms of Nomura's credit facilities, including the requirements to make top up payments or meet margin calls which can be substantial in poor market conditions. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions.

The investor should be aware that in certain circumstances, the realized loss may be greater than anticipated. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

For Naked Decumulators, the investor will not be required to have the maximum amount of underlying shares (assuming full gearing) in his/her portfolio at the time of trade. However, if the investor does not have the requisite number of shares on any fixing date and/or fails to deliver the requisite number of shares within 2 days from any fixing date or such other period that Nomura may determine from time to time, Nomura may take such steps that Nomura deems necessary at its sole discretion to ensure that the delivery obligation is met on the corresponding settlement date or such other later settlement date. Such steps shall include, but are not limited to, the exercise of Nomura's rights under the terms of the credit facilities granted to the investor and / or the security provided to Nomura for the said facilities to buy-in the underlying shares for the account of the investor.

The observation/settlement cycle for a Naked Decumulator is 5 days from the fixing date (i.e. T+5) instead of the standard market norm of T+2 for a Covered Decumulator. The longer settlement cycle is meant for Nomura to facilitate the procurement of the requisite number of shares to fulfil the investor's delivery obligations on each settlement date.

#### 5.5 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

### Sample Terms

Terms	Details	
Underlying	Stock A	
Reference Spot Price (JPY)	7200.0000	
Forward Price (JPY)	7972.5600	110.73% of spot price
Knock-out Barrier (JPY)	6768.0000	94.00% of spot price
Shares Per Day	80	
Maximum Decumulation Days	250 days	
Gearing Ratio	2	
Maximum Total Shares without gearing	20,000	
Maximum Total Shares with gearing	40,000	
Notional Amount without gearing and based on strike (JPY)	159,451,200	
Notional Amount with gearing and based on strike (JPY)	318,902,400	
Protected Period	20 days	

The investor in the above product has a neutral-to-negative view on the underlying share (Stock A) and is prepared to sell the daily shares per day at the forward price for the life of the contract. The investor is prepared to sell two times the number of shares each day if the share price closes above the forward price as the investor may hold a negative view on the medium-to-long term basis. If the investor enters into a Naked Decumulator on a margin basis, the investor wishes to deal in the product on a margin basis and is able to provide additional collateral in the event of a margin call.

#### 5.5.1 Scenario (a): No Knock-Out and Official Closing Price on Each Scheduled Day is Trading Above the Forward Price

In the first scenario, no knock-out event has occurred and the official closing price on each scheduled trading day is above the forward price. Over the one year period, the investor would sell 40,000 shares (250 (number of days) x 80 (shares per day) x 2 (gearing ratio)).

For illustration purpose, we assume that all the shares are sold at the Forward Price. Profit/Loss is calculated as the below formula (Forward Price - Final price) x No of Shares Sold.

Final Price (as a % of Reference Spot Price)	Final Price (JPY)	No. of Shares Decumulated/Sold	Profit/(Loss) (JPY)
128.73%	9268.5600	40,000	(51,840,000)
127.73%	9196.5600	40,000	(48,960,000)
126.73%	9124.5600	40,000	(46,080,000)
125.73%	9052.5600	40,000	(43,200,000)
–	–	–	–

Final Price (as a % of Reference Spot Price)	Final Price (JPY)	No. of Shares Decumulated/Sold	Profit/(Loss) (JPY)
114.73%	8260.5600	40,000	(11,520,000)
111.73%	8044.5600	40,000	(2,880,000)

### 5.5.2 Scenario (b): No Knock-Out and Closing Price on Each Scheduled Day is Trading Below the Forward Price

In the second scenario, no knock-out event has occurred and the official closing price on each scheduled trading day is *below* the forward price. Over the one year period, the investor would sell 20,000 shares (250 (number of days) x 80 (shares per day)).

For illustration purpose, we assume that all the shares are sold at the Forward Price. Profit/Loss is calculated as the below formula (Forward Price - Final price) x No of Shares Sold.

Final Price (as a % of Reference Spot Price)	Final Price (JPY)	No. of Shares Decumulated/sold	Profit/(Loss) (JPY)
110.73%	7972.5600	20,000	0
105.00%	7560.0000	20,000	8,251,200
100.00%	7200.0000	20,000	15,451,200
95.00%	6840.0000	20,000	22,651,200

### 5.5.3 Scenario (c): Assuming the knock-out event has occurred on trading day 17 during the protected period

In the final scenario, a knock-out event has occurred on trading day 17 during the protected period. As the protected period is the first 20 days after the inception of the contract, the investor would sell 1,600 shares (20 x 80 shares).

For illustration purpose, we assume that all the shares are sold at the Forward Price. Profit/Loss is calculated as the below formula (Forward Price - Final price) x No of Shares Sold.

Final Price (as a % of Reference Spot Price)	Final Price (JPY)	No. of Shares Decumulated/sold	Profit/(Loss) (JPY)
96.00%	6912.0000	1,600	1,696,896
95.00%	6840.0000	1,600	1,812,096
94.00%	6768.0000	1,600	1,927,296
93.00%	6696.0000	1,600	2,042,496
92.00%	6624.0000	1,600	2,157,696
91.00%	6552.0000	1,600	2,272,896
90.00%	6480.0000	1,600	2,388,096
89.00%	6408.0000	1,600	2,503,296

## 6. Interest Rate Swap



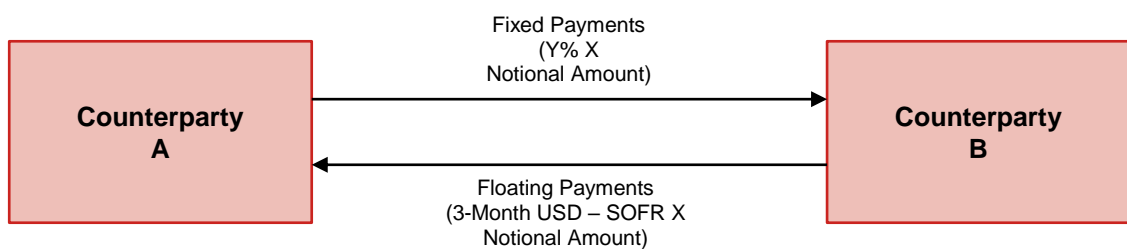
Product Risk Rating

### 6.1 Description

An Interest Rate Swap (IRS) is traded as an over-the-counter (OTC) derivative based financial instrument. In an IRS, each counterparty agrees to pay either a fixed or floating rate on a Notional Amount (principal) denominated in a particular currency to the other party at periodic intervals over a specified period of time. The notional amount is typically not swapped, paid or exchanged.

The most common interest rate swap is where one counterparty A pays a fixed rate to counterparty B while the counterparty B pays a floating rate to counterparty A. The fixed rate is established at the beginning of the transaction, while the floating rate is based on a reference rate determined on periodic reset dates. Reset dates refer to the periodic dates where the interest rates are fixed for interest rate calculation purpose.

The counterparty that pays the fixed interest rate leg is typically termed as the “payer” while the party who receives the fixed interest rate leg is typically termed as a “receiver”.



This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

### 6.2 Investor Profile

- The investor seeks to alter his interest exposure, based on underlying assets/liabilities and interest rate view, and/or hedge and/or cash flow requirements
- The investor who enters into the IRS as the payer, may wish to fix the reference interest rate on their liability or swap a fixed rate bond into a floating rate bond if he investor takes a view that the reference interest rates will rise
- The investor who enters into the IRS as the receiver may wish to have the reference interest rate on their liability converted to a floating basis or swap a floating rate bond into a fixed rate bond if the investor takes the view that the reference interest rates will fall
- Through an IRS, the investor is given the flexibility to align interest rate swap arrangements (notional amount, tenor, coupon payment frequency, reset/payment dates) with his interest rate views, to hedge floating assets/liabilities or reliably meet cash-flow requirements
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

### 6.3 Key Risks

- The investor will be exposed to interest rate risk, specific news and events related to interest rate which could potentially be negative to the IRS. The investor may pay or receive a less advantageous interest rate than available, in the event where interest rate moves in an unfavourable direction
- The investor may be subjected to currency risks for transactions that have any currency as an underlying
- The investor can terminate or vary the IRS early but there may be a cost resulting from a possible early termination or variation payment
- As the product is a privately negotiated instrument with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterpart
- The investor may enter the IRS transaction on a margin basis. As such, the investor would be bound by the terms of credit facilities, including the requirements to make top up payments or meet margin calls. Trading on margin basis could increase the risks significantly and magnify the losses on the product. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions
- Generally, all over-the-counter (OTC) derivative transactions involve the risk of adverse or unanticipated market developments, risk of counterparty default, risk of illiquidity and other risks, and may involve the risk of loss due to default or potential default by the counterparty. Substantial losses may occur as a result
- The investor may lose his entire stake or incur an unlimited loss. As the transaction described herein includes leverage, embedded options forwards or futures, the exchange of currencies, or other structural elements, the value of the transaction, and the exposure, could change more quickly, more frequently or by a greater magnitude (or all three) relative to other derivative transactions or cash market instrument

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.

### 6.4 Example

#### Indicative Terms and Conditions

<b>Counterparty A</b>	Client A
<b>Counterparty B</b>	Nomura Singapore Limited ("NSL")
<b>Currency</b>	USD
<b>Notional Amount</b>	US\$10m
<b>Tenor</b>	5 Years
<b>Day Count Fraction</b>	Interest Payment Dates
<b>Party A Payment Amount</b>	Fixed rate of 1.70% p.a.
<b>Party B Payment Amount</b>	Floating rate of 3 Month USD-SOFR p.a.
<b>Payment Frequency</b>	Quarterly

## 6.5 Scenario Analysis

To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.

### 6.5.1 Scenario (a): Short-Term Rate (US\$3m SOFR) Remains Constant Throughout the Contract Tenor of 5 Years

In the first scenario, floating short-term rates receivable by the client are assumed to remain unchanged over the contract tenor of 5 years, at 0.22%.

For illustration purpose, we assume that the client holds the product till maturity and profit/loss is indicated as below. Profit/Loss is calculated as the below formula (Fixed Payment (%) – Floating Payment (%)) \* Notional Amount.

Year	Client Pays Fixed Payment (A)	Client Receives Floating Payment (B)	Client's Profit/(Loss) (%) (A) – (B)	Client's Profit/(Loss) (US\$)
1	1.70% p.a.	0.22% p.a.	(1.48%) p.a.	(148,000)
2	1.70% p.a.	0.22% p.a.	(1.48%) p.a.	(148,000)
3	1.70% p.a.	0.22% p.a.	(1.48%) p.a.	(148,000)
4	1.70% p.a.	0.22% p.a.	(1.48%) p.a.	(148,000)
5	1.70% p.a.	0.22% p.a.	(1.48%) p.a.	(148,000)
<i>Total P&amp;L (USD)</i>				<b>(740,000)</b>

### 6.5.2 Scenario (b): Short-Term Rate (US\$3m SOFR) Rises 1% Incrementally Each Year Throughout the Contract Tenor of 5 Years

In the second scenario, floating short-term rates receivable by the client is expected to rise 1% year-on-year throughout the contract tenor of 5 years.

For illustration purpose, we assume that the client holds the product till maturity and profit/loss is indicated as below. Assume that the floating payment interest rates are the average interest rates over the period. Profit/Loss is calculated as the below formula (Fixed Payment (%) – Floating Payment (%)) \* Notional Amount.

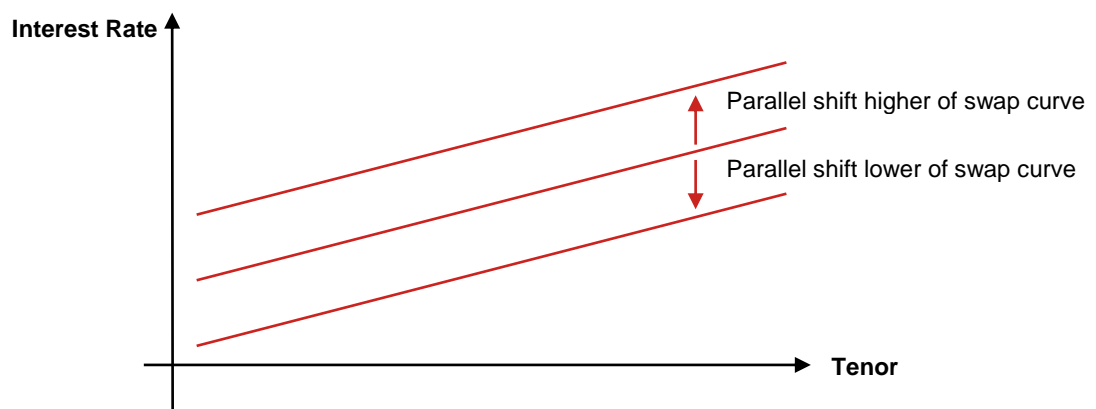
Year	Client Pays Fixed Payment (A)	Client Receives Floating Payment (B)	Client's Profit/(Loss) (%) (A) – (B)	Client's Profit/(Loss) (US\$)
1	1.70% p.a.	0.22% p.a.	-1.48% p.a.	(148,000)
2	1.70% p.a.	1.22% p.a.	-0.48% p.a.	(48,000)
3	1.70% p.a.	2.22% p.a.	0.52% p.a.	52,000
4	1.70% p.a.	3.22% p.a.	1.52% p.a.	152,000
5	1.70% p.a.	4.22% p.a.	2.52% p.a.	252,000
<i>Total P&amp;L</i>				<b>260,000</b>

### 6.5.3 Impact of Parallel Shift in USD Swap Curve on value of IRS

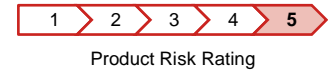
The mark-to-market for an IRS will change during the life of the contract.

Assuming a parallel shift in the USD swap curve where interest rates across all maturities rise or fall by the same amount, the following is a summary of its effect on interest rates.

	<b>Client is a payer of fixed interest rates (and receiver of floating interest rates)</b>	<b>Client is a receiver of fixed interest rates (and payer of floating interest rates)</b>
<ul style="list-style-type: none"> <li>Parallel shift in interest rates higher, all else being equal</li> </ul>	<ul style="list-style-type: none"> <li>MTM value of IRS contract increases as the floating interest payments received would increase whereas the fixed interest payment the client pays remains the same</li> </ul>	<ul style="list-style-type: none"> <li>MTM value of IRS contract decreases as the floating interest payments would increase whereas the fixed interest payment the client receives remains the same</li> </ul>
<ul style="list-style-type: none"> <li>Parallel shift in interest rates lower, all else being equal</li> </ul>	<ul style="list-style-type: none"> <li>MTM value of IRS contract decreases as the floating interest payments received would decrease whereas the fixed interest payment the client pays remains the same.</li> </ul>	<ul style="list-style-type: none"> <li>MTM value of IRS contract increases as the floating interest payments would decrease whereas the fixed interest payment the client receives remains the same</li> </ul>



## 7. Interest Rate Caps, Floors and Collars



### 7.1 Description

Interest Rate Caps, Floors and Collars are derivatives on interest rates that can be used for hedging or speculative purposes.

The Interest Rate Cap is a derivative in which the purchaser receives payments at the end of each period in which the interest rate exceeds a predetermined level. As such, the purchase of the Cap protects the purchaser against rising interest rates. When used as a hedging tool, the Cap Rate sets a “worst case rate” that the purchaser will be exposed to over the term of the Cap.

Conversely, the Interest Rate Floor is a derivative in which the buyer receives payments at the end of each period that the interest rate falls below a predetermined level. As such, the purchase of a Floor protects the purchaser from a decline in interest rates. When used as a hedging tool, the Floor Rate sets a “best case rate” that the purchaser will be exposed to over the term of the Floor.

The Interest Rate Collar is a simultaneous purchase of an Interest Rate Cap and sale of an Interest Rate Floor on the same index for the same maturity and notional principal amount. The purchase of a Collar protects the purchaser against rising rates, but gives up some of the benefit if interest rates decline.

This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

**From the perspective of a purchaser looking to hedge against interest rate moves:**

	Cap	Floor	Collar
<b>Advantage</b>	<ul style="list-style-type: none"> <li>Creates ceiling on rates</li> </ul>	<ul style="list-style-type: none"> <li>Creates floor on rates</li> </ul>	<ul style="list-style-type: none"> <li>Creates ceiling and floor on rates</li> </ul>
<b>Disadvantage</b>	<ul style="list-style-type: none"> <li>Up-front premium as a cost to enter the contract</li> </ul>	<ul style="list-style-type: none"> <li>Up-front premium as a cost to enter the contract</li> </ul>	<ul style="list-style-type: none"> <li>Gives up potential benefit of favourable rate movements below Floor rate or above Cap rate</li> </ul>

### 7.2 Investor Profile

- The investor may use the product to hedge his exposure to interest rate fluctuations or speculate on interest rate movements
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

### 7.3 Key Risks

- The investor will be exposed to interest rate risk, specific news and events related to interest rate which could potentially be negative to the Caps, Floors and Collars. The investor may pay or receive a



less advantageous interest rate than available, in the event where interest rate moves in an unfavourable direction

- The investor can terminate or vary Caps, Floors or Collars early but there will be a cost resulting from a possible early termination or variation payment
- The investor may enter the Caps, Floors and Collars transaction on a margin basis, or utilizing Nomura's credit facilities. As such, the investor would be bound by the terms of Nomura's credit facilities, including the requirements to make top up payments or meet margin calls. Trading on margin basis could increase the risks significantly and magnify the losses on the product. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions
- As the product is a privately negotiated instrument with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterparty
- Generally, all over-the-counter (OTC) derivative transactions involve the risk of adverse or unanticipated market developments, risk of counterparty default, risk of illiquidity and other risks and may involve the risk of loss due to default or potential default by the counterparty
- Counterparties may lose all their capital invested or incur an unlimited loss. If the transaction described herein includes leverage, embedded options forwards or futures, the exchange of currencies, or other structural elements, the value of the transaction, and the exposure, could change more quickly, more frequently or by a greater magnitude (or all three) relative to other derivative transactions or cash market instruments

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.

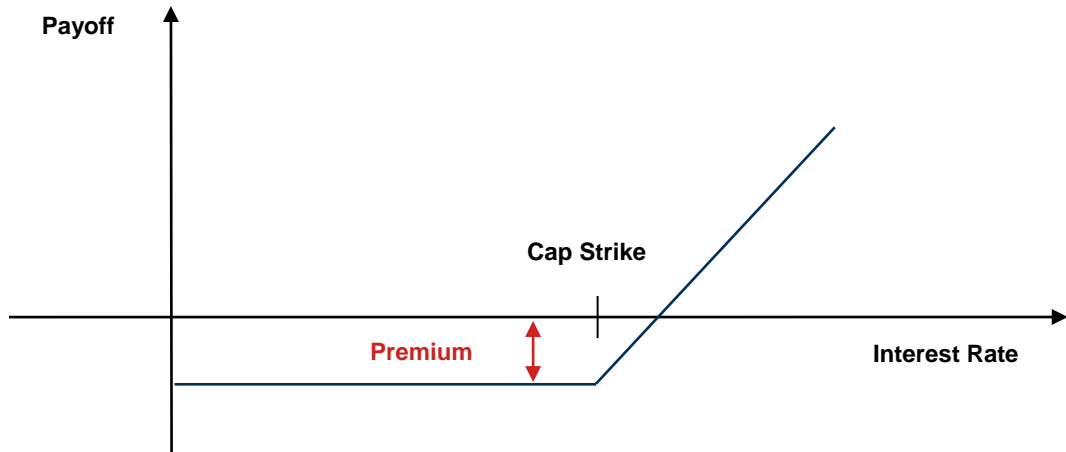
## 7.4 Interest Rate Caps

### 7.4.1 Description

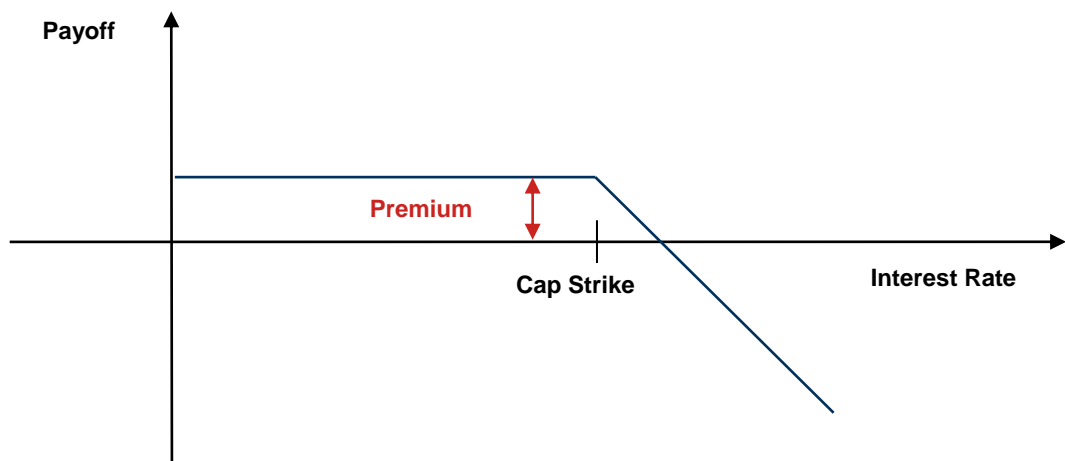
An Interest Rate Cap is a derivative in which the buyer receives payments at the end of each period where the interest rate exceeds the agreed cap strike rate. Used as a hedge, this limits the buyer's interest rate exposure to a maximum limit. The seller would have the obligation to make payments at the end of each period where the interest rate exceeds the agreed cap strike rate.

Caps can be tailored by selecting from a range of rollover frequencies, terms, strike rate and face values over the term.

## Buy Single Cap Payoff Diagram



## Sell Single Cap Payoff Diagram



### 7.4.2 Investor Profile

- The investor may use the product to hedge his exposure to interest rate fluctuations or speculate on interest rate movements
- The buyer of the Interest Rate Cap is taking a view that the interest rate will rise above the cap strike. The seller of the Interest Rate Cap conversely is taking a view that the interest rate will not rise above the cap
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

### 7.4.3 Example

#### Sample Terms

<b>Counterparty A</b>	Nomura Singapore Limited (“NSL”)
<b>Counterparty B</b>	Client
<b>Currency</b>	USD
<b>Notional Amount</b>	US\$10m
<b>Tenor</b>	5 Years
<b>Day Count Fraction</b>	Act/360, Adjusted
<b>Cap Strike Rate</b>	1.85%
<b>Premium</b>	3% If Counterparty B is the purchaser, Counterparty B pays Counterparty A , If Counterparty B is the seller, Counterparty B receives from Counterparty A
<b>Floating Amount Payer</b>	If Counterparty B is the purchaser, Counterparty A pays the floating amount, If Counterparty B is the seller, Counterparty B pays the floating amount
<b>Floating Amount</b>	With respect to each Floating Amount Payer Payment Date, an amount as determined by the Calculation Agent on each Value Date in accordance with the following: <ul style="list-style-type: none"> <li>■ If 3-month USD-SOFR on Value Date is higher than or equal to Cap Strike Rate:  <math display="block">\text{Notional Amount} \times (3\text{-month USD SOFR} - \text{Cap strike rate}) \times \text{Day count Fraction}</math> </li> <li>Otherwise, zero</li> </ul>
<b>Floating Amount Payment Dates</b>	Quarterly each year

### 7.4.4 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

#### Scenario (a): Buy an Interest Rate Cap

In the first scenario, the investor buys an Interest Rate Cap to receive payments at the end of each period. The investor has the right to receive periodical cash flow equal to the difference between the market rate and the cap strike rate. In exchange, the investor is required to pay a non-refundable premium.

**With respect to each Floating Amount Payment Date**, the payment amount as determined by the Calculation Agent on each Value Date is shown below:

3 month USD-SOFR $\geq$ Cap Strike Rate	3 month USD-SOFR $<$ Cap Strike Rate
<ul style="list-style-type: none"> <li>Investor receives Notional Amount x (3 month USD-SOFR – Cap Strike Rate) x Day Count Fraction</li> </ul>	<ul style="list-style-type: none"> <li>Investor receives zero payout from the product</li> </ul>

(A) 3-month SOFR	(B) Cap Strike Rate	(C) Client's Profit/(Loss) (%) (A) – (B)	(D) Client's Profit/(Loss) (US\$) (C) * 90/360
3.00%	1.85% p.a.	1.15%	28,750
2.50%	1.85% p.a.	0.65%	16,250
1.85%	1.85% p.a.	0.00%	0
1.50%	1.85% p.a.	0.00%	0
1.00%	1.85% p.a.	0.00%	0

#### Scenario (b): Sell an Interest Rate Cap

In the second scenario, the investor sells an Interest Rate Cap and receives a premium in exchange for the obligation to pay the counterparty the floating payment.

**With respect to each Floating Amount Payment Date**, the payment amount as determined by the Calculation Agent on each Value Date is shown below:

3 month USD-SOFR $\geq$ Cap Strike Rate	3 month USD-SOFR $<$ Cap Strike Rate
<ul style="list-style-type: none"> <li>Investor will incur losses based on the difference between the market and strike level, and is subject to unlimited losses should the market rate rise infinitely</li> <li>Investor will have to pay the floating amount equal to Notional Amount x (3 month USD-SOFR – Cap Strike Rate) x Day Count Fraction x Day Count Fraction</li> </ul>	<ul style="list-style-type: none"> <li>Investor pays nil</li> </ul>

(A) 3-month SOFR	(B) Cap Strike Rate	(C) Client's Profit/(Loss) (%) (B) – (A)	(D) Client's Profit/(Loss) (US\$) (C) * 90/360
3.00%	1.85% p.a.	(1.15%)	(28,750)
2.50%	1.85% p.a.	(0.65%)	(16,250)
1.85%	1.85% p.a.	0.00%	0
1.50%	1.85% p.a.	0.00%	0
1.00%	1.85% p.a.	0.00%	0

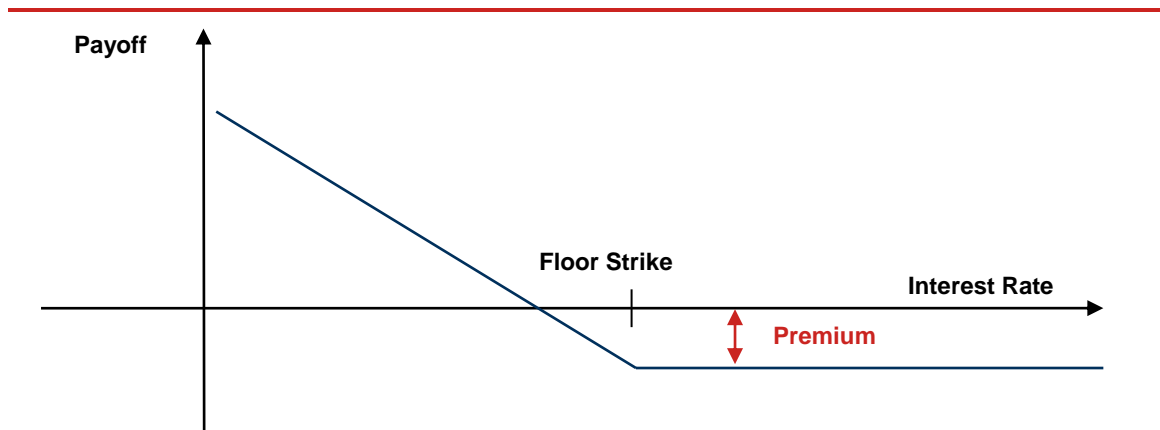
## 7.5 Interest Rate Floors

### 7.5.1 Description

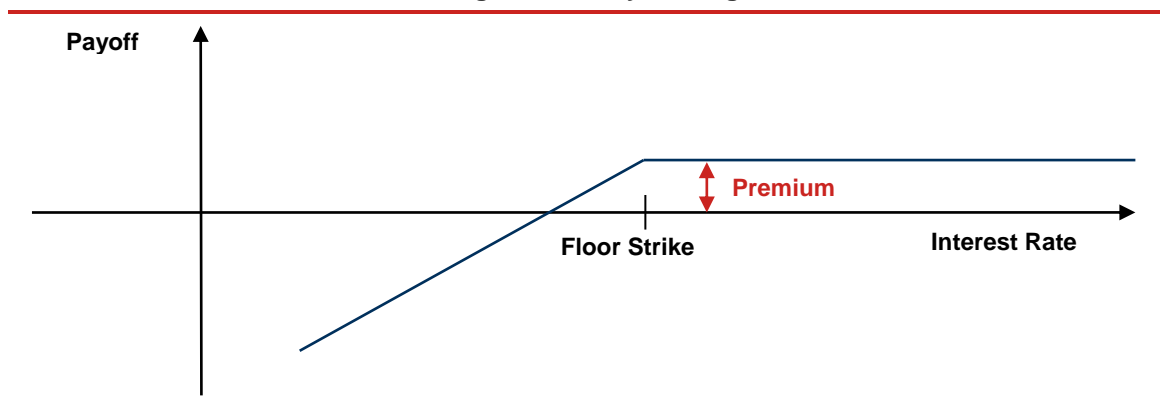
Interest Rate Floor is a derivative in which the buyer receives payments at the end of each period where the interest rate falls below the agreed floor strike rate. Used as a hedging tool, this limits the buyer's interest rate exposure to a minimum limit. The seller would have the obligation to make payments at the end of each period where the interest rate falls below the agreed floor strike rate.

Floors can be tailored by selecting from a range of rollover frequencies, terms, strike rate and face values over the term.

**Buy Single Floor Payoff Diagram**



**Sell Single Floor Payoff Diagram**



### 7.5.2 Investor Profile

- The investor may use the product to hedge his exposure to interest rate fluctuations or speculate on interest rate movements
- The buyer of the Interest Rate Floor is taking a view that the interest rate will fall below the floor strike rate. The seller of the Interest Rate Floor conversely is taking a view that the interest rate will not fall below the floor strike rate
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

### 7.5.3 Example

#### Sample Terms

<b>Counterparty A</b>	Nomura Singapore Limited (“NSL”)
<b>Counterparty B</b>	Client
<b>Currency</b>	USD
<b>Notional Amount</b>	US\$10m
<b>Tenor</b>	5 Years
<b>Day Count Fraction</b>	Act/360, Adjusted
<b>Floor Strike Rate</b>	1.85%
<b>Premium</b>	3% If Counterparty B is the purchaser, Counterparty B pays Counterparty A , If Counterparty B is the seller, Counterparty B receives from Counterparty A
<b>Floating Amount Payer</b>	If Counterparty B is the purchaser, Counterparty A pays the floating amount, If Counterparty B is the seller, Counterparty B pays the floating amount
<b>Floating Amount</b>	With respect to each Floating Amount Payer Payment Date, an amount as determined by the Calculation Agent on each Value Date in accordance with the following: <ul style="list-style-type: none"> <li>■ If 3-month USD-SOFR on Value Date is lower than or equal to Cap Strike Rate:</li> <li>■ Notional Amount x (Floor Strike rate – 3 month USD SOFR) x Day count Fraction, Otherwise, zero</li> </ul>
<b>Floating Amount Payment Dates</b>	Quarterly each year

### 7.5.4 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

#### Scenario (a): Buy an Interest Rate Floor

In the first scenario, the investor buys an Interest Rate Floor to receive a periodical cash flow equal to the difference between the floor strike rate and the market rate, effectively placing a minimum limit on interest payments on floating rate debt. In exchange, the investor is required to pay a non-refundable premium.

**With respect to each Floating Amount Payment Date**, the amount as determined by the Calculation Agent on each Value Date is shown below;

**3 month USD-SOFR  $\geq$  Floor Strike Rate**

- Investor receives zero payout from the product

**3 month USD-SOFR  $<$  Floor Strike Rate**

- Investor receives Notional Amount x (Floor Strike Rate - 3 month USD-SOFR) x Day Count Fraction

(A) 3-month SOFR	(B) Floor Strike Rate	(C) Client's Profit/(Loss) (%) (B) – (A)	(D) Client's Profit/(Loss) (US\$) (C) * 90/360
3.00%	1.85% p.a.	0.00%	0
2.50%	1.85% p.a.	0.00%	0
1.85%	1.85% p.a.	0.00%	0
1.50%	1.85% p.a.	0.35%	8,750
1.00%	1.85% p.a.	0.85%	21,250

**Scenario (b): Sell an Interest Rate Floor**

In the second scenario, the investor sells an Interest Rate Floor and receives a premium for the obligation to pay the counterparty the floating payment.

With respect to each Floating Amount Payer Payment Date, the amount as determined by the Calculation Agent on each Value Date is shown below;

**3 month USD-SOFR  $\geq$  Floor Strike Rate**

- Investor pays nil

**3 month USD-SOFR  $<$  Floor Strike Rate**

- Investor will incur losses based on the difference between the floor strike rate and market level, and is subject to unlimited losses should the market rate fall infinitely
- Investor will have to pay the floating amount equal to Notional Amount x (Floor Strike Rate - 3 month USD-SOFR) x Day Count Fraction

(A) 3-month SOFR	(B) Floor Strike Rate	(C) Client's Profit/(Loss) (%) (B) – (A)	(D) Client's Profit/(Loss) (US\$) (C) * 90/360
3.00%	1.85% p.a.	0.00%	0
2.50%	1.85% p.a.	0.00%	0
1.85%	1.85% p.a.	0.00%	0
1.50%	1.85% p.a.	(0.35%)	(8,750)
1.00%	1.85% p.a.	(0.85%)	(21,250)

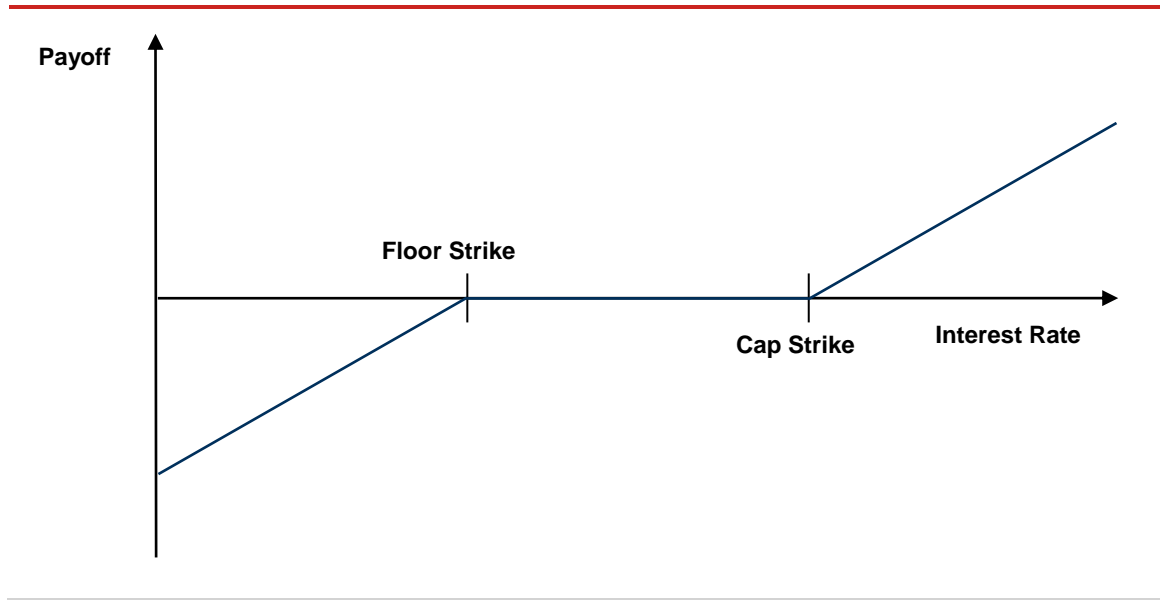
**7.6 Interest Rate Collars**

**7.6.1 Description**

An Interest Rate Collar is constructed by taking a long position in an Interest Rate Cap and a short position in an Interest Rate Floor. The investor purchases an Interest Rate Cap for a premium, which cost is fully or partially offset by the premium received from selling an Interest Rate Floor. The investor would receive payments at the end of each period in which the interest rate is above the agreed cap strike rate while having the obligation to make payments at the end of each period where the interest rate falls below the agreed floor strike rate.

Where a zero cost structure is created, there is no up-front premium payable for the Collar. However, if the investor wishes to select a different cap or floor strike rate, an up-front non-refundable premium may be payable.

**Zero-Cost Single Interest Rate Collar Payoff Diagram**



**7.6.2 Investor Profile**

- The investor may use the product to hedge his exposure to interest rate fluctuations or speculate on interest rate movements
- The investor wishes to hedge rising interest rates on an underlying liability while taking the view that the interest rates may not fall below the floor strike rate. The investor may also be taking a view that the interest rates will rise while taking on the risk of falling interest rates
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

**7.6.3 Example**

**Sample Terms**

<b>Counterparty A</b>	Nomura Singapore Limited (“NSL”)
<b>Counterparty B</b>	Client



### Sample Terms

<b>Currency</b>	USD
<b>Notional Amount</b>	US\$10m
<b>Tenor</b>	5 Years
<b>Day Count Fraction</b>	Act/360, Adjusted
<b>Floor Strike Rate</b>	1.50%
<b>Cap Strike Rate</b>	2.10%
<b>Premium Payer</b>	Not applicable
<b>Floating Amount Payer</b>	Counterparty A or Counterparty B, subject to market conditions
<b>Floating Amount</b>	<p>With respect to each Floating Amount Payer Payment Date, an amount as determined by the Calculation Agent on each Value Date in accordance with the following</p> <ul style="list-style-type: none"> <li>■ If 3-month USD-SOFR on Value Date is higher than or equal to Cap Strike Rate, Party A pays Party B the following amount: Notional Amount x (3 month USD SOFR - Cap Strike rate -) x Day count Fraction,</li> <li>■ If 3-month USD-SOFR on Value Date is lower than or equal to Floor Strike Rate, Party B pays Party A the following amount</li> <li>■ Notional Amount x (Floor Strike rate – 3 month USD SOFR) x Day count Fraction, Otherwise, zero</li> </ul>
<b>Floating Amount Payment Dates</b>	Quarterly each year

#### 7.6.4 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

##### **Scenario (a): 3 Month USD-SOFR Rate on Value Date is Higher Than or Equal To Cap Strike Rate**

In the first scenario, the Interest Rate Cap comes into play. The investor has the right to receive periodic cash flow equal to the difference between the market rate and the cap strike rate. Used as a hedging tool, this effectively places a maximum limit on the net interest payment that the investor would pay on his external floating rate debt.

With respect to each Floating Amount Payment Date, determined by the Calculation Agent on each Value Date, the investor will receive Notional Amount x (3 Month USD-SOFR – Cap Strike Rate) x Day Count Fraction.

**Scenario (b): 3 Month USD-SOFR Rate on Value Date is Lower Than or Equal To Floor Strike Rate**

In the second scenario, the Interest Rate Floor comes into play.

With respect to each Floating Amount Payment Date, determined by the Calculation Agent on each Value Date, the investor will have to pay Notional Amount x (Floor Strike Rate – 3 month USD-SOFR) x Day Count Fraction.

**Scenario (c): 3 Month USD-SOFR Rate Falls Between the Cap Strike Rate, and Floor Strike Rate**

With respect to each Floating Amount Payment Date, determined by the Calculation Agent on each Value Date, where 3 month USD-SOFR falls between Cap Strike Rate, and Floor Strike Rate, the investor will receive zero payment.

	(A) 3-month SOFR	(B) Cap Strike Rate	(C) Floor Strike Rate	(D) Client's Profit/(Loss) (%)	(E) Client's Profit/(Loss) (US\$) (C) * 90/360	(F) Formula
Scenario (a)	3.00%	2.10%	1.50%	0.90%	22,500	(A) – (B)
Scenario (a)	2.50%	2.10%	1.50%	0.40%	10,000	(A) – (B)
Scenario (c)	2.00%	2.10%	1.50%	0.00%	0	
Scenario (c)	1.50%	2.10%	1.50%	0.00%	0	
Scenario (b)	1.00%	2.10%	1.50%	(0.50)%	(12,500)	(A) – (C)
Scenario (b)	0.50%	2.10%	1.50%	(1.00)%	(25,000)	(A) – (C)

## 8. Cross Currency Swap



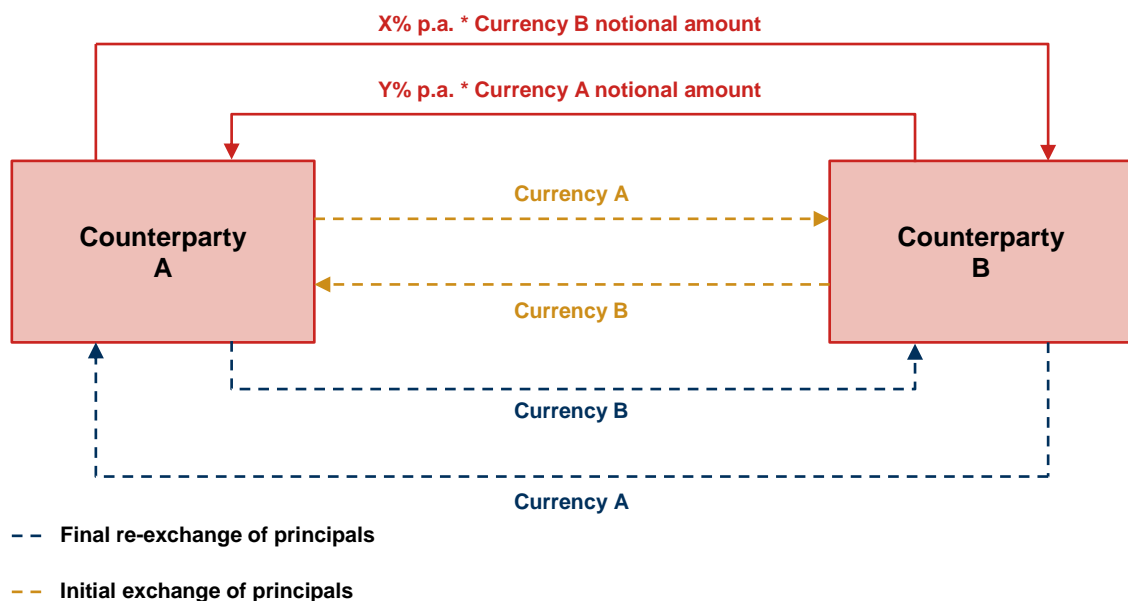
Product Risk Rating

### 8.1 Description

A Cross Currency Swap (CCS) is traded as an over-the-counter (OTC) derivative based financial instrument. CCS is an exchange of differently defined interest rates payable in two different currencies on a fixed nominal amount (principal) between two contracting parties at periodic intervals over a specified period of time. It generally is an exchange of fixed interest rates in one currency for fixed interest rates in another currency. However, either or both interest payments may also be variable. CCS normally involves an exchange of notional.

There are three main types of CCS:

- Floating-for-floating CCS: The interest rates on both legs are floating rates. Such swaps are also called Cross Currency Basis Swap
- Fixed-for-floating CCS: The interest rate on one leg is floating, and the interest rate on the other leg is fixed
- Fixed-for-Fixed CCS: The interest rates on both legs are fixed



This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

The investor who enters into the CCS as counterparty A wishes to hedge against exchange rate fluctuations during the tenor of the swap on currency B as the final exchange rate is fixed. The investor who enters into CCS as counterparty A could also wish to convert his asset cashflow in currency B into an asset cashflow in currency A.

For instance, an investor could have identified a bond that is attractive in GBP (currency B). He would enter into a CCS where he would purchase GBP today in exchange for USD with the counterparty. Periodically, he would need to pay the interest where he would pay interest in GBP while receiving interest in USD. At expiration of the swap, he would sell GBP in exchange for USD.

Taken together, the cashflows from the GBP bond would be converted to USD as his periodic payment of interest in GBP would offset the bond coupon interest received in GBP, leaving the periodic cashflow in USD as his cashflow.

## 8.2 Investor Profile

- The investor seeks to alter the currency and interest rate exposure, based on underlying assets/liabilities, currency or interest rate view, hedge and/or cash flow requirements
- The investor who enters into the CCS as counterparty A wishes to hedge against exchange rate fluctuations on currency B as the final exchange rate is fixed. The investor who enters into CCS as counterparty A could also wish to convert his asset cashflow in currency B into an asset cashflow in currency A
- Conversely an investor who enters into the CCS as counterparty B may wish to hedge against exchange rate fluctuations on currency A as the final exchange rate is fixed. The investor who enters into the CCS as counterparty B could also wish to convert his asset cashflow in currency A into an asset cashflow in currency B
- Through a CCS, the investor is given the flexibility to enter an arrangement which allows him to express his currency and interest rate views and/or to hedge floating assets/liabilities or reliably meet cash-flow requirements in different currencies
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 8.3 Key Risks

- The investor will be exposed to interest rate risk, specific news and events related to interest rate which could potentially be negative to the CCS. The investor may pay or receive a less advantageous interest rate than available, in the event where interest rate moves in an unfavourable direction
- The investor can terminate or vary the CCS early but there may be a cost resulting from a possible early termination or variation payment
- As the product is a privately negotiated instrument with the counterparty, the investor will be exposed to risk due to default or potential default by the reference counterparty
- The investor may enter the CCS transaction on a margin basis. As such, the investor would be bound by the terms of credit facilities, including the requirements to make top up payments or meet margin calls. Trading on margin basis could increase the risks significantly and magnify the losses on the product. Such leveraged activities have specific risks as described in General Product Introductory Material - Section 10 "Introduction to Leveraged Portfolios". It is important for the investor to understand such risks before entering into leveraged transactions. Generally, all over-the-counter (OTC) derivative transactions involve the risk of adverse or unanticipated market developments, risk of counterparty default, risk of illiquidity and other risks, and may involve the risk of loss due to default or potential default by the counterparty. Substantial losses may occur as a result
- The investor may lose his entire stake or incur an unlimited loss. As the transaction described herein includes leverage, embedded options forwards or futures, the exchange of currencies, or other structural elements, the value of the transaction, and the exposure, could change more quickly, more frequently or by a greater magnitude (or all three) relative to other derivative transactions or cash market instruments

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product where the potential gain is limited and losses could potentially be magnified.

## 8.4 Example

### Sample Terms

<b>Counterparty A</b>	Client A
<b>Counterparty B</b>	Nomura Singapore Limited (“NSL”)
<b>Currency</b>	USD
<b>Notional Amount</b>	USD10m
<b>Tenor</b>	5 Years
<b>Initial Notional Exchange</b>	
<b>Initial Exchange Date</b>	1.3619 SGD per USD
<b>Counterparty A Pays</b>	USD Notional Amount
<b>Counterparty B Pays</b>	SGD Notional Amount
<b>Final Notional Exchange</b>	
<b>Counterparty A Pays</b>	SGD Notional Amount
<b>Counterparty B Pays</b>	USD Notional Amount
<b>USD Fixed Rate Payments</b>	
<b>USD Fixed Rate Payer</b>	Party B
<b>USD Fixed Rate</b>	5.00% p.a., semi-annually
<b>SGD Fixed Rate Payments</b>	
<b>SGD Fixed Rate Payer</b>	Party A
<b>SGD Fixed Rate</b>	5.28% p.a., semi-annually
<b>Interest Payment Dates</b>	Semi-annually each year

## 8.5 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

### 8.5.1 Fixing of Payments

#### On the initial exchange,

Counterparty A (Client) will pay USD10,000,000 and receive SGD13,619,000.

#### On each semi-annual interest payment date (including the final interest payment date on maturity date),

Counterparty A (Client) would pay Counterparty B (Nomura) SGD359,541.60 (SGD13,619,000 \* 5.28% \* 180/360).

Counterparty B (Nomura) would pay Counterparty A (Client) USD250,000 (USD10,000,000 \* 5% \* 180/360).

#### On the final exchange,

Counterparty A (Client) would pay Counterparty B (Nomura) SGD13,619,000 and receive USD10,000,000.

## 9. Foreign Exchange (FX)



Product Risk Rating

The foreign exchange rate (forex, FX, or currency market) between two currencies is the rate at which one currency is exchanged for another. The spot exchange rate refers to the current exchange rate. The forward exchange rate refers to an exchange rate that is quoted and traded today but for delivery and payment on a specific future date.

Foreign exchange can be used for settlement, hedging or speculation purposes. For settlement purpose on securities purchase for example, if the investor had purchased Hong Kong securities and requires HKD for settlement but only has USD in the account, the investor would have to sell the USD to purchase the required amount of HKD.

In some cases, FX transactions can be used for hedging. If an individual or a company has future needs of foreign currency to fund projects, buy property or pay school fees etc., given the known sum and time horizon, an FX transaction can be entered now to lock in the current rate of conversion so that the upfront required in home currency can be made certain. As such, a hedge has been put in place.

FX transactions can also be used for speculation purpose when one has a view that a currency will appreciate or depreciate. If one views that the Euro will depreciate in the near future against the USD, then one will sell (short) the Euro today. Conversely, one will buy (long) the Euro and sell the USD now if there is an expectation that the Euro will rise in the future.

FX trading is typically done Over-the-Counter (OTC). OTC trading is done directly between two parties, without any supervision of an exchange. It is contrasted with exchange trading, which occurs via exchanges. In the OTC market, contracts are bilateral, each party has credit risk concerns with respect to the other party.

For a FX conversion, there are two methods of quotations; direct and indirect quotes. In a direct quotation, the quotes are denominated as the number of home (domestic, reference, base) currency per unit of foreign (alternate) currency. Indirect quotation refers to the foreign (alternate) currency price of one unit of home (domestic, reference, base) currency.

For example, if one is based in the US, US\$1.0050 = CHF 1.0000 will be a direct quote and US\$1.0000 = CHF 0.9850 will be an indirect quote.

While the concept of direct and indirect quotes is dependent on where the person is based, the foreign exchange market has quoting conventions that transcend local borders. Below are some standard quotations:

1 EUR = 1.1350 USD (EURUSD)

1 GBP = 1.3150 USD (GBPUSD)

1 AUD = 0.7650 USD (AUDUSD)

1 USD = 100 JPY (USDJPY)

1 USD = 1.2800 CAD (USDCAD)

1 USD = 1.3450 SGD (USDSGD)

### 9.1 Forwards

Generally, a Forward contract gives its holder both the right and full obligation to conduct a transaction involving an underlying currency at a predetermined future date and at a predetermined price. The seller on the other hand, has the obligation to sell the underlying currency at a predetermined future date and at a predetermined price. The future date on which the transaction is to be consummated is the contract's maturity date.

Forward contracts are traded OTC. They are not standardized and can be tailored to the needs of individual investors. Both parties to the contract can privately negotiate and agree on the details of the contract. Swaps are a series of forward contracts used to exchange specified quantities of assets or cash flows at specified times in the future.

One of the common uses of Forward contracts is for investors to hedge certain financial positions against market movements. For example, a Hong Kong based exporter can enter into a foreign exchange Forward contract to hedge its future earnings from the US markets. It can buy a 3 month currency forward contract to lock in its earnings in terms of Hong Kong dollars at a predetermined foreign exchange rate. Thus at the end of the contract, it will receive Hong Kong dollars in cash at the predetermined rate regardless of how the foreign exchange markets move. This reduces earnings fluctuations for the exporter.

Please take note that the risk rating indication above is for FX Forwards only.

This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

Generally, all OTC derivative transactions involve the risk of adverse or unanticipated market developments, risk of counterparty default, risk of illiquidity and other risks, and may involve the risk of loss due to default or potential default by the counterparty. Substantial losses may occur as a result.

## 10. Total Return Swap

### 10.1 Description

A Total Return Swap (TRS) is traded as an over-the-counter (OTC) derivative based financial instrument. It is a contract between two parties to exchange the returns from a financial asset between them. In this agreement, one party makes payments based on a pre-defined rate (which can be fixed or floating) while the other party makes payments based on the total return of an underlying which can be equities, indices, bonds, commodities etc (“Underlying”).

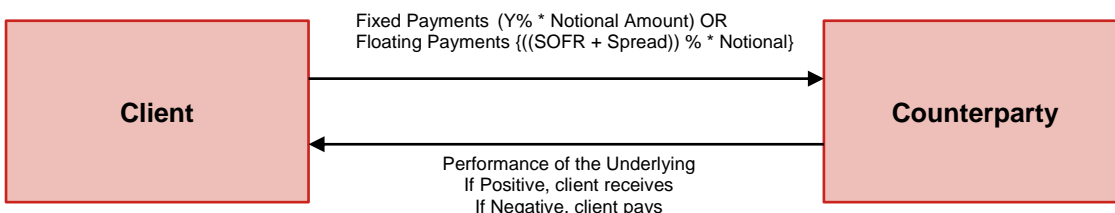
A TRS contract is made up of two parties, i.e. the counterparty and the investor.

If the investor is long (buy) a TRS, the investor will be subject to the performance of the Underlying (receive if the performance is positive, pay if the performance is negative) and pay a periodic interest to the counterparty.

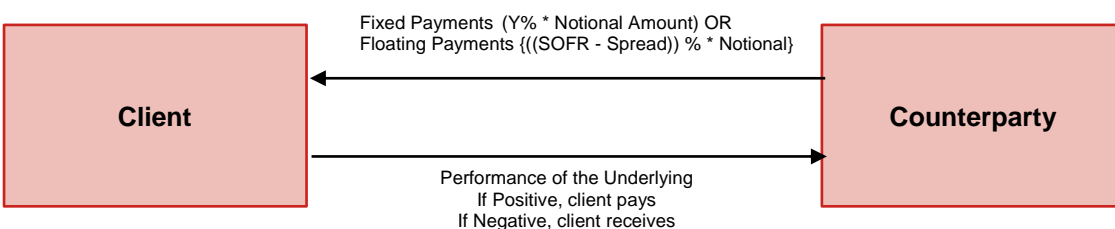
If the investor is short (sell) a TRS, the investor will be subject to the performance of the Underlying (pay if the performance is positive, receive if the performance is negative) and receive a periodic interest from the counterparty.

The periodic interest across both long and short TRS trades can be fixed or floating in nature. If floating, it is usually tied to a floating rate in the currency of the transaction (Secured Overnight Financing Rate, SOFR, for example) and can include a spread on top of the floating rate.

#### Client Long Total Return Swap



#### Client Short Total Return Swap





This product is not capital protected and may be entered into on a margin basis or on leverage. The investor should be aware that in certain circumstances, the risk of losses is not limited to the assets pledged and/or capital invested. Accordingly, a purchase of this product is only appropriate for the investor who can afford to risk the loss of part, all or in excess of the original capital invested.

## 10.2 Investor Profile

- The investor holds a directional view on the Underlying and is prepared to participate in the performance of the Underlying on the basis of that view. For example: if an investor would like to express a view that an underlying stock will show a positive performance over a 6-month tenor, the investor can enter into a buy TRS on that stock to participate in that view. Alternatively, if the investor wants to express a view that an underlying bond will have a negative performance over a 3-month period (either due to an increase in interest rates or a widening of credit spreads), the investor can enter into a sell TRS on that bond to participate in that view.
- By executing the transaction in a TRS format, the investor has an alternative route of expressing a directional view in a margin format.
- The investor should be prepared to bear the MTM fluctuations and potential losses on the trade if the view does not materialize in the investor's favour.
- For investors whose pay or receive obligations that are tied to a floating rate, the investor will be subject to fluctuating interest rates which can impact their net pay or receive obligations.
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 10.3 Key Risks

- Please refer to section 2.4. Key Risks under the Derivatives Section above.
- Depending on the contract terms, performance of the swap may not be perfectly correlated to the performance of the underlying asset.
- **Not Capital Protected:** The maximum loss for the Buyer of a TRS is the entire notional amount invested in this product plus all payments made against the client pay leg. The maximum loss for the Seller of a TRS is unlimited as the value of the underlying against which the TRS has been sold can appreciate by more than 100%.
- **Market and Options Risk:** The return on the swap is linked to the performance of the Underlying. Fluctuations in the market can be significant, and there is no guarantee that the Underlying will perform to yield positive returns on the swap. Further, if the swap comprises a basket of stocks, price movements in such stocks may not correlate with each other, and a positive performance on one stock may not necessarily translate into positive return on the swap.
- **Leverage / Margin:** Risks are increased significantly through leverage / margin. When investors enter into a transaction on a margin basis, they must provide Nomura margin cover by pledging, assigning or charging assets ("collateral") acceptable to Nomura. The margin amount required and the value of collateral is determined by Nomura and may be changed at any time at Nomura's absolute discretion. The high degree of leverage resulting from a relatively small margin requirement can work for or against the investor, and may result in losses. Such losses are related to market movements and may be greater in value than the investor's investments and collateral provided.
- **Worst-case scenario:** The maximum loss for the Buyer of a TRS is the entire notional amount of the TRS contract plus all payments made against the client pay leg. The maximum loss for the Seller of a TRS is unlimited as the value of the Underlying may increase substantially which the payment to the counterparty may exceed the entire notional amount of the TRS contract. The extent of the loss is

magnified if the transaction is entered into on a margin basis. The loss could be multiple times of the initial capital committed.

The above is not intended to be a comprehensive list of all risks involved. The investor should read the terms and conditions of the product carefully as this is a very high risk product especially the potential gains/losses could be substantially magnified when the contract is entered on a margin basis.

For TRS where Underlying is a Proprietary Index (the “Index”)

- Proprietary Index Pricing Risk – The Index comprises a notional position in relation to a single class of shares (the “Shares”) of a special purpose vehicle (the “Company”). The Index is linked to the performance of certain transactions which are over the counter foreign exchange and currency option transactions and exchange traded futures and options in relation to, without limitation, any commodity, metal, financial instrument, currency, interest rate or index traded on certain exchanges (each a “Transaction”) in each case selected by the investment manager of the portfolio (the “Investment Manager”). If the Shares do not appreciate in value, the Index Level may decrease significantly and this may have an adverse effect on the performance of the security.
- Each transaction is undertaken solely by the Investment Manager on behalf of a segregated portfolio of the Company, in each case following a strategy (the “Strategy”) determined solely by the Investment Manager. The performance of the Index depends on the trading performed by the Investment Manager, the selections of transactions, any Strategy or the resulting performance of the Index. If the Transactions in the Segregated Portfolio perform well and increase in value, this will have a positive effect on the Share Value in relation to that Segregated Portfolio, or, if they perform badly, a negative effect. The Share Value is reflected in the calculation of the Index.
- Negative Performance Risk of Manager – The Index is linked to the performance of certain Transactions executed by the Investment Manager on behalf of the Company in accordance with the Strategy. The performance of those Transactions will influence the performance of the Shares in each segregated portfolio of the Company. If the Shares do not appreciate in value, the closing level of the Index may decrease significantly and this may have an adverse effect on the performance of the security.
- For single manager indices, there is no capacity to recompose the Index and the Index only comprises of a single segregated portfolio.

### 10.3.1 Example of Client Buy Total Return Swap

<b>Sample Terms</b>	
<b>Asset Name</b>	1Y Total Return Swap (Long) on GOOGL UQ
<b>Tenor</b>	12 Months
<b>Trade Date</b>	05-Nov-2021
<b>Effective Date</b>	05-Nov-2021
<b>Value Date</b>	09-Nov-2021
<b>Expiry Date</b>	09-Nov-2022
<b>Maturity Date</b>	11-Nov-2022

### Sample Terms

<b>Notional</b>	USD 1 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Underlying</b>	GOOGL UQ Equity
<b>Initial Entry</b>	2965.35
<b>Dividends</b>	Accrued and received on a monthly basis
<b>Dividend Schedule</b>	Monthly (to match the client pay schedule)
<b>Client pays</b>	USD1m SOFR + 0.40% p.a. (Monthly, 30/360)
<b>Performance</b>	Underlying Final/Initial - 1
<b>At Maturity</b>	If Performance is positive, client receives Performance + Receives Final Dividend (if any) + pays Final pay leg If Performance is negative, client pays Performance + Receives Final Dividend (if any) + pays Final pay leg
<b>Transaction Fee</b>	Client pays 0.20% of notional Upon exit (early if unwound/partially unwound over the life of the trade OR at maturity) Client pays 0.20% of notional

### 10.3.2 Scenario Analysis

To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.

**Scenario (a): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is positive.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Pays	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
40%	0.50% p.a.	0.40% p.a.	0.90%	39.10%	Client Receives USD 391,000
30%	1.00% p.a.	0.40% p.a.	1.40%	28.60%	Client Receives USD 286,000

<b>(A) Performance</b>	<b>(B) 1M SOFR Fixing</b>	<b>(C) Spread</b>	<b>(D) Net Client Pays</b>	<b>(E) Final Return = (A) – (D)</b>	<b>(F) Final Settlement (E) * Notional</b>
20%	2.00% p.a.	0.40% p.a.	2.40%	17.60%	Client Receives USD 176,000
10%	3.00% p.a.	0.40% p.a.	3.40%	6.60%	Client Receives USD 66,000

**Scenario (b): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is flat.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Pays	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
0%	0.50% p.a.	0.40% p.a.	0.90%	-0.90%	Client Pays USD 9,000
0%	1.00% p.a.	0.40% p.a.	1.40%	-1.40%	Client Pays USD 14,000
0%	2.00% p.a.	0.40% p.a.	2.40%	-2.40%	Client Pays USD 24,000
0%	3.00% p.a.	0.40% p.a.	3.40%	-3.40%	Client Pays USD 34,000

**Scenario (c): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is negative.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Pays	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
-10%	0.50% p.a.	0.40% p.a.	0.90%	-10.90%	Client Pays USD 109,000
-20%	1.00% p.a.	0.40% p.a.	1.40%	-21.40%	Client Pays USD 214,000
-30%	2.00% p.a.	0.40% p.a.	2.40%	-32.40%	Client Pays USD 324,000
-40%	3.00% p.a.	0.40% p.a.	3.40%	-43.40%	Client Pays USD 434,000

### 10.3.3 Example of Client Short Total Return Swap

#### Sample Terms

<b>Asset Name</b>	1Y Total Return Swap (Short) on GOOGL UQ
<b>Tenor</b>	12 Months
<b>Trade Date</b>	05-Nov-2021
<b>Effective Date</b>	05-Nov-2021
<b>Value Date</b>	09-Nov-2021

### Sample Terms

<b>Expiry Date</b>	09-Nov-2022
<b>Maturity Date</b>	11-Nov-2022
<b>Notional</b>	USD 1 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Underlying</b>	GOOGL UQ Equity
<b>Initial Entry</b>	2965.35
<b>Dividends</b>	Accrued and received on a monthly basis
<b>Dividend Schedule</b>	Monthly (to match the client pay schedule)
<b>Client pays</b>	USD1m SOFR – 1.00% p.a. (Monthly, 30/360)
<b>Performance</b>	Underlying Final/Initial - 1
<b>At Maturity</b>	If Performance is positive, client pays Performance + pays Final Dividend (if any) + receives Final receive leg
	If Performance is negative, client receives Performance + pays Final Dividend (if any) + receives Final receives leg
<b>Transaction Fee</b>	Upon entry Client pays 0.20% of notional
	Upon exit (early if unwound/partially unwound over the life of the trade OR at maturity) Client pays 0.20% of notional

#### 10.3.4 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

**Scenario (a): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is negative.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Receives*	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
-40%	0.50% p.a.	1.00% p.a.	-0.50%	39.50%	Client Receives USD 395,000
-30%	1.00% p.a.	1.00% p.a.	0.00%	30.00%	Client Receives USD 300,000
-20%	2.00% p.a.	1.00% p.a.	1.00%	21.00%	Client Receives USD 210,000
-10%	3.00% p.a.	1.00% p.a.	2.00%	12.00%	Client Receives USD 120,000

\*If the Net Client Receives is negative, that implies the investor needs to pay the amount

**Scenario (b): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is flat.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Receives*	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
0%	0.50% p.a.	1.00% p.a.	-0.50%	-0.50%	Client Pays USD 5,000
0%	1.00% p.a.	1.00% p.a.	0.00%	0.00%	No Settlement
0%	2.00% p.a.	1.00% p.a.	1.00%	1.00%	Client Receives USD 10,000
0%	3.00% p.a.	1.00% p.a.	2.00%	2.00%	Client Receives USD 20,000

\*If the Net Client Receives is negative, that implies the investor needs to pay the amount

**Scenario (c): Assuming clients invests USD 1MM, USD1m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is positive.**

(A) Performance	(B) 1M SOFR Fixing	(C) Spread	(D) Net Client Receives*	(E) Final Return = (A) – (D)	(F) Final Settlement (E) * Notional
10%	0.50% p.a.	1.00% p.a.	-0.50%	-10.50%	Client Pays USD 105,000
20%	1.00% p.a.	1.00% p.a.	0.00%	-20.00%	Client Pays USD 200,000
30%	2.00% p.a.	1.00% p.a.	1.00%	-29.00%	Client Pays USD 290,000
40%	3.00% p.a.	1.00% p.a.	2.00%	-38.00%	Client Pays USD 380,000

\*If the Net Client Receives is negative, that implies the investor needs to pay the amount

## 11. Credit Default Swap

### 11.1 Description

A Credit Default Swap (CDS) is one of the most highly utilized types of credit derivatives. It is similar to an insurance contract, providing the buyer with protection against specific risks on an underlying asset, typically a fixed income instrument. CDS contracts can mitigate risks in bond or credit investing by transferring a given credit risk from one party to another without transferring the underlying bond or credit asset.

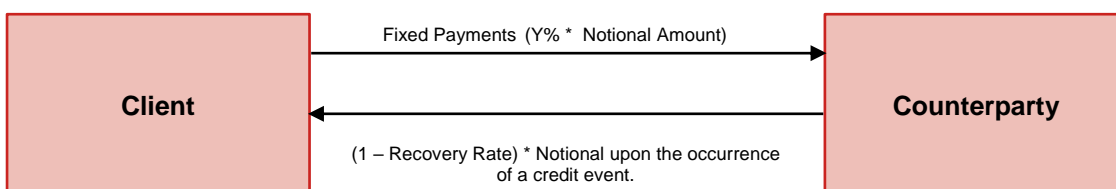
In a CDS, one party “buys” protection (long CDS) and the other party “sells” protection (short CDS). A protection buyer can purchase (long) a CDS contract in three instances.

- A) If the buyer owns the underlying credit asset and is looking to purchase credit protection against a credit event (e.g. bankruptcy, default, debt restructuring) where the recovery payment from the CDS upon occurrence of a credit event can offset the loss of holding the credit asset. The buyer may also monetize any potential gain of the CDS contract if the credit spread of the underlying credit asset widens before maturity of the CDS contract.
- B) If the buyer does not own the underlying credit asset and is looking to purchase a CDS with a view that there could be a credit event on the underlying, thereby benefiting in the form of a positive gain in the event that a credit event is triggered and the recovery payment is more than the premium paid to enter into the contract
- C) If the buyer does not own the underlying credit asset and is looking to purchase a CDS with a view that the credit spreads of the underlying credit asset could widen thereby monetizing any potential gain as a profit on the transaction.

As a protection buyer, the buyer expresses a “short” credit exposure on the underlying credit asset and enters into a trade whereby the buyer pays a periodic interest (premium) for a defined time horizon (tenor of the trade).

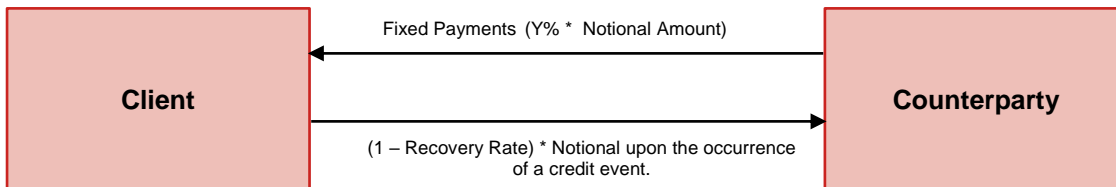
A protection seller does not usually own the underlying credit asset and is looking to sell credit protection with a view that the credit spreads could tighten or remain range bound or the credit quality of the asset could improve and hence credit events are not likely to trigger. As a protection seller, the seller expresses a “long” credit exposure on the underlying credit asset and enters into a trade whereby the seller receives a periodic interest (premium) for a defined time horizon (tenor of the trade).

#### Client Buys CDS Protection on Underlying Credit Asset





## Client Sells CDS Protection on Underlying Credit Asset



*Above assumes the trades are cash settled.*

This product is not capital protected. The investor should be aware that in certain circumstances, the amount payable to the investor (if any) at maturity/upon termination of the CDS contract may be less than the principal sum invested in the product. Accordingly, this product is only appropriate for the investor who can afford to risk the loss of all or part of his original investment.

## 11.2 Characteristics of Credit Default Swaps

The CDS market is divided into three types:

- 1) Single-credit CDS referencing specific corporates, bank credits, loans and sovereigns.
- 2) Multi-credit CDS which can reference a basket of credits agreed upon by the buyer and seller.
  - First to Default CDS references a basket of credit instruments where a credit event is triggered (leading to a settlement) when (and if) the first of the basket defaults.
  - Nth to Default CDS references a basket of underlying credits (for example 3) where the protection seller is exposed to the default of the reference credit that defaults “nth” (first, second, third...)
- 3) CDS index which comprises of credits in an index known as ‘reference entities’.

CDS range in maturity from one to ten years, although the five-year CDS is the most frequently traded. When entering into a CDS contract, the buyer and seller agree on a pre-determined set of credit events. Upon the occurrence of a credit event, the CDS seller is expected to pay the CDS buyer. Some of the most common credit events are:

- Bankruptcy – The reference entity becomes insolvent or is unable to pay its debts.
- Failure to Pay – The reference entity fails to make interest or principal repayments when due.
- Debt Restructuring – The configuration of debt obligations is changed in such a way that the credit holder is unfavorably affected.
- Obligation Acceleration or Obligation Default – The debt obligations of the issuer become due before the originally scheduled maturity date.
- Repudiation / Moratorium – The issuer of the underlying bond (the reference entity) rejects their debt, effectively refusing to pay interest and principal.

*Source: International Swaps and Derivatives Association.*

CDS settlement terms can be physical or cash and is determined when the CDS contract is entered into. The most common type of CDS involves exchanging bonds for their par value, although the settlement can also be in the form of a cash payment equal to the difference between the bond’s market value and par value.

## 11.3 Investor Profile

- If the investor is a CDS seller, the investor holds a neutral-to-positive view on the reference entity(ies) underlying credit asset(s) and does not expect a credit event will occur or the credit quality of the underlying credit asset(s) will deteriorate during the life of the CDS contract.
- If the investor is a CDS buyer, the investor holds a negative view on the reference entity(ies) that there will be a credit event triggered or a view that the credit quality of the underlying credit asset(s) will deteriorate over the life of the trade.
- By executing it in a swap format, the investor has an alternative route of expressing a view on fixed income which are usually fully funded instruments.
- The investor should be prepared to bear the potential losses (including regular payments over the life of the CDS) on the product as a result of MTM fluctuations on the product if the view does not materialize in the investor’s favor.
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 11.4 Key Risks

- Please refer to section 2.4. Key Risks under the Derivatives Section above.
- **Not Capital Protected:** The maximum loss is the entire investment amount for a CDS Seller and a sum of all premium paid over the life of the trade for a CDS Buyer.
- **Market and Options Risk:** The return on the swap is linked to the performance of the underlying credit asset. Fluctuations in the market can be significant, and there is no guarantee that the underlying credit asset will perform to yield positive returns on the swap.
- **Leverage / Margin:** Risks are increased significantly through leverage / margin. When investors enter into a transaction on a margin basis, they must provide Nomura margin cover by pledging, assigning or charging assets (“collateral”) acceptable to Nomura. The margin amount required and the value of collateral is determined by Nomura and may be changed at any time at Nomura’s absolute discretion. The high degree of leverage resulting from a relatively small margin requirement can work for or against the investor, and may result in losses. Such losses are related to market movements and may be greater in value than the investor’s investments and collateral provided.
- **Worst-case scenario:** For a CDS Seller, if the value of the underlying credit asset falls significantly and down to zero, the investor would suffer losses equivalent to the maximum exposure of the product. The extent of the loss is magnified if the transaction is entered into on a margin basis. The loss could be multiple times of the initial capital committed. For a CDS buyer, the worst-case scenario is a sum of all premiums paid over the life of the trade if there is no credit event on the reference.

### 11.4.1 Example of Client Sells Credit Default Swap

#### Sample Terms

<b>Asset Name</b>	5Y Credit Default Swap Transaction on Reliance Industries
<b>Tenor</b>	5Y
<b>Trade Date</b>	29-Nov-2021
<b>Effective Date</b>	29-Nov-2021
<b>Value Date</b>	01-Dec-2021
<b>Expiry Date</b>	20-Dec-2026
<b>Maturity Date</b>	20-Dec-2026
<b>Notional</b>	USD 5 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Reference Entity</b>	Reliance Industries Ltd
<b>Reference Obligation</b>	USY72596BU56
<b>Credit Events (Bankruptcy, Failure to Pay, Restructuring)</b>	Standard, according to the ISDA physical settlement matrix

### Sample Terms

<b>Transaction Type</b>	Standard Asia Corporate (ISDA's standardized transaction type to standardize variables associated with credits that fall under this category)
<b>Coupon Client Receives</b>	1.00% p.a. (Q, 30/360) on outstanding notional paid every 20 March, 20 Jun, 20 Sep and 20 Dec starting on 20 Dec 2022
<b>Upon Credit Event</b>	Client Pays Notional * (1 – Recovery Rate) and the trade terminates

#### 11.4.2 Scenario Analysis

To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.

**Scenario (a): Assuming client sells USD 5MM CDS and there is no credit event during the life of the trade**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	1.00% p.a.	Zero	Client Receives USD 50,000
Year 2	1.00% p.a.	Zero	Client Receives USD 50,000
Year 3	1.00% p.a.	Zero	Client Receives USD 50,000
Year 4	1.00% p.a.	Zero	Client Receives USD 50,000
Year 5	1.00% p.a.	Zero	Client Receives USD 50,000
	<b>Total</b>		<b>Client Receives USD 250,000</b>

**Scenario (b): Assuming client sells USD 5MM CDS and there is no credit event for Year 1 and Year 2, however there is a credit event at the start of Year 3 and the recovery rate is 40%**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	1.00% p.a.	Zero	Client Receives USD 50,000
Year 2	1.00% p.a.	Zero	Client Receives USD 50,000
Year 3	Zero	60%	Client Pays USD 3,000,000

	Trade Terminates
<b>Total</b>	<b>Client Pays USD 2,900,000</b>

**Scenario (c): Assuming client sells USD 5MM CDS, there is a credit event at the start of Year 1 and the recovery rate is 0%**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	Zero	100%	Client Pays USD 5,000,000
			Trade Terminates
	<b>Total</b>		<b>Client Pays USD 5,000,000</b>

#### 11.4.3 Example of Client Buys Credit Default Swap

##### Sample Terms

<b>Asset Name</b>	5Y Credit Default Swap Transaction on Reliance Industries
<b>Tenor</b>	5Y
<b>Trade Date</b>	29-Nov-2021
<b>Effective Date</b>	29-Nov-2021
<b>Value Date</b>	01-Dec-2021
<b>Expiry Date</b>	20-Dec-2026
<b>Maturity Date</b>	20-Dec-2026
<b>Notional</b>	USD 5 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Reference Entity</b>	Reliance Industries Ltd
<b>Reference Obligation</b>	US712219AG90
<b>Credit Events (Bankruptcy, Failure to Pay, Restructuring)</b>	Standard, according to the ISDA physical settlement matrix

### Sample Terms

<b>Transaction Type</b>	Standard Asia Sovereign (ISDA's standardized transaction type to standardize variables associated with credits that fall under this category)
<b>Coupon Client Pays</b>	0.50% p.a. (Q, 30/360) on outstanding notional paid every 20 March, 20 Jun, 20 Sep and 20 Dec starting on 20 Dec 2022
<b>Upon Credit Event</b>	Client Receives Notional * (1 – Recovery Rate) and the trade terminates

#### 11.4.4 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

**Scenario (a): Assuming client buys USD 5MM CDS and there is no credit event during the life of the trade**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	Zero	0.50% p.a.	Client Pays USD 25,000
Year 2	Zero	0.50% p.a.	Client Pays USD 25,000
Year 3	Zero	0.50% p.a.	Client Pays USD 25,000
Year 4	Zero	0.50% p.a.	Client Pays USD 25,000
Year 5	Zero	0.50% p.a.	Client Pays USD 25,000
	<b>Total</b>		<b>Client Pays USD 125,000</b>

**Scenario (b): Assuming client buys USD 5MM CDS and there is no credit event for Year 1 and Year 2, however there is a credit event at the start of Year 3 and the recovery rate is 40%**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	Zero	0.50% p.a.	Client Pays USD 25,000
Year 2	Zero	0.50% p.a.	Client Pays USD 25,000
Year 3	60%	Zero	Client Receives USD 3,000,000
			Trade Terminates
	<b>Total</b>		<b>Client Receives USD 2,950,000</b>

**Scenario (c): Assuming client buys USD 5MM CDS, there is a credit event at the start of Year 1 and the recovery rate is 0%**

(A) Tenor	(B) Client Receives	(C) Client Pays	(D) Final Settlement [(B)+(C)]* Notional
Year 1	100%	Zero	Client Receives USD 5,000,000
			Trade Terminates
	<b>Total</b>		<b>Client Receives USD 5,000,000</b>

## 12. OTC Equity Swaps

### 12.1 Description

An OTC Equity swap is linked to an Underlying where the underlying may be a single underlying or a basket of underlyings (equally weighted, worst-of, best-of, scaled weights etc). The product may be denominated in a different currency from that of the underlying equity. The Underlying may be equity, equity indices or proprietary indices (“Underlying”).

The return of the swap is linked to the performance of such Underlying. It is structured as a swap which provides investors with exposure to the Underlying.

An OTC Equity swap is an unfunded form of derivative structure which contain a derivative component and may involve an option, a swap, a forward or a combination of any of them. There are many possible variations and different features that may be incorporated. Various product features such as knock-in event or a knock-out/auto-call event may be incorporated as well.

Such variations include (but are not limited to):

#### **Knock-in Event:**

A Knock-in Event typically occurs when the price of the Underlying closes below the Knock-in Barrier. The style can be American Knock-in (AKI), European Knock-in (EKI) or Bermuda Knock-in (BKI). Certain actions can be conditional upon the occurrence of a Knock-in Event.

- American Knock-in: The Knock-in Event may occur at any time during the tenor of the product
- European Knock-in: The Knock-in Event may only occur at maturity
- Bermuda Knock-in: The Knock-in Event may only occur on a specified date during the tenor of the product

#### **Knock-out Event:**

A Knock-out Event (or Auto-call Event) occurs when the price of the Underlying closes at or above the Knock-out Barrier. The style can be American Knock-out (AKO) or Bermuda Knock-out (BKO).

- American Knock-out: The Knock-out Event may occur at any time during the tenor of the product
- Bermuda Knock-out: The Knock-out Event may only occur on a specified date during the tenor of the product.

#### **Barrier Event:**

A Barrier event occurs when the price of the Underlying closes at or above or at or below the Barrier. The style can be American, Bermudan or European.

This product is not capital protected. The investor should be aware that in certain circumstances, the investor the risk of losses is not limited to the assets pledged and/or capital invested. Accordingly, this product is only appropriate for the investor who can afford to risk the loss of all or part of his original capital invested.



## 12.2 Investment Rationale

- The investor is looking for unfunded or swap format investments.
- The investor has a view on an Underlying which is consistent with the underlying derivative component of the security.
- The investor is a Professional Investor as defined under the Securities and Futures Ordinance of Hong Kong or an Accredited Investor defined under the Securities and Futures Act of Singapore and possesses prior experience in investing in structured products or writing options.

## 12.3 Key Benefits

- The product allows investors to participate in Underlyings (with varying participation rate) which may not otherwise be accessible.
- They can be customized to cater to an investor's specific view and needs.

## 12.4 Key Risks

- Please refer to section 2.4. Key Risks under the Derivatives Section above.
- Depending on the contract terms, performance of the swap may not be perfectly correlated to the performance of the underlying asset.
- **Not Capital Protected:** The maximum loss is the entire notional amount invested in this product plus all payments made against the client pay leg.
- **Market and Options Risk:** The return on the swap is linked to the performance of the Underlying. Fluctuations in the market can be significant, and there is no guarantee that the Underlying will perform to yield positive returns on the swap. Further, if the swap comprises a basket of stocks, price movements in such stocks may not correlate with each other, and a positive performance on one stock may not necessarily translate into positive return on the swap.
- **Leverage / Margin:** Risks are increased significantly through leverage / margin. When investors enter into a transaction on a margin basis, they must provide Nomura margin cover by pledging, assigning or charging assets ("collateral") acceptable to Nomura. The margin amount required and the value of collateral is determined by Nomura and may be changed at any time at Nomura's absolute discretion. The high degree of leverage resulting from a relatively small margin requirement can work for or against the investor, and may result in losses. Such losses are related to market movements and may be greater in value than the investor's investments and collateral provided.
- **Worst-case scenario:** If the value of the Underlying falls significantly and down to zero, the investor would suffer losses equivalent to the maximum exposure of the product. The extent of the loss is magnified if the transaction is entered into on a margin basis. The loss could be multiple times of the initial capital committed.

### 12.4.1 Example of OTC Equity Swap – Equity (Worst of) with 100% Notional at Risk

#### Sample Terms

<b>Asset Name</b>	1Y Share Basket Swap Transaction with participation or 20% conditional coupon on 700 HK, BABA UN
<b>Tenor</b>	12 Months
<b>Trade Date</b>	05-Nov-2021

<b>Sample Terms</b>	
<b>Effective Date</b>	19-Nov-2021
<b>Value Date</b>	09-Nov-2021
<b>Expiry Date</b>	19-Nov-2022
<b>Maturity Date</b>	21-Nov-2022
<b>Notional</b>	USD 5 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Underlying</b>	Worst of 700 HK, BABA UN
<b>Initial Entry</b>	700 HK – 471.60; BABA UN – 164.79
<b>Strike</b>	95% of Initial Entry. 700 HK – 448.02; BABA – 156.5505
<b>Coupon</b>	20% FLAT (paid if coupon condition is met) on the maturity date Coupon Condition – if Underlying Final > Strike at maturity
<b>Client Pays</b>	USD3m SOFR + 0.40% p.a. (Quarterly, 30/360) on the scheduled payment date as per table below
<b>Performance</b>	Underlying Final/Initial - 1
<b>At Maturity</b>	If Underlying Final is greater than equal to the Strike , client receives Notional * Max (Coupon, Performance – 1) Client also pays the final pay leg  Else, client pays Notional and receives equivalent number of shares of the underlying at strike level plus fractional share amount. Client also pays the final pay leg

#### 12.4.2 Scenario Analysis

*To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the “Analysis”) is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.*

**Scenario (a): Assuming client invests USD 1MM, USD3m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is positive**

(A) Performance	Is Underlying Final > Strike	(B) At Maturity Payoff	(C) 3m SOFR Fixing	(D) Spread	(E) Net Client Pays	(F) Final Return (F) = (B) – (E)	(G) Final Settlement (F) * Notional
40%	Yes	40%	0.50% p.a.	0.40% p.a.	0.90%	39.10%	Client Receives USD 391,000
30%	Yes	30%	1.00% p.a.	0.40% p.a.	1.40%	28.60%	Client Receives USD 286,000
20%	Yes	20%	2.00% p.a.	0.40% p.a.	2.40%	17.60%	Client Receives USD 176,000
10%	Yes	20%	3.00% p.a.	0.40% p.a.	3.40%	16.60%	Client Receives USD 166,000

**Scenario (b): Assuming client invests USD 1MM, USD3m SOFR fixes at the below levels for the life of the trade, day count on SOFR calculation is 30/360 and the Performance is below Strike.**

(A) Performance	Is Underlying Final > Strike	(B) At Maturity Payoff	(C) 3m SOFR Fixing	(D) Spread	(E) Net Client Pays	(F) Final Return (F) = (B) – (E)	(G) Final Settleme nt (F) * Notional
-20%	No	0%	0.50% p.a.	0.40% p.a.	0.90%	-21.90%	Client Pays USD 219,000
-30%	No	0%	1.00% p.a.	0.40% p.a.	1.40%	-31.40%	Client Pays USD 314,000
-50%	No	0%	2.00% p.a.	0.40% p.a.	2.40%	-52.40%	Client Pays USD 524,000
-75%	No	0%	3.00% p.a.	0.40% p.a.	3.40%	-78.40%	Client Pays USD 784,000

\*It is assumed here that at maturity, client pays full notional of USD 1MM, receives physical shares at strike and sells the shares at market to capture the negative performance in the underlying below the strike, thereby realizing the net loss.

### 12.4.3 Example of OTC Equity Swap – Equity (Worst of) with 0% Notional at Risk

#### Sample Terms

<b>Asset Name</b>	1Y Share Basket Swap Transaction on TSLA UQ and ARKK UP with 90% capped upside participation
<b>Tenor</b>	12 Months
<b>Trade Date</b>	05-Nov-2021
<b>Effective Date</b>	19-Nov-2021
<b>Value Date</b>	09-Nov-2021
<b>Expiry Date</b>	19-Nov-2022
<b>Maturity Date</b>	21-Nov-2022
<b>Notional</b>	USD 1 MM
<b>Counterparty</b>	Party A
<b>Currency</b>	USD
<b>Underlying</b>	Worst of TSLA UQ and ARKK UP
<b>Initial Entry</b>	TSLA UQ – 1229.91; ARKK UP – 124.39
<b>Strike</b>	105% of Initial Entry. TSLA UQ – 1291.4055; ARKK UP – 130.6095
<b>Upside Participation</b>	90%
<b>Cap</b>	25%
<b>Floor</b>	0%
<b>Client Pays</b>	2.25% p.a. of Notional, Quarterly (30/360) on the scheduled payment date as per table below
<b>Performance</b>	Worst of (Underlying Final/Initial – Strike)
<b>At Maturity</b>	If Performance is positive, client receives Notional * [Upside Participation * Min (Cap, Performance - Strike)] and pays the final pay leg  If Performance is negative, client pays Notional * Max {Floor Performance} (i.e. no settlement on notional) and pays the final pay leg

#### 12.4.4 Scenario Analysis

To illustrate the features of the product, please refer to the analysis below. The analysis presented below (the "Analysis") is provided for illustrative purposes only. The Analysis does not purport to show all possible scenarios or outcomes. It is not intended to suggest that any outcome is more likely than another, and it does not include all possible outcomes or the range of possible outcomes. The illustration does not take into account transaction fees and dividend payments.

**Scenario (a): Assuming client invests USD 1MM, day count fraction on the pay leg is 30/360 and the Performance is positive**

(A) Performance	(B) At Maturity Payoff	(C) Net Client Pays	(D) Final Return (D) = (B) – (C)	Final Settlement (D) * Notional
40%	22.50%*	2.25%	20.00%	Client Receives USD 200,000
30%	22.50%	2.25%	20.00%	Client Receives USD 200,000
20%	18.00%	2.25%	15.75%	Client Receives USD 157,500
10%	9.00%	2.25%	6.75%	Client Receives USD 67,500

\*1<sup>st</sup> row in (B) is derived based on the formula above i.e.  $90\% * \text{Min}(25\%, 40\%) = 90\% * 25\% = 22.50\%$

**Scenario (b): Assuming client invests USD 1MM, day count fraction on the pay leg is 30/360 and the Performance is negative**

(A) Performance	(B) At Maturity Payoff	(C) Net Client Pays	(D) Final Return (D) = (B) – (C)	Final Settlement (D) * Notional
0%	0%	2.25%	-2.25%	Client Pays USD 22,500
-10%	0%*	2.25%	-2.25%	Client Pays USD 22,500
-30%	0%	2.25%	-2.25%	Client Pays USD 22,500
-50%	0%	2.25%	-2.25%	Client Pays USD 22,500

\*2<sup>nd</sup> row in (B) is derived based on the formula above i.e.  $\text{Max}(0\%, -10\%) = 0\%$

## Disclaimer

This document has been prepared by Nomura International (Hong Kong) Limited / Nomura Singapore Limited (together with their respective affiliates, directors, officers and employees, which shall be collectively referred to as “Nomura”) and is made available to you on a confidential basis by Nomura. This presentation material is not a product of any Nomura Group research department and does not contain all of the information that is material to any investor.

This document is: (i) for your private information only, and we are not soliciting any action based upon it; and (ii) not to be construed as an offer to sell or a solicitation of an offer to buy any products or investments.

While all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, no representation, warranty or undertaking, expressed or implied, is made and no responsibility or liability is accepted by Nomura as to the accuracy, completeness, merchantability or fitness for a particular purpose of the information contained herein or any other information provided by any other person in connection with the information described herein or their distribution or for the results obtained from the use of this information. Nomura does not accept any liability whatsoever for any loss or damage (including, without limitation, direct, indirect or consequential loss or loss of profits or loss of opportunity) suffered by you or any third party in connection with the use of this document.

Any back testing or scenario analysis presented above is intended solely for illustrative purposes. The analysis is not intended to be a prediction of future performance and should not be interpreted to suggest that any outcome is more likely than another.

You should refrain from entering into, or purchasing any Product unless you fully understand all the risks involved. You should consult your own counsel, stockbroker or another licensed securities dealer, bank manager, counsel, accountant and, or other advisers as to the legal, tax, business, regulatory, financial, accounting and related aspects of any Product in relation to your particular circumstances.

The Nomura Group may have performed or may from time to time perform investment banking or other services (including but may not be limited to acting as advisor, manager or lender) for, or have solicited for or may solicit investment banking or other business from, companies or issuers mentioned herein and the affiliates of any such company or issuer mentioned herein (each a “Mentioned Company”). Further, the Nomura Group, and/or its officers, directors, employees and agents, including persons, without limitation, involved in the preparation or issuance of this presentation material may, from time to time, have long or short positions in, and buy or sell, the securities, or derivatives (including but not limited to options and futures) thereof, of any Mentioned Company. In addition, the Nomura Group may act as a market maker, principal and, or agent with respect to the buying and selling of the securities of any Mentioned Company.

The information presented herein will be deemed to be superseded by any subsequent versions of this document and is subject to the information in the relevant product’s terms and conditions, related prospectus, offering circular, pricing supplement or other offer document (the “Related Documentation”).

Investors in or counterparts under an investment product may get back less than the amount they had invested and in certain circumstances, particularly if a product is not principal protected, an investor in a product may lose all amounts invested. Before entering into or purchasing any product, you should consider the suitability of such Product to your particular circumstances and independently review (with your professional advisors as necessary) the: (i) specific financial risks as well as the legal, regulatory, credit, tax and accounting consequences of entering into such transaction and; (ii) any information, warnings, risk disclosures and other matters disclosed in the Related Documentation. Any decision to enter into any transaction must be made solely on the basis of the Related Documentation. Nomura Group does not act as an advisor or fiduciary to any of its counterparties except where a written agreement expressly provides otherwise.

This document has not been reviewed by the Monetary Authority of Singapore or the Securities & Futures Commission of Hong Kong or any other regulatory authority. No part of this document may be (i) copied, photocopied, or duplicated in any form, by any means, or (ii) redistributed without Nomura’s prior express consent. Further information on any of the products mentioned herein may be obtained upon request. If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this document or any other damage that which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version of this document.