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	Co	. No.			M	M		Y	Y	C	CAT.
			(Fo	or Off	icial U	Jse O	nly)				

# **SECRET**

## under the Banking Ordinance

## RETURN ON MARKET RISK AND CVA RISK CAPITAL CHARGE

## \*COMBINED / CONSOLIDATED RETURN

As at	
Delete which is not appropriate. Combined and consolidated returns are defined	d in the completion instructions.
Jame of Authorized Institution	Date of Submission
The Banking O	Ordinance
information requested in this return is required under section 63(2) of the to the Monetary Authority not later than 1 month after the end of each monauthority.	
Note: This return is to be prepared in accordance with the completion ins	structions issued by the Monetary Authority
We certify that this return is, to the best of our knowledge and belief, corre	ect
	•••
Chief Accountant	Chief Executive
Chief Accountant	Chief Executive
Chief Accountant  Name	Chief Executive  Name
Chief Accountant  Name	Chief Executive  Name
Chief Accountant  Name	Chief Executive  Name
Chief Accountant  Name	Chief Executive  Name
Chief Accountant	Chief Executive  Name

Part I: Market Risk Capital Charge Division A: Market Risk Capital Charge under the STM Approach

T. 1				Mai	rket risk capital ch	arge
Item				(1)	(2)	(3)
	The ulti	mate sensitivi	ties-based method (SBM) capital charge, of which			
l i	(a)	SBM delta	risk capital charge:			
l I		(i)	General interest rate risk			
l 1		(ii)	Credit spread risk for non-securitizations			
		(iii)	Credit spread risk for securitizations (CTP)			
		(iv)	Credit spread risk for securitizations (non-CTP)			
		(v)	Equity risk			
		(vi)	Commodity risk			
		(vii)	Foreign exchange risk			
	(b)		risk capital charge:			
		(i)	General interest rate risk			
		(ii)	Credit spread risk for non-securitisations			
1.		(iii)	Credit spread risk for securitisations (CTP)			
		(iv)	Credit spread risk for securitisations (non-CTP)			
		(v)	Equity risk			
		(vi)	Commodity risk			
		(vii)	Foreign exchange risk			
	(c)		ture risk capital charge:			
		(i)	General interest rate risk			
		(ii)	Credit spread risk for non-securitisations			
		(iii)	Credit spread risk for securitisations (CTP)			
		(iv)	Credit spread risk for securitisations (non-CTP)			
		(v)	Equity risk			
		(vi)	Commodity risk			
igwdown		(vii)	Foreign exchange risk			
			(RRAO), of which			
2.	(a)		ith an exotic underlying			
$\vdash$	(b)		earing other residual risks			
			risk charge (SA-DRC), of which			
3.	(a)		ization exposures			
	(b)		on: non-CTP exposures			
igwdown	(c)		on: CTP exposures			
4.			calculated on a standalone basis			
5.		surcharge				
6.			ital charge under the STM Approach			
7.	Total ris	k-weighted a	mount for market risk under the STM Approach (Item 6 x 12.5)			

### Division B: STM Approach - SBM B.1 General interest rate risk ("GIRR")

			Correlation scenario (TRC 5000										
<sub>T.</sub>				Medium scenar	rio		High scenario	)		Low scenario			
Item	Currency		SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk		
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
	-					Bu	cket-level capital	charge					
	Hong Kong dollars	HKD											
	US dollars	USD											
	Chinese renminbi	CNY											
	Australian dollars	AUD											
	Canadian dollars	CAD											
	Euro	EUR											
1	Japanese yen	JPY											
'	New Zealand dollars	NZD											
	Pound sterling	GBP											
	Singapore dollars	SGD											
	Swiss francs	CHF											
	+ Insert a currency that does no	ot list above											
	+ Insert a currency that does no	ot list above											
2	Total:					·			·				
3	3 SBM capital charge for GIRR						•			•	·		

#### B.2 Credit spread risk (non-securitization)

	_											(HK\$'000
								Correlation scena	rio			
tem	Bucket	Credit quality	Sector		Medium scenar			High scenario			Low scenario	
	Bucket	crean quanty	Sector	SBM delta risk		SBM curvature risk			SBM curvature risk			SBM curvature ris
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
							Bu	cket-level capital	charge			
	1		Sovereigns including central banks, multilateral development banks									
	2		Local government, government-backed non-financials, education, public administration									
	3		Financials including government-backed financials									
	4	Investment grade	Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying									
	5		Consumer goods and services, transportation and storage, administrative and support service activities									
	6		Technology and telecommunications									
	7		Health care, utilities, professional and technical activities									
	8		Qualifying covered bonds									
1	9		Sovereigns including central banks, multilateral development banks									
	10		Local government, government-backed non-financials, education, public administration									
	11	Non- investment	Financials including government-backed financials									
	12	grade & unrated	Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying									
	13	umated	Consumer goods and services, transportation and storage, administrative and support service activities									
	14		Technology and telecommunications									
	15	<u> </u>	Health care, utilities, professional and technical activities									
	16	Other sector										
	17	Investment grad										
	18	Non-investmen	t grade indices									
2	Total:											
3	SBM capi	ital charge for cr	redit spread risk (non-securitization)			·		·				·

#### B.3 Credit spread risk (securitization: CTP)

												(HK\$'000)
								Correlation scena				
Item	Bucket	Credit quality	Sector		Medium scenar			High scenario			Low scenario	
I ten	Ducket	Crean quanty	50001	SBM delta risk		SBM curvature risk			SBM curvature risk		SBM vega risk	SBM curvature risk
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
							Bu	cket-level capital	charge			
	1		Sovereigns including central banks, multilateral development									
			banks									
	2		Local government, government-backed non-financials, education, public administration									
	3 Investment		Financials including government-backed financials									
	4		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying									
	5		Consumer goods and services, transportation and storage, administrative and support service activities									
	6		Technology and telecommunications									
	7		Health care, utilities, professional and technical activities									
١,	8		Qualifying covered bonds									
1	9		Sovereigns including central banks, multilateral development banks									
	10		Local government, government-backed non-financials, education, public administration									
	11	Non-investment	Financials including government-backed financials									
	12		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying									
	13	]	Consumer goods and services, transportation and storage, administrative and support service activities									
	14		Technology and telecommunications									
	15		Health care, utilities, professional and technical activities									
	16	Other sector										
2	Total:											
3	SBM ca	apital charge for	credit spread risk (securitization: CTP)		_			_	_			
			•			· ·				•		

### B.4 Credit spread risk (securitization: non-CTP)

											(HK\$'000)
							Correlation scena	ario			
Itam Dual	et Credit quality	Santan		Medium scenar	rio		High scenario			Low scenario	
nem Buck	tet Credit quality	Sector	SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
-						Buc	cket-level capital	charge			
1		RMBS – Prime									
2		RMBS – Mid-prime									
3	g :	RMBS – Sub-prime									
4	Senior investment	Commercial mortgage-backed securities (CMBS)									
5	grade	Asset-backed securities (ABS) - Student loans									
6	grade	ABS – Credit cards									
7		ABS – Auto									
8		CLO non-CTP									
9		RMBS – Prime									
10		RMBS – Mid-prime									
11	Non-senior	RMBS – Sub-prime									
12	investment	CMBS									
1 13	grade	ABS – Student loans									
14	grade	ABS – Credit cards									
15		ABS – Auto									
16		CLO non-CTP									
17		RMBS – Prime									
18		RMBS – Mid-prime									
19	Non-	RMBS – Sub-prime									
20	investment	CMBS									
21	grade &	ABS – Student loans									
22	unrated	ABS – Credit cards									
23		ABS – Auto									
24		CLO non-CTP									
25	Other sector										
2 Tota	l:										
3 SBM	l capital charge fo	or credit spread risk (securitization: non-CTP)									

#### **B.5** Equity risk

(HKS'000)

					Correlation scenario (HK\$00											
						Medium scenar	io		High scenario		ı	Low scenario				
Item	Bucket	Market cap	Economy	Sector	SBM delta risk		SBM curvature risk	SBM delta risk		SBM curvature risk	SBM delta rick	SBM vega risk				
					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
					(1)	(2)	(3)		ket-level capital		(7)					
$\vdash$		T		Consumer goods and services, transportation				Du	ket-iever capitar	charge	I		1			
	1			and storage, administrative and support service												
	1			activities, healthcare, utilities												
	2		Emerging	Telecommunications, industrials												
		-	market	Basic materials, energy, agriculture,												
	3		economy	manufacturing, mining and quarrying												
	4			Financials including government-backed												
	Large		financials, real estate activities, technology													
		Large		Consumer goods and services, transportation												
	5			and storage, administrative and support service												
			Advanced	activities, healthcare, utilities												
١.	6			Telecommunications, industrials												
1	7		economy	Basic materials, energy, agriculture,												
	,			manufacturing, mining and quarrying												
	Q.			Financials including government-backed												
				financials, real estate activities, technology												
			Emerging	All sectors described under bucket numbers 1, 2,												
	9		market	3 and 4												
		Small	economy													
1	10		Advanced	All sectors described under bucket numbers 5, 6,												
	10		economy	7 and 8												
	11 Other sector															
	Large market capitalisation, advanced economy equity indices (non-sector specific							·			·					
	13 Other equity indices (non-sector specific)															
2	2 Total:															
3	SBM cap	ital charge for e	quity risk													

### B.6 Commodity risk

											(ПК\$000)	
							Correlation scen	ario				
Item	Bucket	Commodity bucket		Medium scenar	io		High scenario	)		Low scenario		
Ittem	Bucket	Continiounty bucket	SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk	SBM delta risk	SBM vega risk	SBM curvature risk	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
						Bı	ıcket-level capital	charge				
	1	Energy – Solid combustibles										
	2	Energy - Liquid combustibles										
	3	Energy - Electricity and carbon trading										
	4	Freight										
	5	Metals – non-precious										
1	6	Gaseous combustibles										
	7	Precious metals (including gold)										
	8	Grains and oilseed										
	9	Livestock and dairy										
	10	Softs and other agriculturals										
	11	Other commodity										
2	Total:											
3	SBM cap	ital charge for commodity risk										

## B.7 Foreign exchange risk

## (a) SBM delta and SBM curvature risk

<u>Item</u>		_	
1	Did your institution adopt a base currency during the reporting period? (Note (1)) (Yes	/No)	
2	If yes, please indicate the base currency adopted.	l	
			(HK\$'000)

								(11K\$ 000)
					Correlatio	on scenario		
			Mediur	n scenario	High s	cenario	Low so	cenario
Item	Currency (Note (2))		an	an	an	SBM curvature	an	SBM curvature
			SBM delta risk	SBM curvature risk		risk	SBM delta risk	risk
			(1)	(2)	(3)	(4)	(5)	(6)
					Bucket-level	capital charge		
	Hong Kong dollars	HKD						
	US dollars	USD						
	Chinese renminbi	CNY						
	Australian dollars	AUD						
	Canadian dollars	CAD						
	Euro	EUR						
3	Japanese yen	JPY						
	New Zealand dollars	NZD						
	Pound sterling	GBP						
	Singapore dollars	SGD						
	Swiss francs	CHF						
	+ Insert a currency that does	s not list above						
	+ Insert a currency that does	s not list above						
4	Total:							

## Note:

- (1) The use of a base currency is subject to the approval of the MA.
- (2) It represents the currency against Hong Kong dollars if the reporting institution did not adopt any base currency. Otherwise, it represents the currency against the base currency.

## B.7 Foreign exchange risk

## (b) SBM vega risk

(HK\$'000)

			Correlation scenario	(11124 00
Item	Currency pair	Medium scenario	High scenario	Low scenario
		(1)	(2) Bucket-level capital charge	(3)
	AUD/JPY			
	AUD/USD			
	EUR/JPY			
	EUR/USD			
1	GBP/JPY			
1	USD/CNY			
	USD/HKD			
	+ Insert a currency pair that does not list above			
	+ Insert a currency pair that does not list above			
2	SBM vega risk capital charge for foreign exchange risk			
3	SBM capital charge for foreign exchange risk			

## (c) Structural foreign exchange positions excluded from the market risk capital charge

	Amount of structural position excluded		Amount of position that perfectly neutralises the sensitivity of the capital ratio to movements in exchange rate of the currency against Hong Kong dollars		
Currency (Note(1))	in the original currency '000 (1)	in HKD'000 equivalent (2)	in the original currency '000 (3)	in HKD'000 equivalent (4)	
+ Insert a currency					
+ Insert a currency					

Note: (1) It represents the currency against Hong Kong dollars.

## Division C: STM Approach - RRAO

Item	Positions subject to RRAO	Positions with an exotic underlying		
Item		(1)	(2)	
1	Sum of the gross (long plus short) notional amounts			
2	RRAO risk weight	1.00%	0.10%	
3	RRAO			

# Division D: STM Approach - SA-DRC D.1 SA-DRC (non-securitization)

	Exposures to corporates		Exposures to sovereigns			Exposures to local governments and municipalities			ities								
Item	Classes		mp-to-default mounts	Default risk weight	Sum of risk- jump-to-defaul			mp-to-default mounts	Default risk weight		eighted net jump- risk amounts		ump-to-default mounts	Default risk weight		-weighted net ilt risk amounts	
			Long (1)	Short (2)	(3)	Long (4)	Short (5)	Long (6)	Short (7)	(8)	Long (9)	Short (10)	Long (11)	Short (12)	(13)	Long (14)	Short (15)
	1.1	Credit quality 1			0.5%					0.5%					0.5%		
	1.2	Credit quality 2			2%					2%					2%		
		Credit quality 3			3%					3%					3%		
	1.4	Credit quality 4			6%					6%					6%		
	1.5	Credit quality 5			15%					15%					15%		
		Credit quality 6			30%					30%					30%		
1	1.7	Credit quality 7			50%					50%					50%		
1	1.8	Unrated			15%					15%					15%		
	1.9	Defaulted			100%					100%					100%		
1	1.10	Exposures to sovereigns, public sector entities and multilateral development banks subject to a default risk weight of 0% under section 281S(4) of the BCR			0%					0%					0%		
2	2	Hedge benefit ratio												•			
3	3	Bucket level SA-DRC															
	1	SA-DRC (non-securitization ex	(posures)								•	•		•			·

## D.2 SA-DRC (securitization: non-CTP)

(HK\$'000)

			Bucket-level SA-DRC				
			Region				
			Asia	Europe	North America	Other regions	
			(1)	(2)	(3)	(4)	
It	m	Asset class					
	1.1	Asset-backed commercial paper (ABCP)					
	1.2	Auto loans/leases					
	1.3	Residential mortgage-backed securities (RMBS)					
	1.4	Credit cards					
	1.5	Commercial mortgage-backed securities (CMBS)					
1	1.6	Collateralised loan obligations					
1	1.7	Collateralised debt obligations (CDO) squared					
	1.8	Small-and-medium sized corporates					
	1.9	Student loans					
	1.10	Other retail					
	1.11	Other wholesale					
	1.12	The unique bucket for all corporates (excluding small-and-medium sized corporates), regardless of their region					

SA-DRC (securitization: non-CTP)

## D.3 SA-DRC (securitization: CTP)

It	em	Credit index or underlying basket	Bucket-level SA-DRC
	1.1	+ Insert a credit index or underlying basket	
1	1.2	+ Insert a credit index or underlying basket	
	2	SA-DRC (securitization: CTP)	

(A) Calculation of market risk capital charge

(A) Ca	alculation of market risk capital charge						(HK\$000)
		Capital charge		Number of backtesting e tradin			
Item	Nature of items	End of month value	Average value over the last 60 trading days (for item 1 and 2) or over the last 12 weeks (for item 3)	Based on actual profit & loss	Based on hypothetical profits & loss	Multiplication factor	Total market risk capital charge
		(a)	(b)	(c)	(d)	(e)	(f)
	Modellable risk factors					` '	, ,
١.,	1.1 Unconstrained ES capital charge at the portfolio-wide level						
1.	1.2 Sum of constrained ES capital charges at the risk class level						
	1.3 Market risk capital charge for all modellable risk factors						
	Non-modellable risk factors ("NMRFs")						•
	2.1 Stress scenario capital charge for idiosyncratic credit spread NMRFs						
١,	2.2 Stress scenario capital charge for idiosyncratic equity NMRFs						
2.	Stress scenario capital charge for NMRFs other than the NMRFs						
	under item 2.1 and 2.2						
	2.4 Market risk capital charge for all NMRFs						
3.	Default risk charge						
4.	Capital surcharge for yellow trading desks						
5.	Market risk capital charge under the STM approach for green and yellow trading desks						
6.	Market risk capital charge under the STM approach for red trading desks and trading desks not subject to the approval of the use of the IMA						
7.	Market risk capital charge under the STM approach for all trading desks						
8.	Other capital charges calculated on a standalone basis						
9.	Capital surcharge						
10.	Total market risk capital charge						
11.	Total risk-weighted amount for market risk (Item 10 x 12.5)						
							•

## E.1 Market risk capital charge under the IMA

## (B) Constrained ES capital charge at the risk class level for modellable risk factors

(HK\$'000)

Item	Risk class	End-of-month value (1)	Average value over the last 60 trading days (2)
1	General interest rate risk		
2	Credit spread risk		
3	Equity risk		
4	Commodity risk		
5	Foreign exchange risk		

## (C) Stress scenario capital charge for NMRFs other than the idiosyncratic equity and credit spread NMRFs

	Risk class	End of month value				
Item		Sum of the stress scenario capital charge (1)	Sum of the square of the stress scenario capital charge (2)			
1	General interest rate risk					
2	Credit spread risk					
3	Equity risk					
4	Commodity risk					
5	Foreign exchange risk					

## E.2 Backtesting exceptions at the portfolio-wide level over the last 250 trading days

(HK\$'000)

Date of exception (DD/MM/YYYY)	One-day 99% VaR	Actual loss (absolute value)	Hypothetical loss (absolute value)
(1)	(2)	(3)	(4)

# E.3 Largest daily losses over the quarter

		(11114 000)
Date (DD/MM/YYYY)	Amount of loss (absolute value)	One-day 99% VaR
(1)	(2)	(3)

## E.4 Trading desk details

Desk ID				
Description of the desk				
				(HK\$'000)
	SBM capital charge		(1)	
Desk-level capital charge under STM Approach	RRAO			
Desk-level capital charge under \$1 W Approach	SA-DRC			
	Total		(4)	
	One-day 99% VaR		(5)	
	Number of executions	Based on actual profit & loss	(6)	
Dools loved be eleterating	Number of exceptions	Based on hypothetical profits & loss	(7)	
Desk-level backtesting	One-day 97.5% VaR		(8)	
	Namel and Garage tierra	Based on actual profit & loss	(9)	
	Number of exceptions	Based on hypothetical profits & loss	(10)	
	Spearman correlation metric		(11)	
Profit and loss attribution test	Kolmogorov-Smirnov distribution	on test metric	(12)	
	Zone (Green/Yellow/Red)			

							(HK\$'000)		
It	em		Ris	sk category	Capital charge (1)	Scaling factor (2)	Total market risk capital charge (3)		
	1.1			Non-securitization exposures that do not fall within a correlation trading portfolio and that are not n <sup>th</sup> -to-default credit derivative contracts					
	1.2		Specific risk	Securitization exposures that do not fall within a correlation trading portfolio					
1	1.3	Interest rate exposures		Non-securitization exposures that are n <sup>th</sup> -to-default credit derivative contracts (excluding those that fall within a correlation trading portfolio)					
	1.4			General market risk					
	1.5		Ontions over covers	Simplified approach: long option contract with a related position in the underlying exposure of the option contract					
	1.6		Options exposures	Simplified approach: long call or long put option contracts					
	1.7			Delta-plus approach: gamma and vega risks					
	1.8	· ·		Total		1.3			
	2.1			Specific risk					
	2.2			General market risk					
				Simplified approach: long option contract with a related					
2	2.3	Equity exposures	Options exposures	position in the underlying exposure of the option contract					
	2.4		Options exposures	Simplified approach: long call or long put option contracts					
	2.5			Delta-plus approach: gamma and vega risks					
	2.6			Total		3.5			
	3.1			General market risk					
3	3.2	Foreign exchange exposures	Options exposures	Simplified approach: long option contract with a related position in the underlying exposure of the option contract					
3	3.3	Poteign exchange exposures	Options exposures	Simplified approach: long call or long put option contracts					
	3.4			Delta-plus approach: gamma and vega risks					
	3.5			Total		1.2			
	4.1			General market risk					
4	4.2	Commodity ovnosy-	Options exposures	Simplified approach: long option contract with a related position in the underlying exposure of the option contract					
4	4.3	Commodity exposures	Options exposures	Simplified approach: long call or long put option contracts					
1	4.4			Delta-plus approach: gamma and vega risks					
	4.5		Total		1.9				
	5	Other capital charges calculated on a standalone basis							
	6	Capital surcharge							
	7	Total market risk capital charge	under the SSTM app	oroach					
	8	Total risk-weighted amount for m	arket risk under the	SSTM approach (Item 7 x 12.5)					

#### Division G: SSTM Approach - Interest Rate Exposures (Trading Book)

#### G.1 Interest rate exposures - specific risk

#### (a) Non-securitization exposures that do not fall within a correlation trading portfolio and that are not n<sup>th</sup>-to-default credit derivative contracts

(HK\$'000)

			1							(HK\$'000
						et risk capital charge	factor for specific risk			1
					Residual maturity					Total market risk
Item	Classes (Note (1))	Positions		6 months or less	Over 6 months to 24 months	Over 24 months			To be specified	capital charge for specific risk
			(0.00%)	(0.25%)	(1.00%)	(1.60%)	(8.00%)	(12.00%)	( %)	
	Sovereign (including sovereign foreign public sector entities)									
1.1	Credit quality grade 1 or 2	Long								
		Short								
1.2	Credit quality grade 3 or 4	Long								
		Short								
1.3	Credit quality grade 5 or 6	Long								
		Short								
1.4	Credit quality grade 7	Long								
		Short								
1.5	Unrated	Long								
		Short								
	Qualifying	·								
1.6	Issued by multilateral development banks	Long								
		Short								
1.7	1.7 Issued by public sector entities (excluding sovereign foreign public sector entities)	Long								
		Short								
1.8	Issued by banks	Long								1
		Short								
1.9	Issued by securities firms	Long			-					
1.10	T 11	Long								
1.10	Issued by corporates	Short								
	Non qualifying	_ Short			1	l				
	Non-qualifying			1	1					
1.11	Credit quality grade 5	Long			-					
1.12	C. Fr. Fr. 1.C	Long								
1.12	Credit quality grade 6	Short								
1.12	Unrated	Long								
1.13	Ulirated	Short								
1.14	TOTAL (Items 1.1 to 1.13)	Long								
1.14	101AL (Hems 1.1 to 1.13)	Short								
1.15	Market risk capital charge factor		0.00%	0.25%	1.00%	1.60%	8.00%	12.00%	%	
1.16	TOTAL MARKET RISK CAPITAL CHARGE FOR SPECIFIC RISK FOR INTEREST RATE EXPOSURES (ON GROSS POSITIONS - LONG PLUS SHORT)									

Note: (1) For debt-related option contracts, the delta-weighted positions should be reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1.

## G.1 Interest rate exposures - specific risk

(b) Securitization exposures that do not fall within a correlation trading portfolio (Note)

(HK\$'000)

1 Total market risk capital charge for specific risk

Note: Securitization exposures include re-securitization exposures unless otherwise stated.

#### G.1 Interest rate exposures - specific risk

(c)

#### Non-securitization exposures that are n<sup>th</sup>-to-default credit derivative contracts (excluding those that fall within a correlation trading portfolio)

			Exposures by market risk capital charge factor for specific risk								
				T T	Residual maturity	et risk capital charge	lactor for specific risk	1		1	
Item	Classes (Note (1))	Positions		6 months or less	Over 6 months to 24 months	Over 24 months				Total market risk capital charge for specific risk	
			(0.00%)	(0.25%)	(1.00%)	(1.60%)	(8.00%)	(12.00%)	To be specified (		
	Sovereign (including sovereign foreign public sector entities)		(0.00.0)	(0.2011)	(2.00.1)	(******)	(0.001.5)	(12.00.0)	,		
1.1	Credit quality grade 1 or 2	Long									
	. , ,	Short									
1.2	Credit quality grade 3 or 4	Long									
		Short									
1.3	Credit quality grade 5 or 6	Long									
		Short									
1.4	Credit quality grade 7	Long									
		Short									
1.5	Unrated	Long									
	0.1141	Short									
	Qualifying			1							
1.6	Issued by multilateral development banks	Long Short									
1.7	T 11 1F ( 25 ( 1 F ) 1 C 1 1F ( 25 )	Long									
1.7	Issued by public sector entities (excluding sovereign foreign public sector entities)	Short									
1.8	Issued by banks	Long									
1.0	issued by builds	Short									
1.9	Issued by securities firms	Long									
	,	Short									
1.10	Issued by corporates	Long									
		Short									
	Non-qualifying										
1.11	Credit quality grade 5	Long									
		Short									
1.12	Credit quality grade 6	Long									
		Short									
1.13	Unrated	Long									
1.14	TOTAL (I. 111, 112)	Short									
1.14	TOTAL (Items 1.1 to 1.13)	Short									
1.15	Market risk capital charge factor		0.00%	0.25%	1.00%	1.60%	8.00%	12.00%	%		
1.16	MARKET RISK CAPITAL CHARGE FOR SPECIFIC RISK FOR INTEREST	Long									
1.10	RATE EXPOSURES	Short									
1.17	APPLICABLE TOTAL MARKET RISK CAPITAL CHARGE FOR SPECIFIC RISK FOR INTEREST RATE EXPOSURES (Note (2))										

Note: (1) For debt-related option contracts, the delta-weighted positions should be reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1. (2) The applicable market risk capital charge for specific risk (i.e. Item 1.17) of the institution is calculated as the sum of the market risk capital charge for the gross (i.e. long + short) positions reported in the last column of Item 1.16.

G.2	Interest rate exposures - general market risk						
Currency:	(separate form for each currency)						

#### Maturity method

(HK\$'000)

Zone	Time band	Со	upon			Individua	l positions			Risk-weight	Risk-weigh	ed positions
		Coupon of not less than 3% per	Coupon of less than 3% per annum		Debt securities & debt-related derivative contracts		rivative contracts	To	tal			
		amum		Long	Short	Long	Short	Long	Short	1	Long	Short
1	1	≤1 month	≤1 month							0.00%		
	2	>1 to 3 months	>1 to 3 months							0.20%		
	3	>3 to 6 months	>3 to 6 months							0.40%		
	4	>6 to 12 months	>6 to 12 months							0.70%		
2	5	>1 to 2 years	>1.0 to 1.9 years							1.25%		
	6	>2 to 3 years	>1.9 to 2.8 years							1.75%		
	7	>3 to 4 years	>2.8 to 3.6 years							2.25%		
3	8	>4 to 5 years	>3.6 to 4.3 years							2.75%		
	9	>5 to 7 years	>4.3 to 5.7 years							3.25%		
	10	>7 to 10 years	>5.7 to 7.3 years							3.75%		
	11	>10 to 15 years	>7.3 to 9.3 years							4.50%		
	12	>15 to 20 years	>9.3 to 10.6 years							5.25%		
	13	>20 years	>10.6 to 12 years							6.00%		
	14		>12 to 20 years							8.00%		
	15		>20 years							12.50%		
		TOTAL										
		OVERALL NET OPEN RISK-W	EIGHTED POSITION									

	Vertical disallowance	Horizontal disallowance in			Horizontal disallowance between			Overall net open risk-weighted	Total market
Calculation	uisanowanee	Zone 1	Zone 2	Zone 3	Zones 1 & 2	Zones 2 & 3	Zones 1 & 3	position	risk capital charge for general market risk
TOTAL MARKET RISK CAPITAL CHARGE FOR GENERAL MARKET RISK FOR INTEREST RATE EXPOSURES									

Note: For debt-related option contracts, the delta-weighted positions should be reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1.

#### Division H: SSTM Approach - Equity Exposures (Trading Book)

(HK\$'000)

							(11120 000)
Item	Nature of item	Positions	Homa Vona		Total		
			Hong Kong		le Hong Kong (N		
1.	Common stocks	Long					
		Short					
2.	Convertible securities	Long					
		Short					
3.	Commitments to buy or sell equities and equity forward contracts	Long					
		Short					
4.	Equity swap contracts (Note (2))	Long					
		Short					
5.	Futures contracts relating to equity indices	Long					
		Short					
6.	Futures contracts relating to individual equities	Long					
		Short					
7.	Option contracts relating to equity indices (Note (3))	Long					
		Short					
8.	Option contracts relating to individual equities (Note (3))	Long					
		Short					
9.	Others	Long					
		Short					
	TOTAL	Long					
		Short					

#### Calculation

(A)	Gross (long plus short) positions							
	Market risk capital charge factor	8%	8%	8%	8%	8%	8%	
	Market risk capital charge for specific risk							
(B)	Net long or short positions (in absolute value)							
	Market risk capital charge factor	8%	8%	8%	8%	8%	8%	
	Market risk capital charge for general market risk							
TOTAL MARKET RISK CAPITAL CHARGE FOR EQUITY EXPOSURES								

Note:

- (1) The reporting institution should report its equity exposures on an exchange-by-exchange basis (i.e. separate column for each stock or futures exchange) and use separate reporting form(s) if the columns of this form are not enough.
- (2) Where an equity swap contract involves a leg requiring the receipt or payment of fixed or floating rate interest, that leg should be regarded as an interest rate exposure and reported in Division G.2.
- (3) For equity-related option contracts, the delta-weighted positions should be reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1.

#### Division I: SSTM Approach - Foreign Exchange Exposures

(HK\$'000) A. Market risk capital charge calculations

		Net long (she	ort) position excluding opt	tion contracts	Option contracts	Total
					Net delta-weighted	net
Currency		Hong Kong offices	Overseas branches	Subsidiaries	positions of	long (short)
		Note (1)	Note (1)	Note (1)	option contracts	position
					Note (2)	
US dollars	USD					
Pound sterling	GBP					
Japanese yen	JPY					
Euro	EUR					
Chinese renminbi	CNY					
Canadian dollars	CAD					
Swiss francs	CHF					
Australian dollars	AUD					
Singapore dollars	SGD					
New Zealand dollars	NZD					
Gold	GOL					
Foreign currencies not separately specified above						
Hong Kong dollars	HKD					
Sum of net long / short positions						
USD / HKD position						
Adjusted sum of net long / short positions						

#### Calculation

1.	Adjusted sum of net long / short positions	
2.	Net position in gold (in absolute value)	
3.	Total net open position (Item 3 = Item 1 + Item 2)	
4	Market risk capital charge factor	8%
	TOTAL MARKET RISK CAPITAL CHARGE FOR FOREIGN EXCHANGE EXPOSURES	

Note:

- Figures are extracted from Part I columns 5, 7 and 8 (where applicable) of the Return of Foreign Currency Position (MA(BS)6) but reported in HK\$'000, subject to any applicable adjustments specified in paragraphs 5(b), 61 and 62 of the completion instructions for the Form MA(BS)3A(I): Divisions G to K.
- For exchange rate-related option contracts, the delta-weighted positions are reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1.

## Division I: SSTM Approach - Foreign Exchange Exposures

## B. Structural foreign exchange positions excluded from the market risk capital charge

	Amount of structur	al position excluded	the sensitivity of movements in exchan	at perfectly neutralises the capital ratio to ge rate of the currency inst ng dollars
Currency (Note(1))	in the original currency '000 (1)	in HKD'000 equivalent (2)	in the original currency '000 (3)	in HKD'000 equivalent (4)
+ Insert a currency				
+ Insert a currency				

Note: (1) It represents the currency against Hong Kong dollars.

Division J: SSTM Approach - Commodity Exposures

(HK\$'000)

				Net	Gross	Market risk capi	ital charge factor	Total market
		Long	Short	long or short	long plus short	Net	Gross	risk capital
Item	Nature of items	position	position	position	position	position	position	charge for
				(in absolute value)				commodity exposures
		(1)	(2)	(3) = (1) - (2)	(4) = (1) + (2)	(5)	(6)	$(7) = (3) \times (5) + (4) \times (6)$
1.	Platinum					15%	3%	
2.	Silver					15%	3%	
3.	Other precious metals (excluding gold)					15%	3%	
4	Other precious metals (excluding gold)					15%	3%	
5.	Base metals and non-precious metals					15%	3%	
6.	Base metals and non-precious metals					15%	3%	
7.	Energy					15%	3%	
8.	Energy					15%	3%	
9.	Agricultural assets					15%	3%	
10.	Agricultural assets					15%	3%	
	TOTAL MARKET RISK CAPITAL CHARGE FOR COMMO	DITY EXPOSURES		•	•			

Note:

<sup>(1)</sup> Where a commodity swap contract involves a leg requiring the receipt or payment of fixed or floating rate interest, that leg should be regarded as an interest rate exposure and reported in Division G.2, with the commodity exposure being included in the particular commodity above.

<sup>(2)</sup> For commodity-related option contracts, the delta-weighted positions should be reported above or, if the reporting institution engages only in the purchase of option contracts as defined in the completion instructions, such option contracts can be carved out and reported in Division K.1.

<sup>(3)</sup> The reporting institution should use separate form(s) for reporting of items 3 to 10 above if the rows of this form are not enough.

#### Division K: SSTM Approach - Option Exposures

K.1 Simplified approach (For reporting institutions which purchase only option contracts as defined in the completion instructions.)

#### 1(a) Long option contract with a related position in the underlying exposure of the option contract

Report the market risk capital charge for each option contract as well as the related position in the underlying exposure below.

Market risk capital charge = (Fair value of the underlying exposure of the option contract) x (Sum of the market risk capital charge factors for general market risk and specific risk for the underlying exposure) – (The amount by which the option contract is in-the-money)

(HK\$'000)

		Market risk capi	Market risk capital charge factor		isk capital charge factor Long underlying Short		Short underlying	Total market risk capital charge
Item	Nature of the underlying exposure	Specific risk	General market risk	exposure & long put option contract	exposure & long call option contract			
1.1	Debt instruments (Note (1))	0.00% (Note(2))	Note (3)					
		0.25% (Note(2))	Note (3)					
		1.00% (Note(2))	Note (3)					
		1.60% (Note(2))	Note (3)					
		8.00% (Note(2))	Note (3)					
		12.00% (Note(2))	Note (3)					
		To be specified (Note(2))	Note (3)					
1.2	Interest rate, i.e. non-debt related (Note (1))	0.00%	Note (3)					
1.3	Equity (Note(1))	8.00%	8.00%					
1.4	Foreign exchange	0.00%	8.00%					
1.5	Commodity	0.00%	15.00%					
	TOTAL MARKET RISK CAPITAL CHARGE FOR OPTION EXPOSURES							

Note: (1) Only trading book positions should be reported.

(2) The classes are same as those in Division G.1(a).

(3) The general market risk capital charge should be calculated as per the risk-weights according to the time bands set out in Division G.2.

#### K.1 Simplified approach (For reporting institutions which purchase only option contracts as defined in the completion instructions.)

#### 1(b) Long call or long put option contracts

Report the market risk capital charge for each option contract below. Such market risk capital charge should be the lesser of (i) the fair value of the underlying exposure of the option contract multiplied by the sum of the market risk capital charge factors for general market risk and specific risk for the underlying exposure of the option contract and (ii) the fair value of the option contract.

(HK\$'000)

		Market risk capital charge factor			T 11 4:	T-4-1
Item	Nature of the underlying exposure	Specific risk	General market risk	Long put option contract	Long call option contract	Total market risk capital charge
1.1	Debt instruments (Note (1))	0.00% (Note(2))	Note (3)			
		0.25% (Note(2))	Note (3)			
		1.00% (Note(2))	Note (3)			
		1.60% (Note(2))	Note (3)			
		8.00% (Note(2))	Note (3)			
		12.00% (Note(2))	Note (3)			
		To be specified (Note(2))	Note (3)			
1.2	Interest rate, i.e. non-debt related (Note (1))	0.00%	Note (3)			
1.3	Equity (Note(1))	8.00%	8.00%			
1.4	Foreign exchange	0.00%	8.00%			
1.5	Commodity	0.00%	15.00%			
	TOTAL MARKET RISK CAPITAL CHARGE FOR OPTION EXPOSURES					

Note:

- (1) Only trading book positions should be reported.
- (2) The classes are same as those in Division G.1(a).
- (3) The general market risk capital charge should be calculated as per the risk-weights according to the time bands set out in Division G.2.

K.2	Delta-plus approach - gamma and vega risks (For reporting institutions which use the delta-plus approach to report option contracts)

Currency: (separate form for each currency)

2(a)

Debt-related and interest rate option contracts

(HK\$'000)

**Equity option contracts** 

			(1112,000)	
Time	e band	Market risk capital charge for gamma	Market risk capital charge for	
Coupon of not less than 3% per annum	Coupon of less than 3% per annum	risk (negative gamma impact)	vega risk	
≤1 month	≤1 month			
>1 to 3 months	>1 to 3 months			
>3 to 6 months	>3 to 6 months			
>6 to 12 months	>6 to 12 months			
>1 to 2 years	>1.0 to 1.9 years			
>2 to 3 years	>1.9 to 2.8 years			
>3 to 4 years	>2.8 to 3.6 years			
>4 to 5 years	>3.6 to 4.3 years			
>5 to 7 years	>4.3 to 5.7 years			
>7 to 10 years	>5.7 to 7.3 years			
>10 to 15 years	>7.3 to 9.3 years			
>15 to 20 years	>9.3 to 10.6 years			
>20 years	>10.6 to 12 years			
	>12 to 20 years			
	>20 years			
Total 2(a)				

Types of underlying exposure	Market risk capital charge for gamma risk (negative gamma impact)	Market risk capital charge for vega risk
Total 2(b)		

Note: Report the delta-weighted position of option contracts into Divisions G to J as appropriate.

2(b)

K.2 Delta-plus approach - gamma and vega risks (For reporting institutions which use the delta-plus approach to report option contracts)

#### Foreign exchange and gold option contracts 2(c)

#### 2(d) Commodity option contracts

(HK\$'000) (HK\$'000)

Types of underlying exposure	Market risk capital charge for gamma risk (negative gamma impact)	Market risk capital charge for vega risk	Types of underlying exposure	Market risk capital charge for gamma risk (negative gamma impact)	Market risk capital charge for vega risk
Total 2(c)			Total 2(d)		

Note: Report the delta-weighted position of option contracts into Divisions G to J as appropriate.

## Part II: CVA Risk Capital Charge

## Division A: Reduced Basic CVA Approach

(HK\$'000)

Item	CVA risk capital charge	Total risk-weighted amount for CVA risk under reduced basic CVA approach (Column (1) x 12.5)
	(1)	(2)
1		

## **Division B: Full Basic CVA Approach**

Item	$BA\_CVA_{reduced}$ (1)	$BA\_CVA_{hedged}$ (2)	CVA risk capital charge (3)	Total risk-weighted amount for CVA risk under full basic CVA approach (Column (3) x 12.5)  (4)
1				

## Division C: Standardized CVA Approach

## C.1 Summary of CVA risk capital charge under standardized CVA approach

			(HK\$ 000
Item		CVA risk ca	pital charge
Item		(1)	(2)
1.	CVA delta risk capital charge:		
	(a) Interest rate risk		
	(b) Foreign exchange risk		
	(c) Counterparty credit spread risk		
	(d) Reference credit spread risk		
	(e) Equity risk		
	(f) Commodity risk		
2.	CVA vega risk capital charge:		
	(a) Interest rate risk		
	(b) Foreign exchange risk		
	(c) Reference credit spread risk		
	(d) Equity risk		
	(e) Commodity risk		
3.	Total CVA delta and vega risk capital charge		
4.	$\mathbf{m}_{\mathrm{CVA}}$		
5.	Total CVA risk capital charge under standardized CVA approach (Item 3 x Item 4)		
6.	Total risk-weighted amount for CVA risk under standardized CVA approach (Item 5 x 12.5)		

## C.2 Interest rate risk

Item	Currency		CVA delta risk (1)	CVA vega risk (2)
			Bucket-level	capital charge
	Hong Kong dollars	HKD		
	US dollars	USD		
	Chinese renminbi	CNY		
	Australian dollars	AUD		
	Canadian dollars	CAD		
	Euro	EUR		
	Japanese yen	JPY		
1	New Zealand dollars	NZD		
	Pound sterling	GBP		
	Singapore dollars	SGD		
	Swiss francs	CHF		
	+ Insert a currency that does n	ot list above		
	+ Insert a currency that does n	ot list above		
2	Total:			
3	CVA risk capital charge for	interest rate risk		

## C.3 Foreign exchange risk

(HK\$'000)

Item	Currency (Note (1))		CVA delta risk	CVA vega risk
			(1)	(2)
		Bucket-level	capital charge	
	US dollars	USD		
	Chinese renminbi	CNY		
	Australian dollars	AUD		
	Canadian dollars	CAD		
	Euro	EUR		
	Japanese yen	JPY		
	New Zealand dollars	NZD		
	Pound sterling	GBP		
	Singapore dollars	SGD		
	Swiss francs	CHF		
1	+ Insert a currency that doe	s not list above		
	+ Insert a currency that doe	s not list above		
2	Total:			
3	CVA risk capital charge f	or foreign exchange risk		

## Note:

(1) It represents the currency against Hong Kong dollars.

## C.4 Counterparty credit spread risk

Item	Bucket	Sector Credit quality		Bucket-level CVA delta risk capital charge
	1	Sovereigns including central banks, multilateral development banks	(a) Investment grade	
		Sovereigns including central banks, multilateral development banks	(b) Non-investment grade & unrated	
		Local government, government-backed non-financials, education, public administration	(a) Investment grade	
			(b) Non-investment grade & unrated	
	2	Financials including government-backed financials	(a) Investment grade	
	2		(b) Non-investment grade & unrated	
	3	Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	(a) Investment grade	
			(b) Non-investment grade & unrated	
1	4	Consumer goods and services, transportation and storage, administrative and support service activities	(a) Investment grade	
1			(b) Non-investment grade & unrated	
	5	Technology and telecommunications	(a) Investment grade	
			(b) Non-investment grade & unrated	
	6	Health care, utilities, professional and technical activities	(a) Investment grade	
			(b) Non-investment grade & unrated	
	7	Other sector	(a) Investment grade	
			(b) Non-investment grade & unrated	
	8	Qualified indices (non-sector specific)	(a) Investment grade	
		Quantica maices (non-sector specific)	(b) Non-investment grade & unrated	
2	CVA risk			

## C.5 Reference credit spread risk

Item	Bucket	Credit quality	Sector	CVA delta risk (1)	CVA vega risk (2)
			Bucket-level capital charge		
	1		Sovereigns including central banks, multilateral development banks		
	2		Local government, government-backed non-financials, education, public administration		
	3	Investment grade	Financials including government-backed financials		
	4		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying		
	5		Consumer goods and services, transportation and storage, administrative and support service activities		
	6		Technology and telecommunications		
	7		Health care, utilities, professional and technical activities		
	8		Sovereigns including central banks, multilateral development banks		
1	9	Non-investment grade & unrated	Local government, government-backed non-financials, education, public administration		
	10		Financials including government-backed financials		
	11		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying		
	12		Consumer goods and services, transportation and storage, administrative and support service activities		
	13		Technology and telecommunications		
	14		Health care, utilities, professional and technical activities		
	15	Other sector			
	16	Investment grade	Qualified indices (non-sector specific)		
	17	Non-investment grade & unrated	Qualified indices (non-sector specific)		
2	Total:				
3	CVA risk capital charge for reference credit spread risk				

## C.6 Equity risk

Itam	Dualest	Market Can	E	C	CVA delta risk	CVA vega risk	
пеш	Bucket	Market Cap	Economy	Sector	(1)	(2)	
						Bucket-level capital charge	
	1	Emerging	Consumer goods and services, transportation and storage, administrative and support service activities, healthcare, utilities				
	2	market	Telecommunications, industrials				
	3			Basic materials, energy, agriculture, manufacturing, mining and quarrying Financials including government-backed financials, real estate activities, technology			
	4		Comonny				
i	5			Consumer goods and services, transportation and storage, administrative and support service activities, healthcare, utilities			
	6		Advanced	Telecommunications, industrials			
1	7		economy	Basic materials, energy, agriculture, manufacturing, mining and quarrying			
	8			Financials including government-backed financials, real estate activities, technology			
		9	Emerging	All sectors described under bucket numbers 1, 2, 3 and 4			
	9 S:		market				
		Small	economy				
	10		Advanced	All sectors described under bucket numbers 5, 6, 7 and 8			
		0.1	economy				
	11	Other sector					
	12	Large market capitalisation, advanced economy equity indices (non-sector specific)					
	Other equity indices (non-sector specific)						
2	Total:						
3	CVA risk	CVA risk capital charge for equity risk					

# C.7 Commodity risk

Item	Bucket	Commodity bucket	CVA delta risk (1)	CVA vega risk (2)
			Bucket-level	capital charge
	1	Energy - Solid combustibles		
	2	Energy - Liquid combustibles		
	3	Energy - Electricity and carbon trading		
	4	Freight		
	5	Metals – non-precious		
1	6	Gaseous combustibles		
	7	Precious metals (including gold)		
	8	Grains & oilseed		
	9	Livestock & dairy		
	10	Softs and other agriculturals		
	11	Other commodity		
2	Total:			
3	CVA risk capital charge for commodity risk			

### Division D: Treatment where Total Notional Amount of the OTC Derivative Transactions not Cleared with a CCP Does not Exceed HKD 1 Trillion on a Permanent Basis

Item	Total notional amount of the institution's OTC derivative transactions that are not cleared with a CCP	Risk-weighted amount for CVA risk	
	(1)	(2)	
1			