

Interest rate yield shocks absolute changes (basis points)											
GEO	Country	Description	1M	3M	1Y	2Y	3Y	5Y	7Y	10Y	10Y+
EU	<b>Euro Area</b>	Interest rate SWAP on the EUR (Euro)	45.2	57.0	57.4	57.7	58.1	58.5	59.1	59.1	59.1
EU	<b>Bulgaria</b>	Interest rate SWAP on the BGN (Bulgarian lev)									
EU	<b>Croatia</b>	Interest rate SWAP on the HRK (Croatian Kuna)	45.2	57.0	59.3	61.6	63.9	68.3	72.8	78.8	78.8
EU	<b>Czech Republic</b>	Interest rate SWAP on the CZK (Czech Koruna)	45.2	57.0	55.8	54.6	53.4	51.0	48.4	44.0	44.0
EU	<b>Denmark</b>	Interest rate SWAP on the DKK (Danish Krone)	45.2	57.0	57.4	57.6	57.9	58.6	59.2	59.5	59.5
EU	<b>Hungary</b>	Interest rate SWAP on the HUF (Hungarian Forint)	45.2	57.0	61.1	65.2	69.2	77.2	85.1	96.4	96.4
EU	<b>Poland</b>	Interest rate SWAP on the PLN (Polish Zloty)	45.2	57.0	60.8	64.6	68.6	76.2	83.8	94.8	94.8
EU	<b>Romania</b>	Interest rate SWAP on the RON (Romanian Leu)	45.2	57.0	57.4	57.7	58.2	58.9	59.5	59.7	59.7
EU	<b>Sweden</b>	Interest rate SWAP on the SEK (Swedish Krona)	45.2	57.0	56.2	55.3	54.5	53.0	51.3	48.3	48.3
EU	<b>United Kingdom</b>	Interest rate SWAP on the GBP (British Pound)	45.2	57.0	57.4	57.8	58.1	58.7	59.3	59.8	59.8
Rest of Europe	<b>Iceland</b>	Interest rate SWAP on the ISK (Icelandic Króna)									
Rest of Europe	<b>Norway</b>	Interest rate SWAP on the NOK (Norwegian Krone)	45.2	57.0	55.5	54.0	52.5	49.6	46.6	41.5	41.5
Rest of Europe	<b>Russia</b>	Interest rate SWAP on the RUB (Russian Ruble)	8.9	11.2	15.2	19.3	23.4	31.5	39.6	51.2	51.2
Rest of Europe	<b>Switzerland</b>	Interest rate SWAP on the CHF (Swiss Franc)	16.4	20.7	21.9	23.0	24.2	26.2	28.3	30.6	30.6
Rest of Europe	<b>Turkey</b>	Interest rate SWAP on the TRY (Turkish Lira)	10.9	13.8	15.9	18.1	20.3	24.6	28.9	34.9	34.9
Rest of Europe	<b>Ukraine</b>	Interest rate SWAP on the UAH (Ukrainian Hryvnia)									
North America	<b>Canada</b>	Interest rate SWAP on the CAD (Canadian Dollar)	7.3	9.2	13.8	18.4	23.0	32.2	41.3	54.3	54.3
North America	<b>US</b>	Interest rate SWAP on the USD (US Dollar)	65.2	71.0	71.0	105.9	124.7	162.4	175.8	215.5	215.5
Australia and Pacific	<b>Australia</b>	Interest rate SWAP on the AUD (Australian Dollar)	20.0	25.3	29.5	33.7	38.0	46.6	55.1	67.5	67.5
Australia and Pacific	<b>New Zealand</b>	Interest rate SWAP on the NZD (New Zealand Dollar)									
South and central America	<b>Argentina</b>	Interest rate SWAP on the ARS (Argentine Peso)									
South and central America	<b>Brazil</b>	Interest rate SWAP on the BRL (Brazilian Real)	4.8	6.1	7.5	8.8	10.4	13.2	16.1	19.6	19.6
South and central America	<b>Chile</b>	Interest rate SWAP on the CLP (Chilean Peso)	3.1	4.0	6.0	8.2	10.3	14.4	18.5	23.6	23.6
South and central America	<b>Colombia</b>	Interest rate SWAP on the COP (Colombian Peso)	45.2	21.6	23.2	24.6	26.0	29.0	31.8	35.4	35.4
South and central America	<b>Mexico</b>	Interest rate SWAP on the MXN (Mexican Peso)	14.6	18.5	21.5	24.5	27.5	33.4	39.4	47.6	47.6
South and central America	<b>Peru</b>	Interest rate SWAP on the PEN (Peruvian Sol)	-15.7	-16.7							
Asia	<b>China</b>	Interest rate SWAP on the CNY (Chinese Yuan)	17.2	17.2	17.3	17.4	17.4	17.5	17.4	16.8	16.8
Asia	<b>Hong Kong</b>	Interest rate SWAP on the HKD (Hong Kong Dollar)	3.4	4.3	6.6	8.8	11.2	15.7	20.2	26.5	26.5
Asia	<b>India</b>	Interest rate SWAP on the INR (Indian Rupee)	5.2	5.2	5.9	6.7	7.6	9.1	10.6	12.0	12.0
Asia	<b>Indonesia</b>	Interest rate SWAP on the IDR (Indonesian Rupiah)	45.2	57.0							
Asia	<b>Japan</b>	Interest rate SWAP on the JPY (Japanese Yen)	0.2	0.2	1.4	2.8	4.0	6.4	9.0	12.1	12.1
Asia	<b>Korea</b>	Interest rate SWAP on the KRW (South Korean Won)	9.3	9.3	10.0	10.7	11.3	12.8	14.0	15.5	15.5
Asia	<b>Malaysia</b>	Interest rate SWAP on the MYR (Malaysian Ringgit)	7.3	7.3	8.6	10.1	11.4	14.0	16.6	19.6	19.6
Asia	<b>Pakistan</b>	Interest rate SWAP on the PKR (Pakistani Rupee)	15.5	15.5	16.7	17.9	19.0	21.3	23.5	25.9	25.9
Asia	<b>Philippines</b>	Interest rate SWAP on the PHP (Philippine Peso)	4.5	4.5	5.6	6.8	8.0	10.2	12.6	15.4	15.4
Asia	<b>Singapore</b>	Interest rate SWAP on the SGD (Singapore Dollar)	21.4	21.4	21.9	22.4	22.9	23.6	24.3	24.9	24.9
Asia	<b>Thailand</b>	Interest rate SWAP on the THB (Thai Baht)	4.5	4.5	5.8	7.2	8.5	11.2	13.9	17.1	17.1
Asia	<b>Vietnam</b>	Interest rate SWAP on the VND (Vietnamese Dong)	4.8	4.8	6.1	7.2	8.4	10.7	12.9	15.5	15.5
Africa	<b>Angola</b>	Interest rate SWAP on the AOA (Angolan Kwanza)	31.1	31.1	32.1	33.2	34.3	36.4	38.7	41.5	41.5
Africa	<b>Mozambique</b>	Interest rate SWAP on the MZN (Mozambican Metical)	25.9	25.9	28.2	30.3	32.5	36.7	40.9	46.6	46.6
Africa	<b>South Africa</b>	Interest rate SWAP on the ZAR (South African Rand)	4.5	5.7	7.4	9.1	10.8	13.9	17.1	21.5	21.5

Government bond yield* shocks absolute changes (basis points)									
GEO	Country	3M	1Y	2Y	3Y	5Y	7Y	10Y	10Y+
EU	Austria	49	49	73	78	87	84	79	72
EU	Belgium	10	10	35	45	64	68	84	83
EU	Bulgaria	134	134	122	122	122	106	58	32
EU	Croatia							59	
EU	Cyprus							87	
EU	Czech Republic	156	156	133	116	81	77	66	71
EU	Denmark	14	14	14	21	36	53	51	44
EU	Finland	10	10	24	32	49	60	74	72
EU	France	60	60	77	78	79	77	77	77
EU	Germany	10	10	22	30	47	57	62	69
EU	Greece					55	87	135	138
EU	Hungary	15	15	27	40	53	56	60	57
EU	Ireland	31	31	35	40	44	64	67	77
EU	Italy	63	63	98	105	118	122	125	116
EU	Latvia							59	
EU	Lithuania							78	
EU	Luxembourg							93	
EU	Malta					25		61	
EU	Netherlands	4	4	26	36	57	63	67	63
EU	Poland	15	15	22	33	54	54	67	51
EU	Portugal	21	21	55	66	88	121	131	108
EU	Romania	52	52	57	57	58	62	58	61
EU	Slovakia	173	173	119	111	93	87	78	47
EU	Slovenia	85	85	72	60	37	75	50	23
EU	Spain	60	60	69	82	108	113	113	112
EU	Sweden	49	49	63	67	73	72	74	57
EU	United Kingdom	75	75	79	83	91	89	88	79
North America	Canada	59	59	78	79	81	81	76	63
North America	US	28	28	69	103	171	192	192	169
Australia and Pacific	Australia	13	13	29	31	34	45	48	47
Australia and Pacific	New Zealand	2	2	2	9	9	11	14	14
South and central America	Argentina	53	53	58	61	67	74	70	70
South and central America	Brazil	53	53	58	61	67	74	70	70
South and central America	Chile	10	10	37	39	43	49	58	58
South and central America	Colombia	9	9	33	35	39	44	52	38
South and central America	Mexico	50	50	49	54	65	69	81	81
South and central America	Peru	4	4	4	4	3	29	30	21
Rest of Europe	Iceland								
Rest of Europe	Norway	105	105	101	97	91	87	81	81
Rest of Europe	Russia	48	48	53	58	68	66	64	73
Rest of Europe	Switzerland	9	9	7	10	17	25	29	29
Rest of Europe	Turkey	62	62	72	78	89	71	95	95
Rest of Europe	Ukraine	72	72	7	28	72	49	9	-4
Asia	China	0	0	0	1	3	9	9	9
Asia	Hong Kong	2	2	10	13	20	21	24	30
Asia	India	8	8	8	9	11	15	11	8
Asia	Indonesia	14	14	20	21	24	24	41	33
Asia	Japan	0	0	1	1	2	1	1	3
Asia	Korea	3	3	4	8	15	7	9	5
Asia	Malaysia	6	6	8	10	13	11	11	9
Asia	Pakistan	8	8	8	9	11	15	11	8
Asia	Philippines	2	2	2	3	3	7	19	10
Asia	Singapore	1	1	9	12	20	23	28	26
Asia	Thailand	2	2	2	3	6	11	14	7
Asia	Vietnam	2	2	2	3	6	11	14	7
Africa	Angola							55	
Africa	Mozambique							60	
Africa	South Africa	29	29	34	37	41	43	47	54

\*Government benchmark bond yields

Equity, Commodities and Funds				
relative changes (%)				
Risk factor category	GEO	Country	Index name	Shock
Equity	EU	<b>Austria</b>	Austrian Traded Index	-33.4
Equity	EU	<b>Belgium</b>	Belgium BEL 20 Index	-28.1
Equity	EU	<b>Bulgaria</b>	Bulgaria Stock Exchange SOFIX Index	-24.8
Equity	EU	<b>Croatia</b>	Zagreb Stock Exchange CROBEX Index	-25.0
Equity	EU	<b>Cyprus</b>	Cyprus Market Index	-31.1
Equity	EU	<b>Czech Republic</b>	Prague Stock Exchange Index	-24.5
Equity	EU	<b>Denmark</b>	Nordic Exchange OMX Copenhagen 20 Index	-25.6
Equity	EU	<b>Estonia</b>	Nordic Exchange OMX Tallinn (OMXT) Index	-22.9
Equity	EU	<b>Finland</b>	Nordic Exchange OMX Helsinki Price Index	-28.9
Equity	EU	<b>France</b>	France CAC 40 Index	-33.2
Equity	EU	<b>Germany</b>	DAX 30 Performance Index	-31.4
Equity	EU	<b>Greece</b>	Athens Stock Exchange Main General Index	-31.7
Equity	EU	<b>Hungary</b>	Budapest Stock Exchange BUX Index	-26.9
Equity	EU	<b>Ireland</b>	Irish Stock Exchange ISEQ Overall Index	-29.5
Equity	EU	<b>Italy</b>	FTSE Milan Stock Exchange MIB	-35.0
Equity	EU	<b>Latvia</b>	Nordic Exchange OMX Riga (OMXR) Index	-23.1
Equity	EU	<b>Lithuania</b>	Nordic Exchange OMX Vilnius General Index	-11.6
Equity	EU	<b>Luxembourg</b>	Luxembourg Stock Exchange LuxX Index	-25.2
Equity	EU	<b>Malta</b>	Matla Stock Exchange Index	-9.6
Equity	EU	<b>Netherlands</b>	Amsterdam Exchange (AEX) Index	-29.9
Equity	EU	<b>Poland</b>	Warsaw Stock Exchange General Index	-24.1
Equity	EU	<b>Portugal</b>	Portugal PSI-20 Index	-29.4
Equity	EU	<b>Romania</b>	Romania BET 10 Index	-18.6
Equity	EU	<b>Slovakia</b>	Bratislava Stock Exchange SAX Index	-22.1
Equity	EU	<b>Slovenia</b>	Slovenian Blue Chip Index (SBI TOP)	-21.5
Equity	EU	<b>Spain</b>	Spain IBEX 35 Index	-35.3
Equity	EU	<b>Sweden</b>	Nordic Exchange OMX Stockholm Options Marknad Value Index	-28.1
Equity	EU	<b>United Kingdom</b>	Financial Times Stock Exchange (FTSE) Ordinary Share Index	-27.5
Equity	Rest of Europe	<b>Norway</b>	Oslo Exchange All Share Index	-28.5
Equity	Rest of Europe	<b>Russia</b>	Russian Traded Index	-37.5
Equity	Rest of Europe	<b>Switzerland</b>	Swiss Exchange SWX Swiss Market Index	-21.7
Equity	Rest of Europe	<b>Turkey</b>	International Stock Exchange National 100 Index	-29.8
Equity	North America	<b>Canada</b>	Standard and Poors/TSX Composite Index	-21.7
Equity	North America	<b>US</b>	Standard and Poors 500 Index	-23.6
Equity	Australia and Pacific	<b>Australia</b>	Australian Stock Exchange All Ordinaries Index	-20.9
Equity	South and central America	<b>Argentina</b>	Buenos Aires Stock Exchange Merval Index	-36.4
Equity	South and central America	<b>Brazil</b>	Sao Paulo Stock Exchange Bovespa Index	-30.3
Equity	South and central America	<b>Mexico</b>	Mexico Stock Exchange (MXSE) IPC General Index	-21.9
Equity	Asia	<b>China</b>	Shanghai Stock Exchange Composite Index	-33.8
Equity	Asia	<b>Hong Kong</b>	Hong Kong Stock Exchange HANG SENG Index (HSI)	-27.9
Equity	Asia	<b>India</b>	Bombay Stock Exchange Sensitive Index	-17.8
Equity	Asia	<b>Japan</b>	Nikkei Index	-29.2
Equity	Asia	<b>Singapore</b>	Straits Times Index STI	-22.4
Equity	EU	<b>Dividend EU</b>	EURO STOXX Select Dividend 30	-26.9
Equity	North America	<b>Dividend North America</b>	Dow Jones U.S. Select Dividend Index	-24.0
Equity	Global	<b>General dividends</b>	Global Select Dividend 100 Index	-18.4
Funds	EU	<b>EU Private equity index</b>	LPX Europe Listed Private Equity Index PI	-26.8
Funds	Global	<b>Global Private Equity index</b>	LPX50 Listed Private Equity Index PI	-26.3
Funds	EU	<b>EU Hedge Fund Index</b>	db Hedge Fund Index	-8.4
Funds	Global	<b>Global Hedge Fund Index</b>	HFRX Global Hedge Fund Index	-5.1
Funds	Global	<b>Global Real Estate Investment Trusts Index</b>	MSCI World Real Estate Investment Trusts-REITs Index	-27.9
Commodities	Global	<b>Oil Crude Brent</b>	BRENT CRUDE FUTR (3M)	-3.8
Commodities	Global	<b>Natural Gas</b>	Natural Gas on NYMEX FUTR CFD (3M)	-2.1
Commodities	Global	<b>Gold</b>	XAUUSD Spot Exchange Rate	-0.2
Commodities	Global	<b>Agriculturals</b>	BCOMAG Index	-12.3
Commodities	Global	<b>Metals</b>	BCOMIN Index	-10.4
Commodities	Global	<b>General commodities</b>	BCOM Index	-14.6

FX shocks relative changes (%)			
GEO	Description	Exchange rate name	Shock
EU	EURBGN represents 1 EUR per x BGN (Bulgarian Lev)	EURBGN	8.1
EU	EURCZK represents 1 EUR per x CZK (Czech Koruna)	EURCZK	8.4
EU	EURGBP represents 1 EUR per x GBP (British Pound)	EURGBP	9.6
EU	EURHRK represents 1 EUR per x HRK (Croatian Kune)	EURHRK	2.9
EU	EURHUF represents 1 EUR per x HUF (Hungarian Forints)	EURHUF	12.4
EU	EURNOK represents 1 EUR per x NOK (Norwegian Krone)	USDNOK	15.3
EU	EURPLN represents 1 EUR per x PLN (Polish Zloty)	EURPLN	11.2
EU	EURRON represents 1 EUR per x RON (Romanian Leu )	EURRON	7.4
EU	EURRSD represents 1 EUR per x RSD (Serbian Dinar )	EURRSD	9.1
EU	USDSEK represents 1 USD per x SEK (Swedish Krona)	USDSEK	15.1
Rest of Europe	EURCHF represents 1 EUR per x CHF (Swiss Franc)	EURCHF	-8.2
Rest of Europe	EURRUB represents 1 EUR per x RUB (Russian Ruble)	EURRUB	19.3
Rest of Europe	EURTRY represents 1 EUR per x TRY (Turkish Lira)	EURTRY	15.7
North America	USDCAD represents 1 USD per x CAD (Canadian dollar)	USDCAD	11.9
North America	EURUSD represents 1 EUR per x USD (US Dollar)	EURUSD	-5.4
Australia and Pacific	AUDUSD represents 1 AUD per x USD (Australian Dollar)	AUDUSD	-9.7
Australia and Pacific	NZDUSD represents 1 NZD per x USD (New Zealand Dollar)	NZDUSD	-8.4
South and central America	USDARS represents 1 USD per x ARS (Argentine Peso)	USDARS	7.4
South and central America	USDBRL represents 1 USD per x BRL (Brazilian Real)	USDBRL	20.0
South and central America	USDMXN represents 1 USD per x MXN (Mexican Peso)	USDMXN	15.1
Asia	USDCNY represents 1 USD per x CNY (Chinese Yuan Renminbi)	USDCNY	2.5
Asia	USDHKD represents 1 USD per x HKD (Hong Kong Dollar)	USDHKD	0.6
Asia	USDINR represents 1 USD per x INR (Indian Rupee)	USDINR	9.5
Asia	USDJPY represents 1 USD per x JPY (Japanese Yen)	USDJPY	11.4
Asia	USDKRW represents 1 USD per x KRW (South Korean Won)	USDKRW	13.1
Asia	USDMYR represents 1 USD per x MYR (Malaysian Ringgit)	USDMYR	7.9
Asia	USDSGD represents 1 USD per x SGD (Singapore Dollar)	USDSGD	6.9
Asia	USDTHB represents 1 USD per x THB (Thai Baht)	USDTHB	5.7
Asia	USDTWD represents 1 USD per x TWD (New Taiwan Dollar)	USDTWD	8.1
Africa	USDZAR represents 1 USD per x ZAR (South African Rand)	USDZAR	20.3

Corporate credit spreads for EU countries absolute changes (basis points)						
GEO	Country	Type	AAA	AA	A	BBB
EU	EU	Financial	66	75	76	127
		Non-financial	63	72	70	70
	Austria	Financial	84	95	125	143
		Non-financial	52	59	78	84
	Belgium	Financial	57	64	84	209
		Non-financial	51	58	77	88
	Denmark	Financial	68	77	101	146
		Non-financial	40	45	59	86
	France	Financial	69	78	92	190
		Non-financial	67	76	68	73
	Germany	Financial	73	83	87	152
		Non-financial	80	91	72	78
	Italy	Financial	50	56	101	139
		Non-financial	55	63	89	77
	Netherlands	Financial	57	65	73	87
		Non-financial	64	73	73	73
	Portugal	Financial	60	68	69	132
		Non-financial	58	66	67	130
	Spain	Financial	118	135	136	138
		Non-financial	35	40	40	124
Sweden	Financial	64	73	98	123	
	Non-financial	50	57	77	78	
UK	Financial	74	84	98	164	
	Non-financial	52	59	73	71	

General Corporate credit spread indexes absolute changes (basis points)			
GEO	Country	Type	Shock
EU		Itraxx Overall 5y	83
		Itraxx Crossover 5y	326
		Itraxx High vol 5y	118
		Itraxx Non financial 5y	83
North America	US	Itraxx SubFinancial 5y	206
		Investment grade*	56
		High yield*	155
Asia		Investment grade **	53
		High yield* **	111

\*CDX index

\*\* Itraxx index

Covered bonds <i>absolute changes (basis points)</i>		
GEO	Type	Shock
EU	AAA	50
	<i>below AAA</i>	96
North America	AAA	42
	<i>below AAA</i>	117
Asia	AAA	40
	<i>below AAA</i>	83

RMBS <i>absolute changes (basis points)</i>				
Country	AAA	AA	A	BBB
EU	66	86	106	150
North America	55	72	89	126
Asia	35	45	56	80

FX Implied volatility shocks relative changes (%)								
GEO	Description	Risk factor name	1M	3M	6M	1Y	2Y	5Y
EU	EURBGN ATM Implied Volatility	EURBGN						
EU	EURCZK ATM Implied Volatility	EURCZK	80.3	53.8	35.1	30.4	19.9	8.2
EU	EURGBP ATM Implied Volatility	EURGBP	38.3	28.8	22.8	19.7	16.2	15.4
EU	EURHRK ATM Implied Volatility	EURHRK	5.1	2.3	2.2	1.9	1.4	0.9
EU	EURHUF ATM Implied Volatility	EURHUF	114.0	77.9	53.1	37.5	35.7	22.8
EU	EURNOK ATM Implied Volatility	EURNOK	33.3	21.8	18.3	15.0	17.5	11.4
EU	EURPLN ATM Implied Volatility	EURPLN	94.9	55.7	38.5	27.6	20.0	17.2
EU	EURRON ATM Implied Volatility	EURRON	38.9	30.6	22.4	10.9	8.5	0.1
EU	EURRSD ATM Implied Volatility	EURRSD						
EU	EURSEK ATM Implied Volatility	EURSEK	38.7	25.5	21.0	17.7	15.1	14.8
Rest of Europe	EURCHF ATM Implied Volatility	EURCHF	56.5	36.3	34.0	29.2	25.4	22.4
Rest of Europe	EURRUB ATM Implied Volatility	EURRUB	51.7	30.1	23.9	18.9	18.0	11.7
Rest of Europe	EURTRY ATM Implied Volatility	EURTRY	32.4	28.5	23.0	21.7	22.2	14.4
North America	USDCAD ATM Implied Volatility	USDCAD	85.1	54.4	40.0	28.8	26.1	21.1
North America	EURUSD ATM Implied Volatility	EURUSD	106.6	73.3	55.1	45.2	37.2	21.1
Australia and Pacific	AUDUSD ATM Implied Volatility	AUDUSD	112.5	60.6	56.0	41.6	39.9	26.3
Australia and Pacific	NZDUSD ATM Implied Volatility	NZDUSD	134.7	80.9	57.6	43.2	32.5	17.9
South and central America	USDARS ATM Implied Volatility	USDARS	30.9	25.0	14.1	11.2	11.2	7.3
South and central America	USDBRL ATM Implied Volatility	USDBRL	77.9	53.9	36.2	27.5	22.9	8.8
South and central America	USDMXN ATM Implied Volatility	USDMXN	84.8	58.4	45.1	34.4	28.8	14.2
Asia	USDCNY ATM Implied Volatility	USDCNY	12.9	28.8	19.1	19.6	24.8	16.1
Asia	USDHKD ATM Implied Volatility	USDHKD	23.7	16.3	16.3	15.4	14.7	14.7
Asia	USDINR ATM Implied Volatility	USDINR	113.2	83.2	61.5	43.1	43.8	30.2
Asia	USDJPY ATM Implied Volatility	USDJPY	134.2	79.9	54.9	39.1	30.6	22.1
Asia	USDKRW ATM Implied Volatility	USDKRW	116.5	72.2	61.5	50.7	27.0	21.8
Asia	USDMYR ATM Implied Volatility	USDMYR	17.8	18.0	14.1	13.3	13.4	8.7
Asia	USDSGD ATM Implied Volatility	USDSGD	48.4	35.4	35.4	29.1	22.4	15.7
Asia	USDTHB ATM Implied Volatility	USDTHB	3.0	12.5	21.9	23.4	21.2	10.5
Asia	USDTHB ATM Implied Volatility	USDTHB	3.0	12.5	21.9	23.4	21.2	10.5
Asia	USDTHB ATM Implied Volatility	USDTHB	3.0	12.5	21.9	23.4	21.2	10.5
Asia	USDTWD ATM Implied Volatility	USDTWD	17.6	17.6	18.9	17.2	17.2	13.6
Africa	USDZAR ATM Implied Volatility	USDZAR	13.6	16.5	19.5	16.9	12.2	4.7

IR volatility shocks relative changes (%)						
GEO	Country	Description	3Mx1Y	1Yx1Y	5Yx5Y	10Yx10Y
EU	<i>Euro Area</i>	<i>EUR (Euro) European Swaption Black Vol ATM Libor Discount</i>	18	21	76	42
EU	<i>Croatia</i>	<i>HRK (Croatian Kuna) European Swaption Black Vol ATM Libor Discount</i>				
EU	<i>Czech Republic</i>	<i>CZK (Czech Koruna) European Swaption Black Vol ATM Libor Discount</i>	56	45	58	68
EU	<i>Denmark</i>	<i>DKK (Danish Krone) European Swaption Black Vol ATM Libor Discount</i>	64	41	58	16
EU	<i>Poland</i>	<i>PLN (Polish Zloty) European Swaption Black Vol ATM Libor Discount</i>	96	77	58	63
EU	<i>Sweden</i>	<i>SEK (Swedish Krona) European Swaption Black Vol ATM Libor Discount</i>	28	31	38	33
EU	<i>United Kingdom</i>	<i>GBP (British Pound) European Swaption Black Vol ATM Libor Discount</i>	79			
Rest of Europe	<i>Norway</i>	<i>NOK (Norwegian Krone) European Swaption Black Vol ATM Libor Discount</i>	95	49	15	11
Rest of Europe	<i>Russia</i>	<i>RUB (Russian Ruble) European Swaption Black Vol ATM Libor Discount</i>	131	107	84	27
Rest of Europe	<i>Switzerland</i>	<i>CHF (Swiss Franc) European Swaption Black Vol ATM Libor Discount</i>	149	120	56	29
Rest of Europe	<i>Turkey</i>	<i>TRY (Turkish Lira) European Swaption Black Vol ATM Libor Discount</i>	78	64	50	16
North America	<i>Canada</i>	<i>CAD (Canadian Dollar) European Swaption Black Vol ATM Libor Discount</i>	122	104	38	21
North America	<i>US</i>	<i>USD (US Dollar) European Swaption Black Vol ATM Libor Discount</i>	134	96	50	48
Australia and Pacific	<i>Australia</i>	<i>AUD (Australian Dollar) European Swaption Black Vol ATM Libor Discount</i>	100	81	40	147
South and central America	<i>Mexico</i>	<i>MXN (Mexican Peso) European Swaption Black Vol ATM Libor Discount</i>				175
Asia	<i>China</i>	<i>CNY (Chinese Yuan) European Swaption Black Vol ATM Libor Discount</i>	146	108	132	137
Asia	<i>Hong Kong</i>	<i>HKD (Hong Kong Dollar) European Swaption Black Vol ATM Libor Discount</i>	158	153	52	28
Asia	<i>India</i>	<i>INR (Indian Rupee) European Swaption Black Vol ATM Libor Discount</i>	100	73	98	104
Asia	<i>Indonesia</i>	<i>IDR (Indonesian Rupiah) European Swaption Black Vol ATM Libor Discount</i>	42	30	22	17
Asia	<i>Japan</i>	<i>JPY (Japanese Yen) European Swaption Black Vol ATM Libor Discount</i>	37	57	13	129
Asia	<i>Korea</i>	<i>KRW (South Korean Won) European Swaption Black Vol ATM Libor Discount</i>	100	73	60	100
Asia	<i>Malaysia</i>	<i>MYR (Malaysian Ringgit) European Swaption Black Vol ATM Libor Discount</i>	96	70	29	92
Asia	<i>Pakistan</i>	<i>PKR (Pakistani Rupee) European Swaption Black Vol ATM Libor Discount</i>	100	73	98	104
Asia	<i>Philippines</i>	<i>PHP (Philippine Peso) European Swaption Black Vol ATM Libor Discount</i>	80	68	75	175
Asia	<i>Singapore</i>	<i>SGD (Singapore Dollar) European Swaption Black Vol ATM Libor Discount</i>	118	162	30	50
Asia	<i>Thailand</i>	<i>THB (Thai Baht) European Swaption Black Vol ATM Libor Discount</i>	80	68	75	175
Africa	<i>South Africa</i>	<i>ZAR (South African Rand) European Swaption Black Vol ATM Libor Discount</i>	259	129	156	253



Equity volatility shocks relative changes (%)					
GEO	Country	Index name	3M	6M	12M
EU	EA	EURO STOXX 50 Volatility Index VSTOXX	210	162	129
EU	UK	FTSE 100 Volatility Index	228	176	140
North America	US	Chicago Board Options Exchange SPX Volatility Index	266	206	163
Asia	Hong Kong	HSI Volatility Index	155	120	95
Asia	Japan	Nikkei Stock Average Volatility Index	207	160	127
Global	Emerging	JPMorgan Emerging Market Volatility Index (EM-VXY)	53	41	33

Liquidity and modelling uncertainty relative changes (%)		
GEO	Country	Shock
Global	Liquidity reserve	230
Global	Modelling uncertainty - L2	180
Global	Modelling uncertainty - L3	220