

Equity, Commodities and Funds relative changes (%)				
Risk factor category	GEO	Country	Index name	Shock
Equity	EU	Austria	Austrian Traded Index	-57.7
Equity	EU	Belgium	Belgium BEL 20 Index	-58.4
Equity	EU	Bulgaria	Bulgaria Stock Exchange SOFIX Index	-64.4
Equity	EU	Croatia	Zagreb Stock Exchange CROBEX Index	-56.9
Equity	EU	Cyprus	Cyprus Market Index	-57.6
Equity	EU	Czech Republic	Prague Stock Exchange Index	-61.9
Equity	EU	Denmark	Nordic Exchange OMX Copenhagen 20 Index	-42.0
Equity	EU	Estonia	Nordic Exchange OMX Tallinn (OMXT) Index	-52.4
Equity	EU	Finland	Nordic Exchange OMX Helsinki Price Index	-51.9
Equity	EU	France	France CAC 40 Index	-54.7
Equity	EU	Germany	DAX 30 Performance Index	-54.6
Equity	EU	Greece	Athens Stock Exchange Main General Index	-65.6
Equity	EU	Hungary	Budapest Stock Exchange BUX Index	-65.9
Equity	EU	Ireland	Irish Stock Exchange ISEQ Overall Index	-57.5
Equity	EU	Italy	FTSE Milan Stock Exchange MIB	-58.2
Equity	EU	Latvia	Nordic Exchange OMX Riga (OMXR) Index	-56.9
Equity	EU	Lithuania	Nordic Exchange OMX Vilnius General Index	-55.8
Equity	EU	Luxembourg	Luxembourg Stock Exchange LuxX Index	-53.1
Equity	EU	Malta	Malta Stock Exchange Index	-35.0
Equity	EU	Netherlands	Amsterdam Exchange (AEX) Index	-50.0
Equity	EU	Poland	Warsaw Stock Exchange General Index	-64.1
Equity	EU	Portugal	Portugal PSI-20 Index	-54.3
Equity	EU	Romania	Romania BET 10 Index	-57.4
Equity	EU	Slovakia	Bratislava Stock Exchange SAX Index	-45.0
Equity	EU	Slovenia	Slovenian Blue Chip Index (SBI TOP)	-52.2
Equity	EU	Spain	Spain IBEX 35 Index	-53.5
Equity	EU	Sweden	Nordic Exchange OMX Stockholm 30 Index	-50.8
Equity	Rest of Europe	United Kingdom	Financial Times Stock Exchange (FTSE) Ordinary Share Index	-58.4
Equity	Rest of Europe	Norway	Oslo Exchange All Share Index	-49.7
Equity	Rest of Europe	Russia	Russian Traded Index	-78.7
Equity	Rest of Europe	Switzerland	Swiss Exchange SWX Swiss Market Index	-42.7
Equity	Rest of Europe	Turkey	International Stock Exchange National 100 Index	-49.3
Equity	North America	Canada	Standard and Poors/TSX Composite Index	-53.0
Equity	North America	US	Standard and Poors 500 Index	-58.5
Equity	Australia and Pacific	Australia	Australian Stock Exchange All Ordinaries Index	-50.7
Equity	South and central America	Argentina	Buenos Aires Stock Exchange Merval Index	-51.9
Equity	South and central America	Brazil	Sao Paulo Stock Exchange Bovespa Index	-62.8
Equity	South and central America	Mexico	Mexico Stock Exchange (MXSE) IPC General Index	-43.7
Equity	Asia	China	Shanghai Stock Exchange Composite Index	-53.8
Equity	Asia	Hong Kong	Hong Kong Stock Exchange HANG SENG Index (HSI)	-49.7
Equity	Asia	India	Bombay Stock Exchange Sensitive Index	-47.3
Equity	Asia	Japan	Nikkei Index	-48.9
Equity	Asia	Singapore	Straits Times Index STI	-38.2
Equity	EU	Dividend EU	EURO STOXX Select Dividend 30	-54.3
Equity	North America	Dividend North America	Dow Jones U.S. Select Dividend Index	-58.5
Equity	Others	Other countries	Other countries index	-54.1
Funds	EU	EU Private equity index	LPX Europe Listed Private Equity Index PI	-46.5
Funds	Global	Global Private Equity index		-46.5
Funds	EU	EU Hedge Fund Index	db Hedge Fund Index	-55.1
Funds	Global	Global Hedge Fund Index	HFRU Global Hedge Fund Index	-52.3
Funds	Global	Global Real Estate Investment Trusts Index		-49.3
Funds	Others	Other funds	Other funds index	-49.9
Commodities	Global	Oil Crude Brent	BRENT CRUDE FUTR	53.9
Commodities	Global	Natural Gas	NATURAL GAS FUTR	45.7
Commodities	Global	Agriculturals		46.0
Commodities	Global	Metals	Gold spot	28.1
Commodities	Global	Metals	Silver spot	56.5
Commodities	Global	Metals	Copper spot	43.6
Commodities	Global	Metals		50.2
Commodities	Others	Other commodities		51.1

FX shocks relative changes (%)			
GEO	Description	Exchange rate name	Shock
EU	EURCZK represents 1 EUR per x CZK (Czech Koruna)	EURCZK	2.3
EU	EURHUF represents 1 EUR per x HUF (Hungarian Forints)	EURHUF	7.8
EU	EURPLN represents 1 EUR per x PLN (Polish Zloty)	EURPLN	7.2
EU	EURRON represents 1 EUR per x RON (Romanian Leu)	EURRON	4.9
EU	EURRSD represents 1 EUR per x RSD (Serbian Dinar)	EURRSD	7.4
EU	EURSEK represents 1 EUR per x SEK (Swedish Krona)	EURSEK	0.0
Rest of Europe	EURGBP represents 1 EUR per x GBP (British Pound)	EURGBP	0.0
Rest of Europe	EURCHF represents 1 EUR per x CHF (Swiss Franc)	EURCHF	0.0
Rest of Europe	EURRUB represents 1 EUR per x RUB (Russian Ruble)	EURRUB	12.4
Rest of Europe	EURTRY represents 1 EUR per x TRY (Turkish Lira)	EURTRY	25.7
North America	EURCAD represents 1 EUR per x CAD (Canadian dollar)	EURCAD	0.0
North America	EURUSD represents 1 EUR per x USD (US Dollar)	EURUSD	0.0
South and central America	EURARS represents 1 EUR per x ARS (Argentine Peso)	EURARS	24.8
South and central America	EURBRL represents 1 EUR per x BRL (Brazilian Real)	EURBRL	12.0
South and central America	EURMXN represents 1 EUR per x MXN (Mexican Peso)	EURMXN	9.3
Asia	EURCNY represents 1 EUR per x CNY (Chinese Yuan Renminbi)	EURCNY	0.0
Asia	EURHKD represents 1 EUR per x HKD (Hong Kong Dollar)	EURHKD	0.0
Asia	EURINR represents 1 EUR per x INR (Indian Rupee)	EURINR	12.1
Asia	EURJPY represents 1 EUR per x JPY (Japanese Yen)	EURJPY	0.0
Asia	EURKRW represents 1 EUR per x KRW (South Korean Won)	EURKRW	15.2
Asia	EURMYR represents 1 EUR per x MYR (Malaysian Ringgit)	EURMYR	11.3
Asia	EURSGD represents 1 EUR per x SGD (Singapore Dollar)	EURSGD	9.2
Asia	EURTHB represents 1 EUR per x THB (Thai Baht)	EURTHB	12.2
Asia	EURTWD represents 1 EUR per x TWD (New Taiwan Dollar)	EURTWD	8.9
Africa	EURZAR represents 1 EUR per x ZAR (South African Rand)	EURZAR	9.2
Others	Other exchange rates	Other	12.6

Note: EURDKK and EURBGN rates are assumed to remain unchanged.

Interest rate yield shocks absolute changes (basis points)							
GEO	Country	Description	3M	1Y	5Y	10Y	15Y
EU	Euro Area	Interest rate SWAP on the EUR (Euro)	152	152	167	172	178
EU	Bulgaria	Interest rate SWAP on the BGN (Bulgarian lev)	220	220	267	313	313
EU	Czech Republic	Interest rate SWAP on the CZK (Czech Koruna)	174	174	174	218	202
EU	Denmark	Interest rate SWAP on the DKK (Danish Krone)	152	152	167	172	178
EU	Hungary	Interest rate SWAP on the HUF (Hungarian Forint)	243	243	244	248	253
EU	Poland	Interest rate SWAP on the PLN (Polish Zloty)	184	184	184	196	202
EU	Romania	Interest rate SWAP on the RON (Romanian Leu)	220	220	267	313	313
EU	Sweden	Interest rate SWAP on the SEK (Swedish Krona)	160	160	167	172	171
Rest of Europe	United Kingdom	Interest rate SWAP on the GBP (British Pound)	194	194	198	199	206
Rest of Europe	Norway	Interest rate SWAP on the NOK (Norwegian Krone)	152	152	136	133	144
Rest of Europe	Switzerland	Interest rate SWAP on the CHF (Swiss Franc)	148	148	133	141	139
Rest of Europe	Turkey	Interest rate SWAP on the TRY (Turkish Lira)	318	381	435	421	421
North America	Canada	Interest rate SWAP on the CAD (Canadian Dollar)	193	193	197	188	177
North America	US	Interest rate SWAP on the USD (US Dollar)	184	184	195	196	196
Australia and Pacific	Australia	Interest rate SWAP on the AUD (Australian Dollar)	191	191	189	197	212
South and central America	Mexico	Interest rate SWAP on the MXN (Mexican Peso)	200	201	198	191	199
South and central America	Brasil	Interest rate SWAP on the BRL (Brazilian Real)	204	214	198	191	199
Asia	Hong Kong	Interest rate SWAP on the HKD (Hong Kong Dollar)	176	143	188	188	188
Asia	Japan	Interest rate SWAP on the JPY (Japanese Yen)	45	45	53	63	76
Africa	South Africa	Interest rate SWAP on the ZAR (South African Rand)	213	213	177	194	208
Others	Other countries	Interest rate SWAP on the other currencies	184	184	195	196	196

Sovereign credit spreads absolute changes (basis points)							
GEO	Country	Reference swap rate	3M	1Y	5Y	10Y	15Y
EU	Austria	EUR	88	84	62	52	41
EU	Belgium	EUR	183	178	159	145	131
EU	Bulgaria	BGN	210	207	153	97	87
EU	Croatia	HRK	278	275	252	238	223
EU	Cyprus	EUR	278	275	252	238	223
EU	Czech Republic	CZK	255	253	245	192	198
EU	Denmark	DKK	88	84	62	52	41
EU	Finland	EUR	88	84	62	52	41
EU	France	EUR	88	84	62	52	41
EU	Germany	EUR	88	84	62	52	41
EU	Greece	EUR	278	275	252	238	223
EU	Hungary	HUF	187	184	176	162	148
EU	Ireland	EUR	88	84	62	52	41
EU	Italy	EUR	278	275	252	238	223
EU	Latvia	EUR	183	178	159	145	131
EU	Lithuania	EUR	183	178	159	145	131
EU	Luxembourg	EUR	88	84	62	52	41
EU	Malta	EUR	183	178	159	145	131
EU	Netherlands	EUR	88	84	62	52	41
EU	Poland	PLN	246	243	236	214	199
EU	Portugal	EUR	278	275	252	238	223
EU	Romania	RON	210	207	153	97	87
EU	Slovakia	EUR	88	84	62	52	41
EU	Slovenia	EUR	183	178	159	145	131
EU	Spain	EUR	278	275	252	238	223
EU	Sweden	SEK	80	76	62	52	48
North America	Canada	CAD	41	34	25	30	38
North America	US	USD	41	34	25	30	38
South and central A	Brazil	BRL	232	219	227	225	208
Rest of Europe	United Kingdom	GBP	156	138	130	124	112
Rest of Europe	Norway	NOK	82	75	86	85	71
Asia	Japan	JPY	189	183	169	155	139
Others	Other countries	USD	123	114	110	108	101

Corporate credit spreads absolute changes (basis points)					
GEO	Country	Type	1 to 2 (ECAI)	3 (ECAI)	4 to 6 (ECAI)
EU	Austria	Financial	133	228	309
		Non-financial	130	201	272
	Belgium	Financial	145	233	326
		Non-financial	144	231	308
	Denmark	Financial	133	228	309
		Non-financial	130	201	272
	France	Financial	133	228	309
		Non-financial	130	201	272
	Germany	Financial	133	228	309
		Non-financial	130	201	272
	Italy	Financial	171	239	342
		Non-financial	158	241	344
	Netherlands	Financial	133	228	309
		Non-financial	130	201	272
	Spain	Financial	171	239	342
		Non-financial	158	241	344
	Sweden	Financial	133	228	309
		Non-financial	130	201	272
Others	UK	Financial	145	233	326
		Non-financial	144	231	308
Others	Others	Financial	143	231	319
		Non-financial	138	215	294

Corporate credit spreads indexes absolute changes (basis points)			
GEO	Country	Type	Shock
EU		Itraxx Overall 5y	186
		Itraxx Crossover 5y	383
		Itraxx High vol 5y	272
		Itraxx Non financial 5y	210
		Itraxx Financial 5y	449
North America	US	Itraxx SenFinancial 5y	263
		Investment grade*	170
		High yield*	410
Asia		Investment grade **	237
		High yield**	478
Others	Others	Investment grade **	198
		High yield**	387

*CDX index

** Itraxx index

Covered bonds credit spreads absolute changes (basis points)		
GEO	Type	Shock
EU	1 to 2 (ECAI)	92
	3 (ECAI)	113
	4 to 6 (ECAI)	137
North America	1 to 2 (ECAI)	84
	3 (ECAI)	103
	4 to 6 (ECAI)	125
Asia	1 to 2 (ECAI)	118
	3 (ECAI)	141
	4 to 6 (ECAI)	167
Others	1 to 2 (ECAI)	98
	3 (ECAI)	119
	4 to 6 (ECAI)	143

Securitization credit spreads absolute changes (basis points)			
GEO	1 to 2 (ECAI)	3 (ECAI)	4 to 6 (ECAI)
EU	133	145	171
North America	121	132	157
Asia	169	181	208
Others	141	153	179

Global inflation shock absolute changes (basis points)					
GEO	3M	1Y	5Y	10Y	15Y
<i>Global</i>	189	292	30	24	8

Liquidity and modelling uncertainty relative changes (%)		
GEO	Country	Shock
<i>Global</i>	Liquidity reserve	209
<i>Global</i>	Modelling uncertainty - L2	175
<i>Global</i>	Modelling uncertainty - L3	256

IR volatility shocks relative changes (%)						
GEO	Country	Description	1Mx1Y	1Yx1Y	5Yx5Y	10Yx10Y
EU	<i>Euro Area</i>	<i>EUR (Euro) European Swaption Black Vol ATM Libor Discount</i>	195	195	116	75
EU	<i>Czech Republic</i>	<i>CZK (Czech Koruna) European Swaption Black Vol ATM Libor Discount</i>	177	177	105	75
EU	<i>Denmark</i>	<i>DKK (Danish Krone) European Swaption Black Vol ATM Libor Discount</i>	195	195	116	75
EU	<i>Hungary</i>	<i>HUF (Hungarian Forints) European Swaption Black Vol ATM Libor Discount</i>	162	162	96	95
EU	<i>Poland</i>	<i>PLN (Polish Zloty) European Swaption Black Vol ATM Libor Discount</i>	162	162	96	95
EU	<i>Sweden</i>	<i>SEK (Swedish Krona) European Swaption Black Vol ATM Libor Discount</i>	175	175	125	75
Rest of Europe	<i>United Kingdom</i>	<i>GBP (British Pound) European Swaption Black Vol ATM Libor Discount</i>	153	153	120	101
Rest of Europe	<i>Norway</i>	<i>NOK (Norwegian Krone) European Swaption Black Vol ATM Libor Discount</i>	137	137	78	65
Rest of Europe	<i>Switzerland</i>	<i>CHF (Swiss Franc) European Swaption Black Vol ATM Libor Discount</i>	86	86	86	61
Rest of Europe	<i>Turkey</i>	<i>TRY (Turkish Lira) European Swaption Black Vol ATM Libor Discount</i>	210	156	101	101
North America	<i>Canada</i>	<i>CAD (Canadian Dollar) European Swaption Black Vol ATM Libor Discount</i>	136	136	164	149
North America	<i>US</i>	<i>USD (US Dollar) European Swaption Black Vol ATM Libor Discount</i>	195	195	178	171
Australia and Pacific	<i>Australia</i>	<i>AUD (Australian Dollar) European Swaption Black Vol ATM Libor Discount</i>	195	195	116	85
South and central America	<i>Mexico</i>	<i>MXN (Mexican Peso) European Swaption Black Vol ATM Libor Discount</i>	210	156	101	101
South and central America	<i>Brasil</i>	<i>BRL (Brazilian Real) European Swaption Black Vol ATM Libor Discount</i>	210	156	101	101
Asia	<i>Hong Kong</i>	<i>HKD (Hong Kong Dollar) European Swaption Black Vol ATM Libor Discount</i>	105	105	61	61
Asia	<i>Japan</i>	<i>JPY (Japanese Yen) European Swaption Black Vol ATM Libor Discount</i>	77	77	38	69
Africa	<i>South Africa</i>	<i>ZAR (South African Rand) European Swaption Black Vol ATM Libor Discount</i>	275	275	132	132
Others	<i>Other countries</i>		206	188	125	111

Equity volatility shocks					
relative changes (%)					
GEO	Country	Index name	3M	6M	12M
<i>EU</i>	<i>EA</i>	<i>EURO STOXX 50 Volatility Index VSTOXX</i>	268	235	211
<i>Rest of Europe</i>	<i>UK</i>	<i>FTSE 100 Volatility Index</i>	275	241	217
<i>North America</i>	<i>US</i>	<i>Chicago Board Options Exchange SPX Volatility Index</i>	299	262	236
<i>Asia</i>	<i>Hong Kong</i>	<i>HSI Volatility Index</i>	307	269	242
<i>Asia</i>	<i>Japan</i>	<i>Nikkei Stock Average Volatility Index</i>	191	168	151
<i>Global</i>	<i>Emerging</i>	<i>JPMorgan Emerging Market Volatility Index (EM-VXY)</i>	319	280	251
<i>Others</i>	<i>Others</i>		277	243	218

FX Implied volatility shocks relative changes (%)								
GEO	Description	Risk factor name	1M	3M	6M	1Y	2Y	5Y
EU	EURCZK ATM Implied Volatility	EURCZK	122	96	90	89	70	55
EU	EURHUF ATM Implied Volatility	EURHUF	194	171	142	103	87	85
EU	EURPLN ATM Implied Volatility	EURPLN	138	138	103	100	85	93
EU	EURRON ATM Implied Volatility	EURRON	113	122	106	83	54	12
EU	EURRSD ATM Implied Volatility	EURRSD	194	171	142	103	87	85
EU	EURSEK ATM Implied Volatility	EURSEK	177	122	98	60	69	53
Rest of Europe	EURGBP ATM Implied Volatility	EURGBP	200	192	107	68	49	55
Rest of Europe	EURCHF ATM Implied Volatility	EURCHF	130	112	72	57	54	43
Rest of Europe	EURRUB ATM Implied Volatility	EURRUB	518	432	410	268	250	232
Rest of Europe	EURTRY ATM Implied Volatility	EURTRY	514	364	326	202	192	182
North America	EURCAD ATM Implied Volatility	EURCAD	111	61	56	60	86	86
North America	EURUSD ATM Implied Volatility	EURUSD	216	150	180	116	85	71
South and central America	EURARS ATM Implied Volatility	EURARS	306	331	172	89	61	91
South and central America	EURBRL ATM Implied Volatility	EURBRL	306	331	172	89	61	91
South and central America	EURMXN ATM Implied Volatility	EURMXN	231	126	115	111	107	117
Asia	EURCNY ATM Implied Volatility	EURCNY	124	61	44	57	69	69
Asia	EURHKD ATM Implied Volatility	EURHKD	140	58	52	47	42	42
Asia	EURINR ATM Implied Volatility	EURINR	167	104	68	38	29	25
Asia	EURJPY ATM Implied Volatility	EURJPY	190	91	61	34	31	31
Asia	EURKRW ATM Implied Volatility	EURKRW	140	107	110	105	83	64
Asia	EURMYR ATM Implied Volatility	EURMYR	239	123	106	57	42	37
Asia	EURSGD ATM Implied Volatility	EURSGD	113	77	66	65	49	49
Asia	EURTHB ATM Implied Volatility	EURTHB	140	58	52	47	42	42
Asia	EURTWD ATM Implied Volatility	EURTWD	124	61	44	57	69	69
Africa	EURZAR ATM Implied Volatility	EURZAR	218	150	112	97	69	61
Others		Others	203	152	120	88	77	74