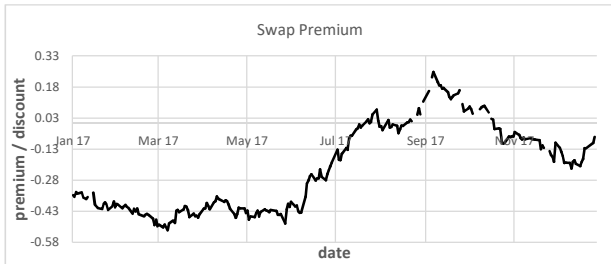
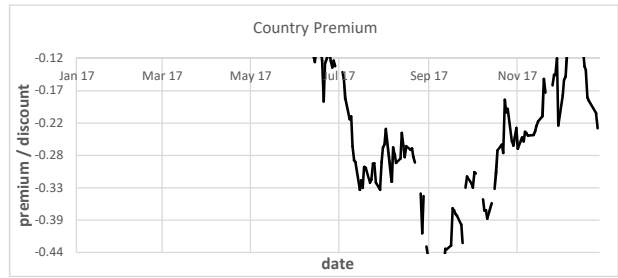
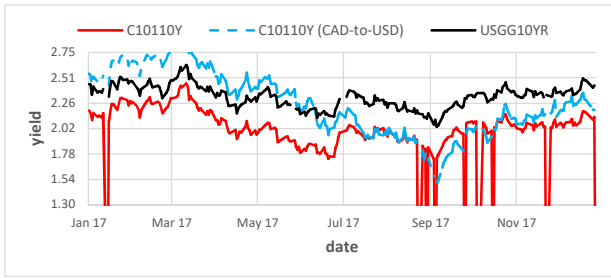


TAB: CHARTS

	Canadian	US	Tenor	Description
Selected curves	C10110Y	USGG10YR	10	Sovereign 10-year curve



**TAB: SWAP CALCULATION RESULTS**

java.util.ArrayList@Sun, : 249 2 java.util.ArrayList@Sun, : 249 2  
 java.util.ArrayList@Sun, : 249 2

<b>C10110Y</b>		<b>C10110Y (CAD-to-USD)</b>		<b>USGG10YR</b>						
Date	CAD Yield	Date	Swapped CAD Yield	Date	USD Yield	Date	USD Yield	Date	Swap Premium	Country Premium
29-Dec-17		29-Dec-17		29-Dec-17		28-Dec-17	2.431	29-Dec-17		
28-Dec-17	2.132	28-Dec-17	2.198	28-Dec-17	2.431	27-Dec-17	2.411	28-Dec-17	-0.066	-0.233
27-Dec-17	2.107	27-Dec-17	2.203	27-Dec-17	2.411	26-Dec-17	2.476	27-Dec-17	-0.095	-0.208
22-Dec-17	2.173	22-Dec-17	2.294	22-Dec-17	2.481	22-Dec-17	2.481	22-Dec-17	-0.121	-0.187
21-Dec-17	2.180	21-Dec-17	2.301	21-Dec-17	2.483	21-Dec-17	2.483	21-Dec-17	-0.121	-0.182
20-Dec-17	2.188	20-Dec-17	2.361	20-Dec-17	2.497	20-Dec-17	2.497	20-Dec-17	-0.173	-0.136
19-Dec-17	2.146	19-Dec-17	2.334	19-Dec-17	2.464	19-Dec-17	2.464	19-Dec-17	-0.188	-0.130
18-Dec-17	2.087	18-Dec-17	2.295	18-Dec-17	2.394	18-Dec-17	2.394	18-Dec-17	-0.208	-0.099
15-Dec-17	2.053	15-Dec-17	2.250	15-Dec-17	2.353	15-Dec-17	2.353	15-Dec-17	-0.197	-0.103
14-Dec-17	2.078	14-Dec-17	2.258	14-Dec-17	2.349	14-Dec-17	2.349	14-Dec-17	-0.180	-0.091
13-Dec-17	2.052	13-Dec-17	2.238	13-Dec-17	2.342	13-Dec-17	2.342	13-Dec-17	-0.186	-0.104
12-Dec-17	2.112	12-Dec-17	2.332	12-Dec-17	2.401	12-Dec-17	2.401	12-Dec-17	-0.220	-0.069
11-Dec-17	2.086	11-Dec-17	2.279	11-Dec-17	2.389	11-Dec-17	2.389	11-Dec-17	-0.193	-0.110
8-Dec-17	2.080	8-Dec-17	2.271	8-Dec-17	2.376	8-Dec-17	2.376	8-Dec-17	-0.191	-0.105
7-Dec-17	2.065	7-Dec-17	2.257	7-Dec-17	2.363	7-Dec-17	2.363	7-Dec-17	-0.192	-0.106
6-Dec-17	2.033	6-Dec-17	2.192	6-Dec-17	2.339	6-Dec-17	2.339	6-Dec-17	-0.159	-0.147
5-Dec-17	2.061	5-Dec-17	2.199	5-Dec-17	2.351	5-Dec-17	2.351	5-Dec-17	-0.138	-0.152
4-Dec-17	2.075	4-Dec-17	2.194	4-Dec-17	2.372	4-Dec-17	2.372	4-Dec-17	-0.119	-0.178
1-Dec-17	2.039	1-Dec-17	2.133	1-Dec-17	2.362	1-Dec-17	2.362	1-Dec-17	-0.094	-0.228
30-Nov-17	2.106	30-Nov-17	2.293	30-Nov-17	2.410	30-Nov-17	2.410	30-Nov-17	-0.187	-0.117
29-Nov-17	2.081	29-Nov-17	2.244	29-Nov-17	2.388	29-Nov-17	2.388	29-Nov-17	-0.163	-0.144
28-Nov-17	2.029	28-Nov-17	2.184	28-Nov-17	2.328	28-Nov-17	2.328	28-Nov-17	-0.154	-0.144
27-Nov-17	2.031	27-Nov-17	2.166	27-Nov-17	2.328	27-Nov-17	2.328	27-Nov-17	-0.135	-0.162
24-Nov-17		24-Nov-17		24-Nov-17	2.342	24-Nov-17	2.342	24-Nov-17		



**TAB: CALCULATOR**

Description	Name	Object	Size	Key	Value
<b>USD to CAD Swap</b>			# of dates	# of series	<b>Parameters</b>
USD-to-CAD Forward rate	CAD	jeconkr.finance.FSTP.lib.model.fx.data.CurveFX@Sun, 24 Jun 2018 23:12:52:9	260	11	CRNCY_FROM CAD
USD Float-to-Fixed swap curve	USSW	jeconkr.finance.FSTP.lib.model.swap.data.CurveSwap@Sun, 24 Jun 2018 23:1	258	10	CRNCY_TO USD
Risk-free discount factors based on USSW curve	Discounts	jeconkr.finance.FSTP.lib.discount.CurveDiscounts@Sun, 24 Jun 2018 23:12:52	258	21	CPN_FREQ_FROM 2
FX swap calculator		jeconkr.finance.FSTP.lib.model.swap.calculator.CalculatorSwapFX@Sun, 24 Ju			CPN_FREQ_TO 2
Index of selected Canadian series	<b>1</b>				DAY_CNT_FROM ACT/365
Canadian series	C10110Y	jeconkr.finance.FSTP.lib.data.Series@Sun, 24 Jun 2018 23:12:52:810..681771	249		DAY_CNT_TO 30/360
Swapped Canadian series (CAD-to-USD)		jeconkr.finance.FSTP.lib.data.Series@Sun, 24 Jun 2018 23:13:36:644..356518	249		TENOR 10
Matched US series	USGG10YR	jeconkr.finance.FSTP.lib.data.Series@Sun, 24 Jun 2018 23:12:52:817..455685	249		

**Interest Rate Series**

#	Canadian series	Name	Size	Matching US Series	Name	Size	Tenor	Descriptio
1	jeconkr.finance.FSTP.lib.data.Series@Sun	C10110Y	249	jeconkr.finance.FSTP.lib.data.Series@Sun	USGG10YR	249	10	Sovereign 10-year curve
2	jeconkr.finance.FSTP.lib.data.Series@Sun	CDOR03	249	jeconkr.finance.FSTP.lib.data.Series@Sun	US0003M	251	0.25	Bankers' acceptance rate
3	jeconkr.finance.FSTP.lib.data.Series@Sun	CABROVER	249	jeconkr.finance.FSTP.lib.data.Series@Sun	FEDL01	251	0.01	BoC (Feds) overnight policy rate
4	jeconkr.finance.FSTP.lib.data.Series@Sun	PRIMCAN	249	jeconkr.finance.FSTP.lib.data.Series@Sun	PRIME	250	1	Prime rate
5	jeconkr.finance.FSTP.lib.data.Series@Sun	CANMORT5	52	jeconkr.finance.FSTP.lib.data.Series@Sun	MB301ARM	52	5	Interest rate on residential real estate loans secured by mor

**TAB: TEMPLATE TESTING TAB (FX SWAP CALCULATOR OUTPUT)**

Ouput data frequency      data-frequency      daily-frequency  
 FX swap parameter      fswap-param      fswap-intercept  
 java.util.ArrayList@Sun, 24 261 12      fswap-output

Ouput data frequency      data-frequency      daily-frequency  
 FX swap parameter      fswap-param      fswap-slope  
 java.util.ArrayList@Sun, 24 261 12      fswap-output

Ouput data frequency      data-frequency      daily-frequency  
 FX swap parameter      fswap-param      fswap-proxy  
 java.util.ArrayList@Sun, 24 261 12      fswap-output

**FX Swap Intercept Parameter**

Date	0	1	2	3	4	5	6	7	8	9	10
29-Dec-17	-0.30	-0.30	-0.23	-0.21	-0.16	-0.12	-0.06	-0.08	-0.06	-0.06	-0.05
28-Dec-17	-0.35	-0.35	-0.26	-0.22	-0.18	-0.14	-0.08	-0.11	-0.09	-0.06	-0.05
27-Dec-17	-0.37	-0.37	-0.28	-0.23	-0.21	-0.18	-0.13	-0.14	-0.12	-0.10	-0.08
26-Dec-17	-0.40	-0.40	-0.30	-0.27	-0.23	-0.19	-0.14	-0.15	-0.13		
25-Dec-17											
22-Dec-17	-0.40	-0.40	-0.30	-0.28	-0.24	-0.20	-0.18	-0.16	-0.14	-0.12	-0.10
21-Dec-17	-0.38	-0.38	-0.29	-0.24	-0.21	-0.18	-0.13	-0.15	-0.14	-0.12	-0.10
20-Dec-17	-0.39	-0.39	-0.32	-0.28	-0.25	-0.22	-0.17	-0.19	-0.18	-0.17	-0.15
19-Dec-17	-0.42	-0.42	-0.35	-0.31	-0.28	-0.26	-0.20	-0.22	-0.21	-0.18	-0.16
18-Dec-17	-0.46	-0.46	-0.37	-0.33	-0.30	-0.28	-0.21	-0.23	-0.22	-0.20	-0.18
15-Dec-17	-0.48	-0.48	-0.38	-0.34	-0.31	-0.28	-0.21	-0.25	-0.22	-0.19	-0.17
14-Dec-17	-0.45	-0.45	-0.36	-0.32	-0.29	-0.27	-0.20	-0.21	-0.19	-0.17	-0.15
13-Dec-17	-0.45	-0.45	-0.39	-0.33	-0.31	-0.28	-0.22	-0.24	-0.21	-0.18	-0.16
12-Dec-17	-0.46	-0.46	-0.41	-0.36	-0.33	-0.30	-0.28	-0.25	-0.23	-0.20	-0.19
11-Dec-17	-0.45	-0.45	-0.39	-0.35	-0.32	-0.29	-0.22	-0.23	-0.20	-0.19	-0.16
8-Dec-17	-0.45	-0.45	-0.38	-0.33	-0.30	-0.27	-0.23	-0.23	-0.20	-0.18	-0.16
7-Dec-17	-0.45	-0.45	-0.39	-0.34	-0.30	-0.28	-0.21	-0.23	-0.21	-0.18	-0.16
6-Dec-17	-0.44	-0.44	-0.38	-0.32	-0.29	-0.26	-0.19	-0.21	-0.19	-0.16	-0.13
5-Dec-17	-0.39	-0.39	-0.32	-0.30	-0.26	-0.23	-0.17	-0.19	-0.17	-0.14	-0.11
4-Dec-17	-0.35	-0.35	-0.30	-0.27	-0.24	-0.21	-0.16	-0.17	-0.15	-0.12	-0.10
1-Dec-17	-0.35	-0.35	-0.31	-0.28	-0.25	-0.22	-0.16	-0.17	-0.15	-0.12	-0.07
30-Nov-17	-0.46	-0.46	-0.41	-0.37	-0.33	-0.30	-0.26	-0.25	-0.22	-0.18	-0.15
29-Nov-17	-0.44	-0.44	-0.38	-0.34	-0.31	-0.27	-0.22	-0.23	-0.20	-0.16	-0.13
28-Nov-17	-0.43	-0.43	-0.38	-0.34	-0.30	-0.27	-0.22	-0.21	-0.18	-0.14	-0.13
27-Nov-17	-0.43	-0.43	-0.38	-0.31	-0.28	-0.24	-0.19	-0.19	-0.16	-0.13	-0.11
24-Nov-17	-0.42	-0.42	-0.37	-0.32	-0.28	-0.25	-0.20	-0.20			
23-Nov-17	-0.41	-0.41	-0.35	-0.32	-0.26	-0.23	-0.19	-0.18	-0.13	-0.12	-0.10
22-Nov-17	-0.40	-0.40	-0.34	-0.29	-0.26	-0.22	-0.17	-0.16	-0.13	-0.11	-0.09
21-Nov-17	-0.41	-0.41	-0.37	-0.33	-0.29	-0.25	-0.19	-0.19	-0.16	-0.13	-0.10

**FX Swap Slope Parameter**

Date	0	1	2	3	4	5	6	7	8	9	10
29-Dec-17	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99
28-Dec-17	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
27-Dec-17	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
26-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
25-Dec-17											
22-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
21-Dec-17	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
20-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
19-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
18-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
15-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
14-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
13-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
12-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
11-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
8-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
7-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
6-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
5-Dec-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
4-Dec-17	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
1-Dec-17	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
30-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
29-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
28-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
27-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
24-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99			
23-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
22-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
21-Nov-17	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

**FX Swap Approximation**

Date	0	1	2	3	4	5	6	7	8	9	10
29-Dec-17	-0.30	-0.30	-0.23	-0.21	-0.16	-0.12	-0.06	-0.09	-0.07		
28-Dec-17	-0.35	-0.35	-0.26	-0.22	-0.18	-0.15	-0.09	-0.12	-0.10	-0.10	-0.07
27-Dec-17	-0.37	-0.37	-0.28	-0.24	-0.22	-0.19	-0.13	-0.15	-0.14	-0.11	-0.09
26-Dec-17	-0.40	-0.40	-0.31	-0.27	-0.24	-0.20	-0.15	-0.16	-0.14		
25-Dec-17											
22-Dec-17	-0.40	-0.40	-0.31	-0.28	-0.24	-0.21	-0.19	-0.18	-0.16	-0.14	-0.11
21-Dec-17	-0.38	-0.38	-0.30	-0.25	-0.21	-0.19	-0.14	-0.17	-0.15	-0.13	-0.11
20-Dec-17	-0.39	-0.39	-0.32	-0.29	-0.26	-0.23	-0.18	-0.21	-0.20	-0.18	-0.17
19-Dec-17	-0.42	-0.42	-0.35	-0.32	-0.29	-0.27	-0.21	-0.24	-0.23	-0.20	-0.18
18-Dec-17	-0.46	-0.46	-0.37	-0.34	-0.31	-0.29	-0.22	-0.25	-0.24	-0.22	-0.20
15-Dec-17	-0.48	-0.48	-0.38	-0.35	-0.32	-0.30	-0.23	-0.27	-0.24	-0.21	-0.19
14-Dec-17	-0.45	-0.45	-0.37	-0.32	-0.30	-0.28	-0.22	-0.23	-0.21	-0.19	-0.17
13-Dec-17	-0.45	-0.45	-0.39	-0.34	-0.32	-0.29	-0.23	-0.25	-0.23	-0.20	-0.18
12-Dec-17	-0.46	-0.46	-0.41	-0.37	-0.34	-0.31	-0.30	-0.27	-0.25	-0.23	-0.21
11-Dec-17	-0.45	-0.45	-0.40	-0.36	-0.33	-0.30	-0.23	-0.25	-0.22	-0.21	-0.18
8-Dec-17	-0.45	-0.45	-0.39	-0.34	-0.31	-0.29	-0.24	-0.24	-0.22	-0.20	-0.18
7-Dec-17	-0.45	-0.45	-0.39	-0.34	-0.31	-0.29	-0.22	-0.25	-0.23	-0.20	-0.18
6-Dec-17	-0.44	-0.44	-0.39	-0.33	-0.30	-0.27	-0.20	-0.23	-0.21	-0.17	-0.15
5-Dec-17	-0.39	-0.39	-0.33	-0.30	-0.27	-0.24	-0.18	-0.21	-0.19	-0.15	-0.13
4-Dec-17	-0.35	-0.35	-0.30	-0.28	-0.25	-0.22	-0.17	-0.18	-0.16	-0.13	-0.11
1-Dec-17	-0.35	-0.35	-0.31	-0.28	-0.26	-0.23	-0.17	-0.19	-0.16	-0.13	-0.08
30-Nov-17	-0.46	-0.46	-0.42	-0.38	-0.34	-0.32	-0.28	-0.27	-0.24	-0.21	-0.17
29-Nov-17	-0.44	-0.44	-0.39	-0.35	-0.32	-0.29	-0.23	-0.24	-0.22	-0.18	-0.15
28-Nov-17	-0.43	-0.43	-0.38	-0.34	-0.31	-0.28	-0.24	-0.23	-0.20	-0.16	-0.14
27-Nov-17	-0.43	-0.43	-0.38	-0.32	-0.29	-0.25	-0.20	-0.20	-0.18	-0.15	-0.13
24-Nov-17	-0.42	-0.42	-0.38	-0.32	-0.29	-0.26	-0.21	-0.21			
23-Nov-17	-0.41	-0.41	-0.35	-0.33	-0.27	-0.24	-0.20	-0.20	-0.14	-0.13	-0.11
22-Nov-17	-0.40	-0.40	-0.34	-0.30	-0.27	-0.23	-0.18	-0.17	-0.14	-0.12	-0.10
21-Nov-17	-0.41	-0.41	-0.37	-0.34	-0.30	-0.26	-0.20	-0.20	-0.18	-0.14	-0.11

**TAB: TEMPLATE TESTING TAB (DISCOUNT FACTORS)**

Output data frequency      data-frequency      monthly-frequency  
 java.util.ArrayList@Sun, 24 Jun    13      22

Date	0.00	0.50	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
15-Dec-17	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
15-Nov-17	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79
16-Oct-17	1.00	0.99	0.98	0.97	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79
15-Sep-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81
15-Aug-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.80
17-Jul-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80
15-Jun-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81
15-May-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80
17-Apr-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80
15-Mar-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.80	0.79	0.78
15-Feb-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79
16-Jan-17	1.00	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79

**TAB: BLOOMBERG SWAP CURVES AND FORWARD RATES**

										curve-fx											curve-swap		
<b>FX Forward rates</b>										CRNCY_FROM	USD	<b>USD Float-to-Fixed swap rate</b>										CRNCY	USD
<b>Currency</b>	<b>CAD</b>	260	11							CRNCY_TO	CAD	<b>Curve name</b>	<b>USSW</b>	258	10							CPN_FREQ	2
jeconkr.finance.FSTP.lib.model.fx.data.CurveFX@Sun, java.util.LinkedHashMap@Sun, 24 Jun :										jeconkr.finance.FSTP.lib.model.swap.data.CurveSwap@Sun, java.util.LinkedHashMap@Sun, 24 Jun 2018													

Date	CAD										Date	USSW										
	CAD0	CAD12M	CAD2Y	CAD3Y	CAD4Y	CAD5Y	CAD6Y	CAD7Y	CAD8Y	CAD9Y		CAD10Y	USSW1	USSW2	USSW3	USSW4	USSW5	USSW6	USSW7	USSW8	USSW9	USSW10
29-Dec-17	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	#N/A	#N/A	29-Dec-17	1.90	2.08	2.17	2.21	2.24	2.28	2.31	2.34	2.37	2.40
28-Dec-17	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	28-Dec-17	1.91	2.09	2.18	2.23	2.27	2.30	2.34	2.37	2.39	2.42
27-Dec-17	1.27	1.26	1.26	1.26	1.25	1.25	1.26	1.25	1.25	1.25	1.25	27-Dec-17	1.90	2.07	2.16	2.21	2.25	2.28	2.31	2.34	2.37	2.40
26-Dec-17	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.25	1.25	#N/A	#N/A	26-Dec-17	1.91	2.10	2.19	2.25	2.29	2.33	2.36	2.39	2.42	2.45
25-Dec-17	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.26	#N/A	#N/A	22-Dec-17	1.92	2.10	2.20	2.25	2.29	2.34	2.37	2.40	2.43	2.46
22-Dec-17	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	21-Dec-17	1.90	2.09	2.19	2.25	2.29	2.33	2.37	2.41	2.44	2.47
21-Dec-17	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	20-Dec-17	1.89	2.07	2.17	2.23	2.28	2.33	2.37	2.41	2.44	2.47
20-Dec-17	1.28	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	19-Dec-17	1.88	2.06	2.16	2.22	2.27	2.31	2.35	2.38	2.41	2.44
19-Dec-17	1.29	1.28	1.28	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	18-Dec-17	1.86	2.03	2.12	2.18	2.22	2.26	2.29	2.32	2.36	2.39
18-Dec-17	1.29	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	15-Dec-17	1.86	2.03	2.11	2.16	2.20	2.23	2.26	2.29	2.32	2.34
15-Dec-17	1.29	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	14-Dec-17	1.84	2.01	2.10	2.15	2.20	2.23	2.26	2.29	2.32	2.35
14-Dec-17	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.26	13-Dec-17	1.82	1.98	2.07	2.13	2.17	2.21	2.25	2.28	2.31	2.35
13-Dec-17	1.28	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	12-Dec-17	1.85	2.03	2.12	2.19	2.23	2.27	2.31	2.35	2.38	2.41
12-Dec-17	1.29	1.28	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	11-Dec-17	1.83	2.01	2.11	2.17	2.22	2.26	2.30	2.34	2.37	2.40
11-Dec-17	1.29	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	8-Dec-17	1.82	2.00	2.09	2.15	2.20	2.25	2.29	2.32	2.36	2.39
8-Dec-17	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	7-Dec-17	1.81	1.99	2.09	2.15	2.20	2.24	2.28	2.31	2.35	2.38
7-Dec-17	1.29	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.26	1.26	6-Dec-17	1.80	1.98	2.08	2.14	2.19	2.23	2.26	2.30	2.33	2.36
6-Dec-17	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	1.26	5-Dec-17	1.81	2.00	2.10	2.16	2.20	2.24	2.28	2.31	2.34	2.37
5-Dec-17	1.27	1.26	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25	4-Dec-17	1.80	1.99	2.09	2.16	2.20	2.25	2.29	2.32	2.36	2.39
4-Dec-17	1.27	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1-Dec-17	1.78	1.96	2.06	2.13	2.17	2.22	2.26	2.30	2.33	2.36
1-Dec-17	1.27	1.26	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.26	1.26	30-Nov-17	1.78	1.97	2.08	2.15	2.20	2.25	2.29	2.33	2.37	2.41
30-Nov-17	1.29	1.28	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.27	29-Nov-17	1.77	1.94	2.05	2.11	2.17	2.22	2.26	2.31	2.34	2.38
29-Nov-17	1.29	1.28	1.28	1.27	1.27	1.27	1.27	1.26	1.26	1.27	1.27	28-Nov-17	1.75	1.92	2.01	2.08	2.13	2.17	2.21	2.25	2.29	2.32
28-Nov-17	1.28	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.26	27-Nov-17	1.75	1.92	2.01	2.07	2.11	2.16	2.20	2.25	2.28	2.32

TAB: SWAPPED YIELD SERIES

		Sovereign Curves										Base Rates													
Series	Description	C10110Y Date	249 Last Price	USGG10YR Date	249 Last Price	C08210Y Date	249 Last Price	CDOR03 Date	249 Mid Price	US0003M Date	251 Ask Price	FED101 Date	251 Mid Price	CABROVER Date	249 Last Price	PRIME Date	250 Last Price	PRIMCAN Date	249 Last Price	MB30 Date	52 Mid Price	CANMORT5 Date	52 Mid Price	MB301ARM Date	52 Mid Price
C10110Y	Canadian 10-year sovereign curve	29-Dec-17	2.07	28-Dec-17	2.43	28-Dec-17	2.44	29-Dec-17	1.54	28-Dec-17	1.69	29-Dec-17	1.33	29-Dec-17	1.00	29-Dec-17	4.50	29-Dec-17	3.20	29-Dec-17	4.22	27-Dec-17	4.99	29-Dec-17	3.40
USGG10YR	US 10-year sovereign curve	28-Dec-17	2.07	27-Dec-17	2.41	27-Dec-17	2.42	28-Dec-17	1.52	27-Dec-17	1.69	28-Dec-17	1.42	28-Dec-17	1.00	28-Dec-17	4.50	28-Dec-17	3.20	22-Dec-17	4.25	20-Dec-17	4.99	22-Dec-17	3.56
C08210Y	US Treasury 10-year curve	27-Dec-17	2.01	26-Dec-17	2.48	26-Dec-17	2.48	27-Dec-17	1.52	22-Dec-17	1.69	27-Dec-17	1.42	27-Dec-17	1.00	27-Dec-17	4.50	27-Dec-17	3.20	15-Dec-17	4.16	13-Dec-17	4.99	15-Dec-17	3.49
CABROVER	Bank of Canada overnight lending rate	22-Dec-17	2.05	22-Dec-17	2.48	22-Dec-17	2.50	22-Dec-17	1.51	21-Dec-17	1.67	26-Dec-17	1.42	22-Dec-17	1.00	26-Dec-17	4.50	22-Dec-17	3.20	8-Dec-17	4.20	6-Dec-17	4.99	8-Dec-17	3.42
FEDL01	Federal Funds effective rate	21-Dec-17	2.06	21-Dec-17	2.48	21-Dec-17	2.50	21-Dec-17	1.51	20-Dec-17	1.66	22-Dec-17	1.42	21-Dec-17	1.00	22-Dec-17	4.50	21-Dec-17	3.20	1-Dec-17	4.19	29-Nov-17	4.99	1-Dec-17	3.48
CDOR03	Canadian bankers' acceptance rate	20-Dec-17	2.02	20-Dec-17	2.50	20-Dec-17	2.51	20-Dec-17	1.49	19-Dec-17	1.64	21-Dec-17	1.42	20-Dec-17	1.00	21-Dec-17	4.50	20-Dec-17	3.20	24-Nov-17	4.20	22-Nov-17	4.99	24-Nov-17	3.42
PRIME	US Prime rate (base rate for corporate loans)	19-Dec-17	1.96	19-Dec-17	2.46	19-Dec-17	2.47	19-Dec-17	1.47	18-Dec-17	1.63	20-Dec-17	1.42	19-Dec-17	1.00	20-Dec-17	4.50	19-Dec-17	3.20	17-Nov-17	4.20	15-Nov-17	4.99	17-Nov-17	3.31
PRIMCAN	Prime rate by country Canada (composed of prime rates of Royal Bank, National Bank, CIBC, BMO, BNS, and TD)	18-Dec-17	1.88	18-Dec-17	2.39	18-Dec-17	2.40	18-Dec-17	1.46	15-Dec-17	1.61	19-Dec-17	1.42	18-Dec-17	1.00	19-Dec-17	4.50	18-Dec-17	3.20	10-Nov-17	4.18	8-Nov-17	4.99	10-Nov-17	3.41
MB301ARM	MBA US 5-year adjustable rate mortgage contract rate	15-Dec-17	1.86	15-Dec-17	2.35	15-Dec-17	2.37	15-Dec-17	1.45	14-Dec-17	1.60	18-Dec-17	1.42	15-Dec-17	1.00	18-Dec-17	4.50	15-Dec-17	3.20	3-Nov-17	4.18	1-Nov-17	4.99	3-Nov-17	3.33
CANMORT5	Bank of Canada 5-year conventional mortgage rate	14-Dec-17	1.90	14-Dec-17	2.35	14-Dec-17	2.37	14-Dec-17	1.44	13-Dec-17	1.59	15-Dec-17	1.41	14-Dec-17	1.00	15-Dec-17	4.50	14-Dec-17	3.20	27-Oct-17	4.22	25-Oct-17	4.99	27-Oct-17	3.33
MB30	Interest rate on residential real estate loans secured by mortgage (Mortgage bankers association)	13-Dec-17	1.87	13-Dec-17	2.34	13-Dec-17	2.36	13-Dec-17	1.45	12-Dec-17	1.57	14-Dec-17	1.41	13-Dec-17	1.00	14-Dec-17	4.50	13-Dec-17	3.20	20-Oct-17	4.18	18-Oct-17	4.89	20-Oct-17	3.29
		12-Dec-17	1.90	12-Dec-17	2.40	12-Dec-17	2.41	12-Dec-17	1.44	11-Dec-17	1.56	13-Dec-17	1.17	12-Dec-17	1.00	13-Dec-17	4.25	12-Dec-17	3.20	13-Oct-17	4.14	11-Oct-17	4.89	13-Oct-17	3.31
		11-Dec-17	1.90	11-Dec-17	2.39	11-Dec-17	2.40	11-Dec-17	1.43	8-Dec-17	1.55	12-Dec-17	1.17	11-Dec-17	1.00	12-Dec-17	4.25	11-Dec-17	3.20	6-Oct-17	4.16	4-Oct-17	4.89	6-Oct-17	3.33
		8-Dec-17	1.89	8-Dec-17	2.38	8-Dec-17	2.39	8-Dec-17	1.43	7-Dec-17	1.54	11-Dec-17	1.16	8-Dec-17	1.00	11-Dec-17	4.25	8-Dec-17	3.20	29-Sep-17	4.12	27-Sep-17	4.89	29-Sep-17	3.30
		7-Dec-17	1.88	7-Dec-17	2.36	7-Dec-17	2.37	7-Dec-17	1.43	6-Dec-17	1.52	8-Dec-17	1.16	7-Dec-17	1.00	8-Dec-17	4.25	7-Dec-17	3.20	22-Sep-17	4.11	20-Sep-17	4.84	22-Sep-17	3.38
		6-Dec-17	1.88	6-Dec-17	2.34	6-Dec-17	2.35	6-Dec-17	1.43	5-Dec-17	1.52	7-Dec-17	1.16	6-Dec-17	1.00	7-Dec-17	4.25	6-Dec-17	3.20	15-Sep-17	4.04	13-Sep-17	4.84	15-Sep-17	3.30
		5-Dec-17	1.92	5-Dec-17	2.35	5-Dec-17	2.37	5-Dec-17	1.44	4-Dec-17	1.51	6-Dec-17	1.16	5-Dec-17	1.00	6-Dec-17	4.25	5-Dec-17	3.20	8-Sep-17	4.03	6-Sep-17	4.84	8-Sep-17	3.17
		4-Dec-17	1.96	4-Dec-17	2.37	4-Dec-17	2.39	4-Dec-17	1.43	1-Dec-17	1.49	5-Dec-17	1.16	4-Dec-17	1.00	5-Dec-17	4.25	4-Dec-17	3.20	1-Sep-17	4.06	30-Aug-17	4.84	1-Sep-17	3.14
		1-Dec-17	1.95	1-Dec-17	2.36	1-Dec-17	2.38	1-Dec-17	1.42	30-Nov-17	1.49	4-Dec-17	1.16	1-Dec-17	1.00	4-Dec-17	4.25	1-Dec-17	3.20	25-Aug-17	4.11	23-Aug-17	4.84	25-Aug-17	3.26
		30-Nov-17	1.92	30-Nov-17	2.41	30-Nov-17	2.44	30-Nov-17	1.41	29-Nov-17	1.48	1-Dec-17	1.16	30-Nov-17	1.00	1-Dec-17	4.25	30-Nov-17	3.20	18-Aug-17	4.12	16-Aug-17	4.84	18-Aug-17	3.27
		29-Nov-17	1.92	29-Nov-17	2.39	29-Nov-17	2.40	29-Nov-17	1.41	28-Nov-17	1.48	30-Nov-17	1.07	29-Nov-17	1.00	30-Nov-17	4.25	29-Nov-17	3.20	11-Aug-17	4.12	9-Aug-17	4.84	11-Aug-17	3.34
		28-Nov-17	1.88	28-Nov-17	2.33	28-Nov-17	2.35	28-Nov-17	1.41	27-Nov-17	1.48	29-Nov-17	1.16	28-Nov-17	1.00	29-Nov-17	4.25	28-Nov-17	3.20	4-Aug-17	4.14	2-Aug-17	4.84	4-Aug-17	3.31
		27-Nov-17	1.90	27-Nov-17	2.33	27-Nov-17	2.35	27-Nov-17	1.40	24-Nov-17	1.47	28-Nov-17	1.16	27-Nov-17	1.00	28-Nov-17	4.25	27-Nov-17	3.20	28-Jul-17	4.17	26-Jul-17	4.84	28-Jul-17	3.30
		24-Nov-17	1.91	24-Nov-17	2.34	24-Nov-17	2.36	24-Nov-17	1.40	23-Nov-17	1.46	27-Nov-17	1.16	24-Nov-17	1.00	27-Nov-17	4.25	24-Nov-17	3.20	21-Jul-17	4.17	19-Jul-17	4.84	21-Jul-17	3.29
		23-Nov-17	1.92	22-Nov-17	2.32	22-Nov-17	2.34	23-Nov-17	1.40	22-Nov-17	1.46	24-Nov-17	1.16	23-Nov-17	1.00	24-Nov-17	4.25	23-Nov-17	3.20	14-Jul-17	4.22	12-Jul-17	4.64	14-Jul-17	3.32
		22-Nov-17	1.93	21-Nov-17	2.36	21-Nov-17	2.38	22-Nov-17	1.40	21-Nov-17	1.45	22-Nov-17	1.16	22-Nov-17	1.00	22-Nov-17	4.25	22-Nov-17	3.20	7-Jul-17	4.22	5-Jul-17	4.64	7-Jul-17	3.32
		21-Nov-17	1.96	20-Nov-17	2.37	20-Nov-17	2.38	21-Nov-17	1.40	20-Nov-17	1.45	21-Nov-17	1.16	21-Nov-17	1.00	21-Nov-17	4.25	21-Nov-17	3.20	30-Jun-17	4.20	28-Jun-17	4.64	30-Jun-17	3.37
		20-Nov-17	1.99	17-Nov-17	2.34	17-Nov-17	2.36	20-Nov-17	1.40	17-Nov-17	1.44	20-Nov-17	1.16	20-Nov-17	1.00	20-Nov-17	4.25	20-Nov-17	3.20	23-Jun-17	4.13	21-Jun-17	4.64	23-Jun-17	3.31
		17-Nov-17	1.96	16-Nov-17	2.38	16-Nov-17	2.38	17-Nov-17	1.40	16-Nov-17	1.44	17-Nov-17	1.16	17-Nov-17	1.00	17-Nov-17	4.25	17-Nov-17	3.20	16-Jun-17	4.13	14-Jun-17	4.64	16-Jun-17	3.26
		16-Nov-17	1.99	15-Nov-17	2.32	15-Nov-17	2.34	16-Nov-17	1.40	15-Nov-17	1.42	16-Nov-17	1.16	16-Nov-17	1.00	16-Nov-17	4.25	16-Nov-17	3.20	9-Jun-17	4.13	7-Jun-17	4.64	9-Jun-17	3.26
		15-Nov-17	1.93	14-Nov-17	2.37	14-Nov-17	2.39	15-Nov-17	1.40	14-Nov-17	1.42	15-Nov-17	1.16	15-Nov-17	1.00	15-Nov-17	4.25	15-Nov-17	3.20	2-Jun-17	4.14	31-May-17	4.64	2-Jun-17	3.19
		14-Nov-17	1.98	13-Nov-17	2.41	13-Nov-17	2.41	14-Nov-17	1.40	13-Nov-17	1.42	14-Nov-17	1.16	14-Nov-17	1.00	14-Nov-17	4.25	14-Nov-17	3.20	26-May-17	4.17	24-May-17	4.64	26-May-17	3.22
		10-Nov-17	2.00	10-Nov-17	2.40	10-Nov-17	2.41	10-Nov-17	1.40	10-Nov-17	1.41	13-Nov-17	1.16	10-Nov-17	1.00	13-Nov-17	4.25	10-Nov-17	3.20	19-May-17	4.17	17-May-17	4.64	19-May-17	3.27
		9-Nov-17	1.96	9-Nov-17	2.34	9-Nov-17	2.34	9-Nov-17	1.40	9-Nov-17	1.41	10-Nov-17	1.16	9-Nov-17	1.00	10-Nov-17	4.25	9-Nov-17	3.20	12-May-17	4.23	10-May-17	4.64	12-May-17	3.30
		8-Nov-17	1.94	8-Nov-17	2.33	8-Nov-17	2.33	8-Nov-17	1.40	8-Nov-17	1.41	9-Nov-17	1.16	8-Nov-17	1.00	9-Nov-17	4.25	8-Nov-17	3.20	5-May-17	4.23	3-May-17	4.64	5-May-17	3.36
		7-Nov-17	1.92	7-Nov-17	2.31	7-Nov-17	2.31	7-Nov-17	1.41	7-Nov-17	1.40	8-Nov-17	1.16	7-Nov-17	1.00	8-Nov-17	4.25	7-Nov-17	3.20	28-Apr-17	4.23	26-Apr-17	4.64	28-Apr-17	3.29
		6-Nov-17	1.96	6-Nov-17	2.32	6-Nov-17	2.32	6-Nov-17	1.41	6-Nov-17	1.40	7-Nov-17	1.16	6-Nov-17	1.00	7-Nov-17	4.25	6-Nov-17	3.20	21-Apr-17	4.20	19-Apr-17	4.64	21-Apr-17	3.22
		3-Nov-17	1.98	3-Nov-17	2.33	3-Nov-17	2.33	3-Nov-17	1.41	3-Nov-17	1.39	6-Nov-17	1.16	3-Nov-17	1.00	6-Nov-17	4.25	3-Nov-17	3.20	14-Apr-17	4.22	12-Apr-17	4.64	14-Apr-17	3.27
		2-Nov-17	1.98	2-Nov-17	2.35	2-Nov-17	2.35	2-Nov-17	1.41	2-Nov-17	1.39	3-Nov-17	1.16	2-Nov-17	1.00	3-Nov-17	4.25	2-Nov-17	3.20	7-Apr-17	4.28	5-Apr-17	4.64	7-Apr-17	3.33
		1-Nov-17	2.00	1-Nov-17	2.37	1-Nov-17	2.37	1-Nov-17	1.41	1-Nov-17	1.38	2-Nov-17	1.16	1-Nov-17	1.00	2-Nov-17	4.25	1-Nov-17	3.20	31-Mar-17	4.34	29-Mar-17	4.64	31-Mar-17	3.33
		31-Oct-17	1.99	31-Oct-17	2.38	31-Oct-17	2.38	31-Oct-17	1.42	31-Oct-17	1.38	1-Nov-17	1.16	31-Oct-17	1.00	1-Nov-17	4.25	31-Oct-17	3.20	24-Mar-17	4.33	22-Mar-17	4.64	24-Mar-17	3.30
		30-Oct-17	1.99	30-Oct-17	2.37	30-Oct-17	2.37	30-Oct-17	1.41	30-Oct-17	1.38	31-Oct-17	1.07	30-Oct-17	1.00	31-Oct-17	4.25	30-Oct-17	3.20	17-Mar-17	4.46	15-Mar-17	4.64	17-Mar-17	3.41
		27-Oct-17	2.02	27-Oct-17	2.41	27-Oct-17	2.42	27-Oct-17																	





TAB: USD FLOAT-TO-FIXED MARKET SWAP CURVES

USSW1		USSW2		USSW3		USSW4		USSW5		USSW6		USSW7		USSW8		USSW9		USSW10	
Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price	Date	Last Price
29-Dec-17	1.90	29-Dec-17	2.08	29-Dec-17	2.17	29-Dec-17	2.21	29-Dec-17	2.24	29-Dec-17	2.28	29-Dec-17	2.31	29-Dec-17	2.34	29-Dec-17	2.37	29-Dec-17	2.40
28-Dec-17	1.91	28-Dec-17	2.09	28-Dec-17	2.18	28-Dec-17	2.23	28-Dec-17	2.27	28-Dec-17	2.30	28-Dec-17	2.34	28-Dec-17	2.37	28-Dec-17	2.39	28-Dec-17	2.42
27-Dec-17	1.90	27-Dec-17	2.07	27-Dec-17	2.16	27-Dec-17	2.21	27-Dec-17	2.25	27-Dec-17	2.28	27-Dec-17	2.31	27-Dec-17	2.34	27-Dec-17	2.37	27-Dec-17	2.40
26-Dec-17	1.91	26-Dec-17	2.10	26-Dec-17	2.19	26-Dec-17	2.25	26-Dec-17	2.29	26-Dec-17	2.33	26-Dec-17	2.36	26-Dec-17	2.39	26-Dec-17	2.42	26-Dec-17	2.45
22-Dec-17	1.92	22-Dec-17	2.10	22-Dec-17	2.20	25-Dec-17	2.25	25-Dec-17	2.30	25-Dec-17	2.34	22-Dec-17	2.37	25-Dec-17	2.40	25-Dec-17	2.43	25-Dec-17	2.47
21-Dec-17	1.90	21-Dec-17	2.09	21-Dec-17	2.19	22-Dec-17	2.25	22-Dec-17	2.29	22-Dec-17	2.34	21-Dec-17	2.37	22-Dec-17	2.40	22-Dec-17	2.43	22-Dec-17	2.46
20-Dec-17	1.89	20-Dec-17	2.07	20-Dec-17	2.17	21-Dec-17	2.25	21-Dec-17	2.29	21-Dec-17	2.33	20-Dec-17	2.37	21-Dec-17	2.41	21-Dec-17	2.44	21-Dec-17	2.47
19-Dec-17	1.88	19-Dec-17	2.06	19-Dec-17	2.16	20-Dec-17	2.23	20-Dec-17	2.28	20-Dec-17	2.33	19-Dec-17	2.35	20-Dec-17	2.41	20-Dec-17	2.44	20-Dec-17	2.47
18-Dec-17	1.86	18-Dec-17	2.03	18-Dec-17	2.12	19-Dec-17	2.22	19-Dec-17	2.27	19-Dec-17	2.31	18-Dec-17	2.29	19-Dec-17	2.38	19-Dec-17	2.41	19-Dec-17	2.44
15-Dec-17	1.86	15-Dec-17	2.03	15-Dec-17	2.11	18-Dec-17	2.18	18-Dec-17	2.22	18-Dec-17	2.26	15-Dec-17	2.26	18-Dec-17	2.32	18-Dec-17	2.36	18-Dec-17	2.39
14-Dec-17	1.84	14-Dec-17	2.01	14-Dec-17	2.10	15-Dec-17	2.16	15-Dec-17	2.20	15-Dec-17	2.23	14-Dec-17	2.26	15-Dec-17	2.29	15-Dec-17	2.32	15-Dec-17	2.34
13-Dec-17	1.82	13-Dec-17	1.98	13-Dec-17	2.07	14-Dec-17	2.15	14-Dec-17	2.20	14-Dec-17	2.23	13-Dec-17	2.25	14-Dec-17	2.29	14-Dec-17	2.32	14-Dec-17	2.35
12-Dec-17	1.85	12-Dec-17	2.03	12-Dec-17	2.12	13-Dec-17	2.13	13-Dec-17	2.17	13-Dec-17	2.21	12-Dec-17	2.31	13-Dec-17	2.28	13-Dec-17	2.31	13-Dec-17	2.35
11-Dec-17	1.83	11-Dec-17	2.01	11-Dec-17	2.11	12-Dec-17	2.19	12-Dec-17	2.23	12-Dec-17	2.27	11-Dec-17	2.30	12-Dec-17	2.35	12-Dec-17	2.38	12-Dec-17	2.41
8-Dec-17	1.82	8-Dec-17	2.00	8-Dec-17	2.09	11-Dec-17	2.17	11-Dec-17	2.22	11-Dec-17	2.26	8-Dec-17	2.29	11-Dec-17	2.34	11-Dec-17	2.37	11-Dec-17	2.40
7-Dec-17	1.81	7-Dec-17	1.99	7-Dec-17	2.09	8-Dec-17	2.15	8-Dec-17	2.20	8-Dec-17	2.25	7-Dec-17	2.28	8-Dec-17	2.32	8-Dec-17	2.36	8-Dec-17	2.39
6-Dec-17	1.80	6-Dec-17	1.98	6-Dec-17	2.08	7-Dec-17	2.15	7-Dec-17	2.20	7-Dec-17	2.24	6-Dec-17	2.26	7-Dec-17	2.31	7-Dec-17	2.35	7-Dec-17	2.38
5-Dec-17	1.81	5-Dec-17	2.00	5-Dec-17	2.10	6-Dec-17	2.14	6-Dec-17	2.19	6-Dec-17	2.23	5-Dec-17	2.28	6-Dec-17	2.30	6-Dec-17	2.33	6-Dec-17	2.36
4-Dec-17	1.80	4-Dec-17	1.99	4-Dec-17	2.09	5-Dec-17	2.16	5-Dec-17	2.20	5-Dec-17	2.24	4-Dec-17	2.29	5-Dec-17	2.31	5-Dec-17	2.34	5-Dec-17	2.37
1-Dec-17	1.78	1-Dec-17	1.96	1-Dec-17	2.06	4-Dec-17	2.16	4-Dec-17	2.20	4-Dec-17	2.25	1-Dec-17	2.26	4-Dec-17	2.32	4-Dec-17	2.36	4-Dec-17	2.39
30-Nov-17	1.78	30-Nov-17	1.97	30-Nov-17	2.08	1-Dec-17	2.13	1-Dec-17	2.17	1-Dec-17	2.22	30-Nov-17	2.29	1-Dec-17	2.30	1-Dec-17	2.33	1-Dec-17	2.36
29-Nov-17	1.77	29-Nov-17	1.94	29-Nov-17	2.05	30-Nov-17	2.15	30-Nov-17	2.20	30-Nov-17	2.25	29-Nov-17	2.26	30-Nov-17	2.33	30-Nov-17	2.37	30-Nov-17	2.41
28-Nov-17	1.75	28-Nov-17	1.92	28-Nov-17	2.01	29-Nov-17	2.11	29-Nov-17	2.17	29-Nov-17	2.22	28-Nov-17	2.21	29-Nov-17	2.31	29-Nov-17	2.34	29-Nov-17	2.38
27-Nov-17	1.75	27-Nov-17	1.92	27-Nov-17	2.01	28-Nov-17	2.08	28-Nov-17	2.13	28-Nov-17	2.17	27-Nov-17	2.20	28-Nov-17	2.25	28-Nov-17	2.29	28-Nov-17	2.32

**TAB: CONFIGURATION FILE**

**Calculations enabled: TRUE**

Test connection

host: home-pc; user: Konstantin Rybakov; key: null

**Output Parameters**

Name	Description
curve-data	Range of Curve values, averaged using a specified frequency
fxswap-output	Output of the FX swap calculator
date-list	List of dates
curve-type	
curve-fx	Forward FX curve
curve-swap	Swap curve
fxswap-param	Parameter of the FX swap output
fxswap-intercept	Intercept coefficients of the FX swap
fxswap-slope	Slope coefficients of the FX swap
fxswap-proxy	Proxy values of the FX swap
data-frequency	The key to set output data frequency
daily-frequency	Daily data frequency
weekly-frequency	Weekly data frequency
monthly-frequency	Monthly data frequency
quarterly-frequency	Quarterly data frequency
annual-frequency	Annual data frequency
day count basis	
30/360	
ACT/ACT	
ACT/360	
ACT/365	

**Configuration parameters for output arrays**

Cell address	Row count	Col count	Comment
'cf'!\$B\$14	-1	-1	
'>discounts'!\$B\$	13	22	
'>FX'!\$B\$9	261	12	
'>FX'!\$O\$9	261	12	
'>FX'!\$AB\$9	261	12	
'swap'!\$B\$10	249	2	
'swap'!\$D\$10	249	2	
'swap'!\$H\$10	249	2	

**Swap Parameters**

CRNCY_FROM	Swap currency: Leg 1
CRNCY_TO	Swap currency: Leg 2
CPN_FREQ_FROM	Swap interest payment frequency: Leg 1
CPN_FREQ_TO	Swap interest payment frequency: Leg 2
DAY_CNT_FROM	Swap day count basis: Leg 1
DAY_CNT_TO	Swap day count basis: Leg 2
TENOR	Swap tenor term

**Graph configuration**

Line	yes	Set to yes/no to set line visible or non-visible
Line size	1.5	Set line size
Marker	no	Set to yes/no to set markers visible or non-visible
Marker size	4	Set markers size

**Package: AC.finance.irb.swap**

**Available functions:**

**1.**