

Fixed Income Relative-Value Weekly

Roger Quick, CFA

Friday, September 03, 2010

Highlights

- After a choppy week, the bond market sold off on the better than expected nonfarm payroll report. We had thought US 10s had become expensive after the rally of the past few months, and some kind of selloff was overdue. US 10s are likely in a broad 2.45% - 2.85% range for the next few months.
- Canada 10s also sold off sharply this week. Key support is toward 3.05% (chart below).
- Canada 10/Long: Longs are good value vs 10s. As argued previously, even if the BoC does nothing more this year, the spread remains steep for the cycle, and could easily flatten another 10 bps.
- Swap Spreads in Canada remain far too tight, and should widen, especially if we have seen the bottom in rates for now. I think the 5-year swap spread can easily widen another 10 bps or more over the months ahead.
- Canada Mortgage Bonds: spreads continue to grind tighter. Modest further tightening is possible, as argued for the past few months. We like asset-swapping CMB as a way to take advantage of the expected swap spread widening, and for the incremental income over Canada.
- CDA 2/5/10 Butterfly: 5s continue to outperform the curve, a situation that has persisted for some time. The outperformance of the past week was unusual, in that it came amid a weaker market, and I think increased liquidity after the Labour Day holiday could cause the recent outperformance to be reversed.
- BoC on Wednesday September 8th: Scotia Economics forecasts that the BoC will raise rates to 1.0%, and then pause. Scotia Economics just released a revised forecast for the BoC, and now sees rates reaching 1.75% next year, down from 2.25% previously.
- Implied expectations for BoC tightening have increased to a 75% probability of a rate increase on Sep 8, based on OIS levels after the US payrolls release.
- The appendix also shows 1) updates of various yield curve rate-cycle charts, 2) an extract from the daily butterfly report for swaps and bonds, 3) Canada bonds valued off our theoretical multi-factor yield curve model, and 4) Canada bond asset-swap spreads.



US 10s

It was a choppy week, with 10-year Treasuries trading back and forth between 2.45% and 2.67% through Thursday. The stronger payrolls report caused Treasuries to sell off sharply, pushing the 10-year yield up to 2.74%.

Our view hasn't changed much. For the past couple of weeks we had thought Treasuries had become quite expensive. Last week we suggested US 10s were likely to be in a broad 2.45% - 2.85% range for the next few months, and are sticking with that view.

A lot of bad economic news had already been priced in. The failure of the Treasury market to rally despite a very weak housing report (August 25th) was a good indicator that the rally had already gone too far. The Fed's bond buying program is unlikely to be increased to a more expansionary policy anytime soon, not until the Fed has evidence that the economic outlook has deteriorated further and deflation becomes a bigger threat. And presumably a lot of the big adjustments to mortgage prepayment hedging have already been done after the big decline in market yields and mortgage rates in the past month or two.

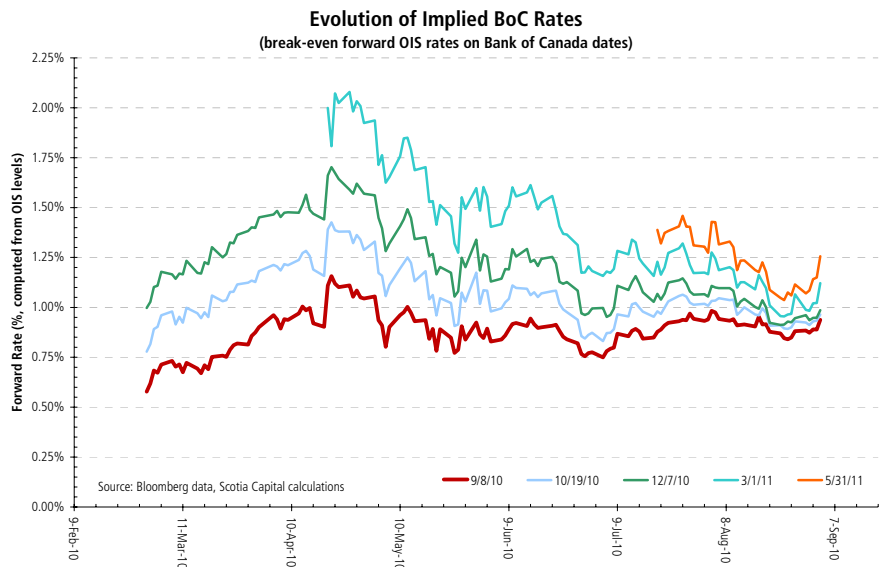
The US auctions 3s, 10s, and longs next week.



Bank of Canada

The BoC announces its interest rate decision on Wednesday September 8th. The market has been raising its expectation for a rate increase. Last week the probability of a hike was as low as 40%. After the US payrolls report, the probability had increased to about 75%.

Scotia Economics forecasts that the BoC will raise rates to 1.0% on Sep 8, and then leave rates at that level until 2011, whereupon it will resume raising rates to 1.75%. This is a downward revision from Scotia's previous forecast that the BoC would take the overnight target to 2.25% next year.



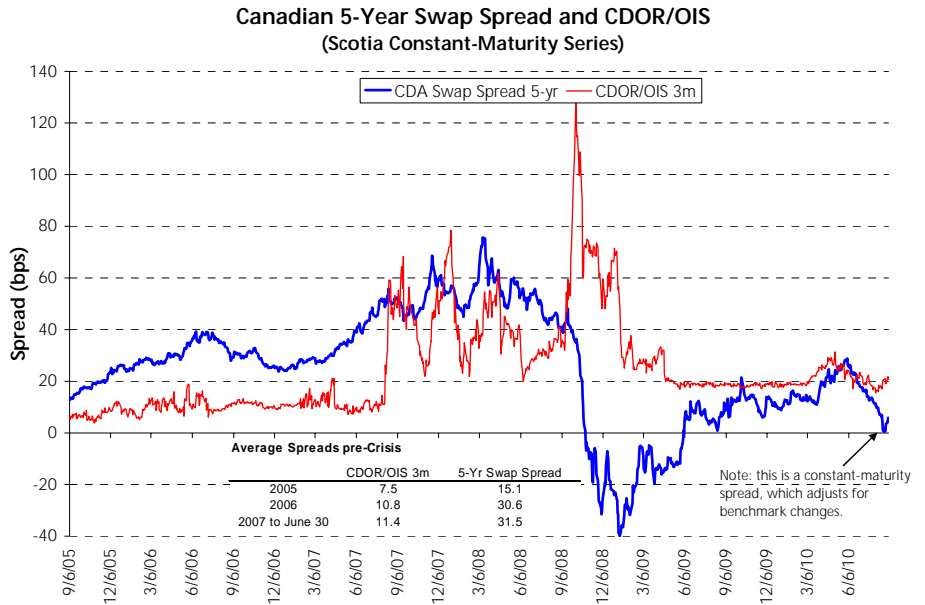
It will be interesting to see how much weight the BoC places on international factors vs domestic factors in its Sep 8th statement. The BoC placed a lot of emphasis on international factors in both of its two previous statements, downplaying domestic strength seen in the first half of the year. Notwithstanding the better ISM and nonfarm reports of the past week, the international evidence has generally been weak, in particular regarding the US. Based on what the BoC has said in its previous two statements, I don't think it would be inconsistent if the BoC were to pause at 0.75%.

Assuming the BoC does raise rates, it would likely downplay some of the weaker Canadian data releases of the past month as at least in part an overdue correction to the very strong performance in the first half of the year. The notion that the BoC may in future lean more toward a kind of counter-cycle policy to reduce asset bubbles would also support the case for higher rates now. There are also questions about seasonal adjustment problems with Canada's previous employment report, which may have made it look weaker than it really was, as our economics group has pointed out.

Swap Spreads Update

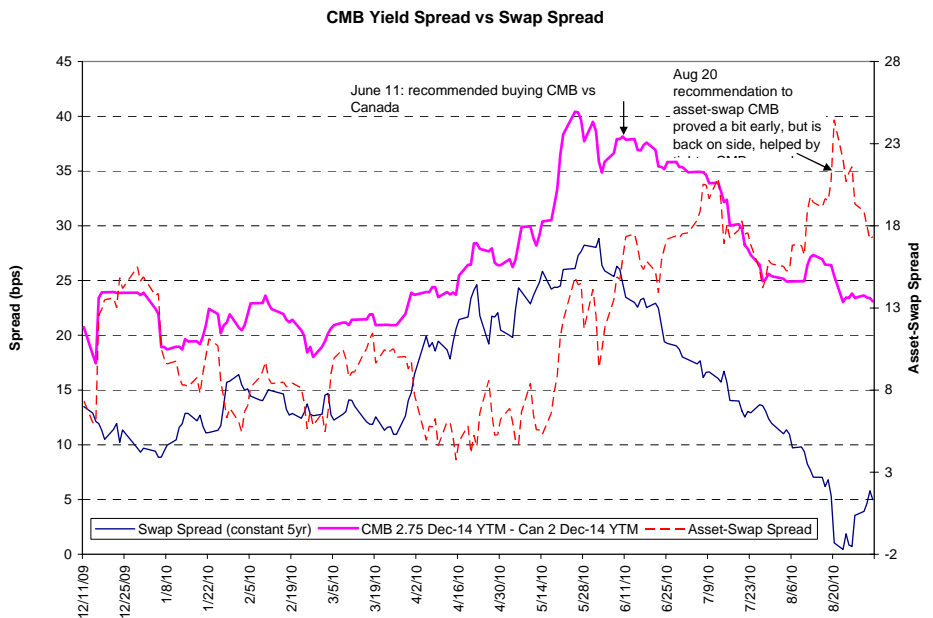
Five-year swap spreads have moved some 5 bps wider (less negative) than their tightest levels of two weeks ago. We still think there is a great longer-term opportunity in paying spreads. I think 5-year spreads are far too tight and should easily move 10 to 15 bps wider in the next few months. This would be a fairly modest move; it would still leave spreads relatively tight compared to CDOR/OIS.

The chart shows an update of the of 5-year constant-maturity swap spread and 3-month CDOR/OIS. Note that the chart shows our constant-maturity swap spread series, rather than the quoted spread over benchmarks.



Canada Mortgage Bonds

We also reiterate the recommendation to asset-swap Dec 2014 and 2015 CMB. See the second chart, which shows the Dec 2014 CMB credit spread, asset-swap spread, and the constant-maturity 5-year swap spread.



Canada 2/5/10 Butterfly

The 5-year butterfly richened further this past week. The 5-year sector has been expensive for some time, as we have noted previously. However, the outperformance of 5s this past week was unusual, because it came amid a weakening market.

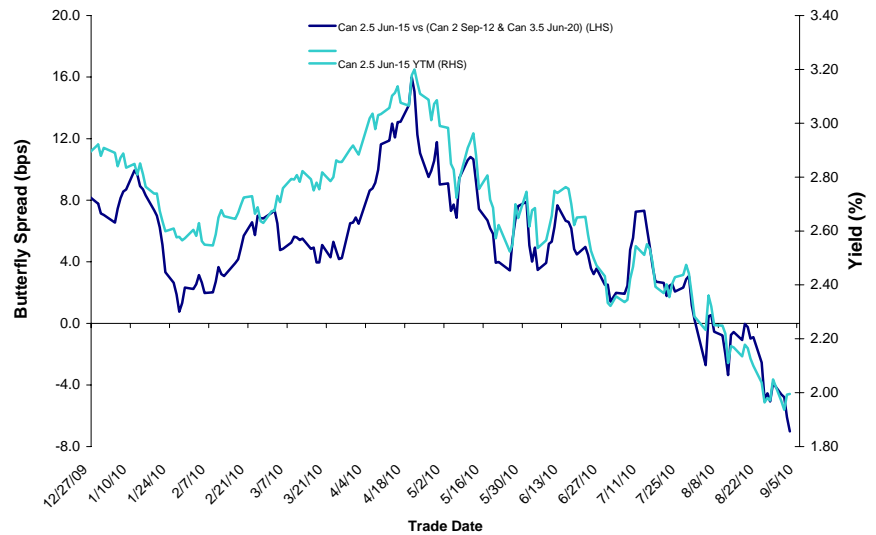
The 5-year butterfly tends to be highly market directional, in that it tends to richen as the market rallies, cheapen as the market sells off. This can be seen in the first chart, which shows the butterfly in bonds graphed against the level of yields. Yet this past week it richened another 3 bps as of Thursday (or 6 bps if you prefer the gross spread), even as the market was weaker.

Perhaps the atypical behavior of the past week is just a reflection of the reduced liquidity in the market. I would think that as liquidity returns after Labour Day, that the 5-year sector should reverse some of its outperformance. The selloff in the market after this morning's better than expected nonfarm payrolls report should also help 5s to cheapen.

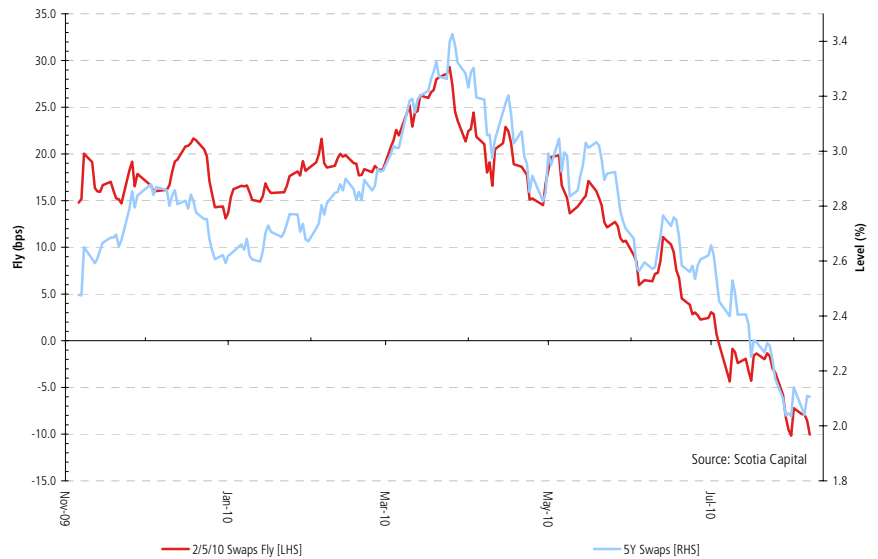
The second chart shows the 2/5/10 butterfly in swaps, which is also strongly related to market direction.

The third chart compares the 2/5/10 butterfly in Canada swaps with the same butterfly in US swaps. Both are very market directional, and consequently both had richened steadily in recent months as rates declined. However, the US butterfly has recently begun to cheapen a bit, while the Canadian fly has remained very rich.

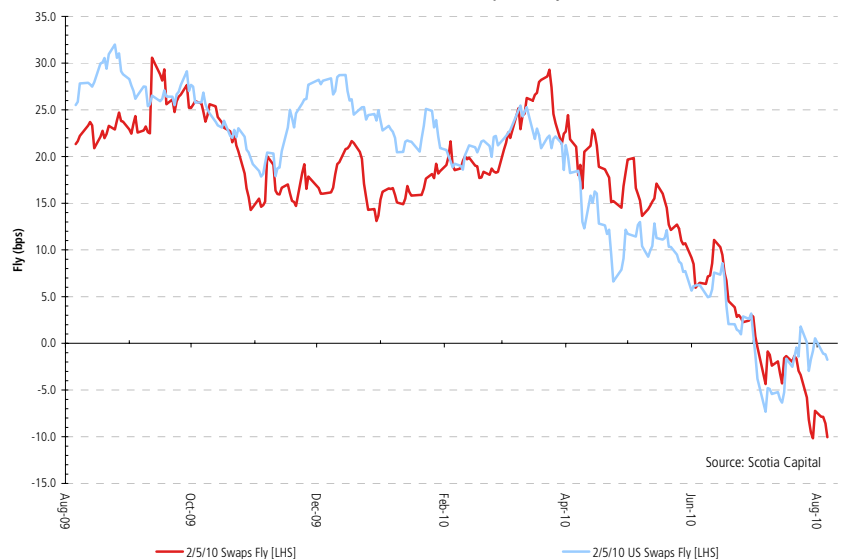
CDA 2/5/10 Butterfly vs Yield Level



CDA 2/5/10 Fly in Swaps vs. Level



Canada and US 2/5/10 Swap Butterfly



Canada 10s/Longs

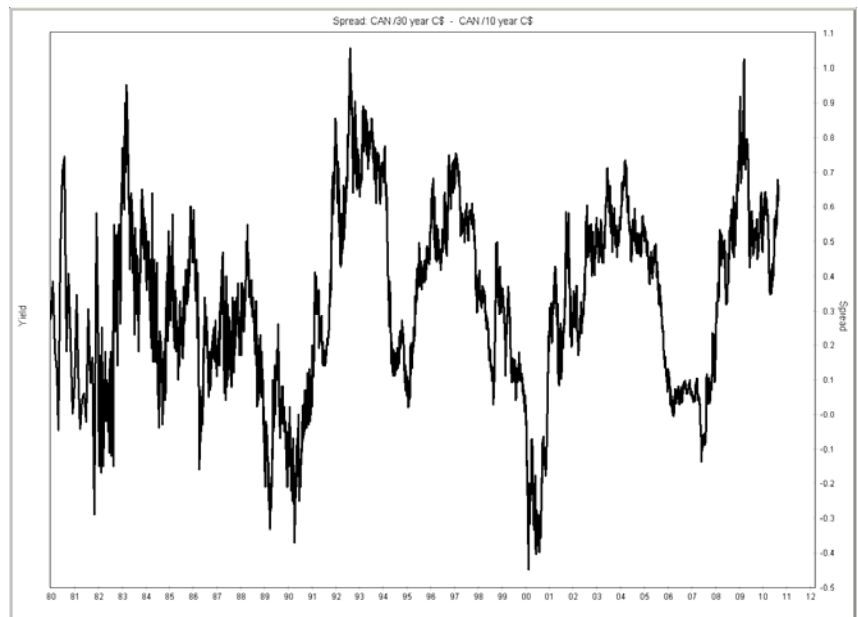
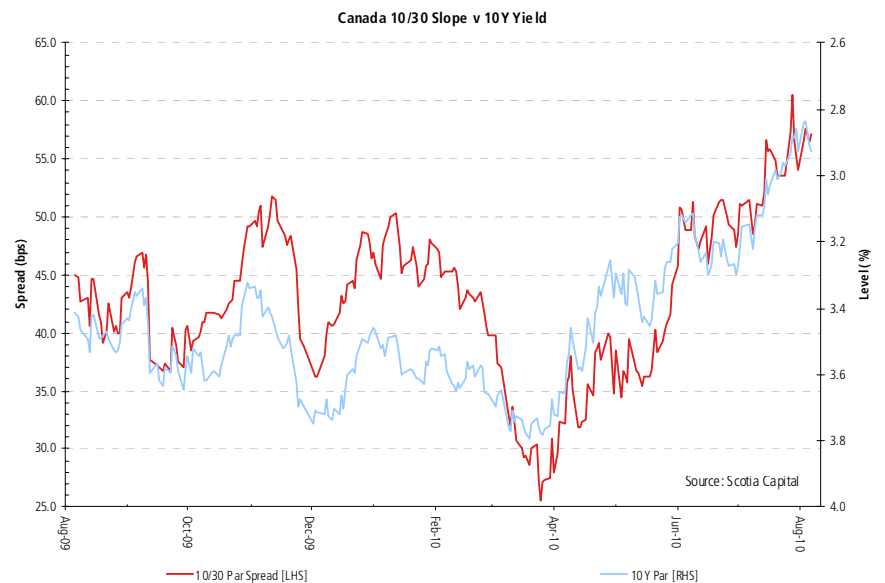
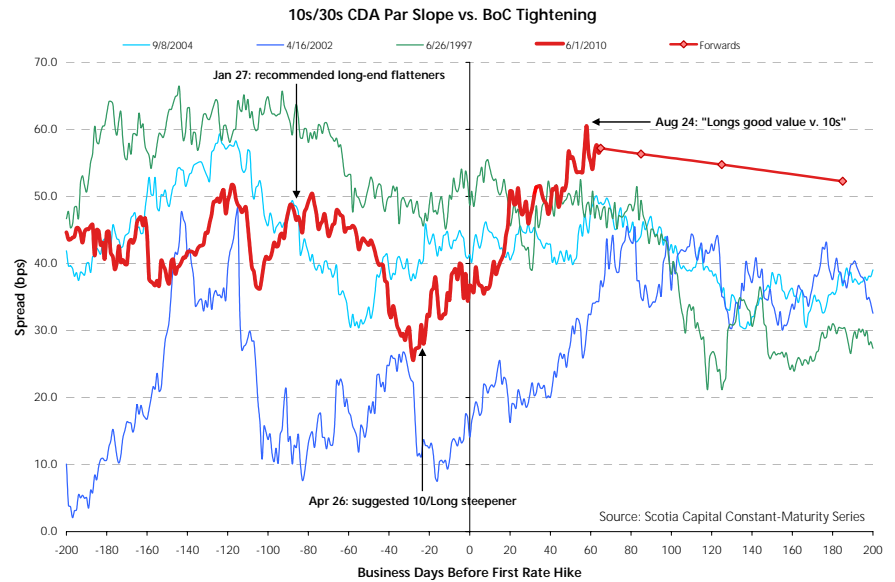
We reiterate the 10/long flattener recommendation. It had re-steepened going into the long auction this week, though was flatter by 4 bps at the time we went to press Friday morning, following the market selloff on payrolls.

We argued last week we thought this spread could flatten a further 10 bps or so, which would put it toward 53 bps using J20/J37. I still think that is a very feasible target. (note that the chart uses our constant-maturity series, which corresponds more closely to the J20/J41 spread).

This tends to be a bearish trade. The 10/30 slope is negatively related to the overall direction of the market, especially when there is a safe-haven bid to the market. As argued previously, if conditions are normalizing a bit after the strong safe-haven rally of the past few months, then that should help this spread to flatten.

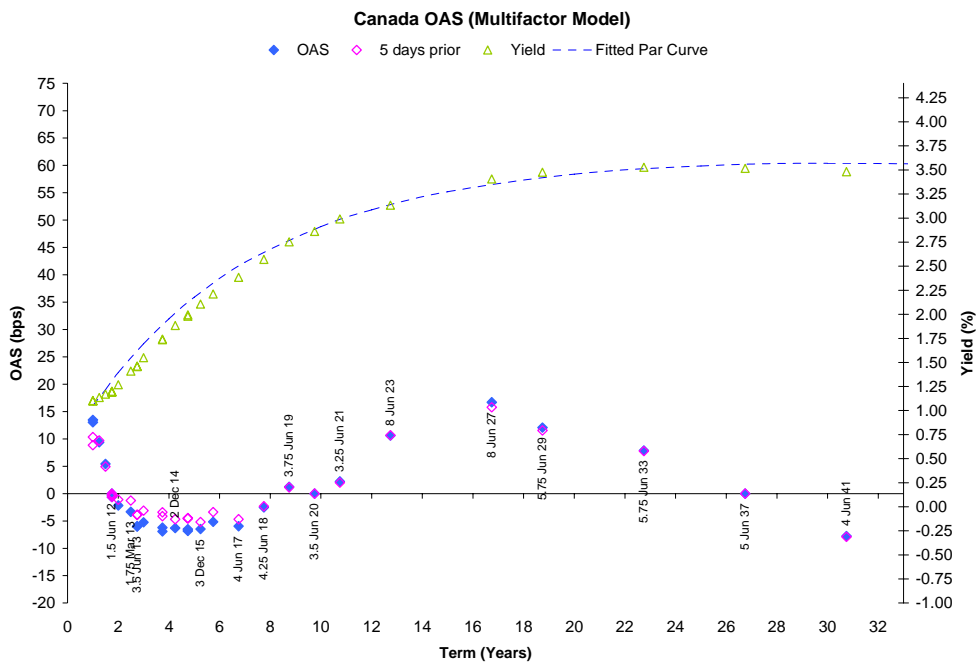
The second chart shows the 10/long slope vs the level of yields (note that the right axis has been reversed).

The third chart shows a long-run view of the 10/30 spread from PC Bond.



Appendix: Canada Bonds vs Theoretical Yield Curve

Coupon	Maturity Dt	Yield	OAS	Chg 1	Chg 5	Chg vs 20 MA			# SD 20*	Chg vs 75 MA			# SD 75*
						Avg 20	SD 20		Avg 75	SD 75			
3.750	9/1/11	1.100	13.0	0.7	4.2	10.3	2.8	1.6	2.6	10.4	5.6	1.8	
1.000	9/1/11	1.105	13.5	0.7	3.1	11.5	2.0	1.5	3.5	10.0	5.8	1.7	
1.250	12/1/11	1.136	9.4	0.6	-0.3	8.0	1.4	1.5	1.4	8.0	4.7	1.7	
1.500	3/1/12	1.171	5.4	0.0	0.5	4.2	1.3	0.8	0.3	5.2	2.8	1.8	
3.750	6/1/12	1.196	-0.3	0.0	0.0	-0.5	0.2	0.2	-0.4	0.1	0.2	0.9	
5.250	6/1/12	1.191	-0.6	0.0	0.0	-0.8	0.2	0.2	-0.5	-0.1	0.3	-0.3	
1.500	6/1/12	1.201	0.0	0.0	0.0	0.0	0.0	0.0					
2.000	9/1/12	1.269	-2.2	-0.2	-1.1	-1.4	-0.8	0.4	0.7	-2.9	1.9	-1.5	
1.750	3/1/13	1.409	-3.3	-0.3	-2.1	0.4	-3.7	2.2	4.8	-8.1	3.4	-2.4	
5.250	6/1/13	1.457	-5.9	-0.5	-2.1	-1.2	-4.8	2.9	4.1	-10.0	3.9	-2.5	
3.500	6/1/13	1.462	-6.0	-0.5	-2.1	-1.3	-4.7	2.8	4.0	-10.0	4.0	-2.5	
2.500	9/1/13	1.550	-5.2	-0.7	-2.1	-0.4	-4.8	3.0	5.7	-11.0	4.6	-2.4	
5.000	6/1/14	1.736	-6.2	-1.0	-2.8	-0.2	-6.0	3.1	5.8	-12.1	4.6	-2.7	
3.000	6/1/14	1.741	-6.9	-1.0	-2.8	-1.0	-5.9	3.1	5.0	-12.0	4.6	-2.6	
2.000	12/1/14	1.884	-6.3	-0.7	-1.6	-1.4	-4.9	2.7	2.8	-9.1	3.5	-2.6	
4.500	6/1/15	1.980	-6.5	-0.9	-2.0	-2.8	-3.7	1.6	-0.1	-6.4	2.5	-2.6	
2.500	6/1/15	1.995	-6.8	-0.9	-2.2	-3.0	-3.8	1.6	-0.6	-6.3	2.3	-2.7	
3.000	12/1/15	2.106	-6.5	-0.7	-1.3	-3.4	-3.1	1.7	1.3	-7.8	3.7	-2.1	
4.000	6/1/16	2.211	-5.2	-0.9	-1.8	-1.9	-3.3	1.6	1.9	-7.1	3.2	-2.2	
4.000	6/1/17	2.384	-6.0	-0.6	-1.3	-3.2	-2.8	1.7	1.0	-7.0	3.4	-2.1	
4.250	6/1/18	2.570	-2.5	-0.2	-0.2	-0.2	-2.4	1.7	2.6	-5.1	2.3	-2.3	
3.750	6/1/19	2.753	1.2	-0.2	0.1	2.1	-0.8	0.6	2.0	-0.8	1.2	-0.7	
3.500	6/1/20	2.861	0.0	0.0	0.0	0.0	0.0	0.0					
3.250	6/1/21	2.991	2.2	0.2	0.2	2.1	0.1	0.3	2.4	-0.1	0.4	-0.3	
8.000	6/1/23	3.134	10.6	0.1	-0.1	10.4	0.2	0.5	7.8	2.8	2.8	1.0	
8.000	6/1/27	3.406	16.7	0.2	0.9	15.9	0.8	1.0	12.9	3.8	2.3	1.6	
5.750	6/1/29	3.476	12.1	0.1	0.5	11.5	0.5	0.7	9.0	3.1	1.9	1.6	
5.750	6/1/33	3.529	7.9	-0.1	0.1	8.1	-0.2	0.4	7.1	0.8	1.0	0.8	
5.000	6/1/37	3.517	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4.000	6/1/41	3.482	-7.8	-0.1	0.2	-6.9	-0.9	0.9	-5.5	-2.3	1.1	-2.0	



Description of the model: The option-adjusted spread (OAS) is the spread to the theoretical curve that would equate the model price to the market price. A positive OAS means that a bond is cheap to the theoretical curve, all else equal, while a negative OAS means that a bond is rich.

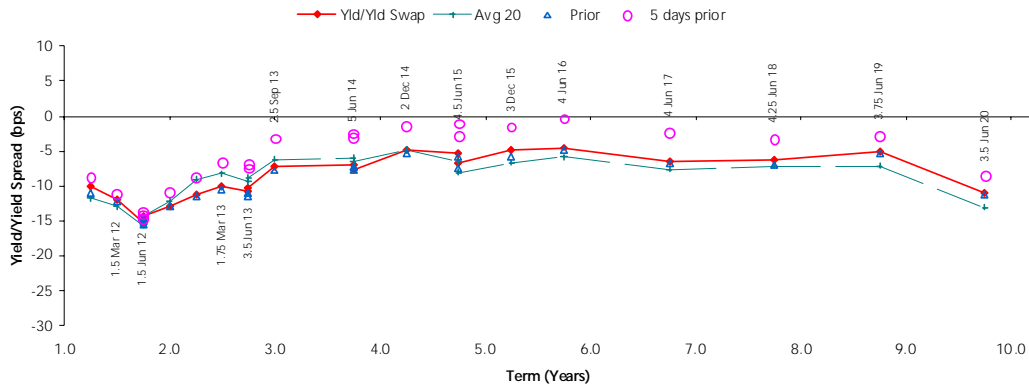
The term-structure model that underlies this report is similar to models used for option pricing, in that it explicitly models the uncertainty in the future evolution of interest rates (as a simplified analogy, think of the standard binomial option-pricing tree). However, it differs from the usual option pricing model in two main ways. First, the term structure model used here has multiple, partially-correlated sources of risk, which enables it to capture a wide range of interest-rate and volatility term structures. Second, it is a so-called equilibrium model. Models for interest-rate options typically try to fit the underlying term structure exactly. In contrast, the equilibrium model is calibrated to fit the prices of just a few key benchmark bonds (typically 6-month T-Bills, and 2, 10, and 30-year benchmarks). We do, however, make use of option-market data to estimate the model's volatility and correlation parameters.

Appendix: Canada Asset-Swap Spreads

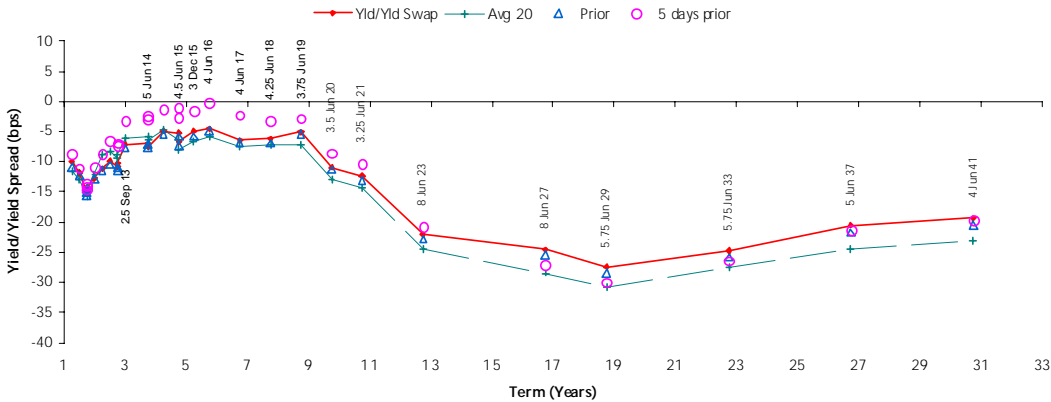
Coupon	Maturity Dt	Par Asset Swap	Yld/Yld Swap	Chg 1	Chg 5	Avg 20	Chg vs 20 MA	SD 20	#SD 20*	Avg 60	Chg vs 60 MA	SD 60	#SD 60*	Carry (\$K) ¹	Carry Delta (\$K) ²
1.250	12/1/11	-10.2	-10.1	0.9	-1.4	-11.7	1.6	1.9	0.8	-13.5	3.5	2.4	1.4	130.6	76.6
1.500	3/1/12	-11.8	-11.9	0.3	-0.8	-12.9	1.1	1.6	0.7	-13.9	2.0	1.6	1.2	105.4	63.0
5.250	6/1/12	-15.9	-15.2	0.3	-0.6	-15.7	0.5	1.3	0.3	-15.6	0.4	1.0	0.4	74.5	55.5
3.750	6/1/12	-15.2	-14.7	0.3	-0.6	-15.2	0.5	1.3	0.3	-15.1	0.4	1.0	0.4	72.9	54.9
1.500	6/1/12	-14.4	-14.2	0.3	-0.6	-14.4	0.1	1.3	0.1	-14.2	0.0	1.0	0.0	68.8	53.8
2.000	9/1/12	-13.7	-12.8	0.1	-1.9	-12.1	-0.7	1.6	-0.4	-11.6	-1.2	1.5	-0.8	74.6	46.9
1.500	12/1/12	-11.8	-11.1	0.3	-2.4	-9.0	-2.2	1.4	-1.5	-9.0	-2.2	1.4	-1.5	65.6	41.6
1.750	3/1/13	-9.8	-9.9	0.6	-3.4	-8.2	-1.7	1.5	-1.2	-9.1	-0.9	1.4	-0.6	70.9	37.3
5.250	6/1/13	-11.1	-10.8	0.6	-3.4	-9.3	-1.5	1.6	-0.9	-11.4	0.6	2.4	0.2	67.2	35.5
3.500	6/1/13	-10.7	-10.3	0.6	-3.4	-8.8	-1.5	1.6	-0.9	-10.6	0.4	2.3	0.2	63.0	34.8
2.500	9/1/13	-7.5	-7.2	0.6	-4.0	-6.2	-1.0	1.7	-0.6	-8.2	1.0	2.5	0.4	68.9	31.3
3.000	6/1/14	-6.9	-7.0	0.1	-4.6	-5.9	-1.1	2.4	-0.5	-10.7	3.7	4.9	0.7	54.8	25.5
5.000	6/1/14	-6.7	-7.6	0.1	-4.6	-6.4	-1.1	2.4	-0.5	-11.4	3.9	5.1	0.8	62.0	26.3
2.000	12/1/14	-5.0	-4.9	0.4	-3.5	-4.8	-0.1	2.6	0.0	-11.5	6.6	6.3	1.1	49.1	22.2
2.500	6/1/15	-5.0	-5.2	0.6	-4.2	-6.4	1.2	3.8	0.3	-15.5	10.3	8.2	1.3	46.0	20.1
4.500	6/1/15	-5.2	-6.7	0.6	-4.0	-8.0	1.3	3.8	0.3	-17.1	10.3	8.1	1.3	53.2	20.9
3.000	12/1/15	-4.3	-4.9	0.9	-3.4	-6.6	1.7	3.3	0.5	-13.9	9.0	6.6	1.4	45.6	18.5
4.000	6/1/16	-2.9	-4.5	0.3	-4.2	-5.8	1.3	3.7	0.4	-14.4	9.9	7.6	1.3	49.0	17.4
4.000	6/1/17	-4.6	-6.5	0.3	-4.2	-7.6	1.1	3.6	0.3	-15.9	9.4	7.2	1.3	41.5	15.1
4.250	6/1/18	-3.7	-6.2	0.7	-3.0	-7.1	0.9	3.2	0.3	-16.3	10.1	8.0	1.3	40.6	13.4
3.750	6/1/19	-3.5	-5.1	0.3	-2.3	-7.1	2.0	4.1	0.5	-18.4	13.3	9.6	1.4	36.3	11.9
3.500	6/1/20	-9.8	-10.9	0.3	-2.4	-13.0	2.1	4.2	0.5	-24.5	13.5	9.5	1.4	25.7	10.8
3.250	6/1/21	-12.0	-12.4	0.7	-2.1	-14.2	1.9	3.8	0.5	-18.4	6.1	6.0	1.0	20.6	9.8
8.000	6/1/23	-11.1	-22.1	0.7	-1.3	-24.4	2.3	3.5	0.7	-36.9	14.8	10.8	1.4	41.8	10.0
8.000	6/1/27	-14.2	-24.5	1.0	2.6	-28.5	4.0	4.1	1.0	-40.0	15.5	9.7	1.6	37.1	8.2
5.750	6/1/29	-23.1	-27.4	1.1	2.5	-30.9	3.5	4.0	0.9	-41.6	14.2	9.0	1.6	20.5	7.1
5.750	6/1/33	-22.9	-24.8	1.1	1.7	-27.6	2.9	3.5	0.8	-36.3	11.5	7.5	1.5	18.5	6.3
5.000	6/1/37	-21.1	-20.6	1.1	0.8	-24.5	3.9	4.0	1.0	-32.9	12.3	7.1	1.7	13.4	5.5
4.000	6/1/41	-20.3	-19.4	1.1	0.3	-23.1	3.7	3.9	1.0	-30.9	11.6	6.7	1.7	5.7	4.9

¹ Carry over 1-mo for 100K of DV01 risk, assuming bond financed at general collateral. ² Carry Delta is the change in carry for a 10bp decline in the bond financing rate.

Canada Yield/Yield Asset-Swap Spreads, 2 through 10 Year Bonds



Canada Yield/Yield Asset-Swap Spreads, all terms



Fixed Income Research:

Roger Quick, CFA
Director, Fixed Income Research
(416) 863-7236
roger_quick@scotiacapital.com

Graham Chubb
Associate Director, Fixed Income Research
graham_chubb@scotiacapital.com

Scotia Plaza

40 King Street West
68th Floor
Toronto, Ontario
M5W 2X6

TM Trademark of the Bank of Nova Scotia. Scotia Capital Inc. authorized user of mark. The Scotia Capital trademark represents the corporate and investment banking businesses of the Bank of Nova Scotia, Scotia Capital Inc., and Scotia Capital (USA) Inc. - all members of the Scotiabank Group.

This report has been prepared by SCOTIA CAPITAL INC. (SCI), a subsidiary of the Bank of Nova Scotia. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither SCI nor its affiliates accepts any liability whatsoever for any loss arising from any use of this report or its contents. This report is not, and is not to be construed as, an offer to sell or solicitation of an offer to buy any securities and/or commodity futures contracts. The securities mentioned in this report may not be suitable for all investors nor eligible for sale in some jurisdictions. This research and all the information, opinions, and conclusions contained in it are protected by copyright. This report may not be reproduced in whole or in part, or referred to in any manner whatsoever, nor may the information, opinions, and conclusions contained in it be referred to without the prior express consent of SCI. SCI is regulated by FSA for conduct of investment business in the UK. U.S. Residents: This report is being distributed by Scotia Capital Inc. directly to U.S. persons who are Major Institutional Investors only. Any U.S. institutional investor wishing further information or to effect transactions in any security discussed in this report should contact Scotia Capital (USA) Inc., a broker-dealer registered with the SEC and FINRA and a member of SPIC, at 1-800-262-5363.

Each research analyst named in this report or any subsection of this report certifies that (1) the views expressed in this report in connection with securities or issuers that he or she analyzes accurately reflect his or her personal views; and (2) no part of his or her compensation was, is, or will be directly or indirectly, related to the specific recommendations or views expressed by him or her in this report. The Research Analyst's compensation is based on various performance and market criteria and is charged as an expense to certain departments of Scotia Capital Inc., including investment banking. Scotia Capital Inc. and/or its affiliates: expects to receive or intends to seek compensation for investment banking services from issuers covered in this report within the next three months; and has or seeks a business relationship with the issuers referred to herein which involves providing services, other than securities underwriting or advisory services, for which compensation is or may be received. These may include services relating to lending, cash management, foreign exchange, securities trading, derivatives, structured finance or precious metals.

For Scotia Capital Research Analyst standards and disclosure policies, please visit www.scotiacapital.com/disclosures.



Products. Industry Knowledge. Relationships.