

FTSE Canada Universe Bond Index - Index Extension Report

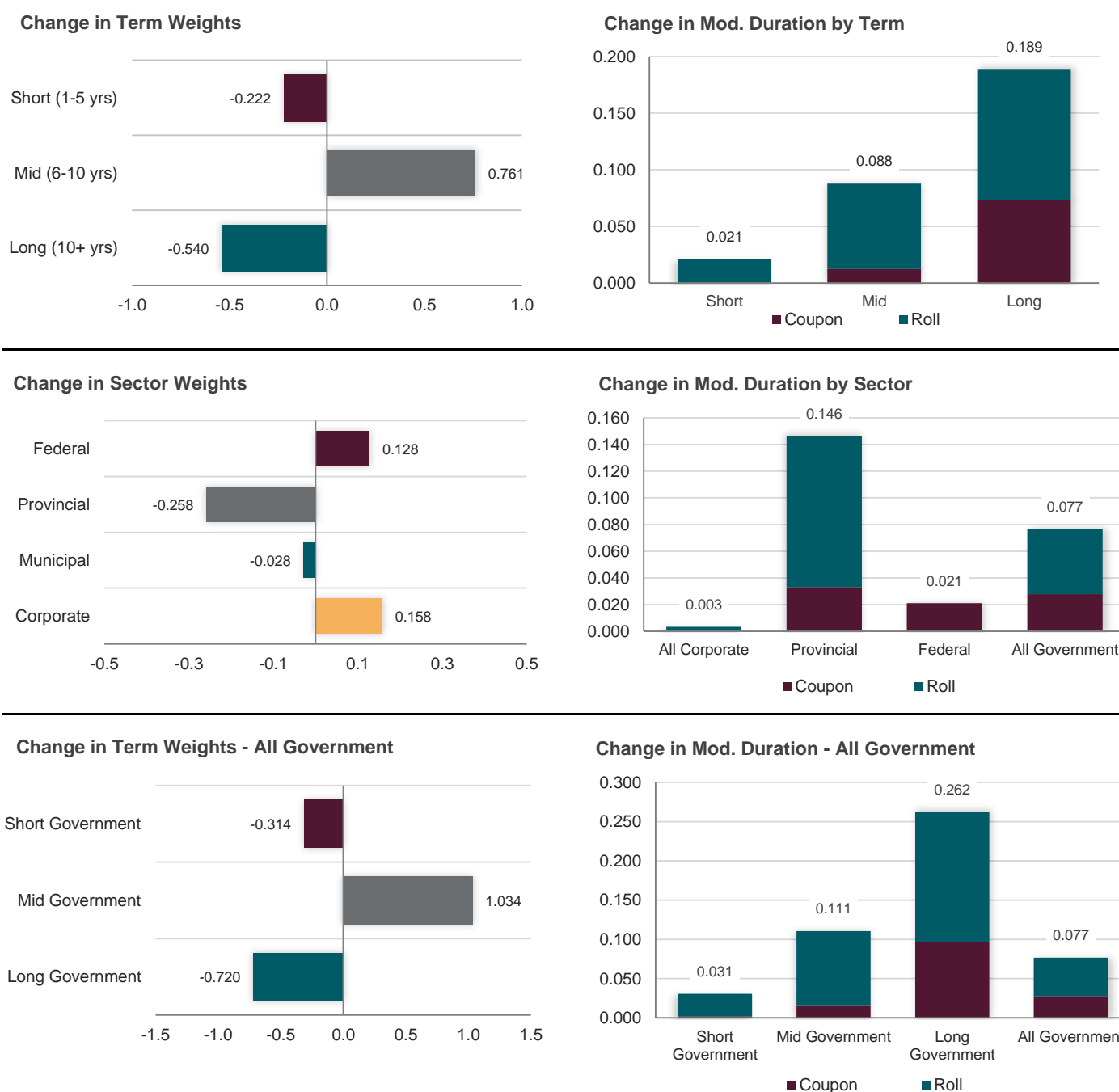
2020/11/20

Coupon & Rollout, Rollover & Market Weight Duration Effects - December 1, 2020

The FTSE Canada Universe Bond Index will experience a duration shift on December 1, 2020 as a result of the payment of approximately \$5.310B dollars in Dec 1 coupons, \$20.474MM in Dec 1 principals, and \$9.095B rollout in Dec 1 bonds. Based on simulations as of November 19, we expect to see an extension of 0.054 years in the modified duration of the FTSE Canada Universe Bond Index.

FTSE Canada Universe Bond Index - Simulation as of Nov 19, 2020*

* assuming no yield curve shifts



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FTSE Canada Universe Bond Index - Simulation as of Nov 19, 2020*

| Index | Macaulay Duration | | | Modified Duration | | |
|------------------|-------------------|--------------|--------------|-------------------|--------------|--------------|
| | Coupon Change | Roll Change | Total Change | Coupon Change | Roll Change | Total Change |
| Short | 0.001 | 0.021 | 0.021 | 0.001 | 0.021 | 0.021 |
| Mid | 0.013 | 0.075 | 0.088 | 0.013 | 0.075 | 0.088 |
| Long | 0.074 | 0.118 | 0.192 | 0.073 | 0.116 | 0.189 |
| Short Government | 0.002 | 0.029 | 0.031 | 0.002 | 0.029 | 0.031 |
| Short Federal | 0.001 | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 |
| Short Provincial | 0.004 | 0.097 | 0.101 | 0.004 | 0.097 | 0.101 |
| Short Corporate | -0.002 | 0.002 | 0.000 | -0.002 | 0.002 | 0.000 |
| Mid Government | 0.016 | 0.094 | 0.111 | 0.016 | 0.094 | 0.111 |
| Mid Federal | 0.028 | 0.192 | 0.220 | 0.028 | 0.191 | 0.219 |
| Mid Provincial | 0.007 | 0.000 | 0.007 | 0.007 | 0.000 | 0.007 |
| Mid Corporate | 0.002 | 0.000 | 0.002 | 0.002 | 0.000 | 0.002 |
| Long Government | 0.097 | 0.169 | 0.266 | 0.097 | 0.166 | 0.262 |
| Long Federal | 0.175 | 0.838 | 1.013 | 0.174 | 0.831 | 1.005 |
| Long Provincial | 0.075 | 0.000 | 0.075 | 0.074 | 0.000 | 0.074 |
| Long Corporate | 0.005 | 0.000 | 0.005 | 0.005 | 0.000 | 0.005 |
| All Government | 0.028 | 0.049 | 0.077 | 0.028 | 0.049 | 0.077 |
| Federal | 0.021 | 0.000 | 0.021 | 0.021 | 0.000 | 0.021 |
| Provincial | 0.033 | 0.114 | 0.148 | 0.033 | 0.113 | 0.146 |
| All Corporate | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.003 |
| Universe | 0.020 | 0.035 | 0.055 | 0.019 | 0.035 | 0.054 |

Market Value Term Weights

| | Before | After | Change |
|-----------------|--------|--------|--------|
| Short (1-5 yrs) | 41.36 | 41.14 | -0.222 |
| Mid (6-10 yrs) | 24.12 | 24.88 | 0.761 |
| Long (10+ yrs) | 34.49 | 33.95 | -0.540 |
| Total | 100.00 | 100.00 | |

Market Value Government Weights

| | Before | After | Change |
|------------------|--------|--------|--------|
| Short Government | 39.07 | 38.76 | -0.314 |
| Mid Government | 24.69 | 25.72 | 1.034 |
| Long Government | 36.19 | 35.47 | -0.720 |
| Total | 100.00 | 100.00 | |

Market Value Sector Weights

| | Before | After | Change |
|------------|--------|--------|--------|
| Federal | 34.11 | 34.24 | 0.128 |
| Provincial | 37.42 | 37.16 | -0.258 |
| Municipal | 2.13 | 2.10 | -0.028 |
| Corporate | 26.34 | 26.50 | 0.158 |
| Total | 100.00 | 100.00 | |

* assuming no yield curve shifts

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APPENDIX

Issues rolling out of the FTSE Canada Universe Bond Index on Dec 1, 2020

| Issuer | ID | Coupon | Maturity Date | Amt Outstanding (\$M) |
|--------------------|--------|--------|---------------|-----------------------|
| Peel Ont Regl Munc | 111063 | 3.50 | Dec 1, 2021 | 200 |
| Metro Inc. | 134839 | 3.20 | Dec 1, 2021 | 300 |
| Quebec | 107418 | 4.25 | Dec 1, 2021 | 7,500 |
| Montreal | 107706 | 4.50 | Dec 1, 2021 | 495 |
| Manitoba | 108980 | 3.85 | Dec 1, 2021 | 600 |
| Total | | | | 9,095 |

Issues rolling over from FTSE Canada Mid to FTSE Canada Short Bond Index on Dec 1, 2020

| Issuer | ID | Coupon | Maturity Date | Amt Outstanding (\$M) |
|--------------|----|--------|---------------|-----------------------|
| Total | | | | - |

Issues rolling over from FTSE Canada Long to FTSE Canada Mid Bond Index on Dec 1, 2020

| Issuer | ID | Coupon | Maturity Date | Amt Outstanding (\$M) |
|--------------|--------|--------|---------------|-----------------------|
| Canada | 160891 | 0.50 | Dec 1, 2030 | 12,849 |
| Total | | | | 12,849 |

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