How to Submit Your Question

Step 1: Type in your question here.

Step 2: Click on the Send button.
In the Links box, you will find:
- Presentation slides (Click to open, print or save)
CFC’s Financial Webinar Series
Update on the Economy:
What the crystal ball says for 2012!
Today’s speakers include:

Chris Kulina,  
ScotiaBank

John Suter,  
CFC
Polling Question

January 1 is the day this museum opened its doors for the first time.

- Statue of Liberty
- The Guggenheim
- Ellis Island
- Carpenter’s Hall
- The Washington Monument
• “The Budget should be balanced. The Treasury should be refilled. Public Debt should be reduced. The arrogance of officialdom should be controlled, lest our country should become bankrupt”
  - Cicero (55 B.C.)

• “A government that robs Peter to pay Paul, can always depend on support of Paul”
  - George Bernard Shaw

• “There must be some kind of way out of here”
  - Bob Dylan

• “Hope in reality is the worst of all evils because it prolongs the torments of man”
  - Friedrich Nietzsche
• Entering 2011, economists and strategists were cautiously optimistic that the worst was over. The view was wrong.

• Financial markets were dramatically rocked by wide-spread uncertainty and elevated levels of systemic risk.

• Geopolitical, social, political, and economic conflict contributed to “flight-to-quality” trading.

• Both global economic growth and inflation expectations declined with Europe at the crossroads.

• Political and financial change started to rapidly unfold with intense fighting between free markets and government interventions around the globe. The markets lost confidence.

• The financial headlines were dominated by Europe. The lack of political leadership and will power became obvious.

• Emerging Market inflation coupled with evidence of slowing growth and real estate excess in China also dominated the headlines. It was reported that China accounted for 40% of global growth in 2011.

• US political gridlock and tension over mega-deficits and fiscal policy coupled with accommodative monetary policy (Quantitative Easing and Operation Twist) dominated the headlines. S&P downgraded the US from AAA to AA+ on August 5th.
• Global Equities lost 10% giving back 2010 gains whilst Global Fixed Income gained 5.7%

• US Equities (S&P 500) gained 2% whilst US Treasuries gained 15% (JPM Global Bond Index)

• Gold gained 14% in USD-terms and hit an all-time high of $1,915 in August

• EUR/USD closed the year unchanged but traded in a volatile range (1.49 – 1.29)

• LIBOR traded at a historic low of 0.245% on June 15th (traded at 0.58% on December 30th)

• The 10 yr. Treasury traded at a historic low of 1.72% on September 22nd
European Bank Funding

Government Budget Balances

Fear Indicators

Percentage Change in 10-Year Yields

Note: The above charts were originally displayed in The Economist 12/31/2011
1. What is next for the European Union, European Banking System, and the EUR?
2. How will the European Central Bank (ECB) respond?
3. What is the European growth and inflation outlook?
4. What is the US fundamental outlook (growth, inflation, labor, housing)?
5. Will the Fed keep interest rates at historic lows?
6. What is the outlook on both Interest Rates, Credit, Equities, USD, and Commodities?
7. How will US political and fiscal uncertainty impact the fundamentals?
8. Will the US housing market continue to drag?
9. How will Emerging Markets and China developments impact global economic conditions?
10. Will geopolitical headline risks escalate (North Korea, Iran, Middle East uprisings) and have a global impact?
• 2012 is a new year with the same story. It will be a year of risk aversion

• The European Sovereign Debt Crisis will not be resolved in 2012

• Systemic risk will remain high with many permutations of possible outcomes and challenges

• The markets will continue to balance the “risk-on” and “risk-off” trade

• Global economic growth is expected to slow

• Inflation pressures have moderated and are expected to remain low

• Global Central Bank and Government policy action needs to be more adequate and effective

• Global Central Bank intervention and accommodative monetary policy is still necessary

• Fiscal tightening, integration, and stabilization are critically important

• Global Interest Rates will remain low

• The USD will remain investor’s preferred world reserve currency

• Commodity markets will be negatively impacted by growth moderation in China
• Recent economic data has been positive ("double-dip" recession risk is lower)
• Economic growth is forecasted to track in the 2.5% range
• Inflation expectations remain in the 1.5% - 2.0% range
• The labor markets remain challenged by structural unemployment. The Unemployment Rate is 8.5% and the 3-month average on Non-Farm Payrolls is only 137,000
• The cost of capital is more expensive than the cost of labor. US Corporations are not hiring employees and hoarding cash balances. M&A activity will be a wildcard
• Real disposable incomes have not grown so the consumer will likely be unable to continue to drive economic growth. The risk of higher energy prices due to a pick-up in geopolitical risks will negatively impact the consumer
• The housing market will remain at depressed levels
• Political tension over mega-deficits leaves the US vulnerable to credit risks
• Political uncertainty will persist under the 2012 Presidential Election

• The results of fiscal tightening and expiring stimulus programs will materialize in 2012 (and beyond)

• The Fed will remain on the sidelines until mid-2013. However, the Fed will start to forecast the direction of interest rates as a means to more effectively communicate with the market. Economists and strategists forecast the Fed to remain on the sidelines until 2014. The probability of Quantitative Easing ("QE3") is low

• Treasuries will trade range-bound, with the 10-yr. UST expected to trade between 2.0% - 3.0% by December

• Corporate Credit Spreads are tight but will potentially widen over the course of the year. Corporate Debt Issuance is expected to be in the $800bn - $850bn range

• Foreign investors will continue to diversify into USD-denominated assets. The USD will perform

• Expectations of double-digit returns in US Equities should be diligently managed (i.e., lowered)
The European Sovereign Debt Crisis remains at the epicenter of the global financial markets

Global economic and financial conditions will not improve until the lingering crisis is resolved

The key headlines include:

- Peripheral Europe has too much debt (and is too uncompetitive)
- European banks are under-capitalized and over-levered
- Sovereign government debt yields are “off-the-charts” high
- Periods of heightened systemic risk and contagion
- Political leadership and policy response has been ineffectual

The key challenges include:

- Placing Greece on a sustainable fiscal and economic path (Debt Restructuring with 50% haircut)
- Protecting the banking system (recapitalization, liquidity facilities)
- Placing Italy and Spain on a sustainable fiscal and economic path (Debt Restructuring without haircut)
- Restoring market confidence

The key policy actions must include:

- Fiscal integration coupled with monetary policy accommodation
- Programs to stabilize the banking system and lower sovereign government debt yields
- Programs to generate localized economic growth despite peripheral austerity
EU Sovereign Debt Crisis Scenario Analysis

• Strategists will continue to debate the worst- and best-case scenarios but the risk of a complete breakup of the EU and EUR currency seems very low (as of today). The consensus scenario is Europe will muddle through 2012

• The key observations under the consensus scenario:
  ➢ Systemic risk remains but recedes in 2H’12 or 1H’13
  ➢ Market volatility persists
  ➢ Economic growth prospects will not improve (Europe tilts into a recession)
  ➢ European Central Bank (ECB) acts more aggressively
  ➢ Political leadership continues to implement and enforce fiscal and economic structural reforms
  ➢ EUR currency remains weak

• Even in the consensus scenario, Political leadership will continue to make policy mistakes. Easy fixes and coordinated responses are unlikely. There will be instances of civil unrest and market paranoia. In summary, the Crisis will not be completely resolved and, as a result, 2012 will be a turbulent year
• Ultra-low short-term interest rates for at least another year as growth and inflation pressures moderate and more countries move towards fiscal restraint

• Long term rates expected to remain low for longer amid European instability and US political inaction
**Global Market Overview**

### Economic Growth Readings

- **China:** Grey bars (2011e), Red bars (2012f), Black bars (2013f)
- **U.S.:** Grey bars
- **Euro-zone:** Black bars

*Corresponds to zero growth*

### Inflation Readings

- China: Black line
- Euro Zone: Red line
- USA: Blue line

### Sovereign Government 10-yr Debt Yields

- **Germany:** Grey line
- **France:** Red line
- **Italy:** Blue line
- **Spain:** Green line
- **United States:** Yellow line

### EUR/USD FX Readings

- EURUSD: Grey line

---

*Jan-10 Jul-10 Jan-11 Jul-11 Jan-12 Jan-10 Jul-10 Jan-11 Jul-11 Jan-12 Jan-10 Jul-10 Jan-11 Jul-11 Jan-12 Jan-10 Jul-10 Jan-11 Jul-11 Jan-12*
Global Market Overview

Sovereign 5-yr CDS Readings

Debt/GDP Readings

Unemployment Readings

ECB Balance Sheet
John Suter
Vice President of Capital Market Funding
CFC
Heightened Market Volatility

World Financial Markets

Debt Capital - Bonds

CFC

Many Small Loans

Electric Cooperatives
• Distribution
• G&T
• Telephone
Member Preference: Fixed Rate

Loan Portfolio Composition

- Fixed: 88%
- Variable: 12%

Legend: Fixed, Variable
Rate Setting
Both Art and Science

Index – CP, 3ML, Treasury

Market Forces

Credit Spreads

Black Box/Rate Formula

Complete Control

No Control

Some Control

CFC Rates
Historical Comparison: Start Point
Reason for Importance...

Cost Breakdown of Long-Term Variable Rate

- ST Debt Cost: 66%
- Credit Spread/Bank Lines: 25%
- Business Cost Adders: 9%

Cost Breakdown of Long-Term Fixed Rates

- Treasury Rates: 30%
- Credit Spread: 23%
- Business Cost Adders: 47%
LTVR: Past and Present

Distribution of CFC's Long-Term Variable Rate
April 1983 to January 2012

Current Rate as of 1/1/2012

Current: 3.20
Avg.: 6.55
High: 12.00, September 1, 1984
Low: 2.55, November 3, 2003
CFC’s 5-Year Standard Fixed Rates

Distribution of Daily Rates CFC 5-Year Loan Rate
February 1998 to January 2012

- Current: 3.35  Date: January 9, 2012
- Avg.: 6.16
- High: 9.20  Date: May 25, 2000
- Low: 3.25  Date: December 19, 2011
# Treasury Yields Drive CFC Loan Rates

One Year Averages (Dec 22, 2010 - Dec 22, 2011)

<table>
<thead>
<tr>
<th></th>
<th>3 yr</th>
<th>5 yr</th>
<th>7 yr</th>
<th>10 yr</th>
<th>30 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CFC Rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3.30</td>
<td>4.18</td>
<td>4.86</td>
<td>5.54</td>
<td>6.89</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.35</td>
<td>0.54</td>
<td>0.60</td>
<td>0.63</td>
<td>0.68</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>3 yr</th>
<th>5 yr</th>
<th>7 yr</th>
<th>10 yr</th>
<th>30 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UST Rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>0.75</td>
<td>1.53</td>
<td>2.18</td>
<td>2.80</td>
<td>3.94</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.35</td>
<td>0.52</td>
<td>0.59</td>
<td>0.62</td>
<td>0.63</td>
</tr>
</tbody>
</table>

### CFC vs UST Rate Volatility

![Graph showing CFC vs UST Rate Volatility](chart.png)
Utilize Forward Rate Agreement
Loan Rate Volatility Eliminated

You Get Today’s Rates
Current Loan Rate PLUS

Interest Rates

FORWARD PREMIUM

Advance Date
07/01/2012

FORWARD PREMIUM (↑)

Advance Date
1/01/2013
Credit Ratings Still Key!

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Moody’s</th>
<th>S&amp;P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior secured debt</td>
<td>A1</td>
<td>A+</td>
</tr>
<tr>
<td>Senior unsecured debt</td>
<td>A2</td>
<td>A</td>
</tr>
<tr>
<td>Subordinated deferrable debt</td>
<td>A3</td>
<td>BBB</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>P–1</td>
<td>A–1</td>
</tr>
</tbody>
</table>

- Financial updates were provided to S&P and Moody’s in September 2011.
- S&P reaffirmed Stable Outlook on 10/31/11.
- Moody’s reaffirmed Stable Outlook on 10/21/11.
- Difference between secured and unsecured CFC bonds: 15-25 bps (with longer tenors closer to 25 bps).
  - One notch upgrade (Aa3/AA-) 5-yr maturity: 5-10 bps
  - One notch upgrade (A2/A) 5-yr maturity: 10-15 bps
Future Rate Expectations/Trends

Variable Rate - LTVR will follow the Fed’s rate directional changes:

- CFC’s latest internal interest rate forecast assumes no Fed hikes until mid-2013.
- 3.20% will continue to be the floor for first half of 2012.
- Given the LTVR is a cost of funds rate calculation, some chance that CFC may be able to hold at 3.20% level in rising interest rate environment.
- Key factors will be size of bank revolver, variable rate loan portfolio size, margins, lower variable rate debt refinancing opportunities in 2012, etc.

Fixed Rates - Highly correlated with movements in Treasury yields:

- Upside risk to Treasury rates in 2012. Expect continued high volatility in rates movement.
- Further credit spread tightening unlikely, but possible.
- Key macro economic factors will be GNP growth (or lack thereof), European financial crisis, election campaign season, inflation, and shape of the yield curve.

2011 Forecast Results -

<table>
<thead>
<tr>
<th>Quarter End (Q42011)</th>
<th>Fed Funds</th>
<th>2yr Fixed</th>
<th>5yr Fixed</th>
<th>10yr Fixed</th>
<th>30yr Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index Cost</td>
<td>0.25%</td>
<td>1.20%</td>
<td>2.50%</td>
<td>3.60%</td>
<td>4.60%</td>
</tr>
<tr>
<td>Forecasted Rate</td>
<td>4.95%</td>
<td>3.70%</td>
<td>5.20%</td>
<td>6.40%</td>
<td>7.60%</td>
</tr>
<tr>
<td>Actual Rate</td>
<td>3.20%</td>
<td>2.95%</td>
<td>3.40%</td>
<td>4.45%</td>
<td>5.60%</td>
</tr>
</tbody>
</table>
# Indicative Forecasted Loan Rates

## Market Update and Analysis - Scotia Forecast

### Qtr Fed Funds Change 2yr UST Change 5yr UST Change 10yr UST Change 30yr UST Change

<table>
<thead>
<tr>
<th>Qtr End</th>
<th>Fed Funds</th>
<th>Change</th>
<th>2yr UST</th>
<th>Change</th>
<th>5yr UST</th>
<th>Change</th>
<th>10yr UST</th>
<th>Change</th>
<th>30yr UST</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12012</td>
<td>0.25%</td>
<td>n/a</td>
<td>0.30%</td>
<td>n/a</td>
<td>0.85%</td>
<td>n/a</td>
<td>1.90%</td>
<td>n/a</td>
<td>2.85%</td>
<td>n/a</td>
</tr>
<tr>
<td>Q22012</td>
<td>0.25%</td>
<td>0.00%</td>
<td>0.35%</td>
<td>0.05%</td>
<td>1.00%</td>
<td>0.15%</td>
<td>2.05%</td>
<td>0.15%</td>
<td>3.00%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Q32012</td>
<td>0.25%</td>
<td>0.00%</td>
<td>0.65%</td>
<td>0.30%</td>
<td>1.45%</td>
<td>0.45%</td>
<td>2.55%</td>
<td>0.50%</td>
<td>3.40%</td>
<td>0.40%</td>
</tr>
<tr>
<td>Q42012</td>
<td>0.25%</td>
<td>0.00%</td>
<td>1.00%</td>
<td>0.35%</td>
<td>1.65%</td>
<td>0.20%</td>
<td>3.00%</td>
<td>0.45%</td>
<td>3.90%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Q12013</td>
<td>0.25%</td>
<td>0.00%</td>
<td>1.10%</td>
<td>0.10%</td>
<td>1.75%</td>
<td>0.10%</td>
<td>3.10%</td>
<td>0.10%</td>
<td>4.00%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q22013</td>
<td>0.25%</td>
<td>0.00%</td>
<td>1.20%</td>
<td>0.10%</td>
<td>1.80%</td>
<td>0.05%</td>
<td>3.20%</td>
<td>0.10%</td>
<td>4.10%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q32013</td>
<td>0.75%</td>
<td>0.50%</td>
<td>1.35%</td>
<td>0.15%</td>
<td>1.90%</td>
<td>0.10%</td>
<td>3.30%</td>
<td>0.10%</td>
<td>4.20%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q42013</td>
<td>1.25%</td>
<td>0.50%</td>
<td>1.50%</td>
<td>0.15%</td>
<td>1.95%</td>
<td>0.05%</td>
<td>3.50%</td>
<td>0.20%</td>
<td>4.40%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Avg.</td>
<td>0.44%</td>
<td>0.14%</td>
<td>0.93%</td>
<td>0.17%</td>
<td>1.54%</td>
<td>0.16%</td>
<td>2.83%</td>
<td>0.23%</td>
<td>3.73%</td>
<td>0.22%</td>
</tr>
</tbody>
</table>

### Resulting Impact - Forecasted CFC Loan Rates

<table>
<thead>
<tr>
<th>Qtr End</th>
<th>LTVR</th>
<th>Change</th>
<th>2yr Fixed</th>
<th>Change</th>
<th>5yr Fixed</th>
<th>Change</th>
<th>10yr Fixed</th>
<th>Change</th>
<th>30yr Fixed</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12012</td>
<td>3.20%</td>
<td>n/a</td>
<td>2.95%</td>
<td>n/a</td>
<td>3.35%</td>
<td>n/a</td>
<td>4.45%</td>
<td>n/a</td>
<td>5.55%</td>
<td>n/a</td>
</tr>
<tr>
<td>Q22012</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.00%</td>
<td>0.05%</td>
<td>3.50%</td>
<td>0.15%</td>
<td>4.60%</td>
<td>0.15%</td>
<td>5.70%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Q32012</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.30%</td>
<td>0.30%</td>
<td>3.90%</td>
<td>0.40%</td>
<td>5.10%</td>
<td>0.50%</td>
<td>6.05%</td>
<td>0.35%</td>
</tr>
<tr>
<td>Q42012</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.60%</td>
<td>0.30%</td>
<td>4.10%</td>
<td>0.20%</td>
<td>5.50%</td>
<td>0.40%</td>
<td>6.55%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Q12013</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.70%</td>
<td>0.10%</td>
<td>4.20%</td>
<td>0.10%</td>
<td>5.60%</td>
<td>0.10%</td>
<td>6.65%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q22013</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.80%</td>
<td>0.10%</td>
<td>4.25%</td>
<td>0.05%</td>
<td>5.70%</td>
<td>0.10%</td>
<td>6.75%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q32013</td>
<td>3.20%</td>
<td>0.00%</td>
<td>3.95%</td>
<td>0.15%</td>
<td>4.35%</td>
<td>0.10%</td>
<td>5.80%</td>
<td>0.10%</td>
<td>6.80%</td>
<td>0.05%</td>
</tr>
<tr>
<td>Q42013</td>
<td>3.50%</td>
<td>0.30%</td>
<td>4.10%</td>
<td>0.15%</td>
<td>4.40%</td>
<td>0.05%</td>
<td>5.95%</td>
<td>0.15%</td>
<td>7.00%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Avg.</td>
<td>3.24%</td>
<td>0.04%</td>
<td>3.55%</td>
<td>0.16%</td>
<td>4.01%</td>
<td>0.15%</td>
<td>5.34%</td>
<td>0.21%</td>
<td>6.38%</td>
<td>0.21%</td>
</tr>
</tbody>
</table>
Fixed Loan Rate Volatility will Continue!

Volatility Drops Off

10-year Treasury
30-year Treasury

Standard Deviation 2010
Standard Deviation 2011
Now...let’s turn it over to our audience!
How to Submit Your Question

Step 1: Type in your question here.

Step 2: Click on the Send button.
Events & Training Tab

Look for the replay of this program early next week
Mark Your Calendar for a special Web Event:

January 31, February 2 and February 16

The Topic is...

Mergers at Electric Cooperatives
For Directors:

January 19, 3 p.m. Eastern Time

The Topic is...

Internet Security: What Every Director Needs to Know
This program—Update on the Economy: What the crystal ball says for 2012—is a copyrighted presentation of CFC. No portion of this program may be reproduced, used or distributed without CFC’s written consent.
In the Links box, you will find:
- Presentation slides (Click to open, print or save)