THE ABCP MARKET
Anatomy of a Meltdown

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Colin Kilgour, Connor Clark & Lunn Wholesale Finance
AGENDA

- Objectives
- The Canadian ABCP Market
- The Market Disruption
- Key Lessons Going Forward
Objectives
Over the last months, the Canadian Asset Backed Commercial Paper (ABCP) market has dominated the financial news.

Today’s Objectives

Understand the Market

- General structure of “conduits”
- Size, growth
- Who are the players?
- What types of assets?

Understand the Meltdown

- What happened?
- How it happened
- Where are we today?

Clarify Misperceptions & Misinformation

- In general, there is very little public information available about ABCP conduits
- Most financial journalists lack fixed income / structured credit knowledge and have been learning ‘on the fly’

Extract Key Lessons for the Future

- What can we take away from this?
The Canadian ABCP Market
ABCP Conduits provide money market funding to asset sellers while providing highly rated securities to money market investors

Typical Conduit Structure

- **Obligors**
  - Payments
  - Receivables
- **Sellers**
  - Cash
  - Credit Receivables
  - Other Enhancement
- **Credit Enhancement**
- **Conduit**
  - Credit Rating
  - Admin
- **Rating Agency**
- **Liquidity Bank**
- **Investors**
  - ABCP
  - Cash
  - Liquidity Funding
- **Sponsor**
  - Credit Rating
  - Admin
  - Cash
  - Receivables
The Canadian ABCP Market is a $113 billion part of the Canadian Money Market and rivals T-Bills in overall volume.

**Composition of Canadian Money Market ($bn)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume Outstanding (12/31/2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Bills</td>
<td>331</td>
</tr>
<tr>
<td>BA's</td>
<td>16</td>
</tr>
<tr>
<td>CP</td>
<td>25</td>
</tr>
<tr>
<td>ABCP</td>
<td>53</td>
</tr>
<tr>
<td>Prov Bills</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>125</td>
</tr>
</tbody>
</table>

Source: Bank of Canada, DBRS
The largest players in the market are the Big 6 banks and a few independent boutiques.

<table>
<thead>
<tr>
<th>Conduit Assets Administered (12/31/2006 - $ mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMO Nesbitt Burns</td>
</tr>
<tr>
<td>Coventree Capital Group Inc.</td>
</tr>
<tr>
<td>CIBC World Markets</td>
</tr>
<tr>
<td>TD Securities</td>
</tr>
<tr>
<td>RBC Capital Markets</td>
</tr>
<tr>
<td>Newshore Capital Inc.</td>
</tr>
<tr>
<td>Scotia Capital</td>
</tr>
<tr>
<td>Metcalfe &amp; Mansfield Capital Corp.</td>
</tr>
<tr>
<td>National Bank Financial</td>
</tr>
<tr>
<td>Merrill Lynch</td>
</tr>
<tr>
<td>Dundee Securities</td>
</tr>
<tr>
<td>Swiss Re</td>
</tr>
<tr>
<td>Deutsche Bank</td>
</tr>
<tr>
<td>Maple Mortgage Trust Advisors</td>
</tr>
<tr>
<td>Corpfinance International</td>
</tr>
<tr>
<td>HSBC</td>
</tr>
<tr>
<td>Brookfield Asset Management</td>
</tr>
<tr>
<td>DR Residential Mortgage Trust</td>
</tr>
<tr>
<td>Securitus Capital Corp.</td>
</tr>
<tr>
<td>Bank of Tokyo Mitsubishi</td>
</tr>
</tbody>
</table>

Source: DBRS
Traditionally, ABCP conduits have securitized financial assets – In recent years, most growth has come from securitizing CDO’s.

### Composition of ABS & ABCP Collateral (% of total ABS)

<table>
<thead>
<tr>
<th>Category</th>
<th>12/31/2003</th>
<th>12/31/2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Loans / Leases</td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Structured Financial Assets</td>
<td>20%</td>
<td>na</td>
</tr>
<tr>
<td>Personal Line of Credit</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Equipment Loans / Leases</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Corporate Loans</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Floorplan</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

SFA’s – not significant in 2003, now back over 20% of all ABS (~29% of all ABCP)

Source: DBRS
Canadian conduits have heavily invested in CDO’s – particularly leveraged super senior tranches

**Leveraged Super Senior CDO Structure**

- **Unfunded SS Exposure**
  - Reference Portfolio of Credits
  - SS Attachment Point
  - AAA Attachment Point
  - Premium Protection

- **Funded SS Exposure**
  - Sub-Trust (1 per deal)

- **AAA Collateral**
  - Income
  - ABCP Proceeds
  - AAA Collateral

- **Conduit**
  - Conduit Income
  - ABCP (R1-high)

- **Liquidity Line**
  - ABCP Proceeds

**Leverage is employed by selling protection on the entire SS tranche, but only funding/collateralizing a fraction of the amount.**

**The SS tranche does not suffer losses until such time as the total portfolio defaults exceed the SS Attachment Point – which, by design, is a highly remote probability.**

**If defaults occur or if the ratings of the credits in the portfolio deteriorate, the conduit has the option to de-lever the trade in order to preserve the AAA rating.**
In order to ensure funds are available to redeem maturing ABCP, conduits must have an alternate source of liquidity – typically a liquidity line from a bank

### Forms of Liquidity

<table>
<thead>
<tr>
<th>Nature of Liquidity</th>
<th>“Canadian” style</th>
<th>“Global” style</th>
<th>Extendible CP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bank lends money if conduit is unable to roll paper.</td>
<td>Conduit uses proceeds to redeem maturing notes</td>
<td>Conduit can “extend” maturity of notes if unable to roll</td>
</tr>
<tr>
<td></td>
<td>Conduit uses proceeds to redeem maturing notes</td>
<td>When conduit is able to issue new notes, it pays back the loan amount</td>
<td>Extended notes become interest bearing</td>
</tr>
<tr>
<td></td>
<td>When conduit is able to issue new notes, it pays back the loan amount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Conditions</td>
<td>Notes not downgraded</td>
<td>Conduit cannot issue at economic spread</td>
<td>Conduit cannot issue at CDOR + 1.1% or less</td>
</tr>
<tr>
<td></td>
<td>Underlying assets not downgraded</td>
<td>Conduit not in default or insolvent</td>
<td>No event that would cause a downgrade has occurred</td>
</tr>
<tr>
<td></td>
<td>General Market Disruption has occurred</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The definition of “General Market Disruption” has evolved over time and varying definitions exist throughout the market, potentially even within the same conduit.
There are several unique elements of the Canadian ABCP market that have differentiated it from other markets.

Only in Canada

**General Market Disruption Liquidity**
In no other developed market is GMD style liquidity acceptable for highly rated ABCP.

**Extendible Notes With No Liquidity**
In Canada, extendible commercial paper has no way to assure investors of timely repayment.

Other markets require this assurance.

**Single Rating Agency**
In most global markets, securities carry ratings from at least 2 agencies.

**Third Party Conduit Sponsors**
Third party sponsors have a much greater presence in Canada relative to other markets.

In September, DBRS changed its criteria regarding GMD liquidity and Extendible Notes with no liquidity.
The Market Disruption
While market growth had stopped in 2007, existing paper rolled smoothly until late July

Meltdown Chronology (part 1)

2004-2006
• Rapid Growth in Arbitrage Conduits
• New entrants come to market

Summer 06
• DBRS changes liquidity rules
• Tightens definition of “GMD”
• “More than one sponsor impacted”

Jan 07
• DBRS changes liquidity rules for arbitrage conduits
• Existing deals “grand-fathered”
• Growth stops

Spring 07
• US sub-prime mortgage market deteriorates
• Investors request disclosure from conduits
• Investor concern grows

7/24
• Coventree discloses its sub-prime exposure, a relatively small (but not ZERO) number

Late July
• One dealer opts out of 3rd party distribution
• RBC closes large ABCP deals
• Other banks reduce 3rd party ABCP inventories for quarter end

On July 27, Third Party ABCP (A Notes) were offered at 2-3 bps over CDOR – Well within their normal trading range
Entering August, sub-prime concerns continued despite no material disclosure of sub-prime exposure in Canadian ABCP conduits – Fear gripped the market when banks reduced inventories

Meltdown Chronology (part 2)

- Investors get increasingly nervous
- Global credit spreads widen and become very volatile
- ABCP Spreads widen to 14 bps over CDOR (Normally 2-3 bps, as recently as 3 days prior!)
- ABCP spreads hit 26 bps over CDOR
- ABCP spreads hit 61 bps – but fail to find buyers
- Conduits request liquidity funding (and extend E notes)
- DBRS affirms ratings on impacted conduits
- Some banks fund, most do not
- Even though ratings are affirmed, ABCP fails to sell
- The assets may be high quality, but the liquidity has failed
- "Montreal" meeting held with major investors and liquidity banks
- FRN proposal developed and tentatively agreed

Investors holding matured ABCP must wait until December to see what emerges
The Montreal proposal intends to convert all 3rd party ABCP to Floating Rate Term Notes (FRN’s)

The Montreal Accord

Interim “60 Day” Solution

• Interim agreement has been extended to 120 days (December 14)
• Noteholders to continue to roll paper
• Swap counterparties to refrain from making collateral calls
• Conduits to refrain from making liquidity requests

Long Term Solution

• All Third Party ABCP to be converted into term Floating Rate Notes (FRNs) with maturities to match the underlying asset maturities
• Existing liquidity facilities will be cancelled and outstanding liquidity calls revoked
• FRNs will pay interest monthly or quarterly, based on underlying cash flows
• Margin provisions will be revised to reduce the probability of margin calls

We have seen one significant progress on the restructuring of one conduit, but the others are likely to be more difficult
Key Lessons Going Forward
While there are many potential drivers of this disruption, there is no unanimity on where the responsibility lies.

**Potential Drivers**

- US Subprime Market?
- Risky CDO's?
- Disclosure by Sponsors?
- Rating Agency Methods?
- Investor Diligence?
- Liquidity Banks?
- GMD Liquidity?
- Dealers?
Going forward, there are some lessons we must learn – many of which are fundamental to any investing

Lessons

- Disclosure is critical
- Bad news travels fast
- Bad news plus lack of disclosure creates fear
- Liquid markets can dry up incredibly fast
- GMD style liquidity is not sufficient
- Rating agencies are but one source of information
At this point, it is still unclear as to how the Canadian Money Market will look once the dust settles

Factors Impacting Future Money Market

- Limited Supply / Growth in Other Money Market Instruments (T-Bills, BA’s, CP)
- Move to ABCP with global style liquidity
- Limited growth in bank sponsored conduits
- ~$30 billion of Term FRN’s to be issued (converted from 3rd party ABCP)
- Level playing field among rating agencies
- Removal of withholding tax with US