

AFP®



# Annual Conference

OCTOBER 27-30, 2013 | LAS VEGAS

ORIGINAL → ESSENTIAL → UNBIASED → INFORMATION

## Strategic Risk Management: Case Study with Novelis

**Louis Edwards**

*Assistant Treasurer –  
Global Risk  
Management*

Novelis

**Peter Seward**

*Vice President,  
Product Strategy*

Reval

# About the Speakers

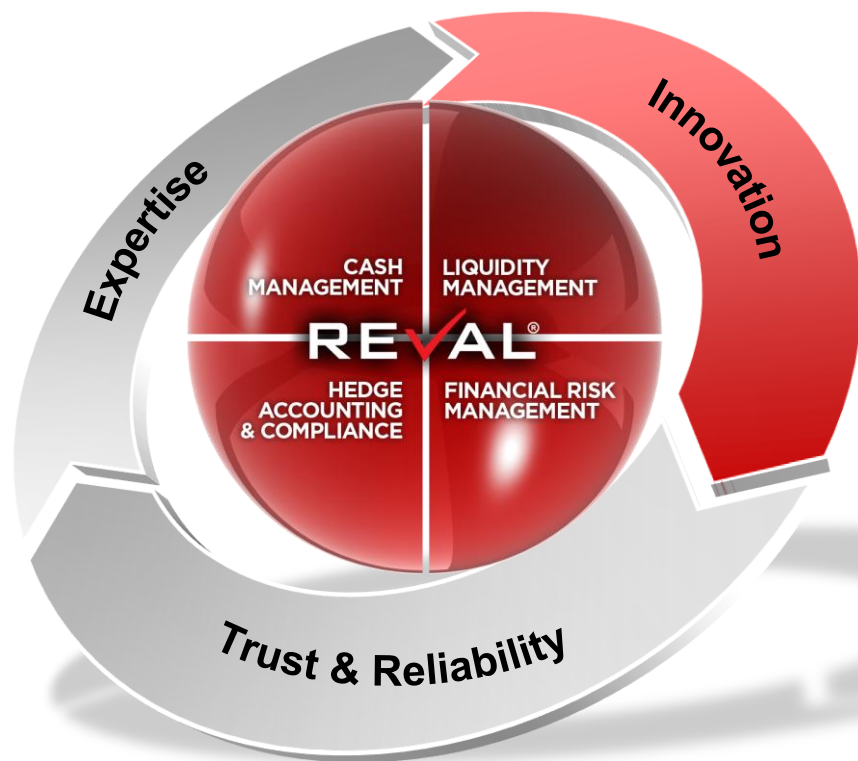


- **Peter Seward**  
VP Product Strategy at Reval



- **Louis Edwards**  
Assistant Treasurer, Global Risk  
Management at Novelis

# Reval – Treasury and Risk Management



- Founded in **1999** to bring an all-in-one solution to the market to transform the way companies manage treasury and risk.
- **575** clients+ in over **20** countries including all **4** of the **Big 4**.
- Reval provides sophisticated **financial risk management** functionality with **cash and liquidity** processes to support complex risk requirements.
- Our all-in-one SaaS solution can easily interface with any 3rd party system including ERP systems and trading platforms.
- With Reval, treasurers and their teams can increase efficiency, decrease manual errors and achieve complete visibility into their cash positions and risk exposures globally.

# Novelis - Our Markets and Customers

## Beverage Cans



## High-End Specialties



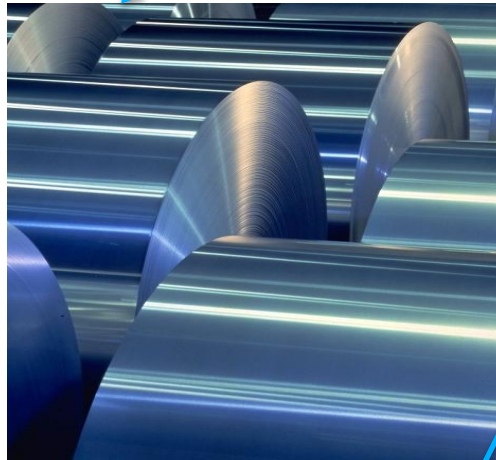
## Automotive



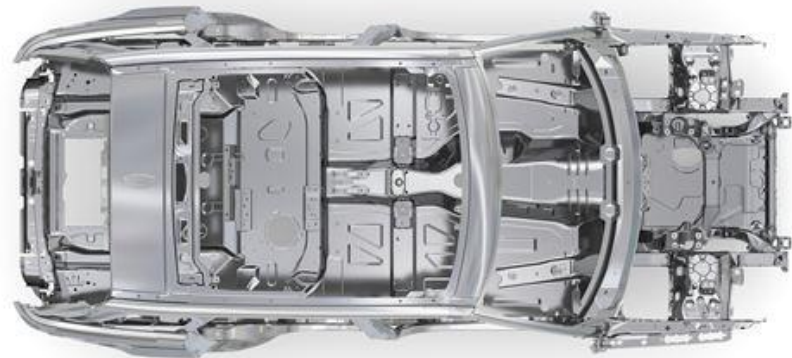
# What we do

To make this...

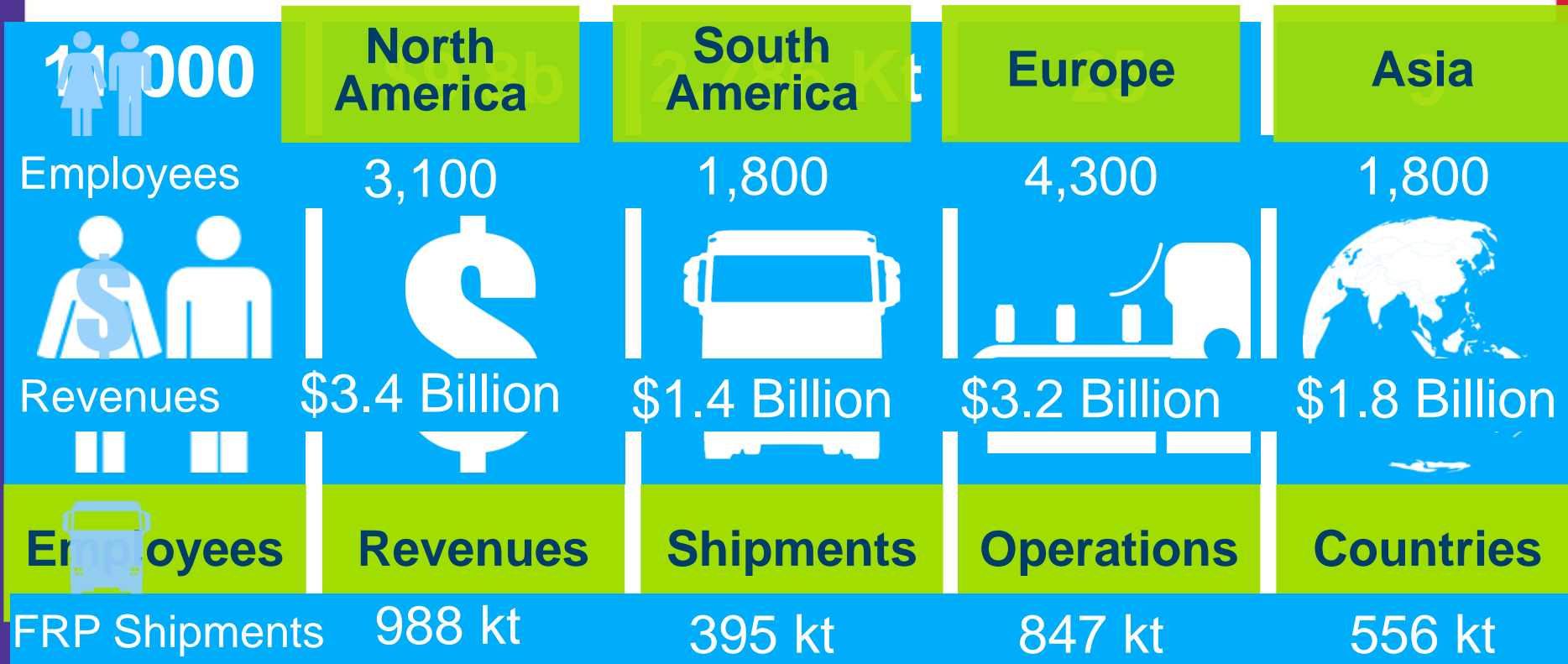
Which becomes these...



We buy these...



# Our Global Footprint



Shipments and Sales Based on FY 2013 Results; Employees as of March 31, 2013



# Risk Management By the Numbers

	Aluminum	Foreign Exchange	Interest Rates	Energy
Programs	24	49	1	2
Counterparties	19	20	4	2
Annual trading	\$20B	\$11B	\$80M	\$17Mt

# A Little History



Originally:  
Alcan  
Rolled Products  
Division



2005:  
Spun from Alcan as  
Novelis Inc.  
(NYSE: NVL)



2007:  
Acquired by  
Hindalco Industries  
Ltd,  
part of the Aditya Birla  
Group



# Reval/Novelis Relationship

- **2005 – IR and FX valuation**
- **2006 – IR and FX hedge accounting**
- **2008 – FAS 157 Valuation of entire portfolio**
- **2012 – Commodity hedge accounting**

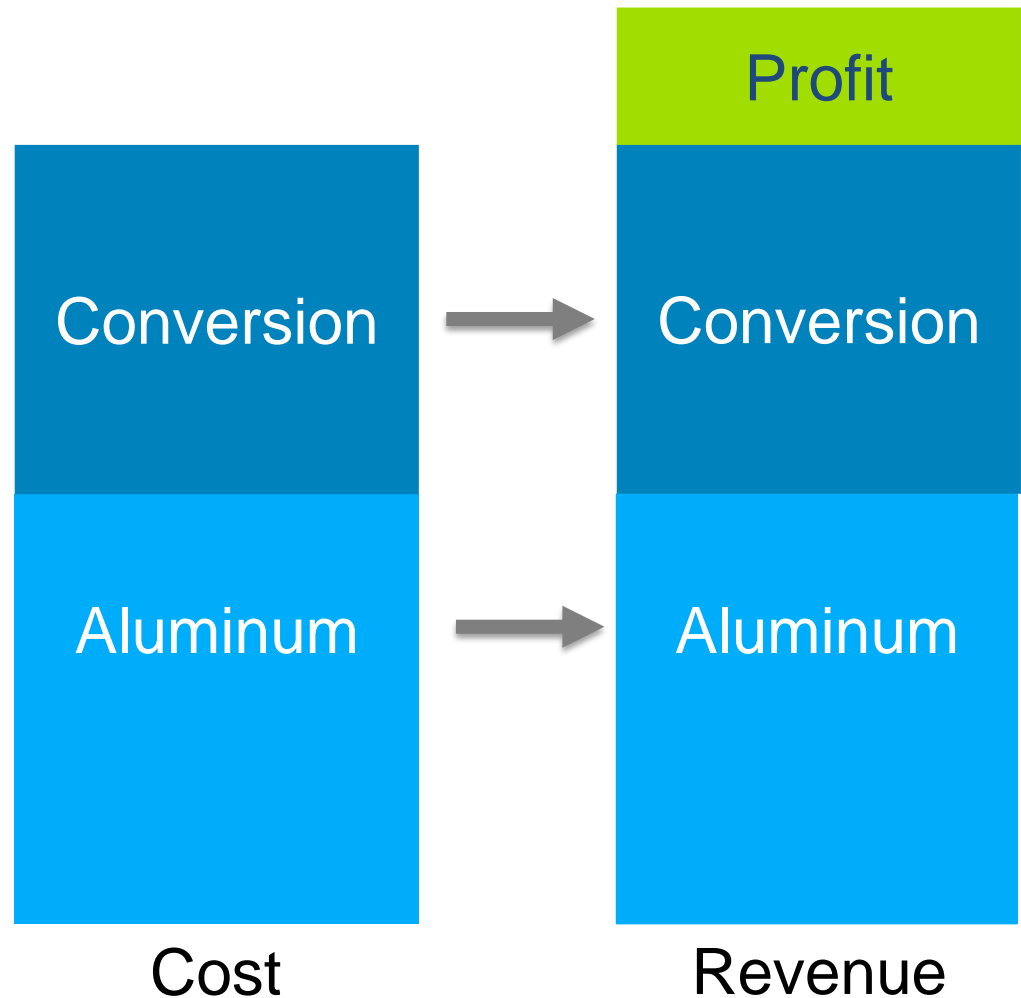
# Pass-through Model

## Two-part selling price:

- Base metal value of aluminum
- Conversion premium covering
  - Our conversion costs
  - Our profit

## Pass-through model:

- Fluctuations in uncontrollable costs are included in our selling prices.



# Two Companies

## Rolling business

Focus on operations:

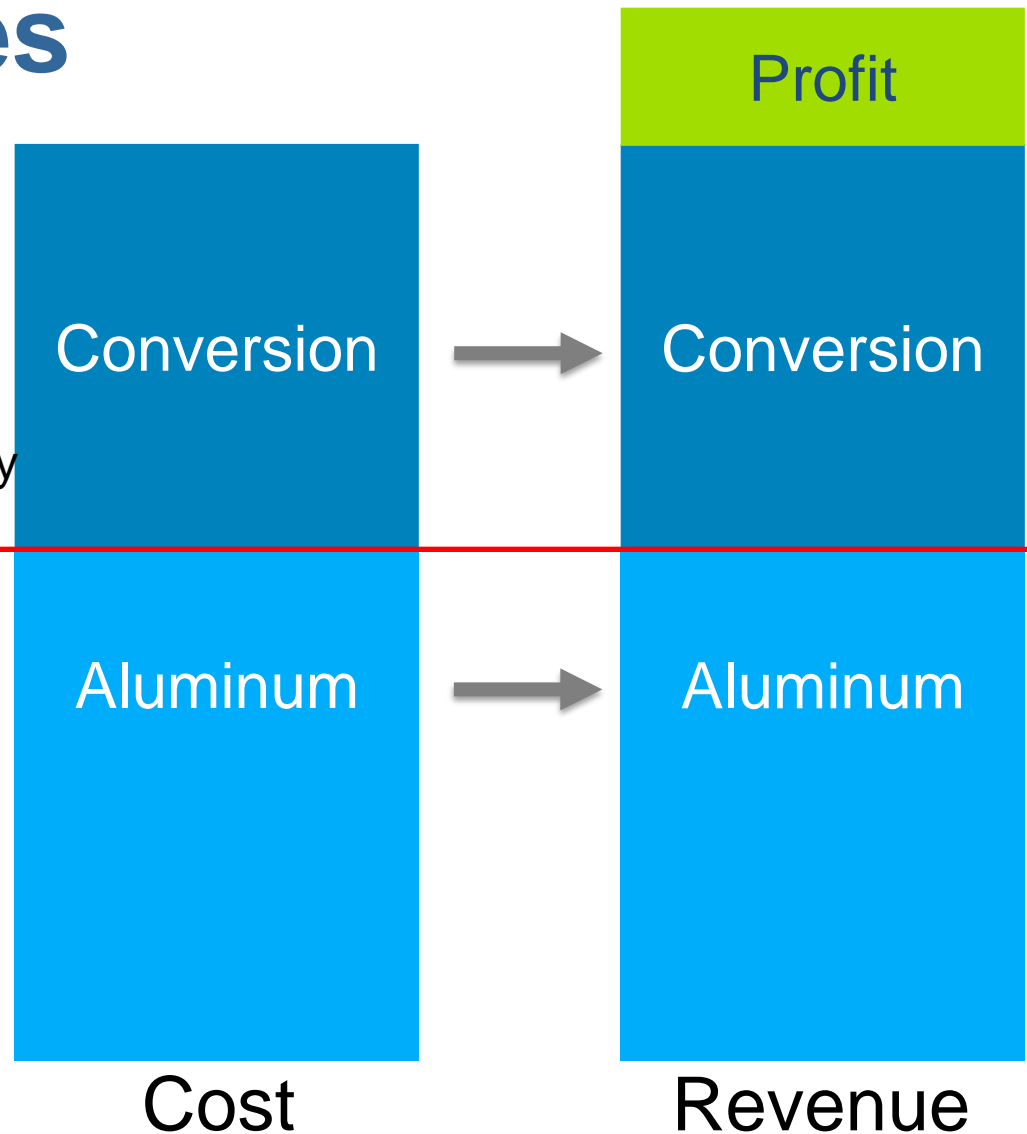
- Safety, quality, customer service, manufacturing, logistics, profitability

## Aluminum trading

Focus on hedging:

- Inventory
- Customer pricing commitments
- Pricing terms
- Local premiums

Goal: Zero P&L



# Commodity Market Data

- Reval daily published market data

General			
AL HG LME 03-Oct-2013 23:00:00 EST			
As of: Thu 10/3/2013		Spot: Thu 10/3/2013	
SnapShot: 03-Oct-2013 23:00:00 EST			
Source: Novelis		Last Updated: 2012-11-30 13:52:02	
Units: MT		Currency: USD	
Cash, Futures, Forwards			
Term	Date	Price	
SP	10/3/2013	1,785.5	
OCT13	10/14/2013	1,786.0	
NOV13	11/18/2013	1,804.75	
DEC13	12/16/2013	1,819.5	
JAN14	1/13/2014	1,832.75	
FEB14	2/17/2014	1,848.0	
MAR14	3/17/2014	1,860.0	
APR14	4/14/2014	1,871.5	
MAY14	5/19/2014	1,884.25	
JUN14	6/16/2014	1,893.25	
JUL14	7/14/2014	1,901.75	
AUG14	8/18/2014	1,912.0	
SEP14	9/15/2014	1,920.5	
OCT14	10/13/2014	1,929.0	
NOV14	11/17/2014	1,939.25	
DEC14	12/15/2014	1,947.75	

AL HG Brazil - Novelis			
General			
AL HG Brazil - Novelis 15-Oct-2013 16:52:49 EST			
As of: Tue 10/15/2013		Spot: Tue 10/15/2013	
SnapShot:			
Source: Novelis		Last Updated: 2012-11-30 13:52:02	
Base Curve: AL HG LME		Currency: USD	
Units: MT			
Cash, Future, Forward Spreads			
Term	Date	Price	
SP	10/15/2013	1,532.14	
NOV13	11/20/2013	1,554.84	
DEC13	12/18/2013	1,567.41	
JAN14	1/15/2014	1,579.13	
FEB14	2/19/2014	1,592.12	
MAR14	3/19/2014	1,602.34	
APR14	4/16/2014	1,611.93	
MAY14	5/21/2014	1,622.36	
JUN14	6/18/2014	1,630.46	
JUL14	7/16/2014	1,637.7	
AUG14	8/20/2014	1,646.01	
SEP14	9/17/2014	1,653.03	
OCT14	10/15/2014	1,660.06	
NOV14	11/19/2014	1,668.37	
DEC14	12/17/2014	1,675.61	
JAN15	1/21/2015	1,683.28	
FEB15	2/18/2015	1,690.95	

- Custom client curves and data for exposures

# Aluminum Pass-through

## We expected..

- Hedges to eliminate aluminum earnings volatility

## But we found..

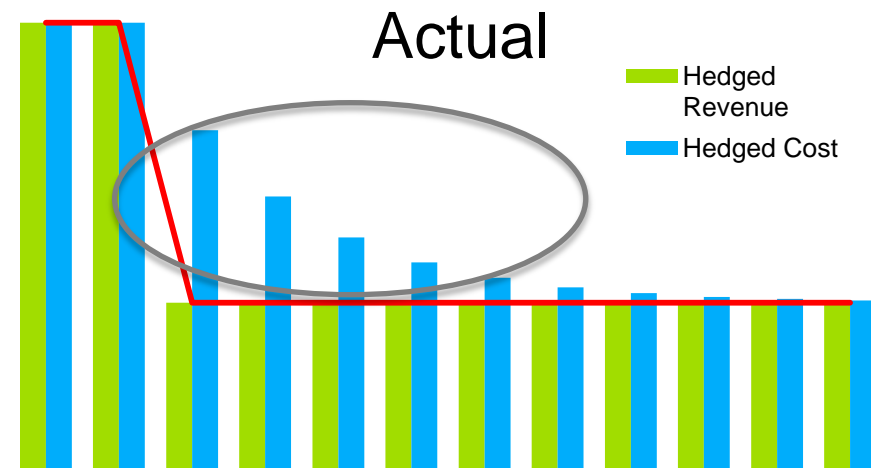
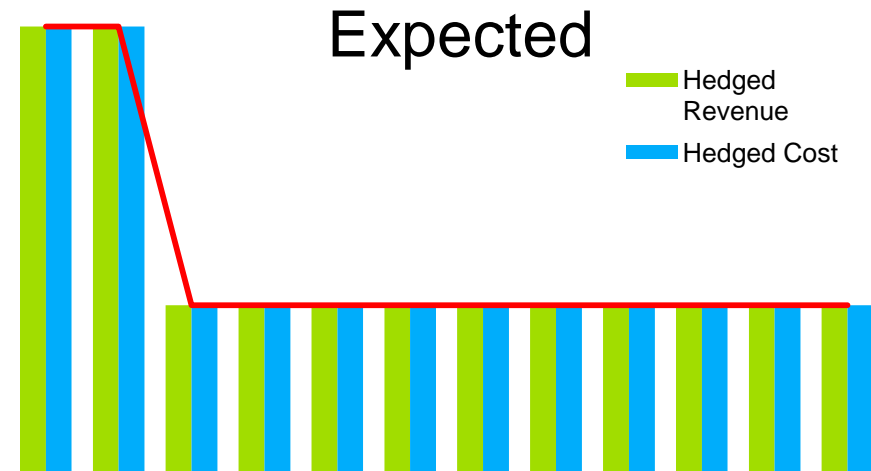
- Continued earnings volatility, despite hedges

## Why?

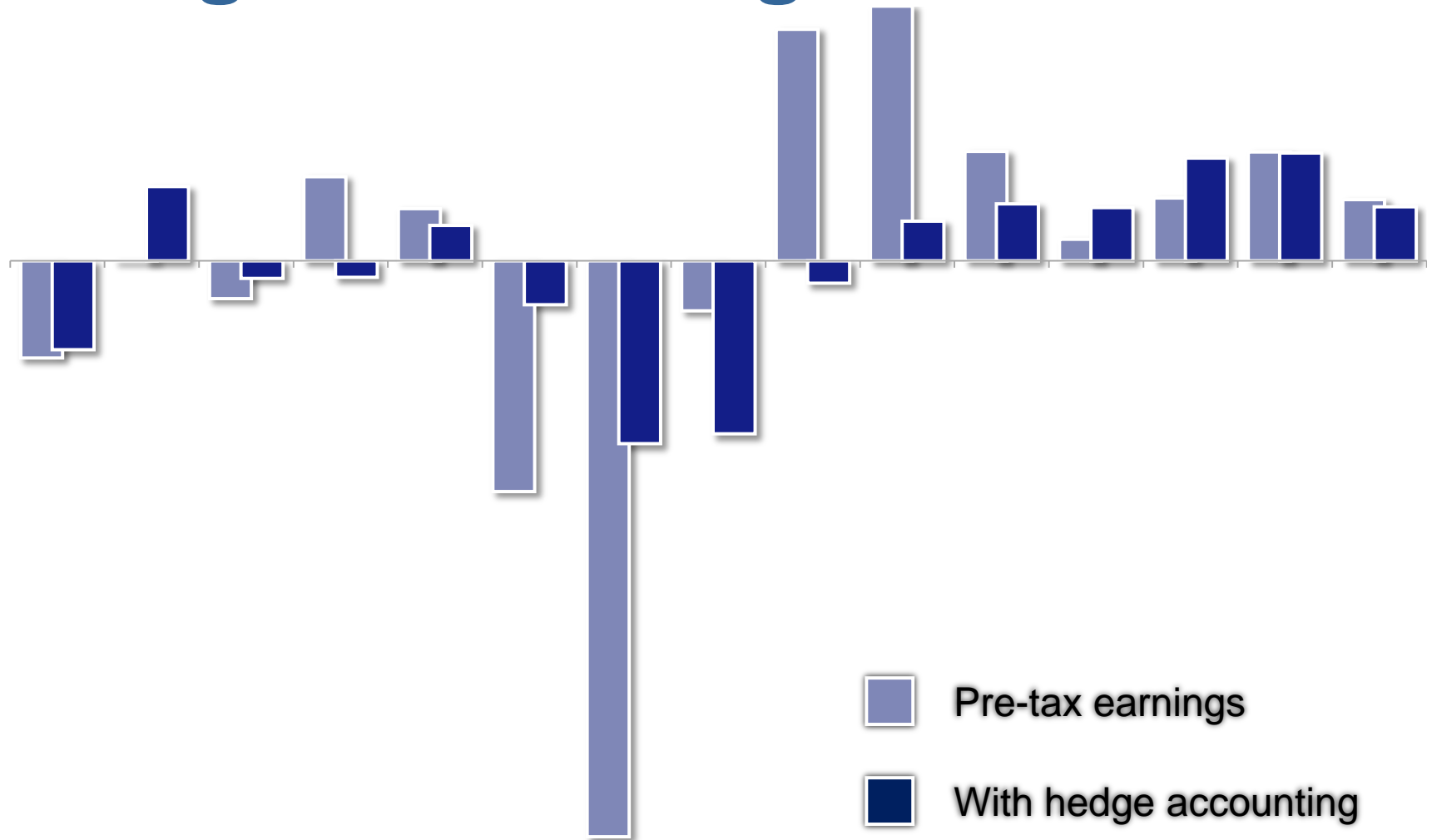
- Hedges did not consider inventory accounting rules

## The lesson

- You must look back to see how your strategies actually perform
- Even things like accounting rules can impact your risk strategy



# Hedge Accounting



# Hedge Documentation

- 36 different hedging programs. Each requiring documentation.

<b>Link Terms</b>	
Description of Hedge:	AL Sales Designation Derivative: 187554, Hedged Item : 173233, Hypothetical Derivative : 187439
Hedge Relationship:	The forecasted first X MT of aluminum sales occurring after previously designated hedges by Novelis Brazil forecast to be sold priced with reference to base metal pricing average for the month prior to the month the hedge instrument fixes. See overall AL Sales memo and specific Brazil pool description memo.
Risk Management Objective:	Novelis Brazil seeks to reduce the variability of the cash flows from forecasted sales of metal with aluminum derivative contracts.
Hedge Type:	Cashflow
Designation Date:	9/30/2013
De-Designation Date:	10/31/2013
<b>Hedge Instrument</b>	
Hedge Instrument Trade ID#:	187554
Trade Description:	CM SWAP 11/13 - 11/13 RCV 1795.40 USD PAY AL HG LME USD 25.0
Trade Type:	CM Swap
Hedge Instrument Proportion:	100 %
Cash Flow Method:	Hypothetical Derivative
Partial From Date:	
Partial To Date:	
<b>Hedged Item</b>	
Hedge Item Trade ID#:	173233
Trade Description:	CM EXP 10/13 - 10/13 PAY AL HG Brazil - Novelis USD 20.0 K
Hedged Item Proportion:	100 %
Class:	Non Financial
Partial From Date:	
Partial To Date:	
Risk(s) Designated:	All Cash Flows
<b>Hypothetical Derivative</b>	
Hypothetical Derivative Trade ID #:	187439
Trade Description:	CM SWAP 10/13 - 10/13 RCV 3345.12 USD PAY AL HG Brazil - Novelis USD 25.0
Trade Type:	CM Swap
Hypothetical Derivative Proportion:	100 %
Partial From Date:	
Partial To Date:	
<b>Credit Adjustments</b>	
Hedge Instrument Spread Applied	Trades Own
Hedged Item Spread Applied	None
Hypothetical Derivative Spread Applied	Hedge Instrument
Implementation in Regression	Off
<b>Effectiveness Test Terms</b>	
Prospective Effectiveness Method:	Critical Terms Match
Retrospective Effectiveness Method:	Regression
Statistic Set:	AL Sales Brazil
Prospective Assessment:	Periodic Change
Retrospective Assessment:	Periodic Change
R-Squared	0.800 To 1.000
Slope	-1.250 To -0.800
F-Stat	greater than or equal to 4.121
T-Stat	greater than or equal to 2.030
Frequency:	Monthly
Statistic Set:	AL Sales Brazil



# Hedge Accounting

- Definition of regression

**Statistic Set**

Name: M7 One-Month Designation Set

Description: AL HG Novelis North America vs LME

AlternateId:

Active:

Regression Type: Index Settings

Statistic 1 Name: R-Squared

Statistic 2 Name: Slope

Statistic 3 Name: F-Stat

Statistic 4 Name: T-Stat

Statistic 5 Name: P-Value

Freq: Monthly

Notes:

---

Auto Generate Statistics Set Info

Auto Gen Preference: Period Change

Independent Data Asset SubType: Aluminum High Grade

Independent Data SRC: AL HG LME

Dependent Data Asset SubType: Aluminum High Grade

Dependent Data SRC: AL HG North America - Novelis

Y-Intercept through Origin:

Sampling Freq: Monthly

Sampling Pref: EOD

Sampling Num: 36

Use Fiscal Calendar:

**Auto Generation Details**

Auto Gen Preference: Period Change

Independent Data Asset SubType: Aluminum High Grade

Independent Data Source and its tenor: AL HG LME NA

Dependent Data Asset SubType: Aluminum High Grade

Dependent Data Source and its tenor: AL HG North America - Novelis NA

Sampling Frequency: Monthly

Sampling Preference: EOD

Sampling Number: 36

Use Fiscal Calendar: Yes

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Generate

**Statistics List**

Date	R-Squared	Slope	F-Stat	T-Stat	P-Value	Notes
11/30/2011	0.9934	1.0201	99.000	9.9499	0.0000e+00	No
10/31/2011	0.9941	1.0052	99.000	9.9499	0.0000e+00	No
9/30/2011	0.995	1.0077	99.000	9.9499	0.0000e+00	No
8/31/2011	0.9962	1.0068	99.000	9.9499	0.0000e+00	No
7/31/2011	0.9964	1.0039	99.000	9.9499	0.0000e+00	No
6/30/2011	0.9964	1.0048	99.000	9.9499	0.0000e+00	No
5/31/2011	0.9965	1.0024	99.000	9.9499	0.0000e+00	No
4/30/2011	0.997	1.0045	99.000	9.9499	0.0000e+00	No
4/19/2011	0.9961	1.0135	99.000	9.9499	0.0000e+00	No
3/31/2011	0.997	1.0028	99.000	9.9499	0.0000e+00	No
2/28/2011	0.9969	1.0023	99.000	9.9499	0.0000e+00	No

- Calculation of statistics

# Hedge Accounting

- Earnings/OCI summary reporting

Hedge type	Excluded Component Periodic Change Earnings	Excluded Component Released Earnings	Links with Non-Effective Period counts	Non-effective Periodic Change Earnings	Ineffective/Included Component Periodic Change Earnings	Included Component Released Earnings	Reclassified from OCI to Earnings	Net Periodic Earnings	Effective Periodic Change OCI	Reclassified to Earnings from OCI	Net Periodic OCI	
CCY: CHF Entity: 021 SIERRE	Asset Class: Foreign Exchange											
Cashflow	-286,164.54	0.00	0	0.00	0.00	0.00	-27,984.14	-314,148.68	0.00	27,984.14	27,984.14	
CCY: EUR Entity: 153 NOVELIS GMBH	Asset Class: Foreign Exchange											
Cashflow	0.00	0.00	0	0.00	335.98	0.00	517,664.64	518,000.62	-458,493.07	-517,664.64	-976,157.71	
CCY: EUR Entity: 153 NOVELIS GMBH	Asset Class: Metal											
Cashflow	1,021,289.47	0.00	0	0.00	1,037,080.77	0.00	3,664,091.88	5,722,462.11	6,833,041.73	-3,664,091.88	3,168,949.86	
CCY: KRW Entity: 541 ULSAN	Asset Class: Foreign Exchange											
Cashflow	-42,251,394.49	0.00	0	0.00	17,877.13	0.00	-118,622,730.11	-160,856,247.48	-4,700,636,808.35	118,622,730.11	-4,582,014,078.24	
CCY: KRW Entity: 542 YEONGJU	Asset Class: Foreign Exchange											
Cashflow	-63,166,325.13	0.00	0	0.00	16,960.90	0.00	-583,707,763.16	-646,857,127.39	-7,721,320,488.43	583,707,763.16	-7,137,612,725.27	
CCY: KRW Entity: 542 YEONGJU	Asset Class: Interest Rate											
Cashflow	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	547,288,397.60	0.00	547,288,397.60	
CCY: USD Entity: 122 EUROPE HLDG	Asset Class: Metal											
Cashflow	0.00	0.00	0	0.00	-25,161.45	0.00	247,919.44	222,757.99	-237,289.93	-247,919.44	-485,209.37	
CCY: USD Entity: 300 INC LOCAL	Asset Class: Foreign Exchange											
Net Investment	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	-21,628.03	0.00	-21,628.03	
CCY: USD Entity: 364 CANADA HO	Asset Class: Foreign Exchange											
Cashflow	0.00	0.00	0	0.00	-29.17	0.00	21,165.38	21,136.21	-663,403.33	-21,165.38	-684,568.71	
CCY: USD Entity: 408 SPECIALTY PROD	Asset Class: Foreign Exchange											
Cashflow	-4,612.11	0.00	0	0.00	0.00	0.00	0.00	-4,612.11	51,926.41	0.00	51,926.41	
CCY: USD Entity: 463 NOVELIS CORP	Asset Class: Energy											
Cashflow	0.00	0.00	0	0.00	23,022.35	0.00	189,929.00	212,951.36	-2,180,958.97	-189,929.00	-2,370,887.97	
CCY: USD Entity: 463 NOVELIS CORP	Asset Class: Metal											
Cashflow	2,725,680.25	0.00	0	0.00	529,936.74	0.00	11,139,028.54	14,394,645.53	7,948,335.93	-11,139,028.54	-3,190,692.61	
CCY: USD Entity: 479 HEDGING CO	Asset Class: Foreign Exchange											
Cashflow	497,668.80	0.00	0	0.00	4.49	0.00	1,856,342.14	2,354,015.43	-34,521,640.74	-1,856,342.14	-36,377,982.88	
CCY: USD Entity: 541 ULSAN	Asset Class: Metal											
Cashflow	904,905.56	0.00	0	0.00	2,147,825.74	0.00	2,307,786.23	5,360,517.53	4,277,894.67	-2,307,786.23	1,970,108.44	
Fair Value	0.00	0.00	0	0.00	-1,349,681.74	0.00	0.00	-77,466.64	0.00	0.00	0.00	
CCY: USD Entity: 542 YEONGJU	Asset Class: Metal											
Fair Value	0.00	0.00	0	0.00	-637,676.21	0.00	0.00	-63,293.38	0.00	0.00	0.00	
CCY: USD Entity: 663 DINDA	Asset Class: Metal											

# Looking at the Exposure Surface

Sales contracts – our largest exposure

- Large, geographically diverse team
- Intense pressure to achieve performance
- Numerous, complex sales agreements

Strategy

- Commercial Risk Playbook
- Risk involved in setting negotiation
- RFA process for playbook exceptions
- Online Contract Repository (Prac
- Commercial Risk Dashboard

Lesson

- Effective risk management requires a
- Treasury must take a leadership role and engage the



# 10Q Sensitivities

- Stress testing – user defined stresses to FX, IR and CM curves

Scenario Name	# of Trades	# of Links	# of Curves	Currency Grouping	Value Currency	Base NPV Value	Scenario NPV Value	NPV Change	% NPV Change	Base Clean NPV Value	Scenario Clean NPV Value	Clean NPV Change	% Clean NPV Change
Sensitivity - Commodities - LME +10%	8195	153	2	USD	USD	33,973,515.19	-34,335,906.32	-68,309,421.51	-201.06669	33,973,515.19	-34,335,906.32	-68,309,421.51	-201.06669
Sensitivity - Commodities - LME -10%	8195	153	2	USD	USD	33,973,515.19	102,999,674.46	69,026,159.27	203.17638	33,973,515.19	102,999,674.46	69,026,159.27	203.17638
Sensitivity - Commodities - MWP -10%	9	0	1	USD	USD	300,261.31	335,245.53	34,984.23	11.65126	300,261.31	335,245.53	34,984.23	11.65126
Sensitivity - Energy - Electricity -10%	1	8	1	USD	USD	-28,071,384.34	-27,662,712.22	408,672.12	1.45583	-28,071,384.34	-27,662,712.22	408,672.12	1.45583
Sensitivity - Energy - Natural Gas -10%	45	37	2	USD	USD	-4,570.67	-1,440,701.17	-1,436,130.51	-31,420.59964	-4,570.67	-1,440,701.17	-1,436,130.51	-31,420.59964
Sensitivity - FX - BRL -10% against USD	1168	357	1	USD	USD	-77,926,629.95	-171,119,776.63	-93,193,146.68	-119.59089	-77,926,629.95	-171,119,776.63	-93,193,146.68	-119.59089
Sensitivity - FX - CAD -10% against USD	126	52	1	USD	USD	-1,057,676.39	-3,952,727.63	-2,895,051.24	-273.71805	-1,057,676.39	-3,952,727.63	-2,895,051.24	-273.71805
Sensitivity - FX - CHF +10% against USD	308	16	1	USD	USD	-573,518.16	10,104,615.52	10,678,133.68	1,861.86495	-573,518.16	10,104,615.52	10,678,133.68	1,861.86495
Sensitivity - FX - CNY +10% against USD	6	0	1	USD	USD	41,534.85	-2,853,480.03	-2,895,014.87	-6,970.08638	41,534.85	-2,853,480.03	-2,895,014.87	-6,970.08638
Sensitivity - FX - EUR +10% against USD	3274	710	1	USD	USD	-13,238,867.74	-75,419,412.76	-62,180,545.01	-469.68174	-13,184,621.91	-75,359,742.34	-62,175,120.43	-471.57303
Sensitivity - FX - EUR -10% against USD	3274	710	1	USD	USD	-13,238,867.74	47,769,475.51	61,008,343.26	460.82750	-13,184,621.91	47,818,296.76	61,002,918.67	462.68235
Sensitivity - FX - GBP +10% against USD	260	0	1	USD	USD	-1,755,055.19	4,723,263.35	6,478,318.54	369.12335	-1,755,055.19	4,723,263.35	6,478,318.54	369.12335
Sensitivity - FX - GBP -10% against USD	260	0	1	USD	USD	-1,755,055.19	-8,190,493.30	-6,435,438.11	-366.68010	-1,755,055.19	-8,190,493.30	-6,435,438.11	-366.68010
Sensitivity - FX - JPY +10% against USD	2	0	1	USD	USD	19.16	30,010.69	29,991.53	156,498.50450	19.16	30,010.69	29,991.53	156,498.50450
Sensitivity - FX - KRW +10% against USD	627	277	1	USD	USD	-14,649,908.14	35,561,276.28	50,211,184.43	342.74061	-14,637,413.40	35,575,159.33	50,212,572.73	343.04266
Sensitivity - Interest - EURIBOR-6M +10%	1033	0	1	USD	USD	-2,232,673.08	-2,190,060.30	42,612.78	1.90860	-2,178,427.25	-2,135,814.47	42,612.78	1.95613
Sensitivity - Interest - KRW-CD-3200 +100 bps	8	6	1	USD	USD	-695,980.01	1,979,809.20	2,675,789.22	384.46351	-683,485.27	1,992,303.94	2,675,789.22	391.49186
Sensitivity - Interest - KRW-KORIBOR-3M -10%	8	6	1	USD	USD	-695,980.01	-696,739.70	-759.69	-0.10915	-683,485.27	-684,244.96	-759.69	-0.11115
Sensitivity - Interest - USD LIBOR +100 bps	12576	1609	1	USD	USD	-114,999,170.99	-114,813,163.68	186,007.32	0.16175	-114,931,615.03	-114,745,607.71	186,007.32	0.16184
Sensitivity - Interest - USD LIBOR -10%	12576	1609	1	USD	USD	-114,999,170.99	-116,094,472.28	-1,095,301.29	-0.95244	-114,931,615.03	-116,026,916.32	-1,095,301.29	-0.95300



# Fair Value Disclosures

- Level 1,2 and 3 reporting of fair values

Trade Type	Ccy	Ending Fair Value Hierarchy	Clean Value Positive	Clean Value Negative	NPV Positive	NPV Negative	Trade Count
Entity: 408 SPECIALTY PROD TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 220 Currency Forwards							
FX Swap	USD	Level 2	0.00	-114.79	0.00	-114.79	2
Entity: 408 SPECIALTY PROD TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 325 Metal I/P							
CM Swap	USD	Level 2	535,153.86	-1,435,872.16	535,153.86	-1,435,872.16	471
Entity: 409 LIGHT GAUGE TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 245 Metal Embedded							
CM Swap	USD	Level 2	77,880.41	0.00	77,880.41	0.00	5
Entity: 409 LIGHT GAUGE TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 325 Metal I/P							
CM Swap	USD	Level 2	26,546.53	-468,147.42	26,546.53	-468,147.42	156
Entity: 463 NOVELIS CORP TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 220 Currency Forwards							
FX Forward	USD	Level 2	0.00	0.00	0.00	0.00	1
FX Spot	USD	Level 2	0.00	0.00	0.00	0.00	1
Entity: 463 NOVELIS CORP TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 242 Metal Forwards							
CM Swap	USD	Level 2	0.00	-181,171.34	0.00	-181,171.34	2
Entity: 463 NOVELIS CORP TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 260 Electricity							
CM Swap	USD	Level 3	0.00	-26,482,351.29	0.00	-26,482,351.29	1
Entity: 463 NOVELIS CORP TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 280 Natural Gas							
CM Swap	USD	Level 2	438,343.63	-728,928.82	438,343.63	-728,928.82	75
Entity: 463 NOVELIS CORP TradeCategory: Trades ParentCompany: Novelis Region: North America AcctGroup: 325 Metal I/P							
CM Swap	USD	Level 2	11,434,805.40	-9,761,355.14	11,434,805.40	-9,761,355.14	275
Entity: 479 HEDGING CO TradeCategory: Trades ParentCompany: Novelis Region: South America AcctGroup: 320 Currency I/P							
FX Forward	USD	Level 2	9,259,225.57	-30,498,629.52	9,259,225.57	-30,498,629.52	791
FX Spot	USD	Level 2	0.00	0.00	0.00	0.00	1
Entity: 479 HEDGING CO TradeCategory: Trades ParentCompany: Novelis Region: South America AcctGroup: 325 Metal I/P							
CM Swap	USD	Level 2	0.00	-210,061.21	0.00	-210,061.21	2
Entity: 541 ULSAN TradeCategory: Trades ParentCompany: Novelis Region: Asia AcctGroup: 220 Currency Forwards							
FX Forward	KRW	Level 2	8,654,549,892.98	-4,796,293,893.49	8,654,549,892.98	-4,796,293,893.49	284
Entity: 541 ULSAN TradeCategory: Trades ParentCompany: Novelis Region: Asia AcctGroup: 242 Metal Forwards							
CM Swap	KRW	Level 2	6,119,294,614.13	-9,084,944,118.48	6,119,294,614.13	-9,084,944,118.48	1475
Entity: 541 ULSAN TradeCategory: Trades ParentCompany: Novelis Region: Asia AcctGroup: Exposures - Metal							
CM Swap	KRW	Level 2	1,900,677,647.82	-155,760,206.69	1,900,677,647.82	-155,760,206.69	108
CM Swap	KRW	Level 3	4,679,482,643.33	-129,766,955.93	4,679,482,643.33	-129,766,955.93	126
Entity: 542 YEONGJU TradeCategory: Trades ParentCompany: Novelis Region: Asia AcctGroup: 220 Currency Forwards							
FX Forward	KRW	Level 2	8,478,894,496.32	-2,450,666,246.44	8,478,894,496.32	-2,450,666,246.44	264
Entity: 542 YEONGJU TradeCategory: Trades ParentCompany: Novelis Region: Asia AcctGroup: 242 Metal Forwards							

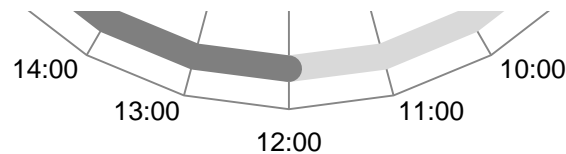
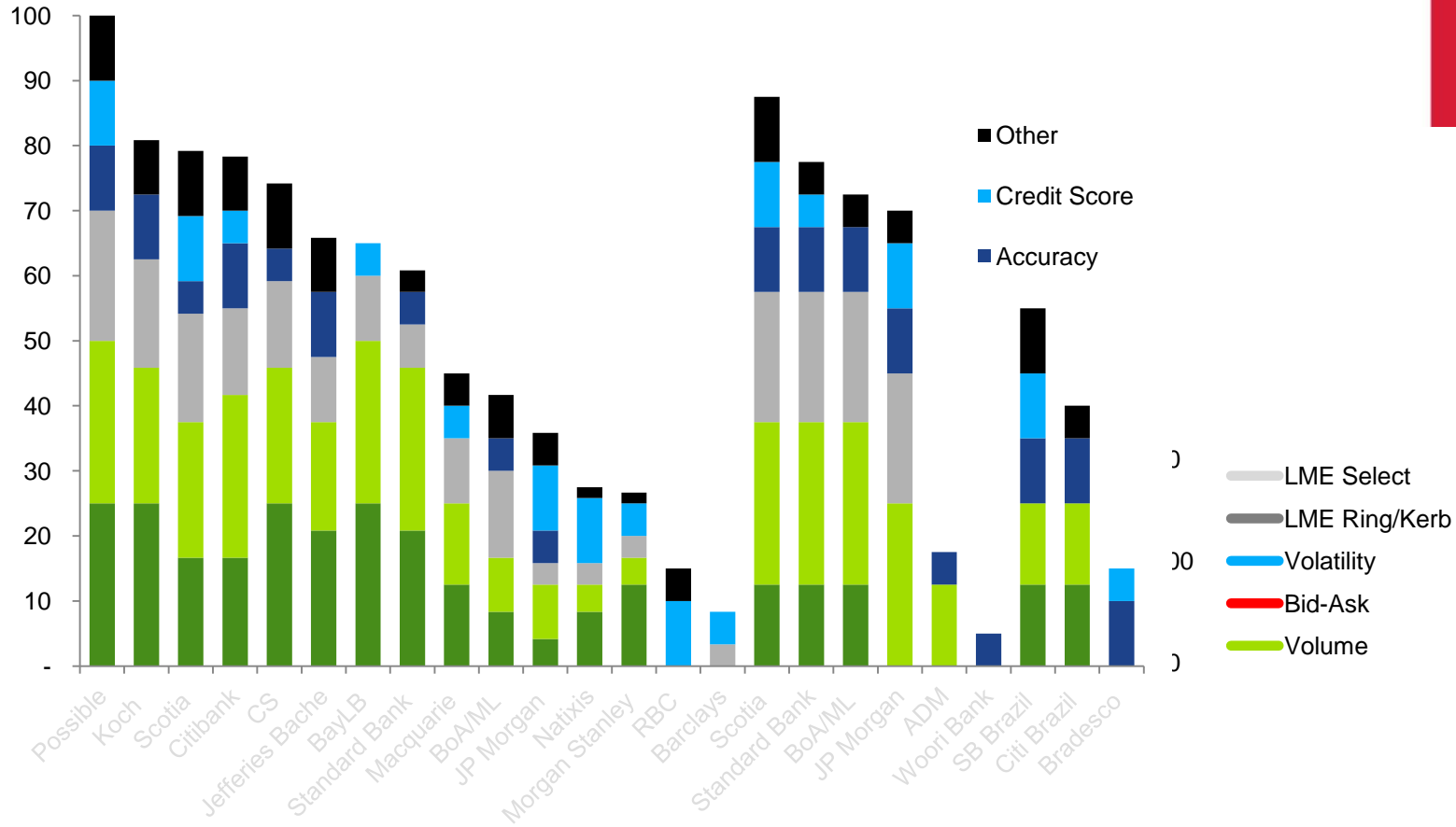
# What's in the Works?

- Counterparty scorecard

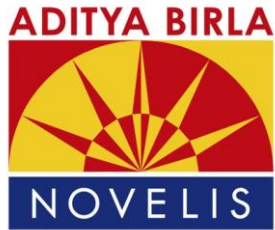
- Global

- Credit

- Policy



# Questions?



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