Best Practices in Risk Management

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REVAL 2010
RISK MANAGEMENT BENCHMARKING STUDY
RESULTS

AFP® Annual Conference
Agenda

• Reval 2010 Risk Benchmarking Study Results
• Best Practices Case Study: Visa, Inc.
• Best Practices Case Study: Ford Motor Co.
• Panel Session Q&A
Study Background

- Although risk management continues to be a top 3 topic among treasurers, there didn’t appear to be consistency among how companies measured the performance of their risk management practices.
- The survey was conducted Q3 of 2010 and so far has yielded 101 respondents.

Company Revenue

- Revenues less than $5bn: 55%
- Revenues between $5bn and $10bn: 18%
- Revenues between $10bn and $15bn: 7%
- Revenues above $15bn: 20%
Risk Management Lifecycle

Are you truly measuring hedge performance against the policy objectives?
Risk Policy & Objectives

- Good news: 92% have Risk Policies.
- Only 7% are not hedging.
- 80% are trying to minimize P&L volatility or protect cash flows.

**Hedging Strategy Trends**

- Selective hedging (only on exposures of significant impact) - 40%
- Conservative hedging (hedge most quantifiable exposures) - 52%
- Speculative hedging (for-profit approach) - 7%
- No Hedging - 1%

**Top Risk Policy Objectives**

- Eliminate P&L volatility - 49%
- Minimize budget deviations - 31%
- Minimize hedging costs - 6%
- Increase operating income - 3%
- Protect cash flows - 11%
#25 – FX or Commodity Risk Policies: Hedge Ratio/Level of Cover

Hedge Ratio/Level of Cover - FX or Commodity Risk Policies

- There is no risk policy in place and hedging is allowed freely: 8
- Price or target driven level of cover (e.g., if Euro is 1.2 hedge 100%): 11
- Standard rolling hedge approach (e.g., 100% - 75% - 50% - 25%): 48
- Have natural offsets and do not need to hedge: 9
- Hedge to the budget rate: 25
#26 – IR Risk Policy: Hedge Ratio/Level of Cover

## Hedge Ratio/Level of Cover - IR Risk Policies

- There is no risk policy in place and hedging is allowed freely: 19
- Interest expense target (e.g. cap on annual interest expense): 10
- Fix / Float % mix target (e.g. 75% fixed rate debt vs. 25% floating rate debt): 41
- 100% fully matched to notional exposure to the maturity that hedging is allowed: 31
Knowing What to Hedge

Difficulty of Obtaining Exposure Information

- 71% Very difficult to moderately difficult
- 29% Less than moderate difficulty
Getting Buy In

• With 63% of respondents not reporting back to the business units, the majority revealed that reporting didn’t take place because of accuracy issues.

![Pie chart showing reporting on accuracy of forecasting by business units]

- Do Not Report Back to Business Units: 63%
- Report Back to Business Units: 37%
Hedging What You Can Measure

- Not surprisingly Fx remains the most actively measured and fully hedged.

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**FX Exposures: Measuring vs Hedging**

- Measure FX Exposures Less Than 2 Years: 64%
- Hedge FX Exposures Less Than 2 Years: 62%
Hedging What You Can Measure

- Shape of yield curve affecting interest rate hedging?

**IR Exposures: Measuring vs Hedging**

| Measure IR Exposures Less Than 5 Years | 63% |
| Hedge IR Exposures Less Than 5 Years   | 47% |
Hedging What You Can Measure

- Taking out those without Commodity risk, 79% measure and 63% hedge 2 years or less.

Commodity Exposures: Measuring vs Hedging

Measure Commodity Exposures Less Than 2 Years: 34%

Hedge Commodity Exposures Less Than 2 Years: 27%
To Hedge Or Not To Hedge

- 23% don’t look at natural hedge offsets at all

Natural Hedge Offsets Utilization

- Look at Natural Hedges: 77%
- Do Not Look at Natural Hedges: 23%
Know What You Pay For!

Companies >$5bn in Revenue
- DO measure cost: 43%
- DO NOT measure cost: 57%

Companies <$5bn in Revenue
- DO measure cost: 44%
- DO NOT measure cost: 56%
Low % With Options
Expense Budgets

Companies >$5bn in Revenue
- Can purchase options as needed: 67%
- Have specific options budget: 23%
- Do not have budget/cannot enter into options: 10%

Companies with <$5bn in Revenues
- Can purchase options as needed: 88%
- Have specific options budget: 10%
- Do not have budget/cannot enter into options: 2%
Hedge Accounting Still Playing Role

• 26% are marking to market derivatives.
• Companies with hedges that qualify for hedge accounting must do so for the following reasons:

Why Qualify for Hedge Accounting

- 54%: Hedges are constructed to achieve hedge accounting from the onset
- 46%: Hedges must qualify for hedge accounting for economic reasons
But Understanding Ineffectiveness Low

Understanding Ineffective Results
Under FAS 133/IAS 39

- 63%
- 37%

- Understand Ineffective Results
- Do Not Understand Why They Are Ineffective
How do you measure success?

- Hedge performance measurements:

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget rate, price target or fix/float mix</td>
<td>30%</td>
</tr>
<tr>
<td>Spot rate or level</td>
<td>25%</td>
</tr>
<tr>
<td>Level of cover or target hedge ratio</td>
<td>20%</td>
</tr>
<tr>
<td>Reduction of P&amp;L volatility</td>
<td>15%</td>
</tr>
<tr>
<td>FAS 133/IAS 39 effectiveness results</td>
<td>10%</td>
</tr>
<tr>
<td>Hedge performance is NOT measured</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>
Benchmarking Hedging

• Not many companies are benchmarking their hedge to measure performance.
• You may want to employ a few methods below
  – And show only the best results to the Board!

<table>
<thead>
<tr>
<th>Type of Benchmark</th>
<th>Survey</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Hedge Benchmark</td>
<td>38%</td>
<td>Compare vs. if you did not hedge</td>
</tr>
<tr>
<td>100% fully hedged Benchmark</td>
<td>36%</td>
<td>Compare if you fully hedged</td>
</tr>
<tr>
<td>50:50 Benchmark</td>
<td>10%</td>
<td>Compare if you hedged 50%</td>
</tr>
<tr>
<td>Rearview Mirror Benchmark</td>
<td>9%</td>
<td>Compare against historic best prices</td>
</tr>
<tr>
<td>Top Of Month Benchmark</td>
<td>7%</td>
<td>Compare if you 1st day of the month</td>
</tr>
</tbody>
</table>
Are You Meeting Cash Flow Hedge Goals

- 31% want to protect cash flows.
- Most stopping with reporting against level of cover or budget rate reporting.
- Most not using Cashflow at Risk type tools to model risk to cash flows.
- Best practice to utilize CFaR.
Are You Meeting P&L Volatility Reduction Goals

- Not the 26% who mark to market derivatives.
- Not the 35% who do not perform any attribution.
- Not the 37% of the 26% who use FAS 133.

P&L Attributions:
- 26%: P&L attribution is not conducted due to level of difficulty
- 14%: P&L attribution is not conducted or a priority
- 21%: Realized and unrealized P&L is attributed by asset class and instrument type
- 37%: FAS 133/IAS 39 effective & ineffective portions by hedge designation or other means determine P&L attribution
- Other
Are You Meeting P&L Volatility Reduction Goals

- 49% of survey said P&L Volatility management was the primary goal.
- 74% not utilizing proper tools to model earnings risk.
- Why is it so hard?

Are You Using Earnings At Risk Models?

- 26% Not Using EaR
- 74% Using EaR

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Do You Have The Right Risk Systems?

- 33% are using spreadsheets to manage risk.
- Need a good system to manage lifecycle of the risk management process.
- Garbage into a good system still means garbage out.

Pie chart showing:
- 36% Treasury Management System
- 33% ERP module
- 18% Spreadsheet
- 9% Separate risk vendor solution
- 4% Other
- 4% Garbage into a good system still means garbage out
Alan L. Weindorf, Senior Business Leader, Global Treasury, Visa, Inc.

VISA, INC.
FOREIGN EXCHANGE RISK MANAGEMENT
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• Certain statements contained in this presentation are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the “safe harbor” created by those sections. These statements can be identified by the terms “continue,” “will” and similar expressions which are intended to identify forward-looking statements. In addition, any underlying assumptions are forward-looking statements. Such forward-looking statements include but are not limited to statements regarding certain of Visa’s goals and expectations with respect to tax rate, capital expenditures, revenue, incentives, expenses, operating margin, earnings per share, free cash flow, and the growth rate in those items, as well as other measures of economic performance.

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The Center of Electronic Payments

- **Acquirers**: 16,000 financial institutions
- **Issuers**: 66 billion total transactions, $4.8 trillion in total volume
- **Card Processors**: 1.8 billion cards
- **Cardholders**: 30 million global merchant outlets
- **Merchants**: 30 million outlets

Source: Visa Inc. data for 12 months ended June 2010

1 Includes merchant outlets in Visa Europe region
2 Source: Visa Inc. data for 12 months ended March 2010
3 Source: Visa Inc. data for 12 months ended June 2010
Putting $4.8T in perspective

- Global GDP by Country (source CIA World Factbook, 2009)
  1. US  14.5T
  2. China  8.8T
  3. Japan  4.1T
  4. India  3.5T
  5. Germany  2.8T
Visa: Transaction Growth
U.S. Annual Payments Transactions (# billions)

Secular trends drive transaction growth, regardless of macroeconomic environment

Source: Visa Inc. data for 12 months ended December 2009
Globally Diversified Business

Payments volume by region, four quarters ended June 30, 2010

- Visa Canada: 6%
- Visa USA: 58%
- Visa LAC: 8%
- Visa CEMEA: 3%
- Visa AP: 25%

Source: Visa Inc. data for 12 months ended June 2010
Treasury at Visa

- One Global Treasury team
- Approximately 40 professionals in four geographic locations
- All functions are led out of California with addition to teams in Denver, London and Singapore
- Typical MNC corporate functions, with the exception of daily settlement activities
Treasury at Visa

Treasury Management

- Insurance
- Foreign Exchange
- Cash and Investments
- Global Treasury Settlement
- Liquidity & Capital Markets

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Visa Treasury Systems

- Unique global treasury structure
- Evolving landscape; transition from a bank association to public company
- Mix of proprietary, home grown systems, 3rd party data sources, and best of breed software providers
- Premium placed on reliability
- Automation / removing manual tasks
- Continuous improvement
Managing Foreign Exchange Risk

- What drives Visa’s FX exposure
- How significant is the exposure
- What is Visa’s approach to hedging
What Drives Visa’s FX Exposure?

- Operate in 190 countries and territories, representing 165 currencies
- Maintain offices in almost 30 countries
- Define FX exposure on a “net basis”

\[
\text{Net FX Exposure} = \text{Gross Revenue} - \text{Less Incentives and Expenses}
\]
How significant is the exposure?

Currency Distribution

Net Revenue

- USD 74%

Expenses

- USD 82%

Approx % of Exposure Hedged

- Hedged 70%

- The above distributions are based on underlying currency and are not comparable with geographic breakdowns.
Visa’s approach to hedging

- Solve for reduced risk and volatility
- Execute only accounting hedges that reduce risk
- Use Value at Risk model to determine currencies to hedge; evaluate top 25
- Hedge 17 currencies on a rolling 12M basis
- Record gain/loss at maturity at specific P&L lines

Revenue: Service and International
Expense: Personnel and Marketing
Hedge accounting at Visa

- Treasury and Accounting are both involved
- Best of breed solution involving FXall (trade execution), SunGard Quantum (GL) and Reval (hedge accounting and reporting)
- Straight-through-process between the systems
- Posting at the detailed level
Hedge accounting at Visa (cont.)

- Four separate legal entities
- Eight separate hedging strategies; ties to GL line item
- Mapped actual results to managerial reporting lines
- Significantly reduced time for month end processes
- Improved hedge accounting analysis and reporting
Dennis A. Tosh, Director, Global Trading & Automotive Risk

PRINCIPLES OF EFFECTIVE FINANCIAL RISK HEDGING
HOW A MIDDLE-AGED MALE RESPONDS TO A MID-LIFE CRISIS:

My present “ride”

- 2010 Taurus SHO
- 365 HP V6
- 6 speed “paddle shift” auto

My next “ride”

- 2011 Mustang GT convertible
- 412 HP V8
- 6-speed manual
- Driver’s license put in escrow

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My previous ride:
DENNIS A. TOSH – FORD MOTOR COMPANY

Director, Global Trading & Automotive Risk

- Global cash investments
- Global derivatives transactions
- Automotive risk management
- Unsecured funding – Auto & Credit
- Commercial paper pricing & sales
HEDGING IS MORE THAN A TREASURY ISSUE

- Operating management needs to be a partner in the process of financial risk management
- Operating management is making the decisions that create the exposures
- Treasury needs to ensure complete transparency with respect to hedging objectives and consequences
HEDGING IS A TEMPORARY SOLUTION

• Buys time to address underlying issues
• If the underlying exposure physicals do not change, the it is a zero sum game over time
• Natural offsets the best long-term hedge
• Reduces income and cash volatility
  – Demonstrates disciplined processes
  – Reduced volatility → reduced cost of capital
EFFECTIVE HEDGING STARTS WITH EFFECTIVE EXPOSURE MEASUREMENT

- Requires close alignment with operating management
- Aligned with financial reporting systems
- Captured in a way that facilitates scenario analysis
EFFECTIVE STRATEGY = KEEP IT SIMPLE!

- Complexity is the root of all evil
- Have clear, well-articulated objectives
- Socialize strategy extensively and repeatedly with operating management (transparency!)
- No surprises
ROBUST, CONSERVATIVE ACCOUNTING IS CRITICAL

- Well-reasoned, well-documented and extensively socialized accounting policies
- Strong control environment
- Robust systems