Executive Pay for Performance

Presentation objective:
- Applying the concepts of Economic Value (also known as Economic Value Added or Economic Profit), so that we can maximize the long-term wealth of shareholders, by motivating managers to think, act, and get paid like owners.
- Demonstrate how to create an effective executive pay for performance incentive plan using @Risk.

Introductions …

Economic Value Advisors, based in Manhattan, is a Value Based Management consulting firm that focuses on maximizing the long-term value of businesses and the wealth of shareholders through a fundamental concept of applied corporate finance and economics, known as Economic Value (also known as Economic Value Added or Economic Profit).

In each of these services we assist companies to do one or all of the following:
- **Improve** - Enhance the existing operations of a business by doing more with less
- **Divest** - Sell a business when the alternative of keeping it is less profitable.
- **Invest** - Invest in profitable growth opportunities through new initiatives or acquisitions.

Our full VBM implementation extends beyond adopting a measure of performance (Economic Value), but rather it instills a Value Based Management business philosophy that aligns the interests of management and shareholders.

As a result, we help to create a shareholder centric culture that encourages a corporate mindset of management ownership and shareholder accountability across all levels and functions of an organization.
When discussing executive pay for performance we need to start from the very beginning by clearly defining our ultimate objective and determining how to measure performance against that objective.

In order to answer this question, we need to introduce the business philosophy of Value Based Management.

1. Defining Value Based Management
   - The economic meaning of value
   - Value Based Management defined
   - Why maximize long-term shareholder value?
   - How to measure value creation

2. Economic Value
   - Calculating Economic Value – simple case
   - Shortfalls of traditional measures
   - Putting Value Based Management to practice

3. Executive pay for performance
   - Motivating managers to think, act, and get paid like owners.
   - Using @Risk to calibrate an executive incentive plan that pays for creating shareholder value

4. Shareholder / Management Alignment
   - Wealth Leverage – a shareholder / management alignment index is used to determine how strongly management incentive is aligned to shareholders.
Defining Value Based Management

Learning Objectives:

- Define value based management
- Understand why maximizing long-term shareholder wealth is in the best interests of all stakeholders.
- Identify a company’s sole objective
- Determining the source of value and wealth
To define a Value Based Management business philosophy we draw from …

… key economic principles of human behavior.

The rational-actor paradigm is a fundamental concept of economics that simply states that people act:

- **Rationally**
- **Maximize Value**
- **Self-Interest**

When people make mistakes, or are fraudulent, or are perceived to act irrational, the problem can be traced to not having either:

- **The Right People**
- **The Right Information**
- **The Right Incentive**

The objective of any company is dictated by the invisible hand principle

Corporate social responsibility is, simply, to maximize long-term shareholder wealth

“... But the study of his own advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to society.

... By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.”


Owners of companies, by necessity, must contribute to society in order to promote their own self interest.

The best way for owners to maximize their own self-interest is by taking into account the self interest of others and to exchange something of value.

Anecdotal evidence

Rated #1 and #2 as the wealthiest men in the world, Bill Gates and Warren Buffett provide anecdotal evidence that the best way to maximize shareholder wealth is by serving society in a meaningful and beneficial way.

From a macro perspective, wealth and healthy functional societies go hand in hand.

Honest free societies create the greatest level of wealth per capita.
"Our mission is to create value over the long haul for the owners of our Company. That’s what our economic system demands of us. That’s what allows us to contribute meaningfully to society. That’s what keeps us from acting shortsighted. As businessmen and businesswomen, we should never forget that the best way for us to serve all our stake-holders – not just our share owners, but our fellow employees, our business partners and our communities – is by creating value over time for those who have hired us.

That, ultimately, is our job.”

- Roberto C. Goizueta (Former CEO of The CoCa-Cola Company)

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Who did he impact?

- Nick Smith
- Whitehead Woodruff & Evans Foundations
- Emory University

How did he impact them?

- Roberto Goizueta’s dentist, bought 100 shares in 1984 for $6,237.50, which by mid-1997 climbed to a value of $180,000 after four stock splits.

- Has a value of $7.6 billion, almost all from their holdings of 119 million Coke shares, which has allowed them to increase charitable giving from $5 million in 1980 to about $220 million in 1997.

- Emory University endowment increased from $250 million in 1981 to one of the nation’s largest at $3.8 billion. The university holds about 40 million Coke shares, making up 63% of the endowment’s value. As a result, Emory has built facilities, offered scholarships, endowed professorships, and expanded programs.

VBM gauges success based on the value created for others

“Price is what you pay. Value is what you get.” – Warren Buffett

Defining management performance based on short-term stock price success is both impractical and does not necessarily ensure a company manages to value.

"Try not to become a [person] of success, but rather try to become a [person] of value."
- Albert Einstein
Value Based Management goes beyond managing to earnings

Reported earnings doesn’t represent the true economics of a business

Earnings can often lead to the wrong behavior when tied to compensation as demonstrated by the following excerpt from Enron’s in-house risk management manual:

“Reported earnings follow the rules and principles of accounting. The results do not always create measures consistent with the underlying economics. However, corporate management’s performance is generally measured by accounting income, not underlying economics. Therefore, risk management strategies are directed at accounting, rather than economic, performance.”

Enron Economic Profit vs Net Income

![Graph showing Enron Economic Profit vs Net Income from 1993 to 2000. The graph indicates that economic profit is consistently higher than net income, especially in the later years of the decade.](image)

The Smartest Guys In The Room by Bethany McLean and Peter Elkind page 132.
Creating value begins by managing towards the right measure

Determining how to increase Shareholder Value is often confusing

**Operations**
- Capacity Utilization
- Capital Turnover
- Capital budgeting
- Volume
- Inventory

**Sales & Marketing**
- Sales Growth
- CRM
- ROI
- Margins
- Market Share

**Human Resources**
- Sales per Employee
- Balanced Scorecard
- Subjective Evaluations

**Finance**
- EPS
- IRR
- NPV
- EBIT
- Cash Flow
- EBITDA

Which measure should you focus on?
Economic Value is the true measure of value creation

Economic Value provides focus, simplicity, and line of sight

- Economic Value is a truism of finance and economics
- Economic Value - different names, same concept:
  - Economic Value Added (EVA)
  - Residual Value or Income
  - Economic Profit
  - Shareholder Value Added (SVA)
  - Cash Value Added (CVA) …
- Your return on investment must be higher than the cost of capital

<table>
<thead>
<tr>
<th>Return on investment</th>
<th>10%</th>
<th>5%</th>
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</thead>
<tbody>
<tr>
<td>Borrow</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Profit</td>
<td>5%</td>
<td>-5%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
The concept of Economic Value is well established

Economic Value is endorsed by all facets of the business community

**Business Academics**

"... there is no profit unless you earn the cost of capital. Alfred Marshall said that in 1896, Peter Drucker said that in 1954 and in 1973, and now EVA (economic value added) has systematized this idea, thank God."

- Peter Drucker

**Institutional Investors**

"Unlike earnings or ROE or any of those other measures, EVA gets at what we're really after: the creation of value by earning returns above our required cost of capital across time."

- Bob Boldt, Senior Investment Officer

**Wall Street Analysts**

"Economic Value Added (EVA) is a superior metric ... EVA has a higher correlation with wealth creation than do EPS, ROE, or cash flow."

- Steven Milunovich

**Corporations**

“Economic Profit is the way to keep score. Why everybody doesn’t use it is a mystery to me.”

- Roberto Goizueta, Past CEO
However, the “measure” of value is not what creates wealth

“There is no substitute for the “right” people:

- Integrity
- Competence
- Strategy
- Judgment
- Diligence
- Vision
- Leadership
- Intelligence
- Passionate work ethic

- Regardless of the measure used to access performance (accounting or economic based), it is only as accurate as the managers and employees that measure it.
- It’s the genuine adoption of a VBM business philosophy that will maximize long-term shareholder wealth versus simply the adoption of a measure.
- Genuine adoption of a VBM business philosophy requires managers to measure, manage, and reward performance with the honest intent, spirit, and principle of maximizing long-term shareholder value.

“Wealth is the product of a [person’s] capacity to think.” – Ayn Rand
"… there is no profit unless you earn the cost of capital. Alfred Marshall said that in 1896, Peter Drucker said that in 1954 and in 1973, and now EVA (economic value added) has systematized this idea, thank God."

- Peter Drucker

Sections:

1. Defining Value Based Management
2. Economic Value - creating value
3. Executive Pay for Performance
4. Shareholder/Management alignment

Learning Objectives:

- Understand how to calculate Economic Value
- Demonstrate Economic Value embodies all other measures
- Economic Value leads to value enhancing operating decisions
- Shortfalls of other traditional measures
- Economic Value’s ability to be understood and used at the shop floor level
A simple Economic Value case study

Case study highlights:

- Carl Carlton, CEO
- Aspiring Entrepreneur
- Total Investment $1,000
- Sources of Funds:
  - Personal savings: $500 in stocks
  - $500 Debt / Lender - Dad

Cost of Capital:

- Opportunity cost – was earning a 15% return in the Stock Market
- Dad charging him 5% after tax
- Weighted Average Cost of Capital = 10%

<table>
<thead>
<tr>
<th>Fund Source</th>
<th>Amount</th>
<th>% of Total Investment</th>
<th>Rate</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>$500</td>
<td>50%</td>
<td>15%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Debt</td>
<td>+$500</td>
<td>50%</td>
<td>5%</td>
<td>+2.5%</td>
</tr>
<tr>
<td>Capital</td>
<td>$1,000</td>
<td>100%</td>
<td></td>
<td>10.0%</td>
</tr>
</tbody>
</table>
Economic Value is simple common sense

There are 2 simple methods for calculating Economic Value

1) **Economic Value**

\[
\text{NOPAT} = \frac{\text{Sales} - \text{Expenses}}{\text{Sales}}
\]

\[
\text{Capital Charge} = \frac{\text{Capital} \times \text{Cost of Capital}}{10\%}
\]

\[
\text{Economic Value} = \text{NOPAT} - \text{Capital Charge}
\]

2) **Economic Value**

\[
\text{ROC} = \frac{\text{NOPAT}}{\text{Capital}}
\]

\[
\text{Cost of Capital} = \frac{\text{Capital Charge}}{\text{Capital}}
\]

\[
\text{Economic Value} = \text{ROC} \times \text{Cost of Capital}
\]

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1) NOPAT – Net Operating Profit After Tax
2) EBIT – Earnings Before Interest and Tax
3) ROC – Return on Capital

DuPont Formula
Economic Value - a simple yet robust measure of performance

Economic Value offers clarity into 4 value creating mandates

1. **Improve** operations and efficiency by increasing margins
   - Reduce manufacturing Costs
   - Process improvements
   - JIT, Lean Manufacturing
   - Six Sigma, Kanban, TQM

2. **Divest** capital – doing more with less
   - Sell a business when the alternative of keeping it is less profitable
   - Reduce overhead expenses
   - Maintain Sales while reducing Net Working Capital and Fixed Capital Turns

3. **Invest** profitably by allocating capital towards value creating investments
   - Value creating acquisitions
   - Invest in positive NPV equipment and facility initiatives
   - Establish foreign and domestic joint ventures
   - Invest in marketing and research development

4. **Optimize** Capital Structure
   - Financial flexibility
   - Dividend policy
   - Investor disclosure

\[
\text{Economic Value} = \frac{\text{NOPAT}}{\text{Sales}} \cdot \text{Profit Margins} \times \frac{\text{Sales}}{\text{Capital}} \times \frac{\text{Capital Turns}}{\text{Cost of Capital} - \text{Return on Capital}} \times \text{Capital}
\]
You have an opportunity to increase sales with a new customer

Sales opportunity of $500,000, but you will require an increase of $200,000 of inventory

Projected operating expenses are 95% of sales. Should you take on the new customer?

Economic Value’s greatest strength – making daily decisions

Potential New Customer
Economic Profit Analysis ($)

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Increase</td>
<td></td>
</tr>
<tr>
<td>- Incremental Costs</td>
<td></td>
</tr>
<tr>
<td>= Operating Income Increase</td>
<td></td>
</tr>
<tr>
<td>x 1 - Tax Rate</td>
<td>60.0%</td>
</tr>
<tr>
<td>(1) = NOPAT Increase</td>
<td></td>
</tr>
<tr>
<td>Working Capital Increase</td>
<td></td>
</tr>
<tr>
<td>x Cost of Capital</td>
<td>10.0%</td>
</tr>
<tr>
<td>(2) = Capital Charge Increase</td>
<td></td>
</tr>
<tr>
<td>(1-2) Economic Profit</td>
<td></td>
</tr>
</tbody>
</table>
Economic Value applies to every business decision

Your daily operating decisions determine the value created

- Taking on a potential new customer
- Negotiating a supplier contract
- Adding human resources
- Making an equipment purchase
- Prioritizing customer orders
- Divesting idle assets
- Acquiring a business
- Make versus buy decisions
- Developing a new product line
- Adding a new shift
- Upgrading equipment
- Negotiating past contracts
VBM compensation incentive must be tied to the right measure

Traditional measures, independently, do not necessarily increase value.

- Earnings measures (Net Income, EPS, EBITDA, Operating Income, etc.) can lead to investment at inadequate rates of return.

- Return measures (ROE, ROC, ROA) can lead to rejecting good investments that diminish current returns or accepting poor investments that enhance current returns.

- Long-term shareholder value can only be maximized by increasing a company’s Economic Value over the long-term.
Carlton decides to make his first acquisition

Year 2 Highlights
- Tough year with price war
- Increased competition
- Decides to buyout competitors
- Skimps on due diligence
- Loses site of the end goal

Acquisition Highlights
- Crazy Patterson’s Lawn Care
- High margins due to ‘stripped’ down operating expenses
- Carlton underestimates Mr. Patterson

C.C. closing Patterson’s Lawn Care acquisition

Mr. Patterson pleased with negotiations
Traditional measures can encourage value destroying growth

Drivers are important but should not be maximized independently

<table>
<thead>
<tr>
<th></th>
<th>Base Business</th>
<th>New Business</th>
<th>Total Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,000</td>
<td>$200</td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>$83</td>
<td>$67</td>
<td></td>
</tr>
<tr>
<td>NOPAT</td>
<td>$50</td>
<td>$40</td>
<td></td>
</tr>
<tr>
<td>NOPAT Margin</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td>$1,000</td>
<td>$500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Return on Capital</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Capital</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Capital Charge</td>
<td>-$100</td>
<td>-$50</td>
<td>-$150</td>
</tr>
<tr>
<td>Economic Value</td>
<td>-$50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Despite CVS’s increased NOPAT Margin, Economic Value has declined

- Despite CVS’s increasing revenue and NOPAT Margins, Economic Value has declined due to a lack of focus on capital efficiency resulting in a decline in Capital Turns.
- Most probably the reduction in Capital Turns is due to the company’s inability to fully capitalize on their minute clinics.
Year 3 Highlights

- Turns around business
- Successfully integrates merger
- Focuses on Economic Value
- Searches for seller with less business savvy

Acquisition Highlights

- Billy’s Mowing Service
- Not his core competency
- Billy wants a business more suited for his size
Economic Value strikes the right balance between value drivers

Compensation tied to Economic Value ensures the right behavior

<table>
<thead>
<tr>
<th></th>
<th>Base Business</th>
<th>New Business</th>
<th>Total Business</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>$2,500</td>
<td>$2,000</td>
<td>$4,500</td>
</tr>
<tr>
<td><strong>EBIT</strong></td>
<td>$625</td>
<td>$167</td>
<td>$792</td>
</tr>
<tr>
<td><strong>NOPAT</strong></td>
<td>$375</td>
<td>$100</td>
<td>$475</td>
</tr>
<tr>
<td><strong>NOPAT Margin</strong></td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td>$1,500</td>
<td>$500</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>Return on Capital</strong></td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Capital</strong></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Capital Charge</strong></td>
<td>-$150</td>
<td>-$50</td>
<td>-$200</td>
</tr>
<tr>
<td><strong>Economic Value</strong></td>
<td>$225</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOPAT Margins are not the only way to create value for shareholders

- Although Catalyst's NOPAT Margin has been declining, the company's capital efficiency has been a major contributor to its rise in Economic Value.
- Catalyst’s ability to increase capital turns seem to be driven by a strong capability in valuing acquisitions and post-acquisition integration, which has resulted in strong Revenue and NOPAT growth while maintaining discipline in the amount of capital invested.
All performance measures cascade into Economic Value
How a Forklift Driver ‘drives’ Economic Value

Cultivating ownership accountability right down to the shop floor

Forklift Driver - “As inventory gets closer to shop floor, the capital charge on inventory is reduced ...

... and warehouse space can be consolidated to reduce the overall invested capital, ... which directly increases a company’s Economic Value
Economic Value is fundamental to a VBM business philosophy

A VBM philosophy requires an operating measure that …

... captures all operating measures …

<table>
<thead>
<tr>
<th>Margins</th>
<th>Production</th>
</tr>
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<tbody>
<tr>
<td>IRR</td>
<td>EPS</td>
</tr>
<tr>
<td>EBIT</td>
<td>NPV</td>
</tr>
<tr>
<td>Capital Turns</td>
<td>Sales</td>
</tr>
<tr>
<td>Market Share</td>
<td>Cash Flow</td>
</tr>
<tr>
<td>Returns</td>
<td>Etc ...</td>
</tr>
</tbody>
</table>

... is used in every aspect of business …

<table>
<thead>
<tr>
<th>Acquisition Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Measurement</td>
</tr>
<tr>
<td>Incentive Compensation</td>
</tr>
<tr>
<td>Financial Planning</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>Goal Setting</td>
</tr>
<tr>
<td>Operating Decisions</td>
</tr>
<tr>
<td>Strategic Planning</td>
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</tbody>
</table>

... binds functions with a common language

<table>
<thead>
<tr>
<th>Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
</tr>
<tr>
<td>Operations</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
</tr>
</tbody>
</table>

... most importantly, is directly tied to shareholder value
3. Executive Pay for Performance

Objectives:

- Review overall structure of a Value Based Management incentive compensation
- Present parameters of the compensation design
- Apply @Risk to calibrate an effective incentive system
Traditional incentive plans are poorly structured

1. Wrong performance measures or too many conflicting measures
2. Threshold and caps that result in year-end “sand bagging” and budget negotiations, which incent mediocrity
3. Targets are independent of shareholder value
4. Each year is independent of other years, leading to short-term thinking
Value Based Management (VBM) Incentive Plan

- Use the right measure of performance
- No limits
- Bonus reserve
- Multi-year targets based on improvement (3 years)

1. Economic Value Improvement (EVI) Excess
   \[ = \text{Actual EVI} - \$x,xxx,xxx \]
2. EVI Target
   \[ = \text{Actual EVI} - \$x,xxx,xxx \]
3. Bonus Reserve
4. Target Bonus
5. Interval
   \[ \$x,xxx,xxx \]
6. 5% probability of Zero Cumulative Bonus over 3 years
7. Bonus Declared
   \[ = \text{Up to 100% of the Target Bonus is paid} \]
   \[ = \text{1/3 of the remaining bonus reserve is paid} \]
The Economic Value Improvement (EVI) Target is the EVI required to get a shareholder return on the Market Value, equal to the cost of capital.

\[
\text{EVI Target} = \text{Actual EVI} - \$820,000
\]

1. **Economic Value Improvement (EVI) Excess**
   
   \[
   \text{EVI Excess} = \text{Actual EVI} - \$820,000
   \]
   
   - **Up to 100% of the Target Bonus is paid**
   - **1/3 of the remaining bonus reserve is paid**
   - **Interval**
     
     $8,500,000
     
     5% probability of Zero Cumulative Bonus over 3 years
Estimating the Economic Value Improvement (EVI) Target

EVI target is derived by determining the Growth Value (GV)

1. Market Value (MV) of the company is determined by taking the market value of the equity and debt. For a private company, we add the discounted future Economic Value to ending capital or discount the Free Cash Flows. In either case, we get the same answer.

2. Operations Value (OV) is determined by assuming the current Economic Value stays constant into perpetuity (Economic Value ÷ Cost of Capital) and then we add the capital invested. This represents the value of the company if no additional growth is expected.

3. Growth Value (GV) is determined by simply subtracting the COV from the Market Value of the business. FGV represents the expected Economic Value Improvement imbedded in the Market Value of the Company.

4. Economic Value Improvement (EVI) Target is the constant Economic Value Improvement needed to get a return equal to the cost of capital on the GV and hence the Market Value.

\[ \text{EVI} = \frac{\text{GV} \times \text{Cost of Capital}}{\text{Market Value}} \]

\[ \text{EVI} = \frac{\$9.02 \text{ million}}{\$473.3 \text{ million}} = \$820,000 \]

For every dollar of EVI there is an additional $11 of value created to shareholders ($1 + 1/10%). By dividing $9.02 million by the $11, management is required to generate approximately $820,000 dollars of EVI annually.
An EVI Target of $820,000 for our Client, based on a Discounted Economic Value Valuation, represents 0.8% of Gross Profit and lies within the 29th percentile among our Client peers.

Based on peer analysis the EVI Target as a % of Gross Profit should fall within the 75th and 50th percentile or 6.7% and 4.0%, respectively.

As a result, the estimated EVI Target falls below the range of $5.3 million and $3.2 million range, assuming $97.9 million in Gross Profit at the end of 2008.

An EVI target at the 29th percentile is justified (under the proposed total compensation design, i.e. interval, target bonus, bonus reserve) based on future growth prospects of the industry, simulation results, and the other factors.
The interval helps establish a balance between strong incentives, limited retention risk, and reasonable shareholder cost by providing exceptional pay for outstanding performance, average pay for expected performance, and below average pay for poor performance.

1. Interval will change at a constant ratio to Target Bonus. If Target Bonus does not change, then the interval will stay constant.

2. EVI Target $820,000
   - Economic Value Improvement (EVI) Excess = Actual EVI – Expected EVI
     - = Actual EVI - $820,000
   - 5% probability of Zero Cumulative Bonus over 3 years
   - 1/3 of the remaining bonus reserve is paid
   - Up to 100% of the Target Bonus is paid
   - Bonus declared
   - Steeper slope increases risk (small interval)
   - Flatter slope decreases risk (larger interval)

Interval $8,500,000
Monte Carlo analysis confirms our analysis – using a bottom up approach

- Using various distributions per driver of Economic Value we can simulate various combinations of assumptions to come up with a range of Economic Value and valuation results.
- In the case of our Client, a triangle distribution was used for the key drivers of value.

Monte Carlo simulation confirms our analysis: using a bottom up approach
Economic Value Interval - bottom up approach

Based on driver assumptions – average bonuses will be at target bonus

**Total Bonus Declared / 3 years**

- Minimum: -1.5039
- Maximum: 8.9568
- Median: 3.2505
- Std Dev: 1.8679
- 10%: 0.9263
- 25%: 1.9816
- 75%: 4.6581
- 90%: 5.9192
- Values: 5000

**Total Bonus Declared / 5 years**

- Minimum: -0.8087
- Maximum: 12.9219
- Median: 5.3890
- Std Dev: 2.5640
- 10%: 2.0492
- 25%: 3.6233
- 75%: 7.2499
- 90%: 8.9472
- Values: 5000

**Bonus Paid and Earned / 3 years**

- Minimum: 0.0784
- Maximum: 6.0677
- Median: 2.8869
- Std Dev: 0.9075
- 10%: 1.7103
- 25%: 2.2746
- 75%: 3.5336
- 90%: 4.1037
- Values: 5000

**Bonus Paid and Earned / 5 years**

- Minimum: 1.4330
- Maximum: 9.6208
- Median: 5.0374
- Std Dev: 1.2136
- 10%: 3.4454
- 25%: 4.1723
- 75%: 5.8758
- 90%: 6.6074
- Values: 5000
The Bonus Declared provides the starting point in determining the bonus earned/paid and the amount left in the bonus reserve to ensure short-term performance wasn’t made at the expense of long-term shareholder value.

\[
\text{EVI Target} = \text{Actual EVI} - \$820,000
\]

\[
\text{5\% probability of Zero Cumulative Bonus over 3 years}
\]

\[
\text{1/3 of the remaining bonus reserve is paid}
\]

\[
\text{Up to 100\% of the Target Bonus is paid}
\]
"Companies perform better when all important parties - management, employees, and directors - have the incentive of ownership in the business."

- George R. Roberts, Co-Founder of KKR
Strong incentive for yearly as well as cumulative long-term performance

- It is best to look at a Value Based Management incentive system in terms of a multi-year period (i.e. cumulative 3 year bonuses), where long-term performance is the objective versus year to year performance.
- Nevertheless, from a year to year bases there is a healthy balance of receiving an approximate 1x bonus in each of the years by creating expected returns to shareholders, while having strong incentive to exceed those expectations and deliver outstanding results.

### 2009

- Minimum: -1.4469
- Maximum: 4.2094
- Median: 0.9624
- Std Dev: 1.1268
- 10%: -0.4087
- 25%: 0.2162
- 75%: 1.8551
- 90%: 2.6171
- Values: 5000

### 2010

- Minimum: -3.6531
- Maximum: 6.5299
- Median: 1.4045
- Std Dev: 1.5719
- 10%: -0.5560
- 25%: 0.3541
- 75%: 2.5308
- 90%: 3.5766
- Values: 5000

### 2011

- Minimum: -5.4074
- Maximum: 7.1782
- Median: 0.8107
- Std Dev: 2.1206
- 10%: -1.9349
- 25%: -0.6484
- 75%: 2.3432
- 90%: 3.6632
- Values: 5000
Bonus Reserve – 3 year ending balance

There is an expected balance of 0.20x multiple left in reserve by the 3rd year.

The expected bonus reserve after three years is 0.20x, which will provide a decent buffer in case of an atypical bad year.

There is a 25% chance of having zero balance in the reserve at the end of three years.

The most frequent occurrence is a zero balance in the bonus reserve, which means that the bonus paid is fully warranted by cumulative EVI improvement.

There is only a 5% probability of having a negative 1.71x bonus reserve in the 3rd year.
Shareholder/Management Alignment

Objectives:

- Understand how to quantify the alignment of management and shareholder self interests
- Introduce the concept of Wealth Leverage as the measure of Shareholder/Management alignment
- Review Client’s Wealth Leverage under the proposed compensation design
Wealth Leverage quantifies how strongly Shareholder and Management self interests are aligned. Wealth Leverage measures how much management’s total long-term wealth will rise or fall for every 1% rise or fall in Shareholder’s long-term wealth.

In the case of our Client, for every 10.0% increase in Shareholder wealth management’s long-term total wealth will increase 7.6%.

Too high a Wealth Leverage may encourage unnecessary risk taking, while too low a wealth leverage provides weak shareholder/management alignment. A Wealth Leverage that fall between 50-100% alignment provides the right incentive.1

**Wealth Leverage - Monte Carlo Simulation**

**Bonus Wealth Leverage falls within a range that provides optimal incentive**

The 3 and 5 year Wealth Leverage for the total bonus declared is 119.9%. As to be expected, the 3 and 5 year should equal.

The total Wealth Leverage is then the weighted average of the bonus and salary. Since salary is for the most part independent of performance, the Wealth Leverage for salary is zero.

Client’s Wealth Leverage is 76.7%, which fall within the optimal range of 50-100%, providing a healthy balance of management/shareholder alignment and incentive to take intelligent risks.