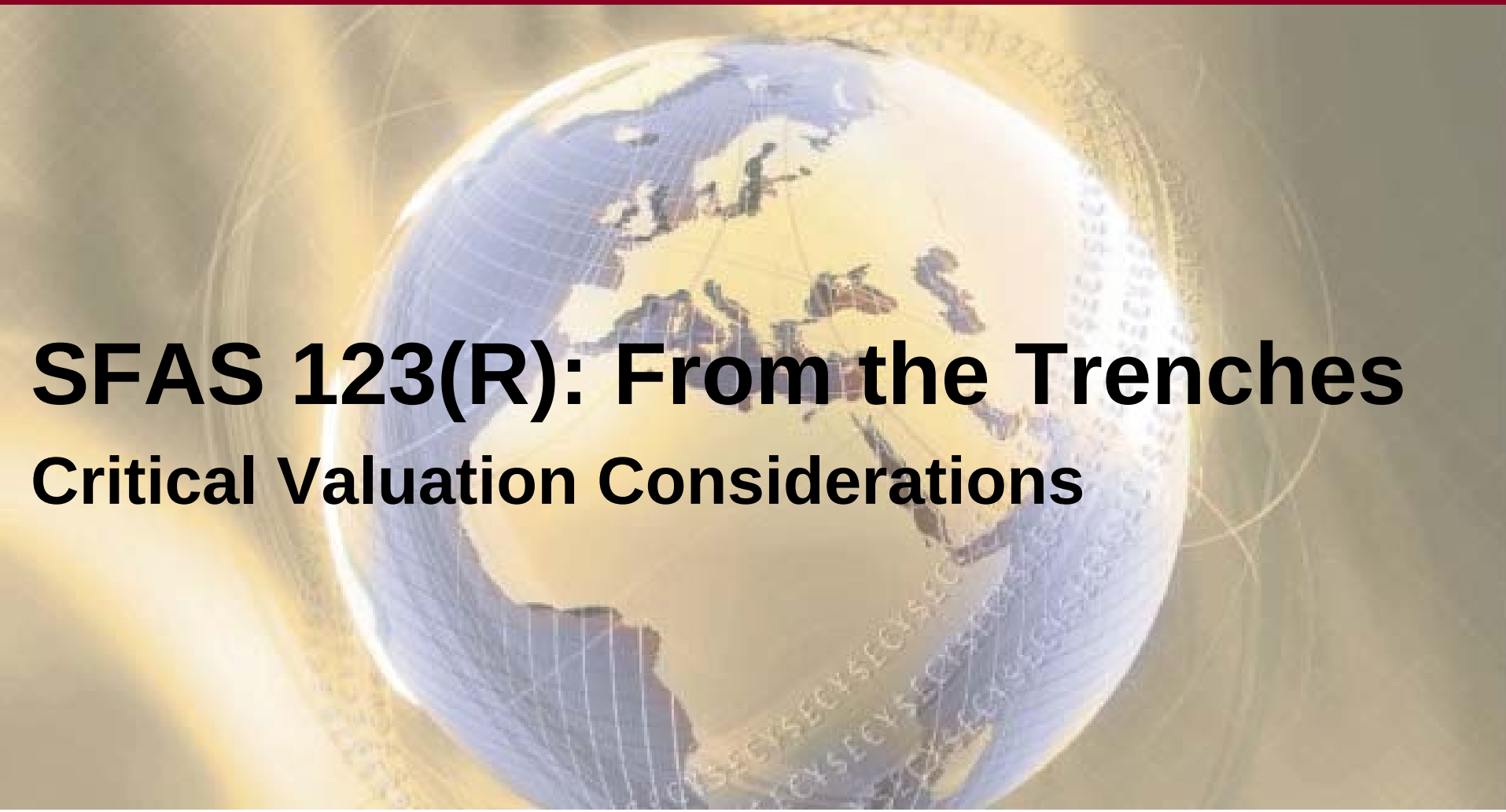

SFAS 123(R): From the Trenches

Critical Valuation Considerations

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June 13, 2006

What's Important?

- Employers:
  - Accuracy in valuation
  - Consistency in reporting
  - Defensibility upon audit
  - Understandable results
- Auditors:
  - "Smell test" satisfaction
  - Auditability
  - Comprehensive disclosure of methodology,results, and data used

Stock Option Valuation – Emerging Best Practice

- Data:
  - Historical exercise and cancellation activity
  - Separation from employment experience
  - Data used for projecting assumed activity of outstanding (i.e.unexercised) options
- Models: Service-based options
  - Binomial models becoming recognized as more accurate
    - 308 companies have now publicly disclosed (see handout)
    - Hazard rate models becoming the norm
    - Path dependency of stock is critical in valuation
    - Multiple drivers of exercise being modeled
  - Black-Scholes still used widely in spite of limitations and inaccuracy

Stock Option Valuation – Emerging Best Practice

- Models: Service-based options
  - Aon has developed a new, more accurate version of Black-Scholes; **always** gives a lower fair value; better captures distribution of exercise behavior; easy audit review
- Models: Performance-based options
  - Performance-based options and share plans must use combination of binomial and Monte Carlo simulation
- Assumptions
  - Volatility is chosen based on combination of terms and types
  - Exercise behavior used to model life hazard rates, so “expected life” only needed for Black-Scholes
  - Separation from employment assumptions made at all points where option is underwater

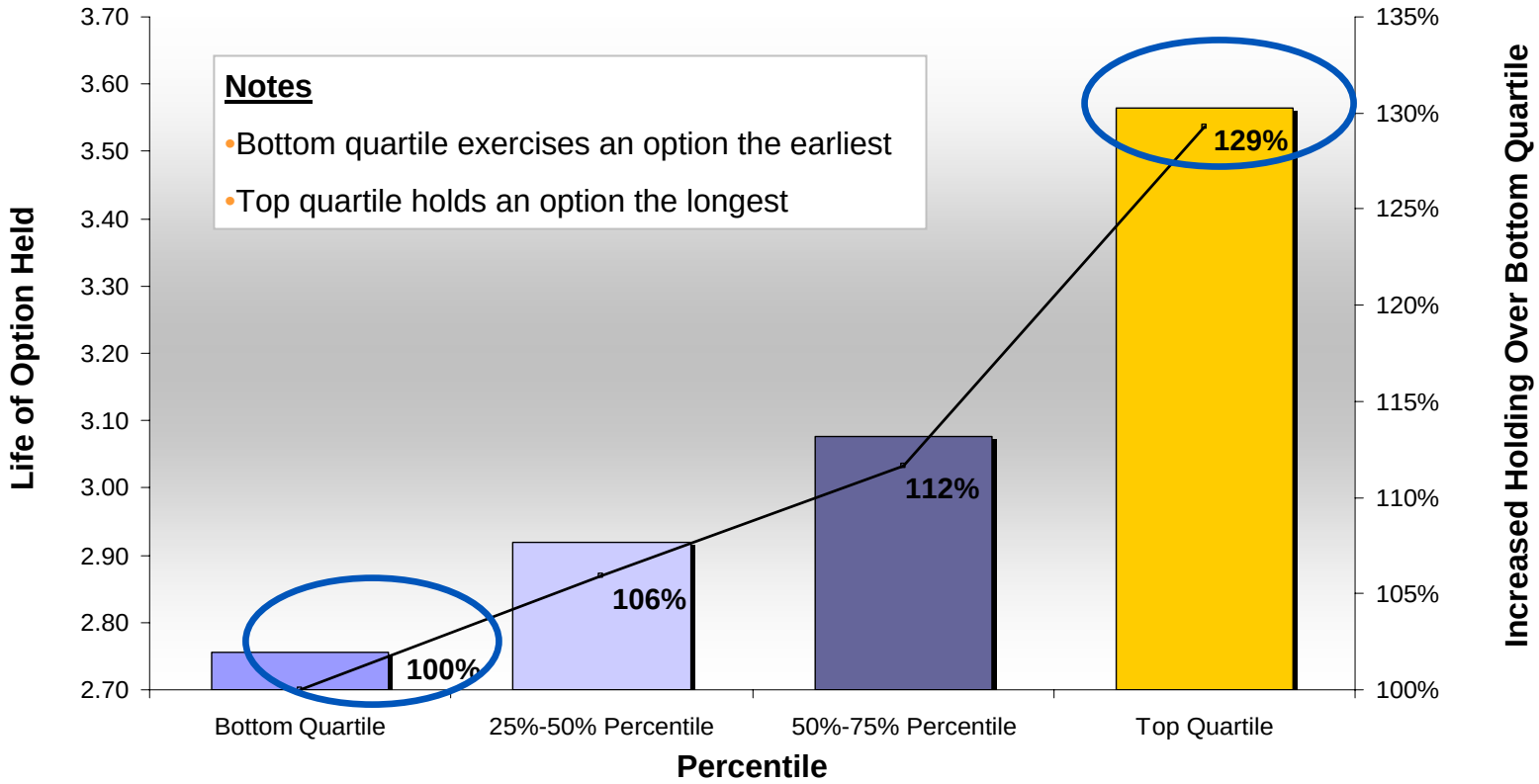
Stock Option Exercise Behavior – What We're Learning

- Important determinants of exercise behavior
  - Path-dependency in stock movement (Aon)
  - Recent vesting is an option tranche (Stanford Univ.)
  - Previous multi-week run-up of stock (Stanford Univ.)
  - Intrinsic value of option at point of exercise (Stanford Univ.)

- FAS 123(R) fair values can differ:
  - **Slightly** – Using different models with the same basic assumptions
  - **Slightly to Moderately** - Using the same (binomial) model with different assumptions for separation from employment
  - **Moderately to Greatly** – Using the same (any) model with different assumptions for exercise of outstanding options

Study of Exercise Behavior - Example

- **Grant and exercise practices for 20 companies were aggregated - involving more than 700 million option exercises**
- **Employees were categorized by the percent of the annual grant received and put into quartiles**



Reporting of Valuation Results – What Auditors Want to See

- Well-documented process for:
  - Analysis of data
  - Selection of assumptions, including range of reasonable choices
- Technical support for range of assumptions presented
- Detailed explanation of the model(s) being used
- Charts of results with sensitivity analysis
- Disclosure of data used
- Explanation of changes in methodology or model and why changes are being proposed

Common Types of Performance Plans with Market Conditions

- Absolute Performance Plans
  - Contingent Vesting
    - At the service period, if market condition is achieved at or before the service period
    - At the later of achieving the market condition and a specified service period
    - At the earlier of achieving the market condition and a specified service period
- Relative Performance Plans
  - Relative Vesting (based on percentile rank of Index)
  - Indexed Exercise Price

Sample Valuations of Absolute Performance with Contingent Vesting

- Vesting is at the service period, if market condition is achieved at or before the service period

Vesting Occurs Only if Hurdle is Met - Cliff Vesting - Expected Volatility of 20%						
		1-Year	2-Years	3-Years	4-Years	5-Years
Black-Scholes Value [1]		26.40%	28.20%	30.03%	31.83%	33.49%
		Reduction in Valuation from Traditional Service Based Options				
Vesting Hurdle (Total Annual TSR)	2.00%	-9.02%	-8.56%	-7.04%	-5.07%	-3.10%
	4.00%	-13.70%	-13.21%	-12.71%	-9.98%	-7.96%
	6.00%	-24.20%	-22.22%	-19.91%	-17.21%	-15.42%
	8.00%	-28.95%	-27.75%	-26.63%	-25.75%	-25.26%
	10.00%	-37.20%	-35.80%	-35.94%	-34.60%	-34.95%

[1] Assumes a Black-Scholes valuation with an expected life equal to the midpoint of the service period and the contractual term (for example, a 1-year service period and a 10 year contractual term would yield an expected life of 5.50 years), a volatility of 20%, no dividend yield, and a Risk-Free Rate commensurate with the expected life.

Going Forward – Valuation Issues

- Expensing impact on the financial statement will take on more importance
- Industry- and/or company size-based FAS 123(R) assumptions will become the norm
- Performance-based cash compensation strategies will also be evaluated for their impact on earnings
- Study of data in understanding drivers of exercise behavior will become more important in designing plans

Contact Information

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