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**Best Practices and Trends in FAS123(R) Valuation
2007 NASPP Conference**



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Choice of Valuation Model

- Three broad classes of models
 - Black-Scholes Model
 - Lattice/Binomial Models
 - Monte Carlo Simulation Models

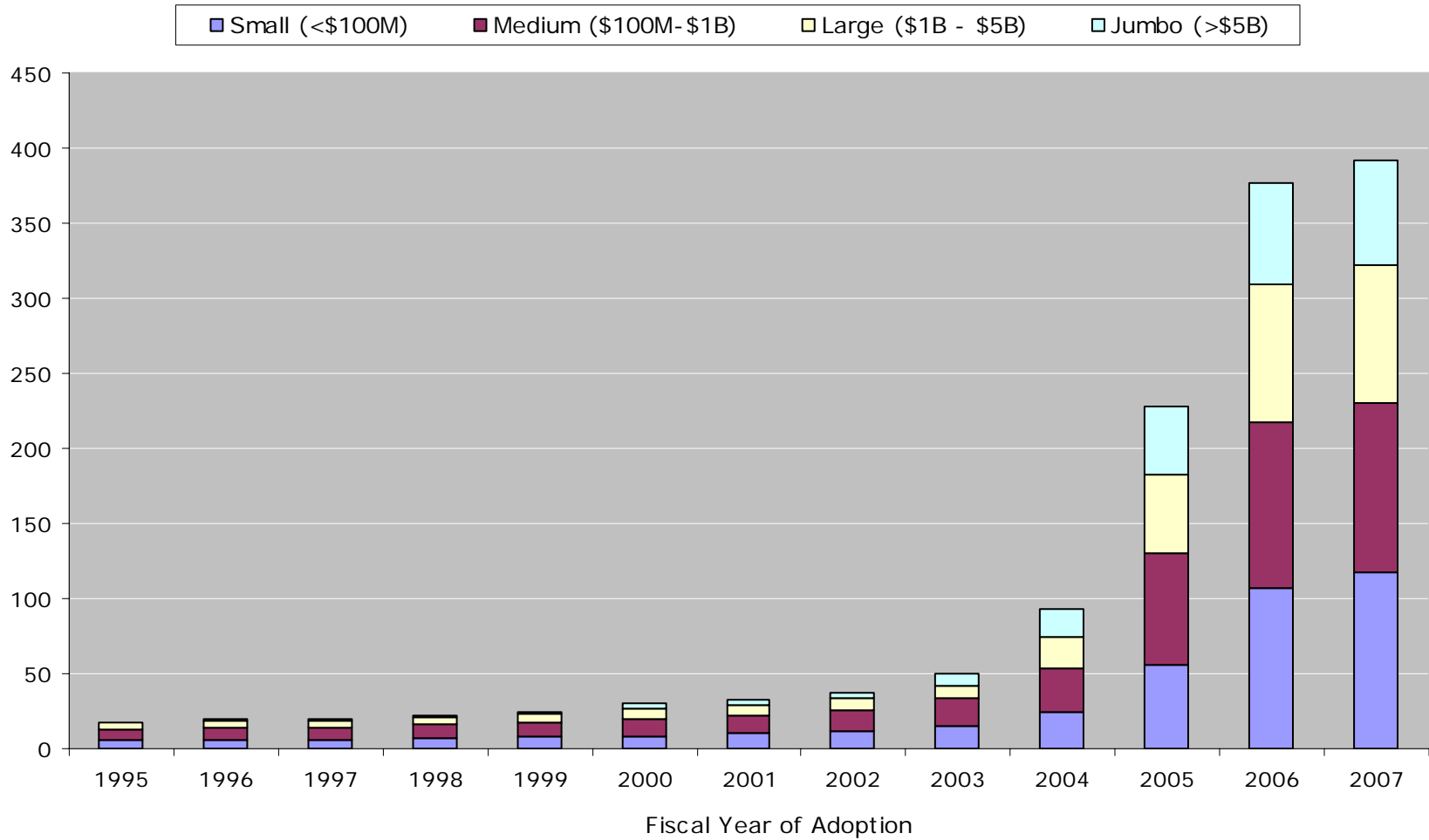
Black-Scholes

- Black-Scholes
 - Plain vanilla options
 - Absence of meaningful data for estimating a detailed behavioral model
 - Companies can, of course, use a detailed behavioral model to estimate a Black Scholes expected life if meaningful data are available
 - Little expectation of large variability in volatility, dividend policy, and interest rates over the life of the option
 - Easy to execute and audit

Lattice / Binomial

- Lattice
 - Allows more detailed specification of early exercise and departure behavior
 - Allows explicit consideration of changes in contractual term and vesting requirements
 - Allows specification of term structure of expected volatility, interest rates, and dividends

Summary of Binomial Companies



Monte Carlo Simulation

- Monte Carlo Simulation
 - Flexible framework for modeling exotic features
 - Allows for path dependent stock price conditions
 - Allows for relative shareholder return conditions
 - Has all the advantages of a lattice model

Early Exercise Behavior

- Factors that influence early exercise decision
- Not Observable
 - Liquidity needs
 - Portfolio needs
- Observable
 - Stock price performance
 - Time

Early Exercise: Simplified Method

- SAB 107 Simplified Method
 - Average of time to vest and contractual term
- Used primarily by private companies and companies with no relevant historical data
- Disincentives to use of simplified method
 - Typically yields a long life
 - Sunset in December 2007
- The Future – Standardized Tables of Behavior
 - *Society of Actuary* research study is progressing with Nancy Wallace and Richard Stanton of Berkeley, and Jennifer Carpenter of NYU studying drivers of exercise behavior

Early Exercise: Time Based

- Estimate of expected life based on
 - Observed time to early exercise and post vesting cancellations
 - Expected time to exercise of outstanding options
 - Usually based on midpoint between current date and contractual term
- Most commonly used for Black-Scholes expected life assumption

Early Exercise: Causal Model

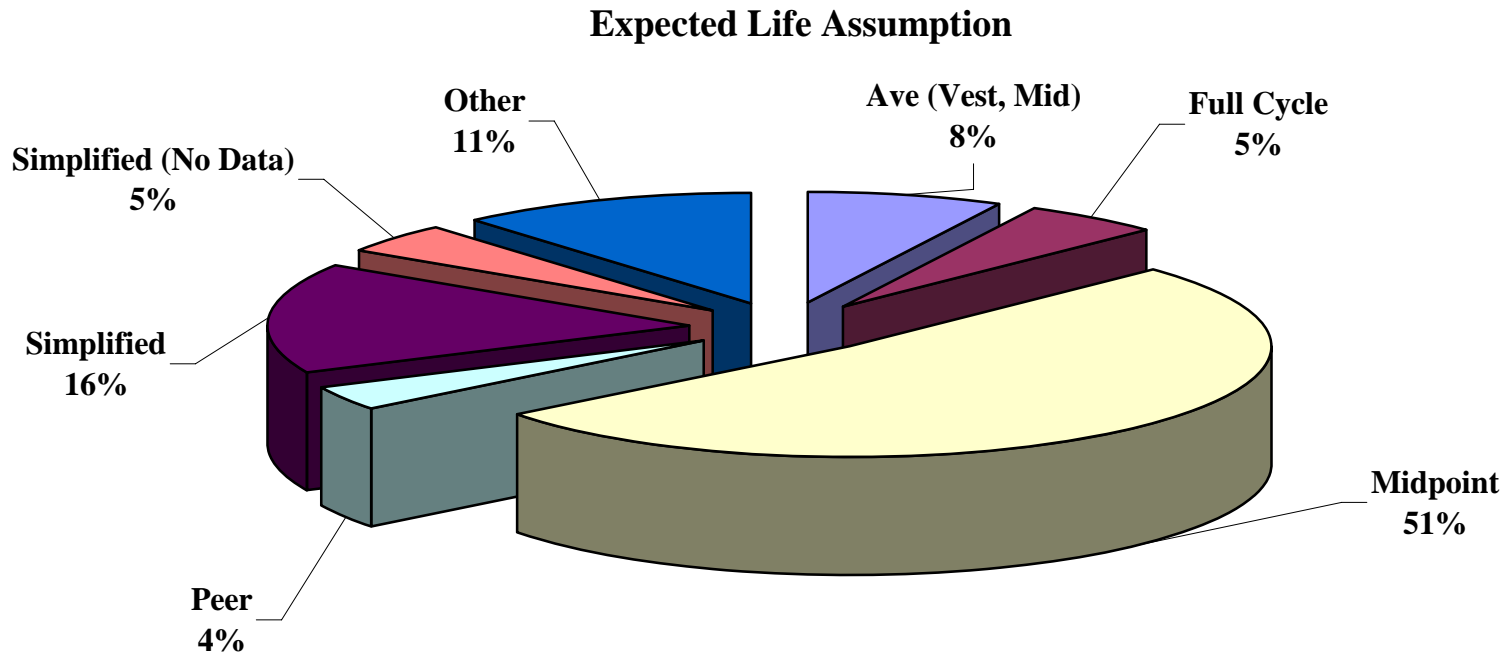
- Expected life as a function of stock price and time
- Factors explaining behavior may include
 - Stock price to strike price ratio
 - Stock price path – how close to historical highs
 - Recent stock price returns
 - Time since grant
 - Recent vesting event
- Can be used in a lattice or simulation model or to estimate expected life for Black-Scholes
- Can be combined with a post-vesting departure rate

Expected Life – Emerging Best Practice

- Courtesy of FAS123R Data in SEC Filings as Provided by *Salary.com*

<u>Sector</u>	<u>Current Year</u>			<u>Prior Year</u>		
	<u>Total Companies</u>	<u>Standard Deviation</u>	<u>Average</u>	<u>Total Companies</u>	<u>Standard Deviation</u>	<u>Average</u>
Consumer Discretionary	411	1.59	5.05	466	1.72	5.17
Consumer Staples	77	1.88	5.47	89	1.99	5.53
Energy	110	1.99	5.03	128	2.11	5.19
Financials	632	2.17	6.14	671	2.23	6.38
Health Care	345	1.71	4.78	393	1.73	4.83
Industrials	273	1.70	5.30	322	1.77	5.36
Information Technology	462	1.58	4.15	518	1.66	4.19
Materials	93	2.12	5.57	103	2.10	5.50
Telecommunication Services	38	1.92	4.82	44	1.80	5.13
Utilities	44	2.26	5.69	68	2.21	6.45
Total	2,485	2.00	5.26	2,802	2.07	5.37

Expected Life – Emerging Best Practice



- The most common approach (68/132) is to assume currently outstanding options will be exercised at the midpoint of the future remaining term.
- The “Simplified Approach” as outlined in SAB #107 is also popular. It can be calculated from historical data or, in the absence of historical data, can be calculated using the vesting schedule and the full contractual term.

FAS123(R) Valuation: Expected Volatility

- Framework set by FAS 123R and SAB 107
- Three sources of volatility information:
 - Historical Volatility
 - Implied Volatility
 - Volatility of Comparable Companies

Historical Volatility

- Term-Matching principle – lookback period corresponding to expected term
 - Problematic for companies where history does not reflect expectations going forward
 - Issue for high-tech and biotech companies because of long-term decline in volatilities
- Excluding Data
 - Rare
- Sampling frequency: Daily vs. Weekly?

Implied Volatility

- Based on exchange-traded options
 - Forward looking – what market believes volatility will be in the future
- SAB 107: “*a company with actively traded options ..generally could place greater (or even exclusive) reliance on implied volatility.*”
- SAB 107 requires traded options with terms of at least 6 months (1 year for exclusive reliance)
- What constitutes “*actively traded?*”

Volatility of Comparable Public Companies

- Only avenue for non-public companies
- Also useful for companies with limited history
- Under SAB 107, can't use volatility of an index as proxy
- Two sources for information on each comparable:
 - Stock price and implied volatility data
 - SEC disclosures (but problems with matching grant date and matching expected term)

Open Issues in Volatility Estimation

- Frequency of updates
 - For each grant date or by quarter
- What constitutes “actively traded” and what to do if trading volumes change
- Weighting of blended estimates
- Need better methodology for many small companies without traded options

Expected Volatility – Emerging Best Practice

- Courtesy of FAS123R Data in SEC Filings as Provided by *Salary.com*

	Current Year			Prior Year		
	<u>Total Companies</u>	<u>Standard Deviation</u>	<u>Average</u>	<u>Total Companies</u>	<u>Standard Deviation</u>	<u>Average</u>
Consumer Discretionary	411	17.74%	43.54%	466	20.21%	47.42%
Consumer Staples	77	18.33%	37.78%	89	20.83%	39.81%
Energy	110	16.51%	43.64%	128	19.75%	45.51%
Financials	632	12.10%	27.47%	671	14.05%	28.32%
Health Care	345	23.25%	56.53%	393	26.52%	61.64%
Industrials	273	23.23%	43.10%	322	32.10%	46.15%
Information Technology	462	21.66%	60.83%	518	26.76%	71.25%
Materials	93	15.26%	37.76%	103	15.73%	39.42%
Telecommunication Services	38	32.26%	57.50%	44	33.90%	62.33%
Utilities	44	16.84%	27.81%	68	16.37%	30.69%
Total	2,485	22.67%	43.61%	2,802	27.53%	47.80%

Note: We believe the reduction in volatility is due to current market conditions and a refinement of assumption selection

Expected Volatility – Emerging Best Practice

Of Non-Blended Volatility Selections	
Type of Volatility	Count
Forward Looking Volatility - Implied Volatility	1
Short Term Historical (less than Expected Life)	0
Mid Term Historical (commensurate with Expected Life)	6
Long-Term Historical (longer than Expected Life)	5
Peers	2
Total Surveyed Companies	14

- Only a handful of companies surveyed, 14 out of 122, rely on one volatility estimate
- The most common of the non-blended techniques include reliance on historical volatility for periods greater than or equal to the expected life

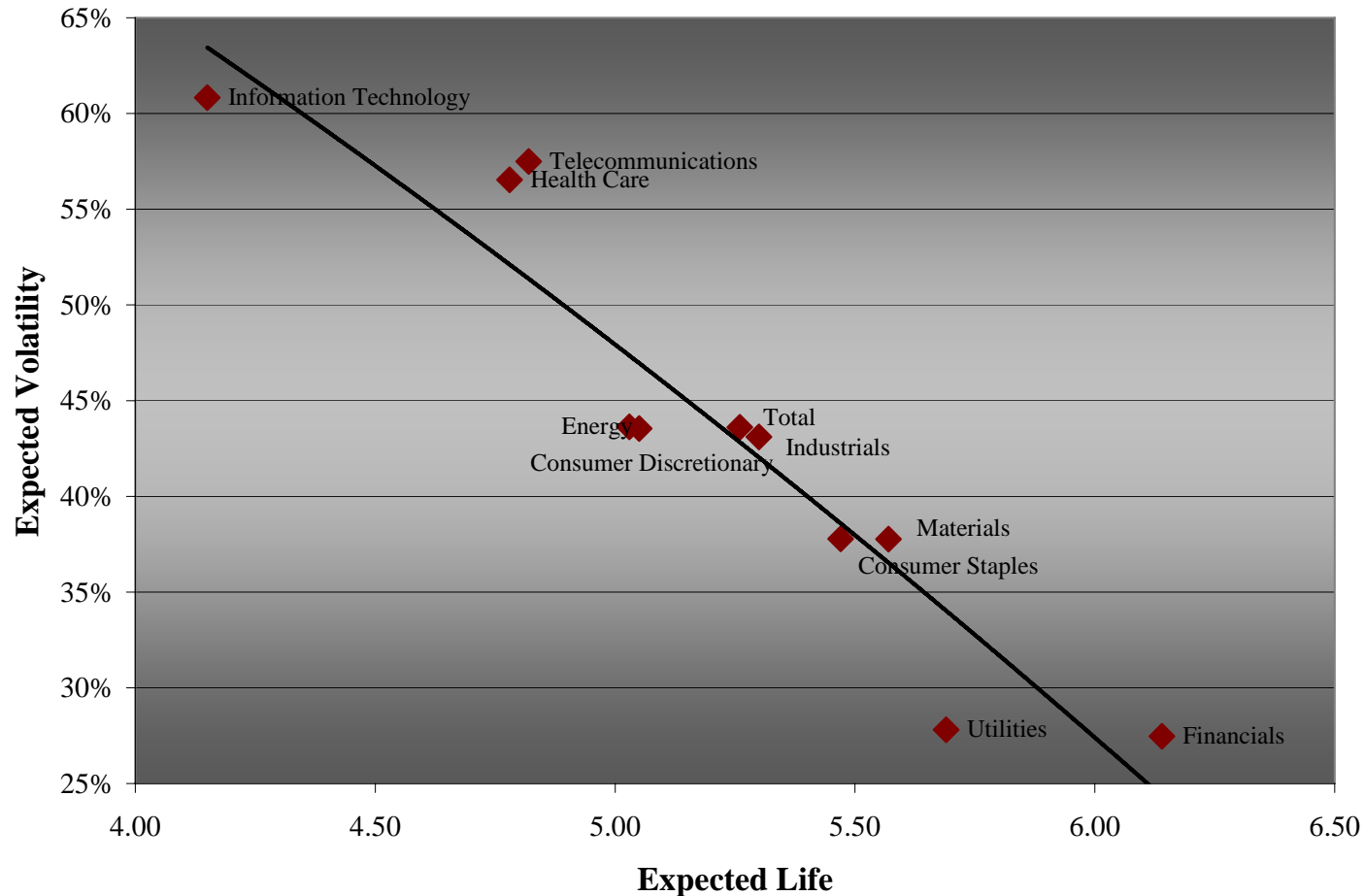
Expected Volatility – Emerging Best Practice

Blended Selections	Count	% of Blended	Of those applying a weight			
			25%	Average	Median	75%
Forward Looking Volatility - Implied Volatility	92	77%	10.83%	33.07%	33.33%	50.00%
Short Term Historical (less than Expected Life)	40	33%	17.55%	21.74%	20.08%	24.71%
Mid Term Historical (commensurate with Expected Life)	68	57%	38.73%	53.51%	50.00%	52.50%
Long-Term Historical (longer than Expected Life)	83	69%	36.73%	54.54%	50.00%	71.91%
Peers (Either Implied or Historical in some way)	21	18%	34.91%	62.42%	50.00%	100.00%

- The majority of companies, 120 out of 134, blend multiple volatility estimates
- The most popular blend combines mid to long-term historical with forward looking implied volatilities
- Weighted blends may offer the best balance

Setting Assumptions: The Efficient Frontier

- Courtesy of FAS123R Data in SEC Filings as Provided by *Salary.com*



Valuations After Grant Date

Mark-to-market valuations and projections are necessary for:

- Modifications of Awards
- Liability Awards with Variable Accounting
- Forecasting Cashflows
- Mid-term Analysis of Market and Performance Conditions

Modifications and Exchanges

- Modification of Unvested and Vested Options
- Downward and Upward Repricings
- Cash Settling Options
- Equity Restructurings (e.g. acquisitions and spin-offs)
- Modifications of Vesting Conditions (e.g. accelerations or changing a performance condition)
 - Probable-to-Probable Modifications (Type I)
 - Probable-to-Improbable Modifications (Type II)
 - Improbable-to-Probable Modifications (Type III)
 - Improbable-to-Improbable Modifications (Type IV)
- Modifications That Change an Award's Classification including:
 - Equity-to-Liability Modification
 - Equity-to-Equity Modification (e.g. exchange of options for restricted stock)
 - Liability-to-Equity Modification
 - Liability-to-Liability Modification

Modifications and Exchanges

- Modification after grant: The company in essence buys back original award and issues modified (“new”) award
- Incremental compensation cost accrues if the fair value of the modified award exceeds the fair value of the original award as of the modification date.
- Therefore, as of the modification date, the original award is marked-to-market (the pre-modification value) and the modified award is marked-to-market (the post-modification value). If the fair value increases, then a compensation cost is recognized.
- Fair value must be considered in aggregate as the modification may affect the number of shares or share options that vest.

Modifications and Exchanges

Factors in Determining Fair Value after the Grant Date:

- Stock Price and Grant Price (“Moneyness”)
- Remaining Term
- Volatility (and correlations for relative market-based awards)
- Dividends and Interest Rates
- Vesting Conditions

Option Fair Value and Expected Term as Function of Moneyness and Remaining Term

Strike Price as % of Stock Price	Years to Expiration					All Expirations
	0 - 2	2 - 4	4 - 6	6 - 8	8+	
0-75%	\$16.62 0.64	\$14.22 1.25	- -	- -	- -	\$16.58 0.65
75-90%	\$7.09 0.30	\$8.03 1.52	- -	- -	- -	\$8.03 1.52
90-110%	\$1.51 0.36	\$6.72 1.92	- -	\$7.21 3.77	\$8.08 3.82	\$7.44 3.43
110-150%	\$0.86 0.74	\$3.48 2.23	\$3.62 2.88	\$5.12 3.19	\$5.75 3.47	\$4.66 2.93
150% +	\$0.03 0.70	\$0.77 1.93	\$1.82 3.14	\$3.05 3.66	- -	\$1.47 2.79
All %	\$6.85 0.67	\$5.62 1.84	\$2.03 3.10	\$5.60 3.33	\$6.52 3.59	\$4.67 2.60

Modeling an Option Exchange

Exchange Date	6/30/07
Total Common Shares	22,634,429
Issued Options	3,627,895
Current Overhang	16.0%

Exclude: Directors	<input type="checkbox"/>
Exclude: CEO	<input type="checkbox"/>
Exclude: Officers	<input type="checkbox"/>

Exchange for New Full Value Stock (or RSUs)

Tier	Greater Than or Equal to...		Less Than or Equal to...	Shares Outstanding	Wtd. Avg. Remaining Life	Wtd. Avg. B-S Value Per Share	Value of New Stock	Cost Neutral Rate
1	\$15.00	to	\$24.99	900,928	5.8	\$5.31	\$10.28	1.94 to 1
2	\$25.00	to	\$34.99	1,198,140	6.5	\$4.88	\$10.28	2.11 to 1
3	\$35.00		And Up	354,143	6.8	\$4.24	\$10.28	2.43 to 1
Total:				2,453,210				

Tier	Manual Override Rate	New Value as a % of Tendered	New Shares	Estimated Incremental FAS 123(R) Cost	Partic. Rate (100% if blank)	Partic. Adjusted Shares Tendered	Partic. Adjusted New Shares	Partic. Adjusted Estimated Incremental FAS 123(R) Cost
1	2.00 to 1	97%	450,464	\$100,676	50%	450,464	225,232	\$50,338
2	2.00 to 1	105%	599,070	\$391,538	75%	898,605	449,302	\$293,653
3	3.50 to 1	69%	101,184	\$0	85%	301,021	86,006	\$0
			1,150,717	\$492,214		1,650,090	760,540	\$343,991
Net Shares Recaptured:			1,302,493				889,549	

Some Comments on Valuations after the Grant Date

- Measuring voluntary option exercise behavior after the grant date is best achieved with Monte Carlo or Lattice technology.
- When possible, companies should perform preliminary analysis before modifying
- The “delta” is what counts
- Terminated employees cannot be terminated again
- Inducements can be offset by changes in fair value

Option Mark-To-Market by Optionee for HR

Optionee	Analysis Date	Options Granted	Options Outstanding	Options Exercised	Gains From Exercise	Value of Outstanding Options	
						Scenario 1	Scenario 2
00001943	4/1/2004	135,133	135,133	-	-	\$1,504,917.88	\$1,627,512.36
	4/2/2005	148,798	136,746	12,052	\$233,447.91	\$1,737,489.19	\$1,953,462.94
	4/1/2006	159,046	86,261	72,786	\$1,711,853.38	\$1,509,212.75	\$1,694,729.08
	6/15/2007	159,046	86,261	72,786	\$1,711,853.38	\$671,192.17	\$796,135.29
00001955	4/1/2004	198,144	198,144	-	-	\$2,396,409.73	\$2,701,800.09
	4/2/2005	243,694	243,694	-	-	\$3,296,979.88	\$3,987,508.44
	4/1/2006	271,024	240,562	30,462	\$865,935.10	\$3,927,841.97	\$4,618,470.75
	6/15/2007	271,024	236,580	34,444	\$911,087.61	\$1,689,099.24	\$2,136,784.31
00007864	4/1/2004	110,080	110,080	-	-	\$1,347,936.53	\$1,560,901.48
	4/2/2005	116,153	116,153	-	-	\$1,635,018.37	\$2,000,494.11
	4/1/2006	116,153	29,998	86,155	\$1,453,883.69	\$662,858.07	\$711,974.55
	6/15/2007	116,153	17,234	98,919	\$1,623,029.26	\$164,878.80	\$198,080.61
00007881	4/1/2004	-	-	-	-	-	-
	4/2/2005	89,582	89,582	-	-	\$1,257,093.78	\$1,496,017.52
	4/1/2006	99,831	99,831	-	-	\$1,614,648.50	\$1,950,256.93
	6/15/2007	99,831	99,831	-	-	\$687,510.22	\$941,839.00
00009623	4/1/2004	151,075	151,075	-	-	\$1,792,494.56	\$2,094,000.22
	4/2/2005	164,740	144,492	20,249	\$314,063.62	\$1,897,366.71	\$2,392,750.97
	4/1/2006	174,989	92,919	82,070	\$1,383,609.99	\$1,653,390.58	\$1,893,440.67
	6/15/2007	174,989	78,343	96,646	\$1,591,902.37	\$640,635.19	\$790,785.36

Appendix A: Binomial Companies

For Filings Through
May 31, 2007

1995 Fiscal Year

BNL Financial Corp.
Boeing Corp.
Cincinnati Financial Corp.
Covanta Energy Corp.
CRT Properties Inc.
Enterprise Bancorp Inc.
First Keystone Corp.
Harsco Corp.
Hawaiian Electric Co. Inc.
Mocon Inc.
MultiColor Corp.
Pulitzer Inc.
Reptron Electronics Inc.
Sandy Spring Bancorp Inc.
Schiff Nutrition International, Inc.
SRI Surgical Express Inc.
Trans Lux Corp.
Vornado Realty Trust

1996 Fiscal Year

Applica Inc.
Ferrellgas Partners LLP

1998 Fiscal Year

Brightstar Information Technology Group
Harbor Florida Bancshares

1999 Fiscal Year

Bank of Commerce Holdings
ISPAT Inland Inc.
Washington Mutual, Inc.

2000 Fiscal Year

Cedar Fair LP
Diamond Offshore Drilling
Idacorp Inc.
MeadwestVaco Corp.
Sonoco Products

2001 Fiscal Year

Dreams Inc.
Mexco Energy Corp.

2002 Fiscal Year

First Keystone Financial Inc.
Harris Preferred Capital
Newcastle Investment Corp.
Pacific Capital Bancorp
UIL Holdings Corp

2003 Fiscal Year

American International Group Inc.
Anheuser-Busch Companies Inc.
Brooke Corp
Citigroup, Inc
Global Preferred Holdings
IMAX Corp
Maguire Properties Inc.
Marlin Business Services
Prudential Financial Inc.
UnitedHealth Group
Vornado Realty LP
WestCorp
Worldspan L P

2004 Fiscal Year

1st Centennial Bancorp
Acadia Realty Trust
Alliance Data Systems
American Home Mortgage Investment Corp.
Becton Dickinson and Co.
Bucyrus International Corp.
Caterpillar Inc.
Charles Schwab Corp
Cheesecake Factory Incorporated
Choicepoint Inc.
CitiCorp
DeVry, Inc.
Digene Corp.
E W Scripps
Fedders Corp
Fiserv Inc.
General Growth Properties
Hartford Financial Services Group, Inc.
Hartford Life Inc.
Hartford Life Insurance Co.
Hillenbrand Industries
Illinois Tool Works Inc.
Integra Lifesciences Holdings
ITT Corporation
Kellogg Co.
Laclede Gas Co
McCormick & Co. Inc.
Metro-Goldwyn-Mayer Inc.
MGIC Investment Corp.
New York Mortgage Trust Inc.
Origen Financial Inc.
Private Bancorp Inc.

2004 Fiscal Year

Rainier Pacific Financial Group, Inc.
Rockwell Collins Inc.
Scotts Miracle Grow
SFBC International, Inc.
Specialty Underwriters Alliance, Inc.
Sun Communities Inc.
Telesource International Inc.
The Travelers Companies, Inc.
United Bankshares
Viskase Companies Inc.
Western Digital Corp

2005 Fiscal Year

Abington Community Bancorp
Actuant Corp
Advanced Cell Technology, Inc.
Aethlon Medical Inc.
Alcoa Inc.
Allstate Corp
Ameren Corporation
American Physician Capital Inc.
AmerisourceBergren Corp
Atlantic Tele Network Inc.
Atlas America Inc.
Automatic Data Processing Inc.
Avaya Inc.
Bancwest Corp
Bank of New York Co., Inc.
Battle Mountain Gold Exploration Corp.
Bioanalytical Systems Inc.
Biosite Inc.
BJ Services Co.

Note: Companies in bold font are in the S&P 500

Appendix A: Binomial Companies

For Filings Through
May 31, 2007

2005 Fiscal Year (cont.)

Brand Intermediate Holdings, Inc.
Brown Shoe Co.
Calavo Growers Inc.
Cardinal Health Inc.
Cardiogenesis Corp.
Catcher Holdings, Inc.
CBeyond Communication Inc.
CBOT Holdings Inc
CBRL Group Inc.
CDW Corp
Central Illinois Light Co.
Central Illinois Public Service Co.
Central Vermont Public Service Corp.
CilCorp Inc.
Coast Distribution System Inc.
Cognos Inc.
Comerica Inc.
Commercial Federal Group
Cooper Companies Inc.
Crescent Real Estate Equities Co.
Crown Media Holdings Inc.
Cytec Industries
Dana Corp
Danka Business Systems
Datascension Inc.
Doral Financial Corp
Dow Chemical Co.
Ecolab Inc.
Energy Exploration Technologies Inc.
EOG Resources Inc.
Equifax Inc.
Equity One Inc.

2005 Fiscal Year (cont.)

Factset Research Systems
Genesis Healthcare Corp
Goldman Sachs Group Inc.
Guitar Center Inc.
Hampton Roads Bancshares
Hawaiian Electric Industries Inc.
Healthextras Inc.
Healthways, Inc.
Hercules Offshore, Inc.
Hiland Partners LP
Hologic Inc.
Idaho Power Co.
Illinois Power Co.
International Securities Exchange
Intersil Corp.
Ivillage Inc.
J C Penney Co. Inc.
Jack in the Box, Inc.
Keynote Systems Inc.
Keyspan Corp.
Knoll Inc.
Laclede Group Inc.
Liberty Global Inc.
Lilly Eli & Co.
Liz Claiborne Inc.
LTX Corp
Marriott International Inc.
Matthews International Corp
McGraw-Hill Companies Inc.
Medimmune Inc.
Metlife Inc.
Middleby Group

2005 Fiscal Year (cont.)

Myers Industries
National Fuel Gas Co
National Medical Health Card Systems
National Retail Properties Inc.
NVIDIA Corp.
Oakley Inc
ON Semiconductor Corp.
Orbit International Corp
Pemco Aviation Group Inc.
Pinnacle Foods Group Inc
PMC Sierra Inc.
Precision Auto Care Inc.
Procter & Gamble Co.
ProxyMed Inc.
QualComm Inc.
RCN Corp
Sabre Holdings Corp.
SafeTek International Inc
Scientigo, Inc.
Searchlight Minerals Corp
SGS International, Inc.
Siricom Inc.
Sivault Systems, Inc.
Smith International Inc.
Socket Communications Inc.
Spark Network PLC
Staples Inc.
Starwood Hotel & Resorts Worldwide Inc.
SVB Financial Group
Sybron Dental Specialties Inc.
Systems Evolution, Inc
Teledyne Technologies

2005 Fiscal Year (cont.)

Tenet Healthcare Corp.
Tidelands Bancshares Inc.
Toll Brothers Inc.
Transatlantic Holdings Inc.
Trimble Navigation Ltd.
Tyson Foods Inc.
U S Physical Therapy Inc.
Union Electric Co.
United Technologies Corp
Valley National Bancorp
Valmont Industries Inc.
Warner Music Group
WCI Communities Inc
WellPoint Inc.
Westbank Corp
Westfield Financial Inc
Williams Scotsman International Inc.
Wisconsin Energy Corp
WMG Acquisition Corp
Zebra Technologies

Note: Companies in bold font are in the S&P 500

Appendix A: Binomial Companies

For Filings Through
May 31, 2007

2006 Fiscal Year

ACCESS PLANS USA, INC.
Acunetx, Inc.
Advanced Micro Devices Inc.
ADVO Inc.
Alcan Inc.
Alliance Fiber Optic Products Inc.
AMERIANA BANCORP
Aon Corporation
Applebee's International, Inc
Argon St, Inc.
Autobytel, Inc.
Bank of America Corp.
Berry Plastics Holding Corp
Best Buy Co Inc.
Big Lots Inc.
Bioscrip, Inc.
BNL FINANCIAL CORP
Boston Beer Co. Inc.
Bovie Medical Corp
Brand Energy & Infrastructure Services, Inc.
Bristol-Myers Squibb Company
Broadridge Financial Solutions, Inc.
Business Objects S.A.
Cabot Oil & Gas Corp.
CapitalSource, Inc.
Central European Distribution Corp
Cerner Corp.
Chattem Inc.
Chordiant Software Inc.
Cognex Corp.
Colony Resorts Acquisitions
Communtiy Bankers Acquisition Corp.

2006 Fiscal Year (cont.)

Corning Inc.
Corporate Executive Board Co.
Countrywide Financial Corp
Covance Inc.
CR Bard Inc.
CRC Health Corp
Crystal River Capital, Inc.
Cullen Frost Bankers Inc
Curis Inc.
D&E Communications Inc.
Davey Tree Expert Co.
Deere & Co.
Deltic Timber Corp.
Digital Music Group, Inc.
DSP Group Inc.
Federal Mogul Corp.
First Advantage Corp.
First American Corp.
Gabriel Technologies Corporation
Glenborough Realty Trust Inc.
GLOBAL REALTY DEVELOPMENT CORP
Grainger W W Inc.
Graphon Corp.
GTECH Holdings Corp.
Harland John H Co
Harleysville Savings Financial Corp.
HealthMarkets, Inc.
Hiland Holdings GP, LP
HSBC Finance Corp.
HSBC USA Inc.
ICAD Inc
IDEX Corp.

2006 Fiscal Year (cont.)

Imperial Sugar Co
Indymac Bancorp Inc.
Innova Holdings
Intergrys Energy Group, Inc.
International Flavors & Fragrances Inc.
Intuit Inc
ITT Educations Services
Jabil Circuit Inc.
JetBlue Airways Corp.
JohnsonDiversey Inc
Kerr McGee Corp.
Kforce Inc
Kitty Hawk Inc.
Kyphon Inc.
Legend International Holdings Inc
Lifepoint Hospitals, Inc.
Lincoln Bancorp /IN/
LSI Logic Corp.
Makemusic Inc.
Mannatech Inc.
Marshall & Ilsley Corp.
Martin Marietta Materials Inc.
McAfee, Inc.
MCF Corp.
Media General Inc.
Medialink Worldwide Inc.
Monroe Bancorp
Monsanto Co.
Municipal Mortgage & Equity LLC
Nashua Corp.
National Mercantile Bancorp
Navteq Corp.

2006 Fiscal Year (cont.)

NB&T Financial Group Inc
Net 1 UEPS Technologies Inc.
New Century Financial Corp.
Newpage Corp.
Newpage Holding Corp
Nordstrom Inc
Northwest Natural Gas Co.
Novell Inc.
Old Second Bancorp Inc.
OmniComm Systems Inc.
Opinion Research Corp.
OUTDOOR CHANNEL HOLDINGS INC
Payless Shoesource Inc
Petsmart Inc
Playboy Enterprises Inc.
Possis Medical Inc.
Precis Inc.
Raytheon Company
Regis Corp.
Rent-A-Center Inc.
Replidyne Inc
Republic Services Inc.
River Valley Bancorp
Rurban Financial Corp
Sealy Corp
SENETEK PLC /ENG/
Serologicals Corp
Shoe Pavilion Inc
Smurfit Stone Container Corp.
Sonic Foundry Inc.
Standard Drilling, Inc.
Standard Pacific Corp

Note: Companies in bold font are in the S&P 500

Appendix A: Binomial Companies

For Filings Through
May 31, 2007

2006 Fiscal Year (cont.)

Stein Mart Inc
Strategic Hotels & Resorts, Inc
Tech Data Corp
Thomas Group Inc.
Toys R US Inc
TRANS-INDIA ACQUISITION CORP
U S Gold Corp
United Western Bancorp, Inc.

V F Corp.

Viacom, Inc.
Vital Signs Inc
Vyteris Holdings (Nevada), Inc.
VYYO Inc.
Wabash National Corp

Walt Disney Co.

Wausau Paper Corp.
W-H Energy Services Inc.
Wisconsin Electric Power Co
Wisconsin Public Service Corp.
WPS Resources Corp.

XTO Energy Inc.

2007 Fiscal Year

Axiom Corp
American Oil & Gas, Inc
CarMax, Inc.
Danka Business Systems PLC
Eastern Insurance Holdings, Inc
Firearms Training Systems Inc.
First Investors Financial Services Group, Inc.
Golden Resources Corp
Innova Robotics & Automation, Inc
Insituform Technologies Inc.

2007 Fiscal Year (cont.)

Kelly Services Inc.
Marshall Edwards Inc
Middle Kingdom Alliance Corp
Shanghai Century Acquisition Corp
Techprecision Corp

Note: Companies in bold font are in the S&P 500