

How To Use LEAPS

To Determine A Discount for Lack of Marketability

by

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An article in the Spring 2008 issue of Business Valuation Review entitled “Minimum Marketability Discounts – 3rd Edition” described research on LEAPS (Long-term Equity Anticipation Securities), which are publicly traded, long-term options on stocks of public companies. A long-term put option eliminates the risk of loss in value of a stock during a holding period of from 18 months to 30 months. The risk of loss in value over time clearly is a component of the “ability to sell” an interest, and is a significant portion of the discount for lack of liquidity. Thus, the cost of eliminating the risk (the cost of the LEAPS), expressed as a percent of the stock price, is a significant portion of the discount for lack of liquidity. Research shows that the cost of a put option varies with company size and risk, and that for companies under \$1 billion in sales revenues costs (or discounts) are commonly from 20% to 33%.¹

So, how can we business valuation practitioners use LEAPS? In general, LEAPS can be used in many of the same ways as the restricted stock studies, except there are more than 1200 LEAPS versus 500 or so restricted stock transactions. In addition to being industry specific and company specific, LEAPS are valuation date specific.

In many valuations we determine a “base” or a “benchmark” from which to increase or decrease the DLOM to arrive at a conclusion. The Tax Court, in its Mandelbaum² decision,

¹ Seaman, Ronald M., “Minimum Marketability Discounts – 3rd Edition,” www.sbgbusinessvaluation.com.

² Bernard Mandelbaum, et al. v. Commissioner, T.C. Memo 1995-255, p. 24.

said "...we use these figures (from 35% to 45%) as benchmarks of the marketability discount for the shares at hand." In the Jelke³ case, the Court repeatedly used descriptions such as "... (this factor) should also favor a lower-than-average discount." In both cases, the Court had an implicit benchmark although in neither case was that benchmark defined or substantiated. LEAPS can provide a provable benchmark.

The Assignment

To illustrate how this can be done, let us use an example from an actual appraisal done in 2007, with the facts modified and updated to the present. The client was a small regional stock brokerage company with 2007 revenues of \$9,800,000. It had been continuously profitable for many years and had no debt. The company had been in business for over 20 years and had 52 employees of whom 24 were brokers. The interest to be valued was 3.0% of the common stock. There were 32 total shareholders, none of whom had a controlling interest. The subject company was growing at about the same rate as the industry and had paid modest cash distributions. The valuation date is February 15, 2008.

Step 1: Define Guideline Public Companies

The first step is to define the industry and obtain a list of public companies in that industry, using SIC or NAICS codes or the website Yahoo Finance. Define the industry as finely as possible. For example, with this assignment in Yahoo Finance, we went from "Finance Search," to "Stocks By Industry," to the "Finance" industry, to "Investment Brokerage –

³ Estate of Frazier Jelke, III v. Commissioner, T.C. Memo 2005-131, p.40.

National,” and finally to ”Investment Brokerage – Regional.” This search listed 30 companies in “Investment Brokerage – Regional” and 25 companies in “Investment Brokerage – National.” While at these sites, it is helpful to download to a spreadsheet the financial data of the companies provided there.

Step 2: Determine Which Companies Have LEAPS

This can be done easily by accessing the alphabetical listing of LEAPS at the website of the Chicago Board of Exchange, <http://www.cboe.com/TradTool/Symbols/SymbolDirectory.aspx>. On the page titled “Symbol Directory – Equity Options,” click on “LEAPS.” There you will find an alphabetical list of all LEAPS available by company name. For our assignment, there are ten “national” brokerage companies and three “regional” brokerage companies that have LEAPS. On the Yahoo financial spreadsheet you downloaded earlier, delete those companies that do not have LEAPS. The result is shown in Exhibit I on the following page.

Step 3: Order LEAPS Prices For Your Valuation Date

The Chicago Board of Exchange website, www.marketdataexpress.com, provides historical options data for each day on which the stock exchanges are open. Order by stock symbol and date. The cost (as of February 2008) is \$3.00 per stock symbol per day. You will receive a print out like the one in Exhibit II showing all options available for each symbol on your valuation date. The options information you will need is highlighted. You can get a chart that interprets the column-heading abbreviations at www.marketdataexpress.com.

Exhibit I

Step 2: Brokerage Firms With LEAPS

<u>Description</u>	<u>Symbol</u>	<u>Market Cap (\$)</u>	<u>P/E</u>	<u>ROE %</u>	<u>Div. Yield %</u>	<u>Debt To Equity</u>	<u>Price to Book</u>	<u>Net Profit Margin</u>	<u>Price To Free C.F.</u>
Investment Brokerage - National		260.34B	29.0	9.4	1.6	12.0	2.4	4.4	-1.4
Investment Brokerage - Regional		51.16B	23.2	9.8	1.7	0.7	9.1	11.7	-76.7
Charles Schwab Corp.	SHQ	22.07B	9.7	25.6	1.1	0.2	5.9	22.9	NA
E*TRADE Financial Corporation	ETFC	1.73B	NA	-41.0	NA	6.9	0.6	NA	NA
Goldman Sachs Group Inc.	GS	63.37B	6.5	29.5	0.9	10.2	1.6	29.9	NA
Lehman Brothers Holdings Inc.	LEH	24.60B	6.4	20.1	1.5	18.2	1.2	20.2	NA
Merrill Lynch & Co., Inc.	MER	43.90B	NA	-24.3	3.1	18.2	1.5	NA	NA
Morgan Stanley	MS	44.03B	13.4	7.7	2.7	16.8	1.4	NA	NA
optionsXpress Holdings, Inc.	OXPS	1.31B	13.4	42.6	1.5	NA	4.7	40.7	NA
SEI Investments Co.	SEIC	4.69B	18.8	37.5	0.6	0.1	6.2	15.2	39.1
TD AMERITRADE Holding Corp.	AMTD	10.03B	13.8	35.8	0.0	0.6	4.2	39.1	NA
The Bear Stearns Companies	BSC	9.54B	46.0	1.9	1.8	19.5	0.8	NA	NA
Friedman Billings Ramsey Group	FBR	288.6M	NA	-84.4	10.2	5.4	0.7	NA	NA
Knight Capital Group Inc.	NITE	1.54B	13.4	13.4	NA	0.1	1.7	19.3	NA
Legg Mason Inc.	LM	8.52B	13.1	10.4	1.5	0.2	1.2	13.0	-21.5

Exhibit II
Step 3

TRADE_DT	UNDLY	CLS	EXPR_DT	STRK_PRC	PC	OIT	VOL	HIGH	LOW	OPEN	LAST	L_BID	L_ASK	UNDL_PRC	S_TYPE	P_TYPE
20080215	NITE	OTI	20090117	10	C	420	0	0	0	0	0	7.5	7.9	16.88	Leap	Equity
20080215	NITE	OTI	20090117	10	P	86	0	0	0	0	0	0.5	0.65	16.88	Leap	Equity
20080215	NITE	OTI	20090117	12.5	C	479	0	0	0	0	0	5.6	5.9	16.88	Leap	Equity
20080215	NITE	OTI	20090117	12.5	P	253	0	0	0	0	0	1.1	1.25	16.88	Leap	Equity
20080215	NITE	OTI	20090117	15	C	350	0	0	0	0	0	4	4.3	16.88	Leap	Equity
20080215	NITE	OTI	20090117	15	P	435	0	0	0	0	0	1.9	2.05	16.88	Leap	Equity
20080215	NITE	OTI	20090117	17.5	C	5877	0	0	0	0	0	2.7	2.95	16.88	Leap	Equity
20080215	NITE	OTI	20090117	17.5	P	398	0	0	0	0	0	3	3.2	16.88	Leap	Equity
20080215	NITE	OTI	20090117	20	C	1689	0	0	0	0	0	1.7	1.95	16.88	Leap	Equity
20080215	NITE	OTI	20090117	20	P	87	0	0	0	0	0	4.5	4.7	16.88	Leap	Equity
20080215	NITE	OTI	20090117	22.5	C	419	0	0	0	0	0	1	1.15	16.88	Leap	Equity
20080215	NITE	OTI	20090117	22.5	P	30	0	0	0	0	0	6.2	6.5	16.88	Leap	Equity
20080215	NITE	OTI	20090117	25	C	402	0	0	0	0	0	0.55	0.75	16.88	Leap	Equity
20080215	NITE	OTI	20090117	25	P	0	0	0	0	0	0	8.3	8.6	16.88	Leap	Equity
20080215	NITE	OTI	20090117	30	C	61	0	0	0	0	0	0.1	0.25	16.88	Leap	Equity
20080215	NITE	OTI	20090117	30	P	0	0	0	0	0	0	13	13.6	16.88	Leap	Equity
20080215	NITE	OTI	20090117	5	C	1	0	0	0	0	0	11.9	12.2	16.88	Leap	Equity
20080215	NITE	OTI	20090117	5	P	0	0	0	0	0	0	0	0.15	16.88	Leap	Equity
20080215	NITE	OTI	20090117	7.5	C	33	0	0	0	0	0	9.6	10	16.88	Leap	Equity
20080215	NITE	OTI	20090117	7.5	P	55	0	0	0	0	0	0.15	0.3	16.88	Leap	Equity
20080215	NITE	QTN	20080419	10	C	160	0	0	0	0	0	6.9	7.1	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	10	P	176	0	0	0	0	0	0	0.1	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	12.5	C	1987	0	0	0	0	0	4.6	4.8	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	12.5	P	2467	0.0005	0	0	0	0	0.15	0.3	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	15	C	983	0	0	0	0	0	2.6	2.75	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	15	P	708	0	0	0	0	0	0.65	0.75	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	17.5	C	923	0	0	0	0	0	1.15	1.25	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	17.5	P	395	2	1.8	1.8	1.8	1.8	1.65	1.8	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	20	C	332	0	0	0	0	0	0.35	0.45	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	20	P	234	0	0	0	0	0	3.3	3.6	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	22.5	C	113	0	0	0	0	0	0.05	0.15	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	22.5	P	0	0	0	0	0	0	5.5	5.8	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	7.5	C	64	0	0	0	0	0	9.3	9.6	16.88	Leap non-	Equity
20080215	NITE	QTN	20080419	7.5	P	42	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	10	C	41	0	0	0	0	0	6.8	7	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	10	P	10	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	12.5	C	172	0	0	0	0	0	4.3	4.5	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	12.5	P	298	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	15	C	990	10	1.9	1.9	1.9	1.9	1.8	2	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	15	P	668	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	17.5	C	1293	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	17.5	P	300	0	0	0	0	0	0.5	0.65	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	20	C	200	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	20	P	0	0	0	0	0	0	3	3.2	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	7.5	C	1	0	0	0	0	0	9.3	9.5	16.88	Leap non-	Equity
20080215	NITE	QTN	20080216	7.5	P	0	0	0	0	0	0	0	0.05	16.88	Leap non-	Equity
20080215	NITE	QTN	20080719	10	C	0	0	0	0	0	0	7.1	7.3	16.88	Leap non-	Equity
20080215	NITE	QTN	20080719	10	P	27	0	0	0	0	0	0.15	0.3	16.88	non-	Equity

														Leap		
20080215	NITE	QTN	20080719	12.5	C	67	0	0	0	0	0	5	5.3	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	12.5	P	230	0	0	0	0	0	0.55	0.7	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	15	C	2902	9	3.3	3.3	3.3	3.3	3.3	3.5	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	15	P	2334	0	0	0	0	0	1.35	1.4	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	17.5	C	491	1	1.9	1.9	1.9	1.9	1.95	2.05	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	17.5	P	167	5	2.45	2.45	2.45	2.45	2.35	2.5	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	20	C	138	0	0	0	0	0	1	1.1	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	20	P	0	0	0	0	0	0	3.9	4.1	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	22.5	C	66	0	0	0	0	0	0.45	0.55	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	22.5	P	0	0	0	0	0	0	5.8	6	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	7.5	C	0	0	0	0	0	0	9.3	9.7	16.88	non-Leap	Equity
20080215	NITE	QTN	20080719	7.5	P	20	0	0	0	0	0	0	0.1	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	10	C	0	0	0	0	0	0	6.8	7	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	10	P	0	0	0	0	0	0	0	0.05	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	12.5	C	1	0	0	0	0	0	4.4	4.6	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	12.5	P	1548	0	0	0	0	0	0.05	0.15	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	15	C	424	0	0	0	0	0	2.25	2.4	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	15	P	1581	0	0	0	0	0	0.35	0.45	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	17.5	C	893	23	0.9	0.6	0.9	0.6	0.7	0.8	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	17.5	P	339	0	0	0	0	0	1.25	1.35	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	20	C	588	0	0	0	0	0	0.1	0.2	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	20	P	1000	0	0	0	0	0	3.1	3.3	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	7.5	C	0	0	0	0	0	0	9.2	9.5	16.88	non-Leap	Equity
20080215	NITE	QTN	20080321	7.5	P	0	0	0	0	0	0	0	0.05	16.88	non-Leap	Equity
20080215	NITE	YTI	20100116	10	C	546	0	0	0	0	0	7.8	8.7	16.88	Leap	Equity
20080215	NITE	YTI	20100116	10	P	125	0	0	0	0	0	0.9	1.35	16.88	Leap	Equity
20080215	NITE	YTI	20100116	12.5	C	18	0	0	0	0	0	6.1	7	16.88	Leap	Equity
20080215	NITE	YTI	20100116	12.5	P	16	0	0	0	0	0	1.55	2.05	16.88	Leap	Equity
20080215	NITE	YTI	20100116	15	C	106	0	0	0	0	0	5	5.5	16.88	Leap	Equity
20080215	NITE	YTI	20100116	15	P	219	0	0	0	0	0	2.45	3	16.88	Leap	Equity
20080215	NITE	YTI	20100116	17.5	C	33	0	0	0	0	0	3.5	4.2	16.88	Leap	Equity
20080215	NITE	YTI	20100116	17.5	P	34	0	0	0	0	0	3.6	4.4	16.88	Leap	Equity
20080215	NITE	YTI	20100116	20	C	65	0	0	0	0	0	2.65	3.4	16.88	Leap	Equity
20080215	NITE	YTI	20100116	20	P	0	0	0	0	0	0	5.2	6	16.88	Leap	Equity
20080215	NITE	YTI	20100116	22.5	C	111	0	0	0	0	0	1.85	2.6	16.88	Leap	Equity
20080215	NITE	YTI	20100116	22.5	P	20	0	0	0	0	0	6.9	7.7	16.88	Leap	Equity
20080215	NITE	YTI	20100116	25	C	45	0	0	0	0	0	1.5	2	16.88	Leap	Equity
20080215	NITE	YTI	20100116	25	P	0	0	0	0	0	0	8.7	9.6	16.88	Leap	Equity

Step 4: Calculate Costs of Price Protection On Your Valuation Date

Using the options information from Market Data Express, calculate the cost of a put option as a percentage of the stock price on the valuation date in a chart like that on the following page. In our studies of LEAPS we adjusted the option cost if it was more than 1% greater or less than the actual stock price. We called this a “Distance Weighted Option Cost.” It is simply the relationship between the actual stock price and the next higher and lower strike prices. For example, a stock trading at \$36.06 per share on your valuation date has put options at \$35.00 at a cost of \$5.10 and at \$40.00 at a cost of \$7.90. The “Distance Weighted Option Cost.” of a put option for \$36.06 is a straight-line percentage increase in the actual option cost difference between \$35.00 and \$40.00. Thus, the stock price, \$36.06, is \$1.06 above the \$35.00 strike price, or 21.2% of the \$5.00 difference in strike prices ($\$1.06 \div \5.00). The difference in put option costs is \$2.80 ($\$7.90 - \5.10). So we add 21.2% of the difference ($\$2.80 \times .212 = \0.59) to the lower option cost (\$5.10) to arrive at a “Distance Weighted Option Cost” of \$5.69. Dividing that by the stock price results in a percentage cost of 15.8% ($\$5.69 \div \36.06).

Exhibit III on the following page shows the discounts on February 15, 2008 for the thirteen brokerage companies that have LEAPS. The expiration date of the 2010 LEAPS, January 16, is about 23 months after our valuation date, February 15, 2008. The January 17 expiration date for 2009 LEAPS is 11 months after our valuation date. Some general observations can be drawn from this data. The cost of LEAPS for even the largest companies in the industry like Goldman Sachs, Morgan Stanley and Merrill Lynch is 20% or more. The cost at the 75th percentile is 25%.

Exhibit III
Step 4
Public Brokerage Companies With LEAPS
Cost of Price Protection, as of Feb. 15, 2008

<u>Description</u>	<u>Symbol</u>	<u>Stock Price</u>	<u>Jan.'09 LEAPS</u>				<u>Jan.'10 LEAPS</u>			
			<u>Strike Price</u>	<u>Cost</u>	<u>Dist. Wghtd. Cost</u>	<u>Discount/ Cost %</u>	<u>Strike Price</u>	<u>Cost</u>	<u>Dist. Wghtd. Cost</u>	<u>Discount/ Cost %</u>
Charles Schwab Corp.	SCHW	\$20.05	\$20.00	\$3.00	Not Applic.	15.0%	\$20.00	\$4.20	Not Applic.	20.9%
E*TRADE Financial Corp.	ETFC	\$5.13	\$5.00	\$1.65			\$5.00	\$2.20		
			\$7.50	\$3.40	\$1.74	33.9%	\$7.50	\$4.00	\$2.29	44.6%
Goldman Sachs Group	GS	\$175.54	\$175.00	\$25.60	Not Applic.	14.6%	\$170.00	\$32.10		
							\$180.00	\$37.10	\$34.87	19.9%
Lehman Brothers Holdings	LEH	\$54.10	\$50.00	\$8.10			\$50.00	\$11.20		
			\$55.00	\$10.40	\$9.99	18.5%	\$60.00	\$16.30	\$13.29	24.6%
Merrill Lynch & Co., Inc.	MER	\$50.90	\$50.00	\$8.40			\$50.00	\$11.40		
			\$55.00	\$11.00	\$8.87	17.4%	\$55.00	\$14.10	\$11.89	23.4%
Morgan Stanley	MS	\$42.36	\$40.00	\$6.00			\$40.00	\$8.20		
			\$45.00	\$8.50	\$7.18	16.9%	\$45.00	\$10.80	\$9.42	22.2%
optionsXpress Holdings	OXPS	\$25.31	\$25.00	\$3.90			\$25.00	\$5.20		
			\$27.50	\$5.40	\$4.08	16.1%	\$27.50	\$6.50	\$5.36	21.2%
SEI Investments Co.	SEIC	\$25.35	\$25.00	\$3.50			\$25.00	\$6.90		
			\$30.00	\$6.80	\$3.73	14.7%	\$30.00	\$9.40	\$7.08	27.9%
TD AMERITRADE Corp.	AMTD	\$18.02	\$17.50	\$2.25			\$15.00	\$2.30		
			\$20.00	\$3.70	\$2.55	14.2%	\$20.00	\$4.70	\$3.74	20.8%
Bear Stearns Co.	BSC	\$82.47	\$80.00	\$12.90			\$80.00	\$16.40		
			\$85.00	\$15.30	\$14.08	17.1%	\$90.00	\$20.90	\$17.53	21.3%
Friedman Billings Ramsey	FBR	\$2.97	\$2.50	\$0.75			\$2.50	\$0.95		
			\$5.00	\$2.40	\$1.06	35.7%	\$5.00	\$2.75	\$1.29	43.4%
Knight Capital Group Inc.	NITE	\$16.88	\$15.00	\$2.05			\$15.00	\$3.00		
			\$17.50	\$3.20	\$2.91	17.2%	\$17.50	\$4.40	\$4.05	24.0%
Legg Mason Inc.	LM	\$69.04	\$60.00	\$5.50			\$60.00	\$8.60		
			\$70.00	\$9.70	\$9.28	13.4%	\$70.00	\$13.00	\$12.56	18.2%
Median						16.9%				22.2%
25th Percentile						14.7%				20.9%
75th Percentile						17.4%				24.6%

Step 5: Analyze The Data To Determine A Reasonable Benchmark Discount

You can analyze the data in the same way you would analyze the data for a publicly traded guideline company. One (of several) ways to do so is to use a chart like Exhibit IV, which utilizes data from the spreadsheet you downloaded from Yahoo Finance. The object of this analysis is to determine a reasonable benchmark range of discounts for your subject company. For example, our earlier research on the entire universe of LEAPS⁴ shows that discounts (or costs of price protection) increase significantly as company size decreases or as risk increases. These characteristics are obvious in the 44.6% discount of E*Trade Financial (ETFC) and the 43.4% discount of Friedman Billings Ramsey (FBR), both of which had financial difficulties in 2007. Yet these companies are hundreds of times larger in revenues or assets than the company we are valuing. The three companies whose operations are most similar to our subject's are Schwab (SCHW) at 20.9% discount, TDAmeritrade (AMTD) at 20.8%, and E*Trade at 44.6%. The five companies with 2007 revenues under \$2 billion have discounts ranging from 21.2% to 44.6%. Considering the very small size of our subject company, it is hard to imagine anyone arguing for a discount for our subject lower than 25%, the 75th percentile of all 13 companies. This sets an important lower limit for our discount conclusion.

Comparing our subject to the public companies, we can see a strength in that the subject has no debt and has a return on equity somewhat better than the average "Investment Brokerage – Regional." However, its profit margin percentage, 4.0%, is before taxes and still is less than half the margin of the public companies (which report after tax profits). Still, the

⁴ Seaman, Ronald M., op. cit.

Exhibit IV
Step 5: Analysis of Public Companies With LEAPS
Latest Fiscal Yearends
(dollars in millions)

<u>Description</u>	<u>Symbol</u>	<u>Total Revenues</u>	<u>Total Assets</u>	<u>Ratio</u>		<u>ROE %</u>	<u>Div. Yield %</u>	<u>Debt to Equity</u>	<u>Price to Book</u>	<u>Net Profit Margin</u>	<u>Operations (a)</u>
				<u>Revenues/ Assets</u>	<u>P/E</u>						
Investm't Brokerage - Natl.					11.5	18.3	1.3	12.0	2.2	8.9	
Investm't Brokerage - Regl.					27.9	7.7	1.3	0.8	9.1	10.8	
Charles Schwab Corp.	SCHW	\$4,994.0	\$42,286.0	0.12	10.0	26.7	1.0	0.2	6.7	22.9	1
E*TRADE Financial Corp.	ETFC	-\$378.0	\$56,845.9	N.M.	NA	-41.0	NA	6.9	0.8	NA	1
Goldman Sachs Group	GS	\$45,987.0			7.6	29.5	0.7	10.2	1.8	29.9	3
Lehman Brothers	LEH	\$19,257.0	\$691,063.0	0.03	8.3	20.1	1.1	18.2	1.5	20.2	3
Merrill Lynch	MER	\$11,250.0	\$1,020,050.0	0.01	NA	-22.2	2.6	16.6	1.3	NA	3
Morgan Stanley	MS	\$28,026.0	\$1,045,409.0	0.03	14.5	7.7	2.4	16.8	1.5	NA	3
optionsXpress	OXPS	\$247.0	\$1,155.5	0.21	16.2	42.6	1.0	NA	5.7	40.7	2
SEI Investments Co.	SEIC	\$1,369.0	\$1,252.4	1.09	20.4	37.5	0.5	0.1	6.7	15.2	3
TD AMERITRADE	AMTD	\$2,283.4	\$18,859.2	0.12	14.6	35.8	0.0	0.6	4.4	39.1	1
Bear Stearns Companies	BSC	\$5,945.0	\$395,362.0	0.02	53.0	1.9	1.5	19.5	1.0	NA	3
Friedman Billings Ramsey	FBR	\$105.5	\$2,469.5	0.04	NA	-41.5	5.9	5.8	0.8	NA	3
Knight Capital Group Inc.	NITE	\$669.1	\$1,755.8	0.38	13.4	13.4	NA	0.1	1.7	19.3	3
Legg Mason Inc.	LM	\$4,343.7	\$9,604.5	0.45	14.6	NA	1.3	0.1	1.4	13.0	2
Subject Company		\$9.8	\$4.4	2.23		11.7		0.0		4.0 (b)	

(a) Similarity of operations to subject:

Criterion: Primary business is financial services to individuals.

1 = most similar to subject

2 = some similarities to subject

3 = least similar to subject

(b) Earnings before tax (S-corp.)

subject does not have financial problems of the magnitude of ETFC or FBR.

Consequently, an upper limit for a discount is probably around 40%.

The argument will be made, of course, that none of these companies is comparable to our subject. Generally that will be true. But, the objective here is not to determine an exact discount but to set a reasonable minimum level or benchmark discount. Moreover, this minimum discount is industry specific and valuation date specific.

Step 6: Reach A Final Discount Conclusion With The Use Of A Mandelbaum Construct

In arriving at a conclusion, we have found useful the chart on the following page which examines the Mandelbaum case factors and ranks their influence relative to the public companies that have LEAPS. In this regard, it is important to keep in mind the factors that are already included in the public company group, such as (in general) small, non-influential share holdings, industry-specific risk, holding period (11 months for 2009 LEAPS or 23 months for 2010 LEAPS), and market conditions on the valuation date. Then, you can weigh each factor and determine a discount conclusion for your company's specific characteristics.

A Mandelbaum construct also helps to remind us of factors not embedded in any of the LEAPS, such as restrictions on transfers of shares, likely cost of a public offering, an influential-size shareholding, an unusual cash distribution policy, or others.

Exhibit V
Step 6: Mandelbaum DLOM Factors
Compared To Public Company Peer Group

<u>Factor</u>	<u>Comparison</u>	<u>Effect On DLOM</u>	<u>Weight In Conclusion</u>
<u>Financial Statement Analysis</u> debt/equity ratio; profitability; growth; stability; risk	<ul style="list-style-type: none"> - Strong balance sheet - Low profitability but long history of profitability - Growth comparable to industry 	Neutral	30%
<u>Dividend/Distribution Policy</u> size; consistency; growth	<ul style="list-style-type: none"> - Comparable to industry 	None	0%
<u>Company/Industry</u> size; position in industry; history; economic outlook	<ul style="list-style-type: none"> - Very small in size. Non-influential. - Small geographic market - No significant products or services other than brokerage 	Increases	30%
<u>Company Management</u> experience; depth	<ul style="list-style-type: none"> - Experienced management but little depth. 	Increases	10%
<u>Amount of Control In Transferred Shares</u>	<ul style="list-style-type: none"> - None. Comparable to public companies. 	None	0%
<u>Restrictions On Transfer</u>	<ul style="list-style-type: none"> - Company has right of first refusal on transfers to other than current shareholders and their families. 	Increases	10%
<u>Anticipated Holding Period</u>	<ul style="list-style-type: none"> - 1 to 2 years. Comparable to LEAPS. 	None	0%
<u>Company Redemption Policy</u> policy; financial capability; history	<ul style="list-style-type: none"> - Company redeems "small amounts" of shares annually for cash (at Company discretion). - Redemption price is adjusted book value, which is lower than fair market value. 	Neutral	20%
<u>Likely Cost of Public Offering</u> legal ability? financial ability to afford cost?	<ul style="list-style-type: none"> - Public offering unlikely. Cost high. 	None	0%

Exhibit V compares our subject company to the industry group of 13 companies that have publicly traded LEAPS. It helps crystallize the factors contributing to a marketability discount conclusion. Several factors require a discount conclusion higher than our 25% base:

- 1) company specifics like its small size, small market, small line of products and services;
- 2) lack of management depth; 3) the Company's right of first refusal on transfers; and 4) a redemption price lower than fair market value.

The key offsetting factor is a short holding period provided by the Company's redemption policy. Overall it would be reasonable to conclude a discount for lack of marketability of 35% for our subject.

Conclusion

Although LEAPS do not provide a DLOM "answer," it is clear that by using them we can prove a base discount (for companies with comparable characteristics) and make a defensible estimate of an upper range of discount. In this way, the analysis of LEAPS provides much better substantiation of the discount conclusion.