



Minorities and other discounts for family companies

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MINORITY AND OTHER DISCOUNTS FOR FAMILY COMPANIES

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WITHIN THIS WEBINAR:

- The classic levels of value chart
- The sources for the control premium and the discount for lack of control
- The discount for lack of marketability:
 - empirical data;
 - mathematical models.



WITHIN THIS WEBINAR (CONTINUED):

- Relevance of models to UK?
- Dissection of Illiquidity
- Reshaped levels of value chart
- Dissection of lack of lack of control – Control and Minority Cash Flows
- Approach of expert in Estera Trust and Singh (2019)

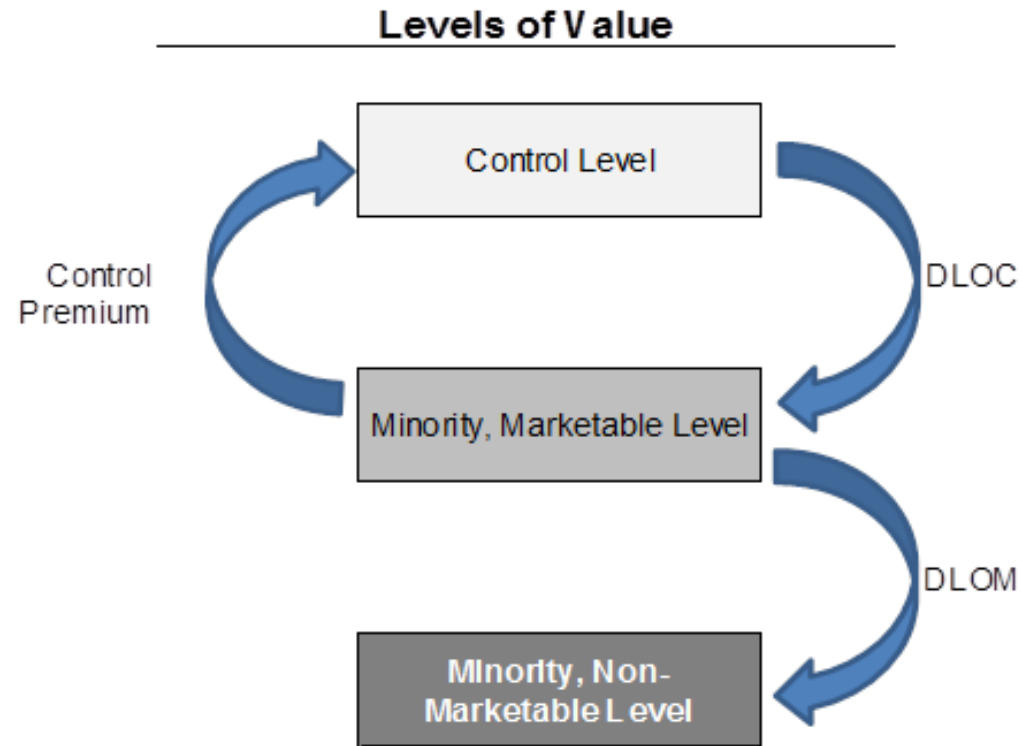


WITHIN THIS WEBINAR (CONTINUED):

- The Small Stock Premium
- The Capital Asset Pricing Line, CAPM and Beta
- Total Beta
- Discounts in recent cases
- Some conclusions



THE CLASSIC LEVELS OF VALUE CHART



DLOC = Discount for Lack of Control
DLOM = Discount for Lack of Marketability

THE CLASSIC LEVELS OF VALUE ASSUMPTIONS



- Listed company share prices represent marketable minority values
- There is a premium which is paid for control – 30% to 40%
- Therefore, the discount for lack of control can be derived
- There is then a discount for lack of marketability for minority interests in private companies

THE CONTROL PREMIUM IN UK CASES



- Shareholder dispute:
 - *Arbuthnott v Bonnyman* (2015) Expert for one side: 30%.
- Tax dispute:
 - *Foulser and Foulser v HMRC* (2015) HMRC expert: 40%; Tribunal 35%.
- Family dispute:
 - *Martin and Martin* (2017) Single Joint Expert: 30%.

THE TWO DISCOUNTS:

- Discount for lack of control - (“DLOC”)
- Discount for lack of marketability - (“DLOM”)



DLOC



$$1 - \left(\frac{1}{1 + \textit{Control Premium}} \right)$$

Control premium of 30% equates to DLOC of 23%

Control premium of 40% equates to DLOC of 29%

DLOM SOURCES

- Restricted stock studies – Letter stocks
- Pre Initial Public Offering transactions
- Option models



LETTER STOCKS OR RESTRICTED STOCKS



Shares issued by USA listed companies in private placements

Trading Between Qualified Institutional Buyers (QIBs)

35% Discounts?

LETTER STOCKS OR RESTRICTED STOCKS



■ Early Studies:

■ Trout	1968-72	33.5%
■ Moroney	1969-72	35.6%
■ Maher	1968-73	35.4%



Safe Harbour Holding Periods Data From FMV Opinions

January 1972 – two years: discount of 22%

1997 – one year: discount of 16%

2008 – six months: discount of 12%



SEC EDGAR Database

- Willamette Management Associates
- John Emory
- Valuation Advisors

PRE-IPO STUDIES



■ Emory

- 1992-93 44%
- 1994-95 45%
- 1995-97 42%
- 1997-2000 54%

PRE-IPO STUDIES



- Valuation Advisor:
- 7 to 9 months before IPO:

		Sample Size
2009	26.8%	108
2010	44.4%	358
2011	43.3%	281
2012	28.9%	292

THEORETICAL OPTION MODELS

- Chaffe Put Option Model – Using Black Scholes
- Shout Option
- Longstaff Look Back Upper Bound Option
- Finnerty Models
- Ghaidarov Models
- Muelbroek CAPM Model



THE BLACK SCHOLES PUT OPTION



Ten Year Option, no Dividends, Risk Free Rate 0.5%

30% volatility

40% volatility

50% volatility

33% discount

44% discount

53% discount

BURNDEN HOLDINGS (UK) LIMITED AND FIELDING [2019] EWHC 1566

- Claim by liquidator
- Unlawful distribution in specie?
- Section 110 reconstruction challenged
- The risk free rate is the long term rate



ESTERA TRUST AND SINGH

- Use of one of the Finnerty Models
- Earlier model with mathematical errors



DLOM VIA THE MODELS



- Ten Year Option, Volatility of 40%, no Dividends, Risk Free Rate 0.5%:
 - Chaffe Black Scholes Model 44%
 - Ghaidarov Average Strike Model 30%
 - Ghaidarov Forward Starting Model 47%
 - Muelbroek CAPM Model 58%



Is that All There is to Illiquidity?

THE QUALITIES OF LIQUIDITY



The Ability to sell a financial instrument:

- Quickly
- For a known price
- Without the transaction moving that price
- With a low bid-offer spread
- With modest dealing costs

A NEW VIEW OF LEVELS OF VALUE



Synergistic Value

- Bid premiums

Liquid value

- Discount for lack of liquidity

Controlling non-liquid

- No benefits of control
- Greater illiquidity

Non-controlling non-liquid

THE CONVENTIONAL CONTROL PREMIUM IS NO MORE



Last Outing 2017 – Martin and Martin



The Formula for the DLOC is based on the Control Premium

$$1 - \left(\frac{1}{1 + \textit{Control Premium}} \right)$$

This Calculation of the DLOC is No More



The Controlling Non-Liquid Value

Synergistic Value

- Bid premiums

Liquid value

- Discount for lack of liquidity

Controlling non-liquid

- No benefits of control
- Greater illiquidity

Non-controlling non-liquid

THE LIQUIDITY DISCOUNT FOR THE CONTROLLING SHAREHOLDER

- For a Marketing Period of One year:
- Volatility of 50%
 - Black Scholes put option-19.4%;
 - Ghaidarov Forward Starting Option -19.7%
- Additional costs of transacting: 1% to 5% of value?



THE NON-CONTROLLING NON-LIQUID VALUE



Engage Brain Before Discounts

- Control and Non-Control Cash Flows
- Value Leakage?
- Governance Deficit?
- Possible Time to an Exit

CONTROL AND NON-CONTROL CASH FLOWS



	Control Cash Flows	Non-Control Cash Flows
Reported cash flows	100	100
Remuneration above market rate	60	-
Employment of husband (decorative only)	13	-
Rental cost above market rate	12	-
Tax Affecting	(17)	-
	<hr/>	<hr/>
Relevant cash flows for valuation	<u>168</u>	<u>100</u>



Valuation of a holding of 19.9%
DLOC and DLOM Considered Together
Normalisation Adjustments Made

Expert – 60%
Court – 45%

FROM THE WRITTEN DECISION: DLOC



“What is the nature of control? Control gives the opportunity to pay a dividend or sell the business, thus curing in part the lack of marketability. DLOC is understood to relate to control or influence over business operations and strategy; access to information on the business; control or influence over financial policy (dividends, sale of the company, etc.) and removing exposure to the risk of unfair prejudice.”

FROM THE WRITTEN DECISION: DLOM



“DLOM is concerned with the ability to sell the asset, and liquidity considerations also arise because the inability to exit the investment exposes the shareholder to uncertainty. In the case of the Company, Mr Bezant identifies the main consideration affecting the minority discount as being that the holder of the A tranche cannot control or influence the means of extracting a return, namely dividends and exit.”

THE SMALL STOCK PREMIUM



- The concept that smaller stocks generate a higher return
- The small stock premium equates to a higher capitalisation rate / lower market multiple
- 1981 paper by Ralf Banz: “The Relationship between Return and Market Value of Common Stocks”
- UK Impact on contentious valuation:
 - Gul Bottlers and Nichols plc
 - Gray and Braid Group (Holdings) Limited

THE SMALL STOCK PREMIUM (CONTINUED)



- The Challenges with the Data:
 - Small Stock Premium not clearly in Evidence since 1981
 - Roger Grabowski of Duff and Phelps:
 - The betas of small stocks tend to be higher;
 - The betas of small stocks may be distorted due to thin trading;
 - Some companies have low value as they are risky; they are not risky because they are small;
 - It could include liquidity adjustment factors;
 - It could reflect a wider bid-offer spread.
 - Clifford Asness and others – “Size matters if you control your junk”

CAPITAL ASSET PRICING LINE, CAPM AND BETA



- A theoretical economic model: world view of two investments
- Used in analysing pricing of stocks in markets
- The return is Risk free rate + (Beta x equity risk premium)
- Beta of market is 1
- The measure is relative stock and market volatility multiplied by the correlation of the stock with market

CAPITAL ASSET PRICING LINE, CAPM AND BETA (CONTINUED)



- Utilities - Beta of less than 1
- Higher risk businesses - Beta of more than 1.
- The pricing of an incremental investment added to a well-diversified portfolio
- January 2020 USA Betas from Damodaran: (RFR of 0.5% and ERP of 6% assumed for illustration)
 - Advertising 1.44 9.14% cost of equity
 - Building Materials 1.23 7.88% cost of equity
 - Retail grocery 0.59 4.04% cost of equity
 - Water utility 0.68 4.58% cost of equity

TOTAL BETA

- Many smaller business owners cannot or do not diversify.
- Betas in the markets assume that investors are fully diversified
- Private equity v Private buyer
- The small business buyer will not be fully diversified
- “Total Beta” relates to an undiversified investor



TOTAL BETA (CONTINUED)



- Relative Volatility but exclude correlation with market from formula
- A measure of the cost of capital for an undiversified investor?
- January 2020 USA Betas and Total Betas from Damodaran

	Beta	Total Beta	Illustrative Cost of equity
■ Advertising	1.44	8.22	49.8%
■ Build Materials	1.23	3.17	19.5%
■ Retail grocery	0.59	3.60	22.1%
■ Water utility	0.68	3.33	20.5%

DISCOUNTS IN RECENT CASES

- Estera Trust and Singh 95% holding – 2.5% discount
- Estera Trust and Singh 74.9% holding – 10% discount
- Foulser, Foulser and HMRC 51% holding – 20% discount
- FW and FH 40% holding - 30% discount
- Fowler and Gruber 28.6% holding – 40% discount
- Booth and Booth 27% combined holding – 33.3% discount
- Davies and Lynch Smith 25% holding – 60% discount



DISCOUNTS IN RECENT CASES (CONTINUED)

- Ingram, Hall and Ahmed 24% holdings – 67.5% discount
- Weatherley and Weatherley 20% holding – 40% discount
- Estera Trust and Singh 19.9% holding – 45% discount
- Foulser, Foulser and HMRC 9% holding – 50% discount



SOME CONCLUSIONS

- The guideline public company market price is a minority price; but it also reflects a control value
- The concept of the control premium cannot be supported
- Discounts for lack of control must be case-specific
- Measure minority values by reference to minority cash flows
 - Problems with some family companies and quasi-partnerships;
- Higher returns are required for illiquid assets - even for short periods



SOME CONCLUSIONS (CONTINUED)



- Option models support illiquidity discounts of 40% to 50% for longer periods;
- Contentious valuation in the UK is becoming increasingly technical;
- There is an ocean of difference between large listed entities and smaller private companies;
- New levels of value chart;
- The separation of DLOC and DLOM is no longer warranted;
- Think of governance deficit and value leakage

SOME CONCLUSIONS (CONTINUED)

- The small stock premium is problematic;
- Value is based on likely population of buyers: diversified, or single business?
- If undiversified, Total Beta supports far higher costs of equity/ lower multiples



AND FINALLY...



Thank you for listening!
Questions?

Q&A

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