DeGroote Finance & Investment Council

Introduction to Leveraged Buyouts

Overview: Leveraged Buyouts

What is an LBO?

- A leveraged buyout is a type of investment/acquisition which entails acquiring a company using a significant amount of debt financing to boost returns (IRR) and then selling the company after a given time period (~5 years)
  - Usually 50-70% of acquisition financing is debt
  - Target IRR of ~20-25%
  - Objective is to use the cash flows of the target company to pay off debt financing and earn additional profit from capital gains, allowing you to generate a higher return while minimizing your initial investment cost
- Many different LBO variations exist but all share the premise of acquiring a firm with large debt financing, restructuring, and then selling at a profit
- Risky but high return if successful

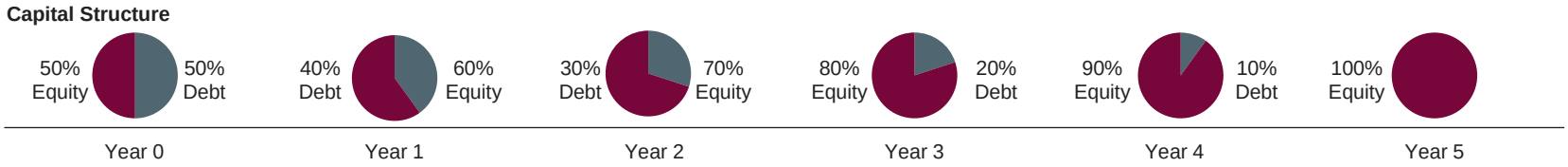
Attractive LBO Characteristics

Stable Cash Flows	Ability to pay off debt and borrow more
Strong Market Presence	Ability to stretch margins and survive competition
Large Fixed Asset Base	Ability to liquidate assets and use them as collateral
Low Valuation	Lower to mid-range EBITDA multiple; company is undervalued
Low CAPEX Requirements	Higher free cash flow reinvestment amounts

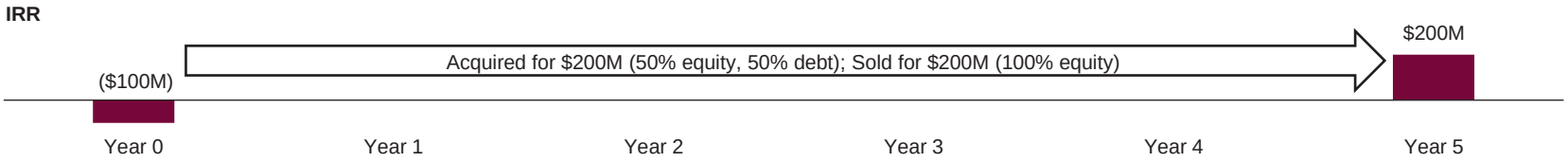
LBO Approach 1: Increasing Returns By Paying Debt

Cash flows pay off debt

Equity ownership increases



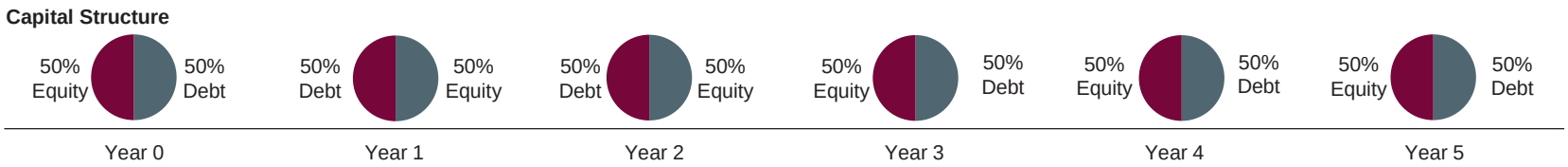
Paying off debt drives return



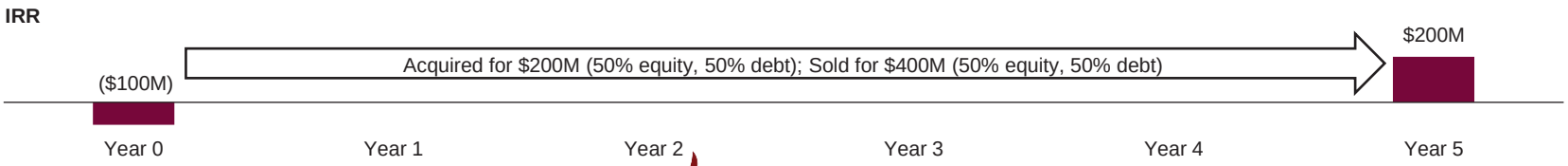
LBO Approach 2: Increasing Returns By Expanding Multiples

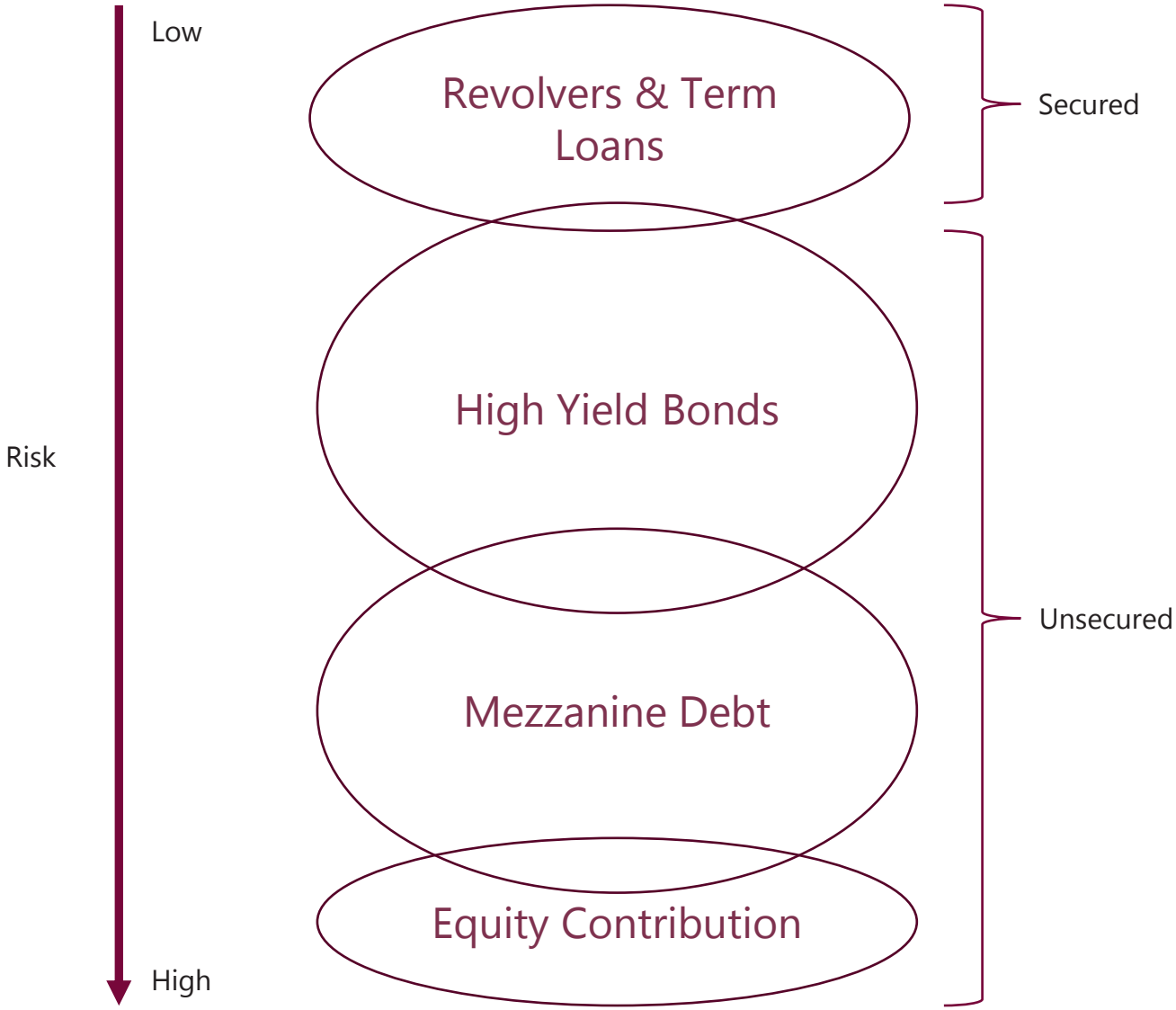
Cash flows reinvested in business

Equity ownership unchanged



Company improvements increase company value




Low
Risk
High
Revolvers & Term Loans
High Yield Bonds
Mezzanine Debt
Equity Contribution
Secured
Unsecured

Internal Rate of Return (IRR)

- The rate at which NPV = 0 for a given period of time; commonly used to calculate the return of leveraged buyouts; popular because time-weighted
- The higher IRR is, the more profitable an investment should be
- $$IRR = \frac{Proceeds\ at\ End}{Initial\ Equity\ Investment}^{\left(\frac{1}{Holding\ Period}\right)} - 1$$
- =IRR function in Excel

Multiple of Money (MoM)

- The ratio of return realized based on the amount you invested
- The higher MoM is, the more profitable an investment should be
- $$MoM = \frac{Proceeds\ at\ End}{Initial\ Equity\ Investment}$$

1. Make Basic Transaction Assumptions

- Information you should know include purchase and selling price, and the % debt and % equity used
  - % of debt and % of equity used should be similar levels to comparable companies
  - Purchase and selling price will allow you to calculate entry and exit multiples

Assumptions:	
EBITDA Purchase Multiple:	10.0 x
Purchase Price:	$1,000
% Debt:	50.0%
Debt Used	500
Equity Contribution	500

2. Project Financial Statements Without Effects of Debt

- To project cash flows, you'll need historical information on the firm's revenue, EBITDA, taxes, other key items such as working capital and capital expenditures, and interest rate

Income Statement	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue	$ 250	$ 275	$ 303	$ 333	$ 366	$ 403
EBITDA	100	110	121	133	146	161
(-) D&A		(8)	(9)	(10)	(11)	(12)
(-) Interest		(50)	(48)	(45)	(41)	(36)
Pre-Tax Income		102	112	78	94	113
(-) Taxes		(41)	(45)	(49)	(54)	(60)
Net Income		**$ 61**	**$ 67**	**$ 74**	**$ 81**	**$ 89**

Assumptions:

EBITDA Purchase Multiple	10.0 x	EBITDA Exit Multiple	11.0 x
Purchase Price	$1,000	Year 0 Revenue	$250
% Debt	50.0%	Annual Revenue Growth	10.0%
Debt Used	500	Annual EBITDA Margin	40.0%
Equity Contribution	500		
		D&A % Revenue	3.0%
Initial Cash Balance	$20	CapEx % Revenue	4.5%
Interest Rate	10.0%	Change in WC % Revenue	(15.0%)
Tax Rate	40.0%		

3. Create Debt Repayment Schedule and Project Financial Statements with Debt Effects

- This allows you to calculate revolver borrowing (in case of shortfalls) or debt payments (if there is a cash surplus)

Cash Flow Projections	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Net Income	$ 250	$ 275	$ 303	$ 333	$ 366	$ 403
(+) D&A		8	9	10	11	12
(+/-) Change in WC		(4)	(4)	(5)	(5)	(5)
(-) CapEX		(12)	(14)	(15)	(16)	(18)
Free Cash Flow		23	30	38	46	56
Free Cash Flow Used for Debt Repayment		23	30	38	46	56
Debt Balance	500	477	447	409	363	307
Cash Balance	20	20	20	20	20	20

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4. Calculate Proceeds and Returns

- *Proceeds at End = Proceeds at Sale + Ending Cash Balance – Ending Debt Balance*
  = $1,772M + $20M - $307M
  = $1,484M

- $IRR = \frac{Proceeds\ at\ End}{Initial\ Equity\ Investment}^{(\frac{1}{Holding\ Period})} - 1$
  = ($1,484M / $1,000M)$^{(1/5)}$ - 1
  = 8.21%

Exit Calculations	
Exit Enterprise Value	$1,772
(-) Debt	(307)
(+) Cash	20
Equity Proceeds	**$1,484**
MoM Multiple	**3.0 x**
IRR	**8.21%**

Exit Strategy

Private Sale	Sponsors sell to strategic buyers (+Synergy Premium)
IPO	(+liquid market) (-delayed sale through follow on offering)
Dividend Recapitalization	By refinancing the capital structure or taking on new debt the firm pays its sponsors early. (+accelerates ROI)
Debt Repurchase	By purchasing debt below par sponsors can increase their equity value by taking advantage of inside views

5. Perform Sensitivity Analysis

- Comparing return rates at different exit multiples

Entry Multiple	Exit Multiple 8.0x	9.0x	10.0x	11.0x	12.0x
8.0x	2.2x	2.7x	3.1x	3.5x	4.0x
9.0x	1.6x	1.9x	2.2x	2.6x	2.9x
10.0x	1.3x	1.5x	1.8x	2.0x	2.3x
11.0x	1.0x	1.2x	1.5x	1.7x	1.9x
12.0x	0.9x	1.1x	1.2x	1.4x	1.6x

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