
Corporate Restructuring

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Corporate Restructuring

Defined as:

Any substantial change in a company's business portfolio or financial structure

Objectives:

- Redeploy assets
- Exploit financial capacity
- Improve competitiveness
- Preserve independence
- All of the above to **increase firm value** except independence

Examples:

Mergers & Acquisitions

Divestitures & Spin-offs

Leveraged Buyouts (LBOs)

Leveraged Recapitalizations (Recaps)

Major share or bond repurchases

Joint ventures and minority interest investments

Distressed restructuring

Average Historical LBO Experience

Pre buyout value of equity	\$350
Average buyout purchase price	\$500
Average gain to pre-buyout shareholders	40%
Equity as % of total capital	14%
Debt as % of total capital	86%
Debt/Equity ratio	6:1
Incremental debt	\$400
Implied capital gain on buyout	\$210
Post buyout sale of firm	\$750
Post buyout gain from sale (50%)	\$250
Return on investment (New Equity)	?

Note: Based on sample of 48 LBOs

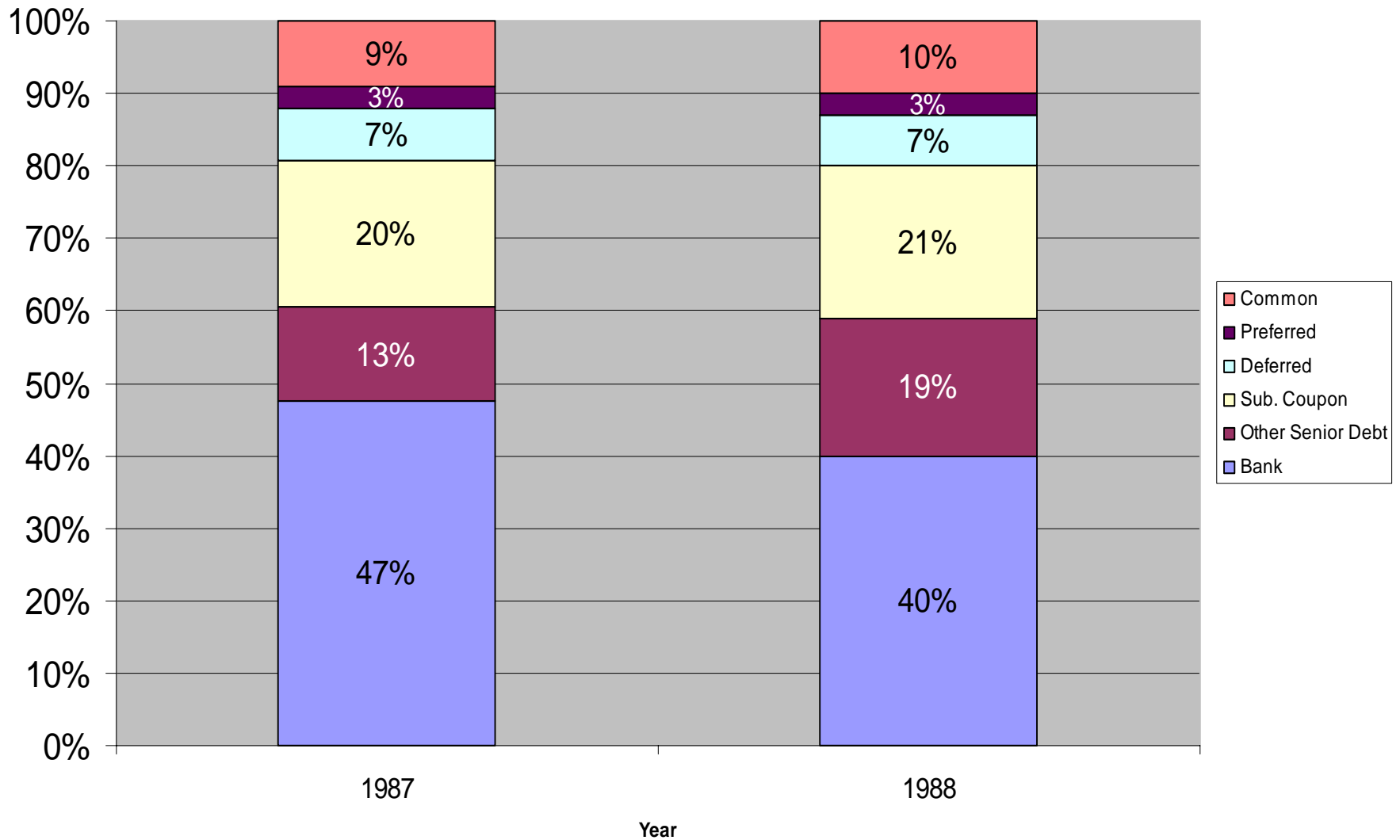
Source: From S. Kaplan's 'Management Buyouts: Efficiency Gains or Value Transfers', unpublished University of Chicago, ms., October 1988, discussed in M.Jensen, S.Kaplan and L.Stiglin, 'Effect of LBOs on Tax Revenues of the U.S. Treasury', January 1989

Full Cycle LBOs: Cashing out of LBO investment

Methods to Cash Out

Asset Sales	Sale of entire firm	Going Public (Again)
Product Lines	Mergers &	IPO
Divisions	Acquisitions	Partial or Complete
Stand-alone operations		
Partial or complete		

Selected Capital Structures



Corporate Restructuring Meltdowns In the 1980's

Leveraged Recapitalizations – Distress primarily due to lower than expected operating earnings and lower proceeds from asset sales as well as far too much debt in most cases

- 31% (9 of 29) of firms completing recaps from 1985-1988 subsequently encountered financial distress (Denis & Denis, JFE, 37, 95)
- These distressed situations included:
 - Carter Hawley Hale (87) – Chapter 11 (91)
 - Goodyear Tire & Rubber (87) – Distressed Restructuring (91)
 - Harcourt Brace Jovanovich – Distressed Sale
 - Holiday Corp. – Distressed Sale
 - Interco (88) – Chapter 11 (91)
 - Quantum Chemical (88) – Distressed Restructuring (91)
 - Standard Brands Paint (98) – Chapter 11 (92)
 - Swank (88) – Distressed Restructuring (91)
 - USG (88) – Chapter 11 (92)
- 36% of MBOs from 1985-1989 defaulted on their debt; 25% distressed from 1980-89.
Examples were:
 - R. H. Macy's – (86) – Chapter 11 (92)
 - National Gypsum – (86) – Chapter 11 (90)
 - Revco Drugs – (86) – Chapter 11 (88)
 - Fruehart – (86) – Default (90)
 - Southland Corp. – (87) – Chapter 11 (90)
 - Jim Walter (Hillsborough) – (88) – Chapter 11 (89)
 - Charter Medical – (88) – Chapter 11 (92)
 - Seaman Furniture – (88) – Chapter 11 (92)

Median Statistics on MBO/LBOs in the United States (1980-1989)

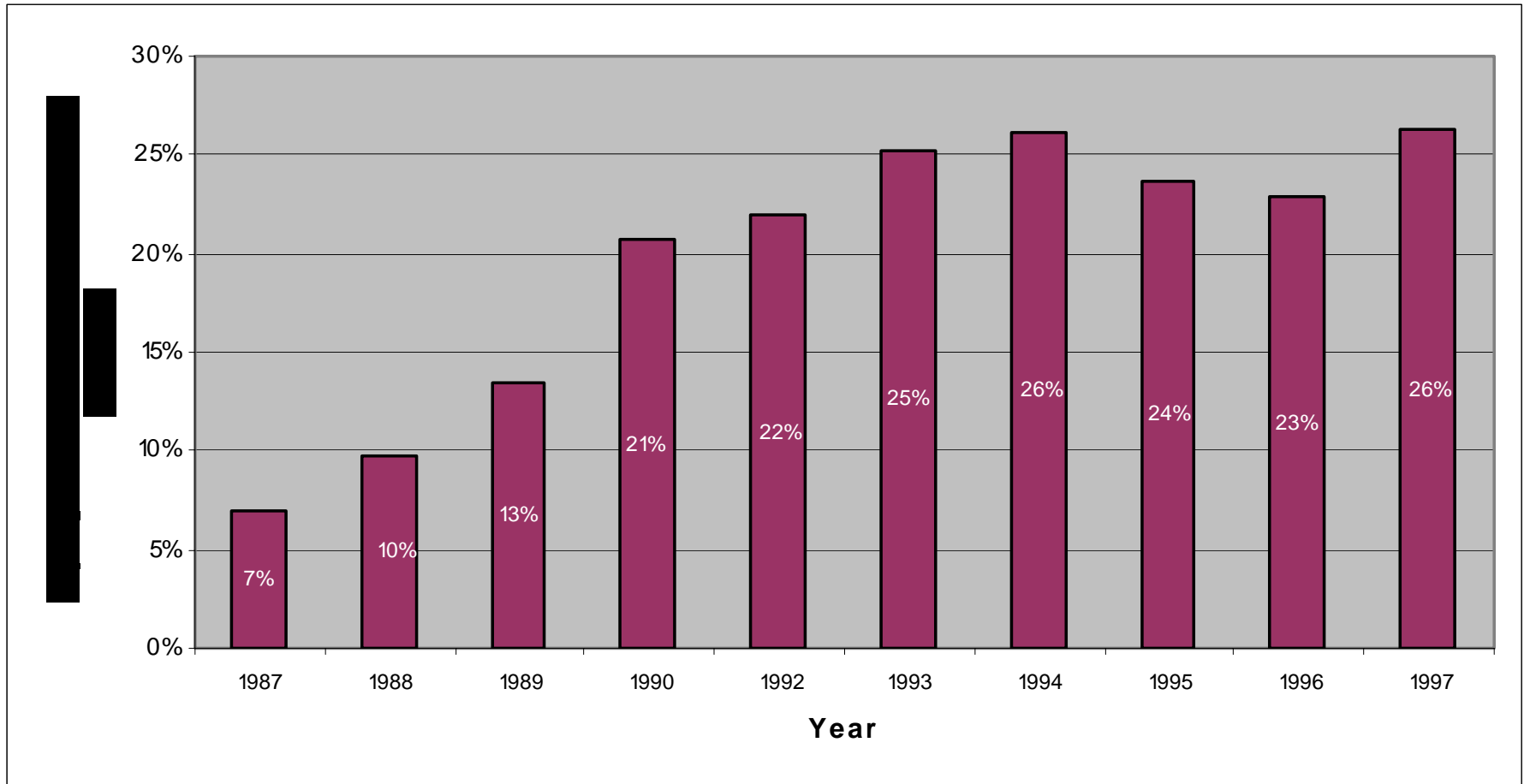
<u>Year</u>	<u>Number of MBO/LBOs</u>	<u>Average Size-Capital (\$ Millions)</u>	<u>EBITA Multiplier⁽¹⁾</u>	<u>Premium Paid %⁽²⁾</u>	<u>Deals with HY Bonds %</u>	<u>Bank Debt Total Debt</u>
1980-81	6	\$397	6.1 X	51%	0%	39%
1982	8	164	5.8	64	0	73
1983	10	392	7.4	34	0	76
1984	17	383	7.0	41	6	72
1985	12	923	7.7	26	58	42
1986	15	371	7.4	39	40	52
1987	20	439	9.3	41	50	54
1988	31	477	8.7	48	61	55
1989	5	316	7.5	57	60	57
Total	124	\$395	7.8	43%	37%	56%

Source: S. Kaplan & J. Stein, (1993), QJE, May.

⁽¹⁾Capital (MV Equity + Debt + Fees – Cash Removed) / EBITDA.

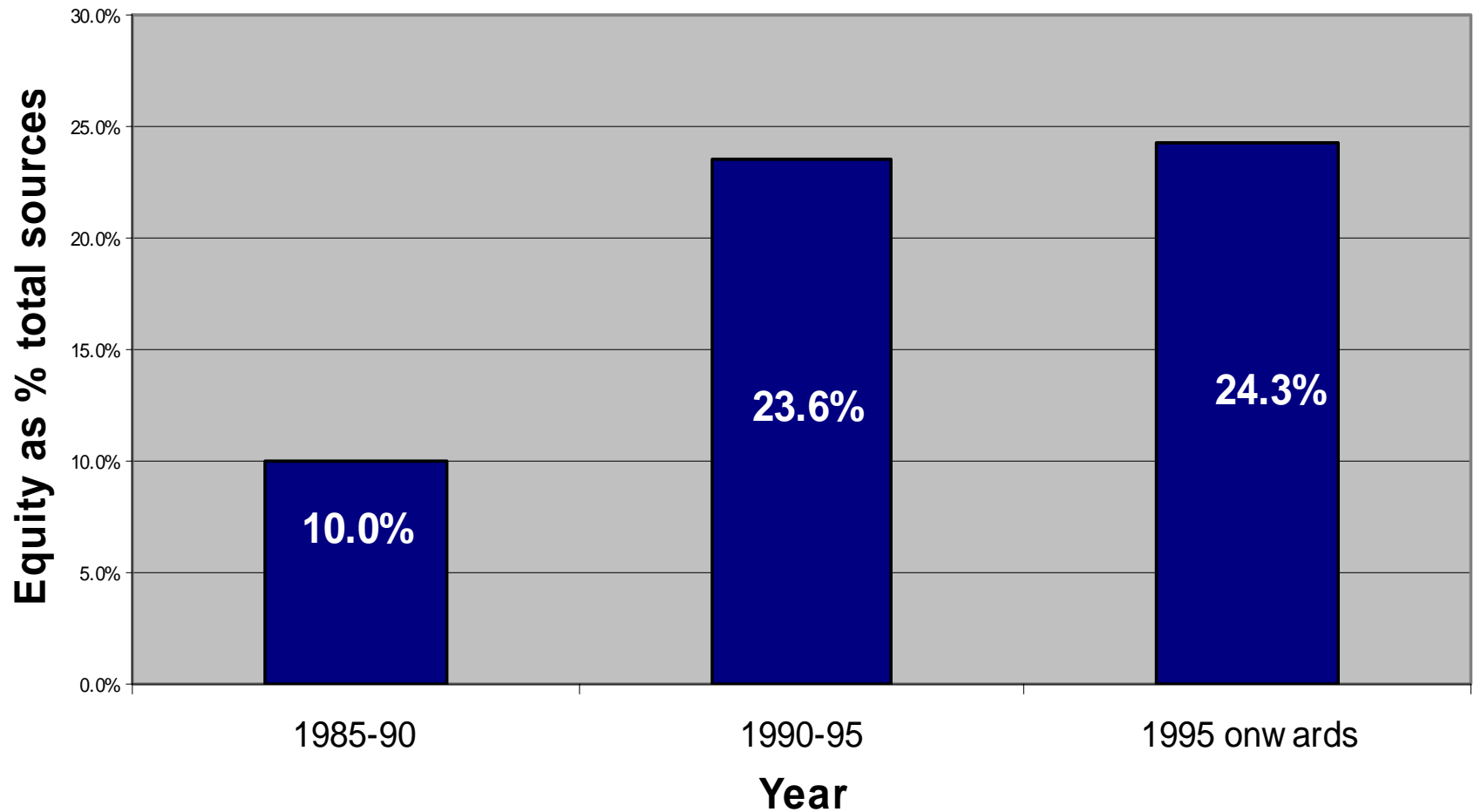
⁽²⁾Price paid/Price two months prior to announcement of MBO.

Role of Equity in LBOs – Last 15 years

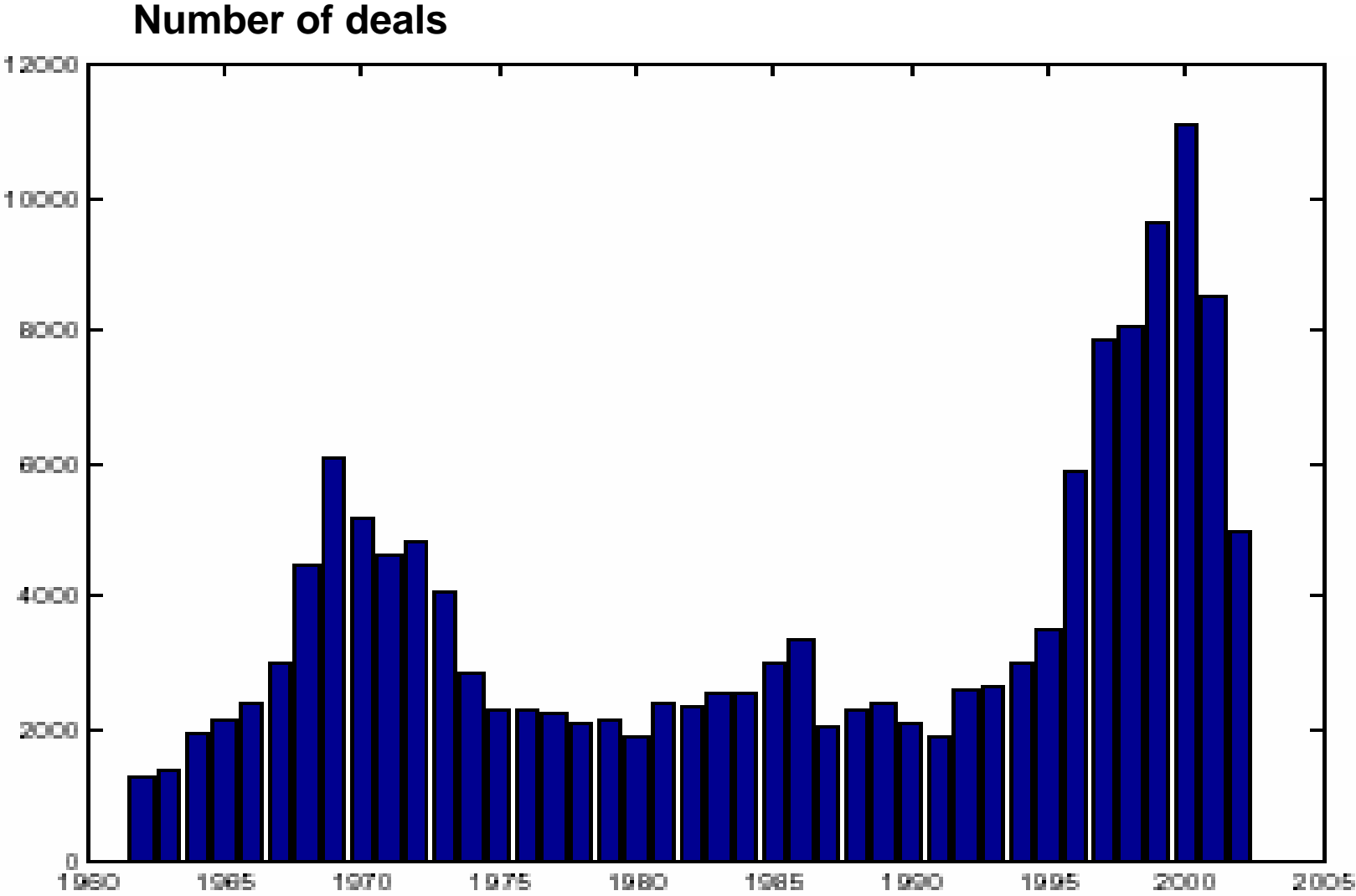


Source: CSFB/DLJ

Role of Equity in LBOs – Last 15 years



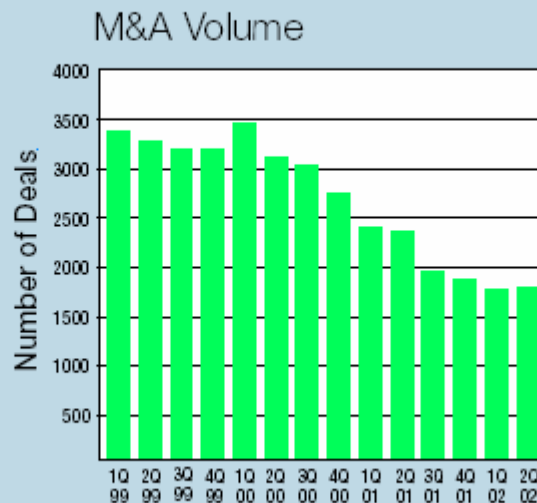
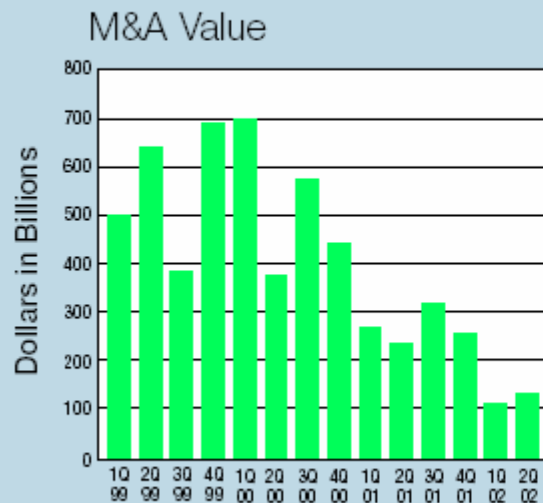
Overall M&A activity volume 1963-2002



Source: Mergerstat

M&A Activity: 1999-2002

M&A Activity



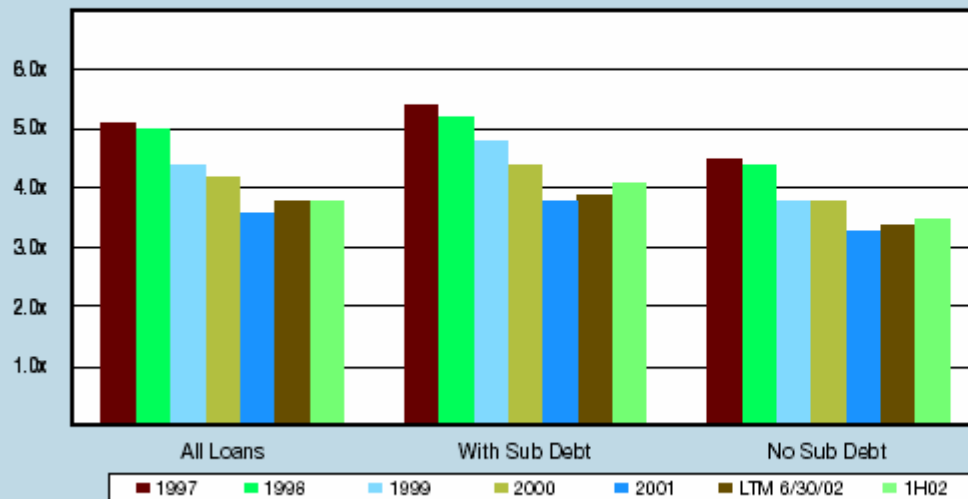
Source: Securities Data Corporation

The number and value of domestic M&A transactions languished in 2Q '02 at levels not seen since the early '90s. The number of transactions in 2Q '02 was 30% less than the same quarter last year and 51% less than the peak of deal activity in 1Q '00. Cautious debt capital markets, floundering public equity markets, ongoing concern about the direction of the economy, and the effects of numerous accounting scandals conspire to make it a difficult environment for deal making.

M&A Activity: Leverage

Bank Loan Market

Average Pro Forma Adjusted Leverage Ratios

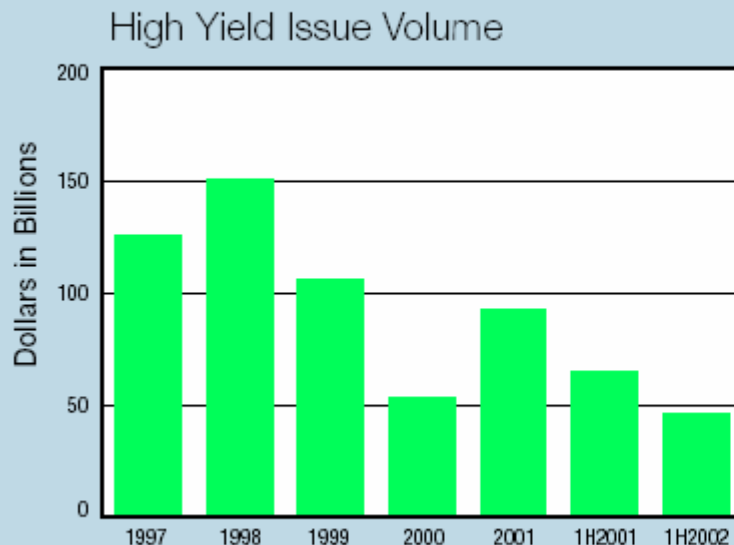


In the first half of '02 we have seen a slight increase in the average debt leverage obtainable in support of acquisitions. Institutional investors have demonstrated a healthy appetite for a limited supply of institutional tranche paper, while bank investors continue to be cautious.

Source: Portfolio Management Data, LLC

M&A Activity: High Yield Bond Market

High Yield Bond Market



Until recently, trends in the high yield market offered hope that this capital market would once again play a meaningful role in acquisition financing in a recovering economy. Unfortunately, concerns regarding corporate governance, and a supply/demand imbalance have negatively affected the high yield secondary market and funds flows to high yield investors. The primary issuance market, which enjoyed a robust level of activity in June, is looking at a light forward calendar. Nevertheless, a low and stable interest rate environment, investor cash positions that remain higher than historic levels, and strong YTD high yield returns in many sectors give reason to be optimistic.

Source: Securities Data Corporation

2002 M&A by Industry

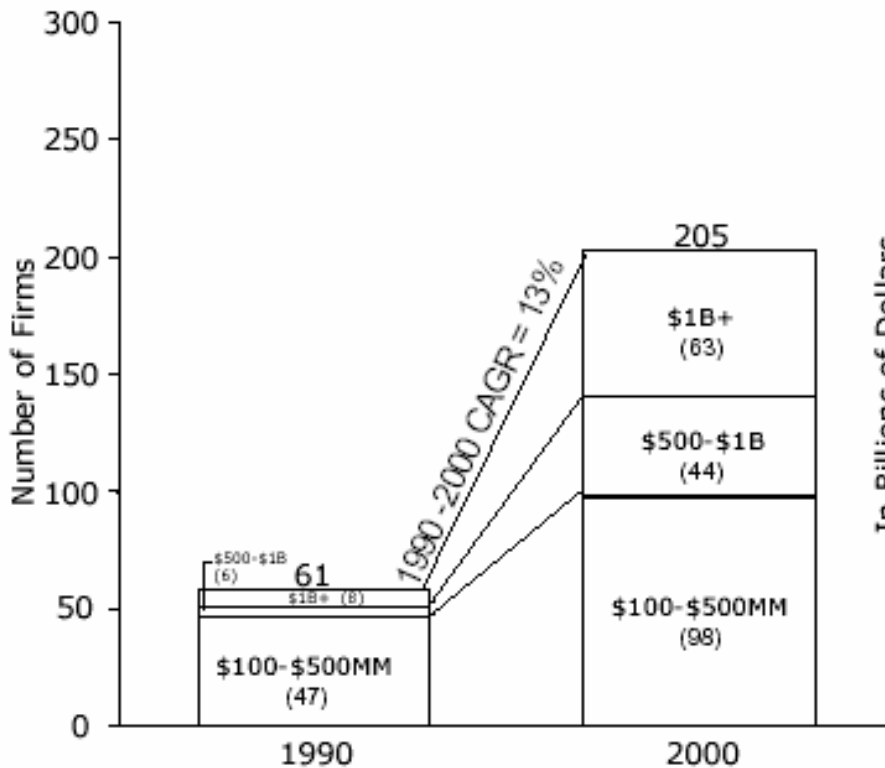
Rank	Industry Group	Deals	Value (\$b)
1	Drugs, Medical Supplies & Equipment	168	67813
2	Communications	166	20960
3	Computer software, Supplies & Services	953	20804
4	Brokerage, Investment & Mgmt Consulting	302	20277
5	Banking & Finance	202	19055
6	Electric, Gas, Water & Sanitary Services	102	15691
7	Miscellaneous services	550	14952
8	Broadcasting	73	10896
9	Printing & Publishing	117	9806
10	Food processing	68	9543

Source: Mergerstat

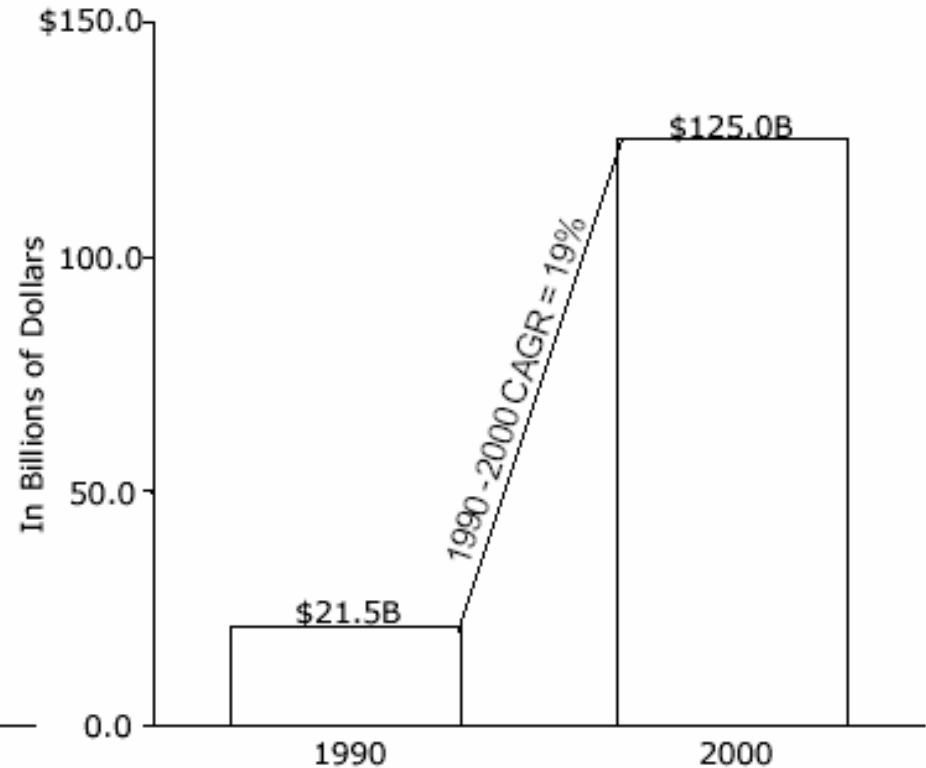
LBO Fund Growth 1990 vs 2000

During the boom years both number of LBO firms and funds available grew dramatically

Number of U.S. LBO Firms

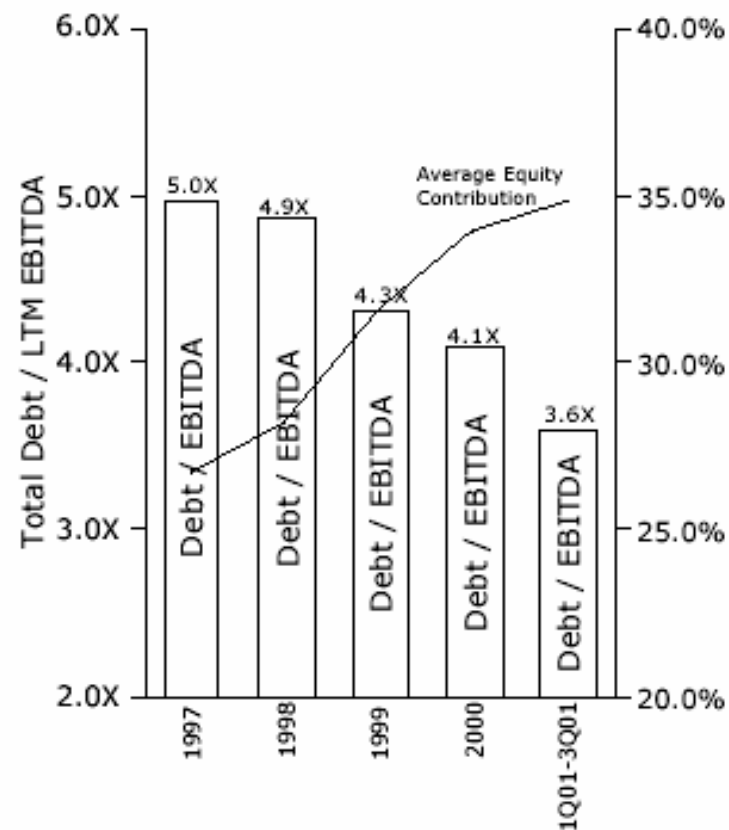
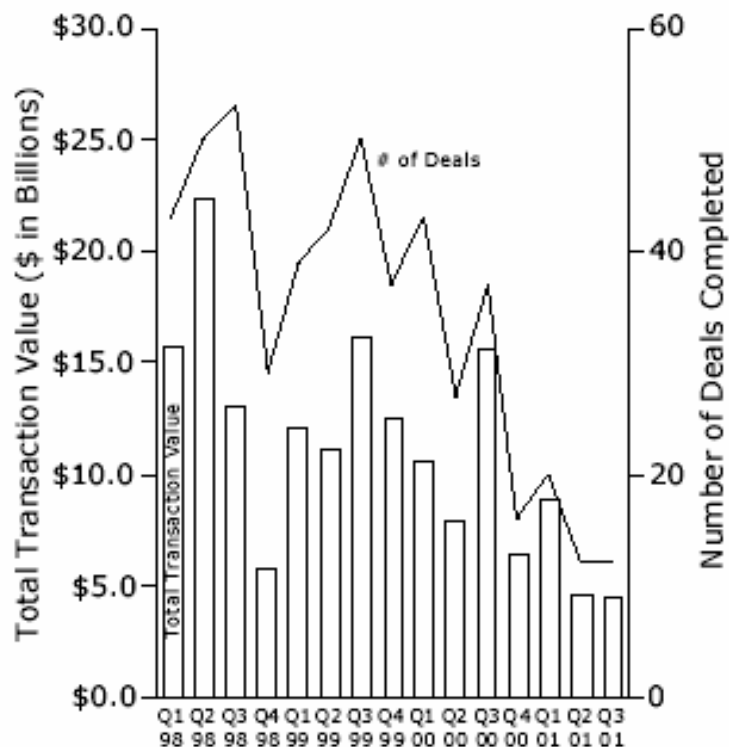


Funds Available for Investment



Recent transaction Volume and Leverage

Fewer deals being done with lesser debt component in the funding



Source: S&P/Portfolio Management Data
 Note: Represents LBO transactions of all sizes

Higher returns than Equity

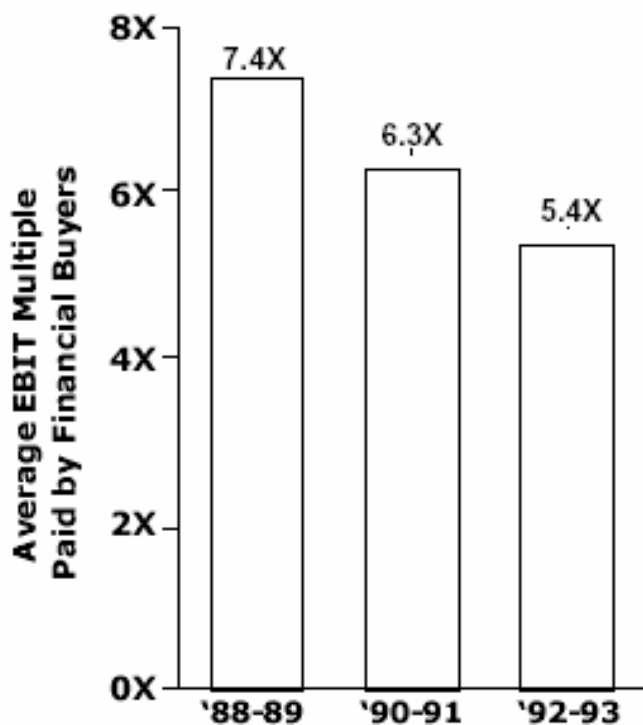
Over long term, Private equity and Buyouts have delivered higher returns

Fund Type	20 year IRR
U.S. Venture	19.6%
U.S. Buyouts	19.1%
S&P 500	12.0%

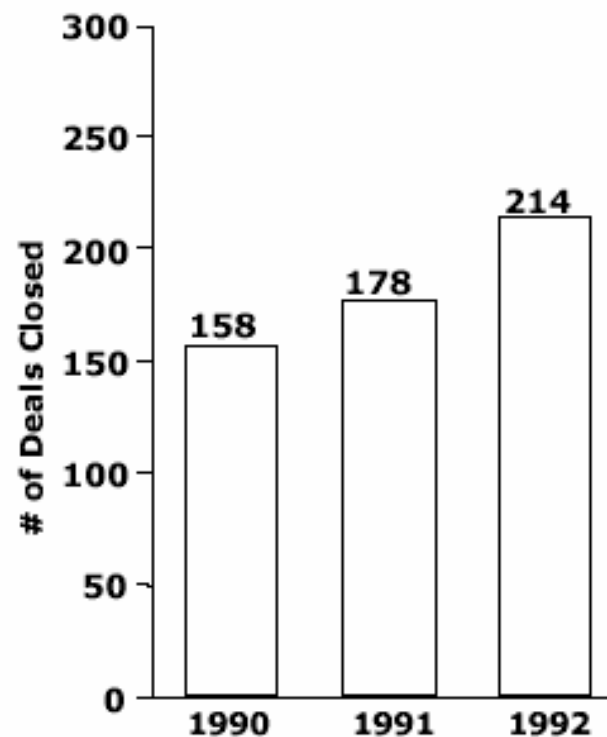
LBO Performance: Previous Recessions

During previous recessions more LBOs were completed at more attractive multiples

Average Buyout EBIT Multiple

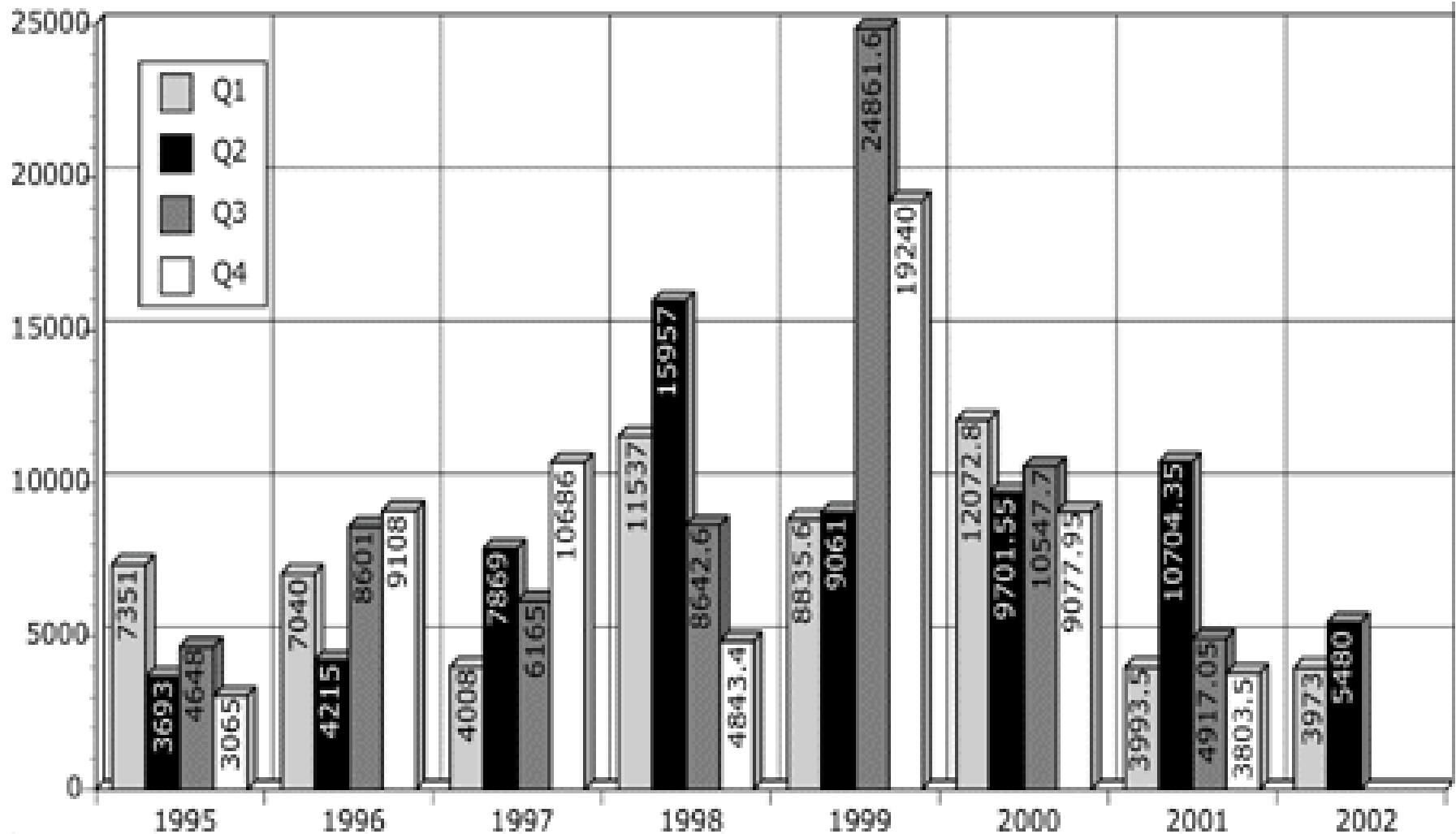


Number of Deals



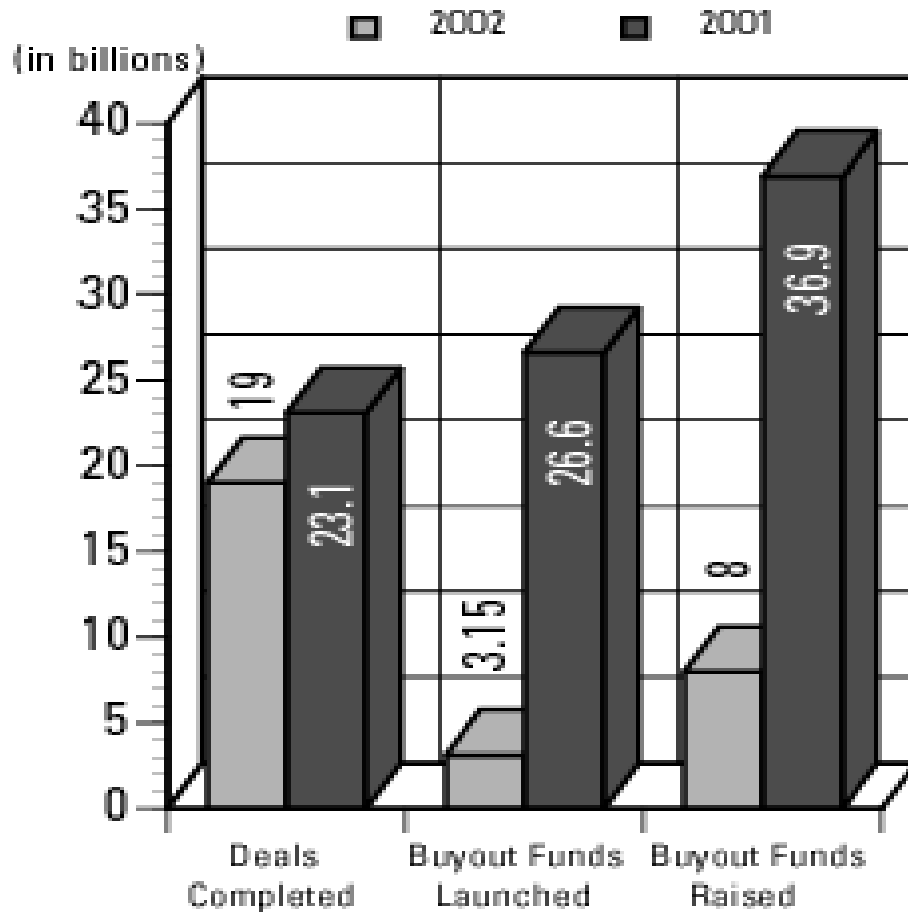
Note: Includes completed U.S. leveraged buyouts (as indicated by SDC) only. Based on enterprise value (i.e., rank value).
Source: *Buyouts* survey of deal multiples; SDC Mergers & Corporate Transactions Database; Buyout Investments database.

Buyout Deal Volume By Quarter Since 1995



Source: Buyouts (Thomson Financial)

State of the LBO market



Note: All data include U.S. targets only. Deal Data include leveraged buyouts and other transactions involving financial buyers in which a majority interest or a remaining stake is involved.

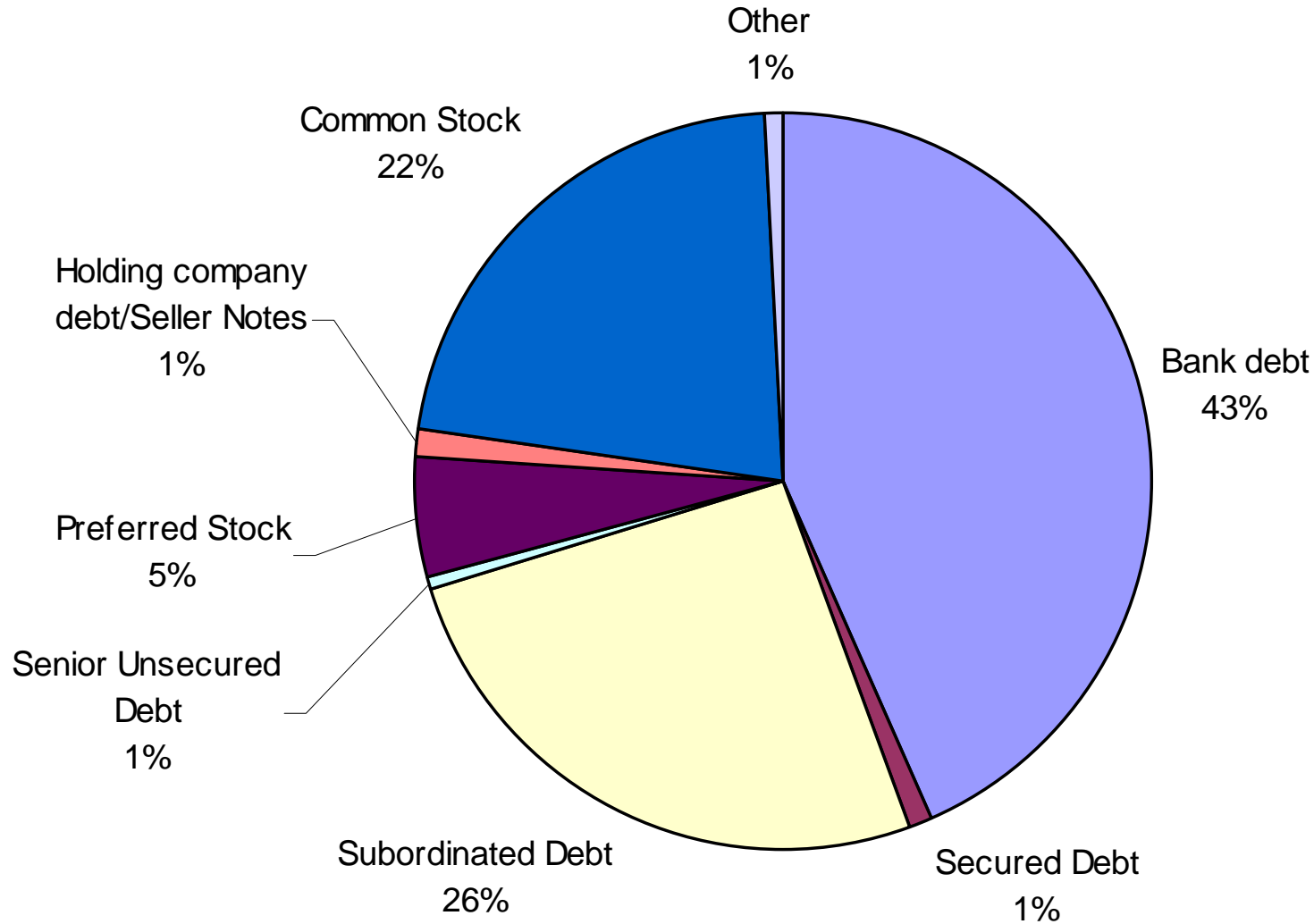
Source: Buyouts (Thomson Financial)

Buyout Purchase Price

Average EBITDA multiples by sector

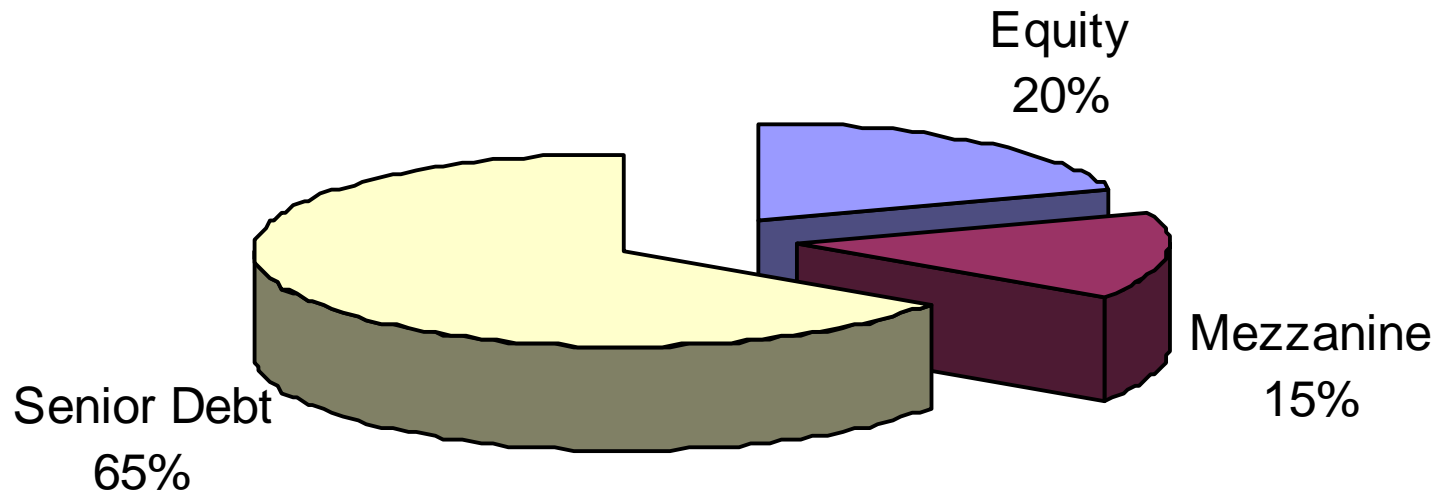
	1999	2000	2001
Manufacturing	6.8	6.6	6.6
Healthcare	5.2	6.8	5.8
Retail	8.2	6.7	4.1
Services	7.3	6.8	6.5
Overall	7.4	6.7	6

Buyout Purchase Price



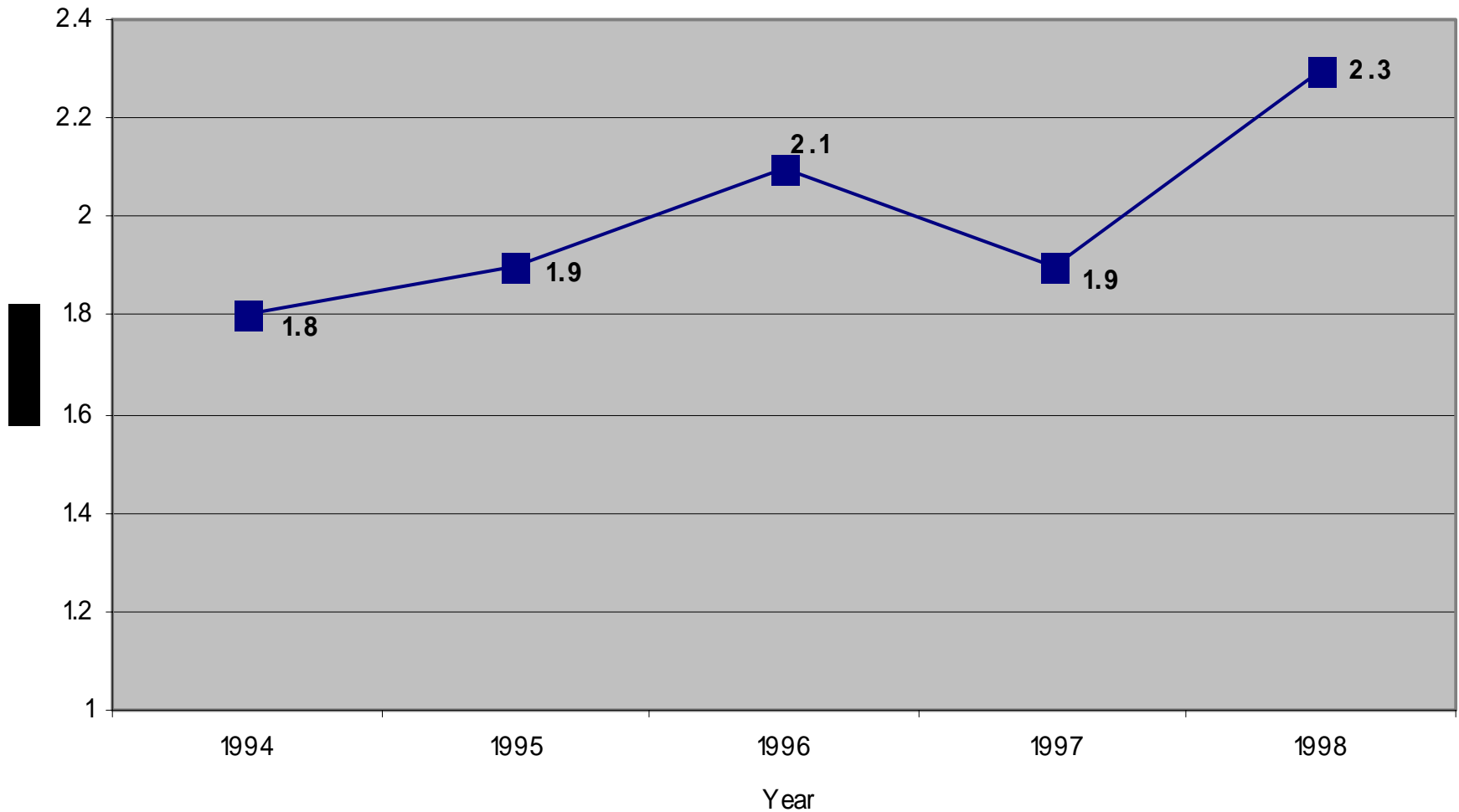
MBO Capital Structure: The Italian Case

Capital Structure in Late 1980s



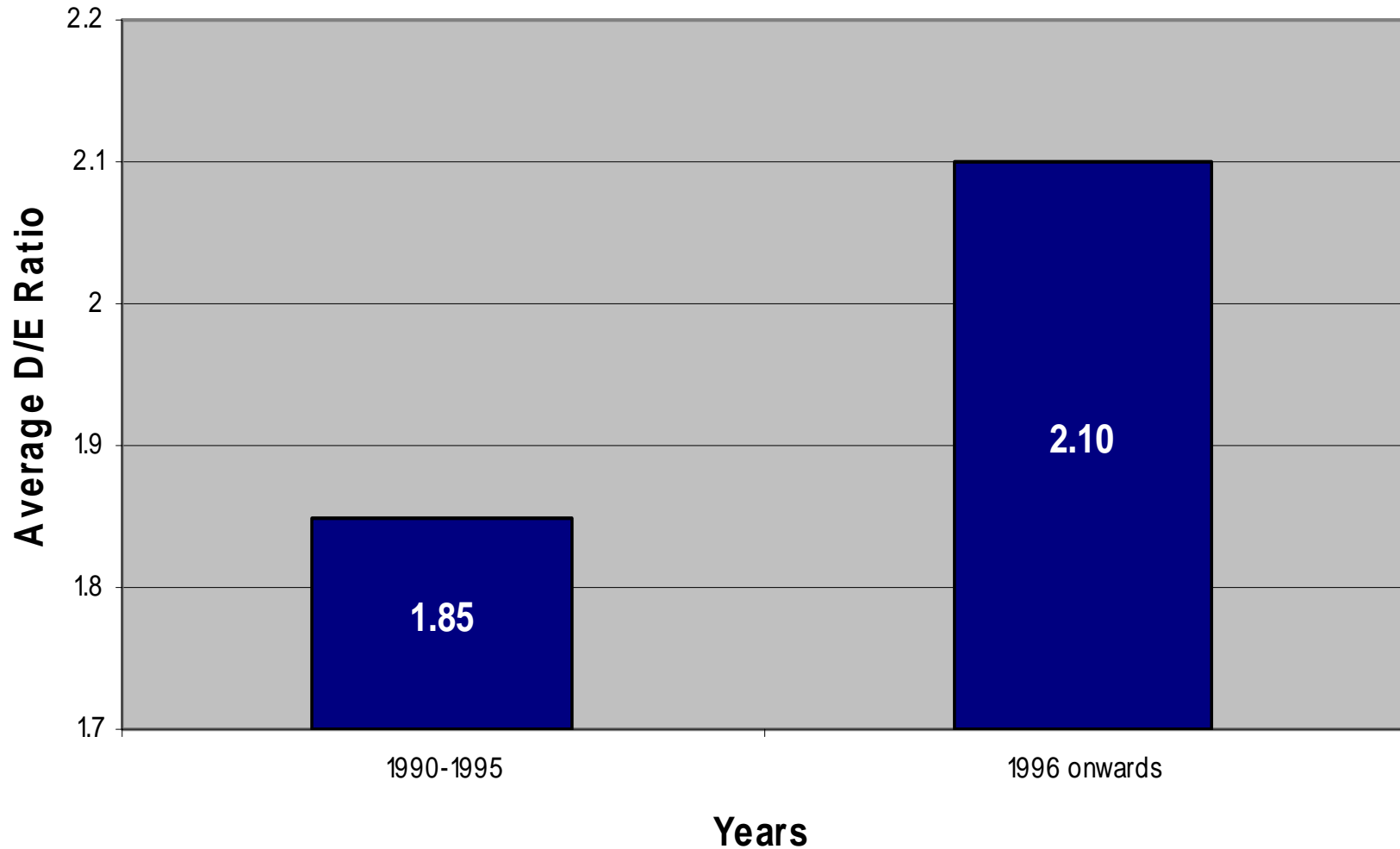
MBO Capital Structure: The Italian Case

Debt/Equity Ratio Trends



MBO Capital Structure: The Italian Case

Debt/Equity Ratio Trends



Theory of Leverage and Firm Valuation

Original MM: No Taxes

Proposition I:

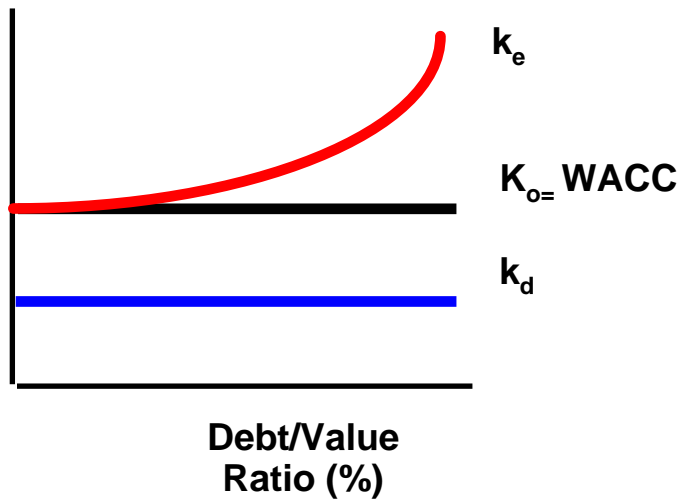
- The value of the firm is NOT affected by changes in the capital structure.
- The cash flows of the firm do not change, therefore value doesn't change

Proposition II:

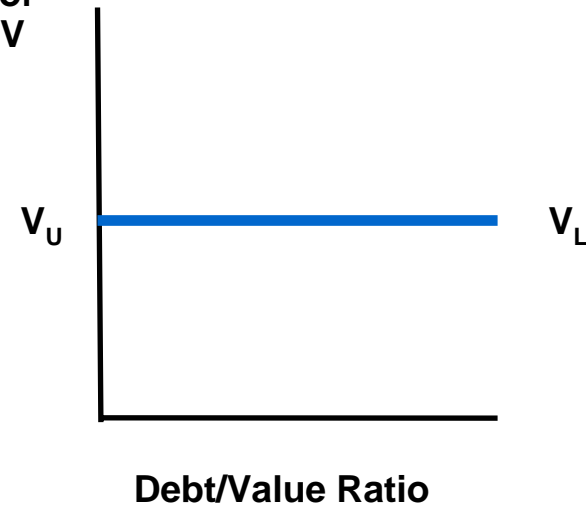
- The WACC of the firm is NOT affected by capital structure

Original MM

Cost of Capital (%)



Value of Firm, V (\$)



Effect of Leverage

Proposition I:

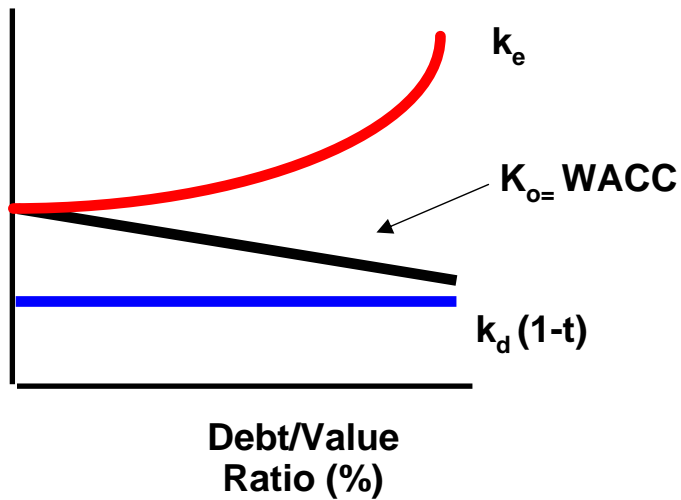
- The value of the firm increases by the present value of the annual interest tax shield: $V_L = V_U + \text{PV of interest tax shield}$.
- When corporate taxes are added, V_L increases as debt is added to the capital structure, and the greater the debt usage, the higher the value of the firm.

Proposition II:

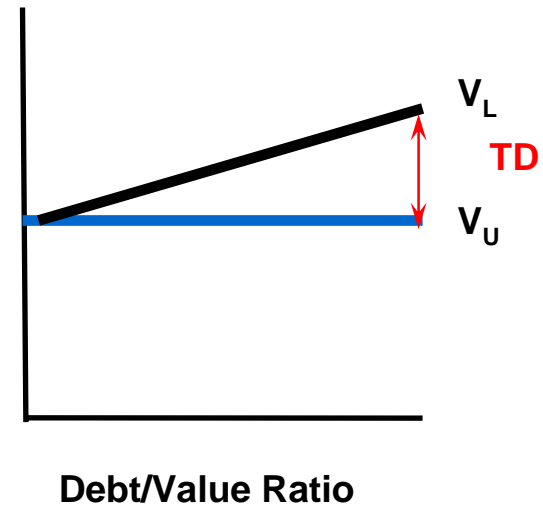
- The WACC decreases as D/E increases because of the government subsidy on interest payments

Effect of Leverage

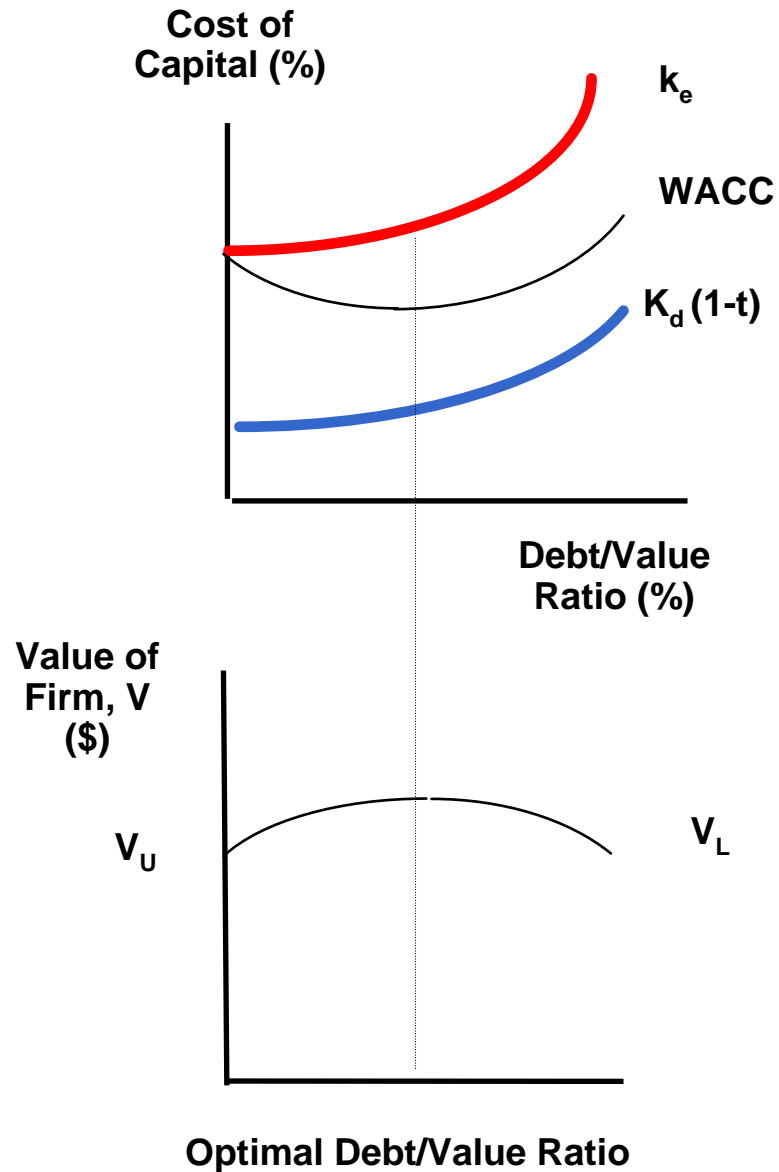
Cost of Capital (%)



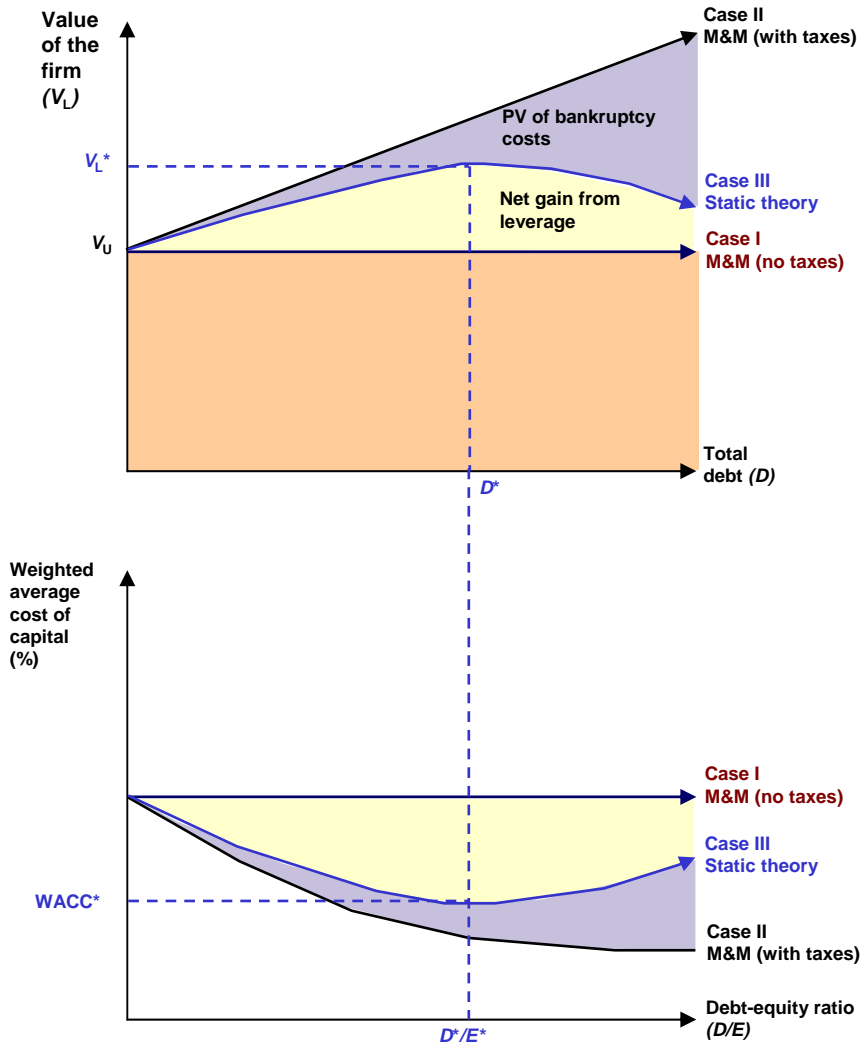
Value of Firm, V (\$)



Effect of Leverage: Traditional Approach



Net Effect of Leverage on Firm Value



Case 1
 With no taxes or bankruptcy costs, the value of the firm and its weighted average cost of capital are not affected by capital structures.

Case 2
 With corporate taxes and no bankruptcy costs, the value of the firm increases and the weighted average cost of capital decreases as the amount of debt goes up.

Case 3
 With corporate taxes and bankruptcy costs, the value of the firm, V_L , reaches a maximum at D^* , the optimal amount of borrowing. At the same time, the weighted average cost of capital, $WACC$, is minimized at D^*/E^* .

Restructuring and Value

Case 1: Leveraging Up

Debt for Equity Swap		3000		
		Before	After	Change (% Return)
EBIT		1000	1000	
Debt	BV	2000	5000	3000
(12 years)	MV	2000	4727	2727
Cost of Debt	Pre tax	8%	10%	2%
	Post tax	4.80%	6%	1%
Tax rate		40%	40%	
Interest		160	460	300
EBT		840	540	-300
EAT		504	324	-180
Cost of Equity		12.50%	14.30%	1.8%
Equity Multiplier		8	7	-1
Equity Value		4032	2268	(+3000)+1236 = 31%
Firm Value		6032	6995	+963=16%
Cost of capital		10%	8.60%	-1.4%

EBIT	1000	1000	
Interest	160	460	\$ Tax Shield =?
EBT	840	540	\$ Bankruptcy Costs =?
Taxes	336	216	Breakeven Multiplier =?
EAT	504	324	Cost of capital=?
WACC = 0.33(4.8%)+0.67(12.5%) = 10%			

Restructuring and Value

Case 2: Debt + Equity

LBO financed by 90% Debt and 10% Equity

LBO purchased at a 40% equity premium = 5645

New Debt = 5080

		Before	After	Change (% Return)
EBIT		1000	1000	
Depreciation		500	500	
Debt	BV	2000	7080	5080
(12 years)	MV	2000	6690	4690
Cost of Debt	Pre tax	8%	11%	3%
	Post tax	4.80%	6.60%	1.8%
Tax rate		40%	40%	
Interest		160	718.8	559
EAT		504	168.72	-335
Equity Multiplier		8	-	-
EBITD based firm multiplier		-	5.25	
Equity Value		4032	1185	109%
	<i>*(Investment = 0.1*5645 = 565)</i>			
Firm Value		6032	7875	+1843=31%

EBIT	1000	1000	
Interest	160	719	
EBT	840	281	
Taxes	336	112.4	
EAT	504	168.6	
WACC	10%	?	\$ Tax Shield =?
EBITD/Interest	9.375	?	\$ Bankruptcy Costs =?