M E R G E R S & A C Q U I S I T I O N S

U.S. LEVERAGED BUYOUT MARKET 1980-2002

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PART I: OVERVIEW OF THE LEVERAGED BUYOUT MARKET

The leveraged buyout market rose to prominence in the late 1980s when private equity firms such as Kohlberg Kravis & Roberts ("KKR") and Fortsmann Little were consistently making headlines with large buyouts including the largest leveraged buyout ever, KKR's $25 billion buyout of RJR Nabisco in 1988. The success of these financial sponsors (i.e., private equity firms) and others in completing transactions and earning favorable returns attracted many other parties to the industry. There are currently hundreds of financial sponsors focused on buying companies of all sizes across many industries.

With an estimated $120 billion in uninvested capital, hundreds of financial sponsors, and a difficult M&A environment, private equity firms currently face a challenging environment. As the buyout community moves forward in this competitive environment, we think it is appropriate to look back at leveraged buyouts over the last 22 years. In this *M&A Insights* article, we review the trends and drivers of the U.S. leveraged buyout market over the 1980-2002 period.

Our data comes from a number of different sources including *Thomson Financial (i.e., Securities Data Corporation ("SDC"), Venture Economics* and *Buyouts*), *Standard & Poor's Portfolio Management Data, Loan Pricing Corporation, FactSet, Moody's* and *FitchRatings*. In some cases, complete data back to 1980 was not available. In other cases, the data available was incomplete or contradictory. In particular, we suspect that many smaller leveraged buyouts are not reported due to the difficulty in obtaining data. In addition, some deals do not report transaction size. However, we have used what we believe to be the most complete and reliable data available. We believe that the data available captures many of the important trends. In relevant sections and exhibits, our analysis is based on disclosed transactions that are either of completed or pending status. Our analysis of volume (i.e., deal value) is based on total enterprise value (e.g., total rank value as reported by SDC) reported by each respective source. The data represents U.S. leveraged buyouts unless otherwise indicated.

The data and our analysis revealed the following about the leveraged buyout market over the 1980-2002 period:

- ***Leveraged Buyout Volume Peaked in the Late 1980s***
  From 1980-2002, SDC reported leveraged buyouts totaling $505 billion. Approximately 56%, 29% and 15% of the leveraged buyout volume was in the 1980s, 1990s and 2000s (2000-2002), respectively. The period from 1985-1989 was the most active, accounting for approximately 51% of the deal volume. Leveraged buyout volume declined significantly in the early 1990s and then increased in the late 1990s and 2000s.

- ***The Late 1980s was the Period with the Greatest Number of Leveraged Buyouts***
  Over the period 1980-2002, SDC reported 4,310 leveraged buyouts. Between 1985 and 1989, there was a total of 1,290 leveraged buyouts, averaging 258 per year. This compares to an average of 216 and 235 per year in the 1990s and 2000s, respectively. Unlike the case with the volume of leveraged buyouts, the annual number of leveraged buyouts from 1990-2002 was relatively flat.

- ***Competition in the Leveraged Buyout Market has Continued to Increase***
  According to data published by *Buyouts*, the number of financial sponsors increased from 229 in 1994 to 346 in 2001. While we believe the trend is accurate, we currently track more than 500 private equity firms.

- ***The Majority of Leveraged Buyouts were with Small to Midsized Companies***
  From 1980-2002, 79% of leveraged buyouts had a total deal value of $250 million or less, and 61% had a total deal value of $100 million or less. The average and median size of leveraged buyouts was the highest in the late 1980s. Although average and median deal size in the 1990s and 2000s was not as high as in the late 1980s, the average and median deal size did gradually trend upward.

- ***The Majority of Leveraged Buyouts were with Manufacturing Businesses***
  Over the 1980-2002 period, almost 50% of leveraged buyouts (by number of deals and volume) were with manufacturing businesses. Approximately 25% (by number of deals and volume) were with service businesses.

- ***Leveraged Buyouts Represented a Relatively Small Percentage of the Overall M&A Market***
  From 1980-2002, leveraged buyouts represented 5% of the total M&A volume and 4% of the total number of M&A transactions. Over this period, annual leveraged buyout volume and the number of transactions were generally lower than 4% of the total M&A market except for the late 1980s when the volume and number of transactions were in the 20% to 30% and 9% to 10% range, respectively.

- ***The Leveraged Buyout Market Outside the United States has Grown in Importance in Recent Years***
  From 1980-2002, leveraged buyouts outside of the United States accounted for approximately 39% of the global leveraged buyout volume. Leveraged buyouts outside of the United States accounted for 10%, 50% and 67% of global leveraged buyout volume in the 1980s, 1990s and 2000s, respectively.

We reviewed a variety of data in order to determine what was driving these trends in the leveraged buyout market over the 1980-2002 period. The data revealed clear drivers for the high level of leveraged buyout activity of the late 1980s. The data also provided insight into the higher leveraged buyout volume in the late 1990s versus the early 1990s. The following drivers were evident from the data we examined:

- **Leverage –** The lending multiples (as measured by total debt/EBITDA) peaked at more than 8.5x in the late 1980s, coinciding with the period of the greatest leveraged buyout activity. The lower lending multiples of the 1990s and 2000s (as compared to the 1980s) resulted in lower leveraged buyout activity. As the lending multiples increased through the mid-1990s, so did the value of leveraged buyouts (but not the number of deals). Over the 1997-2002 period, lending multiples decreased while the volume of leveraged buyouts generally increased and the number of leveraged buyouts did not show a trend.

- **Valuations –** The high leveraged buyout activity of the late 1980s was also the period when overall M&A valuations were relatively low. The combination of relatively low valuations and high lending multiples made the late 1980s an attractive period for leveraged buyouts. However, this same trend was not evident after the 1980s. That is, leveraged buyout volume was not higher during periods of lower valuations. In fact, the opposite trend is evident during periods in the 1990s.

- **Availability of Targets –** There were significantly more leveraged buyouts in which the target was a corporate divestiture or a public company during the late 1980s than in the 1990s and 2000s. The high level of leveraged buyouts in which the target was a corporate divestiture likely reflected the favorable environment (i.e., leverage and valuations), combined with a time when corporations were focusing on core competencies and disposing of non-core assets. We suspect that the fallout in going private transactions in the 1990s and the 2000s (i.e., transactions in which the target was a public company) was primarily driven by corporate law and regulatory developments. In addition, the initial public offering market was much more active in the 1990s and 2000s, presenting sellers with an attractive exit alternative to selling to financial sponsors and strategic buyers.

- **Availability of Capital –** The availability of buyout capital increased in the late 1990s and 2000s resulting in more participants entering the industry. This increase in available capital was likely a driver of the increase in leveraged buyout volume in the late 1990s and 2000s versus the early 1990s.

In Part II, we review the trends in the leveraged buyout market over the 1980-2002 period. In Part III, we review the key drivers of the leveraged buyout market over 1980-2002. Finally, in Part IV, we provide some concluding comments about the leveraged buyout market including some of the strategies private equity firms are considering and/or adopting.

PART II: LEVERAGED BUYOUT MARKET FROM 1980–2002

Overview

In Part II, we review trends in the leveraged buyout market over the 1980-2002 period. Generally, we do not review the drivers of these leveraged buyout trends until Part III. In this part, we review the following leveraged buyout trends:

- Leveraged Buyout Volume
- Number of Leveraged Buyouts
- Number of Financial Sponsors
- Breakdown of Leveraged Buyouts by Size
- Leveraged Buyouts by Sector
- Leveraged Buyout Activity Versus M&A Activity
- Global Leveraged Buyouts

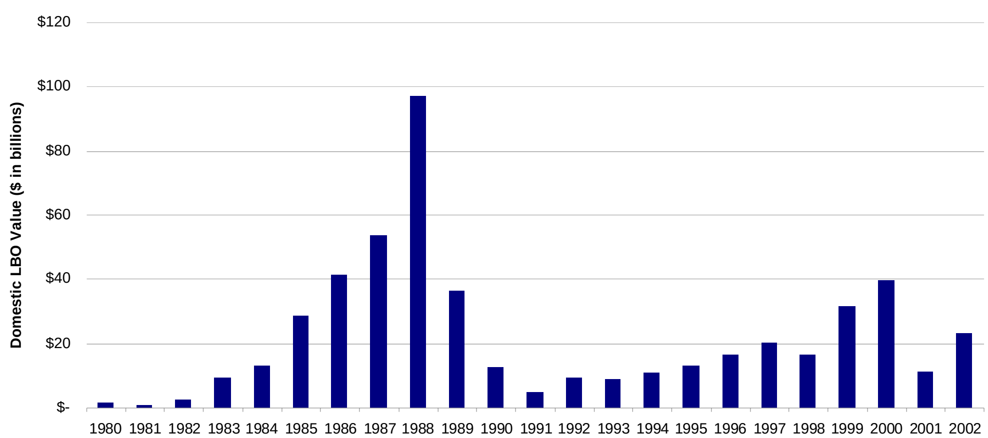
Leveraged Buyout Volume

From 1980-2002, the total leveraged buyout volume as reported by SDC was $505 billion. As a percentage of total leveraged buyout volume over the 1980-2002 period, the breakdown of leveraged buyout volume by the 1980s, 1990s, and 2000s was 56%, 29%, and 15%, respectively. The period from 1985-1989 was a particularly active period for leveraged buyouts, accounting for approximately 51% of the total leveraged buyout volume.

Leveraged buyout volume grew from a few billion dollars in 1980 to a peak of $97 billion in 1988 (Exhibit I). Leveraged buyout volume in the 1980s totaled $285 billion. In the late 1980s, average leveraged buyout volume was $52 billion per year. The volume of leveraged buyouts declined in the early 1990s, averaging approximately $10 billion per year over the 1990-1995 period. Leveraged buyout volume increased in the late 1990s, peaking in 1999 at $32 billion. Leveraged buyout volume reached $40 billion in 2000 and declined to $12 billion in 2001. Leveraged buyout volume was $23 billion in 2002.

Exhibit I

LBO VOLUME



Source: Securities Data Corporation

Number of Leveraged Buyouts

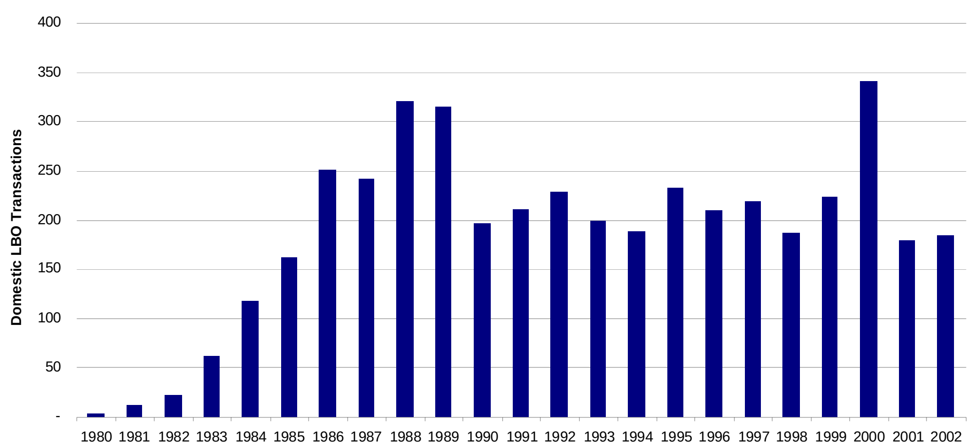
From 1980-2002, the number of leveraged buyouts as reported by SDC was 4,310. Approximately 35% of leveraged buyouts occurred in the 1980s, 49% in the 1990s and 16% in the 2000s. The average annual number of leveraged buyout deals between 1985 and 1989 was 258 deals (we excluded 1980-1984 due to insufficient data). The average annual number of leveraged buyouts during the 1990s and 2000s was 210 and 235 deals, respectively.

The leveraged buyout market grew from few reported deals in the early 1980s to 315 deals in 1989 (Exhibit II). Over the 1990-1999 period, the annual number of deals varied from a low of 187 deals to a high of 233 deals. The number of leveraged buyouts peaked in 2000 at 341 deals, declined in 2001 to 179 deals, and rebounded to 185 deals in 2002.

The trend of higher leveraged buyout activity in the late 1980s was not as pronounced when comparing the number of deals (Exhibit II) to volume (Exhibit I). This suggests higher average deal size in the late 1980s (versus the 1990s and 2000s). In addition, unlike the case with leveraged buyout volume, the number of leveraged buyouts did not show the increasing trend from the early 1990s to the late 1990s and 2000s. Again, this suggests a change in deal size.

Exhibit II

NUMBER OF LBO DEALS



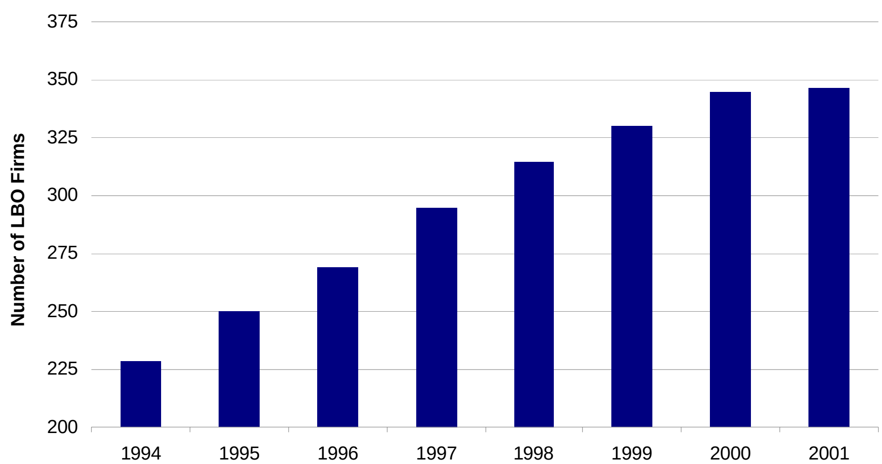
Source: Securities Data Corporation

Number of Financial Sponsors

Over 1994-2001, the number of financial sponsors as reported by *Buyouts* increased from 229 to 346 (Exhibit III). The available data only tracked the number of financial sponsors from 1994-2001. While we have used *Buyouts* as the source of information to track the growth in private equity firms, our internal database currently has more than 500 firms. We note that the increase in financial sponsors over the 1994-2001 period is not associated with an increase in the number of leveraged buyouts. While the data may be incomplete, it does suggest that the environment is much more challenging for private equity firms.

Exhibit III

FINANCIAL SPONSORS



Source: Buyouts

Breakdown of Leveraged Buyouts by Size

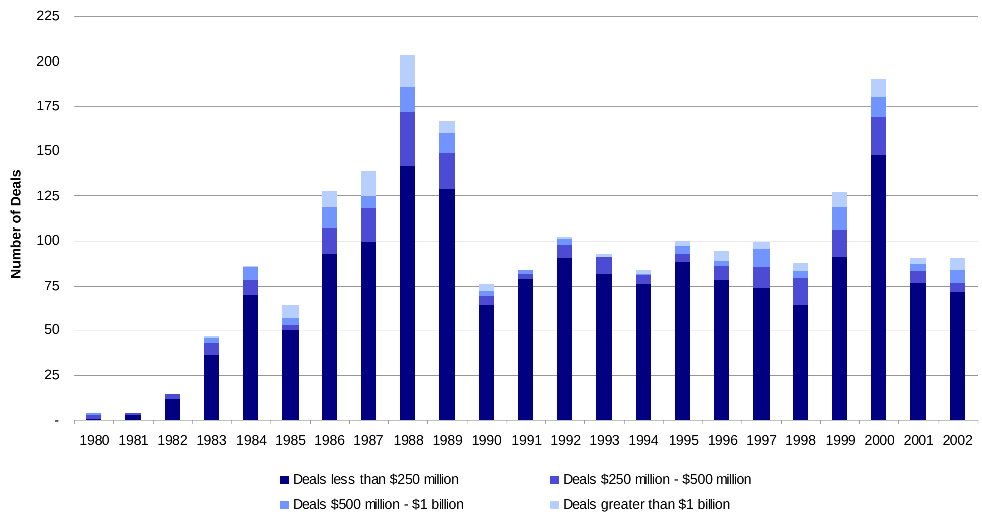
The majority of leveraged buyouts have been with small and midsized companies. Over the 1980-2002 period, the breakdown of leveraged buyouts by deal size for transactions with reported enterprise value was:

- deals less than $250 million accounted for 79%;
- deals between $250 million and $500 million accounted for 10%;
- deals between $500 million and $1 billion accounted for 6%; and
- deals greater than $1 billion accounted for 5%.

The percentage breakdown of leveraged buyouts by deal size remained relatively consistent in the 1980s, 1990s and 2000s.

Exhibit IV

BREAKDOWN OF LBO DEALS BY DEAL SIZE



Note: Data is based on transactions with reported enterprise value (i.e., rank value)
Source: Securities Data Corporation

Average and Median Deal Size

Average Deal Size
From 1980-2002, the average leveraged buyout deal size was $221 million. The average leveraged buyout deal size was significantly higher in the 1980s as compared to the 1990s and 2000s. Average leveraged buyout deal size showed a generally increasing trend from the early 1990s through the late 1990s and 2000s.

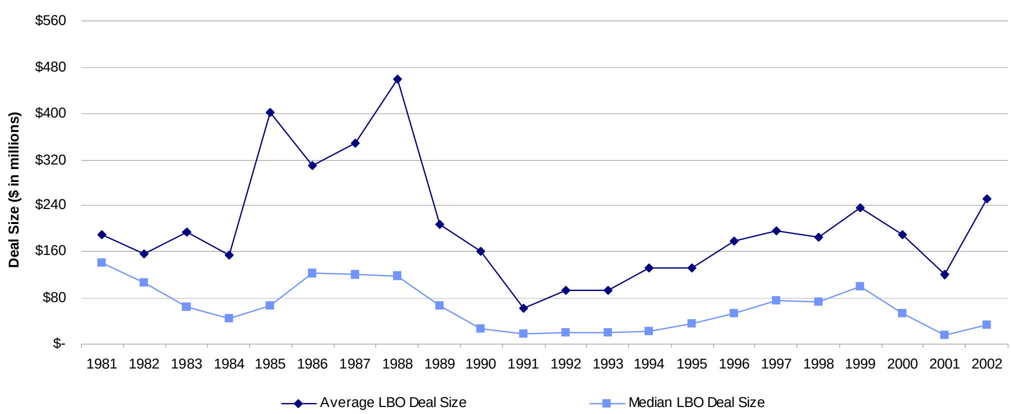
Average leveraged buyout deal size in the early 1980s was slightly more than $150 million. By the late 1980s, average leveraged buyout deal size increased to more than $300 million. The average leveraged buyout deal size declined dramatically in the early 1990s, falling to $63 million in 1991. Through the rest of the 1990s, the average leveraged buyout deal size steadily increased, reaching $237 million in 1999. In 2001, the average leveraged buyout deal size slumped to $121 million but rebounded to $253 million in 2002. We suspect that the average leveraged buyout deal size is somewhat overstated as a result of the difficulty in obtaining information on the smaller transactions.

Median Deal Size
From 1980-2002, the median leveraged buyout deal size shows a similar but more modest trend than the average leveraged buyout deal size. Over this period, the median leveraged buyout deal size was $55 million.

The median leveraged buyout deal size in the late 1980s peaked at $123 million in 1986 and remained around $120 million from 1987-1988. In the early to mid-1990s, median leveraged buyout deal size decreased and remained at levels between $20 million and $50 million. The median leveraged buyout deal size increased in the late 1990s, peaking at $101 million in 1999. So far in the 2000s, the median leveraged buyout deal size is $36 million.

Exhibit V

AVERAGE VERSUS MEDIAN LBO DEAL SIZE



Note: Data in 1980 was omitted because it was not meaningful.
Source: Securities Data Corporation

Top Leveraged Buyouts

The top ten leveraged buyouts in the 1980s, 1990s and 2000s amounted to $61 billion, $17 billion and $25 billion, respectively (Exhibit VI). The 1980s accounted for many of the largest leveraged buyouts, including the largest leveraged buyout ever, KKR's $25 billion purchase of RJR Nabisco. While there were fewer large leveraged buyouts in the 1990s, there have already been a number of large transactions so far in the 2000s.

Exhibit VI

TOP TEN LEVERAGED BUYOUTS[1]

2000s[2]

Date Announced	Acquirer	Target	Industry	Deal Value ($ in billions)
08/20/2002	Carlyle Group Welsh, Carson, Anderson & Stowe	Qwest Commun Intl - QwestDex	Communications	$7
09/23/2002	David H. Murdock	Dole Food	Food	3
08/07/2000	Schroder Ventures Avnet Arrow Electronics	VEBA Electronics	Computer	2
10/20/2000	Berkshire Hathaway	Shaw Industries	Consumer	2
05/29/2000	BC Partners	Mark IV Industries	Automotive	2
03/29/2000	Veritas Software Silver Lake Partners	Seagate Technology	Technology	2
01/16/2001	Forstmann Little	Citadel Communications	Communications	2
11/07/2002	Thomas H. Lee Bain Capital	Houghton Mifflin	Publishing	2
04/13/2002	Kelso & Company LP Nortek Management	Nortek	Building Products	2
01/31/2001	First Reserve Corporation Odyssey Investment DEG Management	Dresser Equipment Group	Energy	2
			Total	$25

1990s

Date Announced	Acquirer	Target	Industry	Deal Value ($ in billions)
07/02/1998	Welsh, Carson, Anderson & Stowe	Centennial Cellular	Communications	$3
09/12/1994	Kohlberg Kravis Roberts	Borden Inc	Food	2
06/28/1999	Thomas H. Lee Roger Altman	Big Flower Holdings	Advertising	2
08/12/1997	Hicks Muse Tate & Furst	LIN Television	Broadcasting	2
05/11/1999	Texas Pacific Group	Motorola (Semiconductor Group)	Semiconductors	2
07/02/1990	Forstmann Little	General Instrument	Cable/Television	2
04/25/1990	Investcorp Bank EC	BATUS (Saks Fifth Avenue)	Retail	2
09/08/1999	dba Communications LLC	GTE (Assets)	Communications	1
05/09/1995	RIC Holdings Inc	Riverwood International	Paper	1
02/09/1996	Bain Capital Thomas H. Lee	TRW Information Systems Group	Financial	1
			Total	$17

1980s

Date Announced	Acquirer	Target	Industry	Deal Value ($ in billions)
10/24/1988	Kohlberg Kravis Roberts	RJR Nabisco	Tobacco and Food	$25
10/16/1985	Kohlberg Kravis Roberts	Beatrice Companies	Food/Consumer	5
07/25/1986	Kohlberg Kravis Roberts	Safeway Stores	Retail - Grocery	4
06/22/1988	FH Acquisition Corp	Fort Howard Paper	Paper	4
03/28/1989	Wings Holdings	NWA	Airline	4
01/21/1988	BFB Acquisition	Montgomery Ward	Retail	4
04/13/1987	Merrill Lynch Capital Partners/ Borg-Warner Holdings	Borg-Warner	Automotive/Manufacturing	4
07/03/1987	JT Acquisition	Southland	Convenience Stores	4
12/11/1986	Kohlberg Kravis Roberts/ Owens-Illinois Holdings	Owens-Illinois	Packaging	4
09/15/1988	HCA Management Group	Hospital Corp of America	Hospitals	4
			Total	$61

(1) Lists primary acquirers only.
(2) From 2000-2002.
Source: U.S. Bancorp Piper Jaffray and Securities Data Corporation

Leveraged Buyouts by Sector

Volume

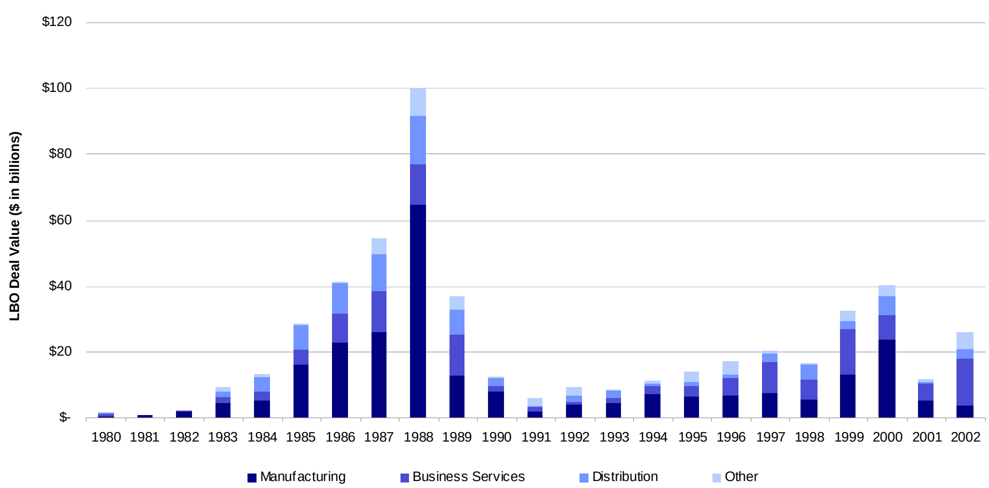
Over the 1980-2002 period, the breakdown of leveraged buyout volume by sector as a percentage of total leveraged buyout volume was:

- manufacturing businesses accounted for 49%;
- service businesses accounted for 25%;
- distribution businesses accounted for 17%; and
- other sectors accounted for 9%.

Manufacturing businesses have accounted for the largest percentage (by volume) of leveraged buyouts in all three periods. In the 1980s, 1990s, and 2000s they accounted for 54%, 44%, and 42% of the volume of leveraged buyouts, respectively. However, leveraged buyouts of service businesses have increased in the 1990s and 2000s, during which time they accounted for 32% of the volume.

Exhibit VII

NUMBER OF LBO DEALS BY SECTOR



Source: U.S. Bancorp Piper Jaffray and Securities Data Corporation

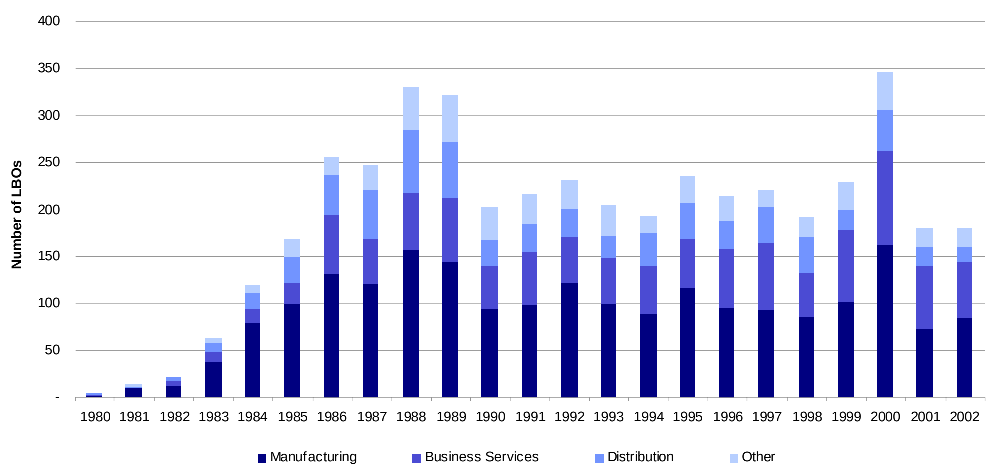
Number of Deals

From 1980-2002, the breakdown of the number of leveraged buyouts by sector as a percentage of the total leveraged buyouts mirrored the results previously discussed when leveraged buyouts were broken down by volume. The trends in each time period (i.e., the 1980s, 1990s, and 2000s) were also similar. The breakdown of leveraged buyouts by sector from 1980-2002 was:

- manufacturing businesses accounted for 48%;
- service businesses accounted for 25%;
- distribution businesses accounted for 15%; and
- other sectors accounted for 12%.

Exhibit VIII

NUMBER OF LBO DEALS BY SECTOR



Source: U.S. Bancorp Piper Jaffray and Securities Data Corporation

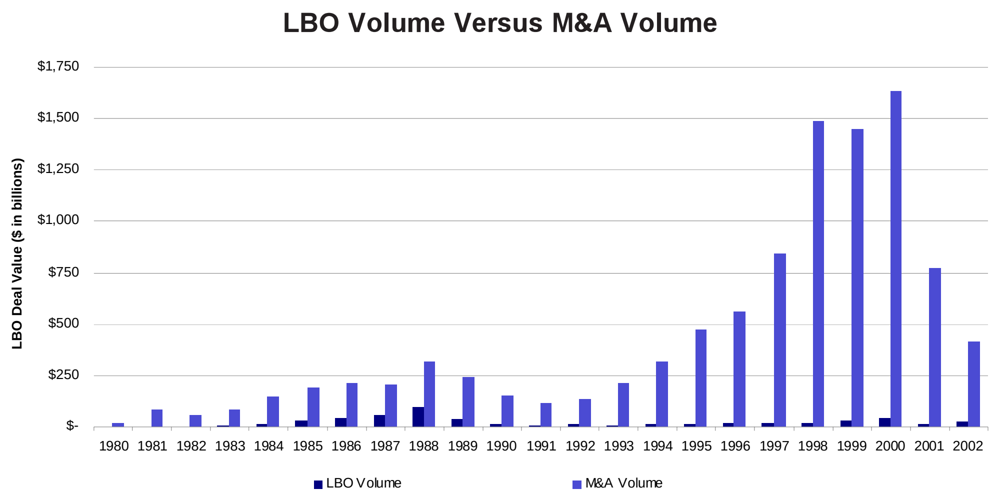
Leveraged Buyout Activity Versus M&A Activity

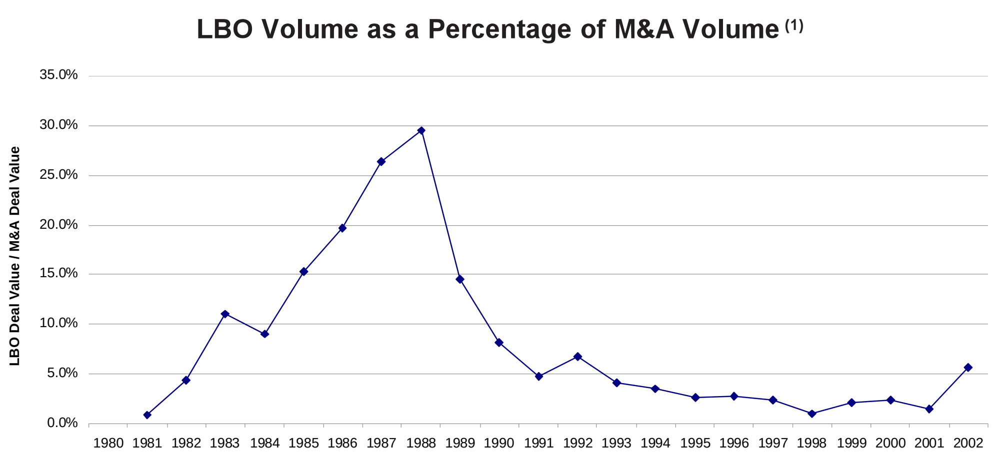
Volume

Over the period 1980-2002, the total leveraged buyout volume of $505 billion amounted to 5% of the total M&A volume of $10 trillion. Leveraged buyout volume as a percentage of M&A volume was highest in the late 1980s, peaking at 29% in 1988. From 1991-2002, leveraged buyout volume as a percentage of M&A volume was generally less than 5%. The exceptions were in 1992 and 2002 when leveraged buyout volume was 7% and 6%, respectively.

Exhibit IX

LBO VERSUS M&A – VOLUME





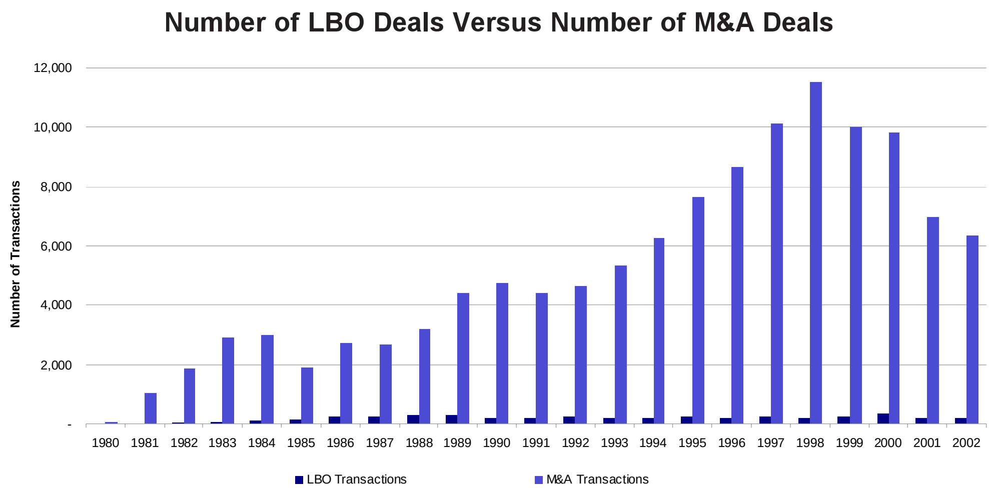
(1) Data in 1980 was omitted because it was not meaningful.
Source: Securities Data Corporation

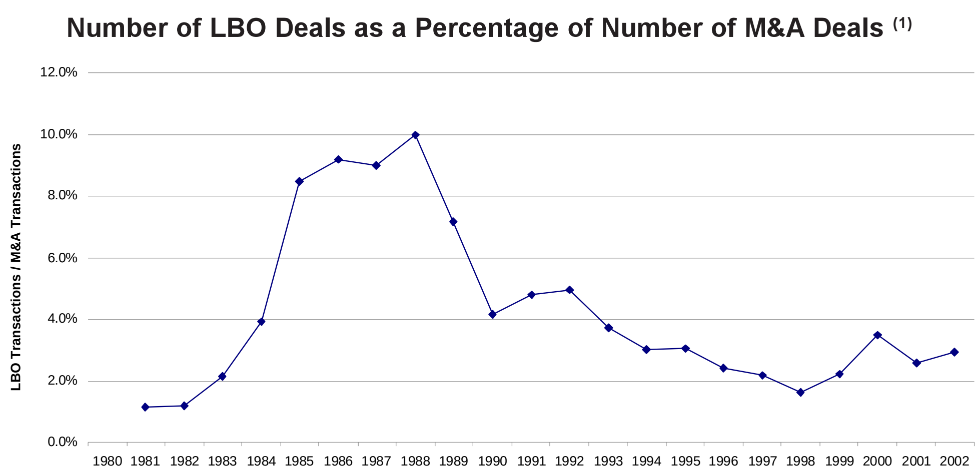
Number of Deals

Over the period 1980-2002, the total number of leveraged buyouts was 4,310, accounting for 4% of the total number of M&A transactions of 120,360. The number of leveraged buyouts as a percentage of M&A deals was highest in the late 1980s, ranging from approximately 8% to 10%. In the 1990s and 2000s, the number of leveraged buyouts as a percentage of M&A deals was generally less than 4%.

Exhibit X

LBO VERSUS M&A – NUMBER OF DEALS





(1) Data in 1980 was omitted because it was not meaningful.
Source: Securities Data Corporation

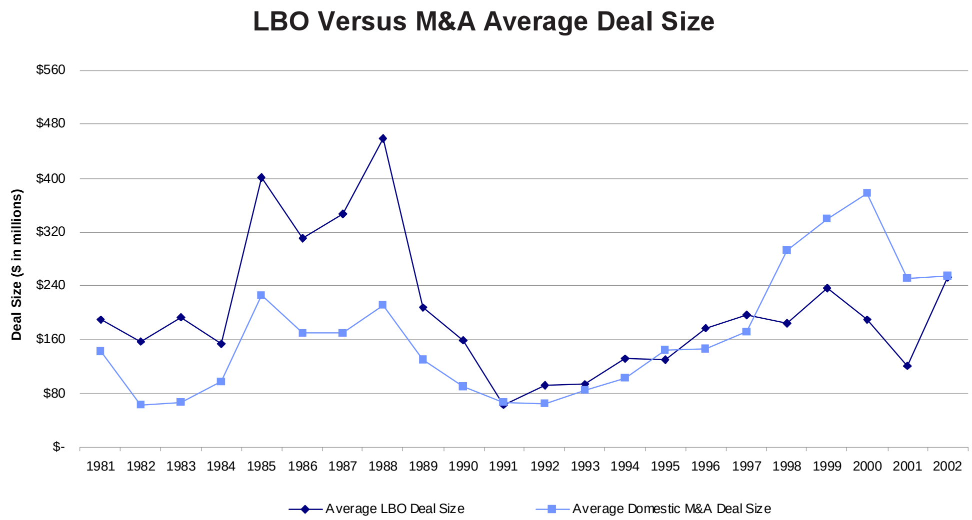
Average and Median Deal Size

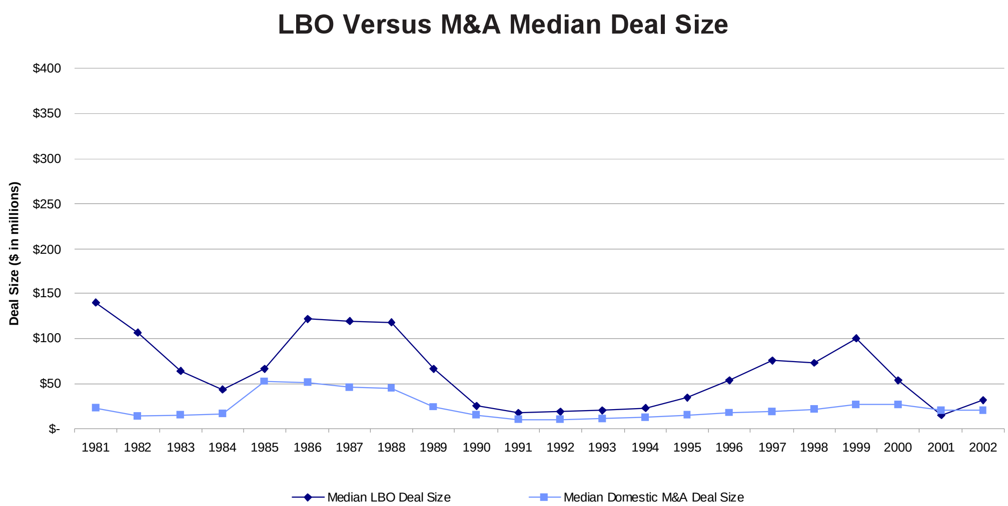
Average Deal Size
Over the 1980-2002 period, the average leveraged buyout deal size of $221 million was larger than the average M&A deal size of $188 million. In the late 1980s, the average deal size for leveraged buyouts was significantly higher than the average deal size for M&A transactions (Exhibit XI). Over the 1985-1989 period, the average deal size of a leveraged buyout was $345 million versus $175 million for the overall M&A market. During the 1990s, the average deal size of leveraged buyouts of $149 million was closer to the average deal size of M&A transactions of $177 million. So far in the 2000s, the average deal size of leveraged buyouts and M&A transactions have been $188 million and $271 million, respectively.

Median Deal Size
From 1980-2002, the median leveraged buyout deal size was $55 million, which was higher than the median M&A deal size of $20 million. Median leveraged buyout deal size in the late 1980s was $100 million as compared to $40 million for M&A transactions. During the 1990s, the median deal size was $40 million for leveraged buyouts and $17 million for M&A transactions. So far in the 2000s, the median deal sizes of leveraged buyouts and M&A transactions have been $34 million and $22 million, respectively.

Exhibit XI

LBO VERSUS M&A – DEAL SIZE





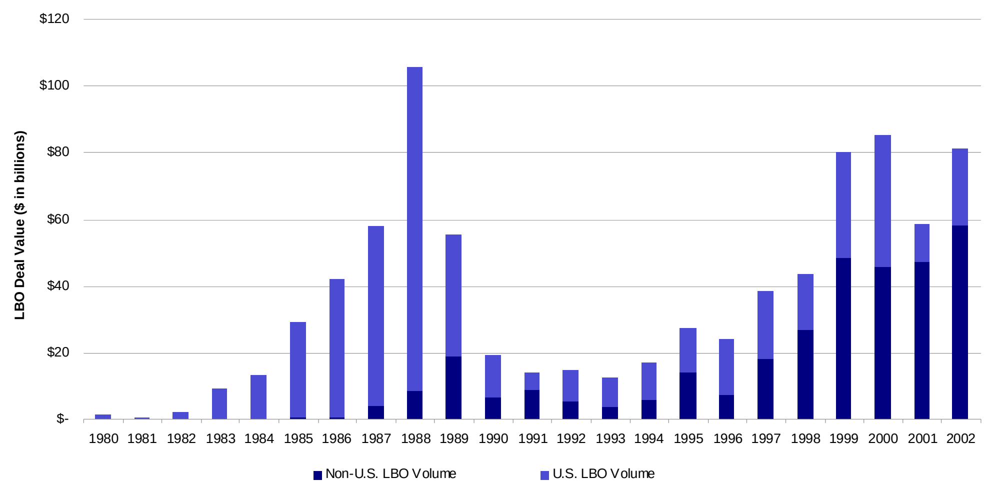
Note: Data in 1980 was omitted because it was not meaningful.
Source: Securities Data Corporation

Global Leveraged Buyouts

Over 1980-2002, the total global leveraged buyout volume was $834 billion. U.S. leveraged buyouts accounted for $505 billion (60%) of global volume versus $329 billion (40%) of the volume for leveraged buyouts outside of the United States. Since the late 1980s, non-U.S. leveraged buyouts accounted for an increasingly large portion of the global market. Reported leveraged buyouts outside of the United States rose from $4 billion in 1987 to nearly $60 billion in 2002. Non-U.S. leveraged buyouts accounted for 50% of the total global leveraged buyout volume in the 1990s. So far in the 2000s, this percentage has increased to 67%.

Exhibit XII

U.S. VERSUS NON-U.S. LBO VOLUME



Source: U.S. Bancorp Piper Jaffray and Securities Data Corporation

PART III – LEVERAGED BUYOUT MARKET DRIVERS

Overview

Leveraged Buyout Trends from 1980-2002

As set out in Part II, there have been a number of changes in the leveraged buyout market over the 1980-2002 period. The most significant trends were:

- Leveraged buyout volume and the number of leveraged buyouts were the highest in the late 1980s.
- Leveraged buyout volume was greater in the late 1990s and early 2000s as compared to the early 1990s.
- The number of buyout firms has increased significantly.
- The average and median leveraged buyout deal size was significantly larger in the 1980s versus the 1990s and 2000s.
- Leveraged buyouts represented a much higher percentage of M&A activity in the late 1980s as compared to other periods.

In this part, we review the drivers behind some of these trends.

Leveraged Buyout Returns

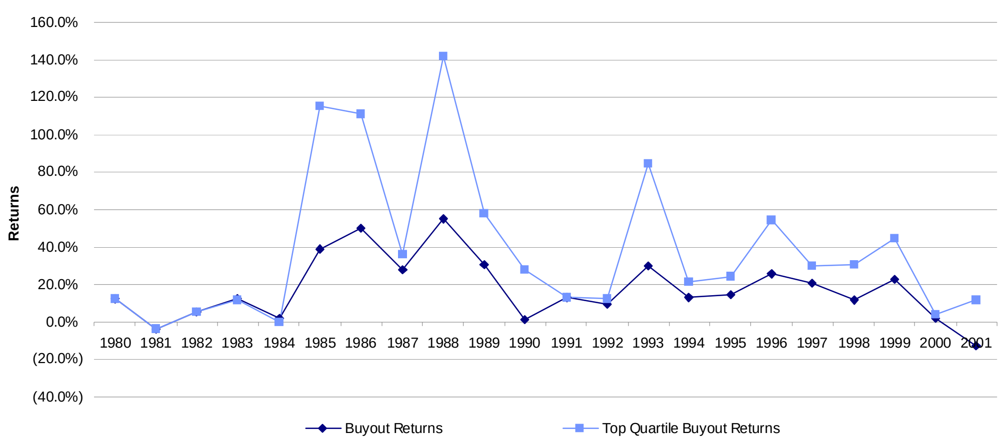
In the 1970s and early 1980s, there were few participants in the leveraged buyout market and many of them earned exceptional returns. For example, in the 1982 leveraged buyout of Gibson Greetings a $330,000 investment was turned into $66 million in 18 months. The successes of these initial participants attracted many more players to the industry.

Leveraged buyout returns are generally a function of one or more of the following factors: (i) leverage; (ii) growth; (iii) margin enhancement; and (iv) multiple expansion. Leverage has historically been the most important driver of buyout returns. Growth and margin enhancements have been important contributors to returns in a number of industries. Private equity firms have also benefited from multiple expansion, that is, buying the target for a lower multiple than that which is received upon an exit. This multiple expansion may be driven by growth, margin enhancement or conditions in the financial markets (e.g., higher valuation multiples).

Exhibit XIII sets out the net buyout returns (i.e., buyout returns to the limited partners) as reported by *Venture Economics*. We suspect that this data is incomplete as a result of the challenges in obtaining this information. However, we believe it to be the most complete reported data. From 1985-1989, buyout returns averaged 41%, with the top quartile of leveraged buyout returns averaging 92%. In the 1990s, average buyout returns were significantly lower than in the late 1980s; returns averaged 16% and the top quartile averaged 34%. So far in the 2000s, top quartile buyout returns have declined to an average of 8%.

Exhibit XIII

BUYOUT RETURNS

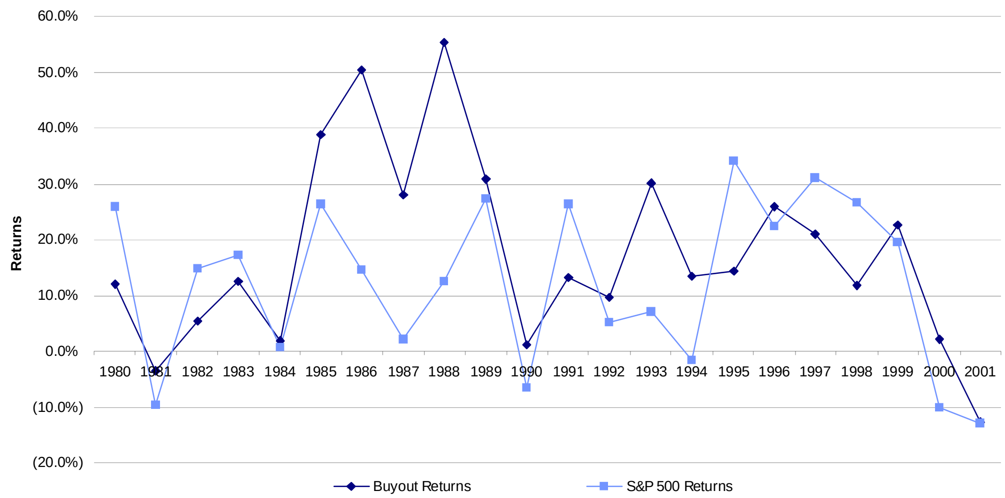


Source: Venture Economics

Buyout returns generally exceeded returns from the S&P 500 during the 1980s (Exhibit XIV). In the 1990s, average buyout returns and average S&P 500 returns both were approximately 16%. In the 2000s, average buyout returns and average S&P 500 returns were approximately –5% and –12%, respectively.

Exhibit XIV

BUYOUT RETURNS VERSUS S&P 500 RETURNS



Source: Venture Economics

As long as returns were relatively attractive, parties were drawn to the leveraged buyout industry. Over the 1980-2002 period, top financial sponsors have earned extremely attractive returns. The lure of exceptional returns continued to attract participants to the industry over this period of time. While there has been an increase in participants in the leveraged buyout market, the activity has not approached the levels seen in the late 1980s. Over the 1980-2002 period, the high activity of the late 1980s and lower levels in later years were driven primarily by the following: (i) leverage; (ii) valuations; and (iii) the availability of attractive targets. In addition, the increased availability of capital has continued to attract participants to the industry and has contributed to the increased competitive environment. We discuss these four drivers in the following sections.

Leverage

Overview

Leverage has historically been the most important driver of the leveraged buyout market. Generally, the higher the leverage and the lower the equity contribution, the higher the total returns. In the leveraged buyout community, leverage is generally measured by total debt/EBITDA. While the debt is composed of a number of instruments such as senior debt, high yield debt and mezzanine debt, a discussion of these components is beyond the scope of this article.

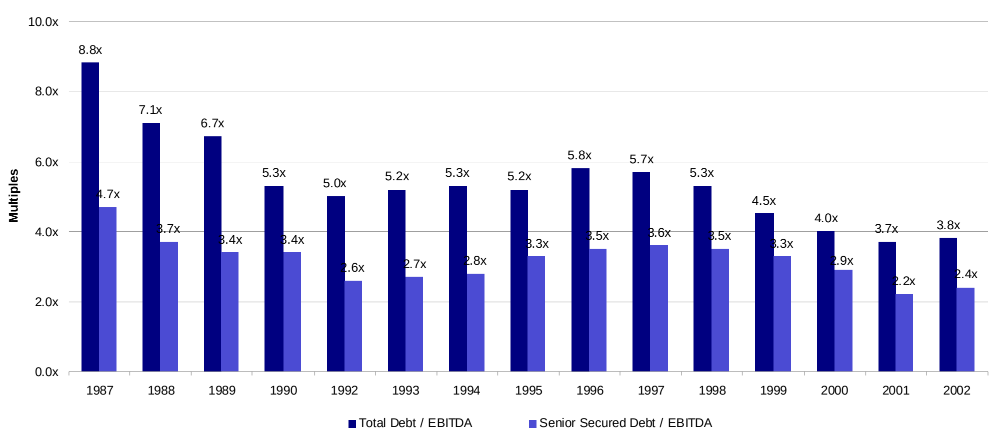
Leverage Lending Multiples

Total debt/EBITDA multiples averaged 5.4x over the 1987-2002 period (Exhibit XV). Lending multiples declined from a peak of 8.8x in 1987 to 3.8x in 2002. (The available data only reported average lending multiples since 1987.) The high lending multiples of the late 1980s coincided with the period of the greatest leveraged buyout activity.

The average lending multiples in the 1990s and 2000s were 5.3x and 3.8x, respectively. The decline in lending multiples was driven by an increase in default rates and regulatory pressure. The lower lending multiples in the 2000s have been driven by the downturn in the economy, the consolidation of lending institutions, a less receptive high yield market, and an increase in default rates. The lower leverage multiples after 1989 coincided with lower leveraged buyout activity as compared to the late 1980s. From 1990-1996, leveraged buyout volume (but not number of deals) generally increased as leverage multiples trended upwards. Over the 1997-2002 period, lending multiples decreased while the volume of leveraged buyouts generally increased and the number of leveraged buyouts did not show a trend.

Exhibit XV

AVERAGE LENDING MULTIPLES

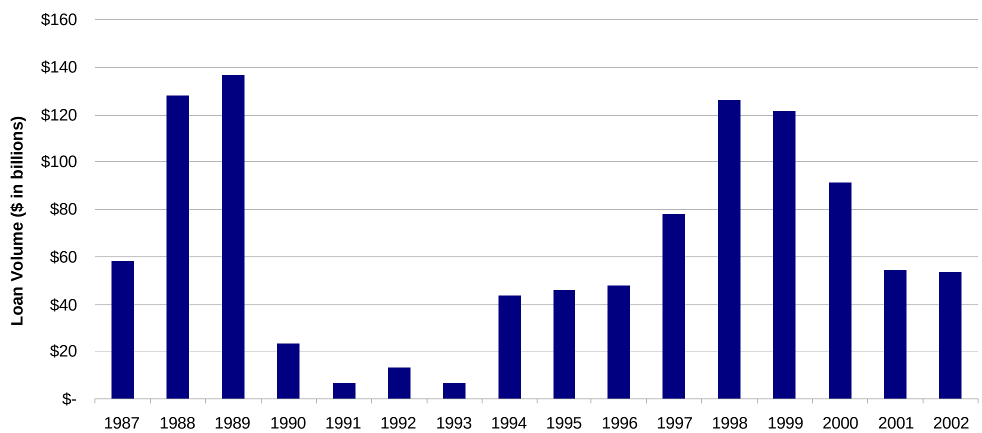


Note: There were too few deals in 1991 to provide a meaningful sample.
Source: Standard & Poor's Portfolio Management Data

In conjunction with lending multiples, we looked at lending volumes over the 1980-2002 period. M&A leverage lending volume peaked in the late 1980s, which was consistent with the trend in leveraged buyout activity (Exhibit XVI). Volume in the leverage lending market was also higher in the late 1990s and 2000s versus the early 1990s. Exhibit XVII sets out the issuance in the high yield market over the 1980-2002 period; this is total issuance and not just M&A-related issuance. The percentage of issuance related to M&A was much higher in the 1980s versus the 1990s. Exhibit XVIII sets out the high yield default rates. The high yield default rates in the early 1990s are consistent with the decline in lending multiples that occurred since the late 1980s. The high yield default rates in the 2000s are consistent with the decline in lending multiples in the 2000s.

Exhibit XVI

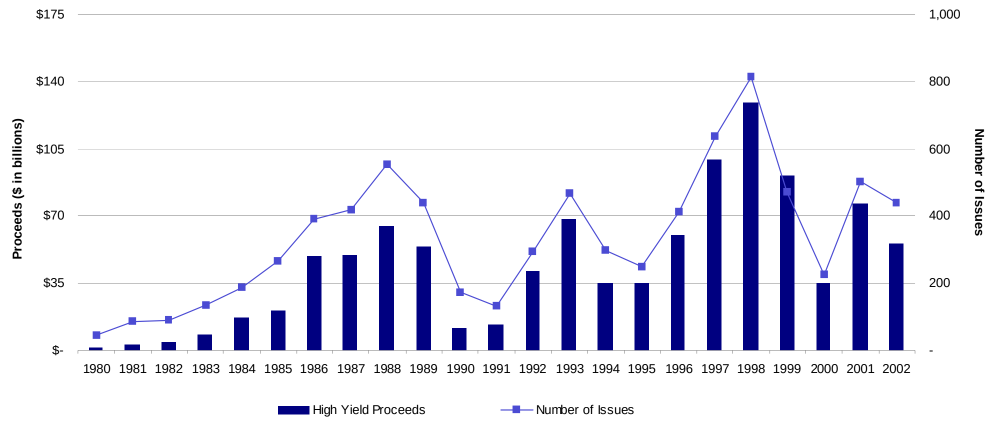
M&A LEVERAGE LOAN VOLUME



Source: Loan Pricing Corporation

Exhibit XVII

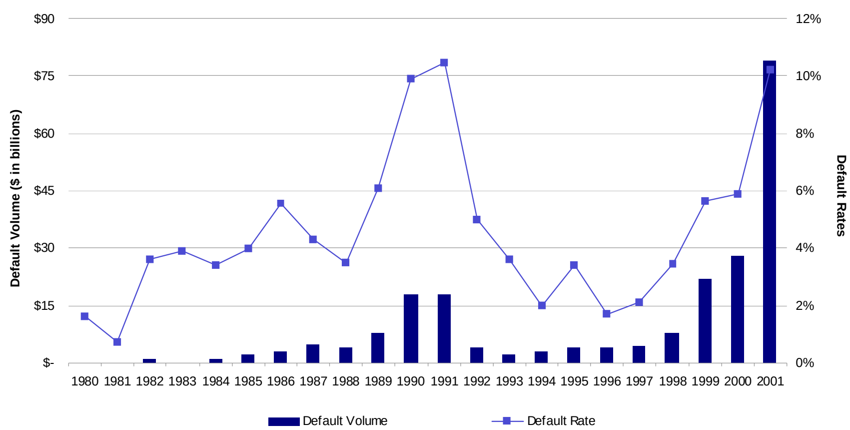
HIGH YIELD DEBT MARKET



Source: Securities Data Corporation

Exhibit XVIII

HIGH YIELD BOND DEFAULTS



Source: U.S. Bancorp Piper Jaffray; Moody's; and FitchRatings

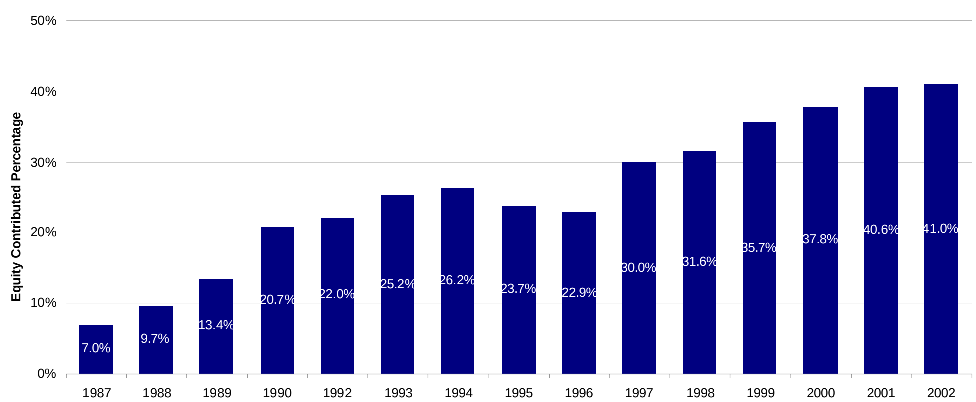
Capital Structure

In conjunction with leverage, we looked at the equity contributions in leveraged buyouts over the 1987-2002 period (data was not available prior to 1987). The low equity contributions of the late 1980s are consistent with the higher leveraged buyout volume during this period of time. However, equity contributions increased over the 1990-2002 period during which time the leveraged buyout volume increased and the number of leveraged buyouts remained relatively stable.

Average equity contribution increased from 7% in 1987 to 41% in 2002, which was consistent with the decrease in lending multiples over this time period. In the late 1980s, equity contribution averaged approximately 10%. In the 1990s and 2000s, the equity contribution averaged approximately 25% and 40%, respectively.

Exhibit XIX

LBO EQUITY CONTRIBUTION



Note: There were too few deals in 1991 to provide a meaningful sample.
Source: Standard & Poor's Portfolio Management Data

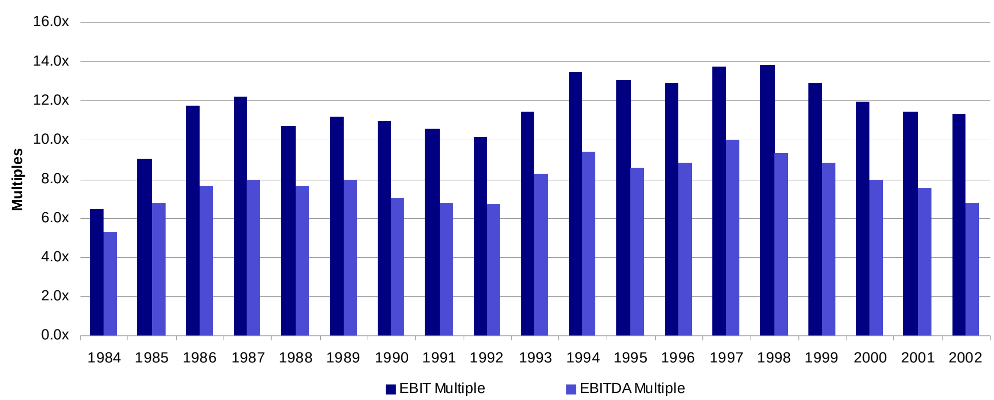
Valuations

Valuation Multiples – 1980-2002

We examined M&A valuations over the 1980-2002 period to see if there was a correlation between leveraged buyout activity and valuation multiples. Prior to 1984, there were no relevant valuation multiples reported by SDC. Over the 1984-2002 period, EBITDA transaction multiples (i.e., enterprise value/EBITDA) averaged 7.9x, ranging between 5.3x and 10.0x. Over the 1984-1989 period, valuation multiples were relatively low, averaging 7.2x and varying between 5.3x and 8.0x. These relatively low valuation multiples occurred during the period of the highest leveraged buyout activity. Between 1993 and 2002, average EBITDA multiples increased to 8.6x, while leveraged buyout activity declined from the levels in the late 1980s. However, the lower valuations of the early 1990s were not associated with higher leveraged buyout activity; in fact, the activity was relatively low during this period.

Exhibit XX

OVERALL M&A VALUATIONS



Note: There were no relevant valuation multiples reported by SDC prior to 1984.
Source: Securities Data Corporation

Availability of Targets

Overview

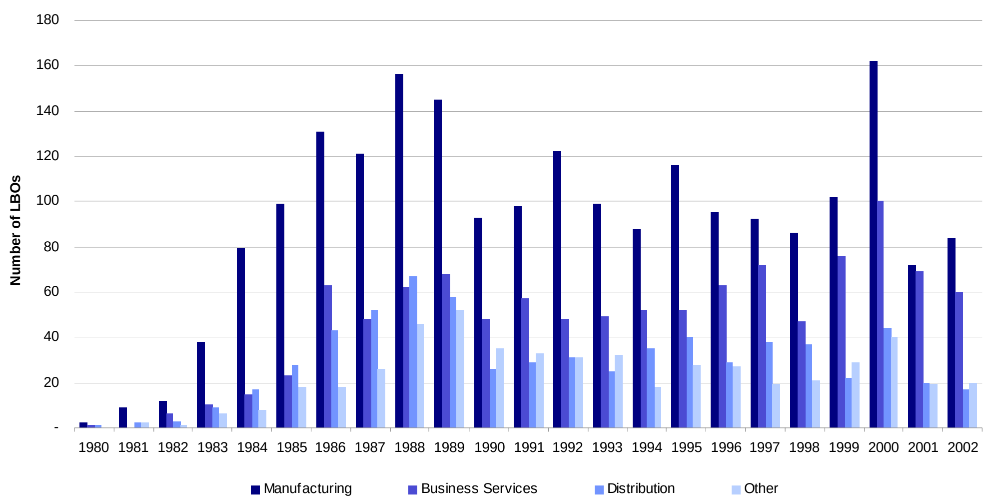
The availability of attractive targets is an important driver of leveraged buyout activity. An attractive leveraged buyout candidate is typically associated with some or all of the following characteristics:

- Stable cash flow
- Non-cyclical business
- Fixed assets that can be used as collateral
- Low level of debt
- Low capital expenditures
- Assets and/or divisions that can be sold to pay down debt
- Experienced management with a proven track record
- Opportunity for cost reduction and margin improvement

Companies with these characteristics generally have a high borrowing capacity and have the ability to service significant levels of debt. Manufacturing companies often have many of the aforementioned characteristics. As discussed in Part II, the majority of leveraged buyouts have been with manufacturing companies over 1980-2002 (Exhibit XXI). In addition to the characteristics mentioned above, financial sponsors are looking for companies that have the potential to generate high returns through growth, margin enhancement and multiple arbitrage. We note that the decrease in leveraged buyouts is consistent with the shift to the service sector, representing a larger portion of the economy. However, in absolute terms this does not necessarily contribute to the falloff in leveraged buyouts in the 1990s and 2000s.

Exhibit XXI

BREAKDOWN OF LBOS BY SECTOR



Source: U.S. Bancorp Piper Jaffray and Securities Data Corporation

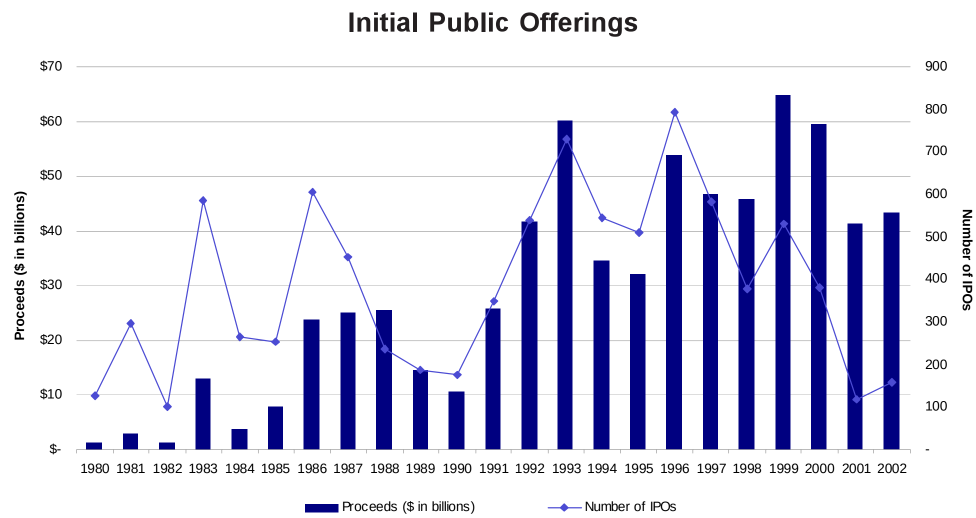
Public Market Activity

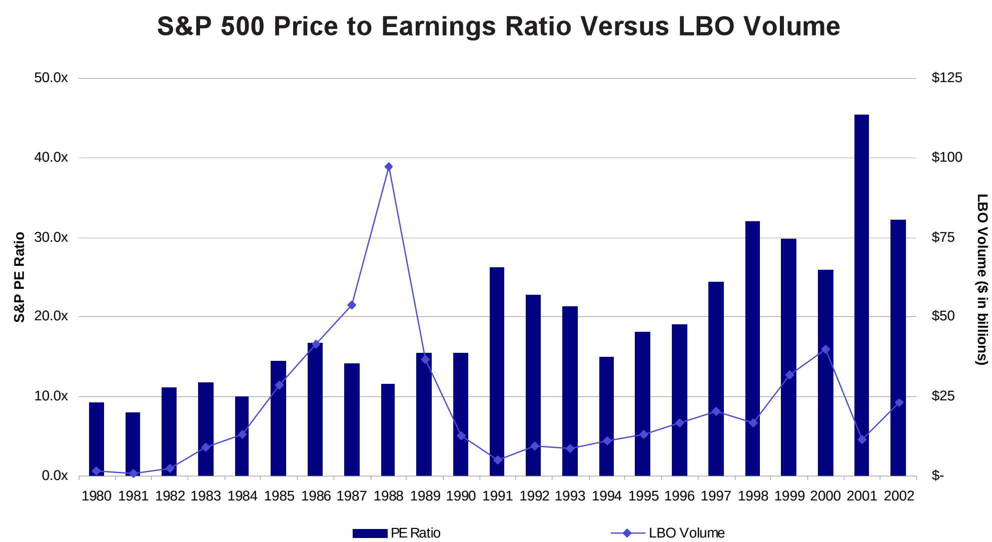
We examined the activity in the public markets over the 1980-2002 period in order to determine if it may have affected leveraged buyout activity. An initial public offering provides an alternative to selling to a strategic or financial buyer for a seller of a private company or division of a public company. When the public equity markets have higher valuations and higher investor demand, an initial public offering becomes relatively more attractive than a leveraged buyout.

We examined the number and volume of initial public offerings over the 1980-2002 period as well as public company valuations as represented by price/earnings ratios. Initial public offering activity was significantly higher in the 1990s and 2000s as compared to the 1980s (Exhibit XXII). In addition, public company valuations were higher in the 1990s and 2000s as compared to the 1980s. We suspect that the more favorable conditions in the initial public offering market in the 1990s and 2000s influenced the lower level of leveraged buyouts as compared to the late 1980s. However, we note that this in isolation does not support the higher leveraged buyout activity in the late 1990s and 2000s versus the early 1990s.

Exhibit XXII

PUBLIC MARKET ACTIVITY





Source: U.S. Bancorp Piper Jaffray; Securities Data Corporation; and FactSet

Leveraged Buyout by Divestitures, Public and Private Targets

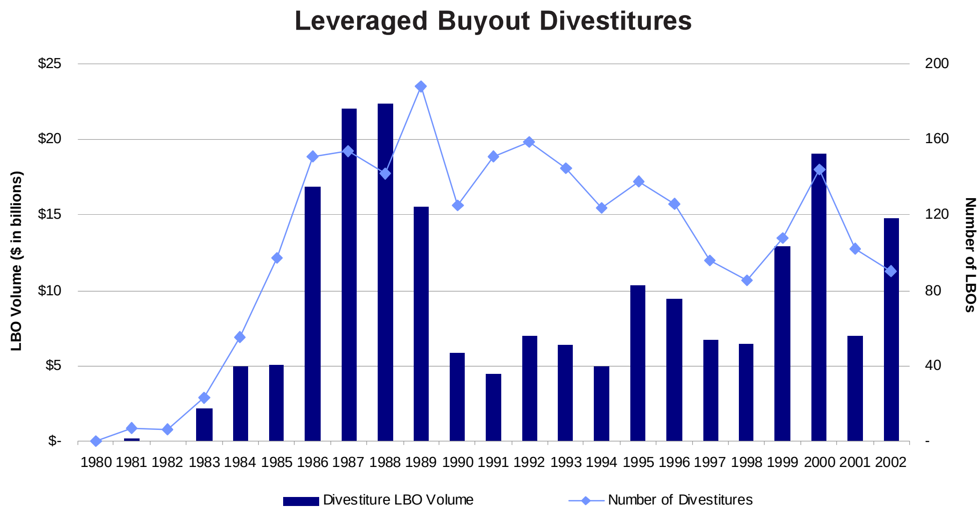
We also reviewed leveraged buyouts by type of target: divestitures, private targets and public targets over the 1980-2002 period in order to see if the availability of any of these targets was higher during the late 1980s. From 1980-2002, 4,231 (98%) leveraged buyouts out of the total of 4,310 reported deal type. Out of the 4,231 leveraged buyouts, there were 2,416 (58%) divestitures, 1,118 (26%) private targets and 697 (16%) public targets. Over the 1980-2002 period, the leveraged buyout volume by target was as follows: $205 billion (40%) were divestitures, $267 billion (52%) were public companies and $42 billion (8%) were private companies. We suspect that the results related to low private company volume and number of deals are a function of the difficulty in obtaining this information.

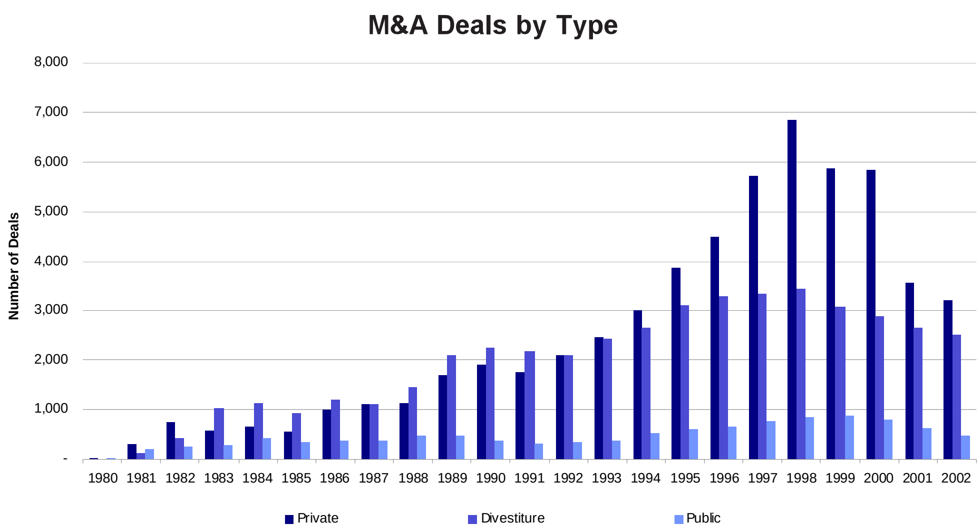
Corporate Divestitures

The leveraged buyout volume in which divestitures were the target was significantly higher in the late 1980s than in the 1990s or 2000s (Exhibit XXIII). Between 1986 and 1989, the average annual leveraged buyouts of corporate divestitures were $19 billion and 159 transactions. These numbers dropped to $7 billion and 126 deals in the 1990s. So far in the 2000s, the numbers are $14 billion and 112 transactions. We suspect that the relatively large divestiture activity in the late 1980s was driven by a period of time when corporations were focusing on their core competencies and disposing of non-core businesses. In addition, private equity firms were in a stronger position to compete for the divestitures as a result of the high leverage multiples and low valuations in that period. While the absolute level of divestitures in the overall M&A market was not higher in the late 1980s versus the 1990s and 2000s, on a relative basis, they were higher than public and private company M&A transactions.

Exhibit XXIII

DIVESTITURES





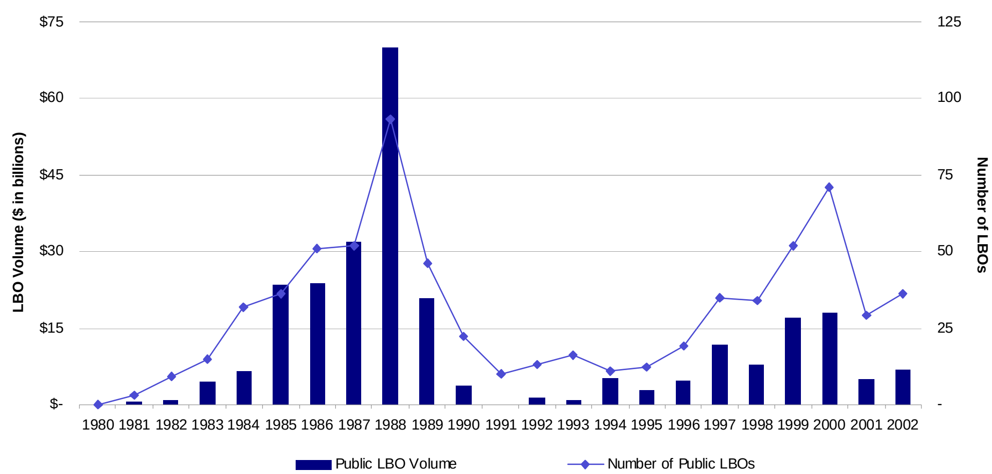
Source: Securities Data Corporation

Public Companies

Similar to corporate divestitures, the leveraged buyout volume of public companies peaked in the late 1980s (Exhibit XXIV). Between 1985 and 1989, the average annual leveraged buyouts of public companies amounted to $34 billion and 55 transactions. In the 1990s, these figures fell to $6 billion and 22 transactions. So far in the 2000s, the average annual leveraged buyouts of public companies has amounted to $10 billion and 45 transactions. The lower leveraged buyout activity of the 1990s and 2000s (versus the late 1980s) likely reflects the increased challenge for leveraged buyouts of public companies as a result of regulatory changes and developments in corporate law (e.g., the Revlon duties). For example, if a financial sponsor approaches a public company with the idea of a going private transaction, it is likely that if the company is receptive, a competitive auction will be triggered. The result is that the financial sponsor could spend significant time and money without being successful in consummating a going private transaction.

Exhibit XXIV

PUBLIC TARGET LBOS



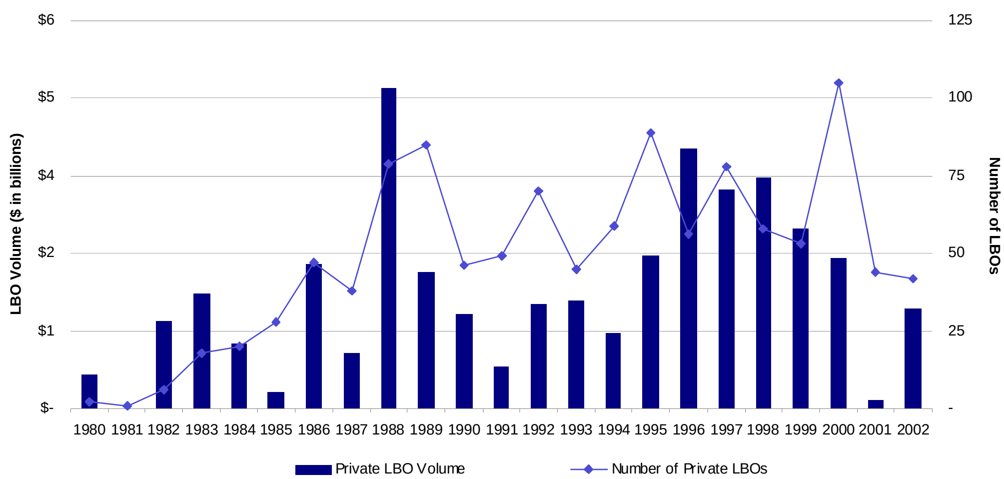
Source: Securities Data Corporation

Private Companies

The trend with respect to leveraged buyouts of private companies in the late 1980s versus the 1990s and 2000s was much less pronounced than the case with divestitures and public companies (Exhibit XXV). We believe that the data with respect to private company leveraged buyouts is the least reliable compared to divestiture and public data because of the difficulty in compiling this information. Between 1985 and 1989, average annual private company leveraged buyout volume and number of deals were $2 billion and 55 deals, respectively. In the 1990s, these figures were $2 billion and 60 transactions. So far in the 2000s, the figures are $1 billion and 64 transactions.

Exhibit XXV

PRIVATE TARGET LBOS



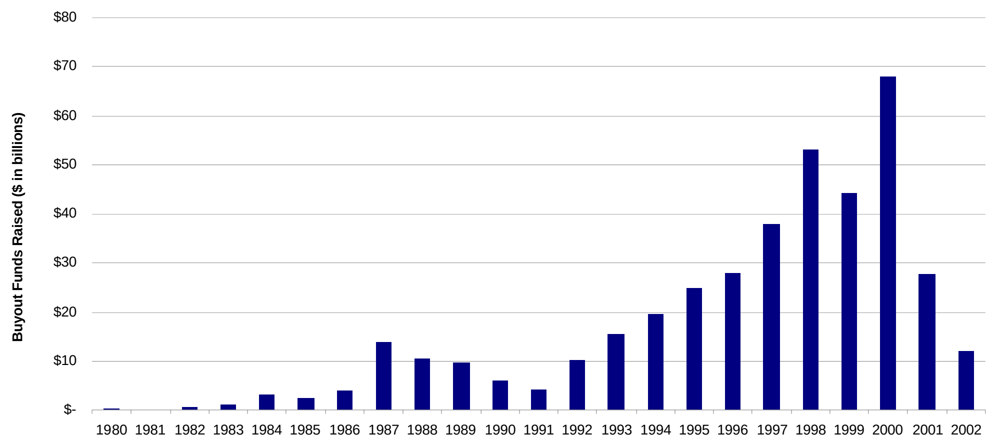
Source: Securities Data Corporation

Availability of Capital

Over the 1980-2002 period, new participants continued to enter the leveraged buyout industry because of the increased availability of equity capital. Buyout fundraising increased significantly in the late 1990s (Exhibit XXVI). The uninvested capital of buyout firms also increased significantly in the late 1990s and early 2000s (Exhibit XXVII). The result of these trends is that many more participants have been able to enter the industry, creating a more competitive environment.

Exhibit XXVI

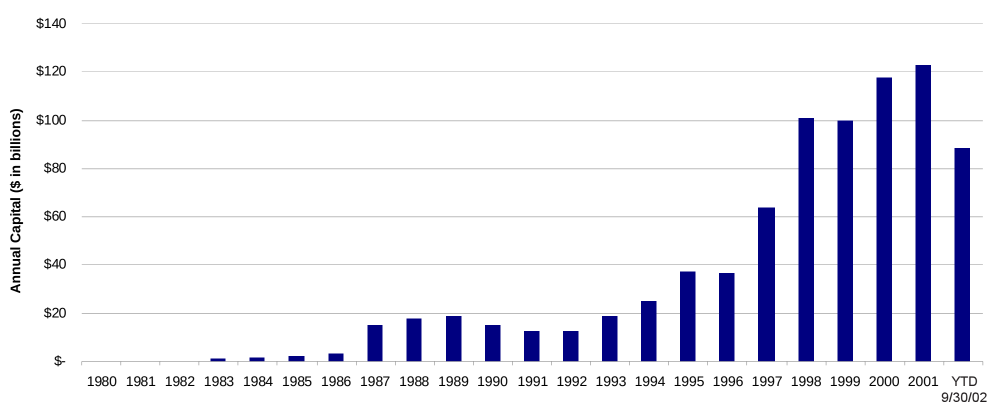
BUYOUT FUNDRAISING



Source: Venture Economics

Exhibit XXVII

UNIVESTED CAPITAL FOR LBOS



Source: Venture Economics

PART IV: CONCLUSION

The leveraged buyout industry has undergone significant changes over the 1980-2002 period. Leveraged buyout activity peaked in the late 1980s. Leveraged buyout activity was higher in the late 1990s and 2000s as compared to the early 1990s. The number of private equity firms has increased, driven by the attraction of high returns and the availability of equity capital. The major drivers of the leveraged buyout activity over this period were leverage, valuations, and the availability of attractive targets and capital.

Currently, the leveraged buyout industry faces a challenging environment due to the availability of relatively low leverage, $120 billion in uninvested capital, hundreds of financial sponsors, and a difficult M&A environment. The current leveraged buyout industry is very competitive. We suspect that many of the current players in the private equity community will not survive this more competitive environment. However, we believe that it will take a number of years for many of the less competitive firms to exit the industry. The gradual exits will be driven by the less competitive firms continuing to employ uninvested capital and only gradually selling off low return portfolio companies. The firms with a track record of producing exceptional returns will continue to attract interest from investors (i.e., the limited partners such as pension funds and insurance companies).

As firms adjust to this more competitive environment, we see firms considering or adopting one or more of the following strategies in order to compete in this increasingly competitive environment:

- ***Industry Specialization* –** Industry specialization allows private equity firms to better recognize attractive opportunities. In addition, this specialization may aid the private equity firm in sourcing deals and in successfully enhancing the value of the business.

- ***Operating Professionals* –** Operating expertise allows financial sponsors to more competitively source opportunities, recognize and enhance value.

- ***Focus on Smaller Transactions* –** Some firms have focused on smaller companies in the belief that the market for these companies is not as competitive.

- ***International Markets* –** Private equity firms are exploring international markets in which the industry is less developed and there is a greater volume of attractive opportunities.

- ***In-house Financing* –** Some private equity firms now have the ability to provide both the debt and equity in a leveraged buyout. This often provides them with an advantage over the competition.

- ***Risk Sharing* –** Some financial sponsors are partnering with their competitors in order to share resources and spread risk.

While we expect the private equity industry to continue to evolve, we believe that industry leaders will continue to enjoy attractive returns.

NOTES

NOTES

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- European Food Industry
- Packaging Industry Public Acquirers - Earnings Per Share Accretion/Dilution Considerations
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- Industrial Distribution
- Housewares & Household Products
- Construction Materials Update
- Plastics
- Mining Higher Aggregate Values
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