

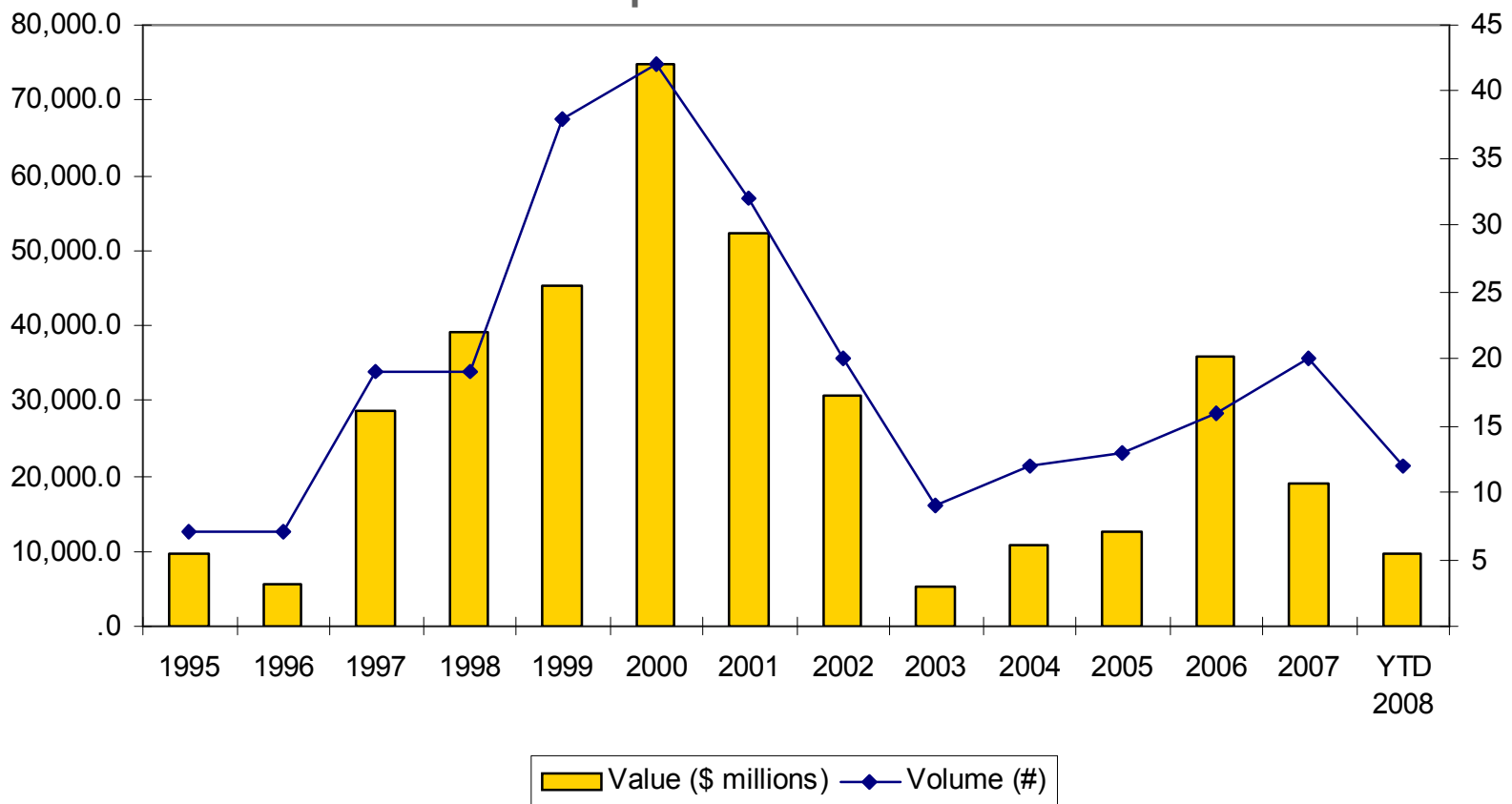


## **Competitive Implications of Private Equity Investment in the Electricity Sector**

March 3, 2009

# M&A trends

North America power and utilities transactions valued in excess of \$250 million completed 1995–2007



Source: CBK analysis of data from Securities Data Corp., accessed November 2008.

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# What is Private Equity

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- Private Equity is a generic term that encompasses distinct strategies in the market for private equity:
  - Venture Capital– acquiring controlling stakes in early stage companies, (eg, Nth Power)
  - Leverage Buy-out– acquiring controlling stakes in mature companies utilizing large percent of debt, (e.g., KKR, Blackstone)
  - Infrastructure Funds– acquiring controlling stakes in essential backbone services to the community, (i.e., utilities, roads, ports), (e.g. Macquarie, Babcock & Brown)
- Leverage Buyout and Infrastructure Funds are key owners in the Power & Utility Industry:
  - KKR acquisition of TXU
  - Lindsey Goldberg’s acquisition of Sempra Energy, (LDC)
  - Macquarie’s acquisition of Puget Sound
  - Madison Dearborn’s acquisition of Astoria Power Generation
  - These purpose of these funds is to earn returns greater than what the public debt, equity and real estate markets can generate over the long term

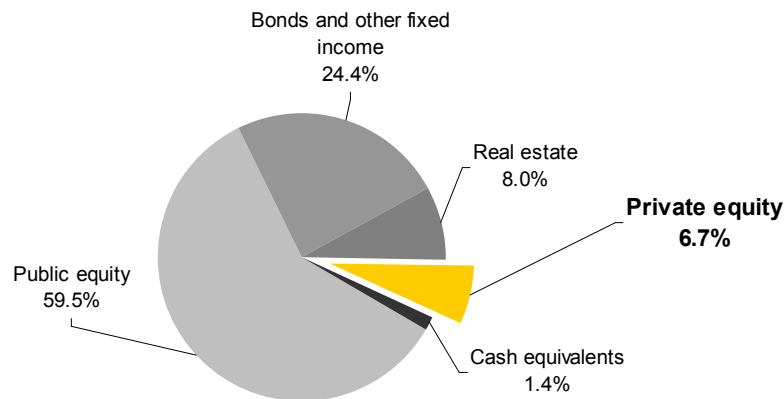
# Where does the money come from?

## PE considerations

- ▶ Institutional Investors, such as pension funds are the largest source of capital for PE and Infrastructure Funds.
- ▶ These institutional investors utilize PE funds to attain part of their asset diversification strategy which is to balance high risk, high return investments with lower return, lower risk investments
- ▶ While Institutional Investors seek investments in bonds, real estate and cash equivalents to diversify their risk of loss, these investors generally are seeking PE funds to earn returns greater than public equity when they allocate capital to PE
- ▶ In the power & utilities sectors, (merchant) power stations, fast-growing utilities and alternative energies have attracted a significant amount of interest from PE

## Pension fund considerations – Calpers

Sample investment portfolio of pension fund



Sources: Calpers, Dow Jones

## Sources of capital for PE

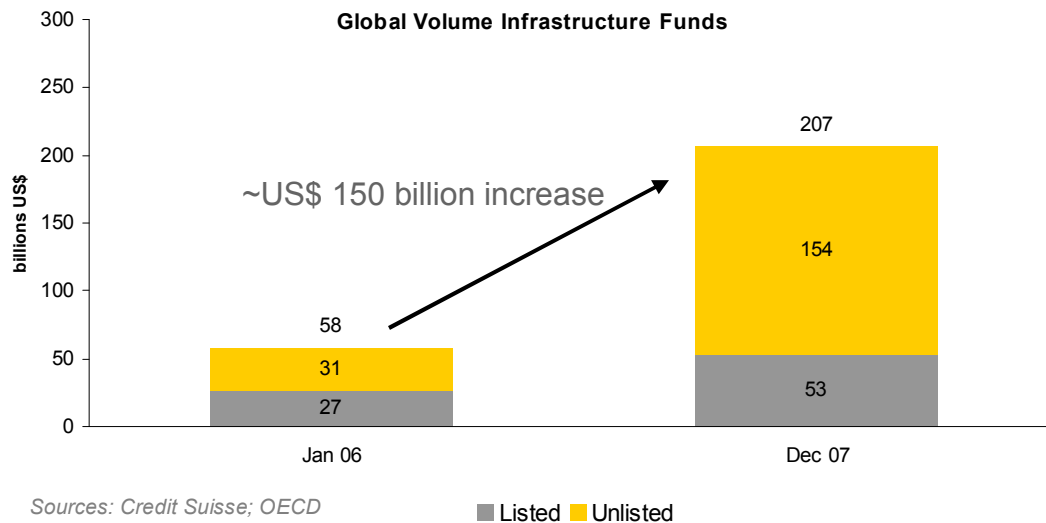
### Sources of capital for PE

Pensions	40%
Corporates	17%
Individuals	17%
Funds of funds	14%
Foundations	8%
SWFs et al	4%

# Why is this industry appealing for infrastructure funds?

## Infrastructure fund considerations

- ▶ Institutional Investors, such as pension funds are the largest source of capital for PE and Infrastructure Funds.
- ▶ These institutional investors utilize infrastructure funds to attain part of their asset diversification strategy which is to balance high risk, high return investments with lower risk investments, and lower, more annual yield-like returns over a long period of time
- ▶ While Institutional Investors seek investments in bonds, real estate and cash equivalents to diversify their risk of loss, these investors generally are seeking infrastructure funds to earn returns that are more steady and predictable than public equity when they allocate capital to infrastructure funds
- ▶ In the power & utilities sectors, electricity and natural gas transmission assets, regulated distribution utilities, water and wastewater utilities and alternative energies with predictable cash flows have attracted a significant amount of interest from infrastructure funds



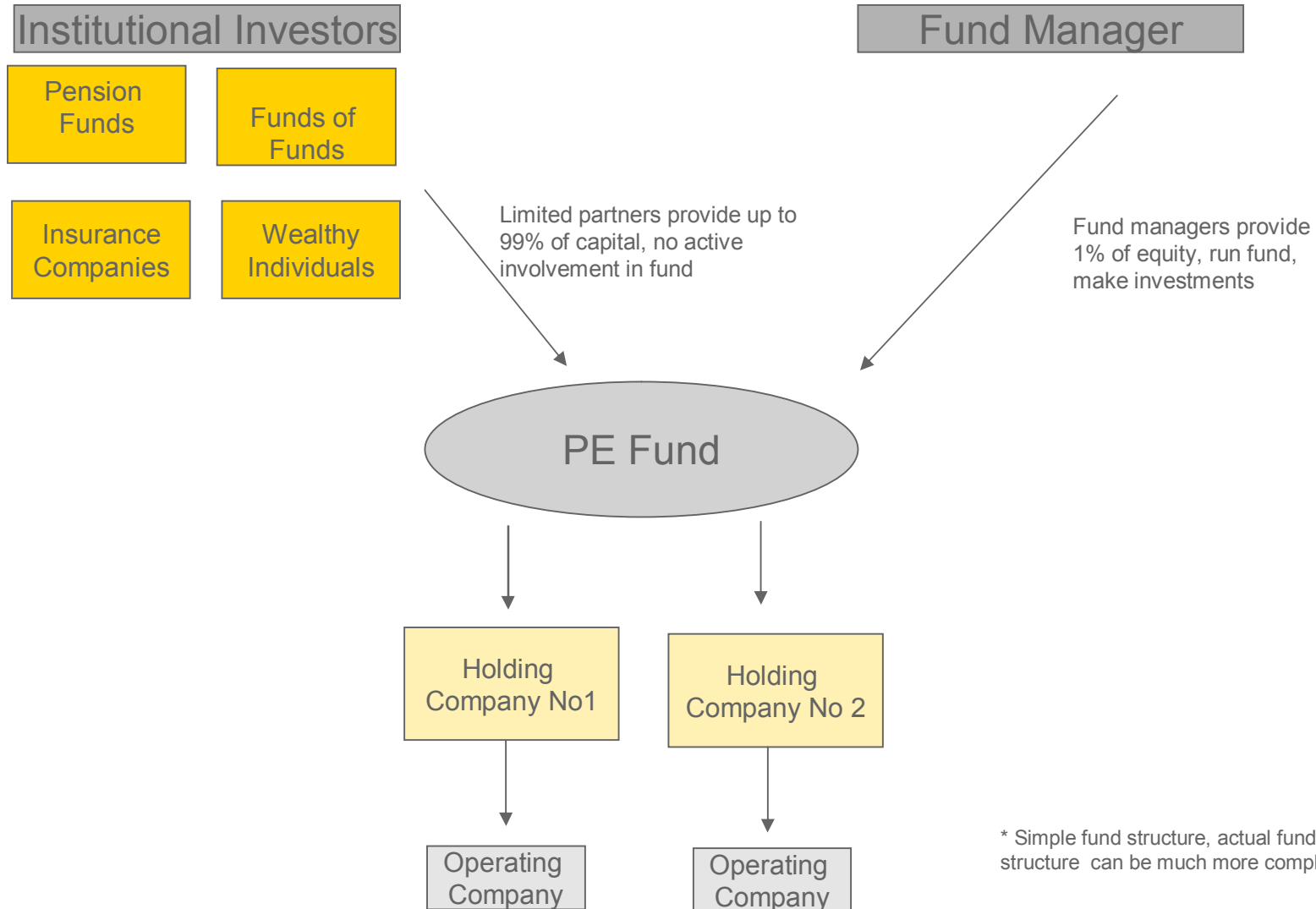
## Electricity infrastructure: A burgeoning asset class

Infrastructure investment requirements (trillion US\$2000; 2003-2030 globally)	
Generation	4.6
Transmission	1.5
Distribution	3.6
<b>Total</b>	<b>9.8</b>

# Some Observations

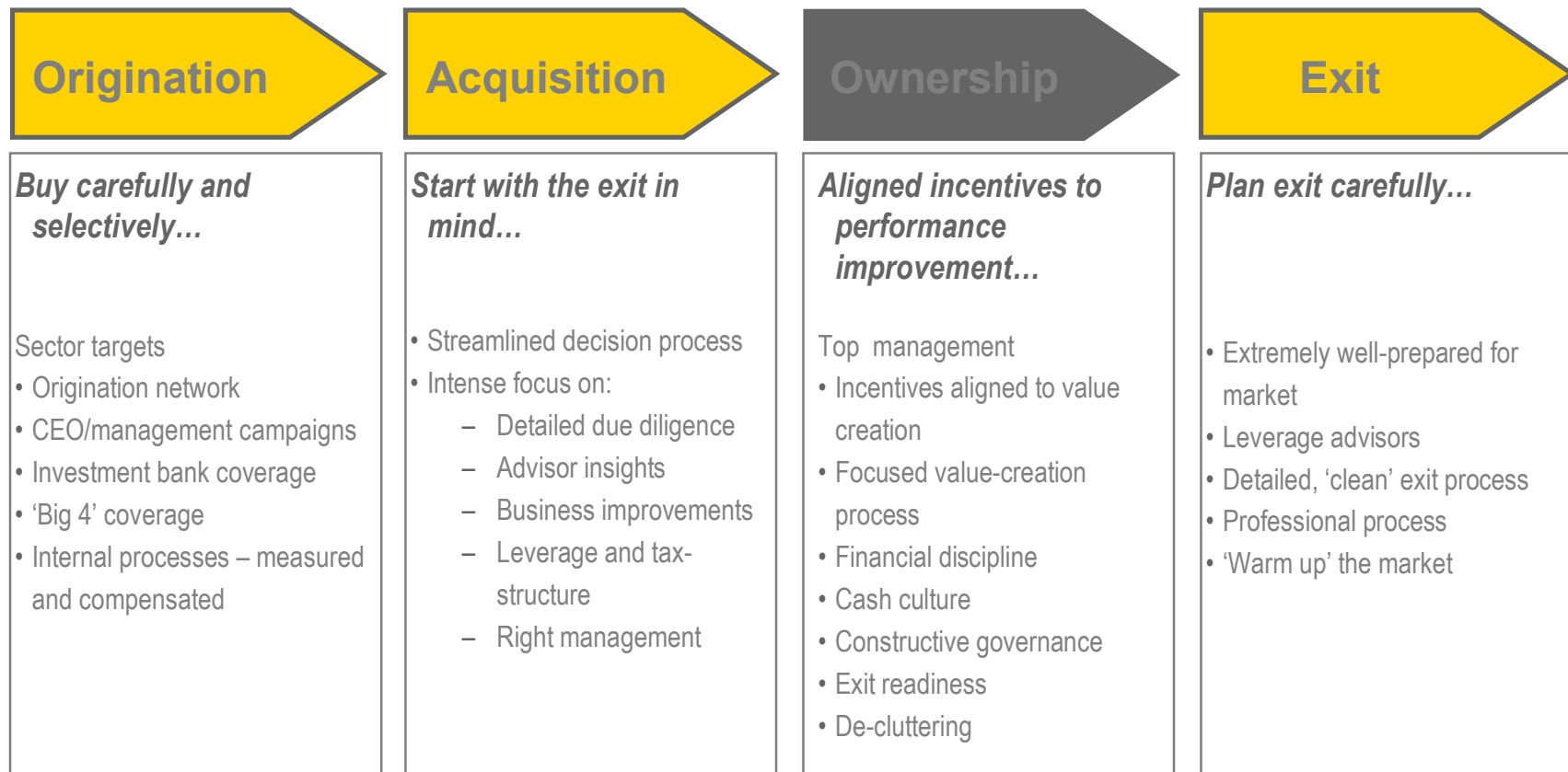
Time horizon (years)	Hedge Funds <1	Private Equity 5-7	Infrastructure Funds 10-30
Equity IRR (%)	High teens	Mid-high teens	Low-double digits
Cash yield (%)	N/A	N/A	>6%
Risk tolerance	Very high	High	Low
Involvement in management	N/A	Medium	Low
Activism	High	Low	Low
Flexibility	Very high	Medium	Low

# What does a fund structure\* look like



# How PE operates

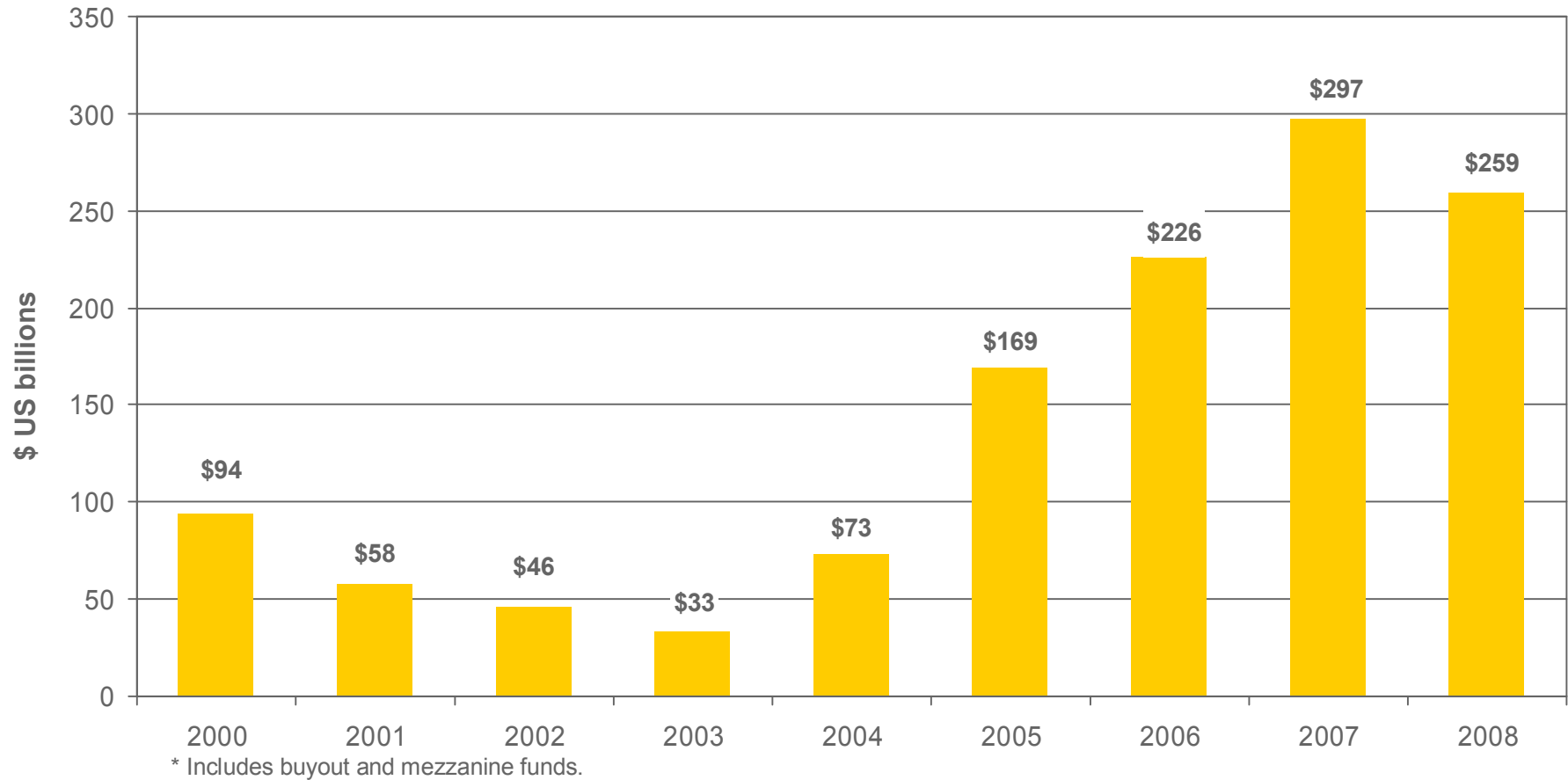
- ▶ *Acquire controlling stake in companies that are undervalued or underperforming*
- ▶ *Achieve a specified return rate over a determined period of time*





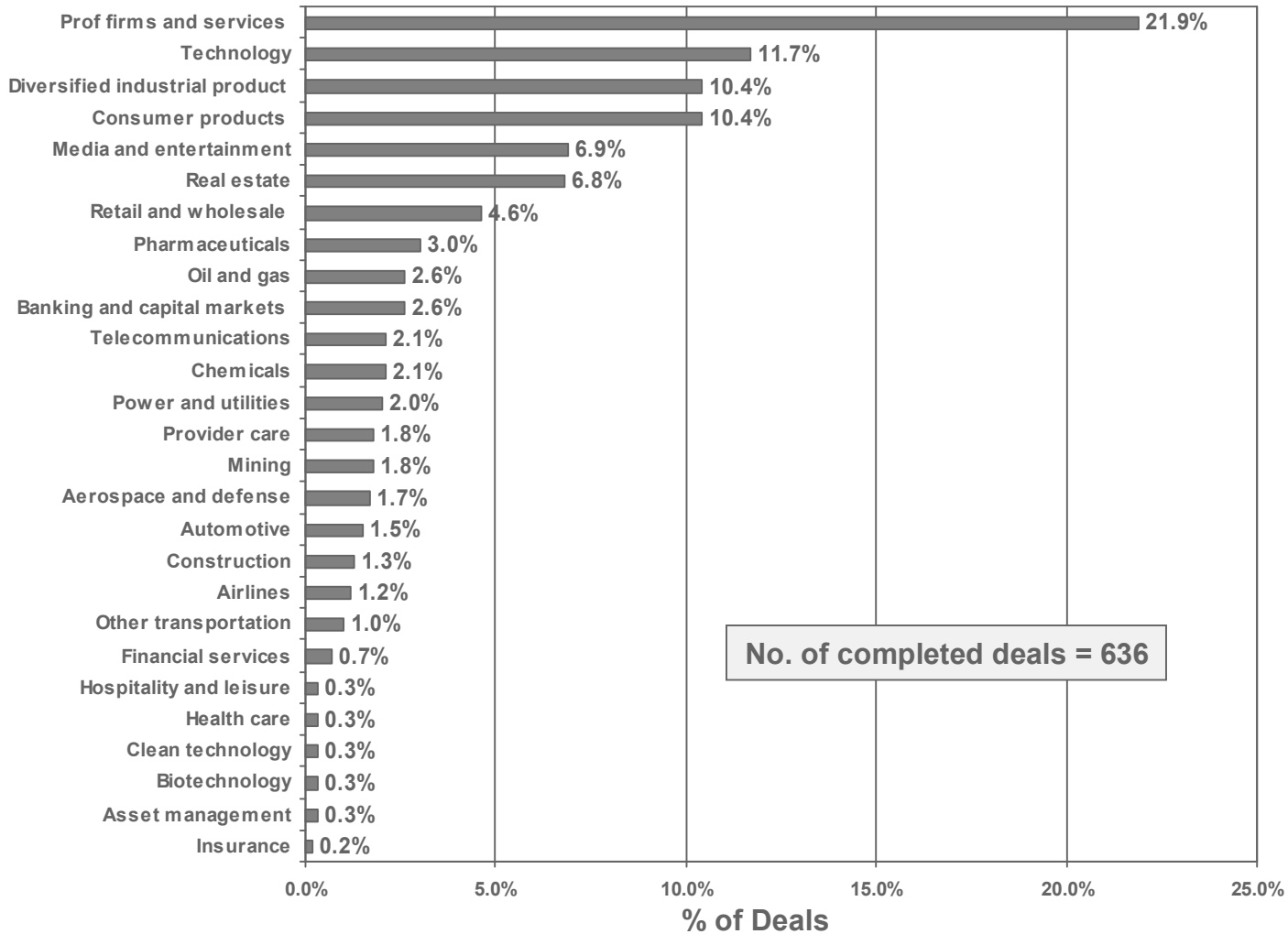
# US buyout fundraising since 2000\*

(in billions)



Sources: (1) "Distressed, Mezz, Energy Remain Hot Strategies," Buyouts, 5 January 2009;

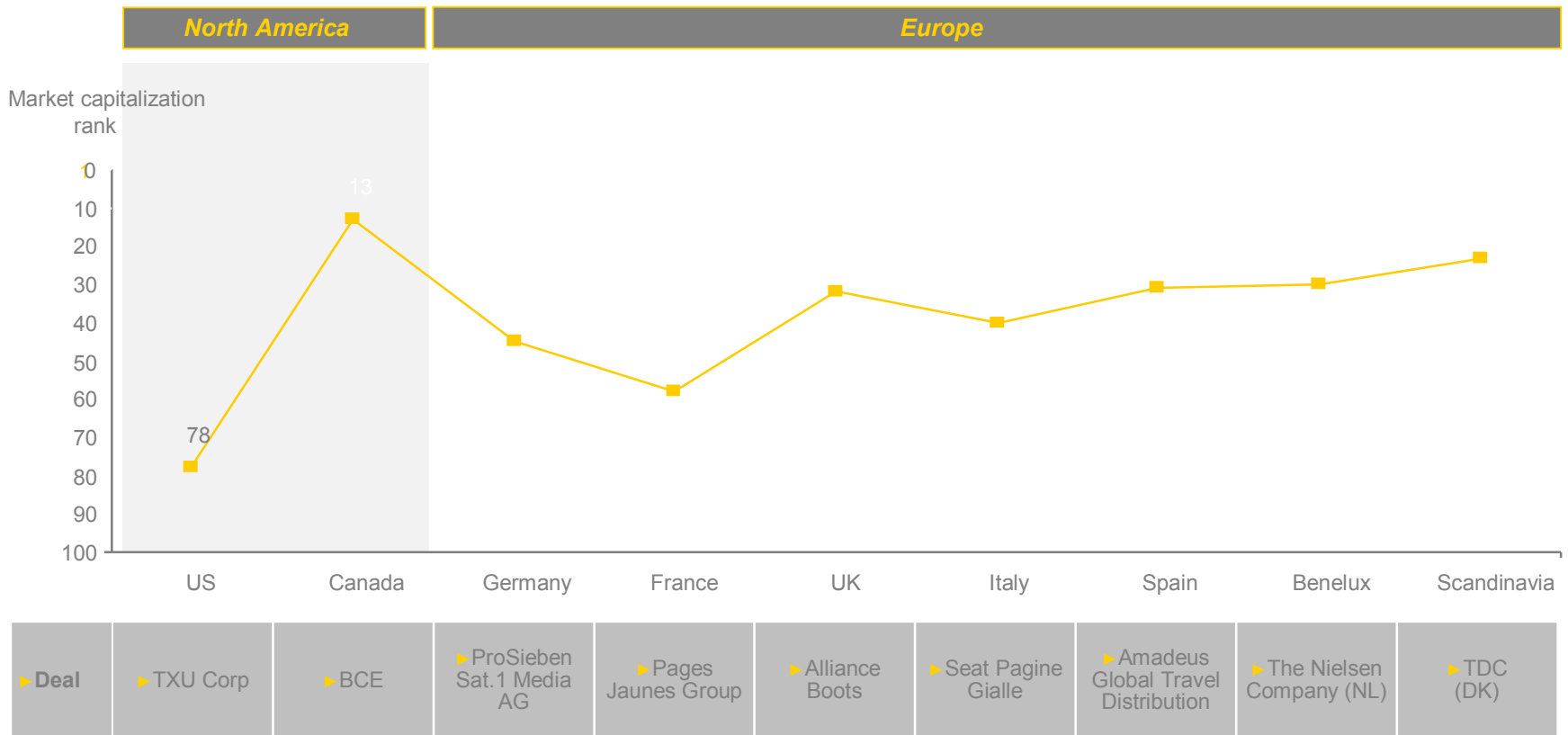
# Cumulative Q3'08 US LBO deals by industry sector



Sources: (1) "Deal Pace Hits Rock Wall In First Quarter," *Buyouts*, April 14, 2008, pg. 37; (2) "Buyout Shops Get Creative in Slow Deal Market," *Buyouts*, July 7, 2008, pg. 40; (3) "Deals Closed in Q3 2008," *Buyouts*, 6 October 2008, pg. 54 (4) EY Analysis.

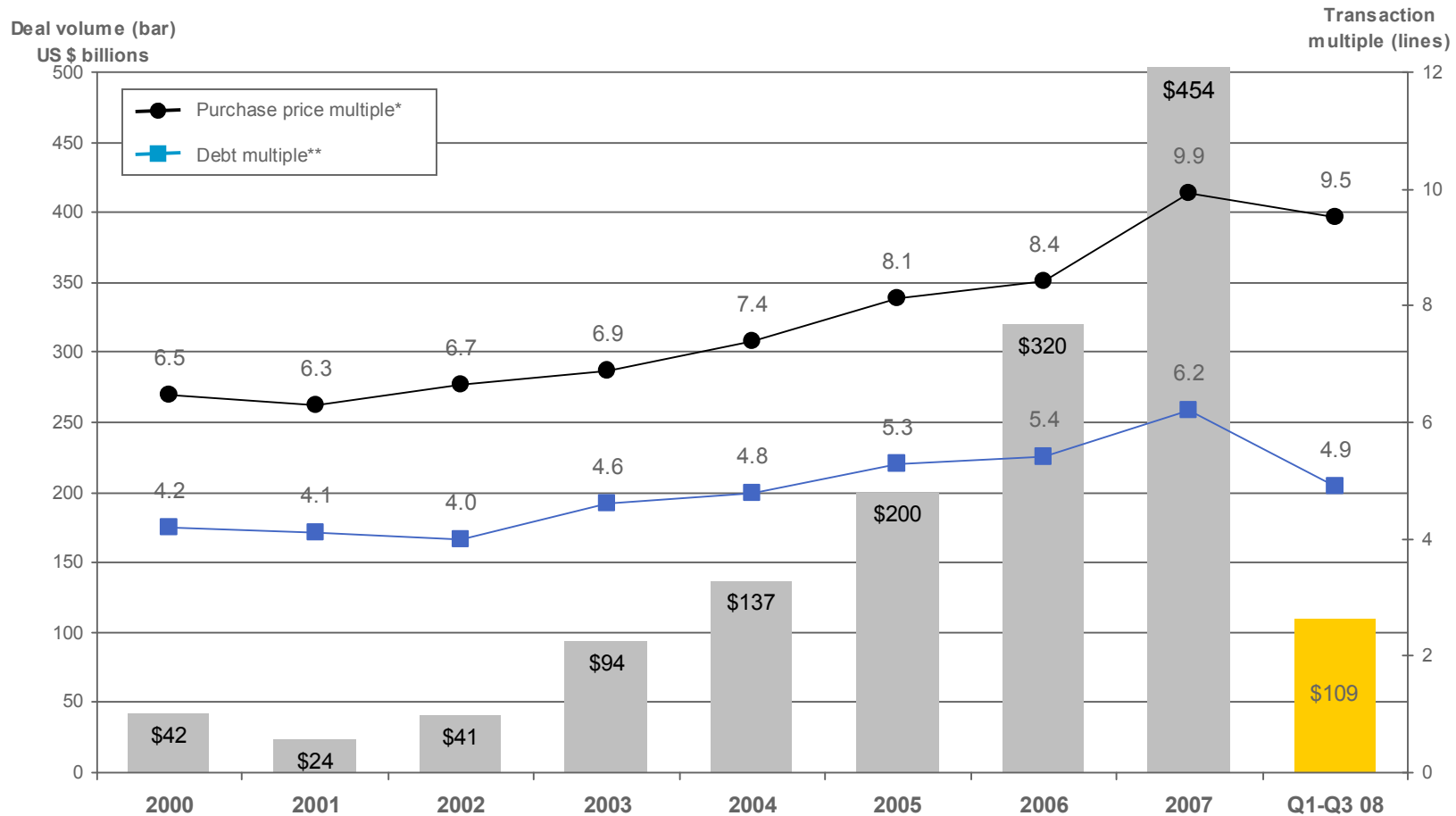
# PE is active in every key market...

Public stock market ranking of largest completed PE deal in 2007



Source: Thomson Financial

# US LBO deal volume and transaction multiples since 2000



\* The purchase price multiple is calculated using the average purchase price of LBOs \$500m or greater divided by adjusted EBITDA.

\*\* The annual debt multiple is calculated using the average debt to adjusted EBITDA ratio for LBO transactions for companies with EBITDA greater than \$50m.

Sources: (1) *Buyouts*, 7 June 2008, (2) *Buyouts*, 6 October 2008; (3) "M&A Stats," *Standard & Poor's*, vol. 10, no. 9, September 2008.

# PE and Infrastructure funds were able to access massive amounts of debt prior to the credit crisis

(Sample list of transactions 2004-2008)

Year	Acquirer	Target	Purchase Price (\$ in millions)	Debt (\$ in millions)	Leverage (%)	Type of Debt
2004	Blackstone, KKR, TPG, H&F	Texas GeCo	\$2,900	\$2,495	86%	A&B Term loans; Revolver & LC (not in total)
2006	Madison Dearborn Partners	Astoria PowerGen	\$1,044	\$770	74%	1 <sup>st</sup> & 2 <sup>nd</sup> Lien; Revolver & LC (not in total)
2006	International Power (*)	Cole to Creek	\$1,170	\$935	80%	7-yr \$735m Term B; 2 <sup>nd</sup> Lien 7-yr \$200m; Revolver & LC (not in total)
2007	Macquarie	Duquesne Light	\$1,800	\$770	43%	Debt in HoldCo, break-out not available
2007	IFM	ConEd Development	\$1,477	\$750	51%	7-yr \$425m term; planned \$325m unsecured high yield
2008	KKR, TPG	TXU	\$32,000	\$24,600	77%	Senior secured and unsecured
2008	International Power	4 Peakers	\$856	\$400	47%	7-yr \$400m term loan; \$108m Revolver (not in total)
2008	Hastings Fund	Southwest Generation	\$840	\$460	55%	7-yr \$460m term loan; \$80m Revolver and \$20m LC (not in total)

(\*) Example of Corporate Buyer using significant amount of leverage for transaction.

Source: SNL Financial, Source Media, Company websites, Power Finance & Risk

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# Credit markets, beginning in the 3Q'08 suffered from catastrophic events...

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- ▶ The 3rd quarter impact of the US takeovers over Fannie Mae and Freddie Mac, the bail out of AIG, the collapse of Lehman Brothers, and the FDIC intervention into WaMu shook lenders to their core, and caused massive hoarding of cash
  - ▶ Three-month Libor, the basis for many adjustable loans, shot up from 2.783% on 30 June to 4.053% on 30 September. The overnight rate, upon which much of the commercial paper market is based, was even more dramatic – on Tuesday, 16 September, overnight Libor doubled from 3.33% to 6.44% on the announcement of Lehman's collapse. It was the biggest one-day increase in its history.<sup>(1)</sup>
- ▶ High-yield bonds fared among the worst as investors scrambled for safety.
  - ▶ The spread between Treasuries and high yield bonds rose from 711 basis points at the beginning of Q3'08 to 1,000 basis points on 30 September.
  - ▶ By 16 October, spreads had increased to 1,460 bps, shattering the previous record of 1,064 set in October 2002.<sup>(2)</sup>
  - ▶ Conversely, yields on short-term Treasuries at one point in September were actually negative, as investors accepted a small loss in exchange for their unqualified safety. Three-month Treasury yields dipped from 1.736% to .910% between 30 June and 30 September.<sup>(3)</sup>
- ▶ The actions taken by the world central banks, including coordinated rate cuts and the backing of a wide range of financial assets, is beginning to have a positive effect, but the ultimate success is still undeterminable.<sup>(4)</sup>
  - ▶ The Counterparty Risk Index, a measure of credit default swap (CDS) pricing created and managed by the independent firm Credit Derivatives Research, showed the price of CDSs coming down in recent days after skyrocketing higher at the peak of the crisis.<sup>(4)</sup>
  - ▶ The index dropped 131.2 basis points the week of 13 October, from 364.4 to 233.2. In dollar terms, the cost of insuring US\$10m of corporate bonds went from US\$364,400/year to US\$233,200/year in the course of a week.
  - ▶ While still far above its historical highs, it's an encouraging sign.<sup>(4)</sup>

Sources: (1) Bloomberg, accessed 2 October 2008; (2) *DWS High Income Fund Q3 Performance Review*, 30 September 2008; (3) "Treasury Bill Demands Some Yields Negative After Bailout of AIG, Money Market Woes," *Canadian Business*, 17 September 2008; (4) "A Thaw in the Freeze," *Barron's*, 20 October 2008.

# Current market environment: State of the LBO model

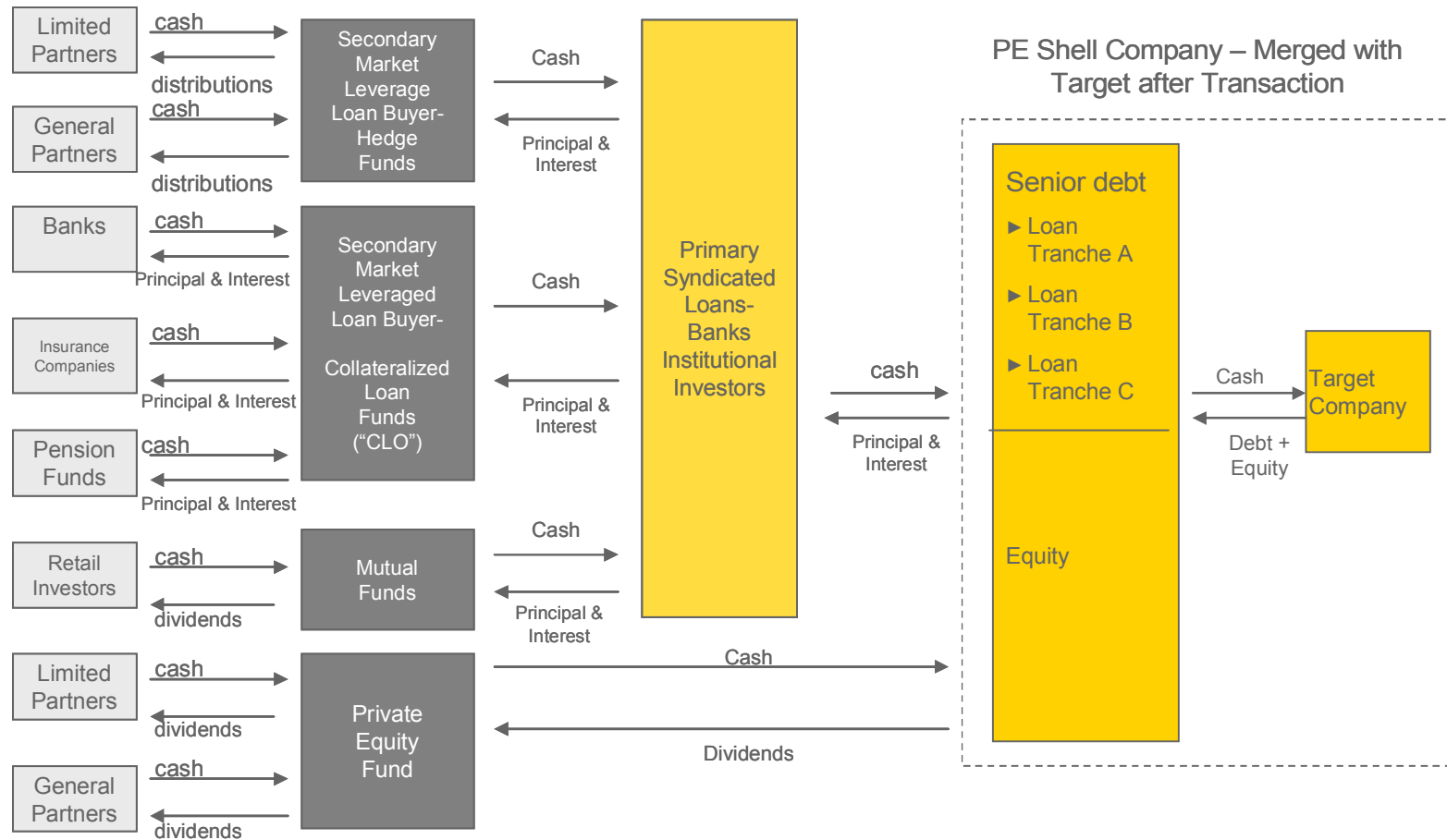
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- ▶ The traditional LBO model has come under extreme pressure on multiple fronts.
  - ▶ Credit, already in dwindling supply since the crunch began last fall, has become even more scarce, goading firms to execute deals with a greater equity component than ever before.
  - ▶ Economic pressures are weighing on the bottom line at portfolio companies.
  - ▶ M&A exits are difficult, and the IPO window is all but shut.
  - ▶ In spite of all this, general partners (GPs) report that valuations remain high, with sellers being slow to adjust to new market realities.
- ▶ Despite all this, Deals are getting done, albeit with less debt than before.
  - ▶ Going into 2008, the average debt multiple for large LBOs was 6.2x. Year-to-date in 2008, multiples have compressed to 4.9x, and the trend is heading still lower —looking at Q3 alone, the average was 4.6x.<sup>(1)</sup>
  - ▶ Add-on transactions have increased in significance as firms seek ways to boost the prospects of portfolio companies.<sup>(2)</sup>
  - ▶ GPs have been advising companies on ways to best weather the economic downturn. Many companies are drawing on revolving credit lines while they still can, and several are availing themselves of PIK toggle covenants negotiated prior to the credit crunch.<sup>(3)</sup>
  - ▶ Unable to finance mega deals, firms are continuing to take minority stakes.
- ▶ Through August 8th, PE firms had been involved in US\$12.4b worth of minority transactions, a 58% jump from the same period last year.<sup>(4)</sup>

Sources: (1) "M&A Stats," *Standard and Poor's*, September 2008, Volume 10, No. 9; (2) "Leverage Drought Sends Deal Volume Lower," *Buyouts*, October 6, 2008; (3) "Private Equity Firms USE PIK Option to Service Their Debt," *Dow Jones Daily Bankruptcy Review*, 23 October 2008; (4) "Private Equity Firms Looking to Minority Stakes," *New York Financial Co. Blog*, 26 August 2008.

# How was the market able to absorb all that debt(\*):

## By selling through to investors who wanted bank debt

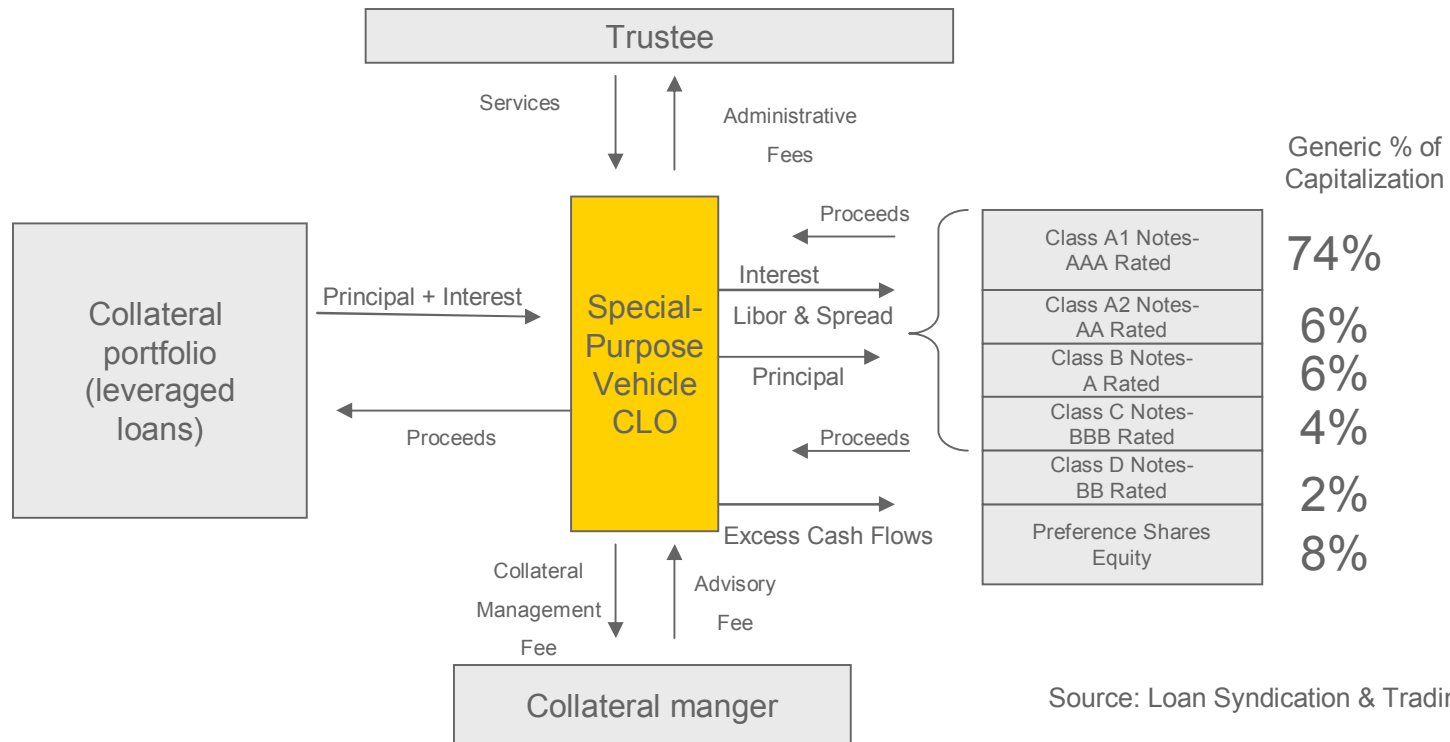


*Hedge Funds, Mutual Funds, Insurance Companies and Banks were all eager to lend to PE and other Non- Investment Grade Buyers\**

(\* ) This structure represents one example of the source of funds for a PE funds acquisition of a Target

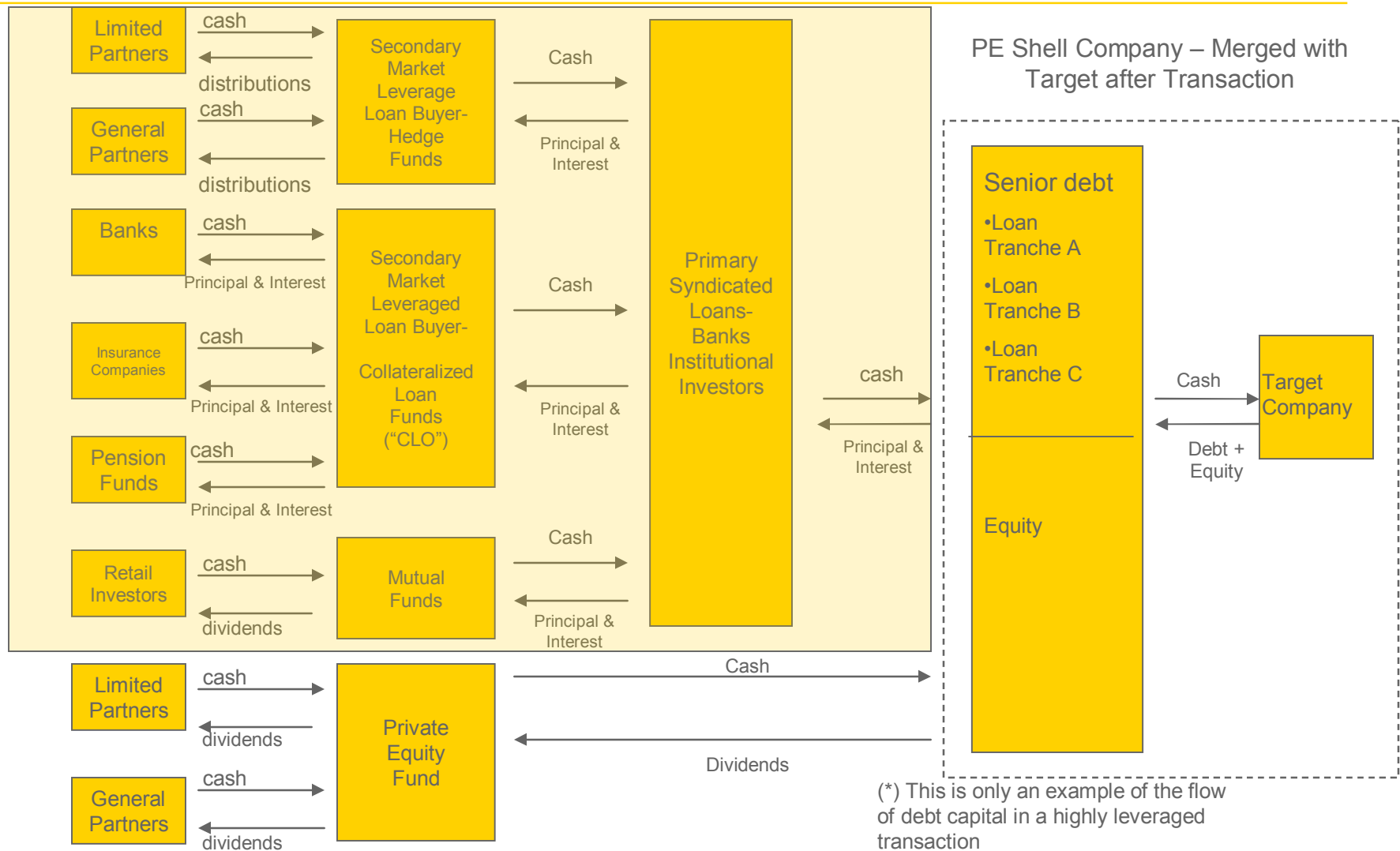


# CLO's were by far the largest acquirer of syndicated bank debt issued in M&A transactions



- ▶ CLO's are a subset of the broader CDO Market, and the largest investor in leveraged loans
- ▶ Typically, CLO's include the loans of 125 to 175 issuers in 25 to 30 industry groups- designed to diversify risk
- ▶ Senior Tranche investors include: banks, insurance companies, pension funds and investors that require investment grade opportunities
- ▶ Equity shares include: hedge funds, investment banks and others willing to maximize risk/return prospects
- ▶ CLO's are an arbitrage play for the equity component, to collect the higher interest from the underlying loans, (libor + 150 or more) than what they pay to investors- (libor + 25) as an example

# Access has dried up, because these Investors have been hit by CDO losses and the fear of similar losses on CLO's(\*)



# The 2007 syndicated loan arranger league tables provides insight into the amount of debt raised

## 2007 U.S. Lead Arranger

Rank	Bank Holding Company	Volume	# of deals	Market Share
1	J.P. Morgan	\$449,372,593,168	741	25%
2	Bank of America	293,393,467,960	833	17
3	Citi	280,455,334,471	356	16
4	Wachovia Securities	92,064,651,358	321	5
5	Credit Suisse	81,250,529,163	174	5
6	Deutsche Bank	71,748,433,853	109	4
7	Goldman Sachs & Co.	62,234,426,596	96	4
8	Lehman Brothers	46,235,382,679	77	3
9	Merrill Lynch & Co.	40,591,062,892	93	2
10	Wells Fargo & Co.	32,450,081,017	195	2
		<b>\$1,449,795,963,157</b>	<b>2,995</b>	<b>58%</b>

## 2007 U.S. Leveraged Lead Arranger

Rank	Bank Holding Company	Volume	# of deals	Market Share
1	J.P. Morgan	\$148,988,173,255	285	20%
2	Bank of America	100,465,998,620	373	13
3	Citi	89,149,042,471	122	12
4	Credit Suisse	73,340,529,163	163	10
5	Deutsche Bank	44,868,433,853	82	6
6	Goldman Sachs & Co.	43,631,926,596	86	6
7	Wachovia Securities	36,463,695,308	157	5
8	Merrill Lynch & Co.	33,676,062,892	82	4
9	Lehman Brothers	26,905,182,679	68	4
10	UBS AG	20,692,403,419	76	3
		<b>\$618,181,448,256</b>	<b>1,494</b>	<b>63%</b>

Source: Reuters Loan Pricing Corporation

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# Who else has Invested in the Industry

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- Sovereign Wealth Funds- (e.g., Taqa, Khazana)
- Balance Sheet of Investment Banks- (Goldman Sachs in Cogentrics and Horizon Wind before disposing of investments)
- Oil & Gas Companies—(e.g., BP in gas fired generation; Shell in renewable power)
- Pension Funds— (e.g., Ontario Teachers Pension Fund 50% interest in Intergen)
- Hedge Funds—(e.g., Pirate Capital in Mirant)