The Credit Crunch and the U.S. Economy

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A Brief Recent Economic and Financial History

- We begin our story in March 2000, when stock market indices reached all-time highs
- The dot.com meltdown and accompanying recession inflicted meaningful damage on the U.S. economy and financial system
  - The U.S. economy went into recession in March 2001, with unemployment rising to 5.5% and cumulative job losses of 1.6 million
  - Equity markets plunged -- the S&P fell 49% from its 2000 peak and the NASDAQ declined 78% over a similar period
  - Bankruptcies among highly leveraged companies[1] increased to 8.3% of outstanding debt from a 20-year average of 3.8%.
- But the damage proved short-lived as the government injected massive stimulus through repeated tax cuts and reductions by the Federal Reserve in its key interest rate from 6% to 1%

[1]Companies with high-yield debt in their capital structure. Source: JP Morgan Research

The Ensuing Golden Age

- The economy grew steadily from 2002 through the end of 2007, with real GDP expanding at an annual rate of 2.6% during this period.
  - Productivity rose at a 3% rate
  - The unemployment rate fell to 4.4%
  - Inflation remained low
  - Consumer spending grew by 5.7% annually

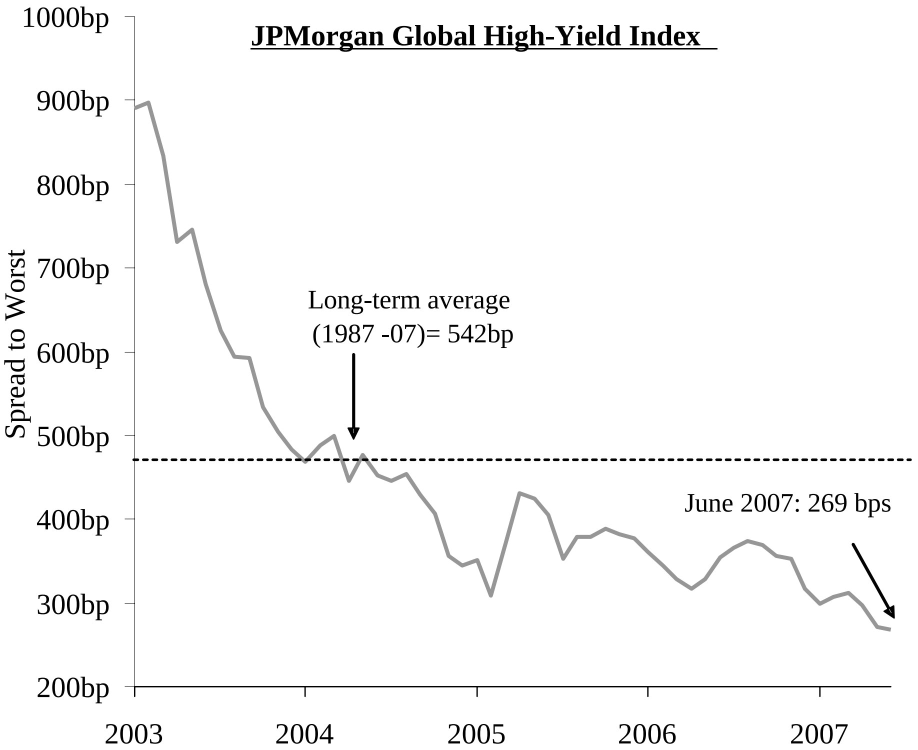
Note: Productivity measured as non-farm business output, from the Bureau of Labor Statistics. Consumer spending measured as per capita personal consumption spending from the BEA

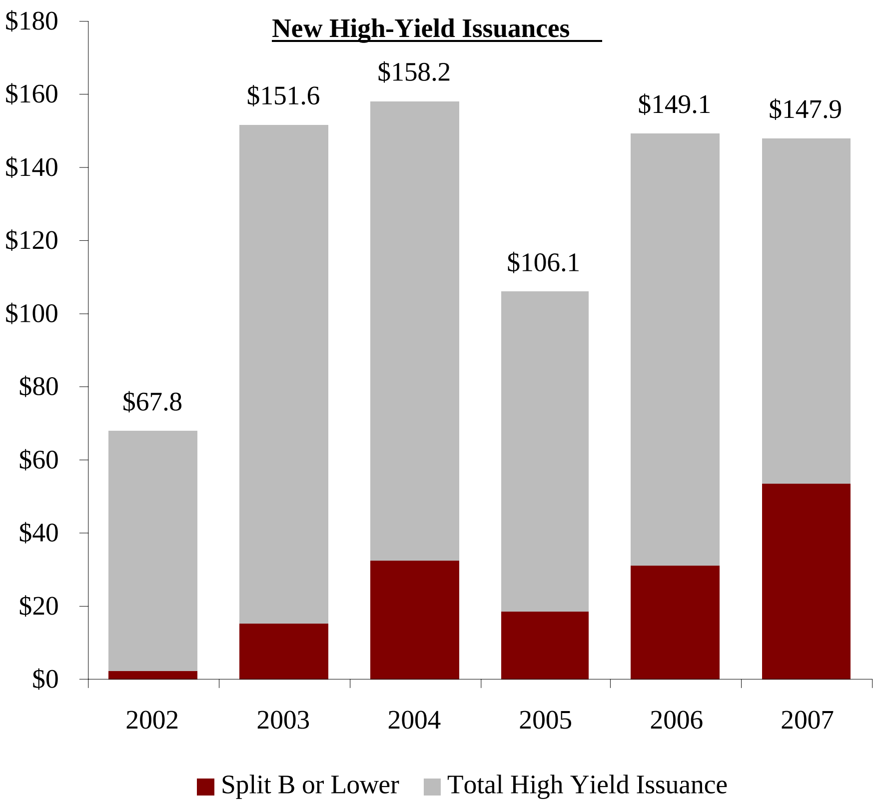
The Golden Age (cont'd)

- Stock prices began a steady rise

Borrowers Were Huge Beneficiaries

- With capital readily available, the cost of borrowing (relative to Treasuries) fell to record lows and lending grew at a rapid pace





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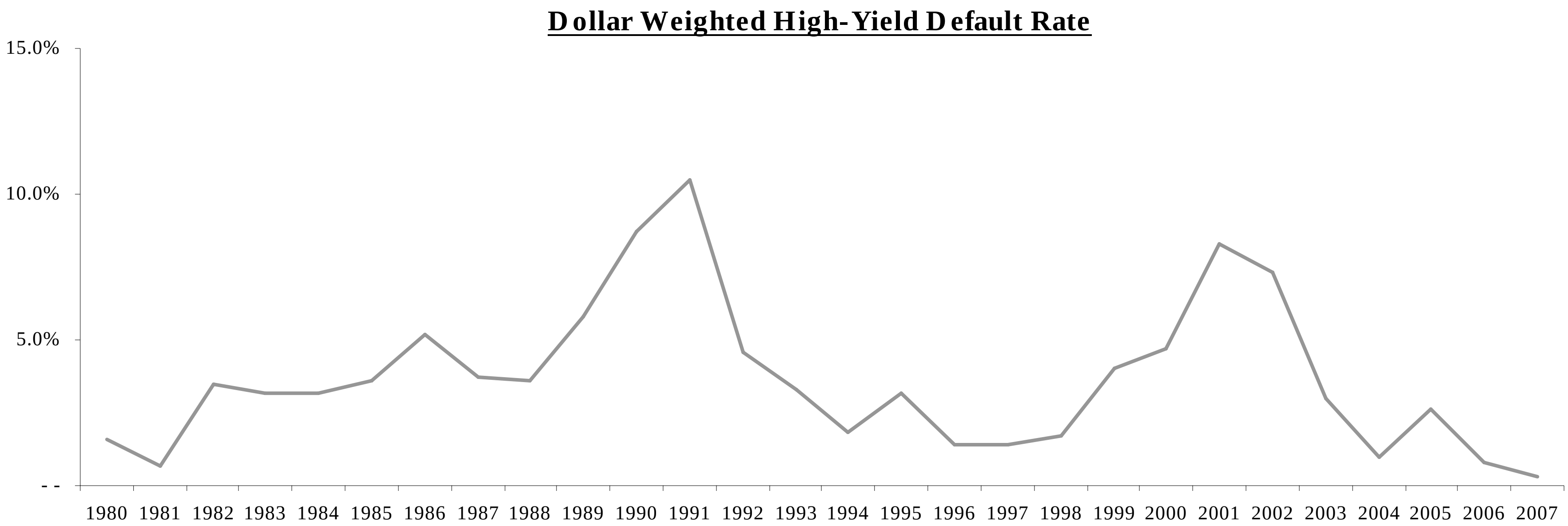
Source: JP Morgan Research

Lenders Were Happy to Lend

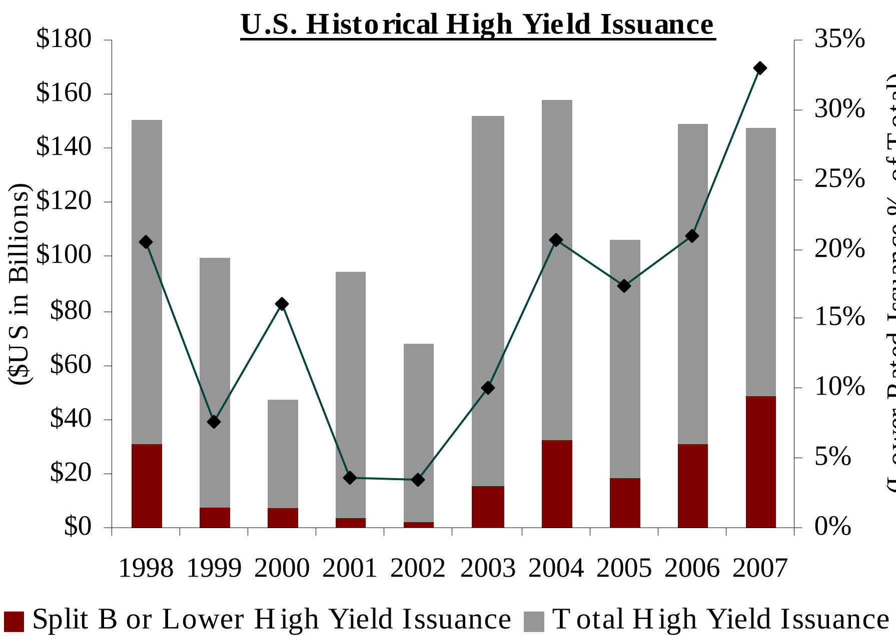
- One of the primary drivers of this heightened activity in the debt and LBO markets was the historically low level of corporate bond defaults
- In 2007 only 10 companies ($3.0 billion in debt) defaulted in the U.S., the lowest figure by number since 1981 and by dollar volume since 1994



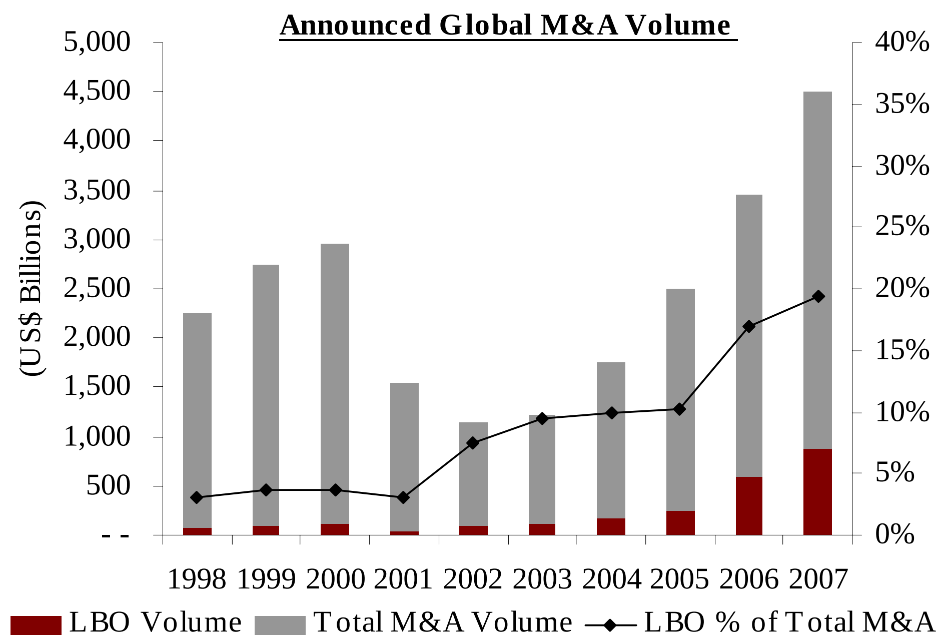
Source: JP Morgan Research

Private Equity Boomed

- Record liquidity in the credit markets fueled historic volume in the buyout market
- In 2007 low rated debt – often raised to finance leveraged buyouts – swelled to 35% of the total high yield issuances in the U.S.



Source: JP Morgan research



Source: Thomson, DeaLogic

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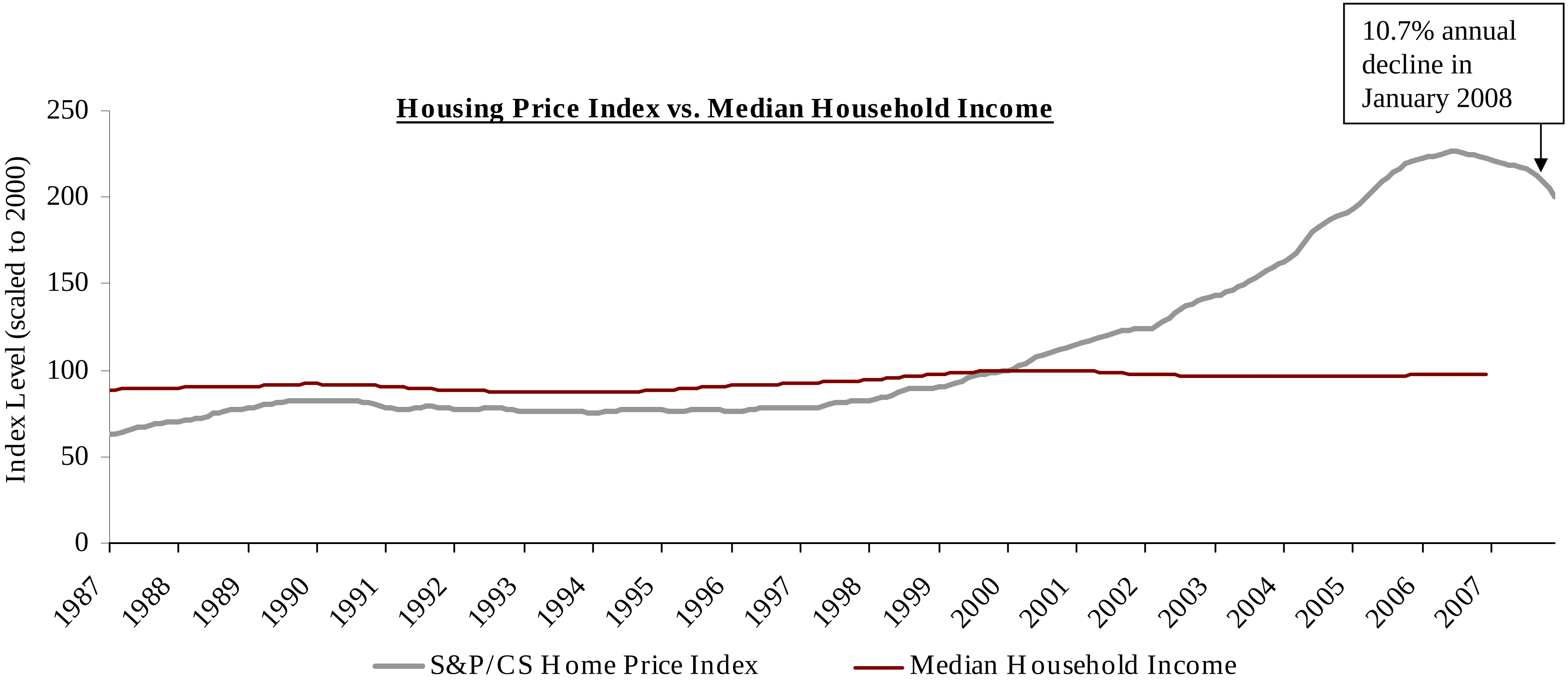
And So, Of Course, Did Housing

- As we are now painfully aware, the credit expansion led to a boom in housing prices, which rose far faster than incomes



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Note: S&P Case/Shiller 20-market home price index

The Age of Turmoil: A Quick Summary

- The unwinding of the credit bubble famously began with the dramatic upsurge in defaults by subprime borrowers, followed in short order by near paralysis in the high yield market, where rising supply overwhelmed demand.

- During the autumn, these developments spread into the “real” economy, as job losses began to occur in the housing and financial sectors and consumers pulled back on spending as a result of falling home prices and overall nervousness about future economic prospects.

- Economic forecasters began to gradually raise their estimates of the probability of a recession; today Intrade puts the odds of a recession at 70%. The credit markets are even more dramatically signaling recession.

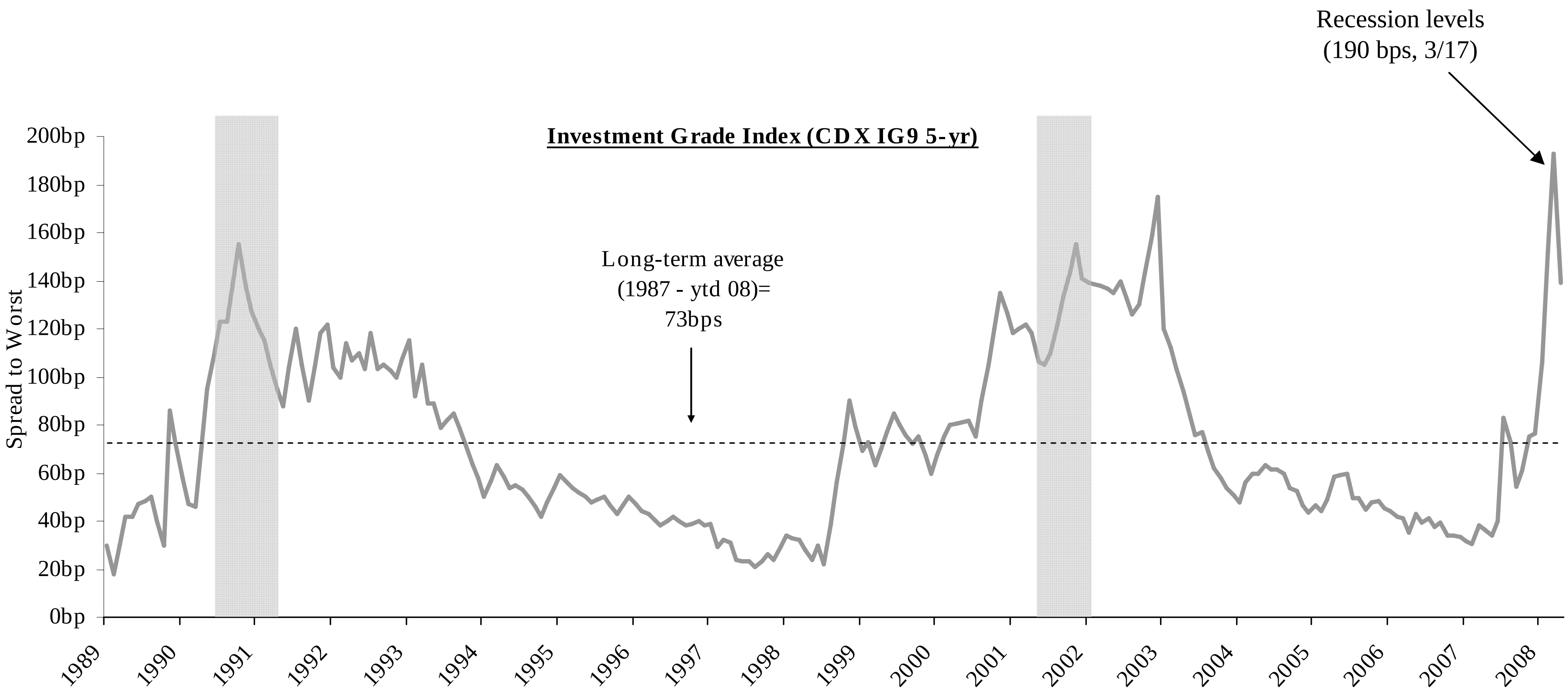
Recent Economic Indicators Point to Recession

- Some leading economic statistics indicate the potential for a recession
  - Real GDP growth was 0.6% in the Q4 2007, and was not revised upward. This result was lower than the 1.1% expected by economists, and the weakest GDP growth for the economy since 2002
  - The unemployment rate was 4.8% in February 2008, up from 4.4% in March 2007
  - New housing construction was down significantly, with Feb. 2008 declining 28% from Feb. 2007
  - The Institute for Supply Management indices have largely been below 50 since December, signaling contraction
  - The Conference Board consumer confidence index has declined significantly since July (down 43%, from 114 to 64.5)
  - Retail sales declined 0.6% in February

Source: BEA, White House Economic Report, The Conference Board, ISM, US Dept. of Housing and Urban Development

Investment Grade Spreads vs. Recession

- The investment grade market is clearly signaling recession.



Source: Goldman Sachs

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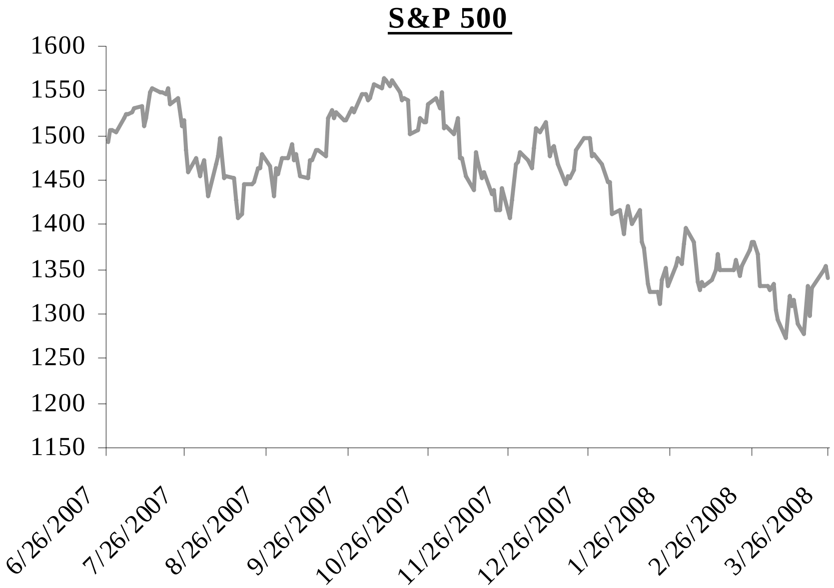
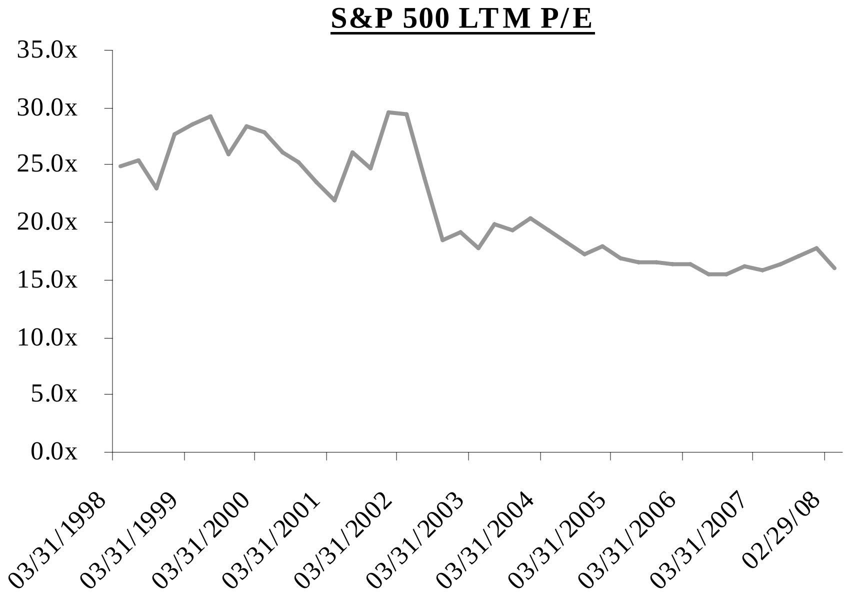
Ambiguous Equity Markets

- The S&P index has dropped 10% since January 1 and 15% from its peak on October 9th
- However, the S&P index currently trades at 16.1 times LTM earnings, below its 20 year historic average of 19.3 times



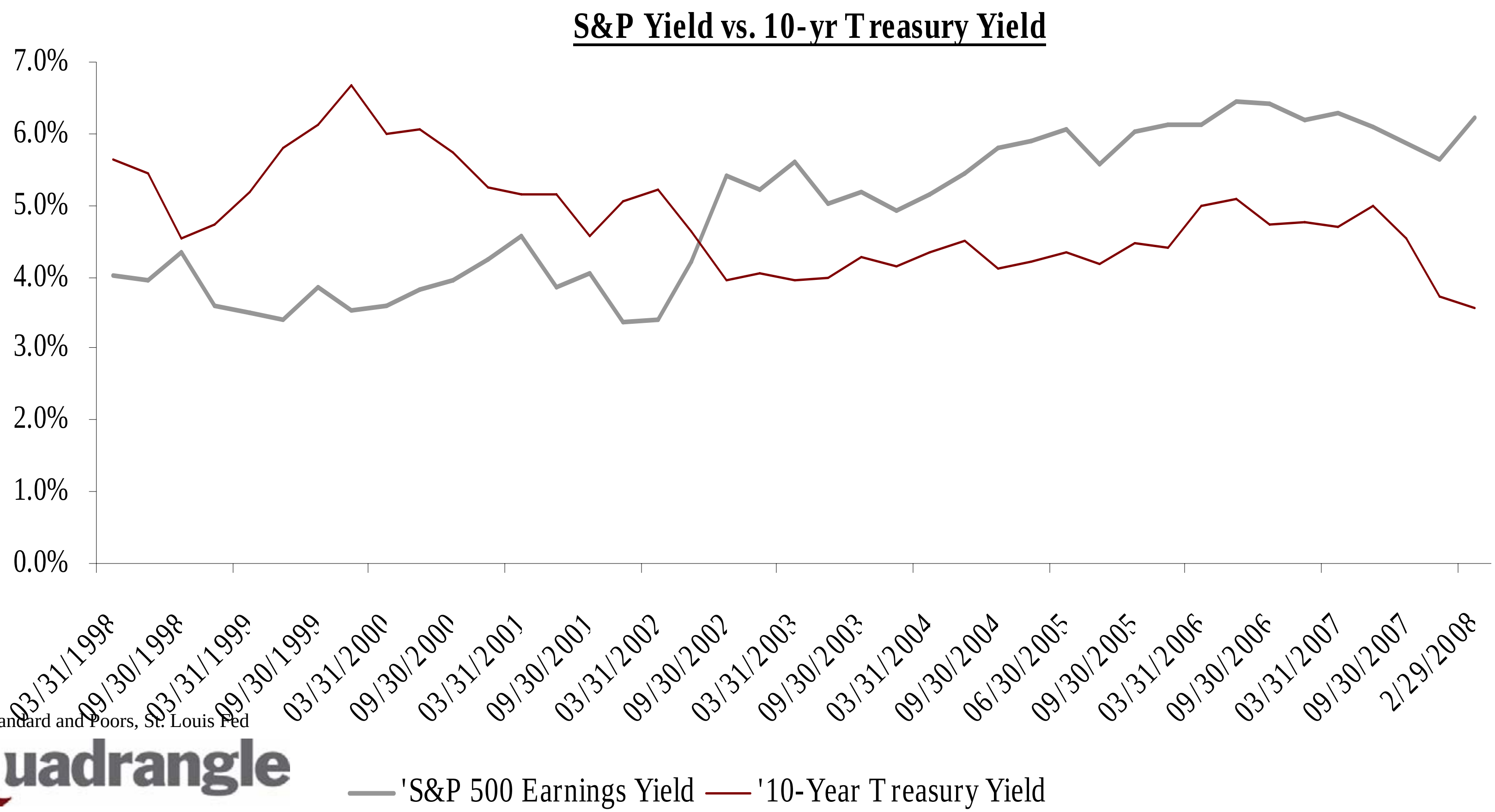
Source: Capital IQ



Source: Standard and Poors

Ambiguous Equity Markets (cont'd)

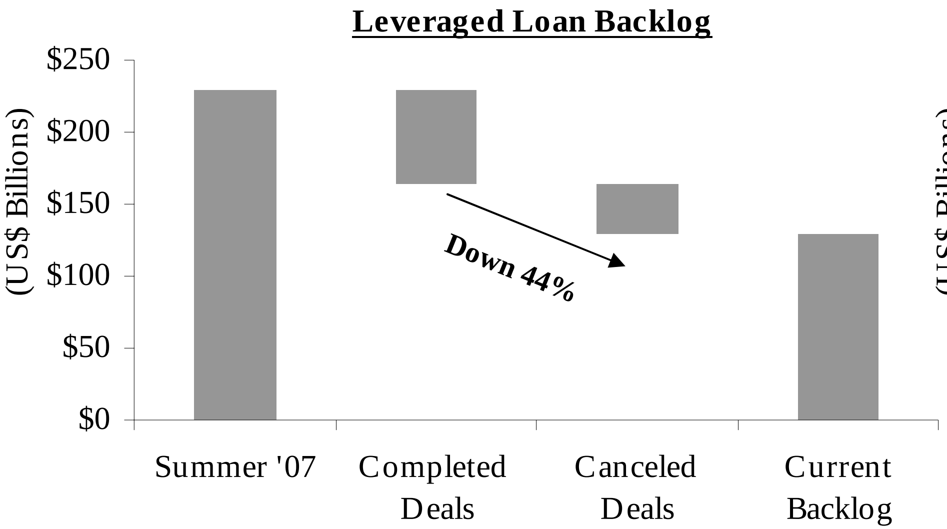
- When comparing the earnings yield of the S&P 500 index to the yield of the 10-year Treasury (known as the Fed Model) the S&P currently has a higher yield, implying that it is relatively cheap when compared to bonds
- This barometer of share prices suggests that the stock market is more attractive than at any time over the past 10 years

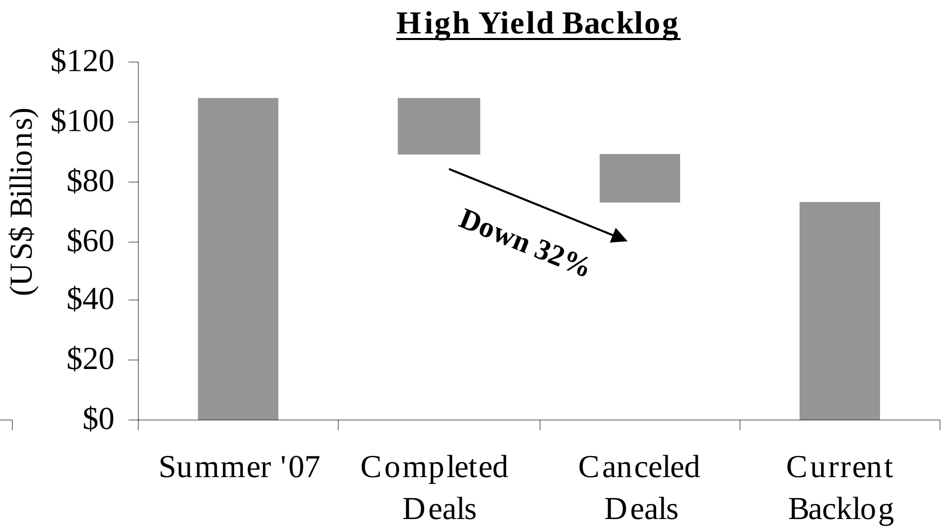


Source: Standard and Poors, St. Louis Fed

Credit Market Working Through Backlog

- Following the meltdown in the U.S. mortgage and sub-prime lending markets, liquidity dried up for corporate debt as well, including over $300 billion in previously committed LBO financing
- Banks and investors have been hard at work since July digesting over $100 billion of the backlog
- Many of the deals that came to market from the backlog were priced at a discount and continue to trade below par
  - ➢ However, banks have maintained discipline in offloading these loans up to this point





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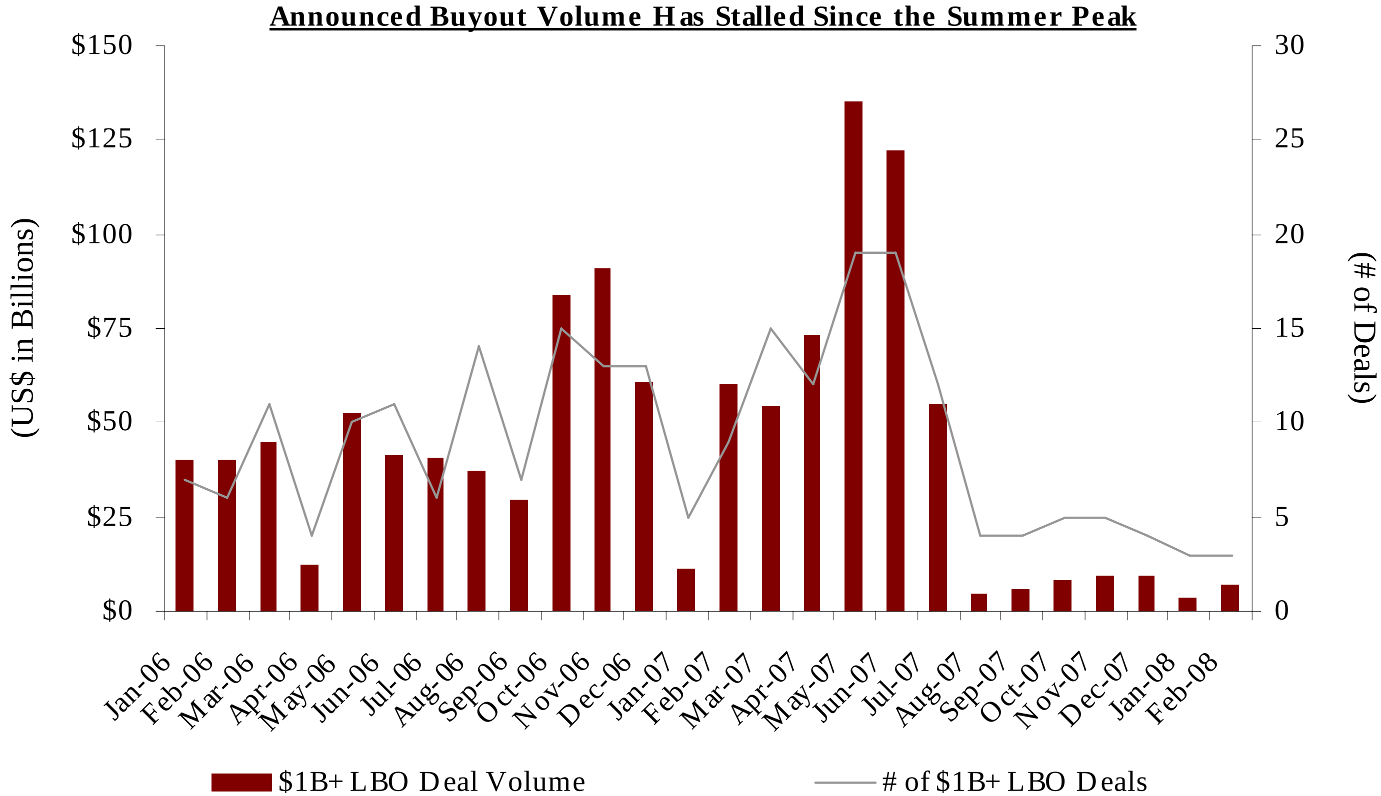
Source: JP Morgan research, Bank of America research

Ramifications for Private Equity

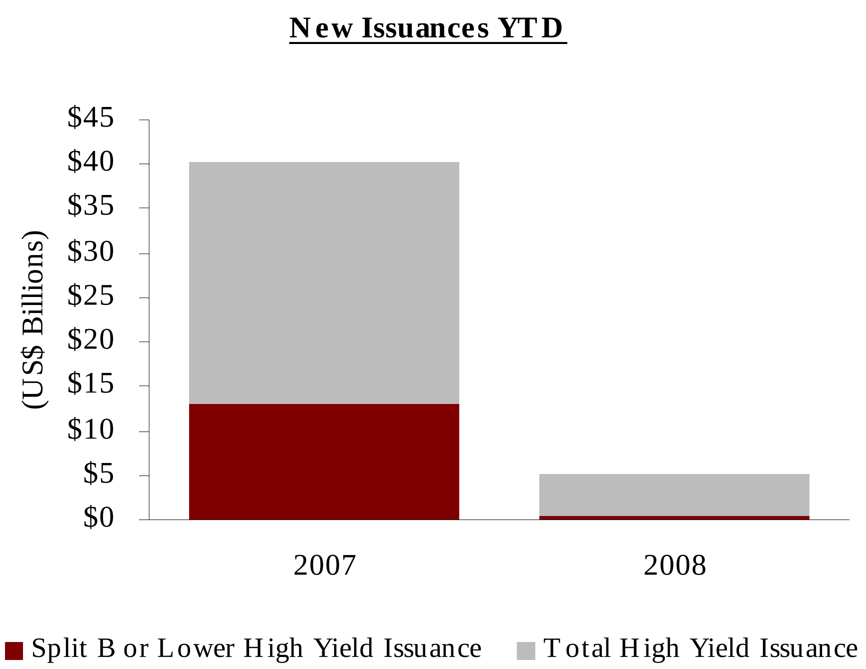
- The aforementioned factors have led to a dramatic slowdown in private equity activity



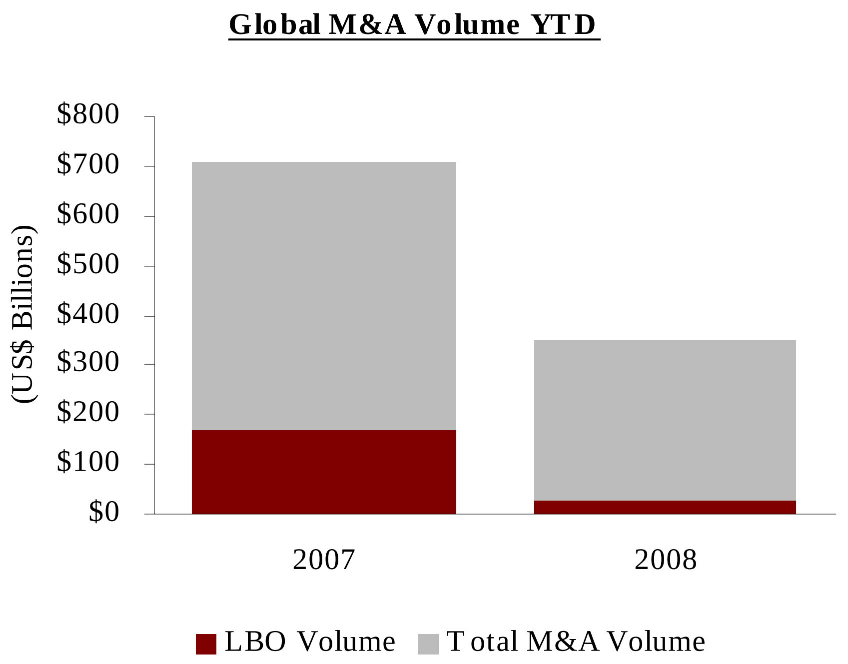
Source: SDC, CapitalIQ

Ramifications for Private Equity (cont'd)

- Early 2008 activity suggests a continuation or even an acceleration of this trend



Source: JP Morgan research



Source: Thomson, DeaLogic

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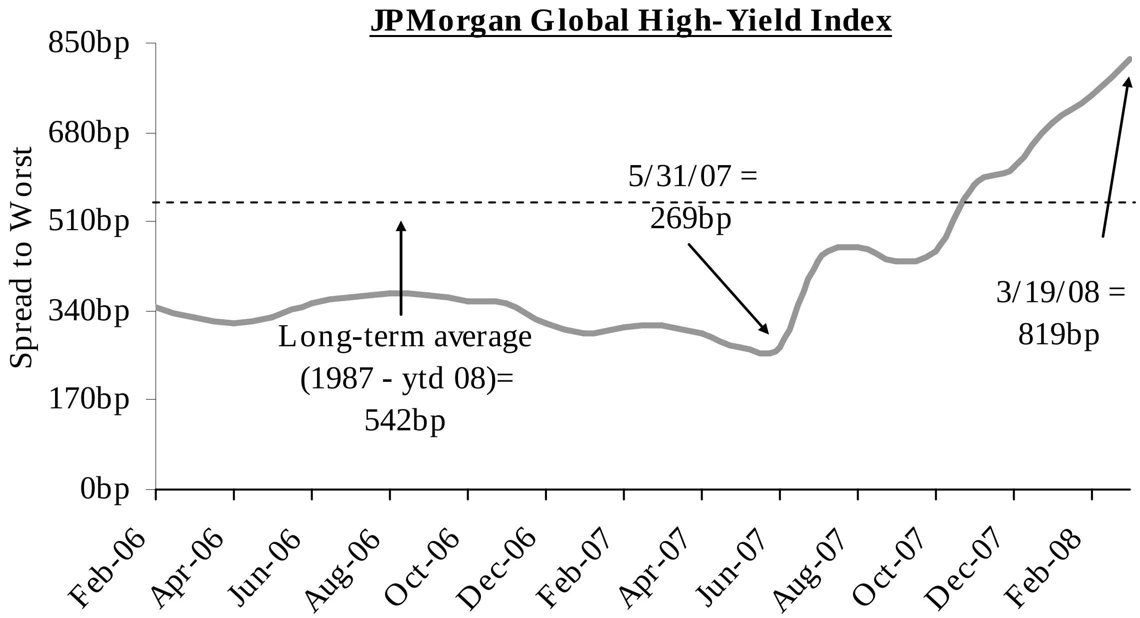
Widened Credit Market Spreads

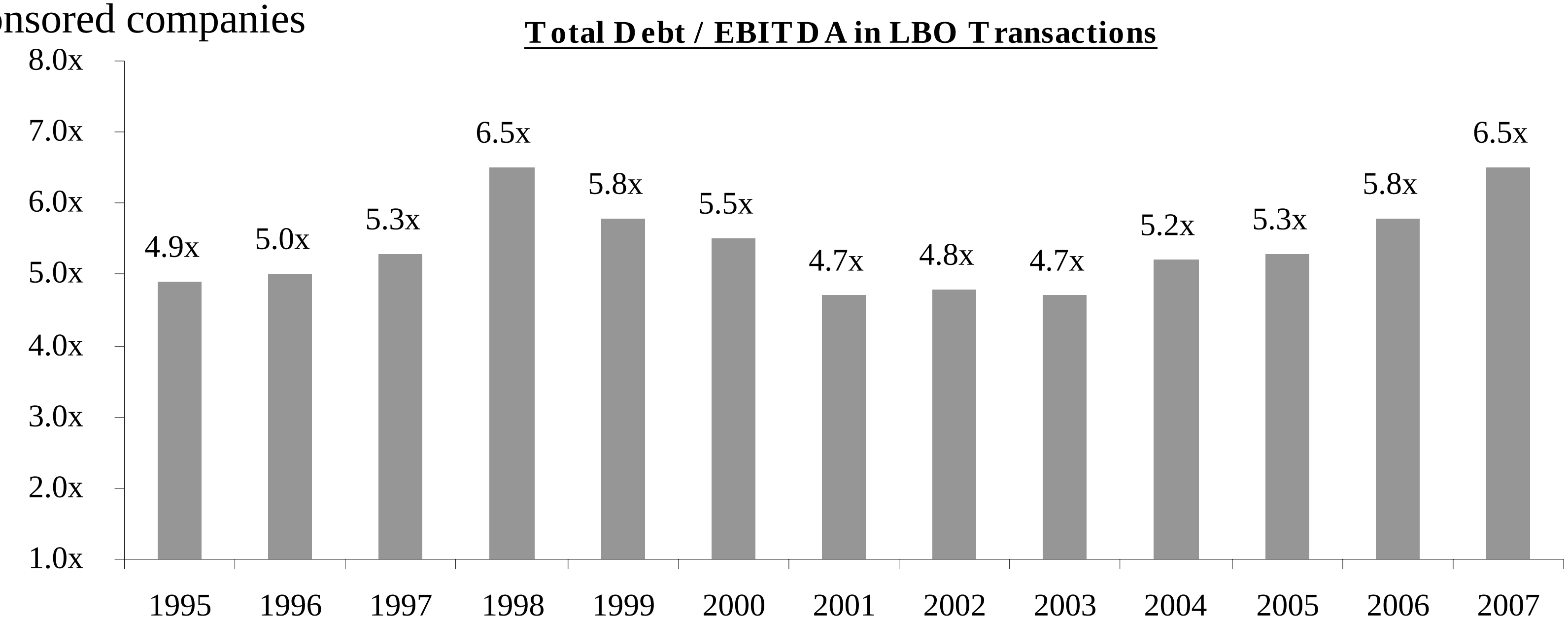
- Credit risk premiums – which by July had compressed to record lows – have widened
- Arguably, even today's levels may not be sufficient given: a) higher than historic levels of debt in buyouts, b) uncertain economic outlook in the U.S. and c) housing / general credit market weakness



Source: JP Morgan research

Private Equity Default Risk

- The biggest risk to the debt markets at present is the specter of a significant uptick in default rates
- Forecasters such as Moody's expect the global default rate to almost triple over the next year
- The proliferation of highly leveraged deals "priced to perfection" over the past few years suggest that private equity-sponsored companies may suffer during a period of economic weakness
  - Financing features available in prior deals (e.g. "covenant-lite" and "PIK-toggle" instruments) may mitigate default risk, or delay an eventual default
- S&P recently issued a watch list of 74 names, not surprisingly, 50 of which are private equity sponsored companies



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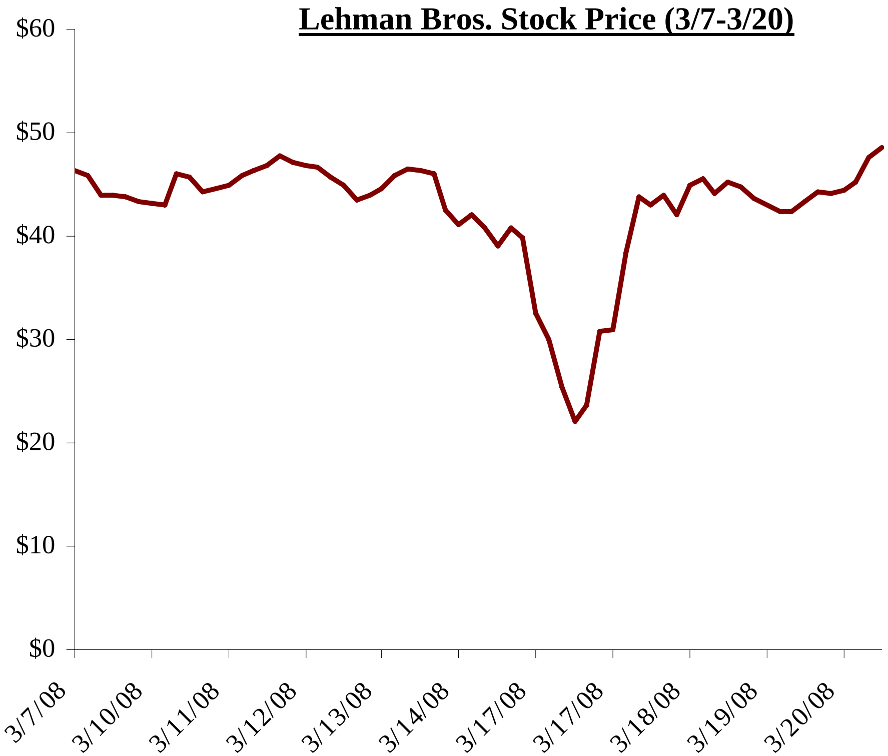
Source: JP Morgan research

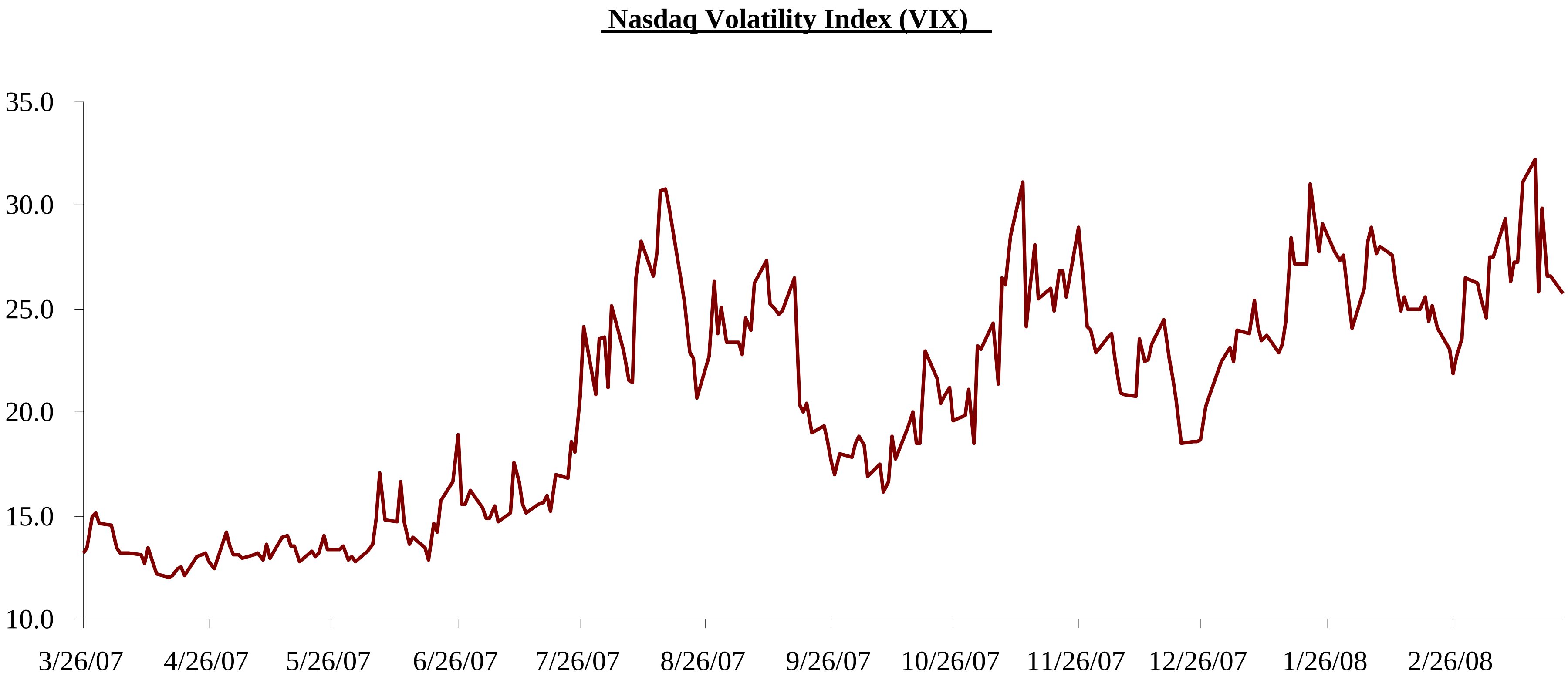
Near Meltdown in Financial Markets

- For the most part, the adjustments in the financial markets have been orderly
- One moment of potential panic occurred in mid-March, when Bear Stearns imploded



Plenty of Volatility

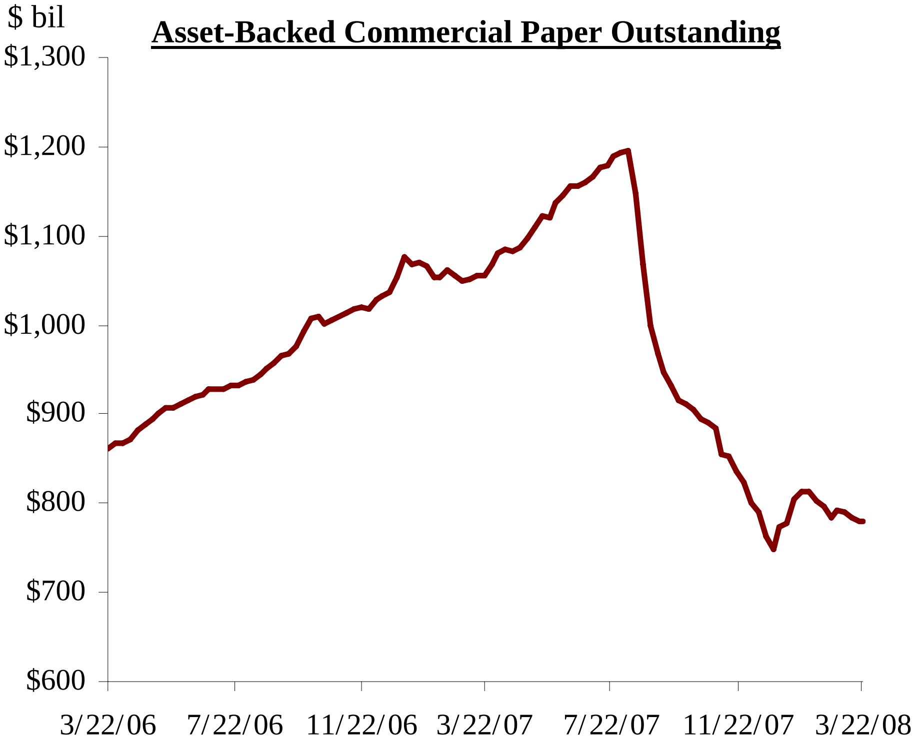
- The pace of market volatility has quickened, unnerving many participants (while cheering others)

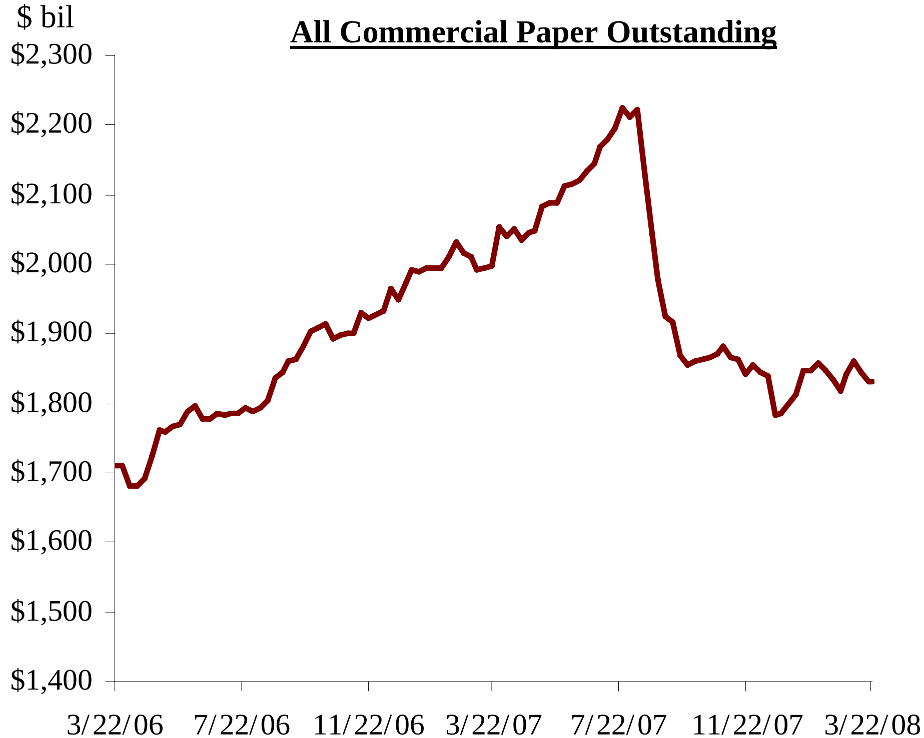


Source: CapitalIQ

Unwinding of Leverage

- A prominent feature of the adjustment process has been a significant deleveraging throughout the financial system.
- The problems of KKR Financial and Carlyle Capital are examples of the consequences of this phenomenon.





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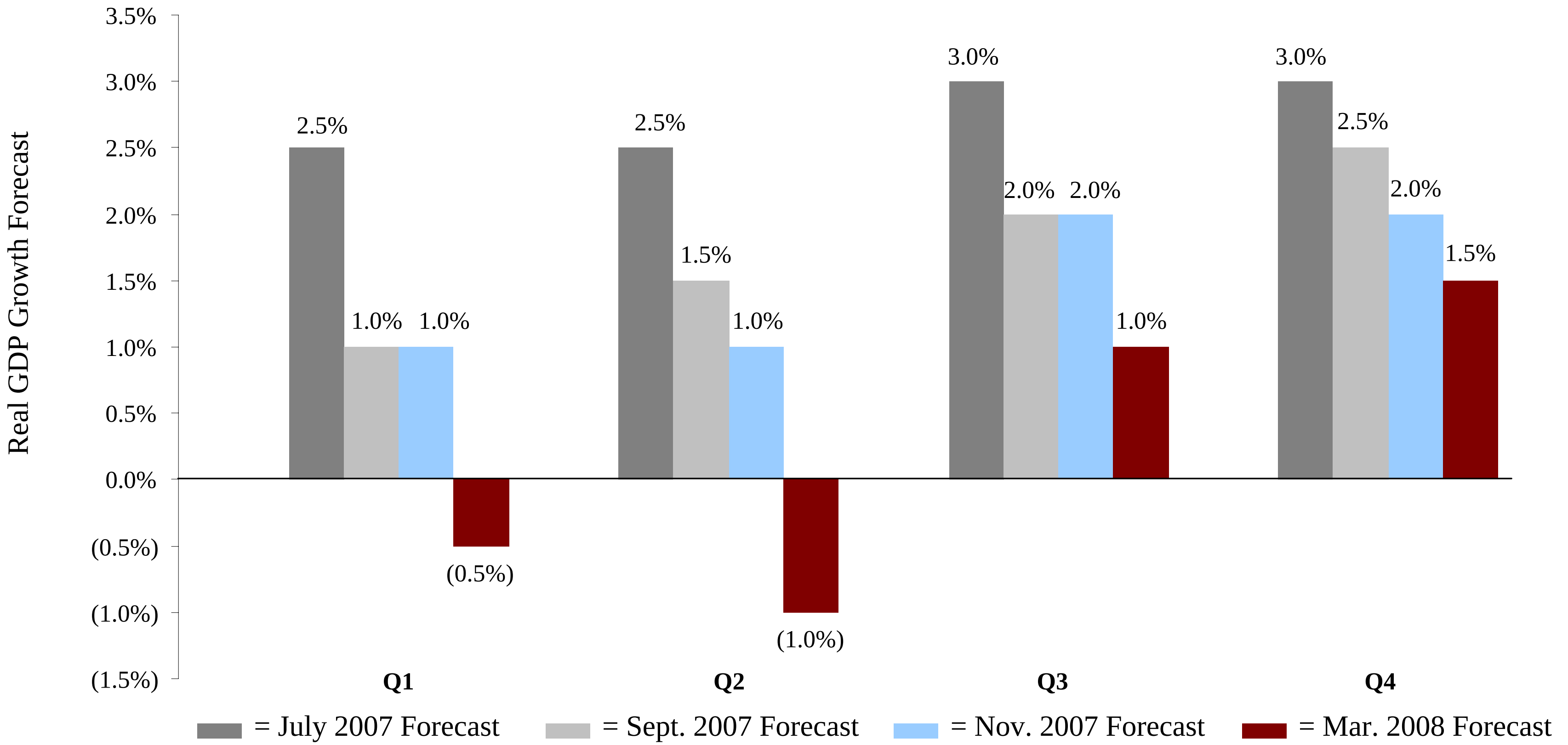
Source: Federal Reserve, 3/22/08

Where Do We Go From Here?

- Since last summer, the consensus economic forecast for 2008 GDP growth has steadily become more pessimistic



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Source: Goldman Sachs

But We Should Not Be Overly Pessimistic

- The probability is that a recession is likely to be shallow
  - More sophisticated economic policymaking has led to generally benign economic conditions over the past two decades, a phenomenon known to economists as "The Great Moderation"
  - The last two recessions (1990-91 and 2001-02) were each eight months in duration and relatively mild
- The U.S. economy remains productive and flexible, and inflationary pressures appear contained
- The massive interest rate reductions by the Federal Reserve and the recently enacted stimulus package will gradually insert a positive influence on growth
- The fall in the dollar provides an important push for exports
- While the possibility of a financial meltdown cannot be ignored, the probability is that the losses from imprudent lending will slowly work through the system
- Absent any cataclysmic events, the adjustments in markets that are now underway will prove healthy and beneficial

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