Presenting debate on contemporary and emerging portfolio construction ssues



CONFERENCE

When top down models went out of date - Fixed Income as an Alpha Source

Peter Walsh

Director, Retail Business

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Outline

- > Traditional view of Global Fixed Income
- Evolution of Fixed Income Markets
- Evolution of Investment Process
- Recipe for Fixed Income Alpha

Traditional view of Fixed Income

- Safe, necessary, boring
- Efficient less alpha than equities
- Volatility is too low to generate alpha



Traditional view of Fixed Income Enron stock price vs. Enron bond price

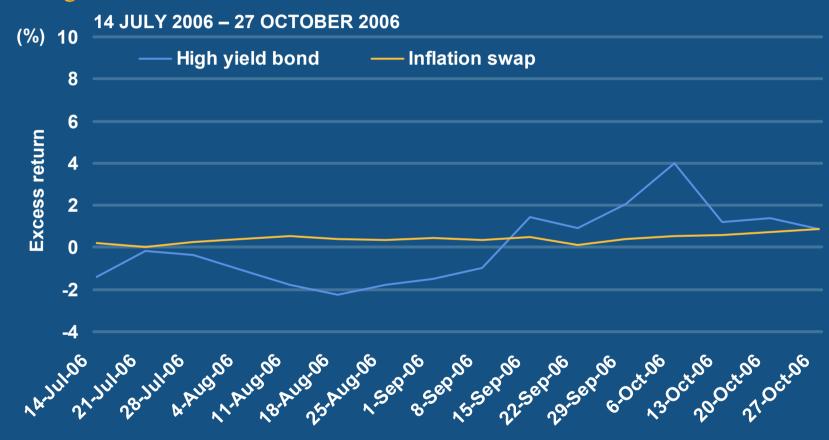
1 JANUARY 2000 - 1 DECEMBER 2001 (%) 120 — Bond (05/19 maturity) Stock 100 80 Price 60 40 20

Source: Bloomberg.



Traditional View of Fixed Income Inflation Swap vs High Yield Bond

- rolling 12 month excess returns

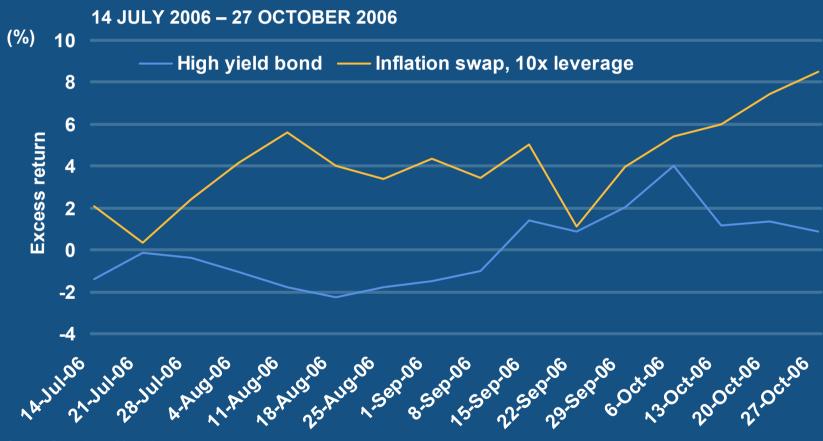


Source: Bloomberg, Merrill Lynch.



Traditional View of Fixed Income Inflation Swap 10x vs High Yield Bond

- rolling 12 month excess returns



Source: Bloomberg, Merrill Lynch.



Evolution of Fixed Income Markets Diminished opportunity in country

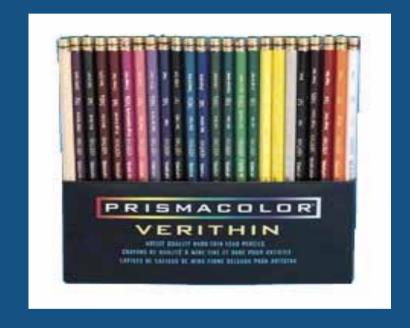
TEN-YEAR YIELD SPREADS BY COUNTRY (%) 14 12 Australia/US - Canada/US New Zealand/US France/Germany Sweden/Germany **Italy/Germany** Norway/Germany



Source: Datastream.

Evolution of Fixed Income Markets





Traditional

New



Evolution of Fixed Income Markets Increased Sector/Security Opportunity



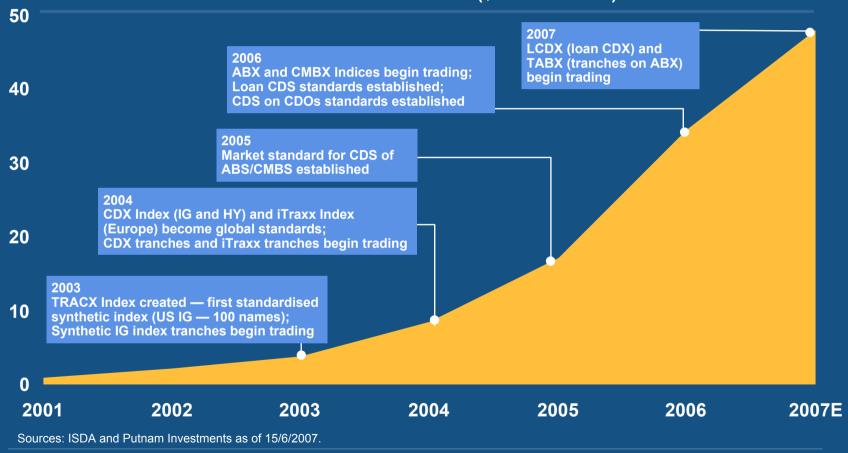
1985 1990 1995 2000 2006

Source: Putnam Investments. Sector opportunities are shown for illustrative purposes only.

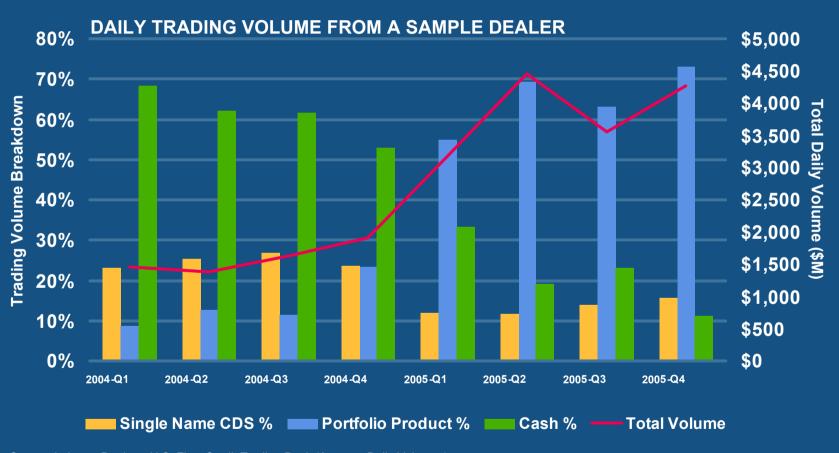


Evolution of Fixed Income Markets Rapid growth and innovation

STRUCTURED CREDIT TIMELINE
TOTAL CREDIT DEFAULT SWAP OUTSTANDING (\$US BILLIONS)



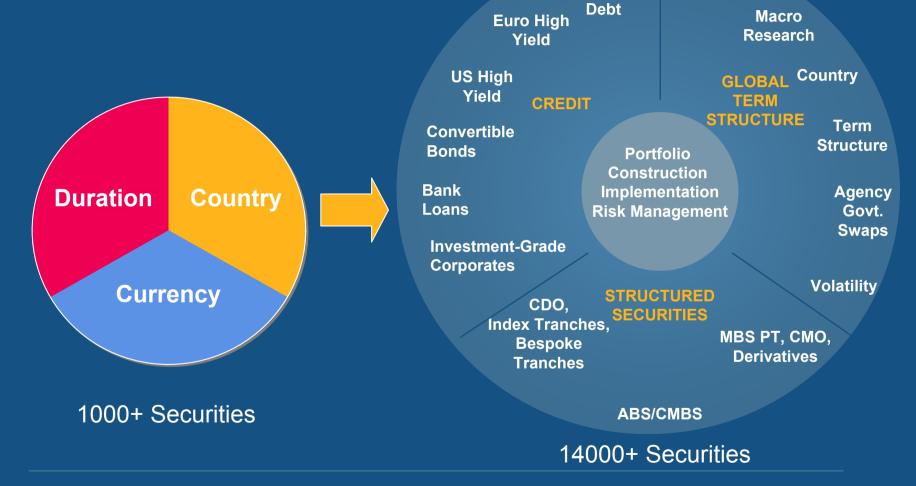
Evolution of Fixed Income Markets Significant and increasing liquidity



Source: Lehman Brothers U.S. Flow Credit Trading Desk (Average Daily Volumes).



Evolution of Investment Process Top Down to Bottom Up



Emerging

Markets

Currency

Evolution of Investment Process Inefficiencies to exploit

- Currency not all investors are return oriented and hence deviations from fair value
- ➤ Term structure real v nominal rates, mispricing of volatility
- Credit different models, different views on size, volatility and correlation of default rates
- Liquidity sensitivity to ratings or short time horizons creates forced sellers



- Historically small returns
- > If large:
 - Usually taking significant market risk (Beta)
 - Long duration
 - Overweight credit
 - Volatile
 - Unrepeatable



- Security selection
- Diversification
- Risk Management
- Derivative expertise
- > Flexible guidelines



Asset Backed Securities > Credit Derivatives







Derivatives

- Enable isolation of opportunities
- Can reduce risk
- Can add security selection opportunities
- Are the future

Shorting

- Allows a larger opportunity set
- Asymmetry in your favour
- Little fundamental difference from being underweight



Leverage

- Allows less volatile, but great risk-adjusted returns to be competitive with higher return more volatile sectors
- Increasing size should equally increase return and risk



Summary

- Security selection is the best source of alpha in fixed income
- Diversification is necessary to avoid typical downside risk of bonds
- Be cautious of excess returns that were driven by large market moves – "big bets"
- Derivatives and shorting can add to alpha while decreasing volatility
- Investment managers need risk systems capable of monitoring the diverse exposures, volatilities and correlations



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Appendix: What happened to credit this year?







- Not all AAA's are the same
- Leverage can amplify returns and can have more downside than upside
- The use of quantitative models is an art and a science

