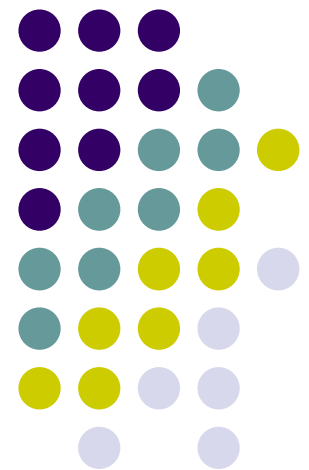


# Overview of Fixed Income Portfolio

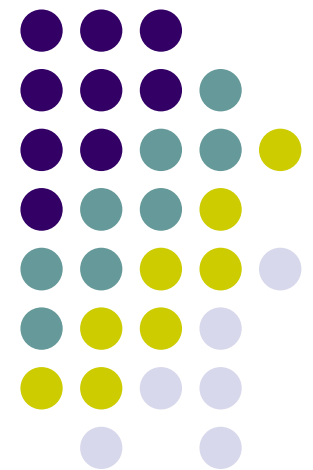
NEW JERSEY DIVISION OF INVESTMENT  
February 19, 2009

Timothy Patton  
Philip Pagliaro

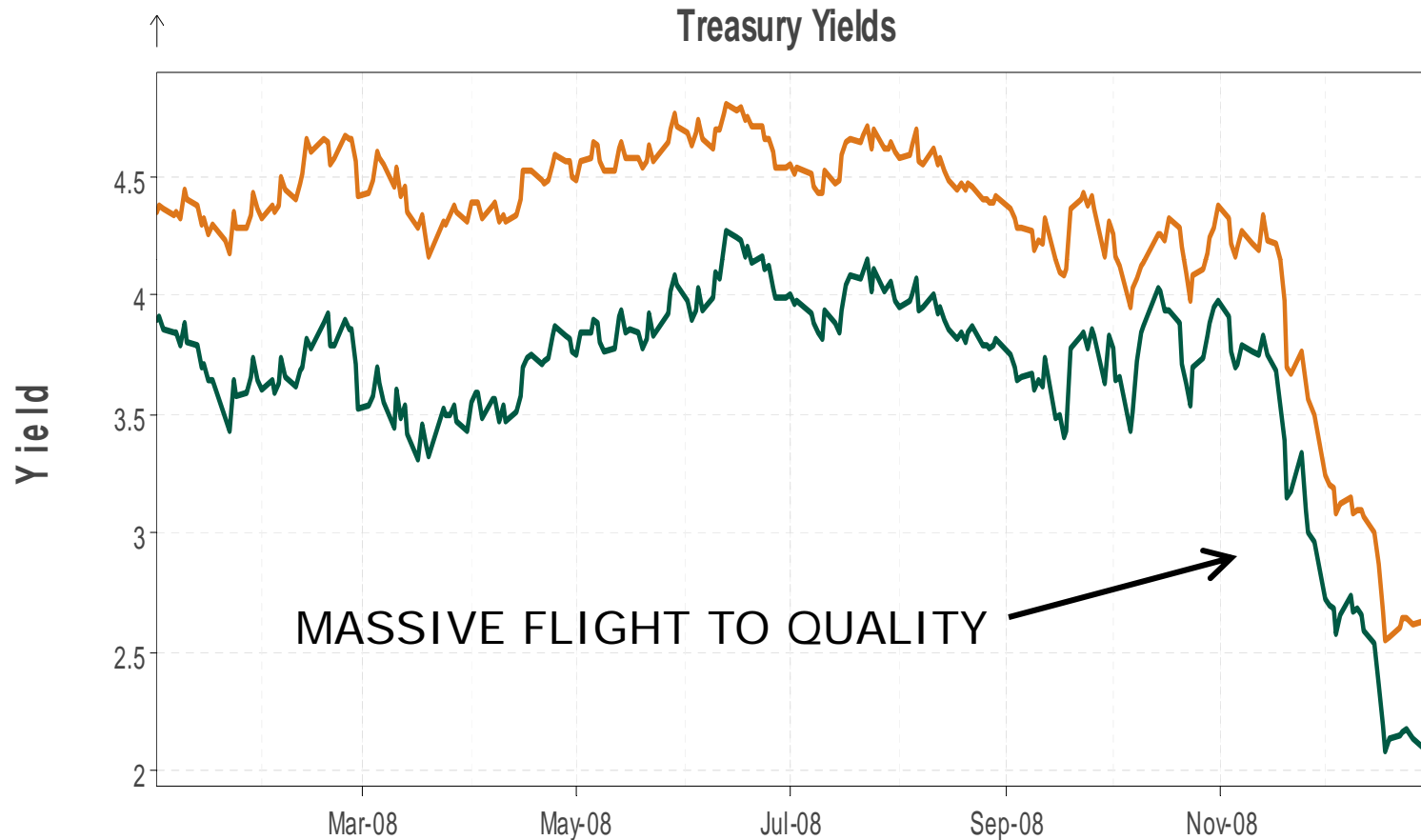
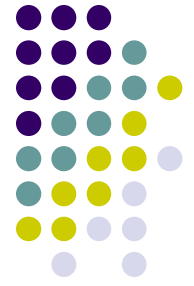


# Summary of the 2008 Market

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# 30-Year and 10-Year U.S. Treasury Yields Have Dropped Dramatically



# Three-Month U.S. Treasury Bills Go Negative



# Yields (as of 12/31/08)



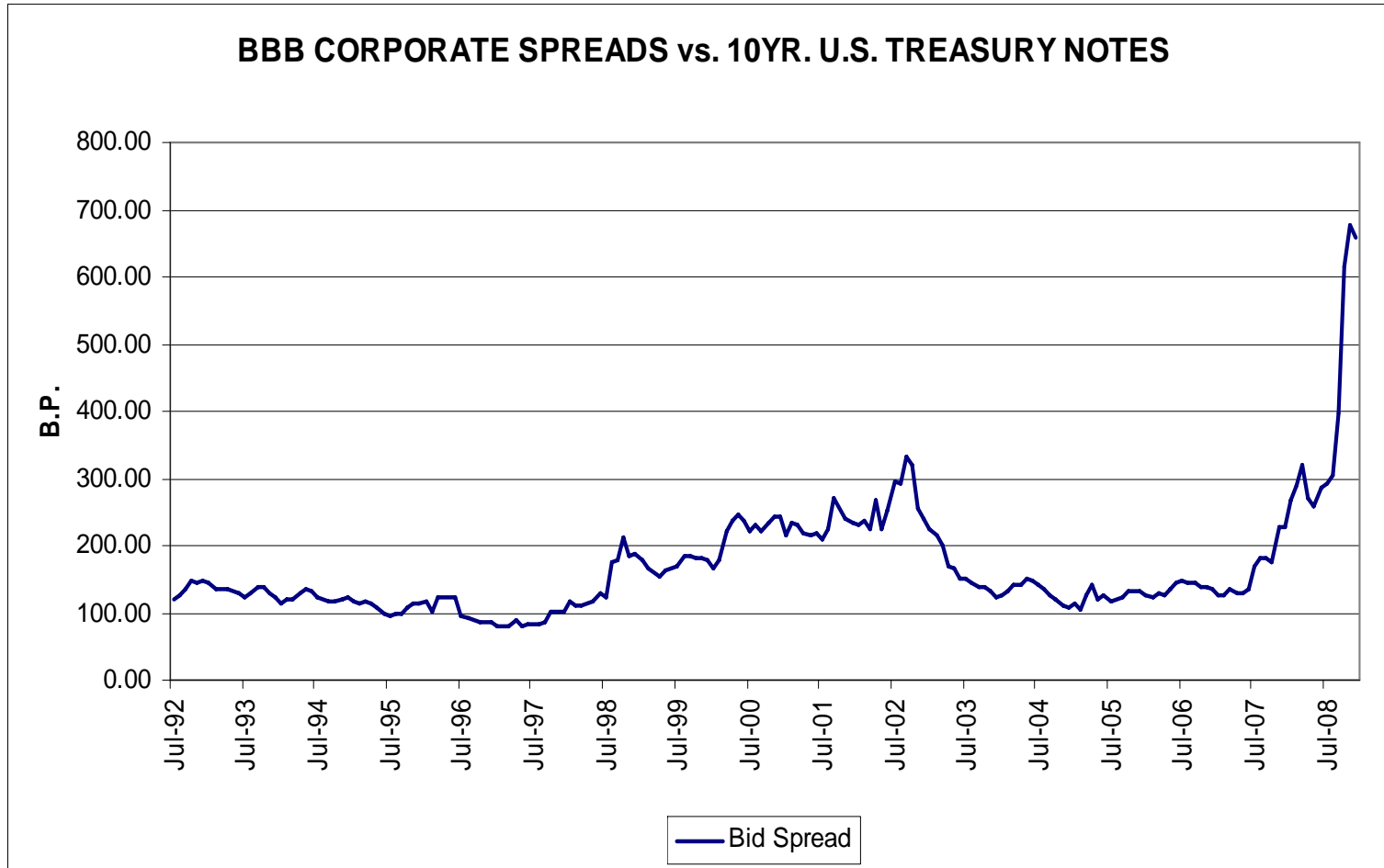
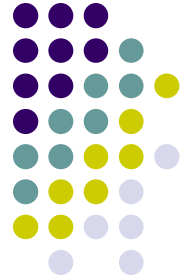
## TREASURIES

	TIPS	NOMINALS
3 MONTH BILLS	N/A	0.07%
2 YEAR	5.62%	0.76%
5 YEAR	1.67%	1.55%
10 YEAR	2.09%	2.21%
30 YEAR	2.06%	2.68%

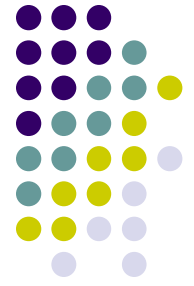
## BARCLAYS INDICES

	YIELD	
GOVT/CREDIT BOND INDEX	3.79%	
LONG GOVT/CREDIT BOND INDEX	5.06%	
HIGH YIELD BOND INDEX	19.43%	} <b>HAVE COMPRESSED; STILL NEAR ALL-TIME HIGH SPREADS; EQUITY- LIKE RETURNS FOR A RATED CREDITS</b>
CORPORATE INDEX	7.57%	

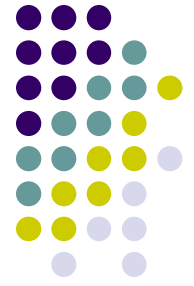
# Corporate Spreads Widen Dramatically to Levels Not Seen Since the 1930s



# 2008 Returns by Asset Class



The dispersion of performance across types of fixed income sectors during 2008 was unprecedented. The flight to quality, particularly during October and November, hammered Corporate bonds, especially High Yield, as investors poured assets into Treasuries and other Government bonds.



# Performance for 2008

## COMMON PENSION FUND B

- BONDS LESS TIPS 7.14%
- TIPS 0.49%
- TOTAL 6.05%

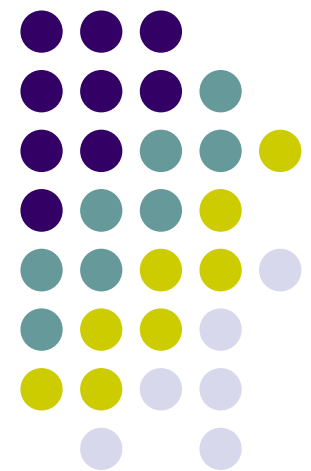
## BENCHMARKS

- BARCLAYS GOVT/CREDIT 5.70%
- BARCLAYS LONG GOVT/CREDIT 8.44%
- BARCLAYS TREASURY 13.74%
- BARCLAYS LONG TREASURY 8.95%
- BARCLAYS TIPS - 2.35%
- BARCLAYS HIGH YIELD - 26.16%

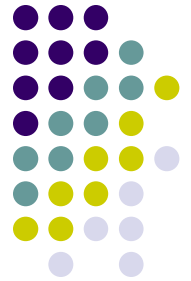
Performance was helped by movement towards long-duration strategy and high overall credit quality. Performance was hurt by exposure to TIPS.

# Portfolio Decisions for 2008

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# 2008 Portfolio Activity



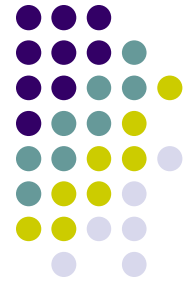
- **TIPS**
  - Increased overall exposure, in part as a hedge versus commodities.
  - Sold all shorter maturity securities and moved out the curve into 20-year sub-sector.
- **Treasuries**
  - Decreased weighting.
  - Sold all shorter maturity and 30-year securities and increased exposure to higher-yielding 20-year sub-sector.
- **Agencies**
  - Decreased weighting.
- **Corporate Bonds**
  - Increased corporate weighting by 50%.
  - Increased exposure to high-quality Industrial and Utility sub-sectors while paring down exposure to Financials.
- **Mortgages**
  - As spreads widened the Division purchased GNMA 30-year at 6%.
  - As the Federal Reserve announced they were going to buy mortgages, the Division started to sell mortgages.
- **Municipal Bonds**
  - Invested in Municipals to take advantage of higher yields in a dislocated market.

# Portfolio Activity in 2008



	PURCHASE	SALES	NET
TREASURIES	\$557.2	\$4,500.5	(\$3,947.3)
TIPS	\$2,464.8	\$1,141.3	\$1,323.5
AGENCIES	\$779.0	\$625.3	\$153.7
MBS	\$279.7	\$1,960.3	(\$1,680.6)
CORPORATES	\$5,703.4	\$2,317.8	\$3,385.6
MUNIS	\$621.5	\$419.1	\$202.4

# Result of Q4 Corporate Bond Purchase Program



## COMMON PENSION FUND B

• Number of Companies	59
• Total Par (mm)	1,589
• Average Spread (B.P.)	363
• Average Yield%	7.17

## COMMON PENSION FUND A

• Number of Companies	18
• Total Par (mm)	401
• Average Spread (B.P.)	625
• Average Yield%	10.20

## TOTAL

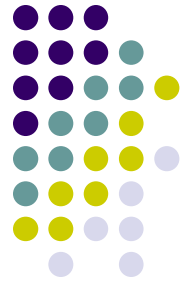
• Number of Companies *	70
• Total Par (mm)	1,990
• Average Spread (B.P.)	416
• Average Yield%	7.78

**EQUITY-LIKE RETURNS  
WITH MORE CERTAIN  
CASH FLOWS; HIGHER IN  
THE CAPITAL STRUCTURE**



\* Some companies were purchased in both Funds

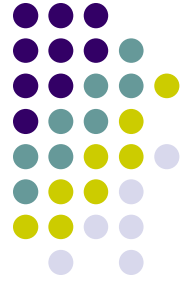
# Armageddon Default Scenarios Priced In



INDEX	ASSUMED RECOVERY RATE	PRICE OR SPREAD TO LIBOR (BPS)	IMPLIED % DEFAULTS OVER THE DURATION OF THE INSTRUMENT	WORST 5-YEAR CUMULATIVE HISTORICAL DEFAULTS
IG CASH	40%	526	38%	4.7%
HY CASH	20%	1976	75%	42.6%

**ANCILLARY POINT: COVENANT-LITE DEALS WERE SUPPOSED TO TRADE LOW RECOVERY RATES FOR LOWER DEFAULT RATES. THIS HAS NOT BORNE OUT IN THE CURRENT ENVIRONMENT.**

# Treasury Inflation Protected Securities (TIPS)



- Pays rate of inflation + coupon.
  - When inflation is high, the TIPS yield is higher and when inflation is low, the TIPS yield is lower.
- We view as a hedge versus commodities.
  - Not a perfect hedge though as the TIPS market isn't nearly as broad as the nominal treasury market.
- Currently the breakeven spread on 20-year TIPS is 100 bps.
  - Historically, this spread is about 250 bps.
  - Appears there is currently relative value in TIPS.
- Short-term fluctuations due to thinner market, but long-term value.
  - Ideal holding for long liability pension fund.

# Breakeven Spread on 20-Year Tips



# Opportunity: Municipal Bonds



- Not Normally Part of a Tax-Exempt Portfolio
- Attractive due to Dislocated Market
  - Rating agencies downgraded
  - Auctions failing
  - Investors leaving the market
  - Yields rising



# Common Pension Fund B Breakdown\*

## CALENDAR YEAR 2008 VS. 2007

	2008	2007
US TREASURIES	22.3%	36.7%
US AGENCIES	8.6%	4.9%
CORPORATE	60.7%	40.4%
NON-US GOVT	2.8%	2.4%
OTHERS	5.6%	15.6%

## COMMON PENSION FUND B VS. BARCLAYS INDEX (AS OF 12/31/08)

	COMMON B	BARCLAYS
US TREASURIES	22.3%	30.4%
US AGENCIES	8.6%	4.9%
CORPORATE	60.7%	54.5%
NON US GOVT	2.8%	10.2%
OTHERS	5.6%	0.0%
DUR. MOD. ADJ	TYPICALLY 4-5 YEARS FOR CORE BOND PORTFOLIOS	10.2 Years
DUR. MOD. WRS.		9.9 Years
MATURITY		17.2 Years
		11.5 Years
		11.4 Years
		22.3 Years

\* Does not include TIPS or High Yield

# Common Pension Fund B

## Corporate Holdings vs. Barclays Index By Sector



<u>SECTOR</u>	<u>CPF B</u>	<u>BARCLAYS</u>	<u>DIFF</u>
Banking	3.36%	7.79%	-4.43%
Basic Industry	2.58%	1.82%	0.76%
Brokerage	0.00%	0.06%	-0.06%
Capital Goods	4.96%	2.64%	2.32%
Communications	6.93%	10.09%	-3.16%
Consumer Cyclical	2.25%	4.17%	-1.92%
Consumer Non Cyclical	11.08%	7.48%	3.60%
Electric	11.93%	6.55%	5.38%
Energy	8.40%	5.36%	3.04%
Finance Companies	1.91%	1.87%	0.04%
Finance Other	0.70%	0.00%	0.70%
Industrial Other	0.01%	0.20%	-0.19%
Insurance	2.26%	3.02%	-0.76%
Natural Gas	1.38%	2.52%	-1.14%
Technology	1.97%	1.20%	0.77%
Transportation	3.36%	1.87%	1.49%
Utility Other	0.00%	0.04%	-0.04%