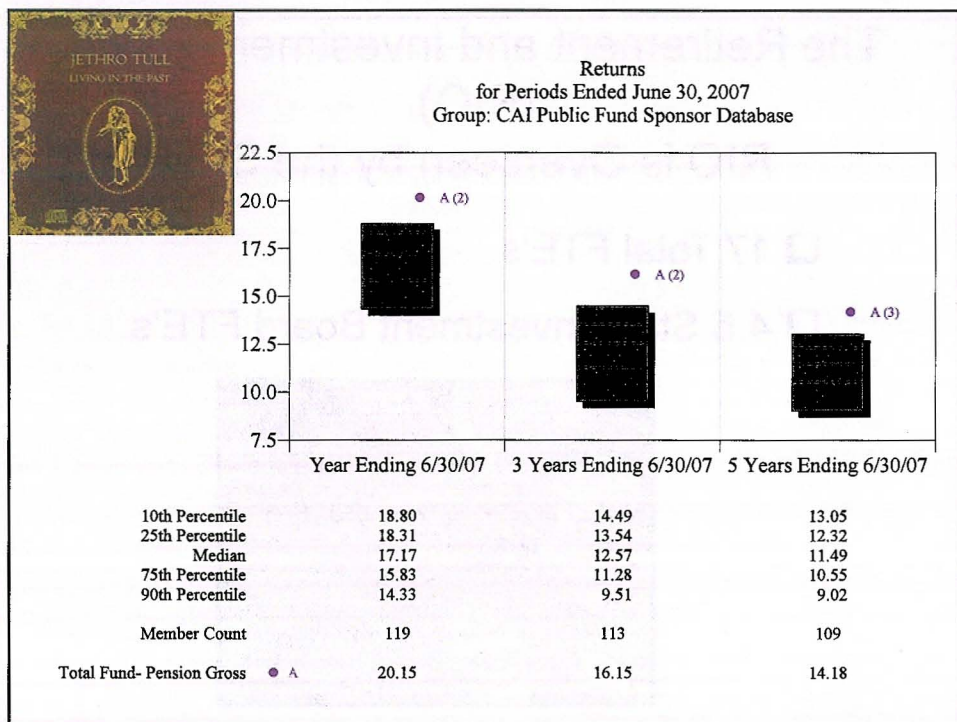


State Investment Board

Program Review

August 6, 2009
 Steve Cochrane, CFA
 Executive Director
 ND Retirement and Investment Office



ND State Investment Board (SIB)



Lt. Governor



Treasurer



Insurance Commissioner



Land Commissioner



WSI Designee



PERS



PERS



PERS



TFFR



TFFR



TFFR

The Retirement and Investment Office (RIO)

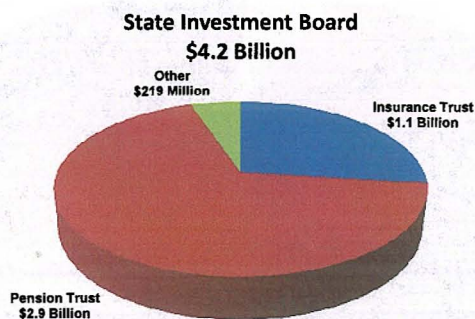
RIO is Overseen by the SIB

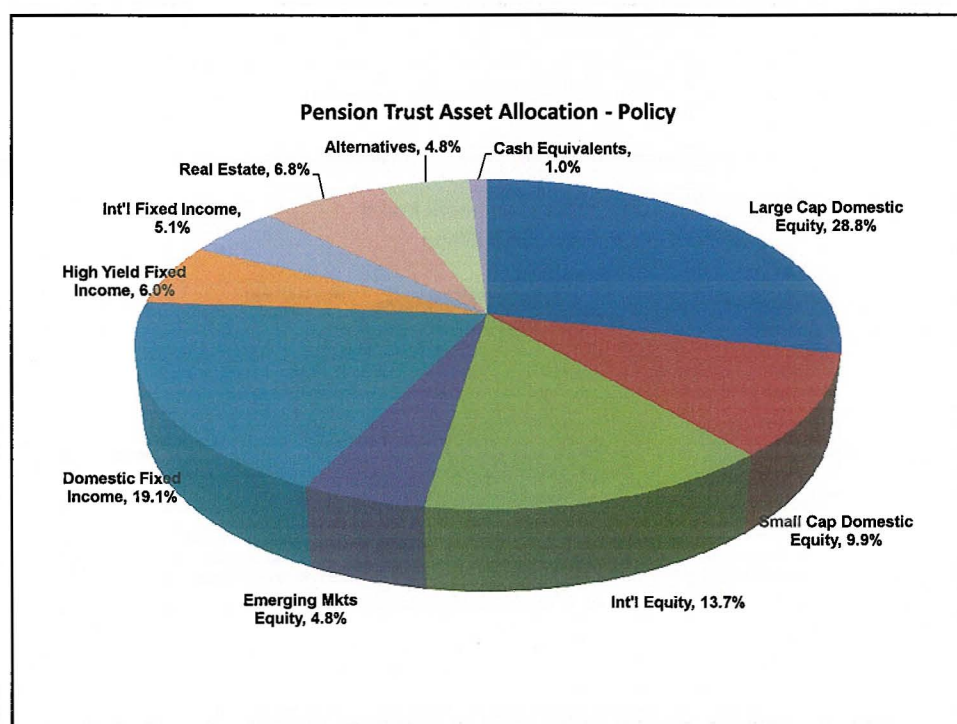
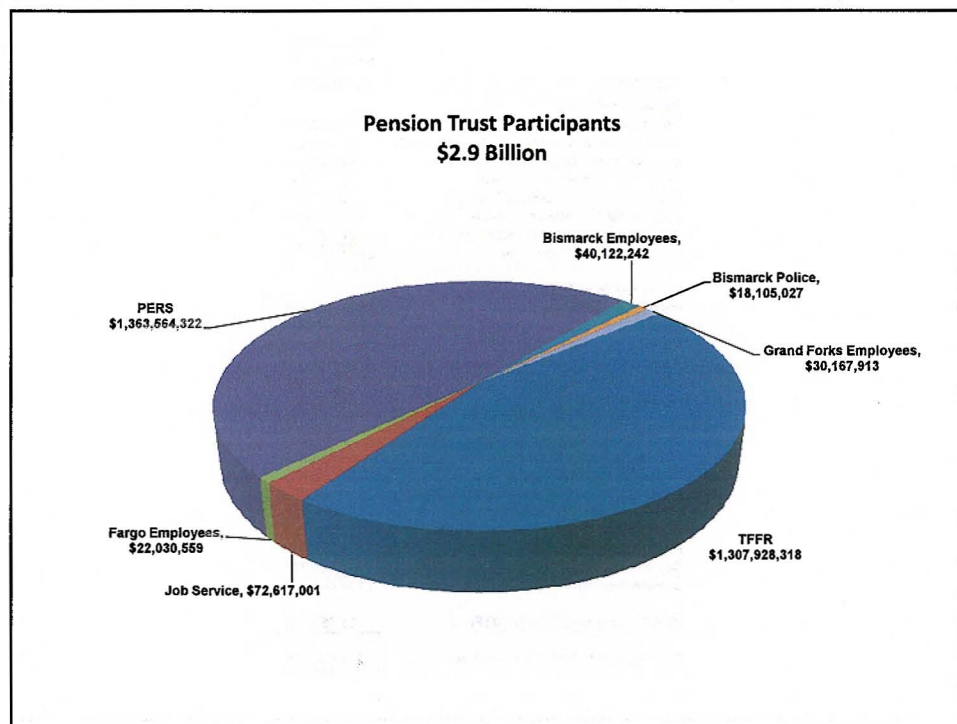
□ 17 Total FTE's

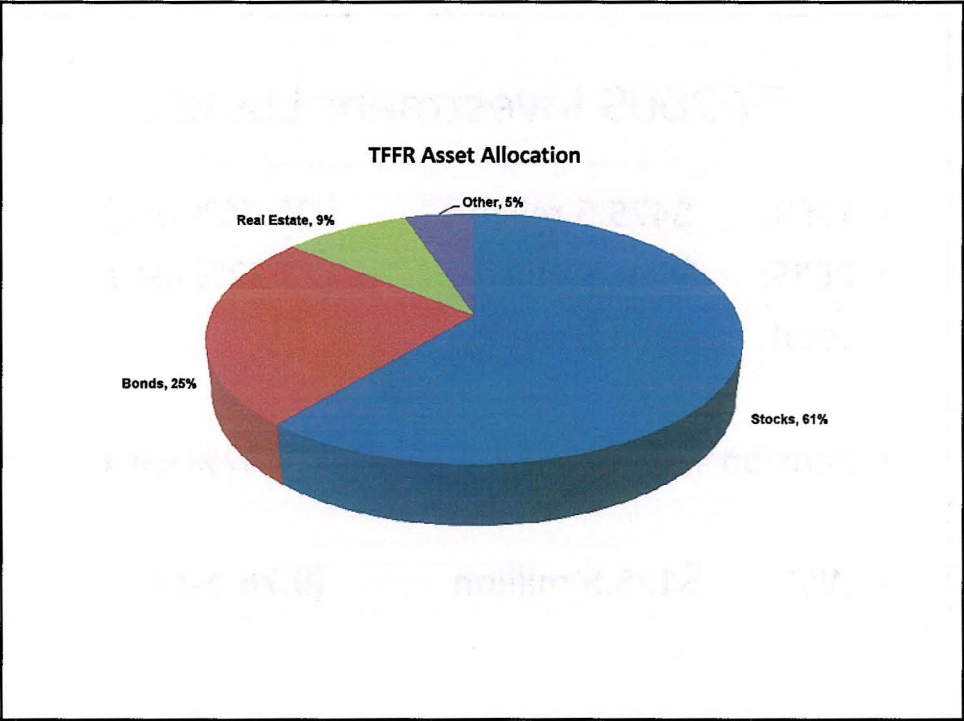
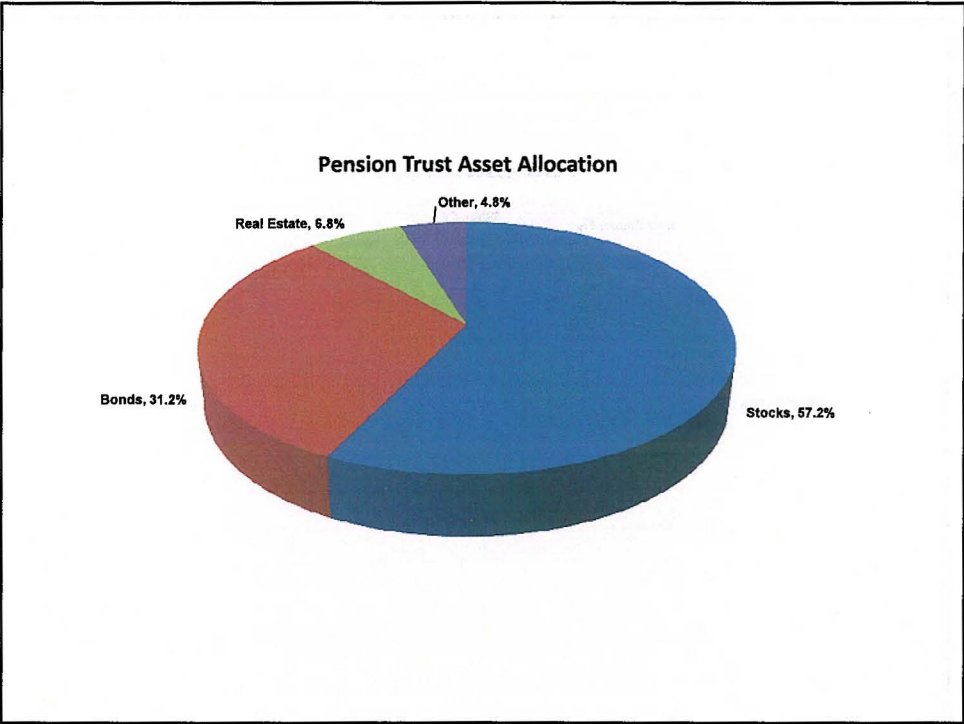
□ 4.5 State Investment Board FTE's

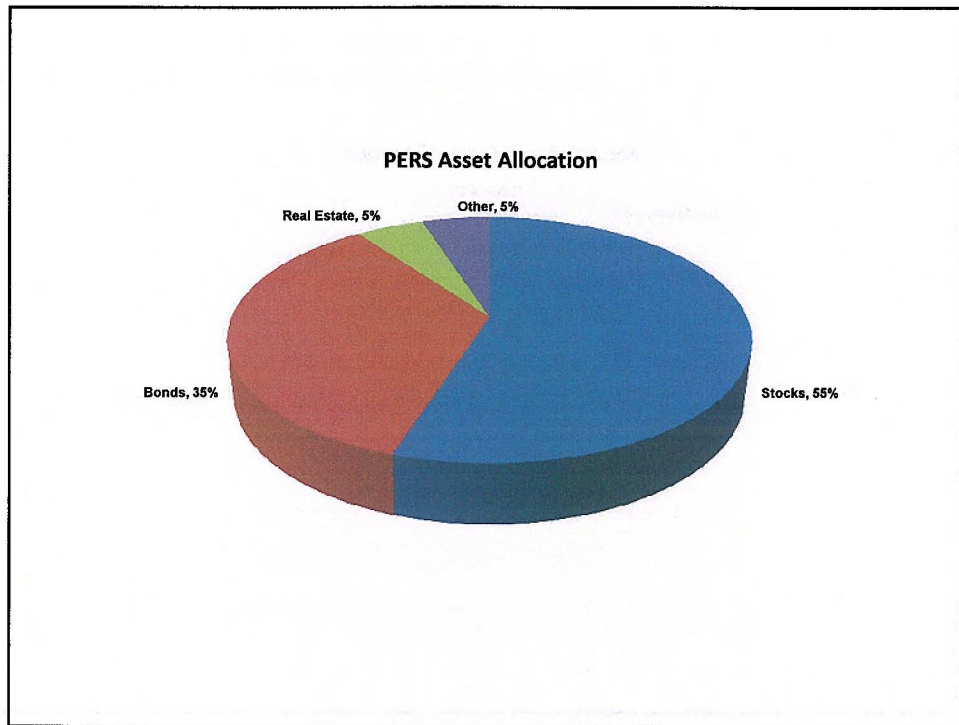


<u>Fund Name</u>	<u>Preliminary Market Values as of 6/30/09</u>
Pension Trust Fund	
Teachers' Fund for Retirement (TFR)	1,307,928,318
Public Employees Retirement System (PERS)	1,363,564,322
City of Bismarck Employees Pension	40,122,242
City of Bismarck Police Pension	18,105,027
Job Service of North Dakota Pension	72,617,001
City of Fargo Employees Pension	22,030,559
City of Grand Forks Employees Pension	30,167,913
Subtotal Pension Trust Fund	<u>2,854,535,383</u>
Insurance Trust Fund	
Workforce Safety & Insurance	1,078,795,745
State Fire and Tornado Fund	22,369,431
State Bonding Fund	2,150,940
Petroleum Tank Release Compensation Fund	6,301,447
Insurance Regulatory Trust Fund	3,241,241
ND Health Trust Fund	2,309,050
State Risk Management Fund	3,260,899
State Risk Management Workers Comp Fund	1,870,284
Cultural Endowment Fund	205,002
Budget Stabilization Fund	190,135,335
ND Association of Counties (NDACo) Fund	933,056
NDACo Program Savings Fund	691,625
Bismarck Deferred Sick Leave Account	730,905
PERS Group Insurance Account	3,996,667
City of Fargo FargoDome Permanent Fund	17,649,377
Subtotal Insurance Trust Fund	<u>1,334,641,004</u>
PERS Retiree Insurance Credit Fund	<u>35,555,393</u>
Total Assets Under SIB Management	<u><u>4,227,040,829</u></u>









FY 2009 Investment Losses

- TFFR: \$475.5 million (25.76% est.)
- PERS: \$424.5 million (23.52% est.)
- Total \$900.0 million

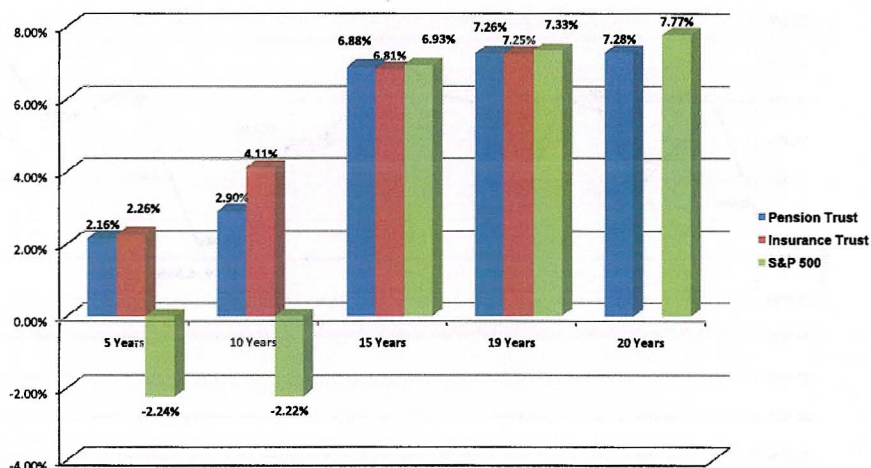
- Pension Trust total (24.37% est.)

- WSI \$125.5 million (9.76 est.)

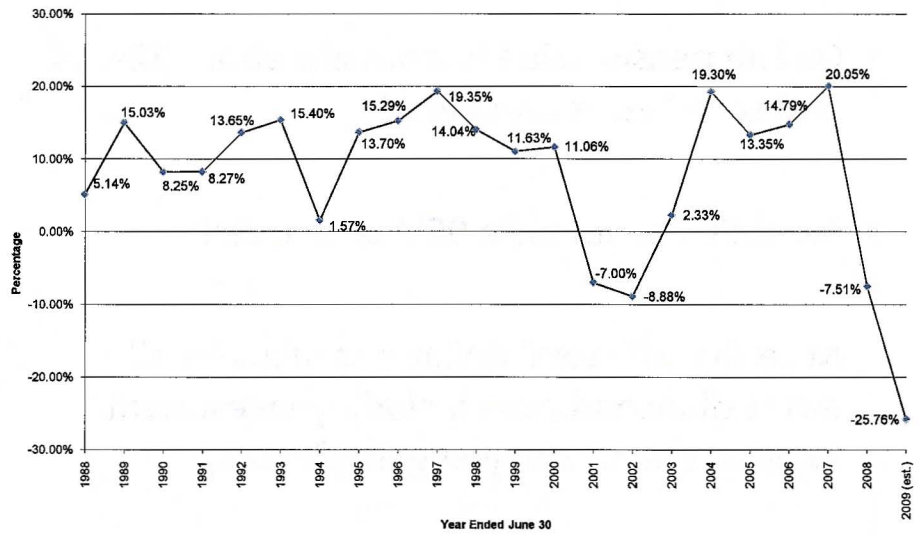
If there is “good news”, it’s this:

- On the pension side it looks like about 82% of that total loss is unrealized.
- For WSI it’s more like 95% unrealized.
- Note that the total dollar loss includes all forms of income/loss including investment expenses, etc... not just gains/losses).

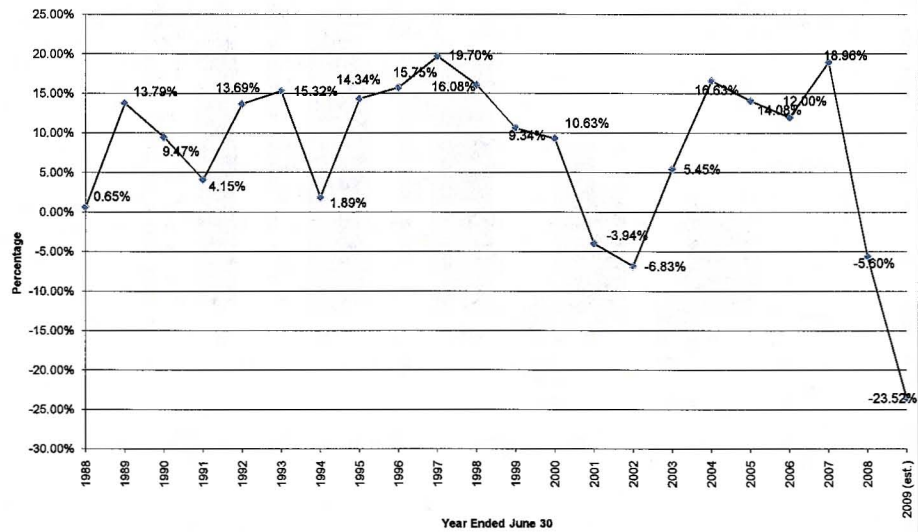
Annualized Returns for periods ended 6/30/09



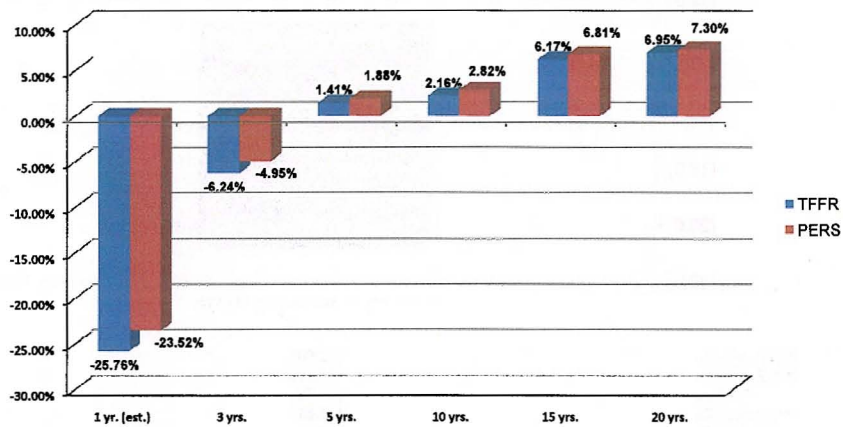
TFFR Annual Investment Performance



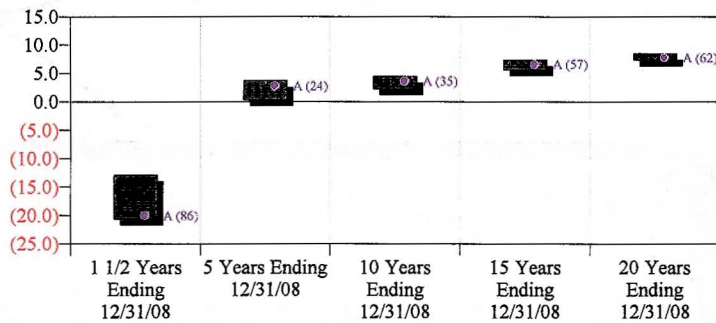
PERS Annual Investment Performance



TFFR and PERS Historical Investment Performance

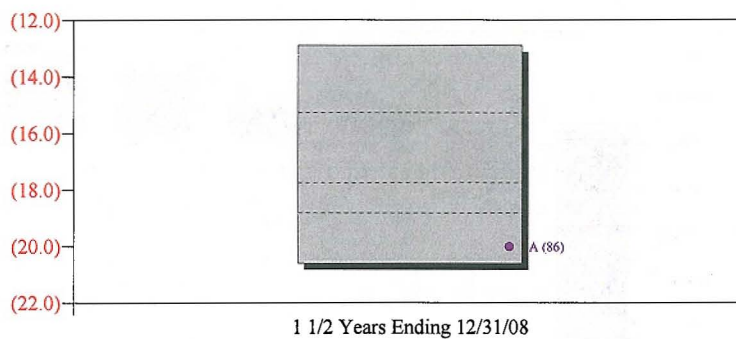


Returns for Periods Ended December 31, 2008 Group: CAI Public Fund Sponsor Database



	1 1/2 Years Ending 12/31/08	5 Years Ending 12/31/08	10 Years Ending 12/31/08	15 Years Ending 12/31/08	20 Years Ending 12/31/08
10th Percentile	(12.90)	3.69	4.49	7.34	8.53
25th Percentile	(15.27)	2.81	3.89	7.01	8.34
Median	(17.76)	2.14	3.36	6.72	8.00
75th Percentile	(18.83)	1.15	2.67	6.22	7.67
90th Percentile	(20.61)	0.36	2.26	5.64	7.37
Member Count	109	100	82	71	44
ND Pen - Total Fund	● A (20.02)	2.83	3.66	6.64	7.81

Returns
for Periods Ended December 31, 2008
Group: CAI Public Fund Sponsor Database



10th Percentile (12.90)
25th Percentile (15.27)
Median (17.76)
75th Percentile (18.83)
90th Percentile (20.61)

Member Count 109

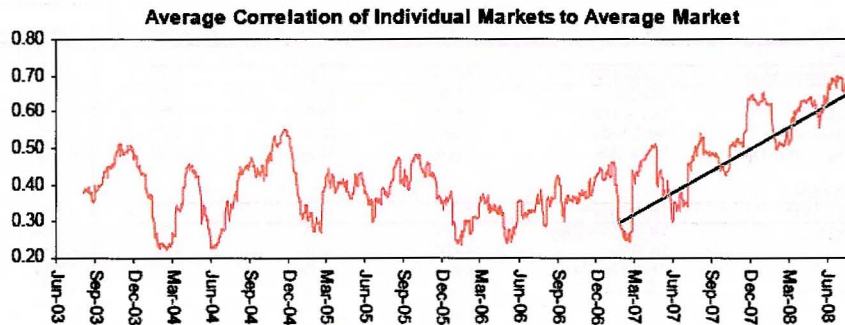
ND Pen - Total Fund ● A (20.02)

Capital Market Assumptions

Callan's 2005-2009 Projected Return, Risk & Correlation

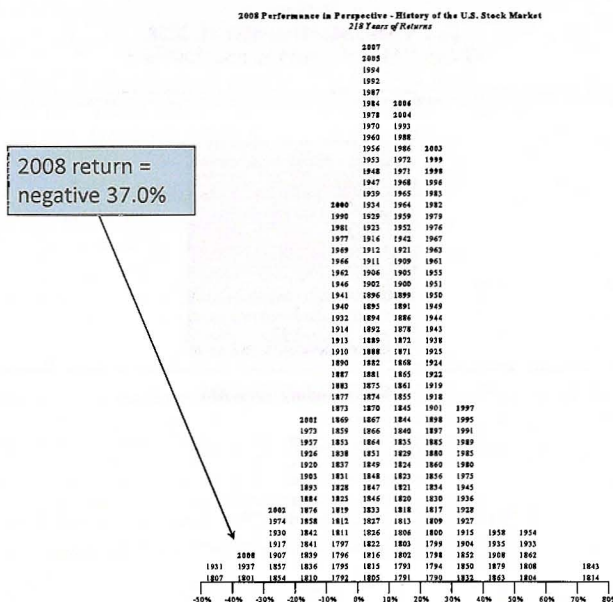
	Broad	Int'l Eq	Emerg	Dom Fix	Defensive	TIPS	H Yield	NUS Fix	Real Est	Pvt Equity	Abs Ret	T-Bill
Broad Dom Eq	1.00											
Int'l Equity	0.73	1.00										
Emerging Mkts	0.50	0.43	1.00									
Domestic Fixed	0.25	0.21	0.15	1.00								
Defensive	0.27	0.20	0.00	0.94	1.00							
TIPS	0.01	-0.09	-0.14	0.40	0.36	1.00						
High Yield	0.65	0.50	0.30	0.41	0.44	0.15	1.00					
Non SUS Fixed	0.01	0.22	-0.02	0.32	0.40	0.11	0.05	1.00				
Real Estate	0.62	0.47	0.35	0.20	0.30	0.00	0.53	0.03	1.00			
Private Equity	0.64	0.63	0.55	0.20	0.20	-0.03	0.45	0.10	0.45	1.00		
Absolute Return	0.55	0.58	0.33	0.43	0.44	0.00	0.50	0.15	0.45	0.46	1.00	
T-Bills	-0.12	-0.25	-0.15	0.50	0.28	0.29	0.07	-0.05	-0.06	0.07	0.50	1.00

High Correlation Among 10 Major Markets



All of the 23 developed nations in the MSCI World Index except for Canada have experienced bear-market plunges of 20 percent or more since September as credit losses surged and record commodity prices stoked inflation. Brazil recently became the 23rd out of 25 developing countries in the MSCI Emerging Markets Index to enter a bear market. Only Jordan and Morocco avoided such slumps.

Stock Market Returns by Calendar Year

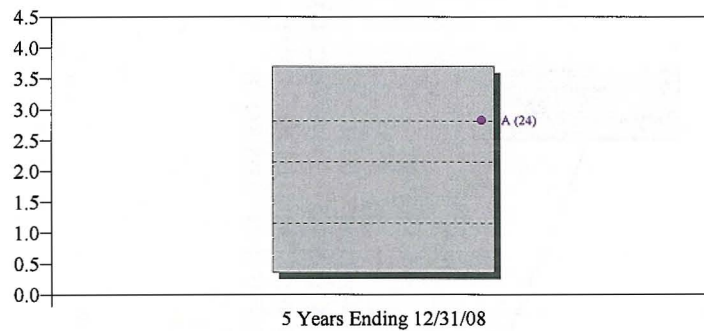


Capital Market Assumptions

Callan's 2005-2009 Projected Return, Risk & Correlation

Asset Class	Index	Projected Annual Return	Projected Standard Deviation (Risk)	Projected Yield	2004 Projections	
Equities						
Broad Domestic Equity	Russell 3000	9.00%	16.90	2.10	9.00%	16.90
Large Cap	S&P 500	8.85%	16.40	2.20	8.80%	16.20
Small/Mid Cap	Russell 2500	9.85%	22.70	1.20	10.10%	23.50
International Equity	MSCI EAFE	9.25%	20.10	2.20	9.30%	20.30
Emerging Markets Equity	MSCI EMF	9.80%	33.00	0.00	9.80%	33.00
Fixed Income						
Domestic Fixed	LB Aggregate	4.75%	4.50	4.75	4.75%	4.50
Defensive	LB Gov't 1-3 Year	3.75%	2.30	3.75	3.75%	2.30
TIPS	LB TIPS	4.40%	6.00	4.40	4.40%	6.00
High Yield	CSFB High Yield	6.75%	12.10	6.75	6.75%	12.30
Non US\$ Fixed	Citi Non-US Gov't	4.65%	9.60	4.65	4.65%	9.60
Other						
Real Estate	Callan Real Estate	7.60%	16.50	7.00	7.60%	16.50
Private Equity	VE Post Venture Cap	12.00%	34.00	0.00	12.00%	34.00
Absolute Return	*	6.50%	10.50	0.00	6.50%	10.50
Cash Equivalents	90-Day T-Bill	3.00%	0.80	3.00	2.70%	0.70
Inflation	CPI-U	2.60%	1.40		2.60%	1.40

Returns
for Periods Ended December 31, 2008
Group: CAI Public Fund Sponsor Database

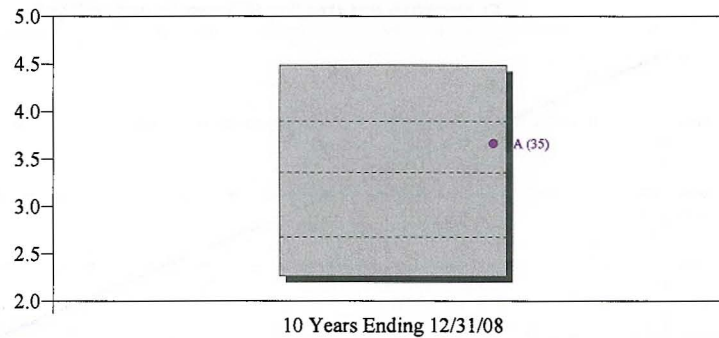


10th Percentile	3.69
25th Percentile	2.81
Median	2.14
75th Percentile	1.15
90th Percentile	0.36
Member Count	100
ND Pen - Total Fund	2.83

Asset Assumptions
Watson Wyatt 2000 Asset Model
Expected Return and Volatility Assumptions

	<u>Average Return</u>	<u>Compound Average Return</u>	<u>Standard Deviation</u>
Large Cap Stocks	10.1%	9.0%	16.0%
Mid Cap Stocks	10.5%	9.1%	18.0%
Small Cap Stocks	11.0%	9.1%	21.0%
International Equity	10.1%	8.6%	18.0%
Real Estate (Direct)	7.5%	7.0%	10.0%
Alternative Investments (General)	14.0%	10.2%	30.0%
Emerging Markets	14.0%	9.0%	35.0%
US Fixed Income	7.1%	6.9%	6.1%
International Fixed Income (Hedged)	6.5%	6.4%	4.6%
International Fixed Income (Unhedged)	6.7%	6.1%	11.0%
High Yield Bonds	9.6%	8.9%	12.4%
Cash Equivalents	5.1%	5.0%	2.5%
Inflation	2.5%	2.5%	2.9%

Returns
for Periods Ended December 31, 2008
Group: CAI Public Fund Sponsor Database

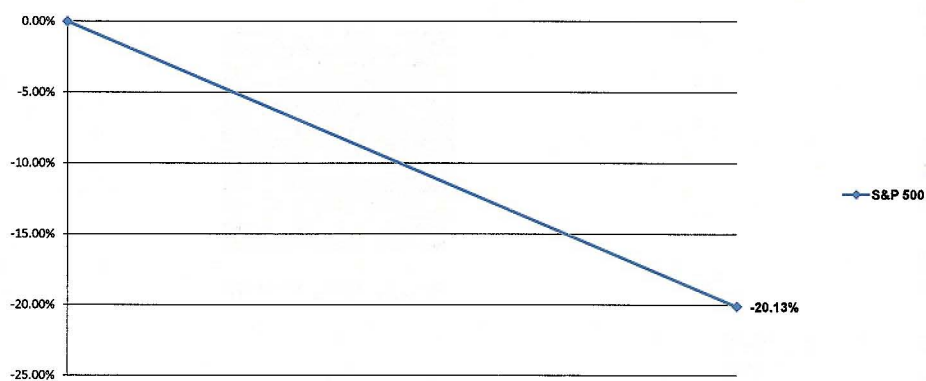


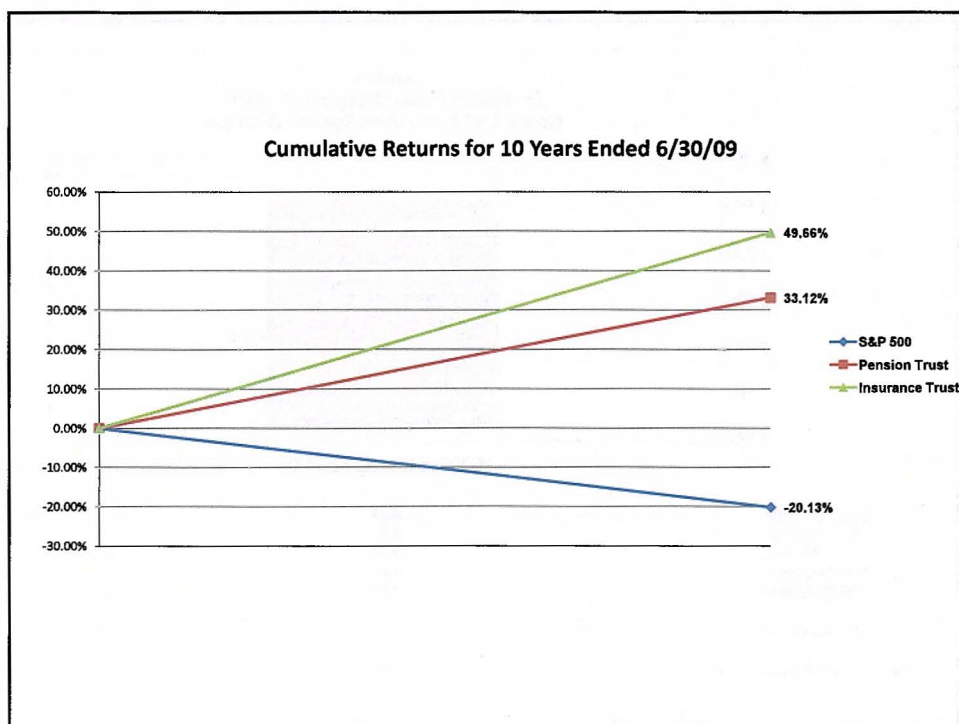
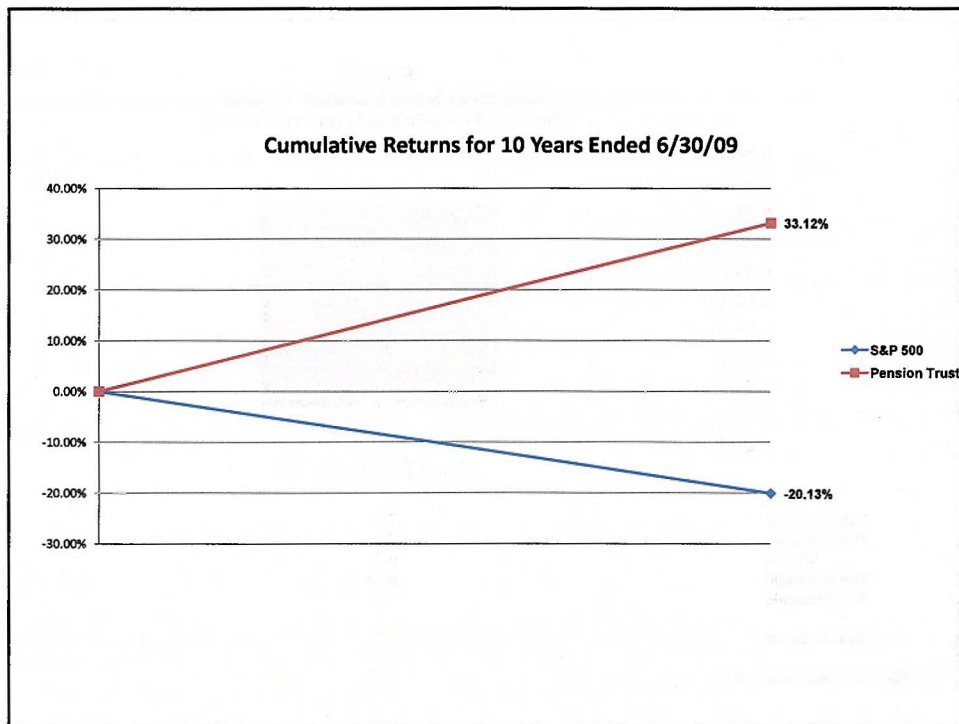
10th Percentile	4.49
25th Percentile	3.89
Median	3.36
75th Percentile	2.67
90th Percentile	2.26
Member Count	82
ND Pen - Total Fund	3.66

So, consultants figured about 9% per year in US stocks during each of the last 10 years

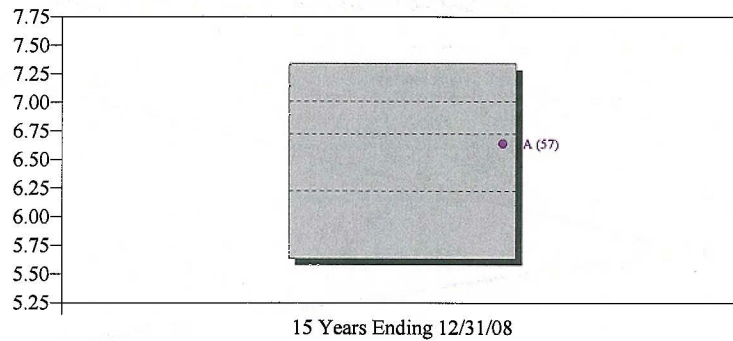
- Compounded over a 10 year time span, that's a 10 year return in stocks of *101%*!
- So...what did the stock market do?
- (You don't have to look at the next slide!)

Cumulative Returns for 10 Years Ended 6/30/09



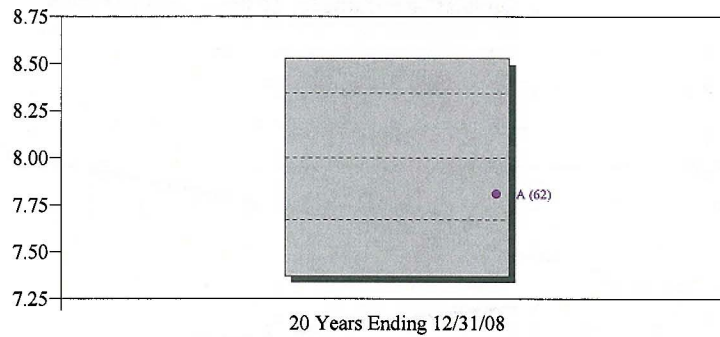


Returns
for Periods Ended December 31, 2008
Group: CAI Public Fund Sponsor Database



10th Percentile	7.34
25th Percentile	7.01
Median	6.72
75th Percentile	6.22
90th Percentile	5.64
Member Count	71
ND Pen - Total Fund	6.64

Returns
for Periods Ended December 31, 2008
Group: CAI Public Fund Sponsor Database



10th Percentile	8.53
25th Percentile	8.34
Median	8.00
75th Percentile	7.67
90th Percentile	7.37
Member Count	44
ND Pen - Total Fund	7.81

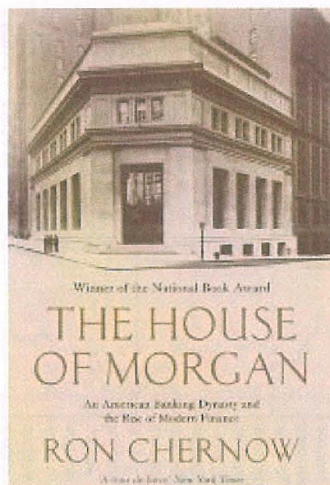
2009 Capital Market Expectations

Return and Risk

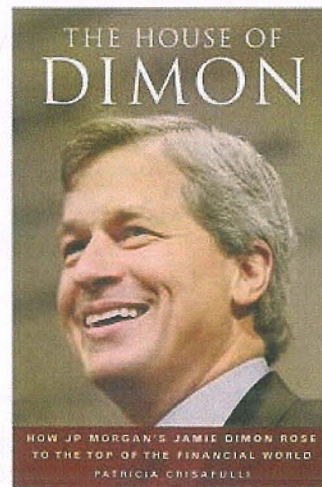
Summary of Callan's Long-Term Capital Market Projections

Asset Class	Index	Projected Return			Projected Standard Deviation (Risk)	Projected Yield	2008 Projections	
		1-Year Arithmetic	Geometric	Real				
Equities								
Broad Domestic Equity	Russell 3000	10.35%	9.50%	6.75%	16.40	2.10	9.00%	16.90
Large Cap	S&P 500	9.95%	9.20%	6.45%	15.25	2.20	8.85%	16.40
Small/Mid Cap	Russell 2500	11.95%	10.00%	7.25%	22.60	1.20	9.85%	22.70
International Equity	MSCI EAFE	10.60%	9.25%	6.50%	19.30	2.00	9.00%	19.20
Emerging Markets Equity	MSCI EMF	13.00%	10.10%	7.35%	27.00	0.00	9.60%	31.20
Non-US Equity	MSCI ACWI (ex-US)	10.96%	9.80%	6.85%	19.60	1.80	9.10%	18.90
Fixed Income								
Domestic Fixed	BC Aggregate	5.25%	5.25%	2.50%	5.00	5.25	5.25%	4.50
Defensive	BC Govt 1-3 Year	4.00%	4.00%	1.25%	2.30	4.00	4.00%	2.30
TIPS	BC TIPS	4.90%	4.90%	2.15%	6.00	4.90	4.90%	6.00
High Yield	CSFB High Yield	7.45%	7.00%	4.25%	11.70	7.45	7.00%	11.50
Non US\$ Fixed	Citi Non-US Govt	5.15%	4.85%	2.10%	9.60	5.15	5.15%	9.60
Other								
Real Estate	Callan Real Estate	8.55%	7.60%	4.85%	16.10	6.00	7.60%	16.50
Private Equity	VE Post Venture Cap	17.25%	11.60%	8.85%	37.00	0.00	12.00%	34.00
Absolute Return	Callan Hedge FoF	7.20%	6.90%	4.15%	10.00	0.00	6.50%	9.70
Cash Equivalents	90-Day T-Bill	3.00%	3.00%	0.25%	0.80	3.50	3.50%	0.80
Inflation	CPI-U	2.75%	2.75%		1.40		2.75%	1.40

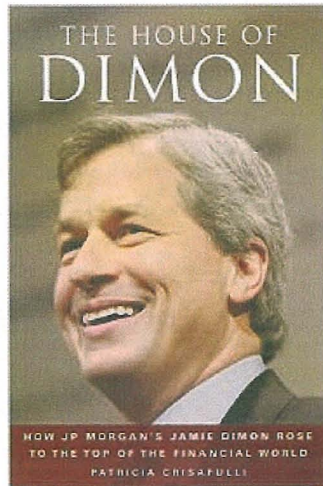
Source: Callan Associates Inc.



2001

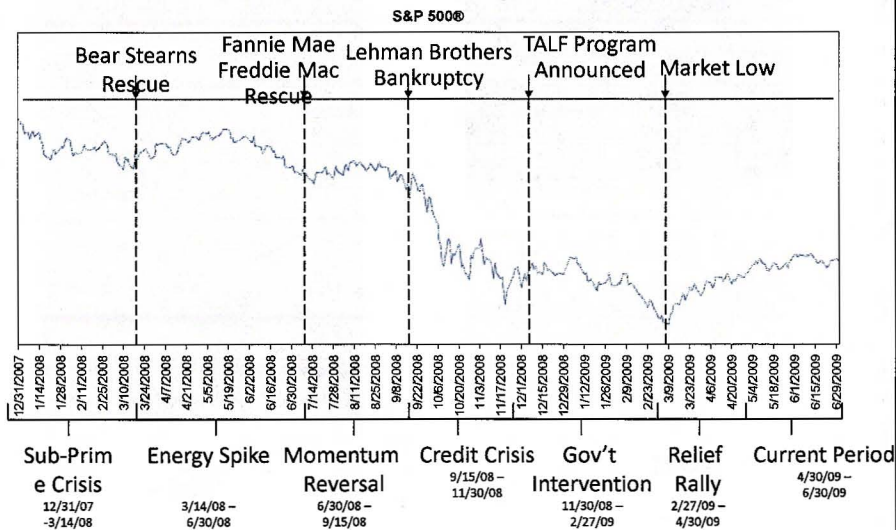


2009



"I feel like I am riding a bronco and hanging on for dear life"

Markets Environment Review - 2008 through June 2009



Madoff With the Money



- New Mexico Educational Retirement Board, Santa Fe
- New Orleans City Employees' Retirement System
- \$41 million by the Fairfield (Conn.) Town Retirement Fund. The \$233 million plan had 17.6%, or \$41 million, invested as of Nov. 30 in the MAXAM Absolute Return Fund, managed by Madoff Investment Securities.



- Massachusetts Mutual Life Insurance
- Swiss Reinsurance Co
- Man Group PLC

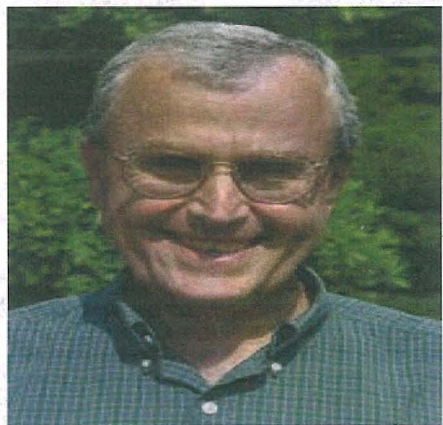
NYU	\$24 million
Yeshiva University	\$110 million
Tufts	\$20 million



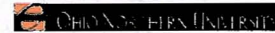


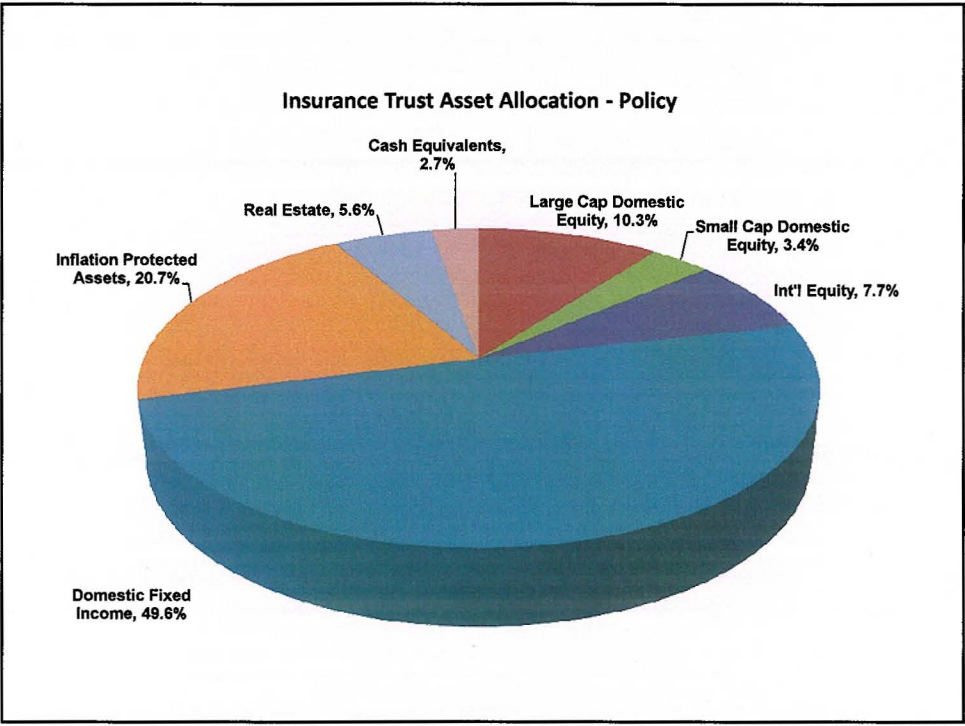
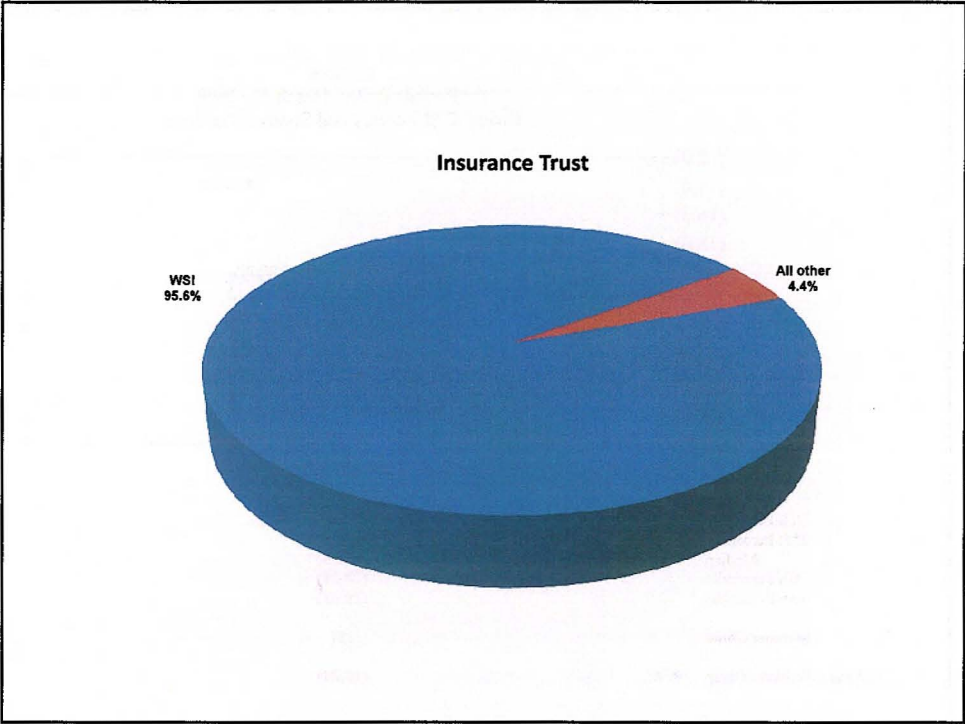



Would you buy a used car from this man?

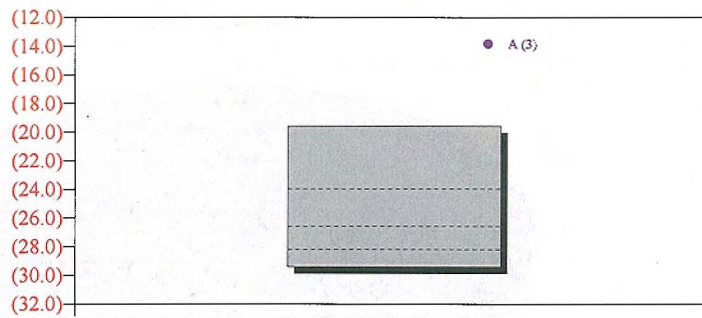



Or this dapper fellow in the sweater?





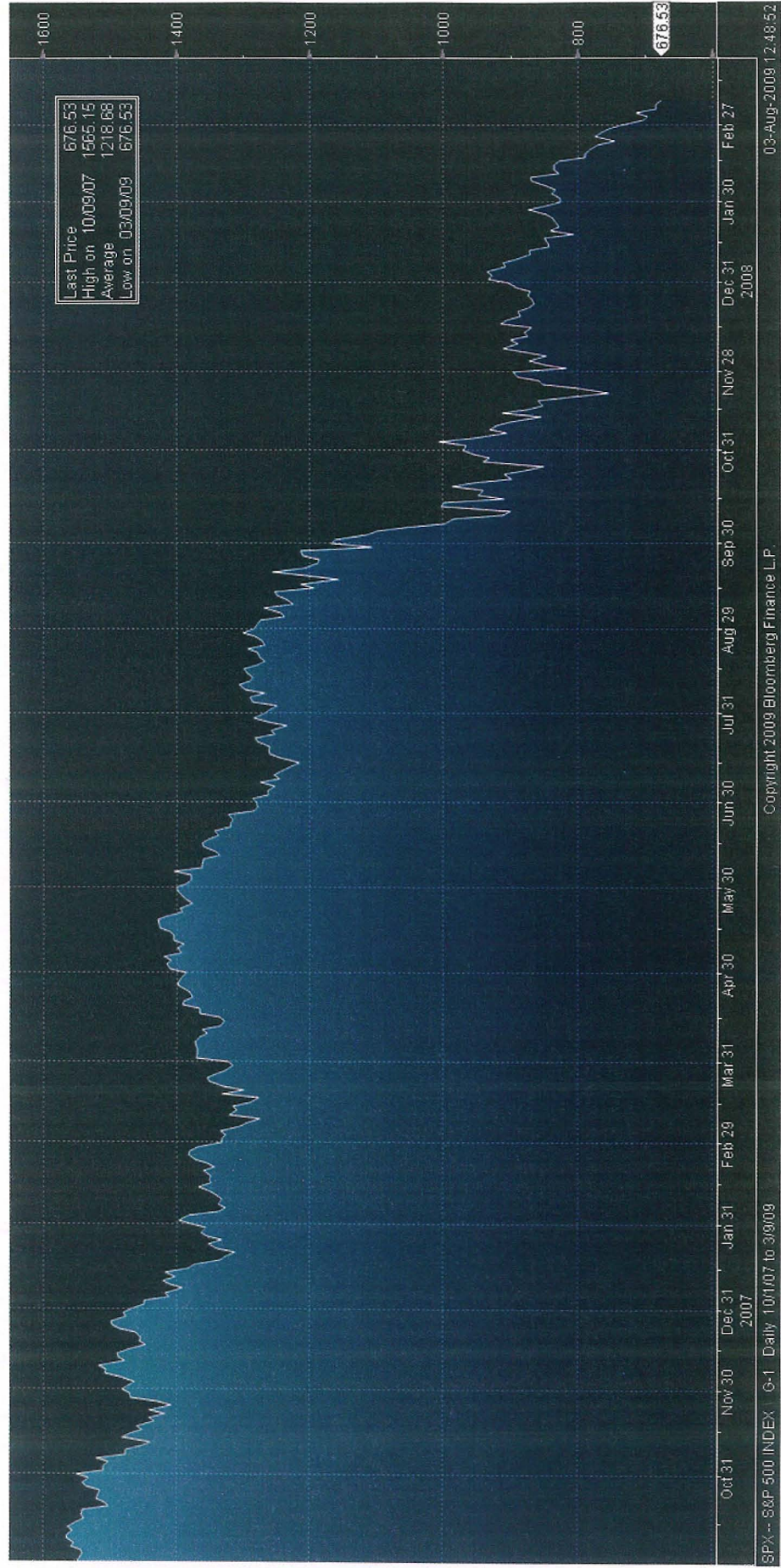
Returns
for Periods Ended March 31, 2009
Group: CAI Public Fund Sponsor Database



Last 3 Quarters

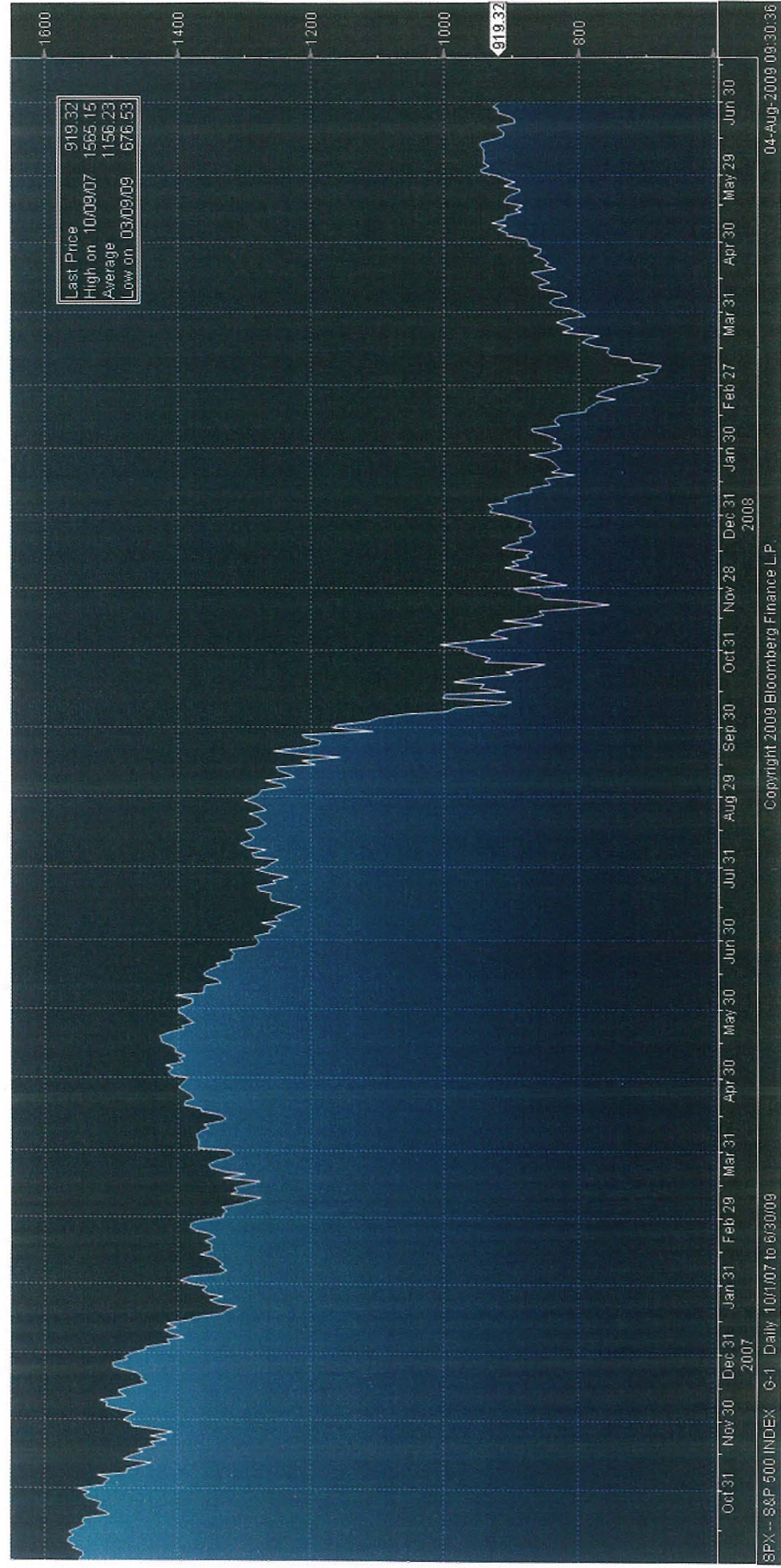
10th Percentile	(19.60)
25th Percentile	(23.98)
Median	(26.59)
75th Percentile	(28.21)
90th Percentile	(29.43)
Member Count	101
Total Fund-Workers Comp	(13.84)

S&P 500 (Price Drop: 09/07-03/09 -56.78%)



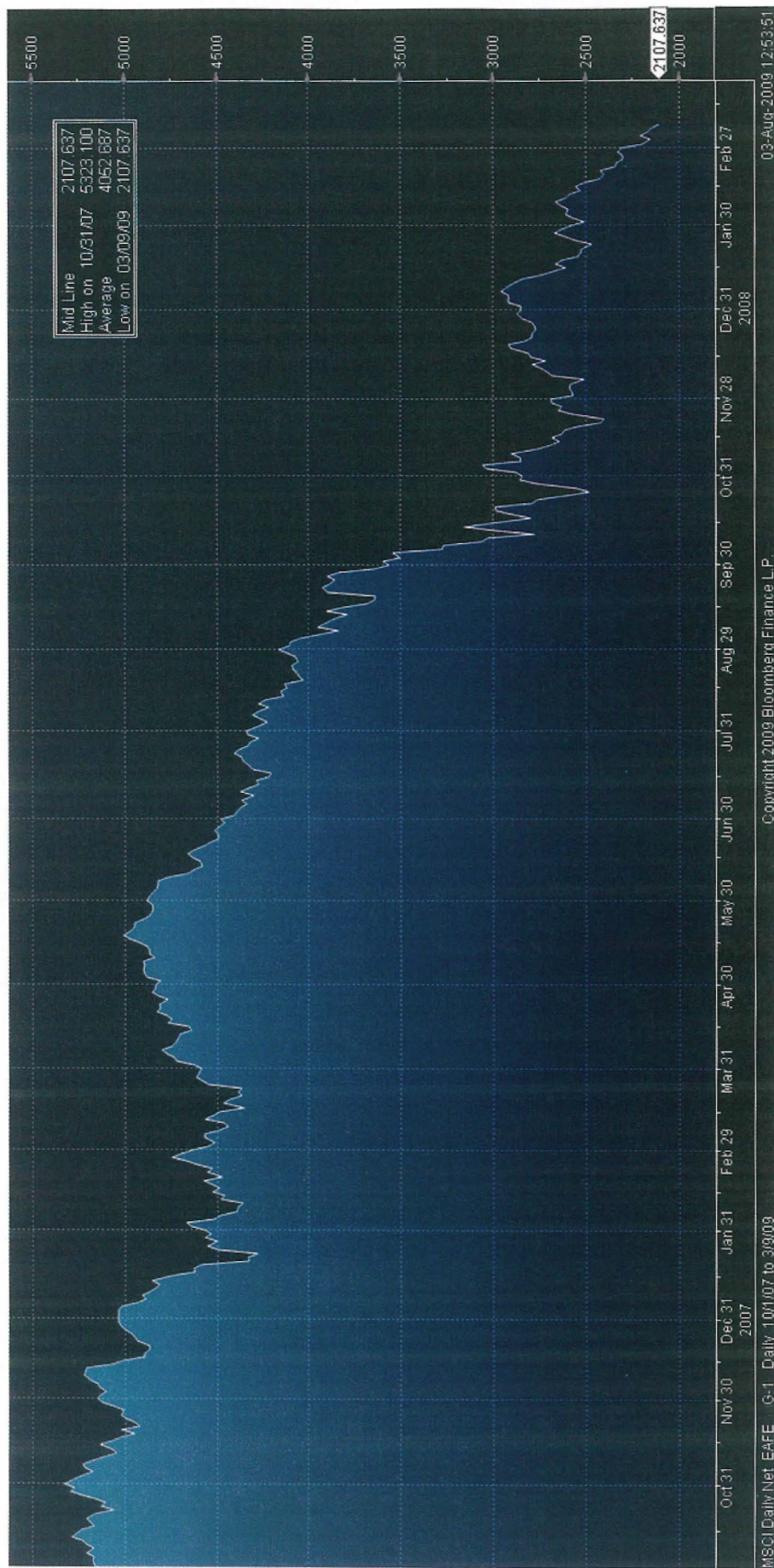
9/30/07 - 3/9/09

S&P 500 (Price Drop: 09/07-06/09 -41.26%)



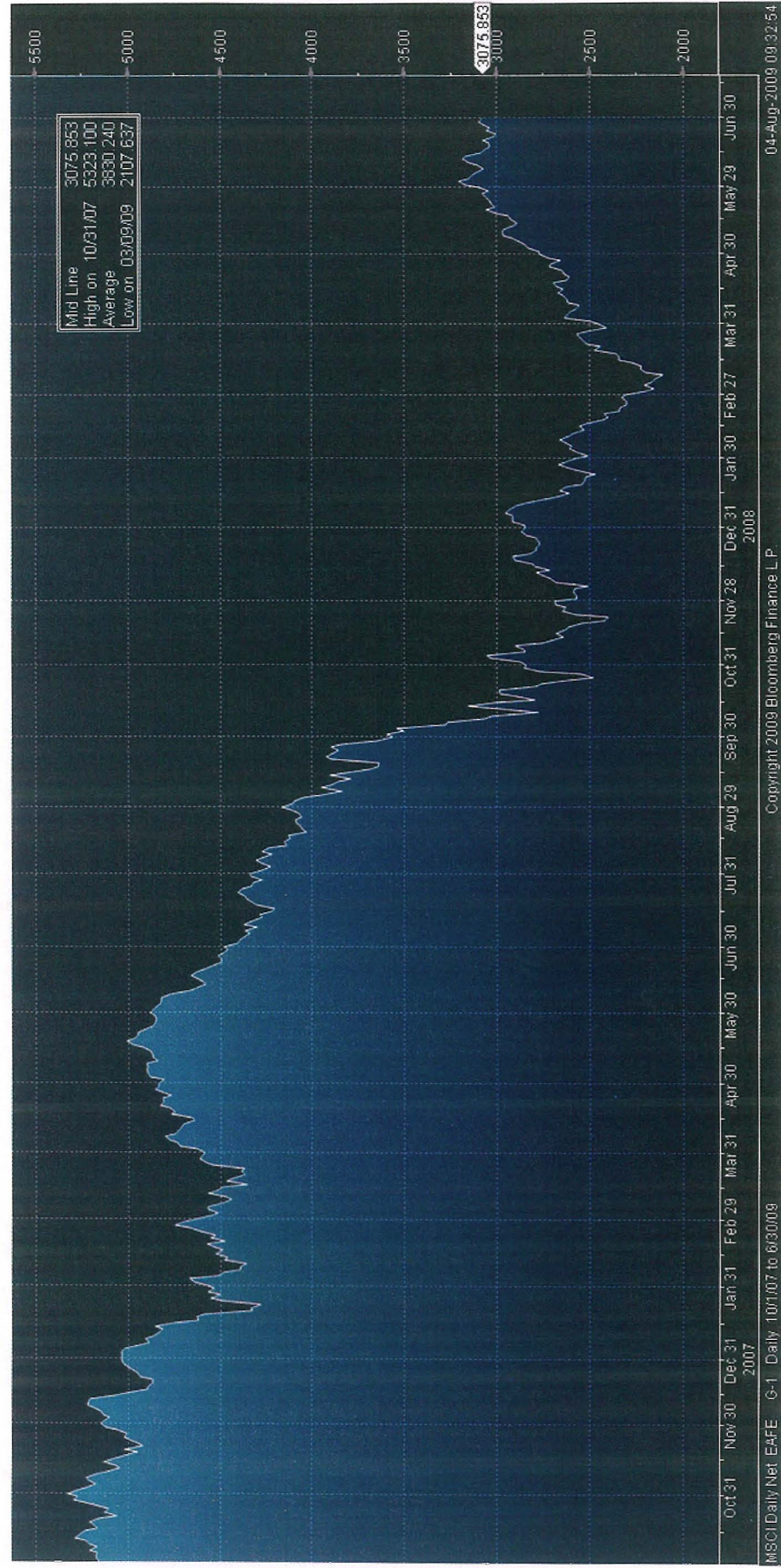
9/30/07 – 6/30/09

EAFE (Price Drop: 09/07-03/09 -60.41%)



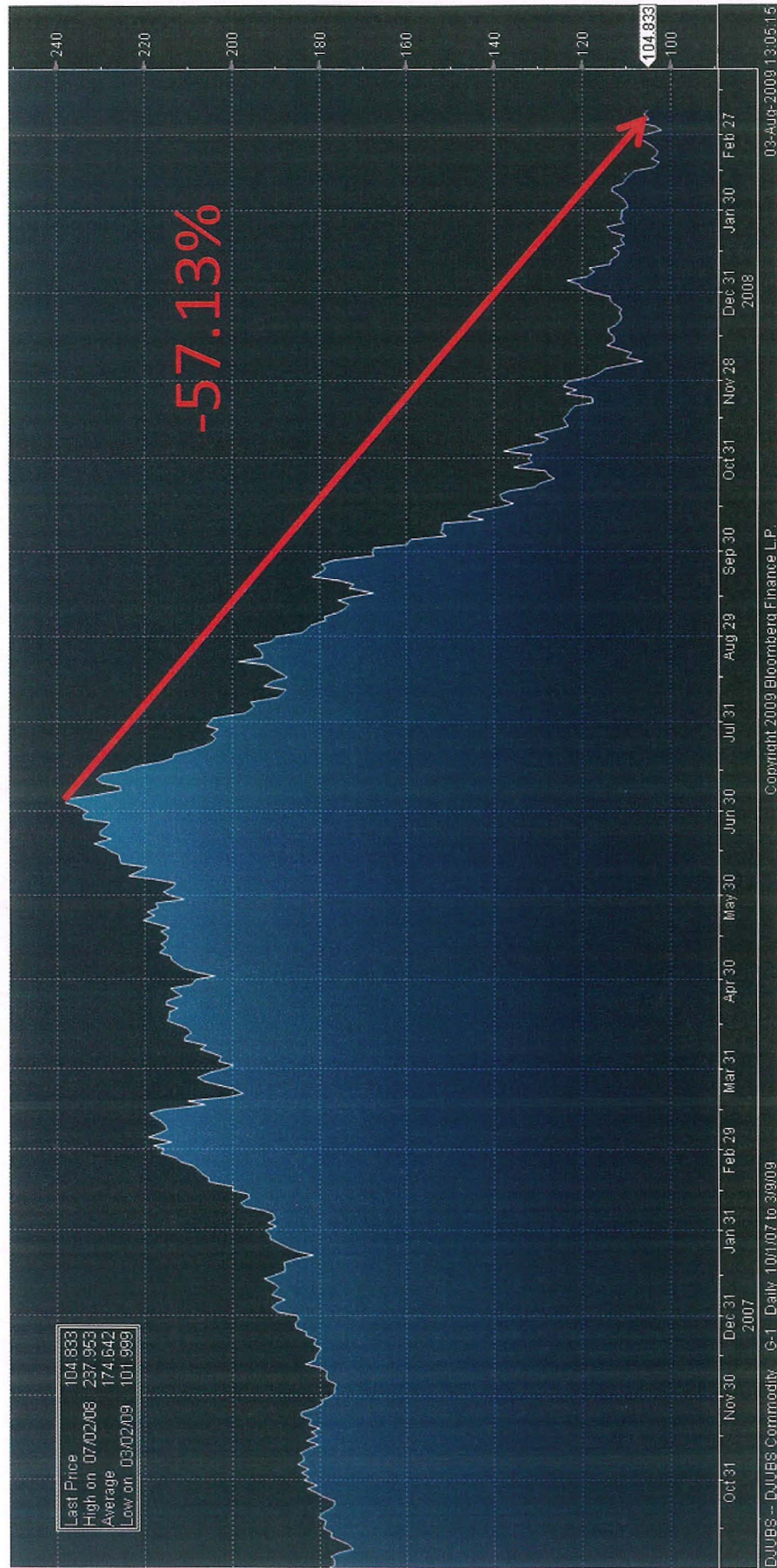
9/30/07 - 3/9/09

EAFE (Price Drop 09/07-06/09 -42.22%)



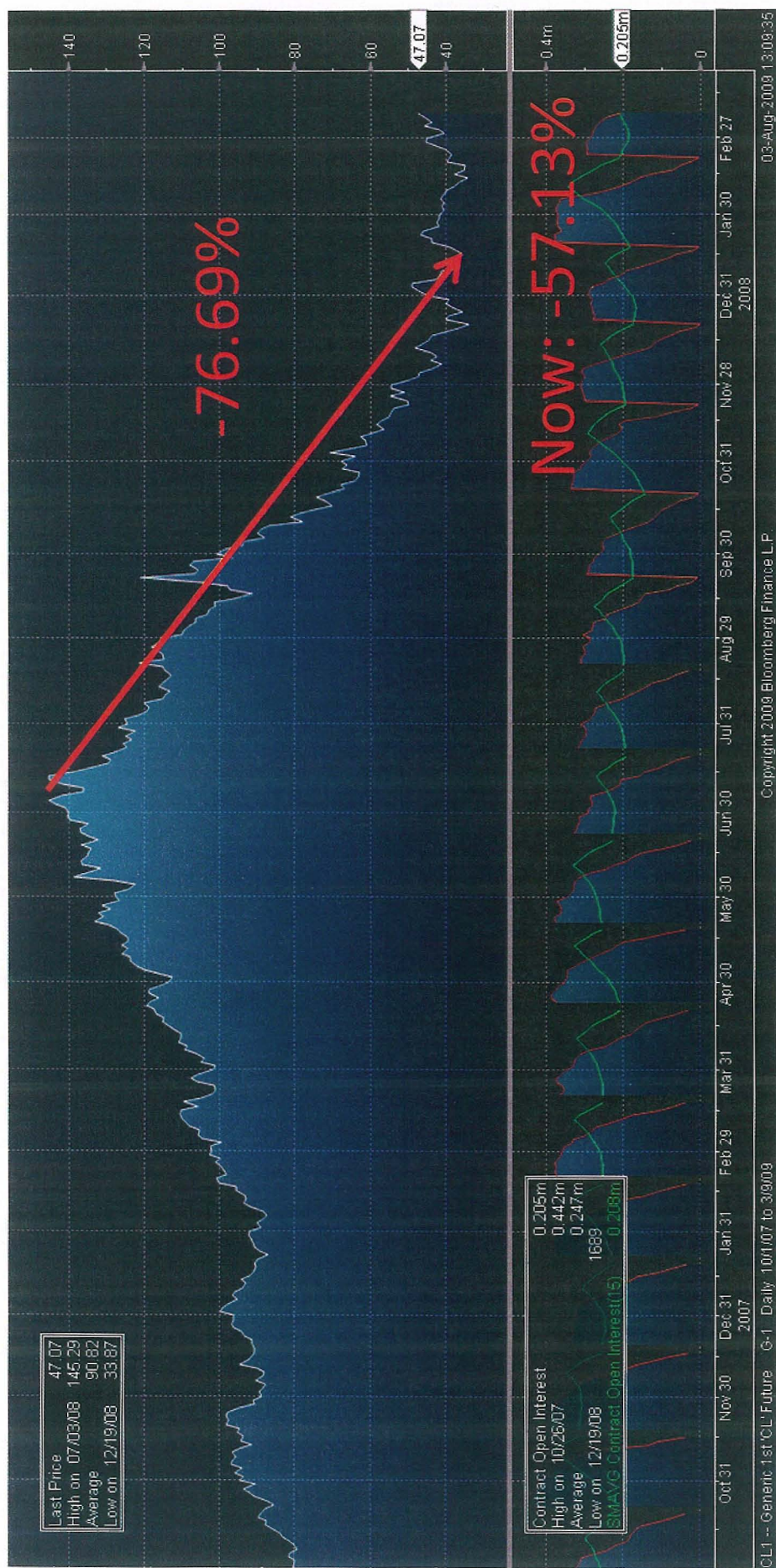
9/30/07 – 6/30/09

DJ AIG



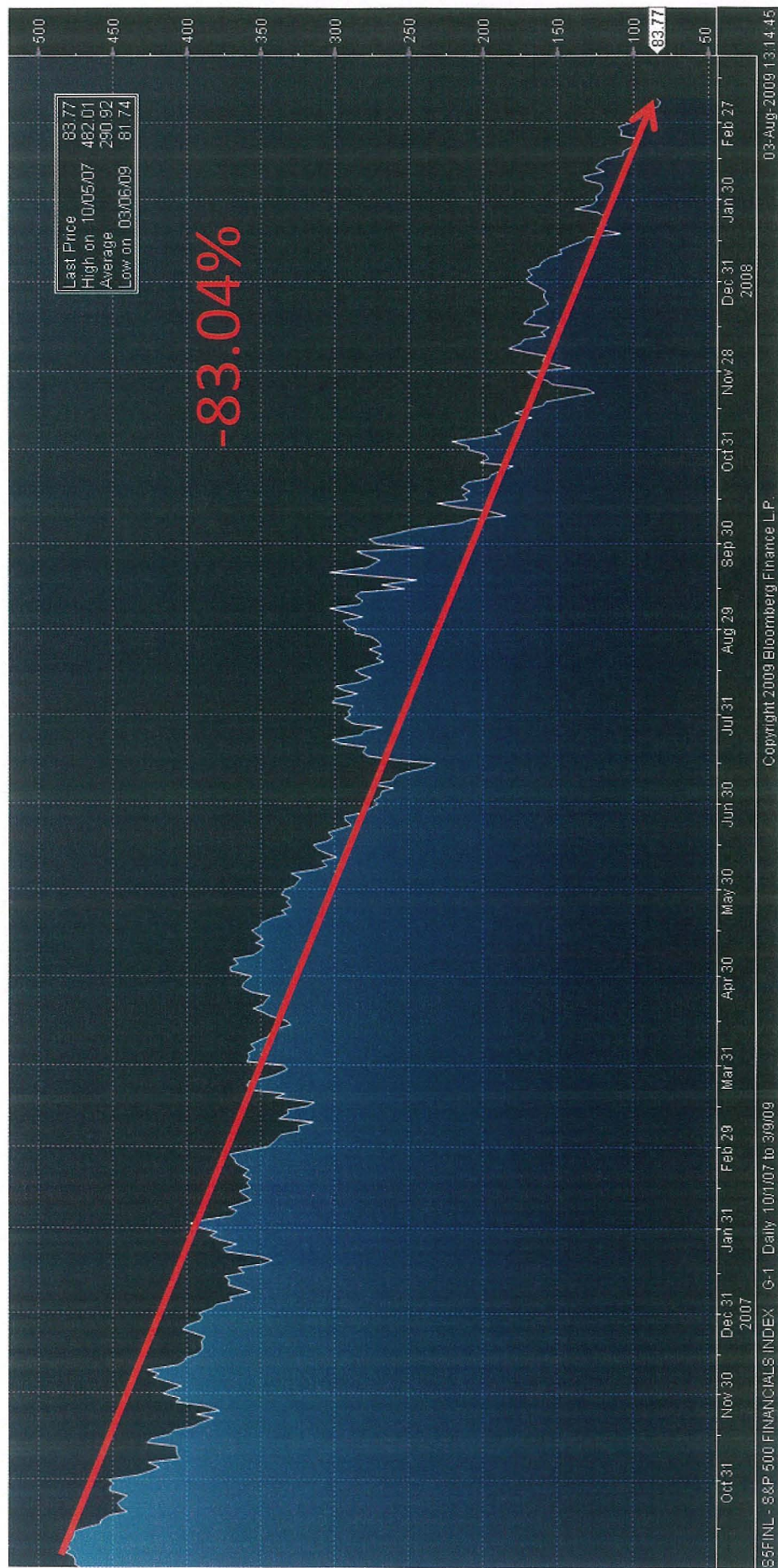
9/30/07 - 3/9/09

OIL PRICE FUTURES



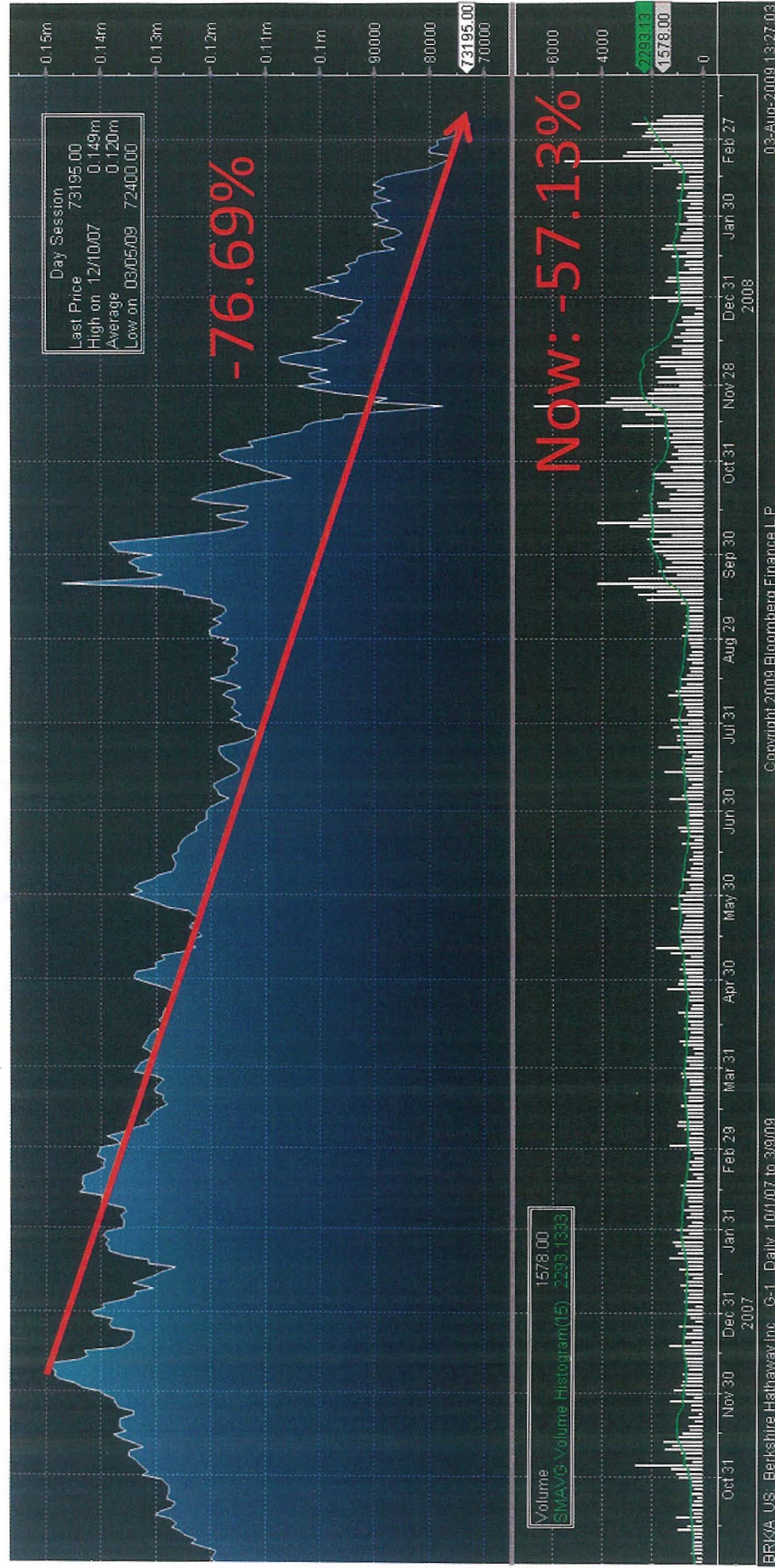
9/30/07 – 3/9/09

S&P FINANCIAL SECTOR



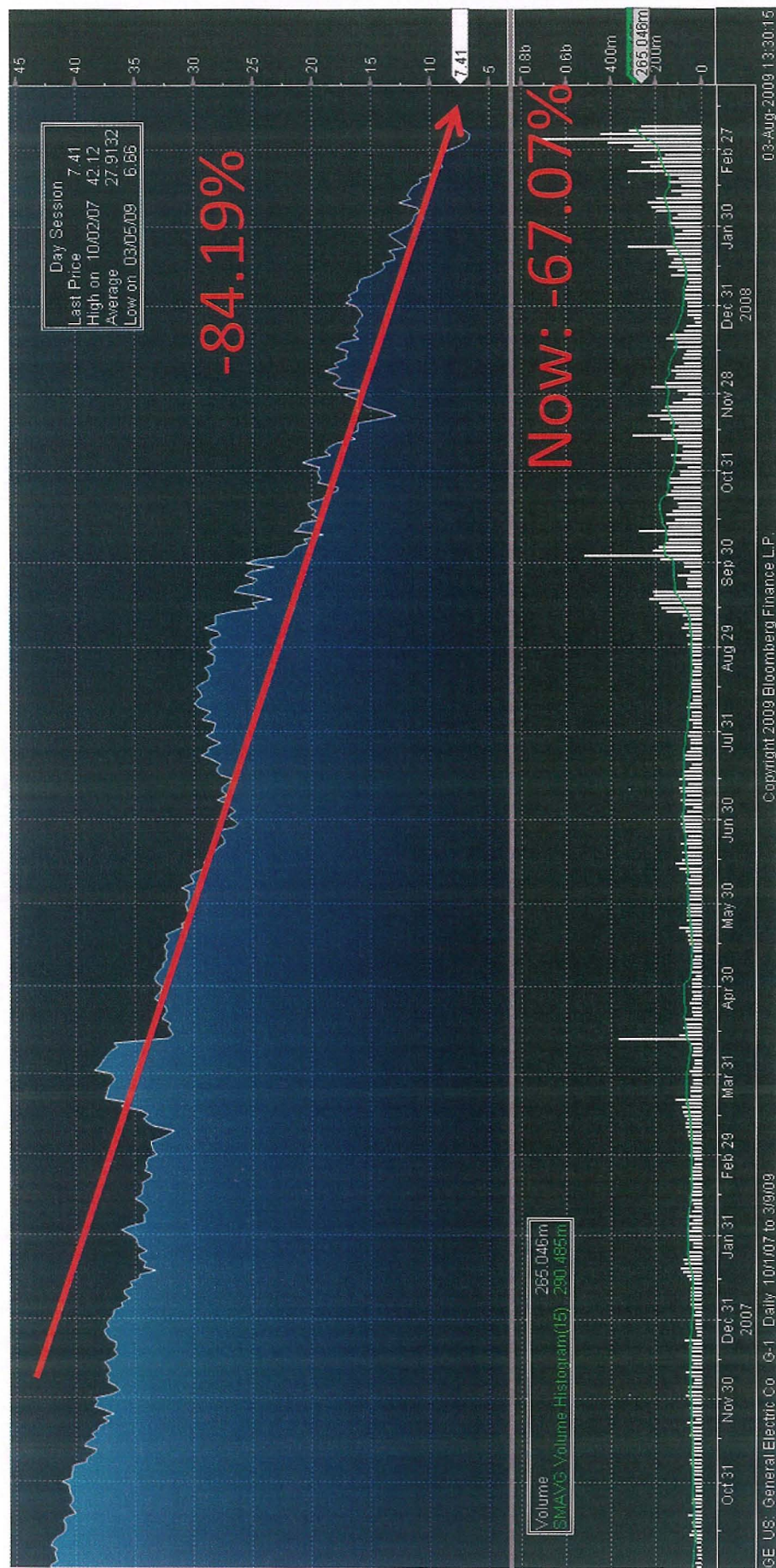
9/30/07 - 3/9/09

BERKSHIRE HATHAWAY



9/30/07 - 3/9/09

GENERAL ELECTRIC



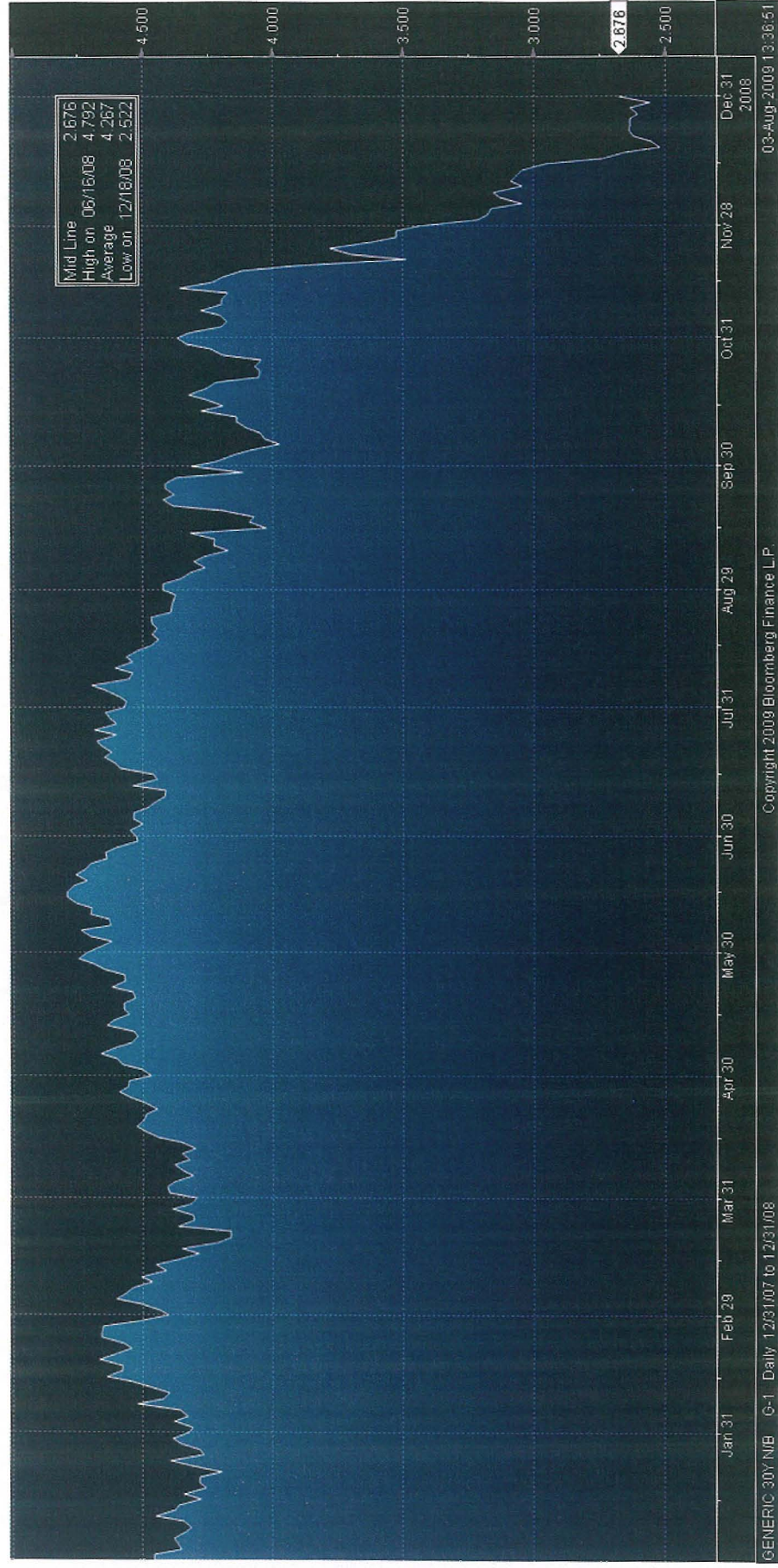
9/30/07 - 3/9/09

High: 4.792%

Low: 2.522%

Now: 4.25%

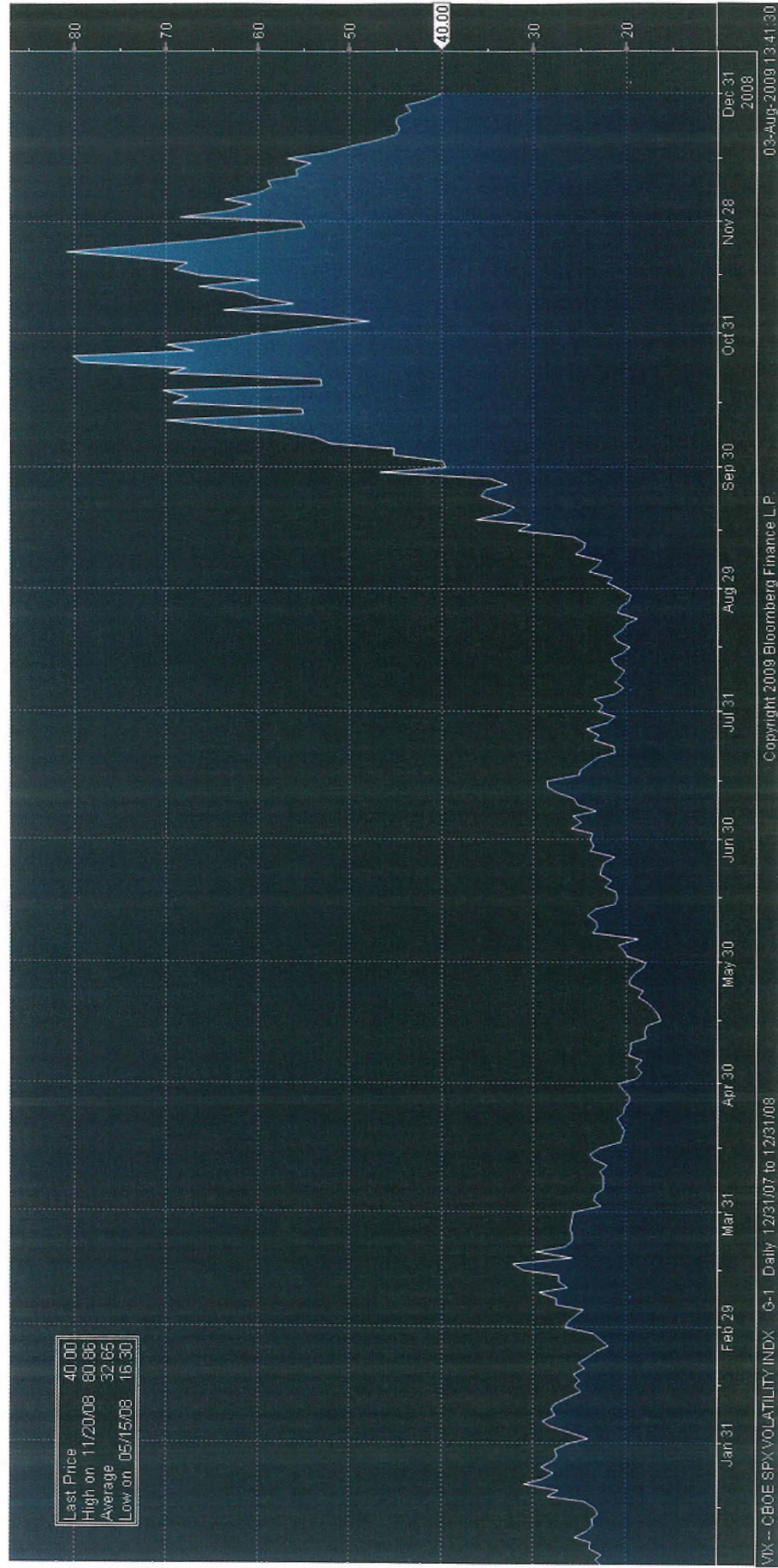
30-YEAR TREASURY



12/31/07 – 12/31/08

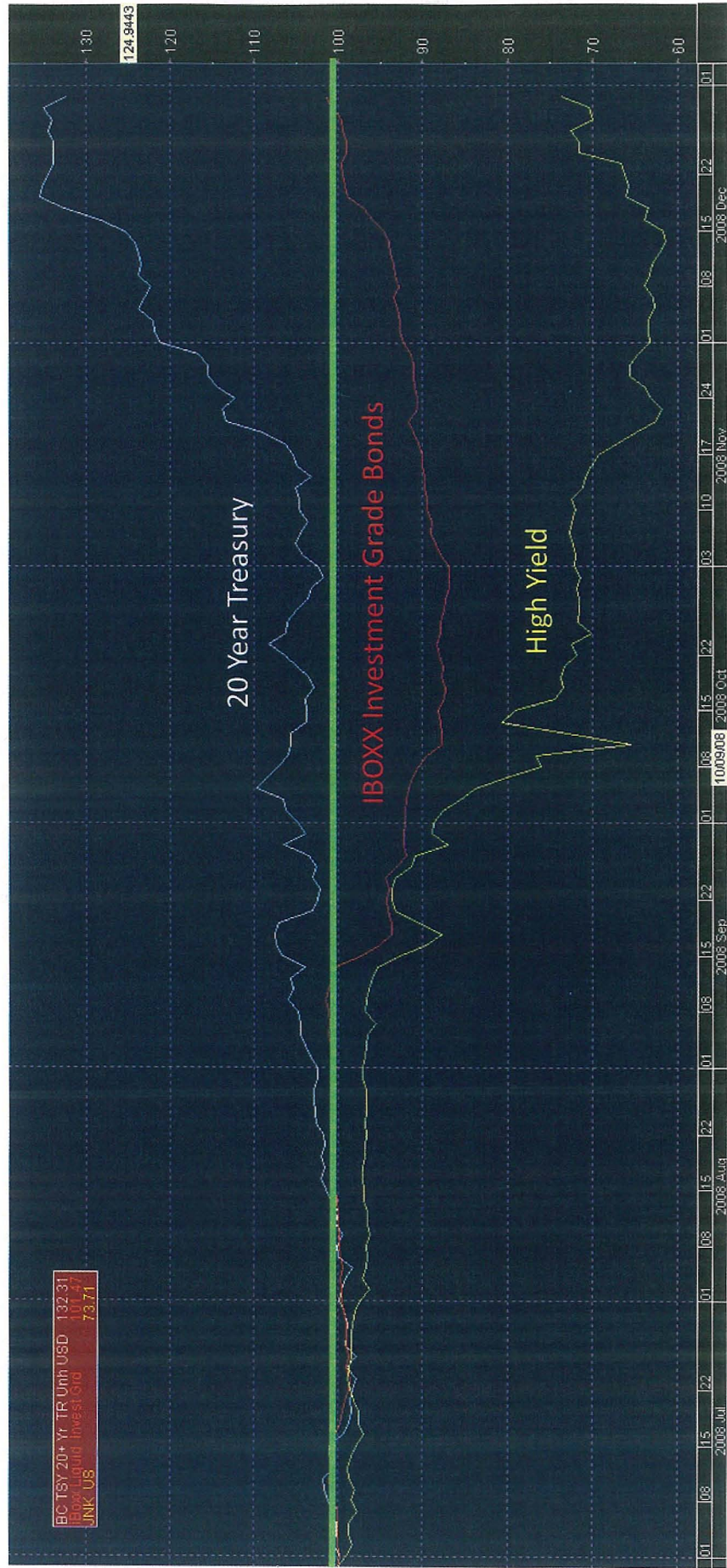
High: 80.86
Low: 16.30
Now: 25.14

VIX INDEX



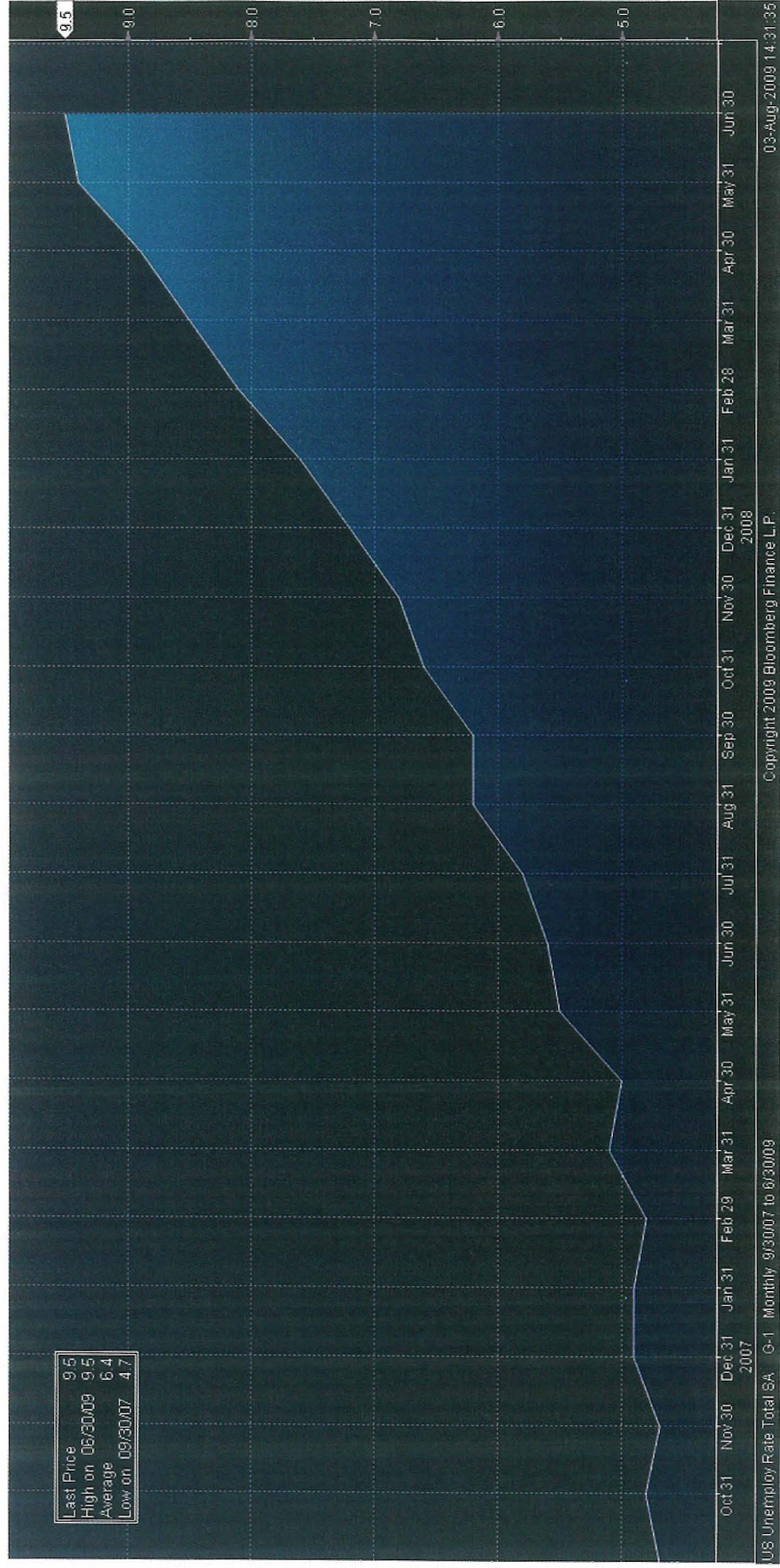
12/31/07 - 12/31/08

FLIGHT TO SAFETY



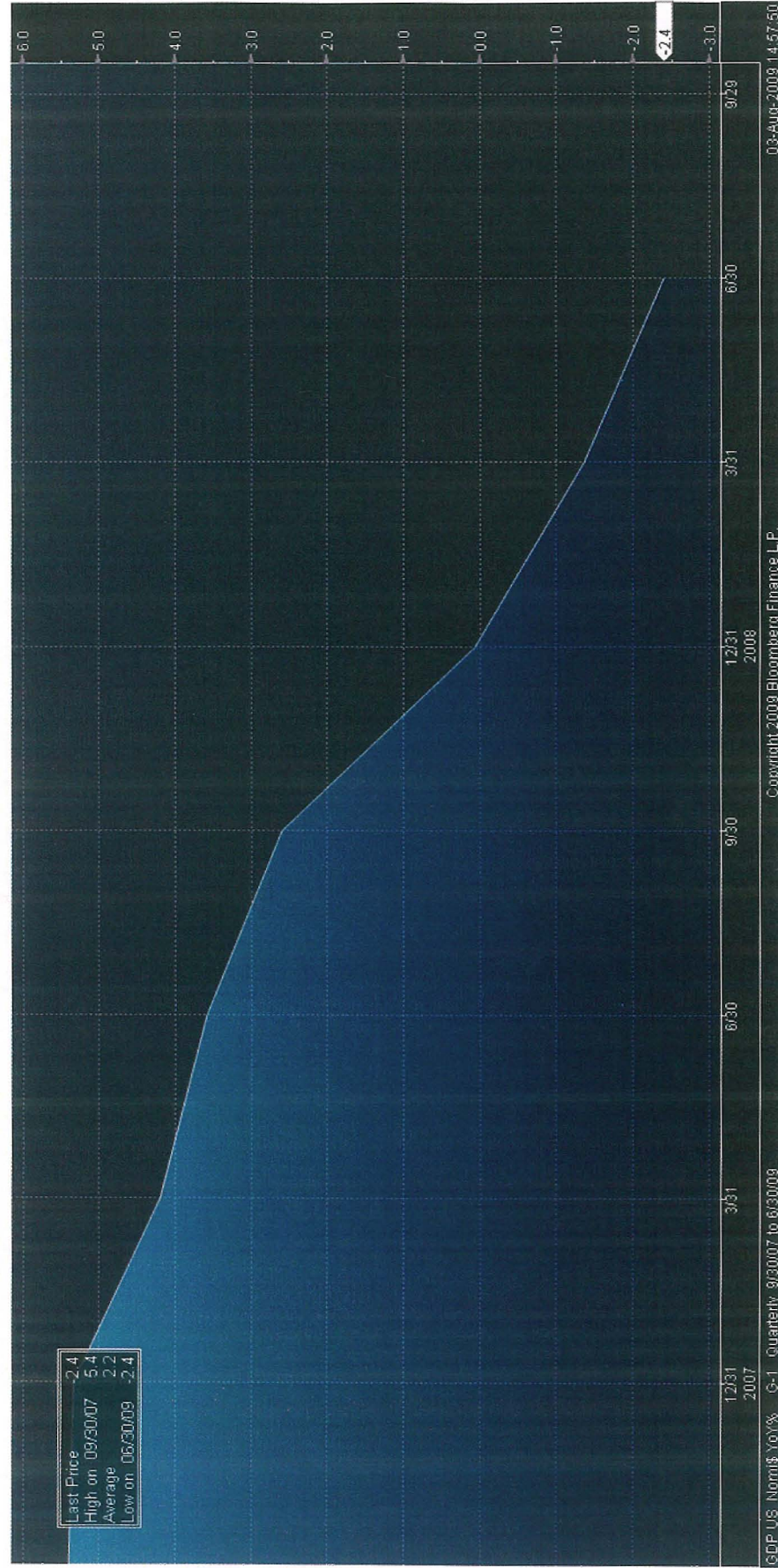
09/07: 4.7%
Now: 9.5%

UNEMPLOYMENT RATE



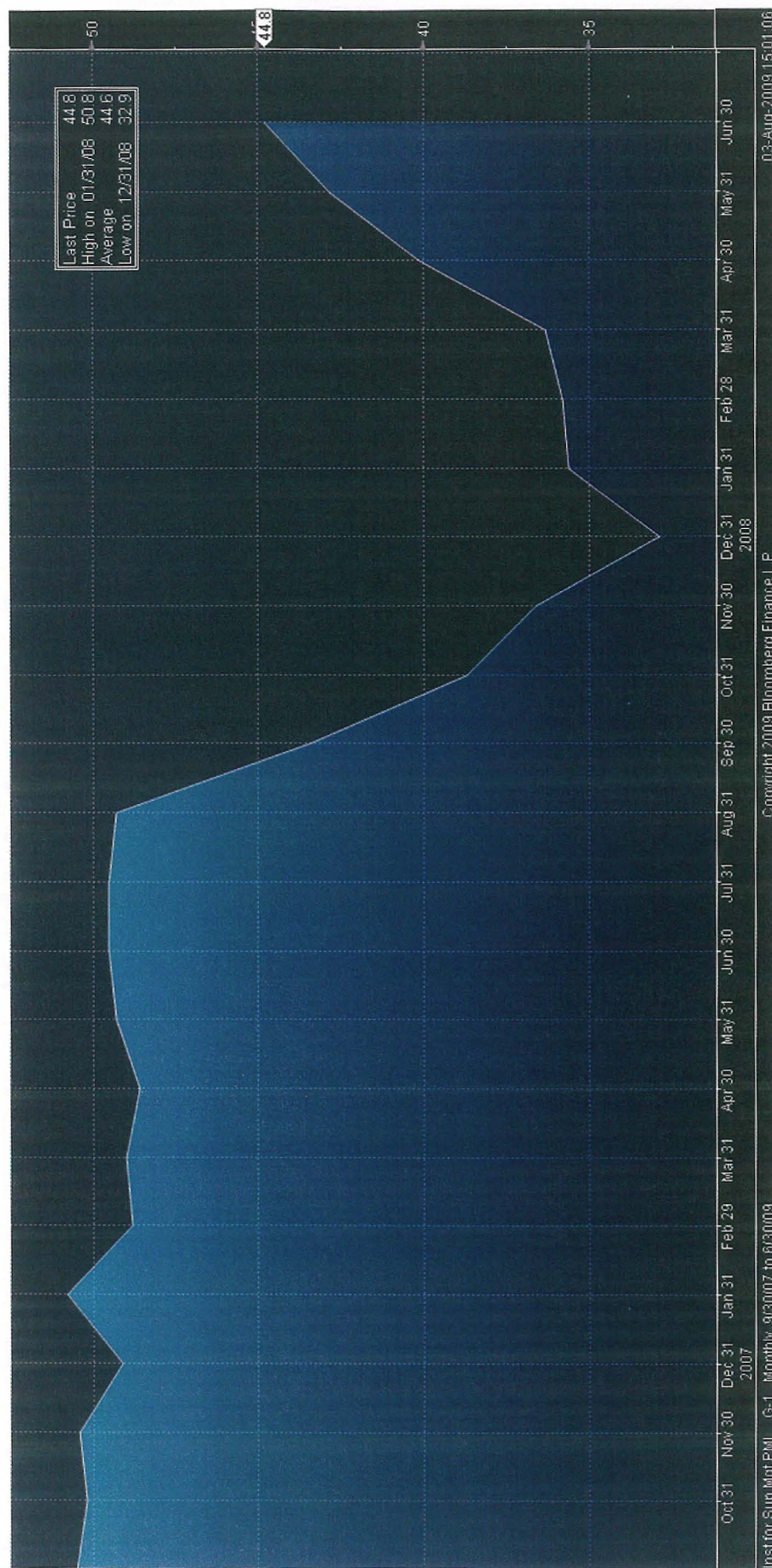
9/30/07 – 6/30/09

QUARTERLY GDP



9/30/07 – 6/30/09

ISM MANUFACTURING



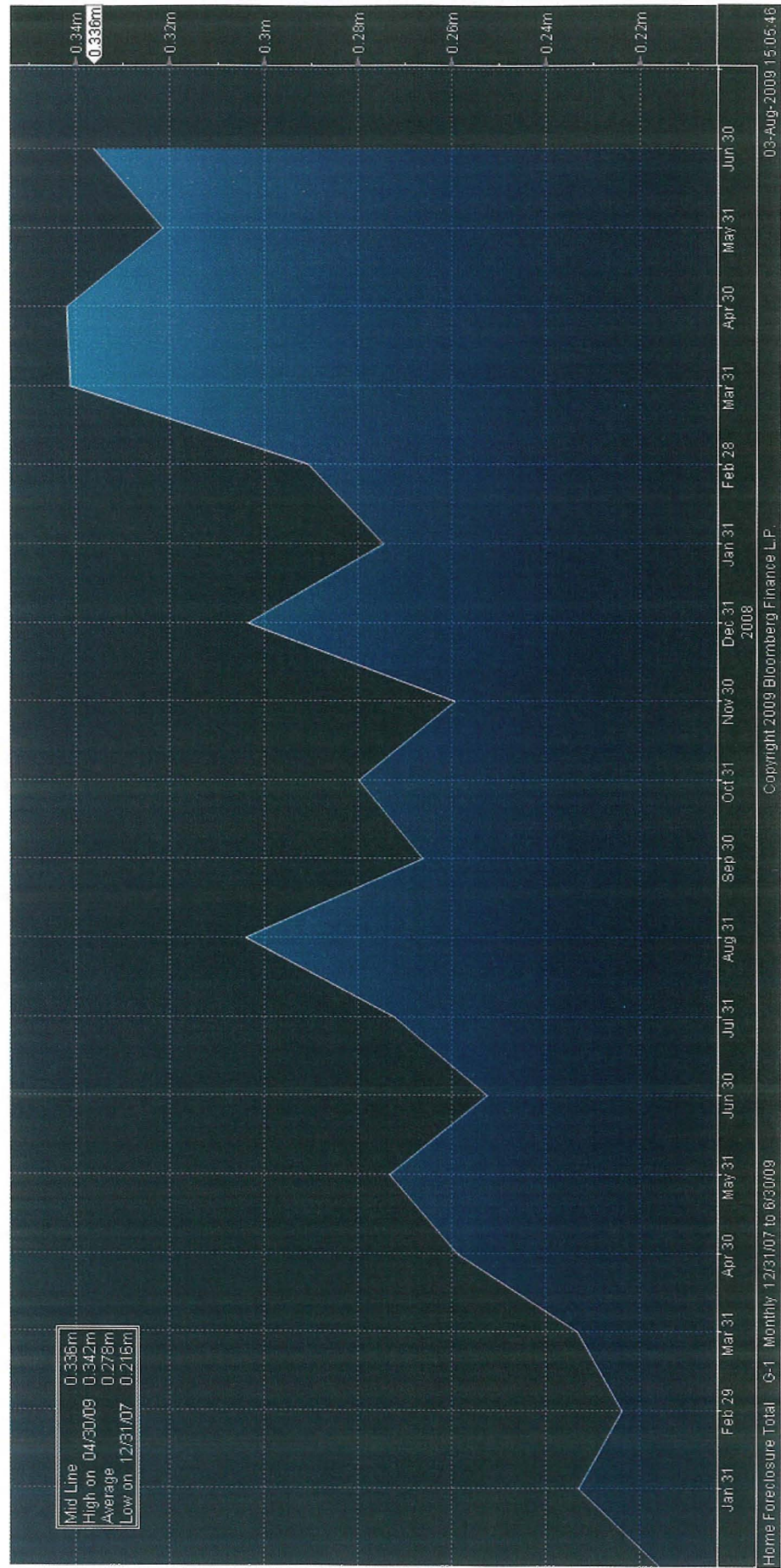
Inst for Sup Mgt PMI G-1 Monthly 9/30/07 to 6/30/09

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03-Aug-2009 15:01:06

9/30/07 - 6/30/09

HOME FORECLOSURE

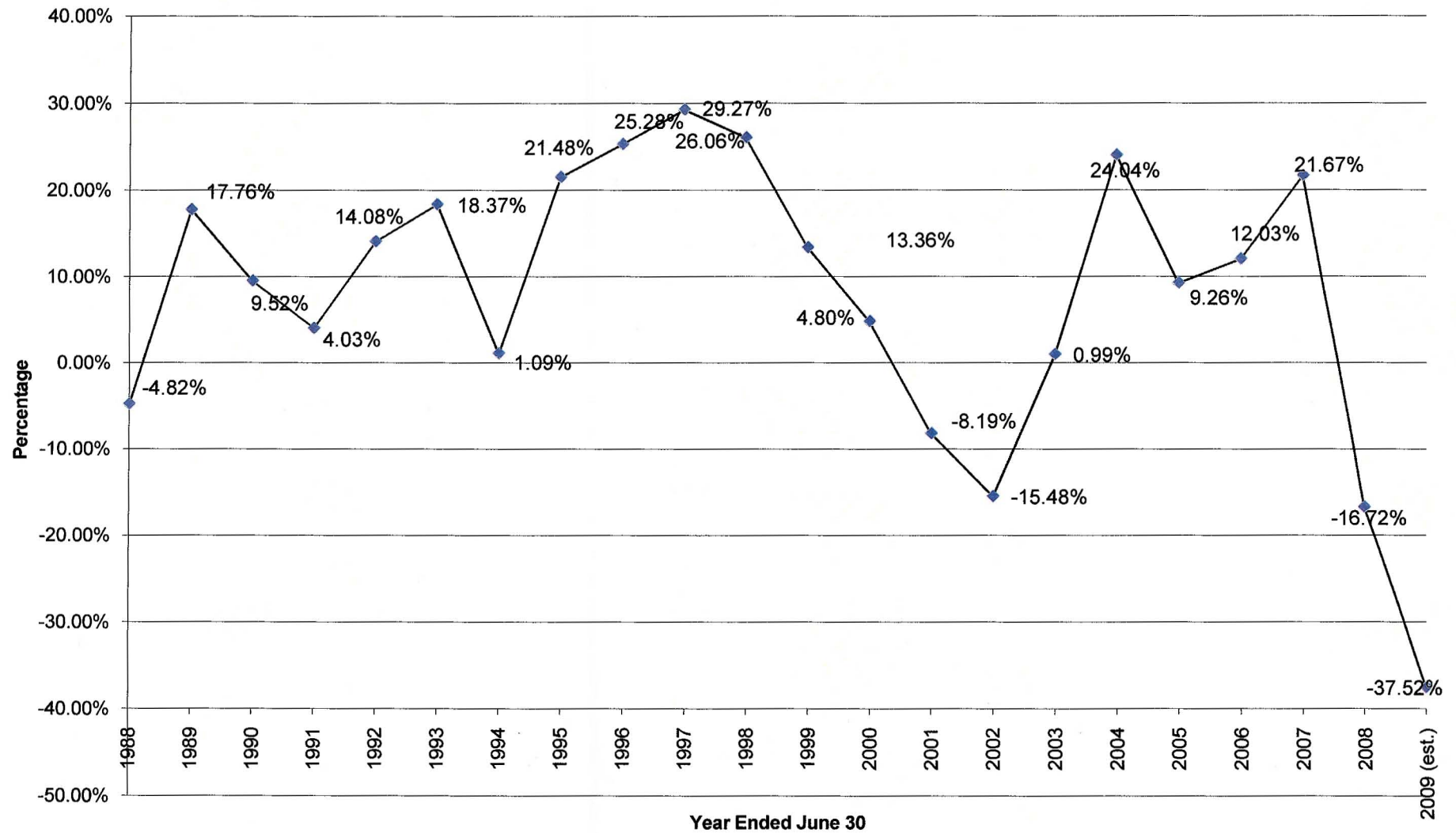


9/30/07 – 6/30/09



"That's all Folks!"

Pension Trust Domestic Equity Historical Returns



Pension Trust Domestic Fixed Income Historical Returns

