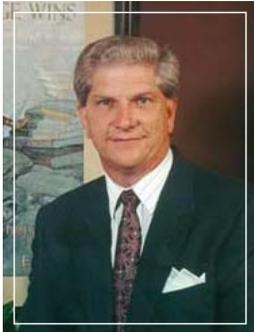




# Ryan ALM, inc.

## Asset/Liability Management

The Solutions Company



Ronald Ryan, CEO, CFA

## The Ryan Letter

January 2009

Index	Returns YTD 2009	Estimated Weights
<b>Liabilities :</b>		
Market (Tsy STRIPS)	-12.35 %	100 %
FAS 158 (AA Corporates)	- 8.97	
PPA (AA Corporates)	0.17	
GASB /ASOP (8% ROA)	0.67	
<b>Assets :</b>		
Ryan Cash	-0.01 %	5 %
Lehman Aggregate	-0.88	30
S&P 500	-8.43	60
MSCI EAFE Int'l	-9.80	5
<b>Asset Allocation Model</b>	<b>-5.81 %</b>	<b>100 %</b>
<b>Assets – Liabilities</b>		
Market	6.54%	
FAS 158	3.16	
PPA	-5.98	
GASB/ASOP	-6.48	

Using Asset Allocation above, 2009 pension assets **outperformed** liabilities by **6.54%** using market valuations (STRIPS); won by **3.16%** under FAS 158; lost by **-5.98%** under the PPA rules (AA Corporate rates); and lost by **-6.48%** using the GASB and ASOP 27 methodology of a constant ROA (8.00%). Such valuations show the significant difference in not using proper *market* valuations. Most pension funds enjoyed a funded ratio surplus in 1999. However, **assets have underperformed liabilities by about -152.58% since 1999** on a compounded index basis starting at 100 on 12/31/99! (see **Pension Scoreboard** section)

Total Returns										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Assets	-2.50	-5.40	-11.41	20.04	8.92	4.43	12.25	6.82	-24.47	-5.81
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	33.93	-12.35
Difference:										
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	6.54
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-181.57	-152.58

**God Bless Pension America !**

Ryan ALM, Inc. - The Solutions Company  
www.ryanalm.com

## **2009 Starts With Negative Growth Everywhere ! Good or Bad?**

The year 2009 started with the month of January posting negative growth for most asset classes including cash (**Ryan Cash Index = -0.01%**)! However, liabilities got hit the hardest showing **-12.35%** growth for the **Ryan Liability Index** (generic liability index version). Once again, if you do not mark to market liabilities (as GASB promotes), you will get sharp discrepancies in the liability growth rate. Ryan ALM calculates on the first page a pension victory of 6.54% for January while GASB would post a deficit of -6.48%. January should have been a great month for pensions due to the large negative growth of liabilities. If interest rates began a secular bear market trend toward higher rates, this will be the best solution to pension deficits. It will be hard for the asset side to post significant long-term positive return numbers. Most pensions are under the assumption that the asset side must earn a ROA that is above their actuarial discount rate to reduce their mounting pension deficits. In truth, if interest rates go up as a prolonged trend, liability present value growth will be a negative. Discount rates should be viewed as prices not returns. Just like a bond if interest rates go up the market value of a bond will go down. Higher interest rates should be the quickest and most risk-adverse way to shore up the Funded Ratio. Higher interest rates should produce negative present value growth on pension liabilities. For example, if interest rates go up 50 bps on average for the next five years most pensions would experience liability present value growth of about -10% cumulative (assuming a 12-year modified duration). So if a pension has a 40% deficit and if pension liability growth is -10% cumulative over the next five years then even if assets only grow 6% a year the deficit would be erased. The current trend to find market Alpha is a risky game that is misdirected. Outperforming market indexes is not Alpha for pensions! If you outperform the S&P 500 but lose to liability growth ...the plan loses!

**The true objective of any pension is to fund the liabilities at the lowest cost to the plan with prudent risk.** The goal should be to match assets to liabilities (Fully Funded) with no extra contributions needed. If there is a true economic (market value) deficit then asset growth needs to outgrow liability growth to makeup this deficiency and/or you need extra contributions. This requires a *Custom Liability Index* to measure the liability market value growth and be the **proper benchmark** for assets. Assets require a Custom Liability Index to measure Liability Alpha. For more info on Ryan Liability Indexes, go to: [www.RyanALM/RyanIndexes/RyanSTRIPS\\_YC.com](http://www.RyanALM/RyanIndexes/RyanSTRIPS_YC.com) as well as our **Research** in the Company Info section from our home page.

## **President Signs Pension Funding Relief**

The Workers, Retiree and Employer Recovery Act (WRERA) was signed into law on Dec. 23, 2008. It provides funding relief to defined benefit sponsors under the Pension Protection Act (PPA) as well as waiving the minimum distribution rules for seniors. The PPA established funding targets as a graduated phase-in schedule: 92% for 2008, 94% for 2009, 96% for 2010. If a plan failed to reach these minimum funding levels they would then have to contribute extra funds to become 100% funded for the next year. The WRERA has relaxed these standards such that corporate DB plans have to meet the phase-in levels without a penalty. Seniors get relief in that they are not required to take distributions at age 70.5 years or pay a 50% penalty for early withdrawal. Asset smoothing over two years was also made permanent.

### **PBGC moves to take over Underfunded Pension of Lehman Bros.**

The PBGC initiated court action to protect the pension benefits of over 25,000 workers of Lehman Brothers Holdings and its subsidiaries. Lehman is currently operating under bankruptcy court protection. According to PBGC estimates, the Lehman retirement plan is 95% funded with \$898.2 million in assets to cover \$940.8 million in benefit liabilities. If the plan is terminated, the PBGC expects to be liable for \$17.9 million of the \$42.6 million shortfall. The PBGC filed a motion with the U.S. District Court of New York to seek approval to terminate Lehman's pension plan ahead of a December 22, 2008 bankruptcy court hearing on the sale of Lehman's subsidiaries. By doing so the Lehman subsidiaries being sold are liable for those pension unfunded liabilities. PBGC acted to terminate Lehman's pension plan because of its financial risk if the subsidiaries escape liability for the pension plan.

### **House Passes Stimulus Plan With No G.O.P. Votes**

Without a single Republican vote, President Obama won House approval on January 28 for an \$819 billion economic recovery plan. House Republicans argued that it is tilted heavily toward new spending instead of tax cuts. All but 11 Democrats voted for the plan and 177 Republicans voted against it. According to the President's chief of staff, Rahm Emmanuel, "the most important number here for this recovery plan is how many jobs it produces, not how many votes it gets." The stimulus package is now at the Senate. House and Senate Democrats seem split over how to divide \$87 billion in relief for Medicaid.

### **30-year Mortgage Rates Lowest in FHLMC data base History**

According to the Freddie Mac weekly rate survey, the benchmark 30-year mortgage rate fell below 5% for the first time ever. The national average rate was 4.96% for the week ending Jan. 15. FHLMC began its rate survey in 1971. Twelve months ago the national average was 5.69%. Other key mortgage rates were 5-year ARMS at 5.25%, 15-year fixed rate mortgage was at 4.65%. Both the U.S. Treasury and the Federal Reserve have added over \$100 billion in liquidity to the mortgage market since September 2008 which puts downward pressure on mortgage rates. The Fed may add an additional \$570 billion more in 2009 based on its November 25, 2008 announcement.

### **Economic Recovery Watch ...Unemployment**

Jobless claims rose to a seasonally adjusted 4.78 billion as of the week ending Jan. 17 which is the highest since the government began records in 1967. The nonfarm unemployment rate hit 7.6% with job losses totaling 598,000. The insured unemployment rate representing the proportion of workers who are receiving benefits rose to 3.6%, the highest in 25 years.

### **Economic Recovery Watch ...Home Sales**

U.S. new home sales fell 14.7% in December to the lowest level on record according to the Commerce Department. New home sales in December were a seasonally adjusted annual rate of 331,000. There were 482,000 homes sold in 2008 down a record 37.9% from the 776,000 new homes sold in 2007. 2008 sales were the lowest annual sales since 1982.

*In God We Trust ! ... (Not in our Financial Institutions)*  
U.S. Currency

## Public Pension Watch

There seems to be an avalanche of recent Public Pension announcements concerning Pension + OPEB deficits and the mismanagement of such funds. **Potential municipal bankruptcies are waiting to erupt across America due to budget crises stemming mainly from unaffordable pension and OPEB contributions!** As I have preached since 1991, the accounting and actuarial rules (GASB and ASOP 27) governing Public Pension plans are the start of the pension crisis since they do not *mark to market* the liabilities (market rates @ 3.00%). Instead, they value the liabilities at the ROA rate (discount rate @ 8.00%). Such a discount rate methodology has *undervalued public pension liabilities by 30 to 55%* in the last 9 years. Moreover, they do not mark to market assets using a *smoothing* technique that can undervalue or overvalue assets. Currently, this method *overvalues assets significantly*. As a result, reported **Funded Ratios are greatly overstated** and need to be reduced accordingly. These inappropriate rules have led to inappropriate ...benefit decisions, contribution decisions and asset allocation decisions. It all links! Here is an update on some municipalities:

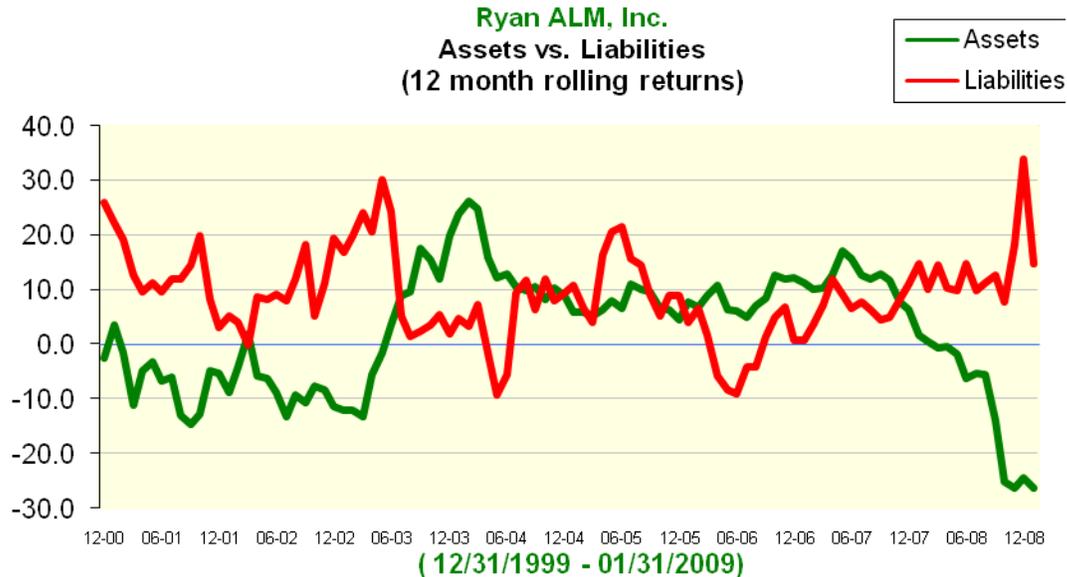
**New York City** - In his budget address, NYC mayor Bloomberg declared that if pension and health benefit systems are not reformed, “we’ll fundamentally bankrupt big municipalities like us.” Mr. Bloomberg proposed that city employees begin paying 10% of their health care premiums; many now contribute nothing. He said that he would no longer give out the kinds of raises that unions have become accustomed to over the past several years. Mr. Bloomberg is proposing a \$58 billion budget for the 2010 fiscal year. That is a decrease of \$60.1 billion. This will still leave a projected \$4 billion gap. To resolve this deficit, Bloomberg proposes raising sales taxes from 8.375% to 8.625%, federal government grants and pension reform.

**Philadelphia** – Currently, the number of pension recipients exceed the number of city workers (33,907 vs. 28,701). The growth of pension costs will eventually outpace that of city revenues. Pension cost was \$252 million in 1998, \$437 million in 2008 and is expected to cost \$613 million in 2012. Three of the four city unions don’t require employee contributions to health insurance.

***“It is amazing what you can accomplish if you do not care who gets the credit.”***  
**Harry Truman**

## Pension Scoreboard

The graphs below show asset vs. liability rolling 12 month and cumulative growth since 1999. The cumulative growth difference is **-152.58%** suggesting any pension **Funded Ratio below 261.00 in 1999 has a deficit today!** As the Pension Crisis watchdog, we designed the **Pension Monitor** to capture world pension news: <http://www.pensionmonitor.com>



## Ryan Indexes

### Custom Liability Indexes

The best way to price (discount rate) and understand the interest rate sensitivity of liabilities is the **Ryan Treasury STRIPS yield curve indexes** as a **LIABILITY INDEX BENCHMARK**. In March 1985, when STRIPS were born, my team and I at the Ryan Financial Strategy Group (RFSG) created the **1st STRIPS Index**. Based upon these Ryan STRIPS indexes we created the **1st Liability Index in 1991** as the proper liability Benchmark for liability driven objectives. Since 1991, the Ryan team has developed hundreds of Custom Liability Indexes (CLI). Similar to snowflakes, no two pension funds are alike in that they each have unique benefit payment schedules due to different labor forces, mortality and plan amendments. Without a Custom Liability Index it would be difficult, if not impossible, for assets to be managed vs. this liability objective. Until a CLI is installed as the benchmark, the asset side is in jeopardy of managing vs. the wrong objective (generic market indexes). **If you outperform generic market indexes, but lose to the CLI ... the plan loses !**

### Ryan Treasury Indexes

In March 1983, my index team and I at the Ryan Financial Strategy Group (RFSG) created the **1st Daily bond Index ... the Ryan Index** as a *Treasury Yield Curve* index series for each auction maturity series (from Bills to Bonds). The best way to understand the interest rate behavior of bonds is to use the Ryan Treasury constant maturity series for each Treasury *auction* series with two composite indexes ... **Ryan Cash and Ryan Index**.

### Ryan/Mergent 1-30 year Treasury Maturity Ladder Index (PowerShares ETF)

On October 11, 2007 Powershares launched a fixed income ETF based upon the Ryan/Mergent 1-30 year Treasury Maturity Ladder index. This index is an equal-weighted diversified portfolio of 30 distinct maturities. For more info on this ETF and index, please go to :

**[www.Powershares.com](http://www.Powershares.com) (click on fixed income portfolios)**

### KLD U.S. Corporate Bond ESG Indexes

On August 7, 2008 KLD, Ryan ALM and Mergent launched a family of U.S. Environmental, Social and Governance (ESG) Corporate Bond Indexes. These are the First ESG Ratings Criteria as U.S. Corporate Bond Indexes. These investable indexes are the first to apply environmental, social and governance factors to a U.S. fixed income asset class. The KLD 1-3, 1-5 year, 1-10 year U.S. Corporate Bond Indexes are available for licensing as both generic and custom indexes, The KLD USCB series is the product of collaboration by three firms: KLD Research & Analytics (the leading ESG research and index provider since 1988), Ryan ALM as the fixed income architect and calculation agent; and Mergent, the fixed income data provider.

To view all Ryan Indexes data go to : **[www.RyanIndex.com](http://www.RyanIndex.com)**

***Note: In October 2005, Ron Ryan terminated his license agreement with Ryan Labs to distribute and calculate the Ryan Indexes and Ryan STRIPS Indexes. Ron Ryan and Ryan ALM have no affiliation with Ryan Labs. Any use of the formulas, methodologies and data of any of the Ryan Indexes without Ron Ryan's written permission is prohibited.***

## **Index Funds**

### **Liability Index Funds (Liability Beta Portfolio)**

The best way to match assets to liabilities and reduce the volatility of the Funded Ratio is through a Liability Index Fund or Liability Beta Portfolio. Immunization is a popular strategy to match liabilities but has a mathematical problem in that it matches the *average duration* of liabilities instead of the entire *term structure* of liabilities. Only a Liability Index Fund correctly matches and fully funds each liability payment. This requires a Custom Liability Index. Ron Ryan was the inventor of both the Custom Liability Index and Liability Index Fund (Liability Beta Portfolio) concept.

***Given the Wrong Index ... you will get the Wrong Risk/Reward***  
**Confucius**