Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

Ronald Ryan, CEO, CFA

The Ryan Letter
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Index	Returns YTD 2008	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	2.25 %	100 %
IRS (Corporates)	0.20	
ROA (8% constant rate)	0.67	
Assets :		
Ryan Cash	0.61 %	5 %
Lehman Aggregate	1.68	30
S&P 500	-6.00	60
MSCI EAFE Int'l	-9.23	5
Asset Allocation Model	-3.53 %	100 %
Assets – Liabilities		
Market	-5.78%	
IRS	-3.73	
ROA	-4.20	

Based on the Asset Allocation above, the first month of 2008 pension assets **underperformed** liabilities by **-5.78%** using market valuations (i.e. STRIPS); lost by -3.73% under the IRS Contribution rules (PPA Corporate rates); and lost by **-4.20%** using the ASOP 27 methodology of a constant ROA (i.e. 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 -87% since 1999** on a compounded index basis starting at 100 on 12/31/99!

(see Graphs and Index disclosures on pages 4 and 5)

Total Returns									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Assets	-2.50	-5.40	-11.41	20.04	8.92	4.43	12.25	6.82	- 3.53
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	2.25
Difference:									
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-5.78
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-86.93

God Bless Pension America !

Funded Ratios Reduced in 2007 and in 2008

Based upon the asset allocation shown on page 1, pension assets underperformed liabilities in 2007 by about **-4.94%** (assets = 6.82%, liabilities = 11.76%) and in January 2008 by **-5.78%** (assets = -3.53%, liabilities = 2.25%). Amazingly, our pension calculations on page 1 show that **assets underperformed liabilities by -86.93% since the end of 1999 on a cumulative compounded basis starting at an index level of 100 !** We calculated an underperformance of **-73.40%** at the end of 2002. So since the perfect storm of 2000-02 we find little or no improvement. However, as reported in my December newsletter (Pension Scoreboard 2007), if we start in 1988 with a fully funded 100% Funded Ratio then the picture looks brighter where the Funded ratios may have evolved as follows:

$$1999 = 156.6\% \qquad 2002 = 82.5\% \qquad 2007 = 99.0\%$$

Unfortunately, many pension plans (especially Public Plans) greatly increased pension benefits after 1999 and damaged their future funded ratios.

Treasury Yield Curve is Key Economic Indicator

The Treasury yield curve is certainly a key economic indicator and represents so much of how our financial markets work. The *intrinsic value* of any investment is best measured versus the risk-free rate(s) or the Treasury yield curve. If the investment underperforms the Treasury with the same volatility or time horizon (maturity) then the investment would be considered a *negative value added*. Most bonds are priced as a yield spread off of a similar duration Treasury as a measurement of relative value. Any liability driven objective (i.e. pensions, healthcare, lotteries, etc.) are best monitored as a portfolio of Treasury STRIPS that match or defease each and every liability payment (i.e. STRIPS yield curve). Our monetary policy usually functions by buying and selling Treasuries to adjust the economy in times of liquidity needs and inflationary trends. The Treasury yield curve in both auction issue form and STRIPS are two Ryan Index series designed in 1983 (auction yield curve) and 1985 (STRIPS yield curve) consisting of about 40 distinct maturity indexes. Such indexes can be viewed from our two web sites **www.RyanIndex.com** and **www.RyanALM.com**. Recently much has happened to the yields and shape of the Treasury yield curve in reaction to a mortgage credit crunch and economic recession trends :

Yields on Ryan Treasury Yield Curve Indexes

Current yields (as of 01/31/08) are closing in on the lowest yields seen on the Treasury yield curve since 06/13/03 based on our index data which started in 1973 for our auction maturity series. Wasn't the recent mortgage bubble due to low interest rates? Wasn't the pension crisis due to low interest rates? Is it déjà vu over again?

	01/31/08	Lowest	Difference
1 year	2.109%	0.922%	1.187%
2 year	2.177	1.073	1.104
5 year	2.822	2.022	0.800
10 year	3.642	3.105	0.537
30 year	4.354	4.169	0.185

Yield Spreads on Ryan Treasury Yield Curve Indexes vs. 30-year Treasury
As the Fed has been accommodating the economy to resolve any liquidity crisis from the mortgage credit crunch plus help out a slowing economy they have lowered interest rates again. This has created a much more positive slope in the Treasury yield curve.

Yield Spread History vs. Ryan 30-year Treasury Index

vs 30-year	12/31/07	01/31/08	Change	High	Date	Average
3 month	108 bp	273 bp	94 bp	470 bp	05/13/04	229 bp
1 year	111 bp	225 bp	114 bp	439 bp	10/08/92	156 bp
2 year	139 bp	218 bp	79 bp	365 bp	10/05/92	91 bp
5 year	100 bp	153 bp	53 bp	226 bp	10/31/02	54 bp
10 year	42 bp	71 bp	29 bp	226 bp	10/06/92	21 bp

Medicare Costs and the CPI
The nation's healthcare costs climbed above $2 trillion in 2006 according to a study just released by Medicare actuaries. This was an increase of 6.7% versus the 6.5% in 2005. Good thing Medicare is not part of the CPI.

If Elected President …
Given that we are now in the stretch run of an election, I thought I would offer some ideas for the candidates. Hopefully, you find them entertaining and even useful. I would appreciate any critiques sent to **rryan@ryanalm.com** :

1. Sell our Gold – Since we left the Gold standard many decades ago, there is no economic reason to hold this commodity. Given the fact that Gold is now at an all time high price ($821.50 per troy ounce as of 11/30/07) and our economy needs a stimulus (other than raising taxes) this might be a proper strategy and certainly good timing. As of September 2007, the U.S. owned 8,133.5 tonnes of Gold (Germany has 3,417.5, China = 600 and the UK = 310.3) . There are 32,551 troy ounces in each tonne. This would value our Gold reserves at $214,822,380,207. Such a new found wealth could shore up the Social Security and Medicare trust fund which is the next big financial crisis that all Americans will pay for in higher FICA taxes. Put the sale proceeds in a lock box and only use the interest income when you start to run SS deficits in future years. This way we would have an interest earning asset rather than the reverse situation which we have today (a cost center not a profit center).

2. Get rid of Electoral College - This antiquated system is in defiance of our Declaration of Independence which states that all men are created equal. Each American should get an equal vote in our elections. Anything less or more contradicts our heritage.

3. Legalize National Lottery - There are about 38 states that have a state lottery. For many this is the second or third largest revenue for that state. We need to find ways to finance and support Social Security and Medicare without taxing our citizens. A National Lottery with revenue dedicated to SS and Medicare would be a big help.

4. Bring back Investment Tax Credit - We are losing our manufacturing steadily to the rest of the world for many years now. We need incentives for corporations to do the right thing for America. Build plant and equipment here in America, hire more Americans! It worked before in the 1960s and 1970s … we need a strong corporate America.

Public Pension and OPEB Watch

There seems to be an avalanche of recent Public Pension announcements concerning the growth of pension + OPEB deficits and the mismanagement of such funds. 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 @ 5.00%). 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 45% in the last 7 years. As a result, reported funded ratios are not accurate 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:

California - The newly appointed Public Employee Post-Employment Benefits Commission released their initial 2007 findings. According to their survey of California State, schools and public agencies pensions the aggregate unfunded pension liability is $63.5 billion. Contributions for the two largest pensions (CalPERS and CalSTRS) rose from $1.58 billion to $3.87 billion in 12 years. As far as the OPEB liability (healthcare) is concerned, only a limited number of responders were ready but the current estimate totaled $118.1 billion unfunded OPEB liability.

Illinois - Evanston police and fire pensions face a $140 million deficit. The city is looking to raise real estate transfer taxes by 20% to gain revenues.

Kentucky - Gov. Steve Beshar will propose a strategy soon to address an $18 billion pension deficit. He said right now there is no cash. If the shortfall is not addressed the pension funds face bankruptcy in 14 years. He further said he will not recommend borrowing money.
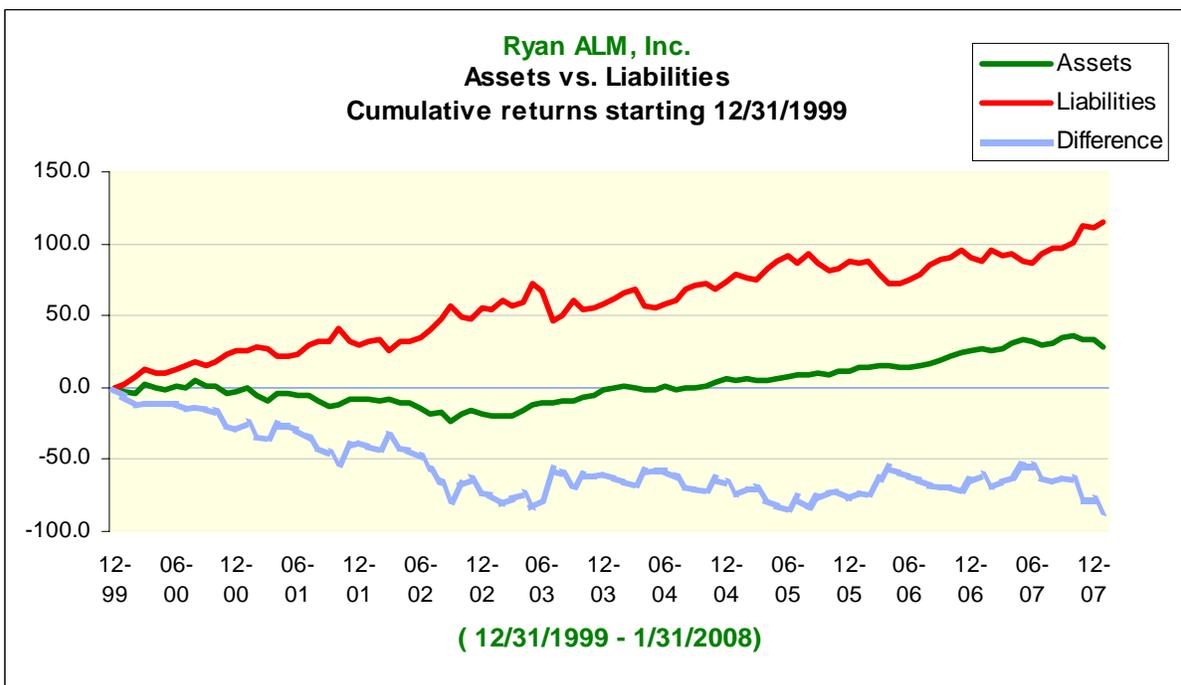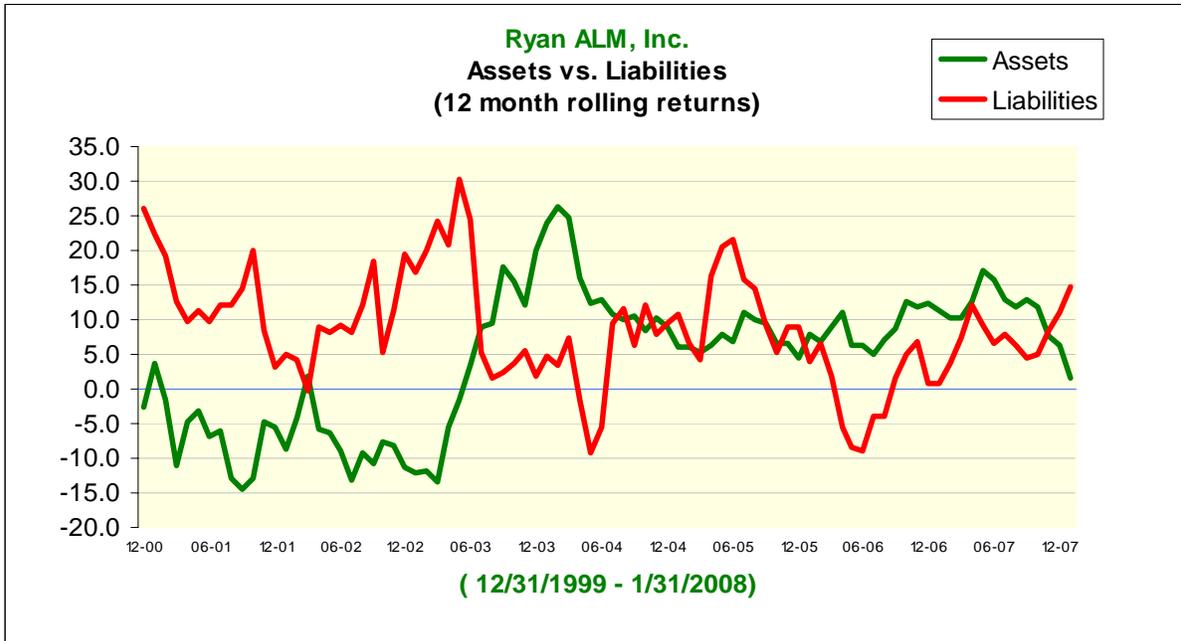
Minnesota - Minneapolis faces a pension crisis where pension payments are scheduled to grow 200% over the next two years costing $256 million over the next 20 years for just the police and fire pension plans.

West Virginia - The total unfunded pension liability is calculated at $659 million. This deficit has grown 22% since 2002. The latest actuarial report shows the police pension was only 9% funded and the fire pension at an incredible 3% funded.

Pension Scoreboard

Based on the Ryan generic Liability Index and a static Asset Allocation shown on page 1, the following graphs show asset growth versus liability growth for rolling 12 month periods and cumulative growth since 1999. The cumulative growth difference is **-86.93% suggesting any pension with a Funded Ratios below 167.65 in 1999 has a deficit today !**. As a Pension Crisis watchdog, we have designed the **Pension Monitor**. We believe that this is the most comprehensive site for pension articles in the world today. To view, please click on :

http://www.pensionmonitor.com/

Ryan ALM, Inc.
Assets vs. Liabilities
(12 month rolling returns)

Assets — Liabilities

(12/31/1999 - 1/31/2008)

Ryan ALM, Inc.
Assets vs. Liabilities
Cumulative returns starting 12/31/1999

Assets — Liabilities — Difference

(12/31/1999 - 1/31/2008)

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** known as the **LIABILITY BENCHMARK or LIABILITY INDEX**. 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 (Pensions, Lotteries, NDT, Insurance Cos., etc.).

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 have unique benefit payment schedules due to different labor forces, different mortality, different plan amendments. **The true objective of a pension is to fund liabilities at the lowest cost to the plan with prudent risk**. 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 a set of economic books, the asset side is in jeopardy of managing vs. the wrong objective (i.e. generic market indexes) **If you outperform generic market indexes, but lose to the CLI … the plan loses !**

Ryan Indexes …Enhanced !
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.**

The daily reports on these indices have been greatly expanded and enhanced to over 100 daily pages + many pages of research and methodology including :

Returns
Yield History
Yield Spreads
Percentage Spreads
To view all Ryan Indexes data go to : 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

Given the Wrong Index … you will get the Wrong Risk/Reward
Confucius

Index Funds

Liability Index Funds

The best way to match assets to liabilities and reduce the volatility of the Funded Ratio is through a Liability Index Fund. Immunization was a common strategy to match liabilities but had a mathematical problem in that it matched 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) concept.

Ameristock / Ryan Launch Five (5) New Bond ETFs

On Monday, July 2nd Ameristock and Ryan ALM launched five new bond ETFs based upon the Ryan Indexes. Here is the list of these innovative ETFs and ticker names:

Ameristock / Ryan 1 year Treasury (GKA)
Ameristock / Ryan 2 year Treasury (GKB)
Ameristock / Ryan 5 year Treasury (GKC)
Ameristock / Ryan 10 year Treasury (GKD)
Ameristock / Ryan 20 year Treasury (GKE)

These new ETFs are **constant maturity** index funds. They are the first such bond funds in the ETF market place today. The other bond ETFs are based on maturity range indexes (i.e. 7-10 years) rather than a precise spot on the Treasury yield curve. These maturity range indexes tend to have significant drifts in average coupon and duration as old issues pass thru this index composition. Such drifts can distort the implied or expected risk/reward behavior. Moreover, these indexes allow for callable bonds which trade to a call date and not a maturity date which create more skewness. Such drifts and skewness are corrected with a constant maturity index methodology.

For more info on these ETFs and the Ryan Indexes, please go to :

Ryan Indexes = www.RyanIndex.com
and
www.RyanALM.com
Ameristock / Ryan ETFs = www.Ameristock.com

Powershares Launches ETF based on Ryan/Mergent 1-30 year Maturity Ladder Indexes

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 (click on fixed income portfolios)