



Ryan ALM, inc.

Asset/Liability Management

The Solutions Company



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The Ryan Letter

September 2007

Index	Returns YTD 2007	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	3.85 %	100 %
IRS (Corporates)	2.94	
ROA (8% constant rate)	6.00	
Assets :		
Ryan Cash	4.14 %	5 %
Lehman Aggregate	3.84	30
S&P 500	9.12	60
MSCI EAFE Int'l	13.57	5
Asset Allocation Model	7.57 %	100 %
Assets – Liabilities		
Market	3.72%	
IRS	4.63	
ROA	1.57	

Based on the Asset Allocation above, in the year 2007 pension assets outperformed liabilities by **3.72%** using market valuations (i.e. STRIPS); **4.63%** under the IRS Contribution rules (PPA Corporate rates); and **1.57%** 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, this **funded ratio has been reduced by about -62% since 1999** (see Graphs and Index disclosures on pages 3 and 4).

Total Returns								
	2000	2001	2002	2003	2004	2005	2006	2007
Assets	- 2.50	- 5.40	-11.41	20.04	8.92	4.43	12.25	7.57
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	3.85
Difference :								
Annual	-28.46	- 8.48	-30.89	18.08	-0.43	-4.44	11.44	3.72
Cumulative		-37.60	-73.40	- 60.08	-66.13	-76.75	-64.60	-62.43

God Bless Pension America !

Lehman Aggregate Underperforms Ryan 5-year Treasury STRIPS

I have reported on a consistent trend for over 20 years now. As hard as it may be to accept, most broad investment grade bond indexes lose to the Treasury STRIPS with a similar duration. The Lehman Aggregate (which I designed when I was Head of Fixed Income Research) is a good example of this phenomena. Based on the Ryan 5-year Treasury STRIPS Index, the Lehman Aggregate underperforms by 40 + basis points for the last 10 and 20 years :

Annualized Total Returns (periods ending 09/30/07)

Index	10 years	20 years	Since 12/88
Lehman Aggregate	5.97 %	7.71 %	7.48 %
Ryan 5-year STRIPS	6.37	8.13	7.93
Difference	- 0.40	- 0.42	- 0.45

Note: Treasury data syndicated in the Wall Street Journal is the Ryan Indexes

To view all Ryan Indexes go to: www.RyanIndex.com

UAW and GM reach a deal on OPEB

The UAW tentatively agreed to allow GM to set up a separate healthcare fund – called a Voluntary Employee Beneficiary Association (VEBA) – to pay for retiree healthcare. GM has \$51 billion in retiree healthcare obligations on its books and much of that will move off its balance sheet into the fund which will be controlled by a board of directors named by GM and the UAW. The VEBA could give the union a louder political voice in Washington, where it has long lobbied for universal healthcare to no avail. VEBAs could become a standard strategy for companies since it removes the OPEB liability from the balance sheet. Goodyear Tire & Rubber did a similar deal this year. Under that plan Goodyear removed the OPEB liability in return for a \$1 billion investment into a fund controlled by the United Steelworkers. The GM/UAW VEBA is likely to have over \$30 billion in its coffers. If similar deals are struck at Ford and Chrysler, the UAW could have over \$80 billion in combined VEBAs.

The UAW ranks 12th among U.S. unions with about 538,448 members. The National Education Association is the largest with 2,767,696 members. Membership among the labor movement has been declining for decades. In 1977, nearly 24% of workers were union members. Last year, that number hit 12%.

Social Security

My September 5, 2007 Social Security Statement reads ... “In 2017 we will begin paying more in benefits than we collect in taxes. Without changes, by 2041 the Social Security Trust Fund will be exhausted (based on the intermediate assumptions from the Social Security Trustees” Annual report to Chicago). Your estimated benefits are based on current law. Congress has made changes to the law in the past and can do so at any time. The law governing benefit amounts may change because, by 2041, the payroll taxes collected will be enough to pay about 75 percent of scheduled benefits.” Maybe we should rename SS ... **Social Insecurity!**

Social Security (SS) and the Federal Deficit ?

According to Allen Sloan from Fortune magazine the Federal deficit might be much larger than reported. Using numbers from the Congressional Budget Office, the SS receives about \$78 billion more in FICA tax revenue than it pays in benefits currently. But the Treasury takes this tax revenue and gives the SS Trust Fund an IOU (Treasury bond) for it. This \$78 billion is not in the stated deficit. The Treasury currently owes \$108 billion in interest for all the IOUs (bonds) owned by the SS trust fund but will pay this interest expense by issuing more IOUs rather than pay cash. This additional expense is not stated on the current Federal deficit of \$168 billion. This additional debt does not include the huge amount of Treasuries held by federal employee pension funds and Government Agencies (estimated at \$97 billion). In the end you can count on: death, taxes and ... more Treasuries.

Hillary's \$7 Trillion Promise

Wooring senior citizens at the Alliance for Retired Americans, Sen. Hillary Clinton pledged that as president she would not cut Social Security benefits, raise the retirement age or privatize the taxpayer-funded Social Security system. In present value dollars, the SS projected unfunded obligations over a 75-year horizon are \$4.7 trillion. Add to that the \$2 trillion the Treasury owes to the SS Trust fund and the deficit rises to \$6.7 trillion. In addition to SS, we have a frightening Medicare unfunded liability of \$33.9 trillion. Sen. Clinton proposal is to impose an extra tax on higher income levels. America would be wise to hire a SS and Medicare chaplain as a possible strategy. Let us pray.

World's 300 Largest Pension Funds = \$10 Trillion

According to a P&I and Watson Wyatt survey, the 300 world's largest pension funds grew 11.5% in 2006 with assets exceeding \$10 trillion for the first time. The top three funds were:

1. Government Pension Investment Fund (Tokyo) = \$936 billion
2. Norway Government Pension Fund = \$274 billion
3. California Public Employees Retirement = \$218.2 billion

Ban On Iran

The U.S. government lists Iran as a state sponsor of terrorism and imposed a ban on U.S. companies doing business there. The California Senate voted 36-0 to require its two major pension funds to shed holdings in companies doing business in Iran. CalPERS officials estimate that the impact on the fund's energy holdings alone could total \$2 billion.

Delphi To Freeze Pension Plan

Financially troubled Delphi Corp. will freeze its two pension plans and shift some pension liabilities to former parent GM under a bankruptcy reorganization proposal filed Thursday, September 6. It will also end its health care plan for hourly retirees. At the end of 2006, the Delphi pension deficit was over \$4 billion. Delphi reported a \$5.5 billion loss for last year.

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 (current

discount rate @ 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 5 years. As a result, reported funded ratios are not accurate and need to be reduced accordingly. As a result of these inappropriate rules, this has led to inappropriate ... benefit decisions, contribution decisions and asset allocation decisions. It all links! Here is an update on some municipalities:

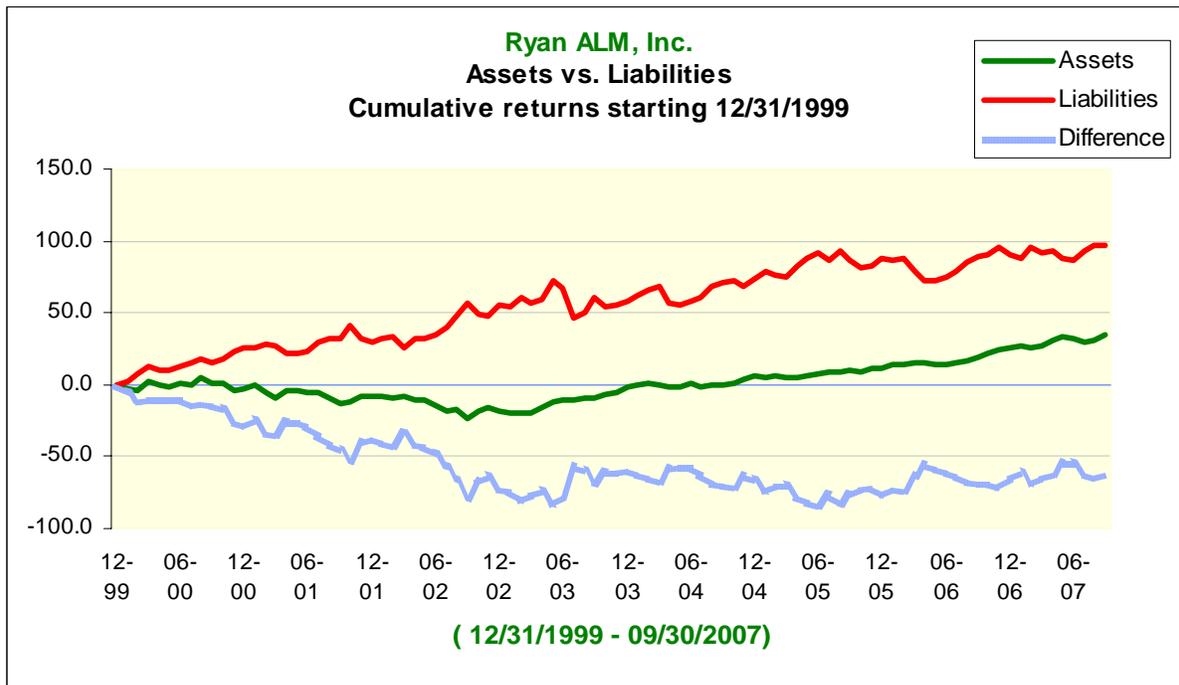
Pittsburgh - Republican mayorial candidate Mark De Santis took on Mayor Luke Ravenstahl's handling of the city's pension woes. The city's pension fund has a \$469 million deficit with 25% of the current operating budget consumed by pension benefit payments. Mr. DeSantis promised to double the city's contributions to help the shortfall by shifting \$23 million in gambling and nonprofit payments (hospitals, colleges, etc.) into the pension fund. Mayor Ravenstahl said "Pennsylvania has four times as many local government pension plans as any other state, making the issue Pennsylvania's version of the national Social Security problem."

San Diego - The county retirement board took a significant step in eliminating the \$1.23 billion by electing to use about \$340 million in above-average investment returns to reduce the deficit. The funded ratio is expected to increase from 83% to 88% (using the ROA as the Discount Rate). Truth is the economic funded ratio is about 58% if liabilities were marked at market (similar to FAS 158). As of July 1, the county stopped funding tax-free health benefits to all employees who retired after the last pension increase.

Washington - In accordance with GASB 45, the state actuary released a report estimating the state's OPEB liability at over \$12 billion. The state's Office of Financial Management response was that retiree health care benefits, unlike pensions, is not contractual obligations but appropriations provided "at the discretion of the legislature." That chill in the air in Washington may not be the weather.

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 **-65.39% suggesting any plan with a Funding Ratio below 152.93% at the end of 1999 is in a deficit position today.** In order to closely watch the Pension Crisis, 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/>



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 a maturity range (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