# Ryan ALM, inc.

## Asset/Liability Management

*The Solutions Company*

Ronald Ryan, CEO, CFA

# The Ryan Letter

## October 2007

| Index | Returns YTD 2007 | Estimated Weights |
|---|---|---|
| **Liabilities :** | | |
| Market (Tsy STRIPS) | 5.68 % | 100 % |
| IRS (Corporates) | 3.29 | |
| ROA (8% constant rate) | 6.67 | |
| **Assets :** | | |
| Ryan Cash | 4.49 % | 5 % |
| Lehman Aggregate | 4.78 | 30 |
| S&P 500 | 10.87 | 60 |
| MSCI EAFE Int'l | 18.04 | 5 |
| Asset Allocation Model | 9.12 % | 100 % |
| **Assets – Liabilities** | | |
| Market | 3.44% | |
| IRS | 5.83 | |
| ROA | 2.45 | |

Based on the Asset Allocation above, in the year 2007 pension assets outperformed liabilities by **3.44%** using market valuations (i.e. STRIPS); **5.83%** under the IRS Contribution rules (PPA Corporate rates); and **2.45%** 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 -63% 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 | 9.12 |
| Liabilities | 25.96 | 3.08 | 19.47 | 1.96 | 9.35 | 8.87 | 0.81 | 5.68 |
| Difference : | | | | | | | | |
| Annual | -28.46 | - 8.48 | -30.89 | 18.08 | -0.43 | -4.44 | 11.44 | 3.45 |
| Cumulative | | -37.60 | -73.40 | - 60.08 | -66.13 | -76.75 | -64.60 | -63.95 |

**God Bless Pension America !**

## VEBA … a Strategy to Remove Healthcare (OPEB) Cost

Several companies are considering establishing a separate healthcare fund – called a Voluntary Employee Beneficiary Association (VEBA) – to pay for retire healthcare. By setting up a VEBA a company removes the OPEB liability from the balance sheet. GM removed $51 billion in retiree healthcare obligations from its books by creating VEBA. Earlier this year Goodyear removed the OPEB liability in return for a $1 billion investment into a fund controlled by the United Steelworkers. AT&T and Verizon may be the next companies to establish a VEBA. Contributions to the VEBA are tax deductible but do not affect earnings like pensions (i.e. pension expense or income). Despite their obscurity, VEBAs are the descendents of the earliest providers of health insurance: industrial sickness funds. The first federal VEBA law was established in 1928.

## United Airlines Uncovers Valuable Asset

In 2005, United Airlines terminated its employee pension plans creating the single largest corporate pension default in U.S. history ($6.6 billion). Since it was in bankruptcy, there was a need to reduce costs by transferring its pension over to the PBGC and the American taxpayer. UAL emerged from bankruptcy in February 2006. But, apparently, UAL had an asset on its books that could have paid for the entire cost of the pension obligation … its Mileage Plus program. According to the financial statements at the time, it was a negative asset or a cost. Today, United is looking to spin off its customer loyalty program to raise money. Although it is not a standalone reporting result, the Mileage Plus program is estimated to have generated $600 million last year. A Bear Stearns analyst recently figured that it could be worth more than $7 billion if spun off. The airlines sell the mileage to merchants who in turn use them as rewards for their customers. UAL has the second largest mileage program behind American Airlines who may also spin off its AAdvantage program. In its 2004 annual report United recorded an $840 million liability to account for miles being redeemed but no listing of an asset. Under Section 4047 of ERISA the PBGC can order a company to restore its pension obligation when the company's financial health has improved. In fact, it did that with LTV in 1990.

## Ex-Chief of SEC Warns that Public Pension Funds are in Danger

Arthur Levitt, Jr., former chairman of the SEC, said that the Public Pension world is fraught with conflicts of interests, opaque accounting and a tendency among elected officials to promise valuable benefits, then fail to set aside enough money to pay for them. Mr. Levitt said much of the trouble was rooted in pension accounting rules that "fail to reflect accurately" the cost of the benefits that pension workers have earned or the value of the assets to pay those benefits. "We can't begin to improve the fiscal standing of public pension funds until we can accurately assess their financial health". Mr. Levitt called for the repeal of the Tower Amendment, a 30-year-old law that limits the SEC's authority to police governmental accounting.

## The Medicare Snowball

Alicia Munnell, director of the Center for Retirement Research at Boston College, predicts that a 30-year worker today can expect premiums, deductibles and co-pays for parts B and D of Medicare to absorb about 50% of there Social Security benefit. A new born can expect the same costs to absorb 70% of future Social Security benefits. The unfunded liabilities of Medicare are six to seven times the unfunded liabilities of Social Security. One new part of

Medicare alone, the prescription drug plan signed into law in 2003 has unfunded liabilities nearly twice as large as the unfunded liabilities of the entire Social Security program.

## Clinton Proposes Retirement Accounts with Tax Credits

Presidential candidate Hillary Clinton proposed new retirement savings accounts that would get matching tax credits from the U.S. government. Americans would be allowed to contribute as much as $5,000 in tax-deferred funds each year to the "American Retirement Accounts". Depending on household income levels, the government would then offer tax credits of as much as $1,000. Only couples making $100,000 or less would qualify for tax credits under this plan. The cost of this giveaway is estimated at $20 billion. Senator Clinton addressed Social Security saying "I do not believe it is in crisis. I don't want to get into negotiating over Social Security while I'm trying to do health care, change our energy policy and move back to fiscal responsibility and get us out of Iraq." Ironically, former President Bill Clinton declared the Social Security system in crisis as his lead message in his State of the Union address in 1999.

## 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 5 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:

**Florida -** Since 2001, Palm Beach's contribution costs for employee medical benefits and pensions has increased 581%. Such benefits amount to 24.7% of the city's budget. A hiring freeze was installed on April 19 to reduce further escalations through attribution.

**Michigan -** State lawmakers are wrestling with a huge budget deficit of over $400 million which threatens to shut down operations by the end of November. One cost cutting idea is to reduce health insurance for school employees. Contradictory, the state lawmakers are eligible to receive state-paid health insurance for life after only six years of service.

**New Hampshire -** The $6 billion State commingled pension fund is funded at less than 60% with a deficit approaching $3 billion. The discount rate used was always too high, the contribution rates were too low and severance benefits were too high. Notably, the accounting methods the fund used were not accepted by any other public plan in the country.

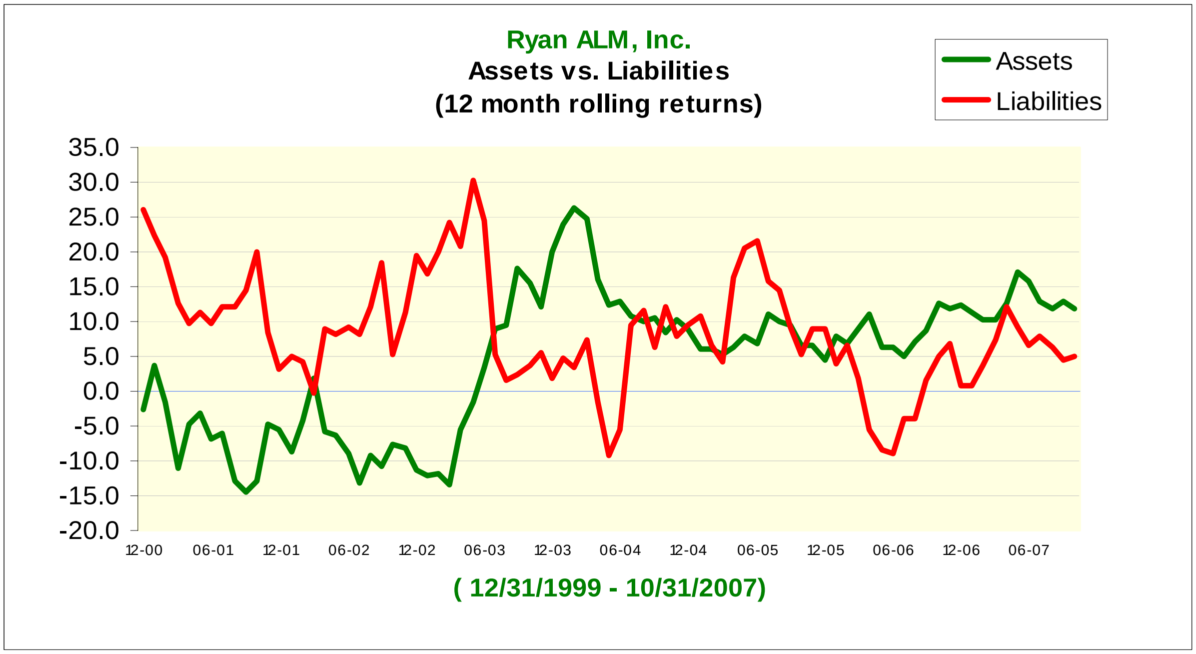
**Rhode Island -** Has a state budget deficit of $300 million and an unfunded pension liability of $4.9 billion. State income taxes have risen to a whopping 9.9% for higher income residents with property taxes one of the highest for any state. A former governor and mayors of Pawtucket and Providence have gone to jail for unethical behavior.

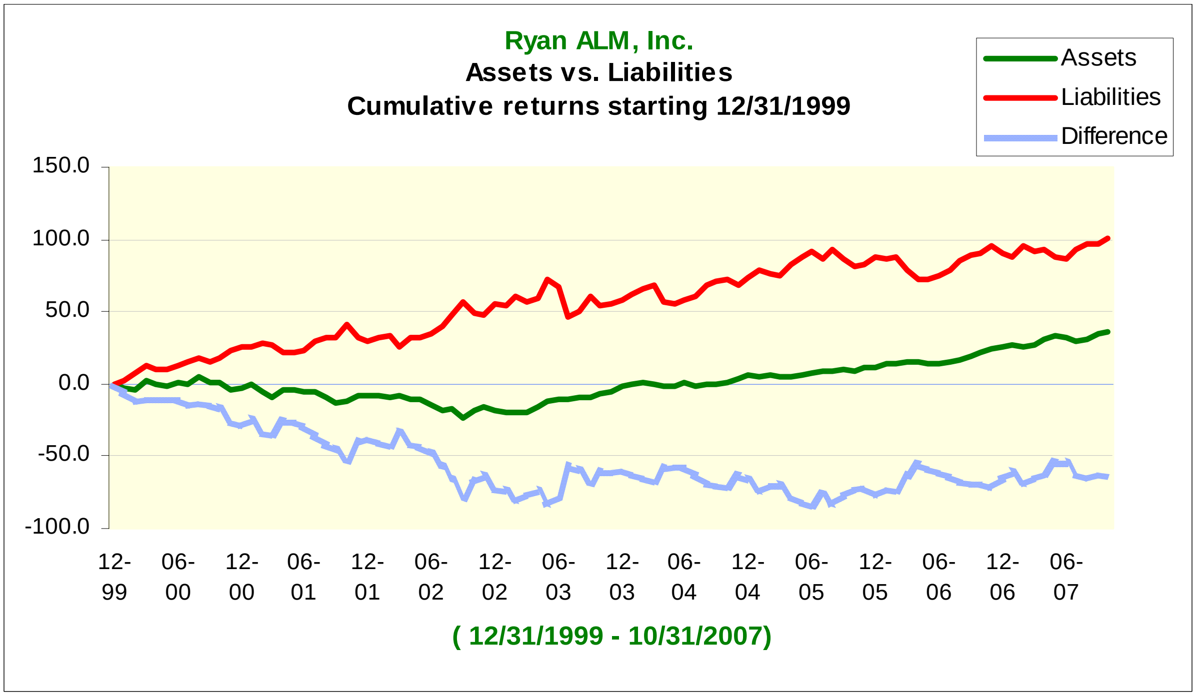
**West Virginia -** Faced with an $8 billion unfunded liability in health-care costs for retired state employees and teachers the Public Employees Insurance Agency (PEIA) had no choice but to impose co-payments and higher deductibles.

**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 **-63.95% suggesting any plan with a Funding Ratio below 156.37% 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/**




Ryan ALM, Inc.
Assets vs. Liabilities
Cumulative returns starting 12/31/1999
Assets
Liabilities
Difference
150.0
100.0
50.0
0.0
-50.0
-100.0
12-99
06-00
12-00
06-01
12-01
06-02
12-02
06-03
12-03
06-04
12-04
06-05
12-05
06-06
12-06
06-07
( 12/31/1999 - 10/31/2007)

# 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**