Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

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The Ryan Letter

August 2007

Index	Returns YTD 2007	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	3.51 %	100 %
IRS (Corporates)	2.74	
ROA (8% constant rate)	5.33	
Assets :		
Ryan Cash	3.70 %	5 %
Lehman Aggregate	3.06	30
S&P 500	5.20	60
MSCI EAFE Int'l	7.78	5
Asset Allocation Model	4.68 %	100 %
Assets – Liabilities		
Market	1.17%	
IRS	1.94	
ROA	-0.65	

Based on the Asset Allocation above, for the year 2007, pension assets outperformed liabilities by **1.17%** using market valuations (i.e. STRIPS); **1.94%** under the IRS Contribution rules (PPA Corporate rates); and -0.65% 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 -65% 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	4.68
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	3.51
Difference :								
Annual	-28.46	- 8.48	-30.89	18.08	-0.43	-4.44	11.44	1.17
Cumulative		-37.60	-73.40	- 60.08	-66.13	-76.75	-64.60	-65.39

God Bless Pension America !

Record Yield Volatility on Bills

Due to a potential credit crunch from the sub-prime mortgage fiasco, a rush to quality and liquidity ensued. This was best demonstrated by the yield on short T-Bills which dropped significantly (193 bps from 8/15 to 8/20 on the 1-month Bill) and the slope of the yield curve (from inverse to highly positive sloping). Here are the yield movements during the month of August based on the Ryan T-Bill Indexes :

Ryan Index	7/31	8/30	Change	8/15	8/16	8/17	8/20
1-month T-Bill	5.12%	4.19%	- 93 bps	4.28%	3.11%	2.96%	2.35%
3-month T-Bill	4.96%	4.15%	- 81 bps	4.25%	3.85%	3.75%	3.17%
1-mo vs. 30-yr	-20 bps	64 bps	84 bps	73 bps	181 bps	204 bps	262 bps
3-mo vs. 30-yr	- 3 bps	69 bps	72 bps	76 bps	107 bps	125 bps	180 bps

Note: The Treasury data syndicated in the Wall Street Journal is … Source: Ryan ALM
To view all Ryan Indexes go to: **www.RyanIndex.com**

Big News on OPEB !

The Internal Revenue Service (IRS) has ruled that employee contributions to a trust fund established by Bristol, R.I. to fund post employment benefits are ***tax exempt***. The ruling sets a precedent for other cities seeking similar solutions to Other Post Employment Benefits (OPEB). This could be a turning point in providing an incentive to prefund OPEB liabilities (just like pensions). At current interest rates, a sponsor can save 53% to 58% on a 15-year average duration and 63% to 68% on a 20-year average duration OPEB liability schedule by pre-funding (i.e. Liability Index Fund).

AON Survey on OPEB

A recent AON survey of 118 public sector employers on OPEB liabilities found the following situations:

1. New Jersey's OPEB liability is estimated at $58 billion
2. 46% of employers are considering three financing methods to prefund OPEB (General purpose bonds, OPEB obligation bonds, Revenue increases like taxes)
3. 66% of employers are not considering changing OPEB plan designs

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:

Alabama - The estimated state OPEB liability is almost $20 billion. Marc Reynolds, deputy director of the Retirement Systems of Alabama sees it as "a time bomb sitting there kind of ticking". He commented that policymakers will either have to cut benefits or pump in a lot more money. This could revive pressure on workers and retirees to pick up more of the cost of coverage – a step Alabama has resisted since their salaries are lower than those in the private sector. On August 15, the State Employees Insurance Board voted to put $50 million into an OPEB trust. They are estimated to owe $5 billion in OPEB liabilities. The Public Education Employees Health Insurance Plan put $200 million in its trust a few months ago and is faced with about $15 billion in OPEB liabilities.

California - State appellate court ruled on August 30 that the state has to repay the $500 million pension contribution to the Teachers pension fund that they skipped four years ago due to a budget crunch when Gov. Gray Davis slashed $3.6 billion in state spending. The appellate court ruled that the money be repaid with 10% annual interest. The state Department of Finance believed they had a strong defense because an independent actuary told the court that future benefits were not in jeopardy due to a supplemental fund that protects against inflation.

New York - State faced with an estimated OPEB liability of $47 billion. Health care costs for NY are paid for by current tax revenues (pay-as-you-go system). State senator Hugh Farley sponsored a Bill that would have blocked any cuts in health care. Gov. Spitzer vetoed this Bill and called for a commission to review ways to cut benefits. However, in 1994 lawmakers banned changing any benefits for teachers and other retirees of school districts.

Pittsburgh - The city's Controller's most recent Annual Financial Report for its three DB pension plans indicated that the Police Funded Ratio was 33%, Fire was 57% and nonuniformed personnel was 47%. The total unfunded liabilities are $469 million.

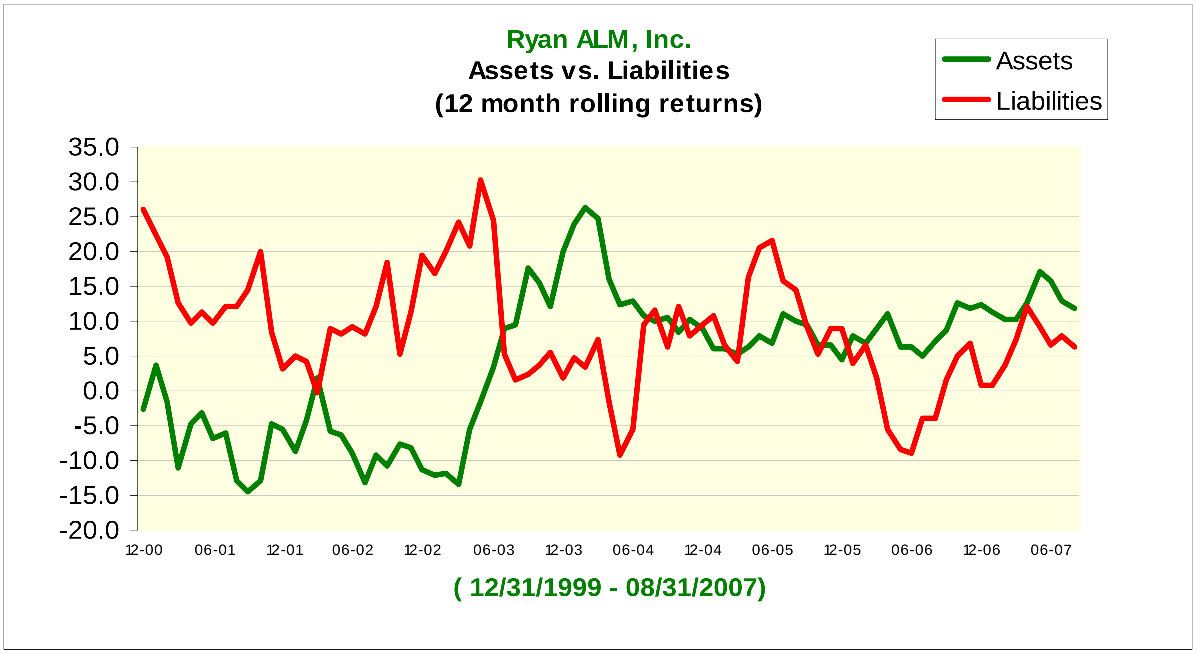
Oh, Canada !

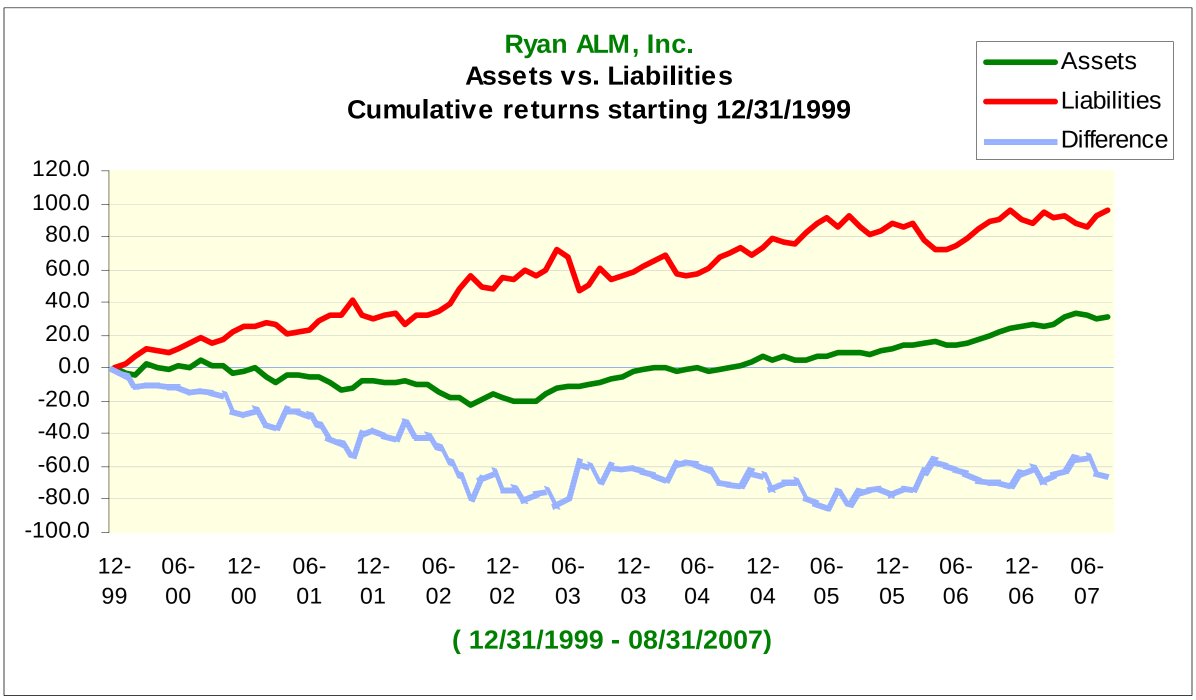
The Canadian Mint unveiled a pizza-sized gold coin weighting in at 220.5 pounds. It holds claim to the world's largest and highest denomination coin … with a face value of $1 million. Oddly enough, with the current price of gold ($682.20 an ounce), the coin is actually worth more than $1 million ($1,504,251.00). Escala Group, a global collectibles company, announced that this coin will be offered in an online auction through Teletrade, Inc., an online rare coin auction company.

Pension Scoreboard

Based on the Ryan generic Liability Index and a static Asset Allocation, as 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 149.87% 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 130 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