Ryan ALM, inc.

Asset/Liability Management *The Solutions Company*

Ronald Ryan, CEO, CFA

The Ryan Letter

November 2007

Index	Returns YTD 2007	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	11.76 %	100 %
IRS (Corporates)	3.65	
ROA (8% constant rate)	7.33	
Assets :		
Ryan Cash	5.00 %	5 %
Lehman Aggregate	6.66	30
S&P 500	6.23	60
MSCI EAFE Int'l	14.20	5
Asset Allocation Model	6.82 %	100 %
Assets – Liabilities		
Market	-4.94%	
IRS	3.17	
ROA	-0.51	

Based on the Asset Allocation above, in the year 2007 pension assets **underperformed** liabilities by **-4.94%** using market valuations (i.e. STRIPS); won by **3.17%** under the IRS Contribution rules (PPA Corporate rates); and lost by **-0.51%** 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 -78% since 1999** !

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

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	6.82
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76
Difference : Annual	-28.46	- 8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94
Cumulative		-37.60	-73.40	- 60.08	-66.13	-76.75	-64.60	-78.38

God Bless Pension America !

Funded Ratios Hit Hard in November

Based upon the asset allocation shown on page 1, pension assets underperformed liabilities significantly in November by at least **-7.87%** (assets = -2.11%, liabilities = 5.75%). Amazingly, our pension calculations on page 1 show that **assets underperformed liabilities by -78.38% since the end of 1999 !** We calculated an underperformance of **-73.40%** at the end of 2002. So since the perfect storm of 2000-02 we find no improvement.

Who's to Blame for the Mortgage Mess?

MSN Money reporter Michael Brush suggests Alan Greenspan is the number one scapegoat or villain of our story. I will agree. When the stock market was on fire in the late 1990s showing consistent high returns above 20% for five continuous years from 1995 thru 1999, the Fed chairman released the Fed model in 2000 showing that the stock market was at least 60% *overvalued*! The Fed model was based on relative value versus the 10-year Treasury yields :

S&P Index Level / (Estimate of Operating Earnings / 10 year Treasury Yield)

1,438.56 / (57.82 / 6.47) = 1,438.56 / 893.52 = 1.61%

Well, guess what the stock market did. It reacted negatively and stocks started to decline rather quickly. In an effort to get a stock market correction that was a soft landing instead of a free fall, the Fed began to lower short-term rates since their model was based on relative value versus interest rates. But the stock market did not respond so the Fed continued to lower and lower Fed Funds to around 1% (lowest rate in over 40 years). As a result, ARMs (adjustable Rate Mortgages) became the rage as home refinancings hit a record. Houses were generally inflated too at this time. So the home owner was faced with an overvalued home financed with initially cheap rates (ARMs). As soon as short rates climbed back up over the last five years, home owners got hit with escalating mortgage payments and generally lower home valuations … the perfect storm.

This move by the Fed to lower rates also created a bond market rally which was exaggerated by pension liabilities going up in present value by over 55% for those three years (2000-02). With stocks going thru a major correction of -37.65% cumulative (S&P 500), we witnessed equity assets underperforming pension liabilities by about 90% in three short years … another perfect storm. Our data suggests that most pension funds went thru a roller coaster ride where their Funded Ratio (assets/liabilities) went from 100.00% (normalized) in 1995 to 163.30 in 1999 to 73.89% in 2002.

OPEC to Abandon U.S. Dollar ?

OPEC countries are seemingly faced with a currency dilemma. For many years they have pegged their currencies to the dollar. Due to the continued weak U.S. dollar has caused the OPEC states a serious bout of inflation as imports from other countries have become much more expensive. In Qatar, inflation hit 11.8% last year and the IMF estimates it will average 12% this year. If OPEC moves away from the dollar it could undermine demand for dollars and encourage others to diversify their holdings. Kuwait already switched to a basket of currencies earlier this year. A key debate will come in early December when heads of state of the Gulf Cooperation Council meet in Doha, Qatar. Oil-producing countries have reduced their dollar holdings to the lowest level in two years and shifted oil income into other currencies, according to the Bank for International Settlements. Members of OPEC and Russia have reduced their dollar holdings from 75% in the third quarter of 2001 to 70% 18 months ago to 61.5% today. OPEC's dollar deposits fell by $5.3 billion according to BIS (central bank). President Bush is sending his economic A-team to visit China for a strategic economic dialogue in Beijing December 14th. The Bush administration wants to get China's cooperation in preventing a dollar collapse. Based on this latest OPEC dollar controversy, oil prices moved up to near $95 a barrel in mid November.

<u>Foreign Pension Crises</u>

France - The French parliament in late November approved medical fees and a tax on stock options to help finance social security. The current deficit is 11.7 billion Euros ($17.3 billion).

Greece - Greece revealed pension reform proposals as hundreds of protestors marched through Athens. The government will offer incentives to employees to stay at work longer. The pension system is expected to go bust in 15 years if no measures are taken. Experts say the actuarial deficits could reach 400 billion Euros … double the Greek GDP.

Japan - The government's top economic panel said that the 5% consumption tax would have to be doubled to fully finance the state pension program requiring 12 trillion yen.

<u>National Debt Hits Record</u>

The national debt has hit $8 trillion for the first time in American history. Congress just passed and President Bush signed into law a new government borrowing ceiling of $9.815 trillion. The budget deficit for the fiscal year ending September 30 was $162.8 billion, the lowest in five years. The total debt is actually higher than reported since it includes the money borrowed from the Social Security and other government trust funds. It took our country from George Washington to Ronald Reagan to reach the first billion in debt.

<u>If Elected President …</u>

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 **<u>rryan@ryanalm.com</u>** :

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) 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 trust fund which is the next big financial crisis that all Americans will pay for in higher FICA taxes. Or put the sale proceeds in a lock box and only use the interest income. This way we would have an earning asset rather than the reverse.

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 - Los Angeles is faced with a serious budget crisis mainly due to rising pensions and medical benefits. Since 2000, Los Angeles workers' costs have surged 53% to $4 billion a year … rising on average 7.5% per year. This resulted in a swing of $1 billion from sizable surplus to a $300 million deficit.

New Hampshire - The New Hampshire Retirement System (NHRS) enjoyed significant returns of 16% for the fiscal year ending June 30. Even so, the $6 billion fund is still only 63% funded with a deficit of about $2.7 billion. NHRS was told that contributions need to equal nearly 15% of workers salary. The new rates would not go up until 2010 representing an 84% increase for police and 50% for teachers and 6% for firefighters.

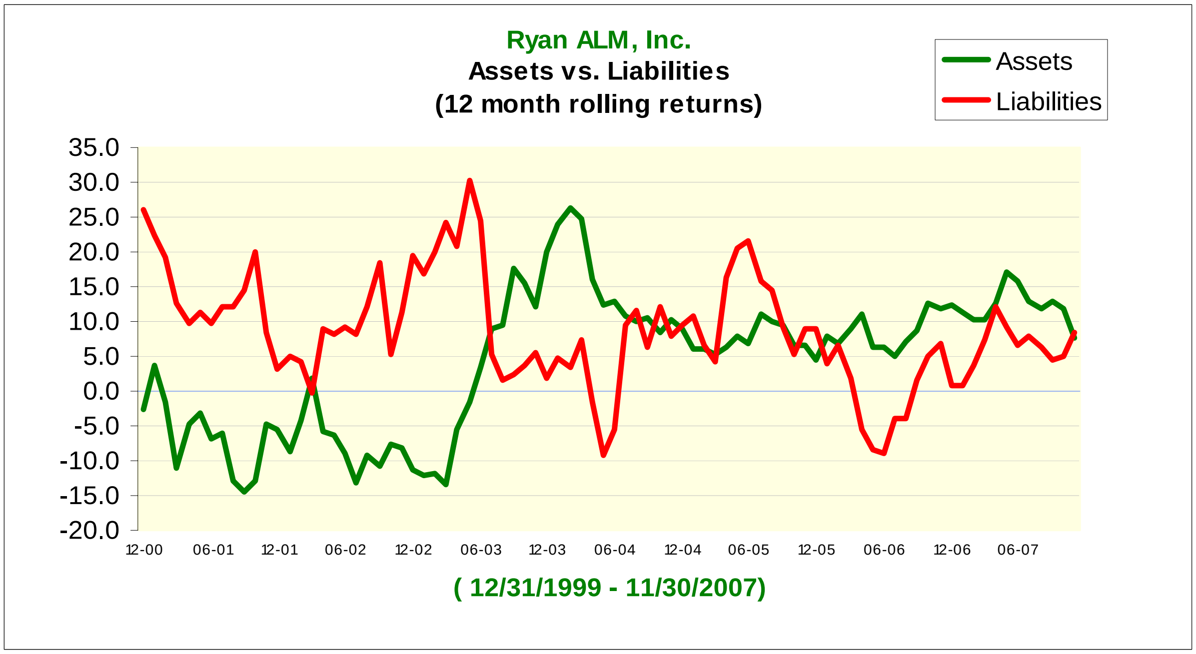
Ohio - Health-care costs for Ohio Teachers retirees cost $4,200 on average per teacher last year. This is a 20% increase from 1998 levels. The State Teachers Retirement System has seen health-care bills soar from $259 million in 2001 to $490 million in 2006. Under current trends, the system will run out of funds to cover these escalating expenses by 2021. As a solution, pension leaders are backing legislation that would increase contributions by 2.5%, phased in over five years.

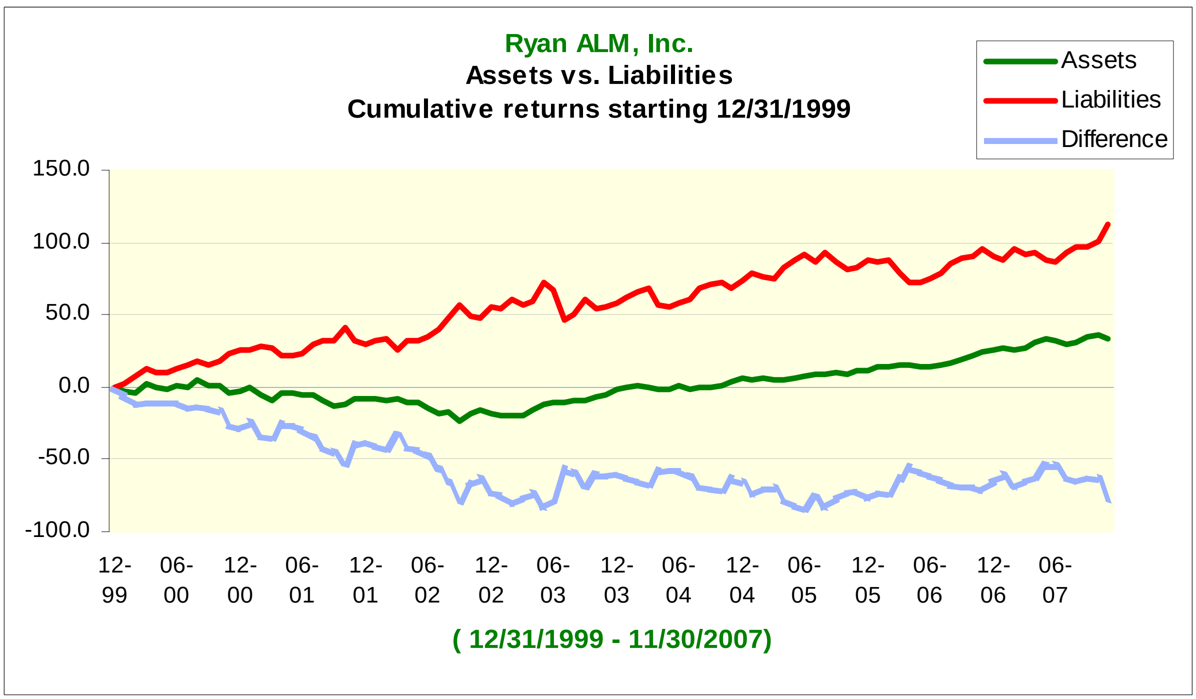
Texas - Texas Teachers Retirement System , one of the nation's largest funds, reported an unfunded healthcare liability of $19 billion. Although Texas was the only state to reject compliance with GASB 45, State Comptroller Susan Combs directed the teacher system to disclose its unfunded healthcare liability.

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 **-78.38% suggesting any pension with a Funded Ratios below 158.59 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
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
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 - 11/30/2007)


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 - 11/30/2007)

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 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)

Ryan Indexes
Summary - Ryan Treasury Yield Curve
11/30/2007

Index	# of Issues	Yield	MDur	Total Returns Month	Quarter	Year	12 MO	3 Yrs*	5 Yrs*	10 Yrs*	15 Yrs*	20 Yrs*
Ryan 1 Month Index	1	3.678	0.072	0.350	0.657	4.484	4.940	4.181	2.943			
Ryan 3 Month Index	1	3.161	0.242	0.465	0.805	5.009	5.452	4.398	3.063	3.802	4.180	
Ryan 6 Month Index	1	3.362	0.486	0.649	1.019	5.504	5.942	4.605	3.169	3.887	4.275	
Ryan Cash Index	3	3.400	0.267	0.488	0.827	4.998	5.444	4.395	3.059	3.834	4.273	
Ryan 1 Year Index **	2	3.255	0.966	1.070	1.446	6.088	6.383	4.450	3.206	4.234	4.646	
Ryan 2 Year Index	1	3.040	1.925	1.917	2.303	7.259	7.263	4.135	3.274	4.619	5.026	5.911
Ryan 3 Year Index	1	3.025	2.318	2.361	2.905	8.326	8.073	4.457				
Ryan 5 Year Index	1	3.414	4.564	3.785	4.415	10.003	9.165	4.726	4.178	5.645	6.050	6.910
Ryan 10 Year Index	1	3.970	8.072	4.390	5.648	10.164	8.441	5.122	4.777	5.861	6.475	7.450
Ryan 20 Year Index **	2	4.185	12.018	5.209	6.714	10.429	7.604	6.057	5.555	6.365	7.107	7.989
Ryan 30 Year Index	1	4.400	15.965	6.024	7.775	10.628	6.705	6.938	6.283	6.802	7.680	8.474
Ryan Index	4	3.706	7.632	3.869	4.782	9.511	8.168	4.547	4.004	5.384	6.012	6.952
Lehman AGG	9,242	4.860	4.370	1.798	2.713	6.667	6.048	4.782	4.793	6.050	6.566	7.621

* Annualized

Index	Yield	Yield Change (bp) Month	Quarter	Year	12 MO	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Ryan 1 Month Index	3.678	-31	28	-105	-155	166	242			
Ryan 3 Month Index	3.161	-78	-65	-185	-186	93	193	-206	-22	
Ryan 6 Month Index	3.362	-72	-71	-173	-173	92	207	-209	-20	
Ryan Cash Index	3.400	-61	-36	-155	-171	117	214	-200	-19	
Ryan 1 Year Index **	3.255	-78	-78	-174	-168	62	171	-227	-56	
Ryan 2 Year Index	3.040	-89	-92	-177	-158	2	98	-274	-176	-469
Ryan 3 Year Index	3.025	-89	-97	-172	-148	-24				
Ryan 5 Year Index	3.414	-75	-81	-129	-103	-29	16	-242	-282	-505
Ryan 10 Year Index	3.970	-50	-61	-74	-49	-39	-24	-191	-297	-503
Ryan 20 Year Index **	4.185	-43	-52	-58	-32	-50	-44	-178	-308	-487
Ryan 30 Year Index	4.400	-35	-43	-41	-16	-61	-64	-165	-319	-470
Ryan Index	3.706	-54	-61	-105	-81	12	53	-217	-254	-478
Lehman AGG	4.860	-37	-45	-48	-27	40	26	-150	-201	-430

The Ryan Index is the first daily bond index started in March 1983.

The Ryan Index is the most complete Treasury Auction index series with data starting in 1979.

** Ryan 1 Year Index is currently weighted 2/3 = 6 Month Bill and 1/3 = 2 Year

Ryan 20 Year Index is currently weighted 1/2 = 10 Year and 1/2 = 30 Year

As of 11/15/2007 the Ryan Index will no longer include the 3 Year Auction

For more information on Ameristock/Ryan ETF's please visit Ameristock.com

For more information on the Ryan Indices please visit RyanIndex.com