Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

Ronald Ryan, CEO, CFA

The Ryan Letter

June 2008

Index	Returns YTD 2008	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	1.28 %	100 %
IRS (Corporates)	1.21	
ROA (8% constant rate)	4.00	
Assets :		
Ryan Cash	1.36 %	5 %
Lehman Aggregate	1.13	30
S&P 500	-11.90	60
MSCI EAFE Int'l	-10.58	5
Asset Allocation Model	-7.27 %	100 %
Assets – Liabilities		
Market	-8.55%	
IRS	-8.48	
ROA	-11.27	

Based on the Asset Allocation above, year to date 2008 pension assets **underperformed** liabilities by **-8.55%** using market valuations (i.e. STRIPS); lost by **-8.48%** under the IRS Contribution rules (PPA Corporate rates); and lost by **-11.27%** 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 -90% since 1999** on a compounded index basis starting at 100 on 12/31/99!

(see Graphs and Index disclosures on pages 6 and 7)

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	-7.27
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	1.28
Difference:									
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-8.55
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-89.88

God Bless Pension America !

Lehman Aggregate vs. Treasury STRIPS

The Lehman Aggregate has been used as the proxy or bogey for the investment grade bond market for over 20 years. It has served the fixed income market well. However, it's composition and risk/reward behavior have proven what I have preached for a long time … there is **NO Alpha in bonds** and **the Aggregate does NOT represent liabilities** (see Research on our web site) Comparing the return behavior of the Lehman Aggregate vs. the Ryan Treasury STRIPS indexes proves my points:

Annual Total Returns
(Periods Ending 06/30/08)

Periods Starting >	06/30/98	06/30/88	02/28/85
Lehman Aggregate	5.68%	7.36%	8.19%
Ryan 4-year STRIPS Index	5.87	7.25	8.06
Difference	- 0.19	0.11	0.13
Ryan 5-year STRIPS Index	6.37	7.89	8.81
Difference	- 0.69	- 0.53	- 0.62
Ryan 10-year STRIPS Index	7.56	9.71	10.97
Difference	- 1.98	- 2.35	- 2.78
Ryan 15-year STRIPS Index	7.69	10.53	12.37
Difference	- 2.01	- 3.17	- 4.18

The Lehman Aggregate consistently reports an average duration of between 4.00 to 5.00 years. When comparing the Agg vs. the Ryan 4.0 and 5.0 year STRIPS suggests that there is no value added in the investment grade bond market. The Agg loses in every time period to the 5-year STRIPS index (over 10, 20 years + since the inception of STRIPS) and loses or marginally wins vs. the 4-year STRIPS index (before fees and transaction costs). So what is the value in investment grade bonds … **BETA**. Bonds should be the Liability Beta portfolio that matches liability (i.e. **Liability Index Fund**).

Comparing the Lehman Aggregate vs. liabilities proves why this index can never be used as a benchmark for liabilities. Measuring the Agg vs. the Ryan 10-year and 15-year STRIPS indexes (good proxies for the average duration of pension liabilities) shows the tremendous mismatch of risk/reward behaviors. The Agg loses by -1.98% to 2.78% annually vs. the Ryan 10-year STRIPS and by -2.01% to 4.18% vs. the Ryan 15-year STRIPS. As I said so repeatedly over the last 17 years : "**given the wrong index … you will get the wrong risk/reward!"**

Fundamental Indexes for Bonds

In my recent research ("Fundamental Indexes … for Bonds!"), I tried to explain the structural flaws of traditional bond indexes. One common problem is that most bond indexes are market weighted. This is mission impossible as Treasury and Agencies are both *stripped* and reported delinquently or not at all. Mortgage-backed securities are *prepaid* and reported delinquently as well. This would support why equal-weighted bond indexes are a solution since they have no skewness or weight bias. Similar to the fundamental index trend in equities, investors should reconsider the weighting methodology for bonds. As of May 31, 2008 the Treasury reported that 29.63% of Treasury bonds have been *stripped* ($165.97 billion out of total outstanding of $560.23 billion). Most bond indexes include Treasuries and Agencies at the *original issue amount* (without stripping) which eliminate Treasury STRIPS and Agency zero-coupon bonds from their index plus *overweight* every Treasury and Agency issue. As a result, they only include coupon Government bonds. Mathematically, the longest duration coupon bond is about 16.0 years which is another reason why traditional bond indexes should never be used as benchmarks for liability driven investments (LDI) ... you can not match or fund long liabilities!

Global Accounting Standards!

It is my prayer that accounting standards become simplified and unified into a universally accepted set of rules used throughout the world so that financial statements can be reported in the same way (i.e. accurately) no matter what country it is in. To that end, starting in April 2001, the International Accounting Standards Board began their mission to converge the global accounting standards into a single set of high-quality reporting standards. Historically, two sets of accounting standards were used on a global basis: the International Accounting Standards (IASC) and the US generally accepted accounting principles (US GAAP). After a three year debate, the result was the creation of the International Accounting Standards Board (IASB) in 2001. In just over seven years, more than 100 countries throughout the world now require or permit the use of International Financial Reporting Standards (IFRS). The US is steadily moving over to the IFRS rules. Congratulations! …to IASB and Sir David Tweedie (Chairman of IASB).

The Pension "Granny" Test and Phantom Earnings

Sir David Tweedie (Chairman of IASB) in his recent speech before the Empire Club of Canada (**www.RyanALM.com/CompanyInfo/Research**) made the baffling pension accounting rules a point of contention. He said… "Suppose a pension fund is in equilibrium, having liabilities of $40 million matched by assets of a similar amount. If the value of the assets was to fall to $30 million and liabilities remained the same, the fund would have a deficit of $10 million. Under what is the commonly used option of IAS 19, derived from the former US standard, the deficit is reduced:

a) to remove market noise by a reduction of 10% of whatever is the higher of assets or liabilities (in this case liabilities, leading to a reduction of $4 million).

b) by spreading the remaining deficit of $6 million over the expected working lives of the employees (i.e. 10 years).

The result is that the deficit shown in the financial statements become $600,000 …Explain that to your granny. Furthermore, not only is the change in value of a pension fund not reflected in the financial statements correctly but **the annual cost of pensions charged against annual income is offset by the *estimated* long term return on the assets in the fund**. Some of these estimated returns have been heroic! In the United States from 2000-2004, the income statements of the top 500 companies, recorded these estimated returns at $498 billion. The actual return amounted to $197 billion. In other words, $301 billion of phoney profits flowed through the profit and loss accounts of the top 500 American companies over a period of five years."

Learning To Live With Inflation

That was headline in the ***Financial Times*** recently. Oil prices have been the focus of reporters but most commodities experienced double-digit growth rates in the last 12 months. "It looks like Ben Bernanke may be regretting his rate cuts" says former UK chancellor, Nigel Lawson. Bernanke panicked in the face of the credit crunch and cut the Fed Funds rate from 3.25% down to 2.0%. The Fed saw deflation as the enemy. The Europeans saw it differently. The ECB held its discount rate at 4% and may raise it. The Fed seemingly continues to fight deflation keeping its key lending rate at 2% less than half of the CPI last reported growth rate of 4.2%. The CPI is certainly not a good measurement of current inflationary trends. It is a mysterious calculation full of statistical biases. Seasonal adjustments are one way these numbers are manipulated. Then there are quality adjustments suggesting that if a product improved by 10% in quality, a 10% price increase is warranted such that the CPI adjusted price would show no price increase. The easy monetary policy of the Fed is inflationary. The one time tax rebate is inflationary. The dollar devaluation is inflationary. Rising commodity prices are inflationary. The longer these trends persist the more dangers we face no matter what the CPI is recording. Beware and be ready!

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 55% 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:

Kentucky - The state legislature passes pension reform to address the $26 billion pension shortfall. This legislation will increase the pension contribution by $52 million each year. It also requires state employees to contribute 1% of payroll for their retirement health insurance. This legislation also reduces the COLA to 1.5% from the previous cap of 5%. Senator Tom Buford opposed the bill as insufficient remedies and predicted that the state will still face an unfunded pension liability of $33 billion even if the General Assembly makes all of their scheduled contributions.

New Hampshire - Governor John Lynch signed a bill that overhauls the state pension system. The bill shifts $250 million from a cost-of-living adjustment (COLA) account into the main pension fund which will hold down increases in employer contributions. Without the bill, contributions would have increased 53% in 2010. Instead, the increase will be 14% for local governments and 27% for the state.

Vermont - Starting in July, state employees will have their pension contribution increased from 3.35% of payroll to 5.1%. New employees will receive retirement benefits at the age of

65 instead of age 62. They will also have to put in more time than predecessors if they want to keep their health insurance coverage in retirement. As retirees, they will receive full cost-of-living adjustments (COLAS) instead of half with a cap of 5%.

Ten Worst State Pensions – According to a recent S&P study here are the 10 worst state pension plans based on their reported Funded Ratio. Remember these ratios are based on GASB accounting which prices liabilities at the ROA (@ 8.00% average discount rate). As a result, liabilities are about 40% higher than actuarially reported and the deficit should be about 20% higher :

($ billions)

State Pension	Pension Size ($)	Deficit (%)	Deficit ($)
West Virginia	11.1	47.3 %	5.3
Rhode Island	10.6	46.6	4.9
Connecticut	33.9	43.6	14.8
Illinois	79.9	40.5	32.4
Oklahoma	24.4	40.5	9.9
Alaska	21.6	39.0	8.4
New Hampshire	6.4	38.6	2.5
Indiana	28.2	35.7	10.1
Hawaii	14.7	35.0	5.1
Louisiana	30.9	33.7	10.4

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. Reduce Our U.N. Costs – The U.N. was a well conceived idea that has gone sour for America and many other Nations over the 59 years of its existence. The central purpose of the United Nations is to preserve peace. Under the charter, member states agree to settle disputes by peaceful means and refrain from threatening or using force against other States. America bears the burden for a great portion of the U.N. costs (@ 30%) but we only have equal vote with the other 192 nations. There needs to be a more equitable sharing of costs. The site of UN headquarters consists of 18 acres owned by the UN. It is an international territory owned by the UN not America!

2. Require Less Dependence on Foreign Oil - Given the escalating and high cost of oil we continue to feed these foreign oil exporting countries with great wealth, some of whom are considered our enemy (i.e. Venezuela). We need to reduce our dependence on foreign oil. We need to be self sufficient on such a dependent commodity. We need to allow more exploration in our own oil deposits (i.e. Alaska and off shore Florida). We need to promote other sources of fuel as a replacement for oil, especially flex-fuel (alcohol based fuel). We need to find a replacement for the internal-combustion engine. After 100 years, can't we find a more energy efficient and cost effective alternative to run our cars and trucks. Congress needs to act quickly to promote the proper incentives plus place penalties (taxes) where companies do not behave in the best interests of the American economy (i.e. gas guzzling cars). Most of these foreign oil export countries have built a Sovereign Wealth Fund of incredible size. This is most commendable to these countries leadership as they save and invest during their good times (surplus) protecting and ensuring their future. Where is America's Sovereign Wealth Fund? Why don't we ever run a Surplus economy? What role do oil lobbyists play in our energy demise?

3. Increase IRA Allowance – As we prepare for a Social Security crisis, American taxpayers should be allowed to provide for their retirement. The IRA has been a great invention but limited. We need to allow our citizens to provide for their own retirement. We need to raise the limits on what taxpayers can allocate to their IRA plan. At current IRA allowances plus Social Security benefits, most Americans would be hard pressed to meet retirement costs. Why not allow a 20% + allocation to an IRA. The government still gets paid in taxes. The only question becomes is it upfront (Roth IRA) or deferred.

4. Make Healthcare Assets Tax-Exempt - We are currently facing the largest financial disaster in America's history … how to pay for Healthcare benefits (OPEB). Pensions were given an incentive to prefund pension liabilities by making them tax-exempt. However, healthcare assets do not have the same tax treatment. As a result, there has been a reluctance to prefund. Instead of funding these future liabilities at 50 to 60% cost thereby saving 40 to 50% most institutions (corporate and Public) have chosen a pay-as-you-go strategy which funds such liabilities at 100% cost. Treat OPEB assets the same as pension assets … make them tax-exempt!

5. Reduce Taxes – If our Declaration of Independence is correct that all men are created equal then perhaps we should treat our citizens the same way. Robbing the rich to give to the poor may be a Robin Hood value but does not work in a capitalist system. We need to motivate the rich to live and work in America. A FLAT INCOME TAX would be a fair system which would eliminate much cost of preparing those arduous tax forms and generate as much revenue as the government gets today. We also need to reduce the Corporate income tax which is the second highest in the world to attract and keep corporations in America. We need to create an environment that motivates the most productive people and companies to live, build and work here. In this way, they will in turn hire more people, spend more in our economy. We should also make permanent the lower capital gains tax rates and eliminate double taxation of dividends to motivate economy activity.

6. Find and Buy Low Cost Manufacturing - America has steadily lost its manufacturing to the rest of the world due to our higher labor costs and taxes. We need to find a way to produce our goods cheaper where the production facilities are on our soil. It's time we become more self-dependent, especially on any critical goods and services. As we see with oil, any dependence on foreign goods here can be harmful to our economy. Why not buy a less developed country to be a low cost provider where we send our intellectual property to teach a low cost labor force. We do not want them to come to America where they would have to be paid at least our minimum wage, move away from family and live a life style they are not used to or perhaps want. Remember, most of America's land mass was purchased! Our key cities and environmental resources were founded mainly by purchasing the land (i.e. Manhattan, Louisiana Purchase, Alaska, etc.). I would think that Haiti is an ideal candidate. It is close to our shores with the third largest land mass in the Caribbean. I would think that we could buy this undeveloped country for a lot less than the Iraq war costs. I am sure that the Haitians would welcome to become a U.S. possession that would upgrade their way of life. I am sure that the politicians would also welcome it for a price that would be less costly than any US war.

7. 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! Create tax incentives for companies to build plant & equipment (i.e. jobs) in America. It worked before in the 1960s and 1970s … we need a strong *corporate* America.

8. Legalize National Lottery - There are about 38 states that have a state lottery. For many states, 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.

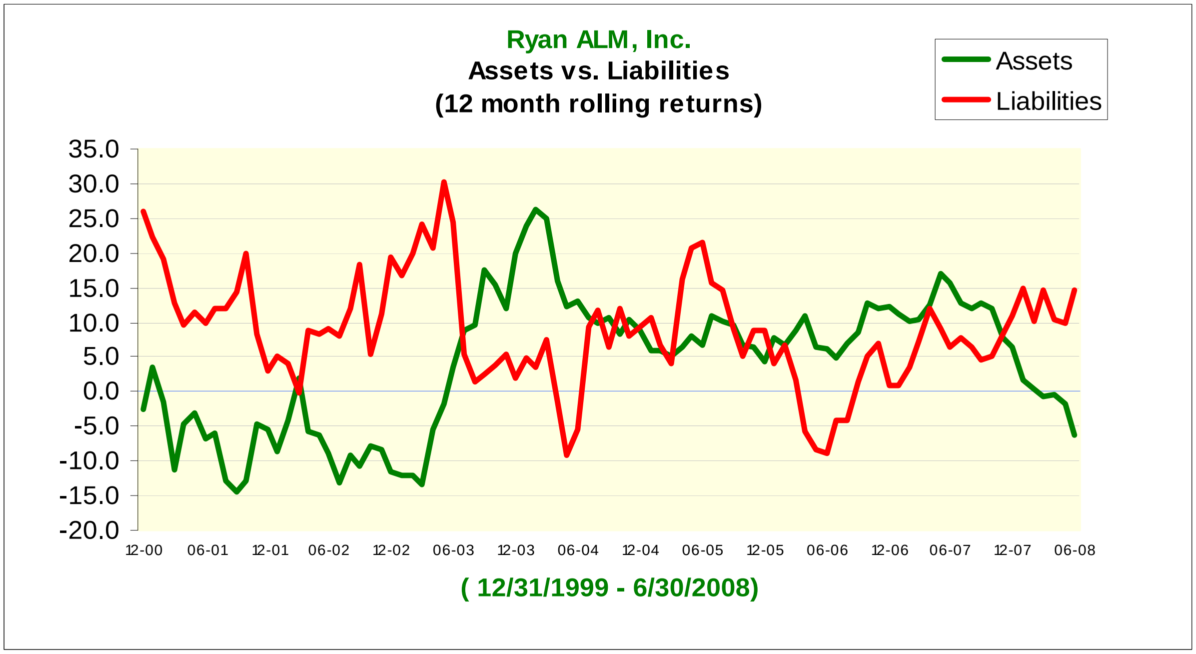
9. Sell our Gold – Since we left the Gold standard many decades ago, there is no economic reason to hold this commodity. Given the fact that Gold is now at an all time high price ($821.50 per troy ounce as of 11/30/07) and our economy needs a stimulus (other than raising taxes) this might be a proper 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).

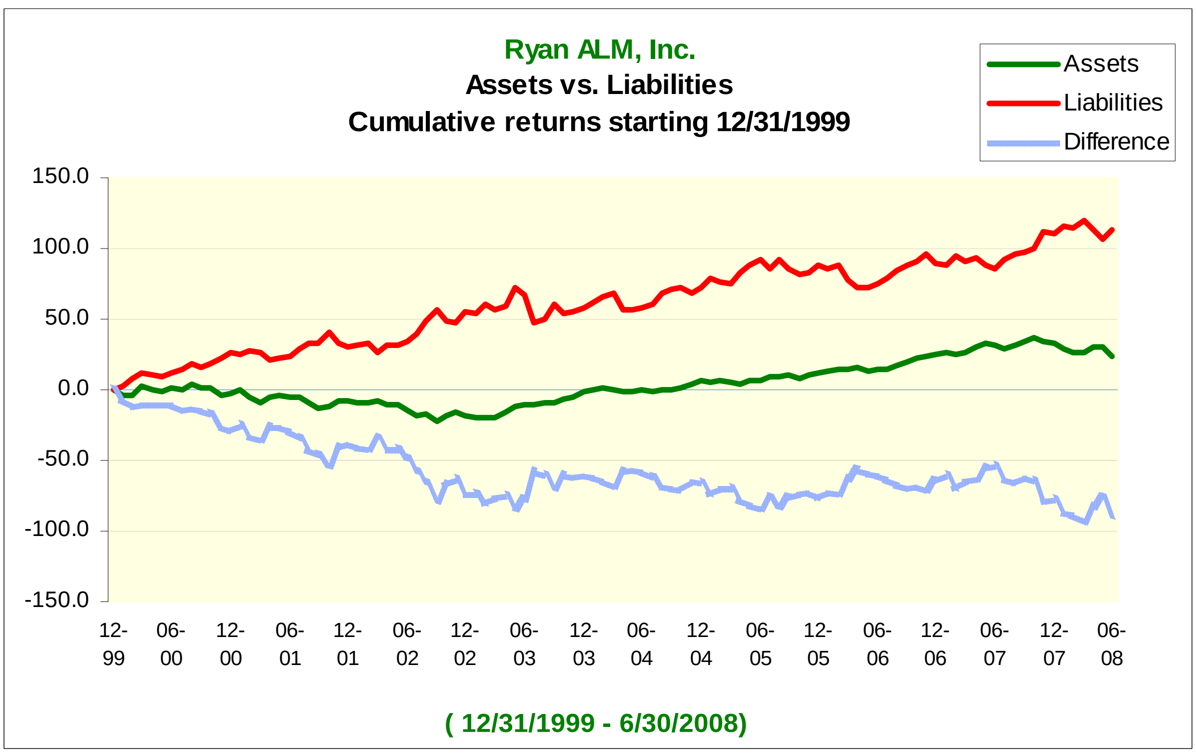
10. Get rid of Electoral College - This antiquated system is in defiance of our Declaration of Independence which states that all men are created equal. Each American should get an equal vote in our elections. Anything less or more contradicts our heritage.

"My friends, we live in the greatest nation in the history of the world.
I hope you'll join with me as we try to change it" **(Huh?)**
Barrack Obama

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 **-89.88% suggesting any pension with a Funded Ratio below 172.76 in 1999 has a deficit today !**. As a Pension Crisis watchdog, we have also designed the **Pension Monitor** as the most comprehensive site for pension articles in the world today: **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 and 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.

ETFs

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)