Ryan ALM, inc.

Asset/Liability Management *The Solutions Company*

The Ryan ALM Quarterly Pension Letter™

December 31, 2019

Index	Returns 2019	Weights
Pension Liabilities:		
Market (Tsy STRIPS)	13.92%	100 %
ASC 715 (FAS 158)	22.15	
PPA (MAP 21 = 3 Segments)	8.47	
PPA (Spot Rates)	25.60	
GASB /ASOP (7.50% ROA)	7.50	
Pension Assets:		
Ryan Cash	2.61 %	5 %
Bloomberg Barclay Aggregate	8.72	30
S&P 500	31.48	60
MSCI EAFE Int'l	22.77	5
Asset Allocation Model	22.54 %	100 %
Pension Assets – Liabilities:		
Market	8.62%	
ASC 715 (FAS 158)	0.39	
PPA (MAP 21 = 3 Segments)	14.07	
PPA (Spot Rates)	-3.06	
GASB/ASOP (7.50% ROA)	15.04	

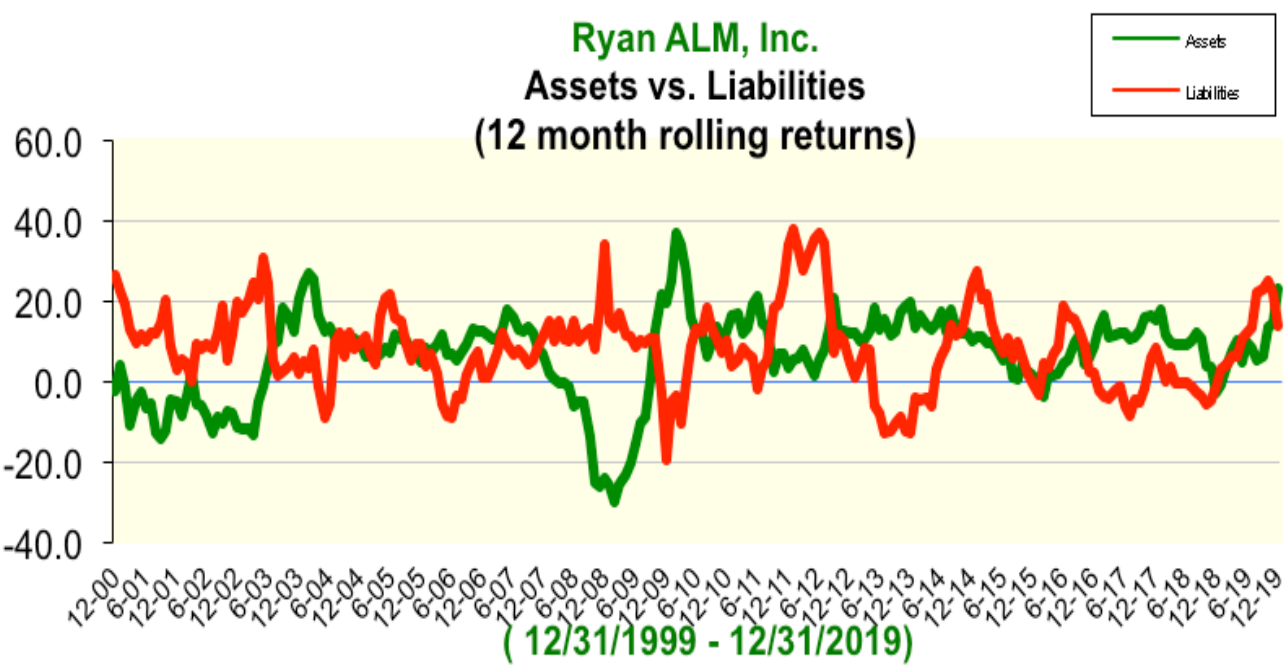
Year -to-Date

Using the Asset Allocation return above, the difference in pension asset growth vs. liability growth in 2019 is: **8.62%** (market valuation STRIPS), **0.39%** (ASC 715), **14.07%** (PPA 3-segment rates), **-3.06%** (PPA-Spot Rates) and **15.04%** (GASB/ASOP). Such valuations show the significant difference in ***not*** using *market* valuations. Although asset growth has been very strong this year, most corporate plan sponsors will have only slightly exceeded liability growth (ASC 715) resulting in little movement in funded status. Public plan sponsors will see assets outperform liability growth based on a 7.50% ROA (GASB). However, given the trend to reducing the ROA will increase liability growth for Public plan sponsors. A 25 basis point decrease in the ROA from 7.50% to 7.25% would show liability growth at about 10.25% based on a 10-year liability duration.

<u>Since 1999</u>

Most pension funds enjoyed a funded ratio surplus in 1999 but **pension asset growth has *underperformed* liability growth since by an estimated -163.93%** on a compounded index basis starting at 100 on 12/31/99! Starting at a Funded Ratio of 100.00 on 12/31/99, the estimated funded ratio today would be 64.95%.

Total Returns										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Assets	-2.50	-5.40	-11.41	20.04	8.92	4.43	12.25	6.36	-24.47	15.73
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	10.99	33.93	-19.52
Difference:										
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	35.25
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-77.50	-181.53	-106.9
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Assets	11.89	3.27	11.79	19.04	9.74	1.22	8.12	15.15	-2.96	22.54
Liabilities	10.13	33.77	4.46	-12.59	24.35	-0.49	1.92	7.94	-1.26	13.92
Difference:										
Annual	1.76	-30.50	7.33	31.63	- 14.61	1.71	6.20	7.21	-1.70	8.62
Cumulative	-115.67	-195.73	-194.30	-120.74	-177.14	-172.78	-163.36	-160.34	-162.68	-163.93



More From Ryan ALM

Cash-Flow Driven Investing (CDI)

The U.S. defined benefit pensions have enjoyed a good performance run during the last 10 years. Funded status has improved for a majority of plans, although contribution expenses continue to rise. Is it time to take some risk off the table? We believe that it certainly is the right time. But, taking risk off the […]

Read more of this post

Why A Dual Asset Allocation Makes Sense

I am looking forward to speaking at the upcoming IFEBP in San Diego. I've been asked to speak about "Modern Asset Allocation", which is a great topic. One of the key points that I will make is that plan sponsors should be looking to separate their Retired Lives from Active Lives liabilities and as a [...]

Read more of this post

What are you hedging?

Since the Great Financial Crisis (GFC) many pension plans have shifted assets into either Treasury Inflation-Protected Securities (TIPS) or real assets (commodities) or both. The question that I'd ask is what are they trying to hedge? Is it asset inflation or pension inflation? If it is pension inflation then they are likely not hedging their […]

Read more of this post

Reversion to the Mean?

My crystal ball is certainly no better than anyone else's in forecasting just about anything (just look at my NFL football pool results), let alone how the U.S. equity market is going to perform over the next day, week, month, and year.   But, by looking at how the S&P 500 has performed since 1926 […]

Read more of this post

Cheiron Updates Their Multiemployer Analysis

Cheiron, a leading actuarial consulting firm, has provided a fresh perspective on the state of the multiemployer pension universe with a particular focus on those plans deemed to be in Critical and Declining (C&D) status. Here is the report. As a reminder, Cheiron played a leading role in providing the critical analysis that was used […]

Read more of this post

Thanks For Nothing!

I've written about the SECURE Act before, and specifically my belief that it is an empty shirt policy and not worth the time and effort that it took to write and pass. It really doesn't SECURE anything. Here is one example. The question and answer appeared in a WSJ article from this morning. Q: The […]

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What Plan Sponsors Need To Ask Their Consultants

Asset consultants continue to play a vital role in the management of defined benefit plans. Occasionally, a plan has to conduct a search for a new one based on several reasons. An industry colleague recently asked me what questions they should ask during their search process for a new asset consultant. I appreciated getting asked […]

Read more of this post

Not The Answer

I've written a lot on this subject, so I suspect that you would prefer another point of view. Here are the words from Cecil Roberts, International President for the UMWA on the subject of the Grassley-Alexander proposal. Grassley-Alexander multi-employer pension plan proposal not the answer for retired miners and widows [TRIANGLE, VA.] United Mine Workers […]

Read more of this post

Custom Liability Index and Liability Beta Portfolio™

Ryan ALM offers a turnkey system of CLI + Liability Beta portfolio as a pension solution:

Custom Liability Index (Patent pending) - The first step in prudent pension management is to measure and monitor the liability objective frequently and accurately. Until liabilities are packaged as a **Custom Liability Index (CLI)** the asset side is in jeopardy of managing to the wrong objectives (i.e. market indexes). Only a CLI best represents the unique liability schedule of pensions. Just like snowflakes, no two pension liability schedules are alike due to different labor forces, salaries, mortality and plan amendments. How could a *generic market index* ever properly represent such a diverse array of pension liabilities? Once the CLI is installed the pension will now know the true **economic Funded Ratio** which should dictate the appropriate Asset Allocation, Asset Management and Performance Measurement. Ryan ALM is a leader in CLI as Ron Ryan was the inventor of the *first Liability Index* in 1991. In 2006, Ron won the *William F. Sharpe Index Lifetime Achievement Award*!

Liability Beta Portfolio™ (LBP) – The value added in bonds is small as every performance ranking study proves (1st quartile vs. median difference). **The best value in bonds is its cash flow to match and fund liabilities** as Dedication, Immunization and Defeasance have proven for decades. Since liabilities are dynamic calculations, they need a CLI to monitor their risk/reward behavior. The *core* or Beta portfolio for a pension should be in high quality bonds that match and fund liabilities. A Beta portfolio is defined as the portfolio that matches the objective. If the true objective is liability driven then, by definition, the proper beta portfolio for any liability objective must be … a **Liability Index Fund or Liability Beta Portfolio**. This requires a Custom Liability Index in order to be executed.

The Ryan ALM Liability Beta Portfolio™ (LBP) system will invest only in high quality securities that match the CLI. This provides our clients with the ***lowest cost and lowest risk portfolio***. It is the lowest risk portfolio since it has:

No Interest Rate Risk (matches CLI)
No Liquidity Risk
No Credit Risk
No Event Risk
No Prepay Risk

The Ryan ALM Liability Beta Portfolio™ is the lowest cost portfolio since we will always out yield liabilities by more than our very low fee thereby guarantying each client **No *Net* Fee**. Moreover, the Liability Beta portfolio is a cash flow matching liability portfolio that fully funds liabilities thereby reducing the cost and volatility of contributions.

Disclaimer

The material herewith is for informational purposes only, and does not contend to address the financial objectives, situation, or specific needs of any individual investor. Any information is for illustrative and educational purposes only and is not intended to serve as investment advice since the availability and effectiveness of any strategy is dependent upon your individual facts and circumstances. Results will vary, and no suggestion is made here about how any specific solution or strategy will perform in reality.

Ryan ALM and Ronald J. Ryan, CFA: Awards and Recognition

IMN

William F. Sharpe
Index Lifetime Achievement Award
ETF Product of the Year Award

money management

Lifetime Achievement Award

The Journal of Portfolio Management

Bernstein Fabozzi/Jacobs Levy Award
Research Paper of the Year

Capital Link

Most Innovative ETF of the Year Award

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