Ryan Labs
ASSET MANAGEMENT

September 2016

Asset/Liability Watch
September 30, 2016

Index	Estimated Weights (%)	Total Return		
		QTD (%)	YTD (%)	Last 12 Months (%)
Ryan Labs Cash	5	0.12	0.52	0.49
Barclays Aggregate Index	30	0.46	5.80	5.19
S&P 500	60	3.85	7.84	15.43
MSCI EAFE Int'l	5	6.50	2.19	7.04
Asset Allocation Model	100	2.78	6.68	11.27
Ryan Labs Liability (PPA)	100	2.19	18.13	17.73
Assets – Liabilities (PPA)		0.59	-11.46	-6.46
Ryan Labs Liability (FAS 158)	100	0.50	15.52	14.89
Assets – Liabilities (FAS 158)		2.28	-8.84	-3.62
Ryan Labs Liability (TSY)	100	0.04	16.82	14.91
Assets – Liabilities (TSY)		2.73	-10.14	-3.64

During an election year, the start of the third quarter typically has people wondering what surprise will October bring? As the end of an anything but normal presidential election cycle comes down the home stretch, this certainly holds true in 2016. This quarter, we also have other potential surprises on the peripheral of the election heading into year-end. Will the Chicago Cubs surprise everyone and win the World Series for the first time in 108 years? Will the Fed raise rates in December? If so, how will this impact pension assets and liabilities? While we'll refrain from talking politics and baseball, we will touch upon the last two questions. But first, the quarter, YTD, and trailing 12 in review.

For the 12 months ending 9/30/16, the Ryan Labs Asset Allocation Model returned a strong 11.27%. YTD, the Model returned 6.68%. Both of these asset returns exceed a typical plan sponsors ROA. However, over the trailing 12 moths, RL PPA liabilities were up +17.73%. YTD, these liabilities were up +18.13%. This translates into assets losing to liabilities by -6.46% over the trailing 12 months and -11.46% YTD. QTD, assets managed to outperform RL PPA liabilities by +0.59%. While funding ratios improved slightly this quarter, they are down by approximately 8% since the end of 2015.

With performance assets on the verge of positive returns for the eighth year in a row and the Fed signaling that a rate hike could occur in December, pension investors are naturally worried about the impact to their fixed income portfolio. Many individuals and market participants are prone to believe that a sudden "Fed rate hike" would increase all interest rates and therefore bonds prices would fall. This is not necessarily true, as parallel yield curve shifts do not occur frequently. Many factors impact market interest rates including preference for shorter-term securities, term premium, inflation and macroeconomic growth expectations, liquidity preference, and risk appetite of investors. A more aggregate factor is supply and demand dynamics. The yield curve is controlled by a supply and demand environment for debt instruments, and particular parts of the yield curve have different implications.

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It is also important to note that during a period of monetary policy tightening, as defined by an increasing federal funds rate, short-term rates rise. However, long-term rates tend to remain similar or fall. This is referred to commonly as a yield curve flattening. If the yield curve does flatten, it becomes important to have exposure on the long end of the curve to hedge what would be a continuation of long rates coming down. If they rise, the majority of pension plans (those that have not hedged 100% of their interest rate risk), will benefit from this, as liabilities will fall in value more than the bond portfolio. All this said, a rise in rates across the yield curve would benefit pension plans, as will having fixed income investments across the liability curve.

Index	Weights	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	9/16
Ryan Labs Cash	5%	1	1	3	5	5	3	1	0	0	0	0	0	0	1
Barclays Aggregate	30%	4	4	2	4	7	5	6	7	8	4	-2	6	1	6
S&P 500	60%	29	11	5	16	5	-37	26	15	2	13	30	11	-1	8
MSCI EAFE Int'l	5%	39	21	14	27	12	-43	32	8	-12	18	23	-4	0	2
Asset Allocation Model	100%	20	9	5	12	6	-24	19	12	3	11	18	8	0	7
RL PPA Liability		7	11	6	2	2	10	6	14	21	9	-7	14	-3	18
Return Difference		13	-2	-1	10	4	-35	13	-2	-18	2	25	-6	3	-11
Funding Ratio (RL PPA)		93	91	90	98	102	70	78	77	66	67	85	81	83	75
Liabilities (TSY)		2	10	10	1	11	42	-26	9	31	3	-15	28	-2	17
Return Difference		18	-1	-5	11	-4	-67	45	2	-28	8	33	-20	2	-10
Funding Ratio (Economic)		77	76	72	80	77	41	66	67	53	57	79	67	68	63

Notes: RL PPA liability curve is the spot curve of the replication of IRS PPA curve (US credit A to AAA).
RL Treasury liability curve is the proxy for economic liabilities.

Assumptions: Normal costs = annual contributions
No benefit enhancements
Assets portfolio rebalanced monthly

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50 Year Equal Par Weighted Cash Flows by RL PPA Corp A to AAA Index (PPA)				
	YTW[1] (%)	MDuration (Years)	YTD Returns (%)	Last 12 Month Returns (%)
2 Year	1.74	1.94	1.93	1.89
5 Year	1.86	4.91	6.16	6.29
10 Year	2.98	9.81	14.13	14.53
30 Year	4.06	29.36	32.40	35.89
RL PPA Index[2]	3.12	16.49	18.13	17.73

50 Year Equal Par Weighted Cash Flows by RL FAS 158 Corp AA to AAA Index (PPA-FAS158)				
	YTW[1] (%)	MDuration (Years)	YTD Returns (%)	Last 12 Month Returns (%)
2 Year	1.37	1.94	1.72	1.58
5 Year	1.71	4.91	5.38	5.38
10 Year	2.68	9.82	13.64	14.80
30 Year	3.93	29.38	22.77	13.77
RL FAS 158 Index[2]	2.92	16.59	15.52	14.89

1. Effective Annualized Yield to Worst
2. Equal Weighted Index

ABOUT RYAN LABS ASSET MANAGEMENT

Ryan Labs Asset Management is an institutional fixed income manager that provides custom and market index strategies tailored to the unique needs of institutional clients since 1988. Our diversified, disciplined, and structured investment process is employed versus popular market indexes as well as custom liability indexes.

Ryan Labs employs a disciplined investment process that seeks to add value through issue selection and sector rotation, not through interest rate anticipation. All of our strategies are actively managed in a total return framework.

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