Arizona State Retirement System

Investment Committee

Investment Program Updates

August 18, 2014

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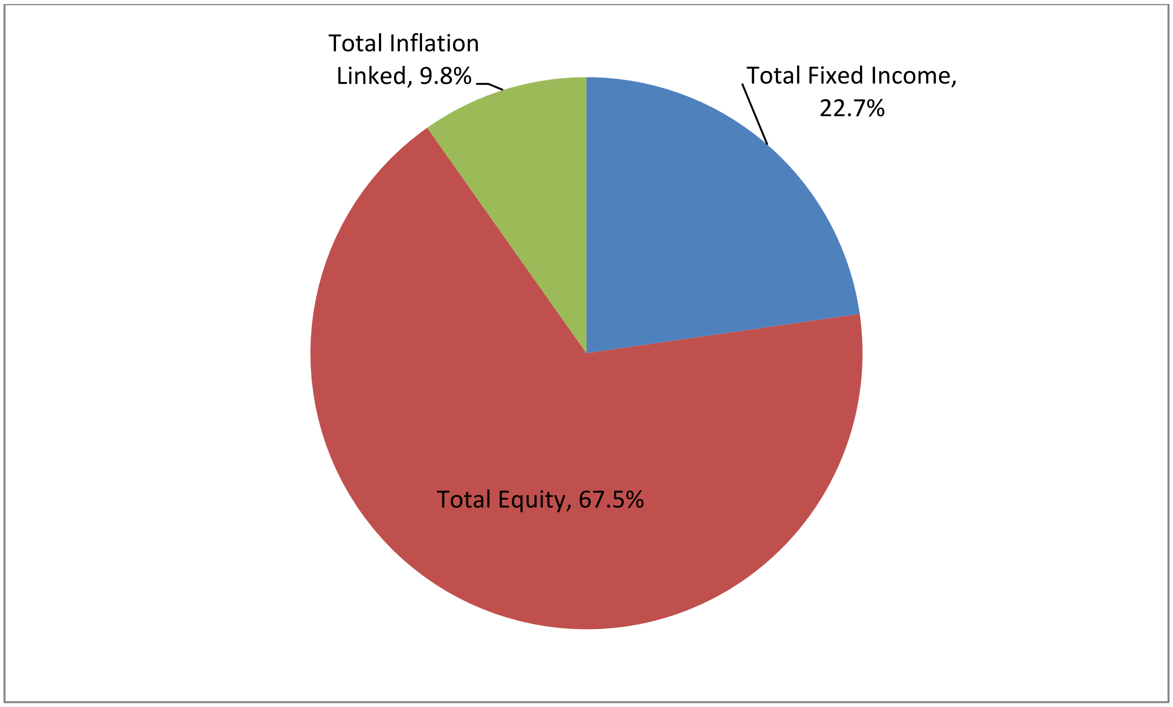
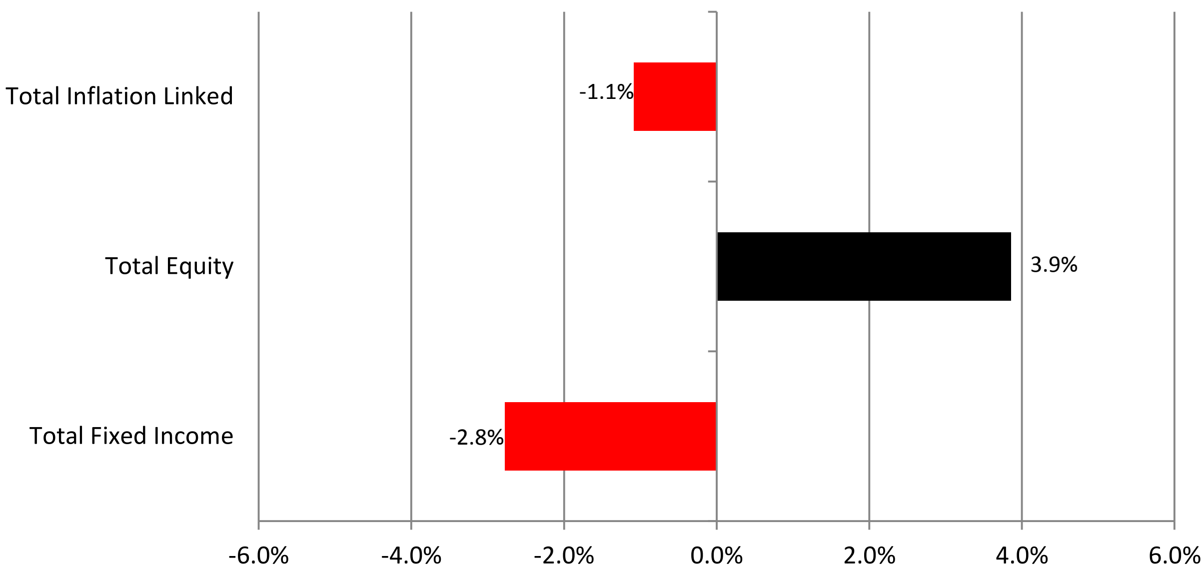
TOTAL FUND POSITIONING – 7/31/14

ACTUAL PORTFOLIO



ACTUAL PORTFOLIO (ASSUMED GTAA ALLOCATION VS. ADJUSTED SAA POLICY *)



**Real Estate and Private Equity actual weight is equal to policy weight during the implementation of the asset class.*

**Over/Underweights include both GTAA positions as well as IMD tactical considerations.*

Note: Opportunistic & Private Debt, Opportunistic Private Equity, Farmland & Timber, Real Estate and Private Equity market values are reported on a quarter-lag and adjusted to include the current quarter's cash flows. Within the Assumed GTAA Allocation vs. Adjusted SAA Policy chart, Real Estate was prorated to domestic equity, international equity and fixed income. Private Equity was prorated to domestic equity.

Pension (Plan, System, HBS Assets)		ASRS Market Value Report				As of:		Thursday, July 31, 2014	
		Fixed Income		Equity		Inflation Linked			
Account Manager	Account Manager Style	Active	Enh/Passive	Active	Enh/Passive	Active	Enh/Passive	Total	Pct of Fund
State Street B&T: Boston	Master Cash & Pension Acct.		246,491,521					246,491,521	0.72%
	Cash Total							**$246,491,521**	0.72%
GTAA Managers (2)	Active GTAA	1,010,227,380						1,010,227,380	2.96%
Blackrock: San Francisco	Passive (Intermediate Gov Credit)		23,823,005					23,823,005	0.07%
ASRS: Phoenix	Enhanced Passive F2		1,915,213,768					1,915,213,768	5.60%
Blackrock: San Francisco	Passive (US Debt Index)		710,102,199					710,102,199	2.08%
	Core Fixed Income Total							**$3,659,366,353**	10.70%
								Core Fixed Income Policy	**13.00%**
Columbia: Minneapolis	Active	638,639,346						638,639,346	1.87%
JP Morgan: Indianapolis	Active	326,435,765						326,435,765	0.95%
	High Yield Fixed Income Total							**$965,091,760**	2.82%
								High Yield Fixed Income Policy	**5.00%**
	US Fixed Income Total							**$4,624,458,112**	13.53%
								US Fixed Income Policy Range: 8% - 28%	**18.00%**
PIMCO (local): Newport Beach	Active	348,625,675						348,625,675	1.02%
Ashmore (blended): London	Active	420,121,150						420,121,150	1.23%
	EM Debt Total							**$768,746,825**	2.25%
								EM Debt Policy	**4.00%**
	Opportunistic Debt							**$963,758,083**	2.82%
								Opportunistic Debt Policy Range: 0% - 10%	**0.00%**
	Private Debt Total							**$1,166,092,915**	3.41%
								Private Debt Policy	**3.00%**
	Fixed Income Total							**$7,769,547,457**	22.73%
								Total Fixed Income Policy Range: 15% - 35%	**25.00%**
Intech: FL	Active (Growth)			525,783,073				525,783,073	1.54%
LSV: Chicago	Active (Value)			792,350,066				792,350,066	2.32%
GTAA Managers (2)	Active GTAA			1,153,409,350				1,153,409,350	3.37%
ASRS: Phoenix	Passive E2				4,911,434,057			4,911,434,057	14.37%
ASRS: Phoenix	Enhanced Passive E7				780,661,205			780,661,205	2.28%
ASRS: Phoenix	Enhanced Passive E8				502,963,796			502,963,796	1.47%
ASRS: Phoenix	Risk Factor Portfolio				504,342,077			504,342,077	1.48%
	Large Cap Equity Total							**$9,170,956,624**	26.83%
								Large Cap Policy	**23.00%**
Wellington: Boston	Active (Core)			418,802,556				418,802,556	1.23%
CRM: New York	Active (Value)			98,009,203				98,009,203	0.29%
ASRS: Phoenix	Passive E3 (Growth)				506,117,404			506,117,404	1.48%
ASRS: Phoenix	Passive E4 (Value)				523,477,583			523,477,583	1.53%
	Mid Cap Equity Total							**$1,546,406,747**	4.52%
								Mid Cap Policy	**5.00%**
TimesSquare: New York	Active SMID (Growth)			463,314,208				463,314,208	1.36%
DFA: Santa Monica	Active (Value)			408,205,341				408,205,341	1.19%
Champlain:Vermont	Active (Core)			97,440,059				97,440,059	0.29%
ASRS: Phoenix	Passive E6				477,336,693			477,336,693	1.40%
	Small Cap Equity Total							**$1,446,296,302**	4.23%
								Small Cap Policy	**5.00%**
	U.S. Equity Total							**$12,163,659,672**	35.58%
								US Equity Policy Range: 26% - 38%	**33.00%**
Brandes: San Diego	Active (Value)			597,125,321				597,125,321	1.75%
GTAA Managers (2)	Active GTAA			1,099,344,355				1,099,344,355	3.22%
American Century	Active (EAFE)			515,637,136				515,637,136	1.51%
Trinity Street	Active (EAFE)			338,274,413				338,274,413	0.99%
Thompson Siegel Walmsley	Active (EAFE)			158,639,423				158,639,423	0.46%
Blackrock: San Francisco	Passive (EAFE)				2,415,878,835			2,415,878,835	7.07%
	Large Cap Developed Non-US Equity Total							**$5,131,827,240**	15.01%
								Large Cap Developed Policy	**14.00%**
AQR: Greenwich	Active (EAFE SC)			179,040,875				179,040,875	0.52%
DFA: Santa Monica	Active (EAFE SC)			224,645,947				224,645,947	0.66%
Franklin Templeton: San Mateo	Active (EAFE SC)			405,163,482				405,163,482	1.19%
Blackrock: San Francisco	Passive (EAFE SC)				469,991,481			469,991,481	1.37%
	Small Cap Developed Non-US Equity Total							**$1,278,844,735**	3.74%
								Small Cap Developed Policy	**3.00%**
William Blair: Chicago	Active (EM)			484,067,376				484,067,376	1.42%
Eaton Vance: Boston	Active (EM)			528,583,756				528,583,756	1.55%
LSV: Chicago	Active (EM)			325,278,506				325,278,506	0.95%
Blackrock: San Francisco	Passive (EM)				720,983,312			720,983,312	2.11%
	Emerging Markets Equity Total							**$2,058,912,951**	6.02%
								Emerging Markets Policy	**6.00%**
	Non-US Equity Total							**$8,469,584,925**	24.78%
								Non-US Equity Policy Range: 16% - 28%	**23.00%**
	Private Equity Total							**$2,108,435,490**	6.17%
								Private Equity Policy Range: 5% - 9%	**7.00%**
	Opportunistic Equity							**$326,545,463**	0.96%
								Opportunistic Equity Policy Range: 0% - 3%	**0.00%**
	Equity Total							**$23,068,225,551**	67.48%
								Total Equity Policy Range: 53% - 73%	**63.00%**
Gresham: New York						826,503,891		826,503,891	2.42%
GTAA Managers (2)	Active GTAA					367,733,124		367,733,124	1.08%
	Commodities Total							**$1,194,237,015**	3.49%
								Commodities Policy Range: 1% - 7%	**4.00%**
GTAA Manager (1)	Active GTAA					54,554,600		54,554,600	0.16%
	Real Estate Total							**$2,047,719,170**	5.99%
								Real Estate Policy Range: 6% - 10%	**8.00%**
	Infrastructure Total							**$0**	0.00%
								Infrastructure Policy Range: 0% - 3%	**0.00%**
	Farmland & Timber Total					105,648,179		**$105,648,179**	0.31%
								Farmland & Timber Policy Range: 0% - 3%	**0.00%**
	Opportunistic Inflation Linked Total							**$0**	0.00%
								Opportunistic I/L Policy Range: 0% - 3%	**0.00%**
	Inflation Linked Total							**$3,347,604,363**	9.79%
								Inflation Linked Policy Range: 7%-15%	**12.00%**
	TOTAL Amounts	$3,910,158,880	$3,859,388,577	$11,255,026,107	$11,813,199,443	$3,453,252,542	$0	**$34,185,377,370**	**Total Fund**
	TOTAL Percent	11.44%	11.29%	32.92%	34.56%	10.10%	0.00%		

	Actual	SAA Policy:	Rebalancing		Assumed - Adjusted		Policy Band check	Passive	Passive
Asset Class	**Portfolio**	**Target (Range)**	**Assumed Port**	**Adj Policy**	**% diff**	**$ diff**	**Actual - Adj**	**Min**	**Actual**
Cash	0.72%								
Core	10.70%	13%						**50%**	**72%**
High Yield	2.82%	5%							
US Fixed Income	13.53%	18% (8-28%)	14.31%	18.56% (9-29%)	-4.25%	-$1,453,161,492	**OK**		
EM Debt	2.25%	4%		4.00%					
Opportunistic Debt	2.82%	0% (0-10%)	2.82%	0% (0-10%)	2.82%	$963,758,083	**OK**		
Private Debt	3.41%	3%		3.00%					
Total Fixed Income	**22.73%**	**25% (15-35%)**	**22.79%**	**25.56% (16-36%)**	**-2.77%**	**-$947,540,085**	**OK**		
Large Cap	26.83%	23%							
Mid Cap	4.52%	5%							
Small Cap	4.23%	5%							
US Equity	**35.58%**	**33% (26-38%)**	**36.84%**	**34.7% (28-40%)**	**2.15%**	**$733,742,713**	**OK**	**50%**	**65%**
Developed Large Cap	15.01%	14%							
Developed Small Cap	3.74%	3%							
Emerging Markets	6.02%	6%							
Non-US Equity	**24.78%**	**23% (16-28%)**	**24.25%**	**23.5% (17-29%)**	**0.75%**	**$257,143,222**	**OK**	**30%**	**50%**
Private Equity	6.17%	7% (5-9%)	6.17%	6.17% (4-8%)	0.00%	$0	**OK**		
Opportunistic Equity	0.96%	0% (0-3%)	0.96%	0% (0-3%)	0.96%	$326,545,463	**OK**		
Total Equity	**67.48%**	**63% (53-70%)**	**68.22%**	**64.37% (54-71%)**	**3.85%**	**$1,317,431,399**	**OK**		
Commodities	3.49%	4% (1-7%)	2.85%	4.08% (1-7%)	-1.23%	-$420,984,893	**OK**		
Real Estate	5.99%	8% (6-10%)	5.83%	5.99% (4-8%)	-0.16%	-$54,554,600	**OK**		
Infrastructure	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Farmland & Timber	0.31%	0% (0-3%)	0.31%	0% (0-3%)	0.31%	$105,648,179	**OK**		
Opportunistic I/L	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Total Inflation Linked	**9.79%**	**12% (8-16%)**	**8.99%**	**10.07% (6-14%)**	**-1.08%**	**-$369,891,314**	**OK**		
Total	**100.00%**	**100%**	**100.00%**	**100.00%**	**0.00%**	**$0**		**30%**	**43%**
								Internally Managed Portfolios:	
Total GTAA								**$9,617,204,506**	**28%**
Bridgewater	$3,082,455,550	9.0%					**Opportunistic definitions:**		
Windham	$602,813,257	1.8%					1) Tactical in nature: Function of market dislocation AND		
Total	**$3,685,268,808**	**10.8%**					2a) Outside SAA benchmark, OR		
Policy	**10% ±5%**	**OK**					2b) Within SAA benchmark but absolute return oriented		

(Notable changes from the previous month are highlighted in RED)

AUGUST 2014

U.S. EQUITIES

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - Economic data suggests stable, sub-trend growth into 2014.
   - Persistently high U.S. unemployment raise questions about a sustainable recovery, but no other tailspin issues have surfaced.
   - At risk longer term due to stimulus measures; inflation remains generally subdued.
   - There is considerable liquidity; Federal Reserve policy remains accommodative.
   - Overall U.S. corporate profits are still growing, but with decelerating momentum; revenues have begun trending up modestly although high profit margins are no longer expanding.

2. Valuations: **NEUTRAL**
   - Net sideways price movement over July of the major indices left P/E ratios (forward) essentially unchanged from late spring 2014 levels. Though marginally rich, they remain near historic averages: S&P 500, 14.7x-16.2x, S&P MID, 16.5x-19.1x; S&P SC600, 16.5x-20.2x.
   - Historic P/Es imply advances of 5-10% for mid and small caps; 9-12% for S&P 500.
   - Still rising earnings and low yields on 10-Yr Treasury notes combine for equity risk premiums that are favorably above the 4.0% long-range average for large caps, but market advances have trimmed those of mid- and small-caps to near 3.0%.

3. Sentiment: **NEUTRAL (change from POSITIVE)**
   - Short-term caution has moved up a notch following the sustained advance of equity markets throughout 2013 and 1H2014 without a significant pullback.
   - Lessened near-term equity market volatility (i.e., VIX Index) still reflects growing acceptance of risk-oriented assets.
   - Asset flows that had gone to bonds and non-U.S. equities until 2013 continue to shift toward equities, though not necessarily to stock mutual funds

Commentary:

Throughout 1Q2014, IMD systematically pared back the allocation of U.S. stocks to address capital calls in the Plan's private equity and real estate asset classes. Proportionally more was withdrawn from the smallcap and midcap sub-classes. Strong price advances in 2013 outpaced earnings growth in these categories to the extent that their short-run risk premiums are less compelling than the larger-cap counterparts. This has also been reflected in the waning performance of smallcap stocks *relative* to largecap and midcap counterparts over 2014. Smallcaps are off by about 2.5%; largecaps and midcaps are up 4.9% and 2.4%, respectively.

Notwithstanding some opinions that prices of U.S. stocks are greatly overextended and thus due for a precipitous decline, data suggests otherwise. Valuations of domestic equities are full, but generally don't yet exceed long-term average valuations by much. Business conditions are constructive if not vibrant. Moreover, the equity markets have been resilient in spite of unsettling political events and have rebounded on shallow dips over 1H2014. Rather than setting up for an abrupt decline, in re-rating over the past year, the markets have pulled forward some return from future periods. This implies that future equity returns will still be available; they just are unlikely to be of the magnitude as those experienced over the past year.

This drives our now "*NEUTRAL*" opinion on Sentiment and the unchanged opinions of "*POSITIVE*" on Fundamentals and "*NEUTRAL*" on Valuations. Employing that tactically, IMD may further reduce ASRS U.S. Equity assets. Reallocations of U.S. Equity over the past year subsidized some of the Plan's monthly obligations, but moved mostly to the Fund's non-public, private markets asset classes.

CURRENT PORTFOLIO POSTURE: Overweight vs. SAA target

NON – U.S. EQUITIES

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - GDP growth in the Eurozone has begun to look less recessional while that of the lesser-developed economies remains off its pace, but comparatively stronger.
   - Relatively inexpensive and available money supports a shift toward risk assets.
   - Monetary and economic policies are focused on controlling economic growth and fiscal stability.

2. Valuations: **POSITIVE**
   - Reasonable global valuations relative to U.S.; price-to-book values of 1.4x - 1.6x; P/Es of 13.0x – 16.0x on trend earnings.
   - Dividend yields are incrementally more favorable with most ranging from 1.5x to 1.6x that of the S&P500.

3. Sentiment: **POSITIVE**
   - Money flows continue toward both U.S. and non-U.S. equities; excepting the emerging economies markets, investors are less guarded and remain constructive on global risks.
   - Major non-U.S. markets performances are keeping pace with those of the U.S.

Commentary:

Global equities have begun responding positively to stabilizing economic momentum across major economies. Weaker than expected economic readings earlier in the year from China and the U.S. triggered corrections in the equities markets and a 50 basis points decline in U.S. 10-year bond yields. It is also attributable to a 5% relative underperformance of global cyclical equities versus more defensive stocks. U.S. ISM indices and their international PMI counterparts are rising; this often leads to better performance of equities and to an extent, markets have reacted. Adding to confidence is that PMI new orders globally are mid-range, so any slide back would be small and thus not transfer into major negative signal to the equities markets. Various measures of global monetary conditions such as policy rates, money supply growth and currency valuation continue to ease and the tapering policy of the U.S. Federal Reserve is not yet bringing about a broad tightening of monetary conditions.

Available liquidity is supportive for re-rating equity risk premiums. Equity risk premiums on international stocks of over 5% exceed those of the U.S. by about 100 basis points. Both imply ample compensation for investment, more so for the former. Falling yields among high-yield bonds and other compressions of credit spreads are further magnifying the relative advantage available in current equity risk premiums.

The Japanese equities markets continue to be challenged after responding well earlier in 2013. Japanese economic reform continues, but the markets are waiting for follow-on to the Abe policies. They might be unduly bearish. The solid gains in personal consumption from the spurt of income growth are now appearing vulnerable to this new round of taxes. Most remain of the opinion that the Bank of Japan will need to ease additionally if hoped-for 2% annualized inflation targets are to be met. The bulk of the rise in inflation so far this year has come via higher import prices, which now are set to fall back. This suggests the BoJ will need to expand its program of bond purchases in 2H2014, and possibly further broadening of quantitative easing.

Emerging markets (EM) overall, are enigmatic, but of late are trading more favorably. Having undergone two years of price correction, valuations for the most part remain attractive as compared to those of the developed economies. But an inherent "value trap" persists, as economic fundamentals continue to shift about for the larger countries, weaken for those with large external debt balances yet are surprisingly solid for many others. Up until recently, capital was withdrawn indiscriminately from EM equity markets, despite select opportunities at the specific company level. Staff is watching this equilibration with interest of for opportunities to shift the allocation of the sub-class to above policy weight.

CURRENT PORTFOLIO POSTURE: Marginally Overweight vs. SAA target

FIXED INCOME

Primary Markets Metrics & Indicators:

1. Fundamentals: **NEUTRAL**
   - Over the past few years, fundamentals in the fixed income markets have been dominated by an extremely accommodative monetary policy by the Federal Reserve. This has included massive, unprecedented bond buying programs of both treasury bonds and agency MBS securities known as "quantitative easing" that began in 2009 during the credit crisis and continues to this day. The Fed has now gradually begun to reduce its monthly purchases with a potential complete cessation of bond buying by the end of this year. In addition, the Fed has pledged to keep short-term rates near zero over an extended time depending on select economic targets and conditions.
   - While these policies have kept interest rates artificially low, the potential cessation of bond buying activities along with an improving U.S. economic outlook could lead to higher long-term interest rates over an intermediate to long-term time frame. It is also possible that economic conditions improve enough in the near-term that the Fed could raise short-term interest rates in 2015 or 2016.
   - This year, long-term interest rates have fallen in response to a combination of factors including some disappointing economic data, concerns about global growth, some geopolitical uncertainty (ex. Ukraine, Gaza), subdued inflation expectations and possible short covering by investors positioned for rising rates.

2. Valuations: **NEGATIVE**
   - Overall, we view the public fixed income markets as generally unattractive due to low overall yield and spreads. However, we believe very attractive opportunities exist in both private and opportunistic debt. We have been reducing our exposure to public fixed income markets such as

high yield, emerging market debt, core fixed income and asset-backed securities in order to fund private and opportunistic debt mandates offering significantly higher expected returns.

- The core fixed income market is relatively unattractive due to low overall yields as Treasury rates remain at low levels, investment-grade credit spreads are relatively tight and spreads on agency MBS are somewhat compressed due to aggressive buying by the Fed. Ultimately, we believe the Fed will end its aggressive bond buying, and Treasury rates will rise over the intermediate-term from artificially low levels in the current market. That being said, core fixed income remains a safe haven in times of market turbulence and tends to perform well when risky assets such as equities sell off.
- With a benign outlook for corporate defaults and an overall demand in the market for yield, the valuation of high yield bonds has substantially compressed since mid-2012. As a result, the market has lost much of its return potential relative to prior years and will likely achieve low to mid-single-digit returns over the coming year.
- While emerging market debt denominated in local currencies offers attractive yields, it comes with the added risk that emerging market currencies depreciate in value relative to the U.S. dollar resulting in poor returns as happened in 2013. Of most concern is the potential for a sustained period of US dollar appreciation as has occurred periodically in the past (such as the 1990's) that could adversely affect the returns of EM local currency debt going forward.
- Private debt offers the most attractive opportunity in the fixed income markets with double-digit yields readily available for investors willing to accept illiquidity.
- Select areas of opportunistic debt such as distressed debt (both corporate and structured credit) also offer opportunities to potentially achieve double-digit returns.

3. Sentiment: **NEUTRAL**

- Following a multi-decade period of declining interest rates, IMD has modest concerns that investors sentiment is shifting away from fixed income. That being said, going forward, IMD believes demand will continue for income producing assets particularly those which offer a yield premium.
- Recently, technical selling pressure has led to higher spreads and yields in the high yield bond market.

Commentary:

IMD remains underweight in its overall fixed income target due to the relatively low yields offered in the public fixed income markets as well as the risk of potentially higher treasury rates. ASRS is currently underweight in its SAAP target for core fixed income, high yield and emerging market debt. While core fixed income offers important defensive characteristics to potentially balance out the overall risks of the total fund portfolio, low levels of U.S. Treasuries and generally tight spreads in the investment-grade bond markets make it generally unattractive.

Furthermore, IMD remains concerned about the potential for higher Treasury rates and the impact on returns for core fixed income, should the Fed completely end its quantitative easing programs. In high yield, which historically is less sensitive to higher interest rates, spreads have compressed to levels which make potential returns much less compelling than in prior years. In emerging market debt, we are concerned about the currency risk embedded in the local currency bond markets of this asset class.

IMD sees the most attractive opportunities in fixed income in select credit markets -- particularly private debt and opportunistic debt -- where compelling yield and total return opportunities exist. Opportunistic debt includes a number of mandates such as distressed debt (both corporate and structured credit) and excess mortgage-servicing rights that are likely to provide very attractive returns.

CURRENT PORTFOLIO POSTURE: Underweight vs. SAA target

REAL ESTATE

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - Improved levels of demand and easing credit conditions, combined with broad improvement in the economy, are supportive of continued expansion of commercial lending and building. Better levels of occupancy while there is a lack of construction has resulted in rising rents.
   - Our review of property market fundamentals leads to emphasize apartments, industrial properties, medical office buildings, senior housing self-storage, and student housing in our current investing efforts for demographic and macro policy reasons.
   - There are relatively few foreclosures on high quality property, but there continues to be pressures on refinancing of legacy leverage structures and we participate in those transactions through several of our manager relationships.
   - Single family housing continues to exhibit tight supply and moderate demand driven by healing household balance sheets, improved employment conditions, and continued affordability. This should lead to reacceleration of new construction and continued moderate price increases. Recovery in construction and NOI has been led by apartments to date.

2. Valuations: **NEUTRAL**
   - On a total market basis, valuations have recovered from recession lows but are still about 5% below prior peak. However, coastal markets have rebounded more strongly than interior markets.
   - High quality coastal market properties are trading at historic low cap rates; however these cap rates still reflect approximately a normal spread to treasury. The financing market for assets of this quality has recovered and supports these valuations by providing fixed rate financing that mitigates the risk of later cap rate expansion. International investors looking for safe assets have contributed to demand in the coastal markets.
   - Recent increases in treasury rates do not appear to have affected commercial real estate valuations. Many observers believe that ~100bps of rate increase was already discounted into cap rates.
   - REITs are trading at a 4% premium to NAV with an average dividend yield of 3.8%. This reflects a 120bps spread to the 10 year treasury, which is a bit higher than the historical average of 108bps.

3. Sentiment: **POSITIVE**
   - U.S. focused real estate fund raising rose 13% to $76 billion per year. U.S. focused dry powder has trended down to approximately $80 billion.
   - Global commercial real estate transaction volume peaked at around $700 billion in 2007, but dropped to about a third of that during the global financial crisis. Current volume of approximately $550 billion is double the recession trough, but still well below the peak.
   - Debt availability has improved considerably since the depth of the recession, but is still tight by historic standards for all but the most desirable properties. Construction financing remains a considerable challenge, even for well justified projects.

Commentary:

IMD continues to implement its separate account real estate strategic manager program. ASRS adopted an updated pacing and implementation plan in December, calling for $500 million in new commitments in 2014 including $350M allocated to niche and tactical opportunities.

CURRENT PORTFOLIO POSTURE: Underweight *vs. SAA target *in program funding/build-out phase

PRIVATE EQUITY

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - The U.S. economy continues to show steady improvement.
     - ◊ The energy sector is dynamic with massive new investment in "tight oil" and related infrastructure and services, with supply improvements also resulting in improved energy efficiency particularly of benefit to manufacturers.
     - ◊ Healthcare is being reshaped to implement the requirements of "Obamacare"
     - ◊ The U.S. continues to be a global leader in technology innovation.
   - Europe continues to struggle in recovering from the financial crisis although recent data suggests a pickup in economic activity. Its problems are exacerbated by a unified currency without unified fiscal policy and it is expected to experience a very slow recovery.
   - Emerging markets have slowed while the largest emerging markets are transitioning to focus on domestic consumption.
2. Valuations: **NEUTRAL**
   - Purchase price multiples in 2013 (through Q3) were 8.4x, roughly flat from 2012 levels and below 2007 peak valuations. Over the course of 2013, large deal multiples rose from 10x to 11x while small deals fell from 4.0x to 2.5x.
   - The leveraged loan and high yield debt markets were active in 2013 reaching multi-year highs for net issuance, albeit principally for refinancing. Single B high yield spreads have recently dipped below 350 bps.
   - Total leverage in 2013 (through Q3) ticked up to 5.3x from 5.1x in 2012, although still down ~0.8x turn from the 2007 peak.
3. Sentiment: **NEUTRAL**
   - Globally, year-to-date $236B (417 funds) have closed through Q2 2014 compared to $522B (1,097 funds) closed in aggregate for 2013. Dry powder of nearly $1.2T globally in all categories rose from $1.1T at the end of 2013.
   - The global number of buyout deals rose from 732 in Q1 to 766 in Q2 2014 while the aggregate value of deals remained approximately flat at $80B.
   - Exits rose in Q2 2014 to 394 at an aggregate value of $137B representing the second highest count and the highest value since Q2 2006.
   - The IPO market in Q2 2014 had the largest value of exits ($30B) in 4 quarters.

Commentary:

Areas of emphasis are U.S middle market buyout with focus on managers with strong operational capability. Vertical strategies in energy, healthcare and technology are under consideration. IMD will reduce emphasis on large buyout strategies though larger managers with specialized deal flow remain of interest. IMD will continue to monitor Europe for a favorable reentry point. IMD's pacing plan calls for $550M in commitments for 2014, with an additional $50M carried over from 2013.

CURRENT PORTFOLIO POSTURE: Underweight * vs. SAA target*in program funding/build-out phase

COMMODITIES

Primary Market Metrics & Indicators:

1. Fundamentals: **NEGATIVE**
    - The Fed continued to taper its QE program by $10B per month and reiterated that inflation continues to run below the FOMC's long-term objective.
    - Recent data indicates the US economy has momentum but most commodity sectors appear well supplied, particularly for the current global growth environment.
    - Nearly 75% of the corn & soybean crops are rated good/excellent, ahead of last year at this time. Energy markets reflect the continued growth in US production as the Brent/WTI spread continues to narrow. Metals have been mixed as precious metals have benefitted as a US dollar hedge while industrial metals still exhibit weak demand.
2. Valuations: **NEUTRAL**
    - The index rose to nearly 280 in April 2014 but has steadily sold off to its current level of 260.
    - YTD: coffee, nickel, & hogs have been the leaders; cotton and corn are the biggest laggards.
    - The index on a year-to-date basis is up 2.9%, modest ag losses offset by modest gains in energy and precious metals.
3. Sentiment: **NEUTRAL**
    - The moderate growth and inflation environment in the U.S. year-to-date has tempered investor enthusiasm for commodities and resulted in modest inflows into commodities.
    - Exogenous geopolitical shocks have not resulted in price spikes; weather has been favorable.
    - Looking across the individual commodities, most remain well supplied, which has been reflected in prices as inflationary fears have abated.

Commentary:

IMD has maintained a tactical underweight relative to the SAAP during 2013 and into 2014 after recognizing the potential effects of Fed tapering and Chinese transition. IMD recognizes that Fed tapering will be data dependent but the Fed has been clear about its intention to reduce stimulus. China's transition to a more consumer oriented economy will be gradual but the era of infrastructure build-out which fueled a portion of the demand for commodities is abating. IMD will closely monitor the growth and inflation dynamics globally with improving economic conditions and inflationary pressures serving as a catalyst which may initiate a neutral position.

CURRENT PORTFOLIO POSTURE: Underweight vs. SAA target

OPPORTUNISTIC INVESTMENTS

IMD continues to monitor and assess co-investment flow from real estate, private equity and debt managers for select opportunistic investments with favorable capital market dynamics. Opportunistic investments are tactical in nature AND are outside ASRS SAAP benchmarks or absolute return oriented.

CURRENT PORTFOLIO POSTURE: Approx. 3.7% of ASRS TOTAL MARKET VALUE

GLOSSARY

Commentary: Provides verbiage on 1) the current asset class market environment and possible changes to this environment and 2) ASRS asset class portfolio positioning relative to ASRS SAA policy, its rationale for positioning and anticipated changes which may occur in such positioning.

Current Portfolio Posture: Indicates ASRS asset class position relative to its asset allocation policy weight. "Overweight" indicates an asset class weight is greater than its policy target, "Neutral" indicates an equal weight and "Underweight" indicates a lesser weight than its policy target.

Investment House Views: Synthesizes IMD's current and forward-looking investment perspectives and tactical positioning in asset classes and investment strategies in which the ASRS invests.

Primary Market Metrics and Indicators: Broadly-defined metrics (Fundamentals, Valuations, and Sentiments) applied universally to ASRS asset classes and used collectively to evaluate existing market conditions. Indicators ("Positive," "Neutral" and "Negative") reflect IMD's existing views of these metrics and, in addition to other factors, generally determine the basis for the existing (and possible future changes) to ASRS aggregate portfolio position relative to or within ASRS SAA policy targets.

2014 ASSET CLASS COMMITEE AND IC MEETINGS								
2014		Asset Class Committees				Board Committee		Grand Totals
		Private Market Committee (PRIFMC)		Public Market Committee (PUBMC)		Investment Committee (IC)		
Quarter	Month	Dates	Total	Dates	Total	Dates	Total	
1st	January	1/15 1/31	2	1/31	1	1/31	1	9
	February	2/21	1			2/20 2/24	2	
	March	3/24	1	3/27	1			
2nd	April	04/22	1	04/17	1	04/21	1	9
	May	05/12 05/27 05/28	3					
	June	06/19 06/26	2			06/23	1	
3rd	July	07/01 07/14 07/21	3					3
	August							
	September							
4th	October							
	November							
	December							
Totals			13		3		5	21

PRIVATE MARKETS COMMITTEE (PRIVMC)

06/19/14:

- **Real Estate Investments**

  - The Committee approved the recommendation made by USAA to sell one of two buildings acquired from the Fresh 'n Easy Bankruptcy estate earlier this year which are located in Stockton, CA. The sale was at approximate 30% profit margin on the acquisition made in April. RCLCO recommended taking the profit on this sale rather than taking the leasing risk of continuing to own the building. The sale subsequently closed.

06/26/14

- **Real Estate Program**
  - The Committee reviewed and discussed ASRS exposure apartments and for sale residential noting that the exposures appear reasonable and appropriate. In addition, the Committee discussed the private equity pipeline which will be updated in Q4-14 as a guideline to make investments in 2015.

- **Private Equity Program**
  - The Committee approved a $40 million investment to FFL IV, a growth oriented mid-market private equity generalist founded in 1997 by, among others, Tully Friedman.

  - The Committee approved a $50 million investment to Veritas V, a middle market firm focused on firms who provide services to government entities.

07/01/14

- **Real Estate Investments**

  - The Committee approved a $100 million commitment to a niche and tactical real estate GP who specializes in street level urban retail in major cities. Final contract negotiations are pending. This investment is part of the "niche and tactical" investment program.

  - The Committee approved variance to the Ventas investment criteria respect to neighborhood demographics and market positioning of a medical building located in Sacramento, CA.

07/14/14

- **Real Estate Investments**

  - The Committee approved due diligence on an investment in a Seattle property with Lowe Enterprises, a real estate investment firm. Pending full reporting and subsequent recommendation of investment approval by the Committee. This investment was intended as part of the niche tactical program, but on closer examination of the subject property with additional diligence as authorized by the committee, the real estate consultant recommended against proceeding with the investment.

07/21/14

- **Private Opportunistic Investments**

  - The Committee approved ASRS participation in secondary offering by TPG Specialty Lending (TSLX). As a result, ASRS sold a portion of its 2.2 million shares in TSLX at net proceeds that will produce a realized IRR of approximately 18% to 19% on the shares sold. ASRS's remaining shares are subject to lockups that will expire on rolling time frames over the coming eight months.

TACTICAL PORTFOLIO POSITIONING

Asset class tactical positioning is a function of Investment House Views and an assessment of relative value between ASRS asset classes and their positioning to ASRS Strategic Asset Allocation Policy (SAAP).

Most notable, ASRS continues to remain underweight to U.S. small and mid-cap equities, high yield (HY) debt and EM debt relative to their respective SAAP targets. In aggregate, these have positively contributed to ASRS performance relative to ASRS TF benchmark.

Recent repositioning trades occurred in HY debt in Q2-14 which further underweighted HY relative to policy; 2.8% actual compared to a 5% policy. This repositioning was due to the richness of HY on an absolute yield and risk premium spread basis. In late June, U.S. Corporate High Yield Index posted both historical lows in absolute yield (4.83%) and in spread-to-Treasuries (3.23%). This positioning was favorable given that in late July technical selling pressure on HY ETFs (exchange-traded funds) resulted in HY yields/spreads widening by over 80 bps. The funds were used for capital calls in private and opportunistic debt and to fund external cash flow needs.
The CIO and IMD PMs will discuss these tactical portfolios repositioning in more detail at the IC meeting.

Note: tactical portfolio positioning is captured in the ASRS Asset Allocation report; the performance results of tactical positioning (vs. policy targets) are reflected in the ASRS Quarterly Total Fund Performance Attribution Analysis.

IMD (INVESTMENT MANAGEMENT DIVISION)
ACTIVITIES, PROJECTS AND RESEARCH INITIATIVES

- The Director and CIO have begun discussions with NEPC regarding a review of and modifications to ASRS Asset Allocation Policy. As part of this process, an agenda item will be included on future IC agendas during this development process which is intended for the Director and CIO to provide an update on the process and solicit input and perspectives from IC Trustees. The Study is anticipated to be completed in Q4-14.

- Implementation of the redesigned ASRS securities lending program is pending final contract negotiations with State Street. The program will include two parts: ‘base lending’ to initiate a conservative strategic lending program and ‘opportunistic lending’ to profit from relatively large or one-off individual lending transactions, the latter of which will be evaluated and approved on a case-by-case basis by the Director and CIO.

- IMD enhanced cash management program document continues to be developed. Upon final approval by the CIO and pending final contract negotiation with State Street, implementation is anticipated to occur within the next 90 days. The goals of the program are to provide required Fund liquidity, mitigate cash drag, minimize transaction costs and optimize manager portfolios rebalancing.

- An IC/IMD Investment Roundtable is scheduled for August 18 which will focus on the following interrelated topics: Equity Risk Factors, Smart Beta Constructs and New/Alternative Beta/Alpha Investment Strategies. Participation will include both internal and external subject matter expects who will provide their perspectives on the agenda topics.

- As a standard course of business, IMD meets with both incumbent and potential investment managers to discuss macro-economies and capital markets as well as providing a means to review new initiatives, relationships and new strategy offerings. Since the last IC meeting, IMD has met via conference call or in-person with a total of 59 investment managers: Private markets (RE, PE, Debt) – 37 and Public markets (Equity and Debt) – 22.

- IMD internally manages 7 public equities and fixed income portfolios which had an aggregate market value of over $9.8 billion or 30% of Total Fund. For the 1-year ending June 30, 4 of 7 met or exceeded their benchmarks, and 7 of 7 portfolios met or exceeded their benchmarks on an inception-to-date basis.