Arizona State Retirement System

Investment Committee

Investment Program Updates

February 24, 2014

Presented by:
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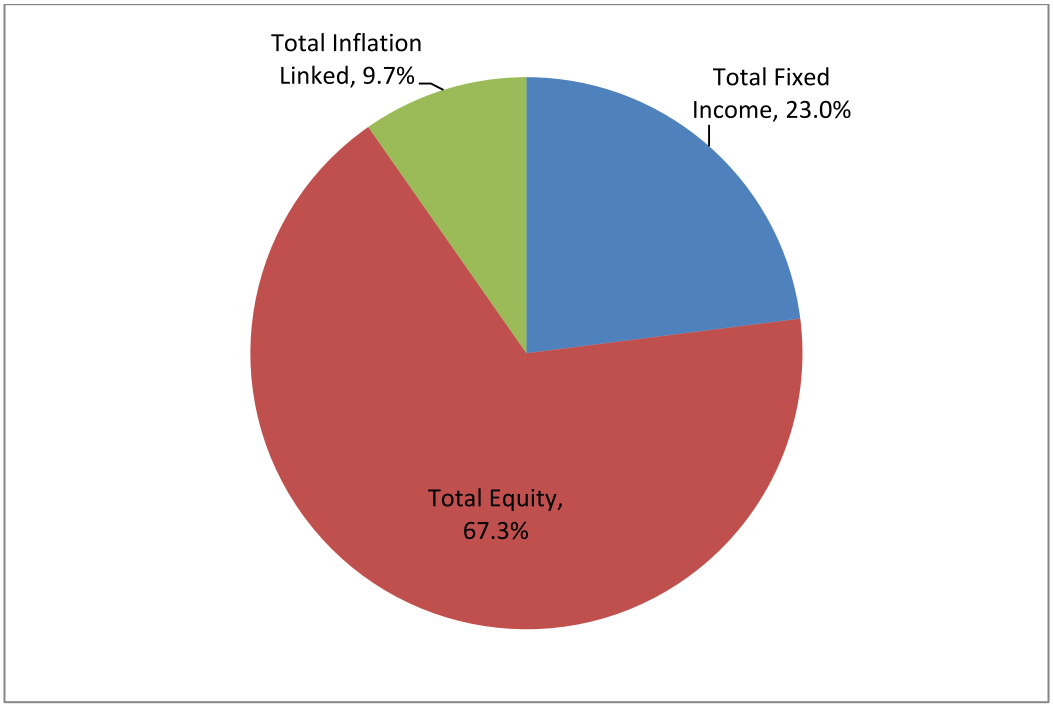
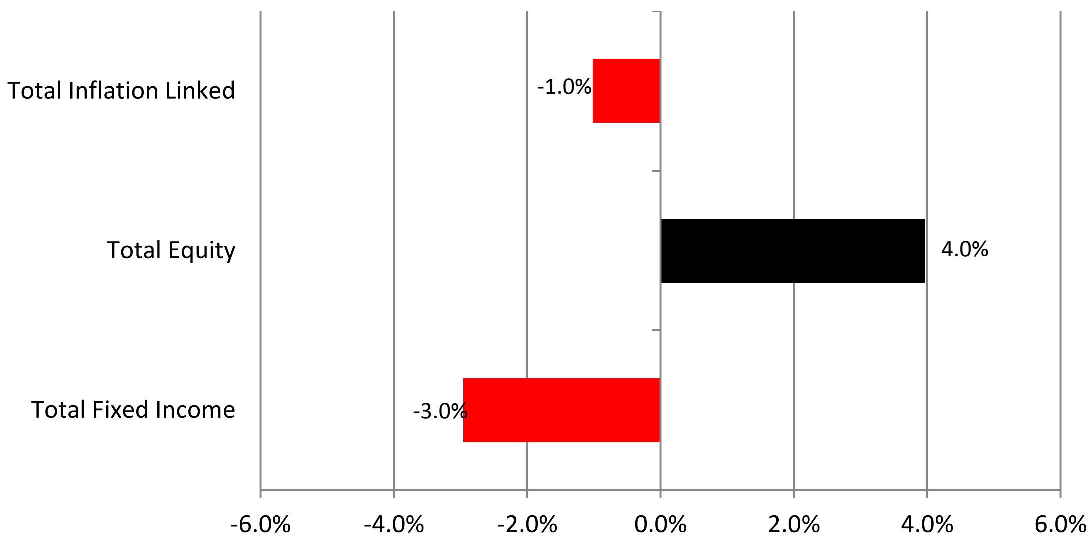
TOTAL FUND POSITIONING – 01/31/2014

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:		Friday, January 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.		352,809,530					352,809,530	1.10%
	Cash Total							**$352,809,530**	1.10%
PIMCO: Newport Beach	Active (Core)	299,821,555						299,821,555	0.93%
GTAA Managers (2)	Active GTAA	1,083,226,360						1,083,226,360	3.37%
Blackrock: San Francisco	Passive (Intermediate Gov Credit)		23,532,302					23,532,302	0.07%
ASRS: Phoenix	Enhanced Passive F2		1,795,658,542					1,795,658,542	5.59%
	Core Fixed Income Total							**$3,202,238,759**	9.98%
								Core Fixed Income Policy	**13.00%**
Columbia: Minneapolis	Active	714,576,614						714,576,614	2.23%
Shenkman: Connecticut	Active	168,043,793						168,043,793	0.52%
JP Morgan: Indianapolis	Active	316,988,490						316,988,490	0.99%
	High Yield Fixed Income Total							**$1,199,608,898**	3.74%
								High Yield Fixed Income Policy	**5.00%**
	US Fixed Income Total							**$4,401,847,657**	13.71%
								US Fixed Income Policy Range: 8% - 28%	**18.00%**
PIMCO (local): Newport Beach	Active	314,155,672						314,155,672	0.98%
Ashmore (blended): London	Active	522,293,940						522,293,940	1.63%
	EM Debt Total							**$836,449,613**	2.61%
								EM Debt Policy	**4.00%**
	Opportunistic Debt							**$937,935,153**	2.92%
								Opportunistic Debt Policy Range: 0% - 10%	**0.00%**
	Private Debt Total							**$854,255,452**	2.66%
								Private Debt Policy	**3.00%**
	Fixed Income Total							**$7,383,297,404**	23.00%
								Total Fixed Income Policy Range: 15% - 35%	**25.00%**
Intech: FL	Active (Growth)			508,649,317				508,649,317	1.58%
LSV: Chicago	Active (Value)			739,092,414				739,092,414	2.30%
GTAA Managers (2)	Active GTAA			1,060,256,281				1,060,256,281	3.30%
ASRS: Phoenix	Passive E2				4,615,832,585			4,615,832,585	14.38%
ASRS: Phoenix	Enhanced Passive E7				792,713,058			792,713,058	2.47%
ASRS: Phoenix	Enhanced Passive E8				482,530,808			482,530,808	1.50%
ASRS: Phoenix	Risk Factor Portfolio				465,287,669			465,287,669	1.45%
	Large Cap Equity Total							**$8,664,373,020**	26.99%
								Large Cap Policy	**23.00%**
Wellington: Boston	Active (Core)	,		415,624,523				415,624,523	1.29%
CRM: New York	Active (Value)			103,230,027				103,230,027	0.32%
ASRS: Phoenix	Passive E3 (Growth)				545,038,228			545,038,228	1.70%
ASRS: Phoenix	Passive E4 (Value)				546,326,689			546,326,689	1.70%
	Mid Cap Equity Total							**$1,610,219,467**	5.02%
								Mid Cap Policy	**5.00%**
TimesSquare: New York	Active SMID (Growth)			516,877,132				516,877,132	1.61%
DFA: Santa Monica	Active (Value)			436,912,384				436,912,384	1.36%
Champlain:Vermont	Active (Core)			129,152,277				129,152,277	0.40%
ASRS: Phoenix	Passive E6				539,008,385			539,008,385	1.68%
	Small Cap Equity Total							**$1,621,950,177**	5.05%
								Small Cap Policy	**5.00%**
	U.S. Equity Total							**$11,896,542,663**	37.06%
								US Equity Policy Range: 26% - 38%	**33.00%**
Brandes: San Diego	Active (Value)			500,253,082				500,253,082	1.56%
Aberdeen: Edinburgh	Active (Value)			458,440,234				458,440,234	1.43%
Hansberger: Ft. Lauderdale	Active (Growth)			326,001,460				326,001,460	1.02%
Walter Scott: Edinburgh	Active (Growth)			222,762,813				222,762,813	0.69%
GTAA Managers (2)	Active GTAA			928,553,610				928,553,610	2.89%
Blackrock: San Francisco	Passive (EAFE)				2,243,481,343			2,243,481,343	6.99%
Large Cap Developed Non-US Equity Total								**$4,679,516,205**	14.58%
								Large Cap Developed Policy	**14.00%**
AQR: Greenwich	Active (EAFE SC)			170,759,532				170,759,532	0.53%
DFA: Santa Monica	Active (EAFE SC)			211,029,796				211,029,796	0.66%
Franklin Templeton: San Mateo	Active (EAFE SC)			396,584,868				396,584,868	1.24%
Blackrock: San Francisco	Passive (EAFE SC)				446,161,963			446,161,963	1.39%
Small Cap Developed Non-US Equity Total								**$1,224,543,621**	3.81%
								Small Cap Developed Policy	**3.00%**
William Blair: Chicago	Active (EM)			406,934,394				406,934,394	1.27%
Eaton Vance: Boston	Active (EM)			458,458,370				458,458,370	1.43%
LSV: Chicago	Active (EM)			270,051,091				270,051,091	0.84%
Blackrock: San Francisco	Passive (EM)				615,828,709			615,828,709	1.92%
	Emerging Markets Equity Total							**$1,751,272,563**	5.46%
								Emerging Markets Policy	**6.00%**
	Non-US Equity Total							**$7,655,332,390**	23.85%
								Non-US Equity Policy Range: 16% - 28%	**23.00%**
Corporate Finance				1,181,276,605				1,181,276,605	3.68%
Special Situations				614,911,178				614,911,178	1.92%
Venture Capital				67,801,722				67,801,722	0.21%
	Private Equity Total							**$1,863,989,504**	5.81%
								Private Equity Policy Range: 5% - 9%	**7.00%**
	Opportunistic Equity							**$182,884,681**	0.57%
								Opportunistic Equity Policy Range: 0% - 3%	**0.00%**
	Equity Total							**$21,598,749,238**	67.29%
								Total Equity Policy Range: 53% - 73%	**63.00%**
Gresham: New York						797,967,977		797,967,977	2.49%
GTAA Managers (2)	Active GTAA					347,440,524		347,440,524	1.08%
	Commodities Total							**$1,145,408,500**	3.57%
								Commodities Policy Range: 1% - 7%	**4.00%**
Core Public						71,734		71,734	0.00%
Core Private						302,518,172		302,518,172	0.94%
Non-Core Opportunistic						1,338,435,359		1,338,435,359	4.17%
Non-Core Enhanced						150,628,630		150,628,630	0.47%
Buildings/ Jt. Land						46,533,657		46,533,657	0.14%
GTAA Manager (1)	Active GTAA					41,586,821		41,586,821	0.13%
	Real Estate Total							**$1,879,774,374**	5.86%
								Real Estate Policy Range: 6% - 10%	**8.00%**
	Infrastructure Total							**$0**	0.00%
								Infrastructure Policy Range: 0% - 3%	**0.00%**
	Farmland & Timber Total					92,404,140		**$92,404,140**	0.29%
								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							**$3,117,587,014**	9.71%
								Inflation Linked Policy Range: 7%-15%	**12.00%**
	TOTAL Amounts	$4,273,361,877	$3,109,935,527	$10,306,528,914	$11,292,220,324	$3,209,991,153	$0	**$32,099,633,656**	**Total Fund**
	TOTAL Percent	13.31%	9.69%	32.11%	35.18%	10.00%	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	1.10%								
Core	9.98%	13%						**50%**	**59%**
High Yield	3.74%	5%							
US Fixed Income	13.71%	18% (8-28%)	14.46%	18.6% (9-29%)	-4.14%	-$1,330,100,394	**OK**		
EM Debt	2.61%	4%		4.00%					
Opportunistic Debt	2.92%	0% (0-10%)	2.92%	0% (0-10%)	2.92%	$937,935,153	**OK**		
Private Debt	2.66%	3%		3.00%					
Total Fixed Income	**23.00%**	**25% (15-35%)**	**22.65%**	**25.6% (16-36%)**	**-2.95%**	**-$948,434,532**	**OK**		
Large Cap	26.99%	23%							
Mid Cap	5.02%	5%							
Small Cap	5.05%	5%							
US Equity	**37.06%**	**33% (26-38%)**	**38.39%**	**35.12% (28-40%)**	**3.28%**	**$1,052,755,353**	**OK**	**50%**	**65%**
Developed Large Cap	14.58%	14%							
Developed Small Cap	3.81%	3%							
Emerging Markets	5.46%	6%							
Non-US Equity	**23.85%**	**23% (16-28%)**	**23.65%**	**23.54% (17-29%)**	**0.12%**	**$37,079,858**	**OK**	**30%**	**44%**
Private Equity	5.81%	7% (5-9%)	5.81%	5.81% (4-8%)	0.00%	$0	**OK**		
Opportunistic Equity	0.57%	0% (0-3%)	0.57%	0% (0-3%)	0.57%	$182,884,681	**OK**		
Total Equity	**67.29%**	**63% (53-70%)**	**68.42%**	**64.46% (54-71%)**	**3.96%**	**$1,272,719,892**	**OK**		
Commodities	3.57%	4% (1-7%)	2.92%	4.09% (1-7%)	-1.17%	-$375,102,679	**OK**		
Real Estate	5.86%	8% (6-10%)	5.73%	5.86% (4-8%)	-0.13%	-$41,586,821	**OK**		
Infrastructure	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Farmland & Timber	0.29%	0% (0-3%)	0.29%	0% (0-3%)	0.29%	$92,404,140	**OK**		
Opportunistic I/L	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Total Inflation Linked	**9.71%**	**12% (8-16%)**	**8.93%**	**9.94% (6-14%)**	**-1.01%**	**-$324,285,360**	**OK**		
Total	**100.00%**	**100%**	**100.00%**	**100.00%**	**0.00%**	**$0**		**30%**	**40%**
								Internally Managed Portfolios:	
Total GTAA								**$9,317,108,294**	**29%**
Bridgewater	$2,905,090,048	9.1%					**Opportunistic definitions:**		
Windham	$555,973,549	1.7%					1) Tactical in nature: Function of market dislocation AND		
Total	**$3,461,063,597**	**10.8%**					2a) Outside SAA benchmark, OR		
Policy	**10% ±5%**	**OK**					2b) Within SAA benchmark but absolute return oriented		

ARIZONA STATE RETIREMENT SYSTEM'S INVESTMENT MANAGEMENT HOUSE VIEWS

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

FEBRUARY 2014

U.S. EQUITIES

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - Major risks have receded and 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 except for Congressional / Administration impasse over spending and the Treasury debt ceiling.
   - 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 as revenue trends are flat and pressures on profit margin expansion are surfacing.
2. Valuations: **POSITIVE**
   - P/E ratios (forward) are acceptable, though now less generous, and marginally less so for the mid- and smaller-sized companies: S&P 500, 13.4x-15.2x, S&P MID, 15.8x-18.1x; S&P SC600, 16.0x-19.0x.
   - Historic P/Es still imply advances of 6-10% for mid and small caps; 10-12% 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.
3. Sentiment: **POSITIVE**
   - Lessened near-term equity market volatility (i.e., VIX Index) still reflects wariness over fiscal and sovereign issues.
   - Asset flows that had gone to bonds and non-U.S. equities throughout most of 2011-2012 continue to shift toward equities, though not necessarily to stock mutual funds

Commentary:

Amidst the challenges of the early-year correction of the U.S. equity markets, the general resiliency of stocks in general confirms positive underlying investor sentiment. Such corrections, and their extent, can rarely be timed, only anticipated. Although one can point to a number of economic or fundamental impediments, outweighing them was the persistent advance without meaningful retracement since spring of last year that set up conditions for a respite. Portfolio rebalancing and profit-taking are normal and prudent after 25%-30% advances, as is disciplined buying of stocks once price corrections run their course.

Once past this corrective phase, the U.S. equities markets seem apt to appreciate at their secular historic rate. We still see the U.S. economy moving forward well below its potential velocity, but non-recessional and broadening, evidenced by rising capital goods orders, a positive Purchasing Mangers' Index and dissipating unemployment claims. The rate of growth in corporate profits looms as more questionable. While they are generally solid, there is little to suggest earnings growth will accelerate as fairly widen operating profit margins are vulnerable to coming in somewhat and projected slow economic growth does not portend a quickening of unit revenues.

Staff took advantage of 2013 equity market strength to systematically pare back allocation to U.S. markets, moving a portion to the EAFE asset sub-class of Non-U.S. equities late in 4Q2013. Staff anticipates reallocating additional assets opportunistically from U.S. Equities, predicated on the developed Non-U.S. markets sustaining a relative value advantage and their principal economies continuing to recover.

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 focused on controlling economic growth and fiscal stability.
2. Valuations: **POSITIVE**
    - Reasonable global valuations relative to U.S.; price-to-book values of 1.3x - 1.9x; P/Es below 15x on trend earnings.
    - Dividend yields are incrementally more favorable with most ranging from 1.3x to 1.5x 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:

The developed global markets equity indexes recently logged their first monthly decline since late summer 2013. Much the same as the U.S. equities markets are experiencing, global investors are re-assessing what a slow start to the earnings season, reduced Federal Reserve quantitative easing and pressure on emerging markets currencies seem to imply over the longer term. Given the gains over the past year, investors are naturally taking some risk capital out of the markets during this reevaluation process.

That does not suggest that risk is being reappraised fundamentally; rather, global investors are adjusting expectations following the first phase of recovering markets. Major EU economies continue to strengthen and corporate profitability continues to expand, potentially rising by low double-digits which would outstrip the rate projected overall, for U.S. companies. Regardless, EU valuations of equities are relatively generous, particularly equity risk premiums, which look sufficient for weathering projected increases in risk-free rates.

The Japanese equities markets have been equally challenged in this current correction phase. It appears that this has been market action alone, as the Japanese economic reform story is still intact. The Abe policies look to bring better growth evidenced already by growing personal incomes and solid consumption.

Emerging markets (EM) overall, are more problematic. 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, and weaken for those with large external debt balances yet are surprisingly solid for many others. Not surprisingly, capital continues to be withdrawn indiscriminately from EM equity markets, despite select opportunities at the specific company level.

IMD moved equities positioning in late 4Q2013 to a more neutral allocation to the Non-U.S. developed-economies equities class, and expects to increase the Non-U.S. exposure opportunistically over the course of 2014. A slightly below policy weight allocation will be maintained in the Non-U.S Emerging Markets sub-asset class.

CURRENT PORTFOLIO POSTURE: Equal Weight 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 interest rates over an intermediate to long-term time frame.
    - In the near-term, long-term interest rates fell in January in response to a combination of factors including some disappointing economic data and concerns about growth in China and other emerging markets.

2. Valuations: **NEGATIVE**
   - 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, the weak performance of emerging market currencies relative to the U.S. dollar has resulted in very poor performance of this market over the past year. Furthermore, a combination of global economic factors has raised the possibility of a continuation of poor returns this year. 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) and excess mortgage-servicing rights ("MSRs") also offer opportunities to potentially achieve double-digit returns.

3. Sentiment: **NEUTRAL**
   - Following a multi-decade period of declining interest rates, IMD has 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.

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 potential for continued poor performance in this asset class. As a result, in January, we further reduced our allocation to this asset class by withdrawing $200 million from emerging market local debt to fund capital calls and other opportunities.

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. In January, we increased our overall commitments to private debt by nearly 30% to take advantage of the compelling opportunities in this market. Private debt offers very attractive yields but the pace of our funding is subject to the ability of managers to source investments and draw down capital on our commitments. Opportunistic debt includes a number of mandates such as distressed debt and structured asset-backed securities that are likely to provide very attractive returns. In December, we approved the establishment of two new multi-strategy mandates in opportunistic debt to take advantage of potential investment opportunities as European banks disgorge troubled fixed income assets.

CURRENT PORTFOLIO POSTURE: UNDERWEIGHT vs. SAA target

REAL ESTATE

Primary Market Metrics & Indicators:

1. Fundamentals: **POSITIVE**
   - While vacancy is declining across the board, excess inventory remains a problem in some sectors especially retail and suburban office.
   - 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 has turned the corner with effects rippling through the economy. 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 15% 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 5% discount to NAV with an average dividend yield of 4.1%. This reflects a 106bps spread to the 10 year treasury, which is in line with 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 mutliples 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 leveraged loan and high yield spreads have recently dipped below 450bps.
- 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**
   - Fund raising was up from $95B (137 funds) closed 2012 to $169B (145 funds) closed in 2013. In aggregate, there are 2,000+ funds currently seeking ~$800B.
   - Dry powder of nearly $1.0 trillion globally in all categories rose from $941 at the end of 2012.
   - In 2013, PE deal flow fell 10% globally while the aggregate value of deals was up 10% in N. America, down 6% in Europe, and down 28% in Asia.
   - In 2013 there were 1,300+ exits valued at $300B, the highest count on record and matching the value of 2011. The average exit size of $500M was the same as 2012.
   - The IPO market continued to trend up in 2013 (particularly in H1) as equity markets rallied.

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 began to taper its QE program in December 2013 by $10B and followed up with another $10B in January, easing monetary stimulus pressures.
   - Recent data indicates the US economy has momentum. However, excluding exogenous factors, most commodity sectors appear well supplied, particularly for the current global slow growth environment.
   - After a strong harvest season, Ags will turn their attention to the upcoming planting season. Energy markets reflect the continued growth in US production, although natural gas is sharply up on the cold winter weather. Metals have been mixed as precious metals have benefitted from a flight to safety while industrial metals still exhibit weak demand.

2. Valuations: **NEUTRAL**
    - Since October the index has been range bound from 245 – 260 as markets have priced in a stronger US economy with broader global weakness.
    - Year-to-date, coffee, natural gas, and cocoa have been the leaders with zinc, lead, and aluminum being the biggest laggards.
    - The index on a year-to-date basis is up 2%, as inflation dynamics are not particularly robust while improving US growth is counterbalanced by global challenges.
3. Sentiment: **NEUTRAL** (from NEGATIVE)
    - The improvement in macroeconomic sentiment in the U.S. year-to-date has been counterbalanced by EM weakness and therefore not resulted in flows into commodities.
    - Exogenous shocks have been largely absent with the exception of natural gas and coffee, keeping supply concerns largely abated while central banks continue to manage their influence, leading to balanced prospects.
    - Looking across the individual commodities, most remain well supplied, which has been reflected in prices as inflationary fears have abated.

Commentary:

IMD maintained a tactical underweight position relative to the SAAP during 2013 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 equity investments in idiosyncratic opportunities with favorable capital market dynamics. Opportunistic investments are tactical in nature AND are outside ASRS SAAP benchmarks or are absolute return oriented.

CURRENT PORTFOLIO POSTURE: APPROX 3.5% 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.

ASSET CLASS COMMITTEE (ACC) MEETINGS										
2013		Asset Class Committees					Board Committee			
		Private Market Committee (PRIVMC)			Public Market Committee (PUBMC)		Investment Committee (IC)			
Quarter	Month	Dates		Total	Dates	Total	Dates	Total	Grand Totals	
1st	January	1/22		1	-	-	-	-	7	
	February	2/19	2/28	2	2/26	1	2/20	1		
	March	3/18		1	3/21	1	-	-		
2nd	April	4/18		1	-	-	4/22	1	7	
	May	5/29		1	5/13	1	-	-		
	June	6/4	6/26	2	-	-	6/24	1		
3rd	July	7/16		1	-	-	-	-	5	
	August	8/13		1	8/30	1	8/30	1		
	September	9/20		1	-	-	-	-		
4th	October	10/4	10/21	2	-	-	10/21	1	9	
	November	11/4	11/21	2	11/25	1	11/18	1		
	December	12/10	12/20	2	-	-	-	-		
Totals				17		5		6	28	

ASSET CLASS COMMITTEE (ACC) MEETINGS

2014		Asset Class Committees					Board Committee		
		Private Market Committee (PRIVMC)			Public Market Committee (PUBMC)		Investment Committee (IC)		
Quarter	Month	Dates		Total	Dates	Total	Dates	Total	Grand Totals
	January	1/15	1/31	2	1/31-	1	1/31	1	
1st	February					1			4
	March					1			
	April					-			
2nd	May					1			
	June					-			
	July								
3rd	August								
	September								
	October								
4th	November							1	
	December							-	
Totals				2		1		1	4

PRIVATE MARKETS COMMITTEE (PRIVMC)

11/21/13:

- **Real Estate Program**
    - The Committee discussed an error found by staff regarding Credit Suisse reporting ODCE index gross rather than net of fee returns, the latter of which is in the ASRS Real Estate Strategic Plan and Total Fund Strategic Asset Allocation Policy. As a result of research on GIPS and GASB standards and reporting rules applicability to remedy such an error, the Committee approved the recommendation to implement the benchmark from inception but not require restatement of prior reports.
    - IMD will provide an update informational agenda at this IC meeting. In short, since the Board approved the Real Strategic Plan that included the NET ODCE benchmark, NEPC will start using the net ODCE benchmark (from inception), beginning with the next quarter reporting period after this IC presentation.
- **Private Equity Pacing Model and Implementation Plan**
    - The Committee approved the pacing model establishing $550 million as the guideline for making new private equity commitments in 2014 plus $50 million carried over from 2013.

1/10/13: (Ad-hoc)

- **Opportunistic Debt**
    - The Committee approved a $300 million investment commitment to Och-Ziff's open-end fund that invests in distressed securitized and corporate debt.
    - The Committee approved a $350 million in a partnership which will investment in distressed corporate debt in the U.S. and Europe. Final negotiation of business and legal terms are in process.

12/20/13:

- **Real Estate Pacing Model and Implementation Plan**
    - The Committee approved the pacing model establishing $500 million as the guideline for making new real estate commitments in 2014.
- **Real Estate Program**
    - The Committee approved granting a guideline variance to an investment criteria needed to accommodate ASRS participation with USAA in their acquisition of the Fresh & Easy assets. This variance was approved based on its merits and is

applicable to this specific investment opportunity. USAA is the ASRS strategic real estate manager specializing in industrial properties.

- **Opportunistic Equity**

  - The Committee approved an investment of $90 million in a joint venture to develop certain gas and liquid reserves. This project is in legal negotiation.

1/15/14: (Ad-hoc)

- **Private Debt Program**

  - The Committee approved an increase in commitment sizes to the following debt mandates: Cerberus Credit Opportunity Fund, H/2 Core real Estate Debt Fund and RFM Cactus Holding (Related) Real estate Debt.

  - The Committee approved a $10 million co-investment in a senior debt and preferred equity position a company invested in by Highbridge, a fund in which the ASRS in currently invested.

1/31/14

- **Real Estate Program**

  - The Committee approved granting a guideline variance to an investment criteria needed to secure Ventas's joint venture agreement in an attractive senior housing investment opportunity. This variance was approved based on its merits and is applicable to this specific investment opportunity. Ventas is the ASRS strategic real estate manager specializing in senior housing and medical office.

  - The Committee approved granting a guideline variance to an investment criteria associated with a potential purchase of a student housing investment opportunity. This variance was approved based on its merits and is applicable to this specific investment opportunity. Peirce Education Properties is the ASRS strategic real estate manager specializing in student housing.

- **Private Equity Program**

  - The Committee approved a $75 million commitment to an energy and minerals fund pending staff negotiations of final business and legal documents.

  - The Committee approved an additional commitment of $25 million to Pine Brook Capital Partners, bringing the total ASRS commitment in this partnership to $75 million.

PUBLIC MARKETS COMMITTEE (PUBMC)

11/25/13:

- **Securities Lending Program**

    - The Committee approved authorizing $4 billion in aggregate lending comprised of $2 billion in Base Lending and $2 billion in Opportunistic Lending contingent upon final contract negotiations with State Street and final approval of this contract by the Director and CIO.

1/31/14:

- **Public Equities Program**

    - The Committee was presented with analyses of ASRS Risk Factor ETF Portfolios which included the proforma effects to the Public Equities (MSCI Barra) risk factors profile of rebalancing, and increasing the allocation to the Risk Factor Portfolios. The Committee took no action on the proposal and staff will present additional analysis at a later session.
    - The Committee received a project status report regarding review of ASRS International Large-Cap Equity sub-asset class (EAFE) and analyses related both ASRS incumbent and non-current investment managers. The Committee was not requested to consider taking action at this meeting; however, a proposal by staff is expected to be presented for consideration in the next 30-45 days.

TACTICAL PORTFOLIO POSITIONING

In January, IMD redeemed approximately $200 million from ASRS emerging market local currency debt mandate with PIMCO. Funds were redeployed to handle $60-$80 million of real estate and private debt capital calls with the remainder reallocated to F2 which will slightly reduce ASRS policy underweight in core fixed income – an area of the market that could perform well in an extreme risk-off scenario. As a result, the ASRS further reduced its exposure to EM debt to approximately 2.6% vs 4% policy with about a 38% in local currency debt and 62% in the blended mandate.

This action is consistent with IMD House Views regarding on-going concerns about emerging market local currency debt due to a number of factors. These factors include the potential for further deterioration in the value of EM currencies due to higher interest rates in the US, an eventual withdrawal of quantitative easing, and improving growth prospects in the US coupled with much weaker growth prospects in major EM countries. In fact, concerns appears to have recently been heightened due to other recent events such as a broad withdrawal of funds from EM countries, political uncertainty in a number of major EM countries and growth concerns in China. 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.

The CIO and PMs for Fixed Income and Equity will discuss in more detail this tactical portfolio repositioning.

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

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

- In January, the Director commenced a biweekly staff Investment Idea Exchange meeting with the following key objectives: 1) promote & share investment ideas, 2) determine which ideas can be timely researched & if prudent, implemented, 3) update each other on views and intiatives, and 4) further enhance the structure and efficiency of the ASRS Fund.

- In February, ASRS Private Markets PM facilitated a forum on the US home construction industry, discussing the structure of housing demand, the builder supply chain, homebuilders' perspective on risk management, the relationship between builders and land providers, and the mitigation of entitlement risk. These discussions provided context to and support for a potential further investment opportunity in residential real estate and included a panel of four experts in real estate.

- 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 76 investment managers: Private markets (RE, PE, Debt) – 53 and Public markets (Equity and Debt) – 23.

- IMD completed research identifying opportunistic fixed income investments in distressed credit and structured product which we believe will provide favorable risk adjusted returns especially relative to those provided in core fixed income. Specific opportunities appear to continue to exist in structure credit especially from European banks which are expected to systematically deleverage and shed problem assets. This tactical investment theme and specific investment managers was approved by the PRVMC in December.

- ASRS private equity and real estate pacing and implementation plans for 2014 were presented in Q4-13. Private Equity's pacing plan of $550M (+$50M held over from 2013) was approved for 2014. Real Estate's pacing plan of $500M ($150M for the renewal of one special situations fund and $350M for niche and tactical opportunities).

- IMD internally manages 7 public equities and fixed income portfolios which had an aggregate market value of over $9.5 billion or 30% of Total Fund. For calendar year 2013, 4 of 7 met or exceeded their benchmarks, and 7 of 7 portfolios met or exceeded their benchmarks on an inception-to-date basis.

- ASRS general investment consulting contract expires in March 2014 and as such, the ASRS Procurement Department (project manager) engaged an Evaluation Committee to evaluate the responses to a General Consultant RFP. It is anticpated that a recommendation to the IC and, subsequent IC recommendation to the Board will occur in February.

- In Q4-13, the Public Markets Committee approved a redesign of the ASRS securities lending program 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 potentially approved on a case-by-case basis by the Director and CIO.

  Additionally, the CIO approved a tactical securities loan of approximately $54 million of emerging market ETFs (held an ASRS GTAA beta portfolio) against non-cash collateral which is expected to net ASRS approximately $60K per month.