Inflation Linked Assets

Asset Class Review

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Arizona State Retirement System

November 30, 2015

Outline

Inflation Linked Assets

- Inflation linked assets are positively linked to inflation through their value and income streams
- Inflation linked assets are one of three major asset classes (along with equities and fixed income) as defined in the ASRS strategic asset allocation
- Inflation linked assets are implemented in both private and public markets
- Private market inflation linked assets are
  - Real estate
  - Farm land
  - Infrastructure
  - Timber
- Investments in commodities are generally implemented through highly liquid derivatives markets

The 2009 Asset Allocation Study

- The 2009 Strategic Asset Allocation Study established Inflation-linked as an asset class
  - Commodities & TIPS
    - Positive short and medium-term correlation to inflation
    - Diversification benefits from low correlation to traditional asset classes & low correlation among one another
- During 2009-2011 used TIPS opportunistically
  - Blackrock US TIPS passive
- In Q3 2010 ASRS hired two commodities managers
  - Gresham & Cargill

2009 Inflation Linked Allocations

Asset Class	Target	Range	Benchmark
Commodities	3%	0-5%	DJ UBS Total Return
TIPS	0%	0-5%	Barclay's TIPS
Total IL	3%	0-10%	

The 2012 Asset Allocation Study

- The 2012 Strategic Asset Allocation Study further built out the Inflation-linked program
  - Real Estate: Increased target allocation to 8% from 6%
  - Commodities: Increased target allocation from 3% to 4%
  - Farmland & Timber, Infrastructure, and Opportunistic Inflation-linked each established as asset classes, with 0% target allocation and 0-3% range

2012 Inflation Linked Allocations

Asset Class	Target	Range	Benchmark
Commodities	4%	1-7%	DJ UBS Total Return
Real Estate	8%	6-10%	NCREIF ODCE
Infrastructure	0%	0-3%	Core CPI plus 3.5%
Farmland & Timber	0%	0-3%	Core CPI plus 3.5%
Opportunisitic	0%	0-3%	Investment Specific
Total IL	12%	8-16%	

The 2015 Asset Allocation Study

- The 2015 Strategic Asset Allocation Study modified the Inflation-linked program
  - Real Estate: Increased target allocation to 10% from 8%
  - Commodities: Reduced target allocation to 2% from 4%
  - Farmland & Timber, Infrastructure, and Opportunistic Inflation-linked retained as asset classes, with no change to target allocation

2015 Inflation Linked Allocations

Asset Class	Target	Range	Benchmark
Commodities	2%	0-4%	DJ UBS Total Return
Real Estate	10%	8-12%	NCREIF ODCE
Infrastructure	0%	0-3%	Core CPI plus 3.5%
Farmland & Timber	0%	0-3%	Core CPI plus 3.5%
Opportunisitic	0%	0-3%	Investment Specific
Total IL	12%	8-16%	

Real Estate Strategy

- ASRS Implements its real estate program pursuant to a strategic plan
- ASRS updated this plan in September, 2015
- The ASRS Real Estate Strategic Plan can be found at the following link www.azasrs.gov/content/key-investment-documents

Real Estate Objectives

- Generate attractive risk adjusted returns at or above the actuarial target return of 8%
- Enhance the overall diversification of the ASRS investment program
- Generate regular cash flow from stabilized properties
- The program is benchmarked against the NCREIF ODCE index. The real estate strategic plan provides the following guidance regarding the target return and selection of the benchmark:

  "By selecting the NFI-ODCE as benchmark, the ASRS considers this benchmark as an opportunity cost, not a model portfolio. The ASRS expects that its portfolio will vary significantly from the ODCE index. The ASRS will manage its investments actively and dynamically in the real estate asset class in order to target a net return expectation of 8%. The 8% net objective represents a significant premium over the 6.5% net long term expectation for passive, stable, equity real estate positions."

Real Estate Portfolio Structure

- 75% of the portfolio is planned for implementation in separate account structures
  - In these structures, ASRS will be a majority owner with significant control rights including control over liquidity events and the right to utilize a consultant to validate each property meets the investment criteria and return hurdles applicable to the investment
  - ASRS favors separate account structures because of the ability to negotiate custom investment criteria, enhanced controls and enhanced liquidity
- 25% of the portfolio is planned for implementation in commingled structures
  - Commingled structures will be used for differentiated strategies that are only available in a commingled structure or not feasible to implement in a separate account
- ASRS commenced building the separate account portfolio in 2013 and this portfolio now constitutes approximately one third of the real estate portfolio. We anticipate the target portfolio structure will be achieved in three to five years as we continue to build out the separate accounts and the legacy commingled funds run off.

Risk Management – Property Markets

- Real estate performance is strongly influenced by observable and durable demographic and economic trends
- Rental increases occur in situations with high demand and constraints on supply
- Some important trends are:
  - The demographics of baby boomers and their children profoundly affect real estate demand
  - E-commerce affects utilization of industrial and retail space
  - The structure of employment away from goods producing to service occupations affects the geographic dispersion of economic activity
  - Urbanization is a continuing trend with a pattern of globally significant cities emerging
  - Office utilization is becoming much more efficient with a strong downward trend of space utilization per employee

Risk Management – Demand Driven Investing

- In order to capitalize on these trends, we are creating a customized investment strategy that we like to call "demand driven investing".
  - We believe the risk of real estate is not having tenants
  - We search for opportunities with strong demand fundamentals driven by age and income demographics, education levels, concentrations of high quality jobs and other relevant location criteria
- We identify sectors that have favorable demand dynamics with demographic or other economic tail wind and search for markets with supply barriers
  - Apartments, industrial, self-storage, medical office, senior housing, student housing are overweight sectors for us
- We have implemented a robust search and recruitment process to find the most qualified parties to be our partners in this program
  - Identify first tier operators in each of these sectors to implement through custom separate account arrangement

Risk Management – Property Level Underwriting

- All of our separate account agreements require consultant confirmation that each property acquired meets investment criteria and meets applicable return hurdles
  - While there are national real estate estate statistics, property markets are inherently local
  - We underwrite every property in the context of its competitiveness in the supply/demand dynamic of its neighborhood
- We are supported in this process by a consultant with deep expertise in this type of property level underwriting and with extensive contacts in the real estate industry

Risk Management – Diversification and Leverage

- As required by the strategic plan, the portfolio will be well diversified across
  - Property types
  - Geography
  - Life Cycle Stage
  - Vintage Year
- The portfolio will levered at 50% to 60% loan to value
  - Leverage is measured at the portfolio level, allowing latitude at the property level
  - Higher leverage is permitted on stable properties with access to fixed rate financing but offset by lower leverage on properties in the process of implementing a value creation business plan

Risk Management – Capital Markets

- Like other asset classes, real estate faces challenges as we approach what may be the end of an extended period of very low interest rates
  - While real estate cap rates are low, spreads to treasuries are higher than historic norms indicating some degree of interest rate increase is already priced into values
- Our strategy in this context is:
  - Focus on diversification, especially by vintage year
  - Highly disciplined underwriting at the property level anticipating future increases in interest rates and cap rates
  - Avoid the most expensive core properties which in the current market are "priced to perfection"
  - Focus on niche property types such as medical office priced wide of traditional property categories
  - Focus on properties with value creation potential through operational improvement investing directly with expert operators

Current Portfolio

Real Estate Portfolio as of June 30, 2015

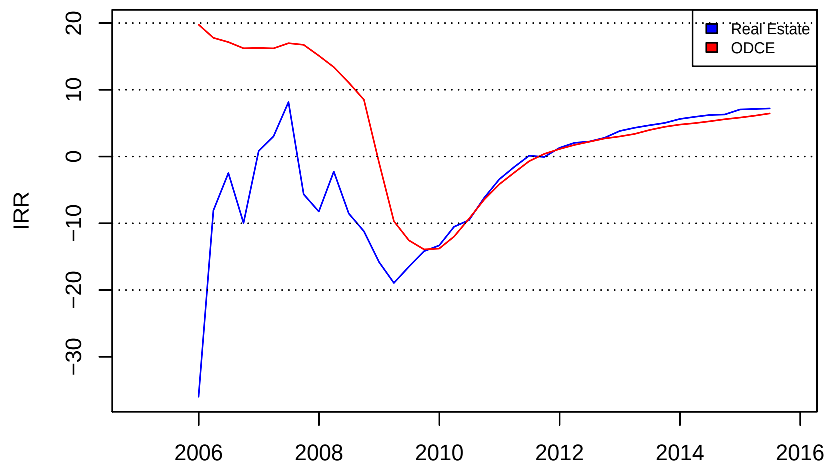
	$ millions	Percent of ASRS Total Fund
Net Asset Value	2393.42	6.87%

- Current Portfolio is $1093 million below the target funding of 10%
- We update a pacing study and implementation plan each year to determine the amount of new investment commitments to achieve the target funding

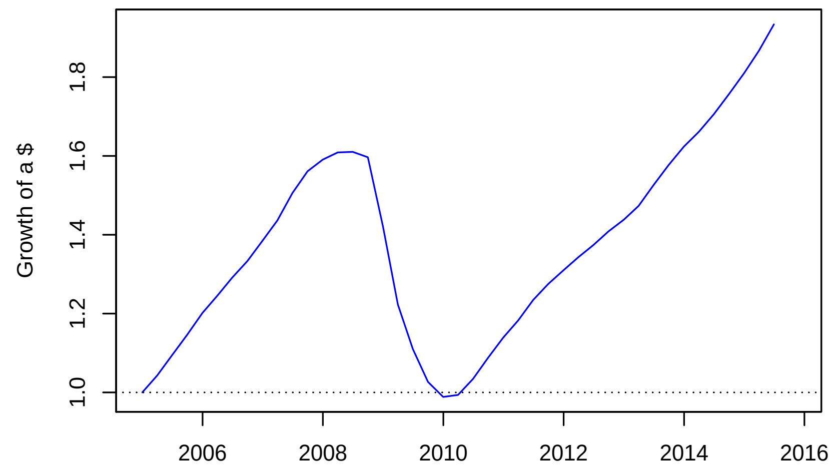
Performance

- The charts and tables on the following pages illustrate the performance of the real estate portfolio
- The real estate portfolio underperformed its benchmark in its early years, but recent out-performance has brought the inception to date performance above benchmark levels
- As noted above a majority of assets are invested in commingled opportunity funds which have, as would be expected, underperformed during down markets but outperformed in up markets

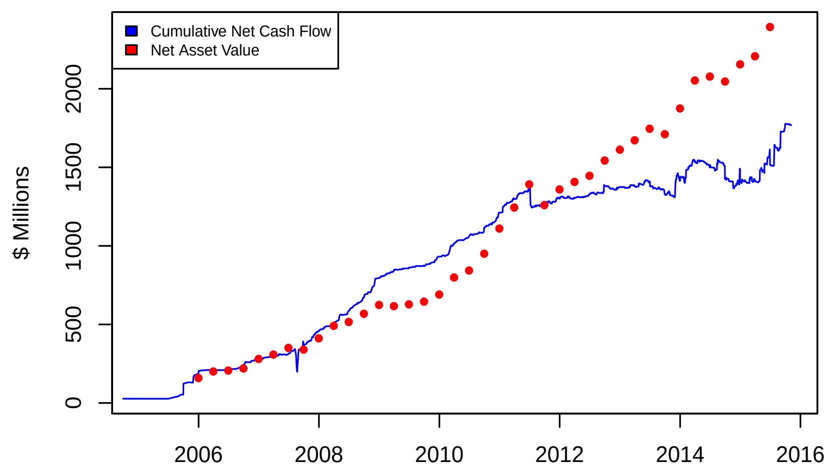
Real Estate IRRs compared to ODCE
Inception through indicated date



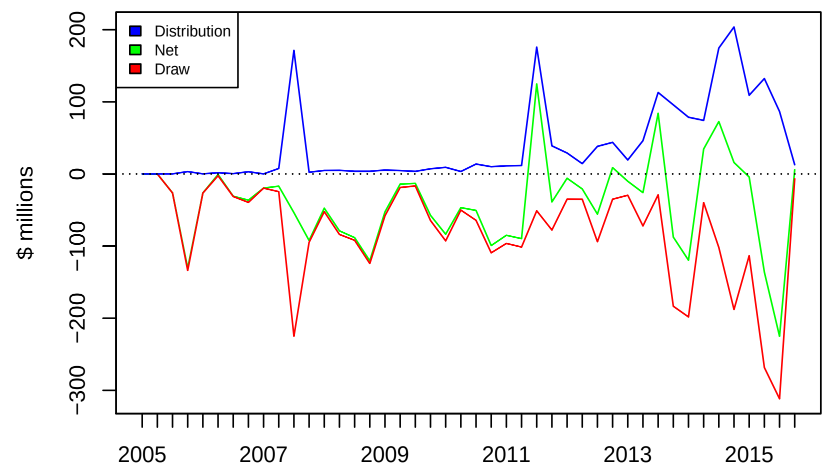
ODCE



Real Estate Cumulative Net Capital Contributed
Compared to Value



Real Estate
Quarterly Draws and Distributions



Returns for Periods Ended June 30, 2015

Time Weighted Returns

	One Quarter	One Year	Three Years	Five Years	Inception
Real Estate TWR	2.24%	14.61%	13.58%	14.11%	7.02%
ODCE TWR	3.00%	12.00%	12.00%	13.00%	6.00%

IRRs

	One Quarter	One Year	Three Years	Five Years	Inception
Real Estate IRR	2.21%	12.99%	13.76%	14.34%	7.20%
ODCE IRR	3.58%	13.38%	12.08%	13.15%	6.46%

Opportunistic Investments

Real Estate Related Opportunistic Investments

	Commitment	Net Amount Inveted	NAV	Inception IRR
56th and Park (NY) Holdings, LLC	50	40.02	96.47	63.28%
OCM STR Co-Invest 1, L.P.	150	105.95	193.70	21.68%
Saguaro Land Investor, LLC.	140	44.66	47.86	11.76%

- OCM Store is a REIT based in Scottsdale investing in single tenant net lease properties. ASRS was a founding investor in this company which has recently gone public (NYSE:STOR).
- 56th and Park is a condominium at 432 Park in Manhattan
- Saguaro Land Investor provides subdivision financing to homebuilders

Performance Accountability

The following table shows performance for legacy real estate investments and those by the current management team.

Portfolio Returns

	Portfolio IRR	ODCE IRR	Outperformance
Total RE Legacy Portfolio	5.91	5.56	0.35
Total RE Current Portfolio	15.50	12.37	3.12
Real Estate Opportunistic	27.88	12.19	15.69
Combined Current Real Estate	18.30	12.33	5.97

The following table shows performance of the current consulting team.

Consultant Returns

	Portfolio IRR	ODCE IRR	Outperformance
RCLCO Real Estate	13.67	12.98	0.70
RCLCO Opportunistic	55.35	12.61	42.73
RCLCO Combined	19.71	12.91	6.80

Farm Land Investing

- ASRS invests in farm land for its long-term inflation protection linked to the value of land and its income generation
- ASRS invested $175 million International Farming Corp (IFC)
    - IFC is a multi-generational U.S. farming corporation with deep operational expertise
    - They pursue a diversified and value add approach to agricultural investing
        - Diverse crop mix and geography with high crop optionality
        - Prefer properties with natural resource optionality (water and mineral rights)
        - Avoids the expensive Midwest 'I' states (Iowa, Illinois, and Indiana)
    - ASRS negotiated custom structure with right-of-first-offer (ROFO) rights to buy assets upon sale from the fund
    - Inception IRR through June 30, 2015 is 3.28% which has underperformed the benchmark return of CPI+350 by over 2%
        - The portfolio is still very young with average hold of less than 2 years
        - Value add business plans are still in course of implementation with productivity improvements being realized in the current crop year
        - Recent distressed investments in citrus and organic farming seem very promising
        - Commodity grain investments have been impacted by prices

Infrastructure

- ASRS invests in infrastructure for long-term inflation protected income streams from assets and systems that support transportation, energy, shipping, and communications
  - Global needs exist to support rising populations and antiquated operations
- ASRS invested $300 million with Industry Funds Management (IFM), an Australian-based infrastructure manager that invests globally using a core strategy in an open-end fund structure
  - Fund structure provides diversity of exposure across strategies and geography
  - Long term vehicle structure is aligned with long term character of assets
  - Focused on OECD countries; current portfolio invests across US, UK, and Europe
  - Investments include airports, toll roads, a petroleum pipeline, power generation & transmission facilities, a regulated water & wastewater treatment company, and broadcast and wireless communication infrastructure
    - Projects are heavily regulated and have predictable revenue patterns
- The $300 million commitment was called in December 2014
- Inception IRR through June 30, 2015 is 2.77%, which has underperformed the benchmark return of CPI+350 by 0.47%
  - The portfolio has performed well (albeit over a short measurement period) but with gains largely offset by currency impacts

Timber

- Timber is a permitted asset in the inflation linked group because it can provide long-term inflation protection income derived from the rising utilization of timber and shrinking forest sizes
- Timber has a low correlation with other asset classes combined with low volatility
- ASRS has has made no investments in timber but monitors the space
- Should ASRS pursue this strategy, it will seek alignment of asset and vehicle life similar to other private markets inflation-linked assets

Background of ASRS Commodities Program

- ASRS approved a 3% (0%-5%) strategic allocation to commodities in October 2009. After an in-depth search, ASRS invested just over half of the allocation with two long-only commodities investment managers
  - Gresham - $200M on 8/30/2010
    - Systematic rules-based approach is used to construct and rebalance the portfolio. A discretionary, market-driven approach is used to implement and roll commodity futures.
  - Cargill - $200M on 9/30/2010
    - Fundamental, bottom up approach using trading desks to construct a regional and global supply/demand balance sheet for each commodity market in which Cargill participates
  - ASRS legged into its allocation to avoid chasing returns and because of valuation concerns.
  - ASRS GTAA managers' benchmark also included a 3% allocation to commodities.

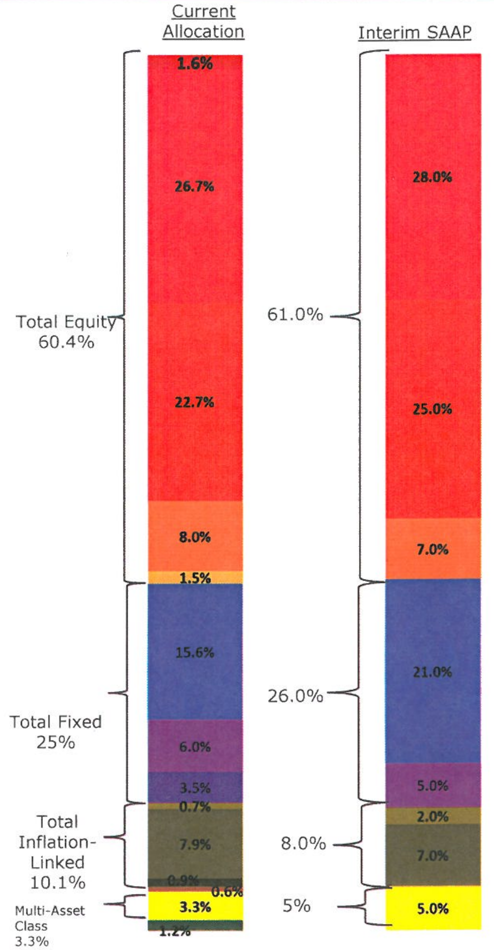
Background of ASRS Commodities Program (2)

- The 2012 Strategic Asset Allocation Study increased target allocation from 3% to 4%, with a range of 1% - 7%
- The 2015 Strategic Asset Allocation Study reduced the target allocation from 4% to 2%, with a range of 0% - 4%
  - Over the past year, ASRS has maintained its tactical underweight to commodities and reduced its exposure:
    - $100M redemption in December 2014
    - $50M redemption in July 2015
    - $200M redemption in August 2015
    - These moves were consistent with the ASRS House View of maintaining an underweight position and also to provide liquidity for the Total Fund
  - Relative underperformance of asset class and redemptions resulted in further underweight to commodities from -0.7% (9/30/2014) to -1.3% (9/30/2015).
  - ASRS maintains its single manager relationship in commodities with Gresham. ASRS is comfortable with Greshams' role due to consistent outperformance, exceptional client service, and low fees

ASRS Commodities Asset Class Overview as of 9/30/2015

Arizona State Retirement System

SAA Policy Compliance



	Current Mkt Value	Current Allocation	Interim SAAP	Difference	Policy Range	Within Range
Total Domestic and International Equity[1]	$16,823,835,177	51.0%	53.0%	-2.0%		
Domestic Equity[2]	$8,804,975,453	26.7%	28.0%	-1.3%	16% - 36%	Yes
U.S. Large Cap	*$6,958,889,493*	*21.1%*	*22.0%*	*-0.9%*		
U.S. Mid Cap	*$941,088,936*	*2.9%*	*3.0%*	*-0.1%*		
U.S. Small Cap	*$904,997,024*	*2.7%*	*3.0%*	*-0.3%*		
International Equity[2]	$7,490,182,873	22.7%	25.0%	-2.3%	14% - 34%	Yes
Developed Large Cap	*$5,496,020,109*	*16.7%*	*18.0%*	*-1.3%*		
Developed Small Cap	*$641,867,052*	*1.9%*	*2.0%*	*-0.1%*		
Emerging Markets	*$1,351,557,075*	*4.1%*	*5.0%*	*-0.9%*		
Private Equity[3]	$2,630,736,159	8.0%	7.0%	1.0%	6% - 10%	Yes
Opportunistic Equity[3,5]	$480,673,177	1.5%	0.0%	1.5%	0% - 3%	Yes
Total Equity	$19,935,244,513	60.4%	60.0%	0.4%	48% - 65%	Yes
U.S. Fixed Income	$5,131,640,536	15.6%	21.0%	-5.4%	8% - 28%	Yes
Core	*$3,731,607,177*	*11.3%*	*16.0%*	*-4.7%*		
High Yield	*$1,011,962,598*	*3.1%*	*5.0%*	*-1.9%*		
Treasuries Long Duration	*$388,053,348*					
Private Debt[3]	$1,963,196,587	6.0%	5.0%	1.0%	8% - 12%	
Opportunistic Debt[3,5]	$1,145,367,306	3.5%	0.0%	3.5%	0% - 3%	Yes
Total Fixed Income	$8,240,204,429	25.0%	26.0%	-1.0%	18% - 35%	Yes
Commodities	$232,059,332	0.7%	2.0%	-1.3%	0% - 4%	Yes
Real Estate[3]	$2,618,473,818	7.9%	7.0%	0.9%	8% - 12%	Yes
Infrastructure	$308,318,001	0.9%	0.0%	0.9%	0% - 3%	Yes
Farmland and Timber	$182,866,836	0.6%	0.0%	0.6%	0% - 3%	Yes
Opportunistic Inflation-Linked[4]	$0	0.0%	0.0%	0.0%	0% - 3%	Yes
Total Inflation-Linked	$3,341,717,987	10.1%	9.0%	1.1%	8% - 16%	Yes
Multi-Asset Class Strategies	$1,085,617,751	3.3%	5.0%	-1.7%	0% - 12%	Yes
Cash[4]	$392,075,938	1.2%	0.0%	1.2%		
Operating Cash (Non-Assetized)	*$28,920,981*	*0.1%*	*0.0%*	*0.1%*		
Operating Cash (Assetized)	*$363,154,956*	*1.1%*	*0.0%*	*1.1%*		
Total	$32,994,860,617	100.0%	100.0%	0.0%		

[1]Total Domestic and International Equity includes Equity Risk Factor Portfolio with assets of $528.7 million.
[2]Domestic Equity, International Equity and U.S. Fixed Income market values include residual values remaining in terminated manager accounts.
[3]Values shown for private markets portfolios include cash flows that occurred during 3Q 2015.
[4]Cash includes money for the upcoming monthly pension distribution.
[5]Aggregate Opportunistic asset classes not to exceed 10%.
Note: Interim SAA Policy includes proration of 0.9% Private Equity and 3.3% Real Estate, and 5.3% Private Debt which are unfunded.
Policy Ranges shown are relative to the long-term SAAP, causing some asset classes to be out of range while implementation of the long-term SAAP is in process.
Market values include manager held cash.

NEPC, LLC
September 30, 2015

Commodities Performance

as of 9/30/15

Asset Class Performance Summary - Public Markets

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	FYTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Since
Total Inflation-Linked Assets	232,059,332	0.7	-15.4	--	-15.4	--	-27.9	--	-15.4	--	-8.2	--	--	--	-6.1	Feb-10
ASRS Custom Inflation-Linked Benchmark			*-14.5*	--	*-14.5*	--	*-26.0*	--	*-16.0*	--	*-9.6*	--	*-2.1*	--	*-7.3*	*Feb-10*
Over/Under			-0.9		-0.9		-1.9		0.6		1.4				1.2	

as of 10/31/15

	Benchmark	Market Value ($mil.)	1 Mth	3 Mth	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
GLOBAL INFLATION LINKED										
GRESHAM	Bloomberg Commodity Index Total Return	232	-0.02	-5.09	-27.08	-14.16	-8.07		-5.67	09-01-2010
Excess			0.43	-0.36	-1.36	0.87	1.78		1.78	

Commodities Excess Return

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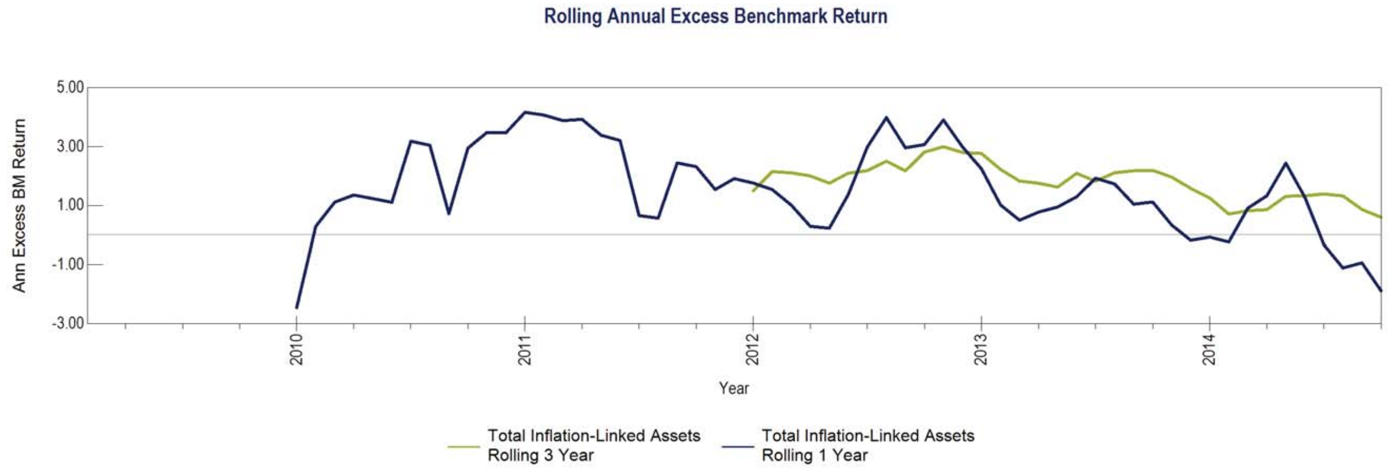
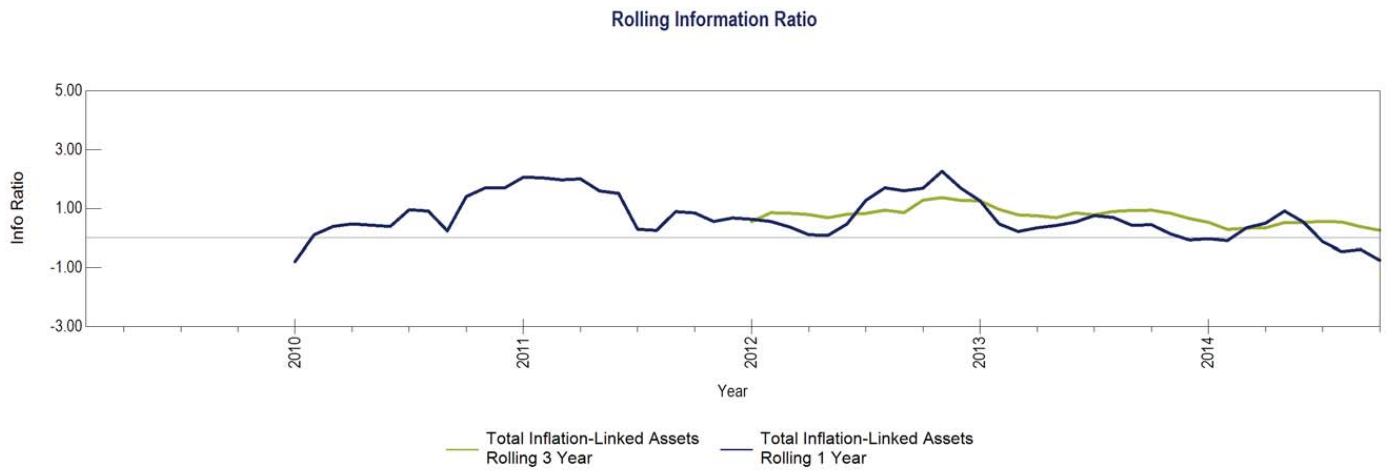
Asset Class Analysis - Total Inflation-Linked Assets



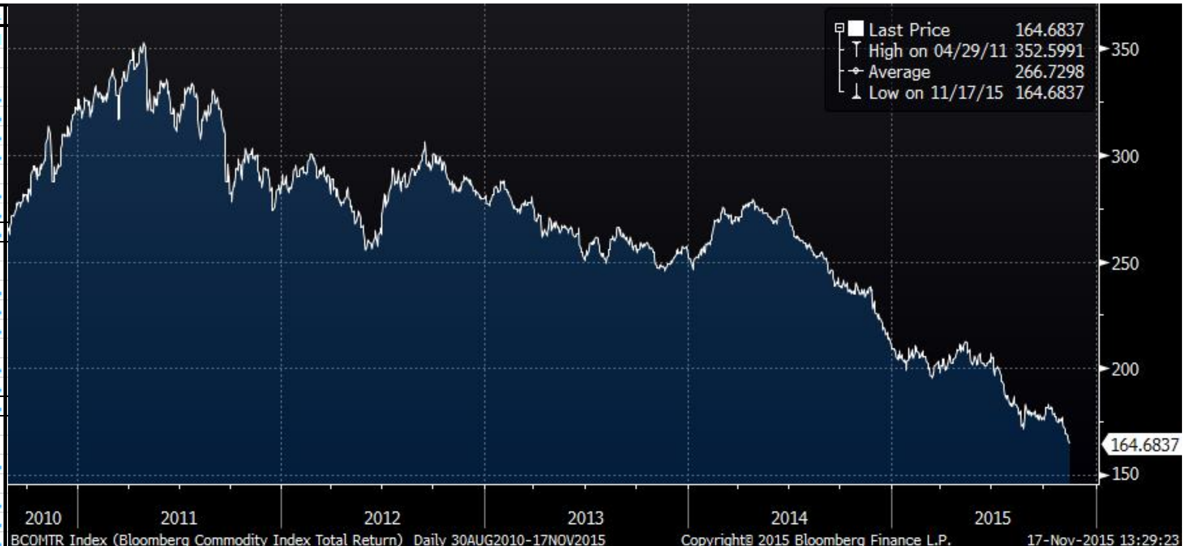


Commodities Profile

Bloomberg Commodities Total Return Index

	Pd Ending Wghts
	BCOM
AGRICULTURE	
Corn	8.00%
Soybean	5.42%
Wheat (CBOT)	3.32%
Wheat (KC)	1.07%
Wheat (MGE)	
Soybean Meal	2.71%
Soybean Oil	2.62%
Group SubTotal	23.14%
ENERGY	
WTI Crude Oil	8.13%
Brent Crude	7.70%
Heating Oil	3.90%
Gas Oil	
Natural Gas	8.69%
Unleaded Gas (RBOB)	4.14%
Group SubTotal	32.56%
INDUSTRIAL METALS	
Aluminum	4.54%
Copper (LME)	
Copper (NY)	7.22%
Nickel	1.60%
Zinc	2.15%
Lead	
Group SubTotal	15.51%
LIVESTOCK	
Live Cattle	2.96%
Lean Hogs	1.84%
Feeder Cattle	
Group SubTotal	4.81%
PRECIOUS METALS	
Gold	12.38%
Silver	4.24%
Platinum	
Palladium	
Group SubTotal	16.61%
SOFTS	
Cotton	1.71%
Sugar	3.93%
White Sugar	
Coffee	1.73%
Coffee (Robusta)	
Cocoa	
Group SubTotal	7.37%
Total	**100.00%**

9/30/2015 Index weights



Aug’10 – Apr’11	+33%	‘risk on’: positive global recovery
May’11 – May’12	-25%	‘risk off’: concerns regarding Europe & global growth
Jun’12 – Sep’12	+15%	Drought driven grains rally & Fed stimulus
Oct’12 – Dec’13	-15%	China slowdown, anticipation of taper
Jan’14 – Jun’14	+7%	Momentum in growth, expectation of inflation
Jul’14 – Nov’15	-39%	Saudi commitment to maintain market share, China slowdown

Commodities Index: Energy

- Performance [1]
  - YTD WTI (-21%) and Brent (-22%) have been very weak
    - The N. American shale gas story continues as the US ramps up production and reduces the Brent spread
    - Demand has not been robust as growth in the world ex-US has been weak
    - Saudi Arabia's stance to maintain its market share has oil reduced prices by ~50% since 9/30/2014
  - YTD Natural gas (-19%) has also suffered materially and is down ~45% since 9/30/2014
- Market Commentary and Outlook
  - US rig count is down ~60%, but has stabilized in recent weeks
  - Domestic growth continues to be moderate and not likely to surge
  - Geopolitical factors are unpredictable but have not been impactful

[1] as of 11/16/15

Commodities Index: Precious and Industrial Metals

- Performance YTD [2]
  - Gold (-9%) and silver (-9%) have been modestly weak as the USD has been relatively strong
  - Copper (-23%) has performed poorly as China has experienced a slowdown
- Market Commentary and Outlook
  - As a proxy for hedging against inflationary money printing and USD devaluation, gold and silver have a soft outlook
  - China's growth has moderated and its infrastructure build out for urbanization has shifted to a focus on a consumer driven economy
    - Industrial metals continue to be well supplied

[2] as of 11/16/15

Commodities Index: Ags, Livestock, and Softs

- Performance YTD [3]
  - Corn (-9%) and soybeans (-16%) have suffered meaningful losses driven by good weather and increases in global stocks
  - Cattle (-17%) and hogs (-33%) have been weak on the back of surging herds and tepid demand growth
  - Cocoa (+16%) has experienced the largest gains as Ghana has dealt with crop issues
- Market Commentary and Outlook
  - The weather largely cooperated for a strong growing season in row crops
  - Increased grain storage capacities over the past several years dampen these effects

[3] as of 11/16/15

Commodities House Views

Primary Market Metrics & Indicators:

1. Fundamentals: **NEGATIVE**
   - The U.S. dollar has strengthened on a relative basis as the Fed appears poised to raise interest rates. China's economy has slowed down while Europe has begun to deal with its economic weakness with stimulus.
   - Most commodity sectors appear well supplied, particularly for the current global growth environment.
   - The decision by Saudi Arabia not to reduce production with the potential addition of Iranian supply has kept energy markets depressed, resulting in rig lay downs in the U.S. while the budgetary impacts globally continue to add up.
   - Corn and wheat stockpiles have recently hit multi-year highs while world food prices continue to slide. Energy markets reflect the continued growth in global production as WTI and Brent prices are both near $45. Metals have weakened as precious metals have suffered from U.S. dollar strength while industrial metals still exhibit weak demand.
2. Valuations: **NEGATIVE**
   - The Bloomberg Commodities Index is just above its 13 year low as global supplies outpace demand.
   - On a trailing twelve-month basis, commodities are down 30% with ags being the least impacted sector with a decline of 11%.
3. Sentiment: **NEGATIVE**
   - The moderate growth and weak inflation environment in the U.S. has tempered investor enthusiasm for commodities and resulted in outflows from commodities.
   - The slowdown in the Chinese economy and its equity market has tempered enthusiasm for commodities.
   - Geopolitical news has not been constructive for energy prices. Looking across the individual commodities, most remain well supplied, which is reflected in prices as inflationary fears are muted.

Commentary:

IMD has maintained a tactical underweight relative to the SAA approved in 2015 which reduced the commodities target from 4% to 2%, recognizing the effects of the Chinese slowdown and sufficient global supplies. As a result of the changing dynamics in the energy markets IMD reduced its exposure to commodities in December and further reduced its exposure in July as inflationary pressures are still soft.

The North American shale play has resulted in increased U.S. energy production and represents a long-term phenomenon. China's growth rate is also moderating and the era of infrastructure build-out which fueled a portion of the demand for commodities (particularly industrial metals) is abating. Precious metals may also be challenged as the U.S. has moved to the front of the global recovery and other countries' stimulus should result in US dollar strength at the margin. While grains are currently well supplied, the unpredictability of weather inhibits long-term forecasting.

IMD will maintain a tactical underweight relative to the SAAP and monitor global supply and demand swings for inflationary pressures. Improving economic conditions and inflationary pressures would serve as a catalyst to initiate a neutral position should the conditions arise.

CURRENT PORTFOLIO POSTURE: UNDERWEIGHT vs. SAA target