CalPERS Chief Investment Officer Total Fund Update

Appendix B: Portfolio Risk

Period Ending December 31, 2012

Joe Dear, CIO

Investment Committee

February 2013

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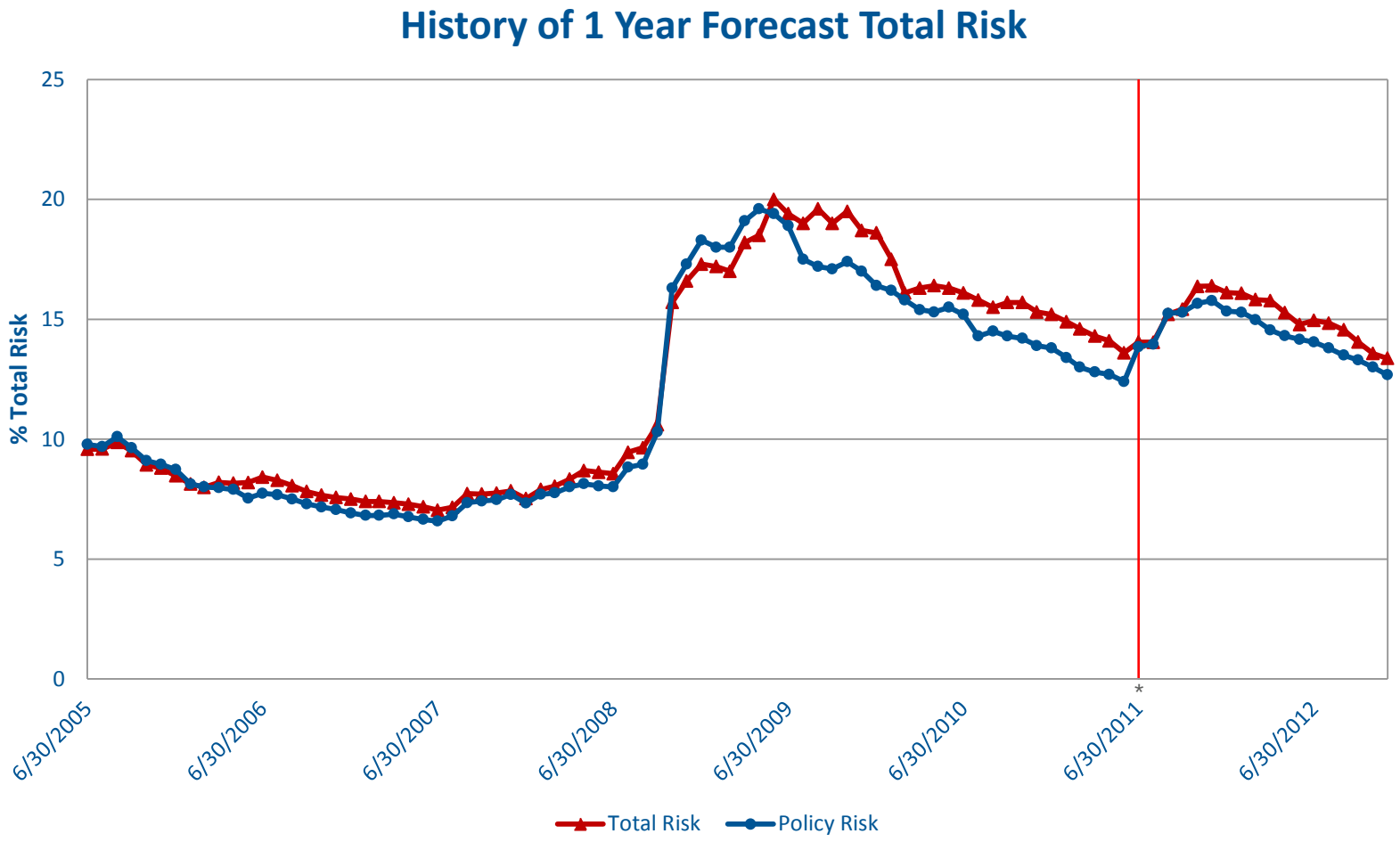
Topics

- Total Risk Time Series – Forecasted
- Active Risk Time Series – Forecasted
- CalPERS Leverage
- Derivative Counterparty Exposure Report
- Liquidity Analysis

Total Risk Time Series - Forecasted



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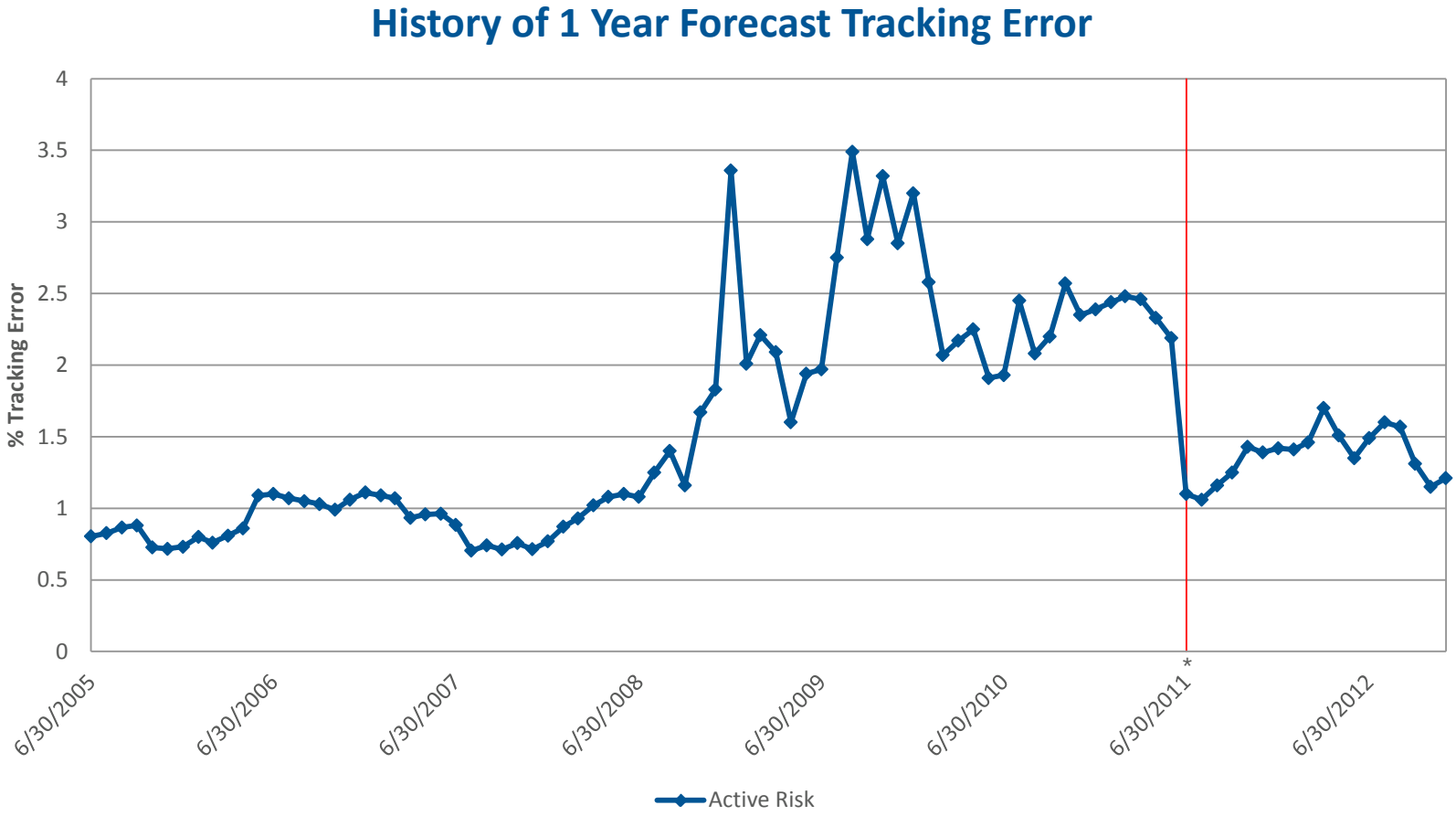
* The red line denotes the cutover to BarraOne and the new BIM 301 model for 6/30/12 month end. The BIM 301 model introduced several changes including a new Real Estate model, new currency model, and more frequent observations in building the covariance matrix.

Active Risk Time Series - Forecasted



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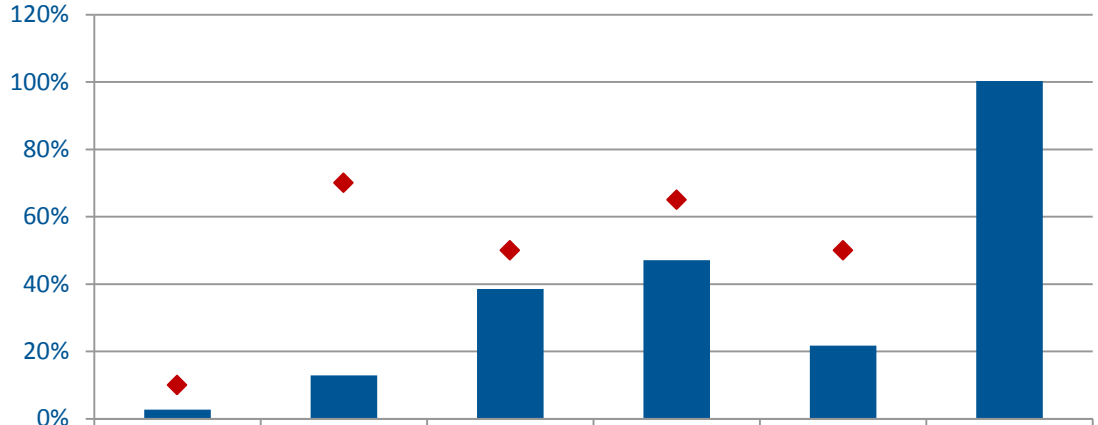
* The red line denotes the cutover to BarraOne and the new BIM 301 model for 6/30/12 month end as well as the change to the new risk based asset allocation framework. Both asset class and policy benchmark changes for the new allocation framework were incorporated for the 6/30/12 reporting period resulting in a recasting of active risk vs. this new information set.

CalPERS Leverage*

As of September 30, 2012



	Global Equity	Securities Lending	Real Estate	Infrastructure	Forestland	ARS Equitization
Current Leverage	3%	13%	38%	47%	22%	100%
Leverage Limit	10%	70%	50%	65%	50%	

■ Current Leverage ◆ Leverage Limit

*Leverage Definitions

Global Equity, Real Estate, Infrastructure, Forestland: (Market Exposure / Equity Capital) -1

Securities Lending: Reinvestment Pool with Maturity > 90 Days / Total Reinvestment Pool

ARS: Equity Beta Futures Overlay Notional Value / ARS Fair Market Value

Derivative Counterparty Exposure Report

As of November 30, 2012

Counterparty	FORWARD	OPTION	SWAP	CalPERS Exposure	Counter Party Exposure	Total	Collateral Posted*	Net Exposure	CDS Spread	Credit Rating	Above Average
Bank of America	24,403,771		(34,231)	49,355,774	(24,986,234)	24,369,540		24,369,540	33	A	NO
BNP	(7,158,803)		2,027,237	3,151,960	(8,283,526)	(5,131,566)		(5,131,566)	21	A+	NO
Barclays PLC	6,219,088		4,506,776	15,266,882	(4,541,018)	10,725,864		10,725,864	32	A	NO
CommonWealth Bank of Australia	(8,736,989)			32,226	(8,769,215)	(8,736,989)		(8,736,989)	43	AA-	YES
Citigroup	4,011,479		2,632,723	7,367,796	(723,594)	6,644,202		6,644,202	30	A	NO
Credit Suisse	(6,692,507)			336,940	(7,029,447)	(6,692,507)		(6,692,507)	21	A	NO
Credit Suisse International	(7,569,133)		3,432,784	11,562,430	(15,698,779)	(4,136,349)	100,000	(4,036,349)	8	A	NO
Deutsche Bank	2,372,638		1,775,622	10,942,672	(6,794,412)	4,148,260		4,148,260	10	A+	NO
Goldman Sachs & Co.			(159,036)	80,840	(239,876)	(159,036)		(159,036)	46	A	YES
Goldman Sachs Intl.	(7,795,643)	(16,479,797)	(2,136,453)	20,803,572	(47,215,465)	(26,411,893)	3,700,000	(22,711,893)	144	A	YES
HSBC	(1,266,505)		2,318,062	4,970,202	(3,918,645)	1,051,557		1,051,557	22	AA	NO
JPMorgan	(8,884,870)	3,202,073	7,854,322	27,256,828	(25,085,303)	2,171,525		2,171,525	20	A+	NO
Mellon Bank	(4,678,476)			3,372,551	(8,051,027)	(4,678,476)		(4,678,476)	125	AA-	YES
Morgan Stanley Capital Service			(6,948,720)	-	(6,948,720)	(6,948,720)		(6,948,720)	82	A	YES
RBS	2,053,404			4,131,395	(2,077,991)	2,053,404		2,053,404	22	A	NO
Standard Chartered Bank	503,487			9,482,488	(8,979,001)	503,487		503,487	6	AA-	NO
Societe Generale	(1,898,844)			-	(1,898,844)	(1,898,844)		(1,898,844)	33	A+	NO
Toronto Dominon	5,748,442			5,748,442	-	5,748,442		5,748,442	50	AA-	YES
UBS	(12,399,739)		813,005	20,297,197	(31,883,931)	(11,586,734)		(11,586,734)	9	A	NO
WestPac Bank	(1,960,742)			2,670,841	(4,631,583)	(1,960,742)		(1,960,742)	36	AA-	NO
Grand Total	(23,729,942)	(13,277,724)	16,082,091	196,831,036	(217,756,611)	(20,925,575)	3,800,000	(17,125,575)	40		

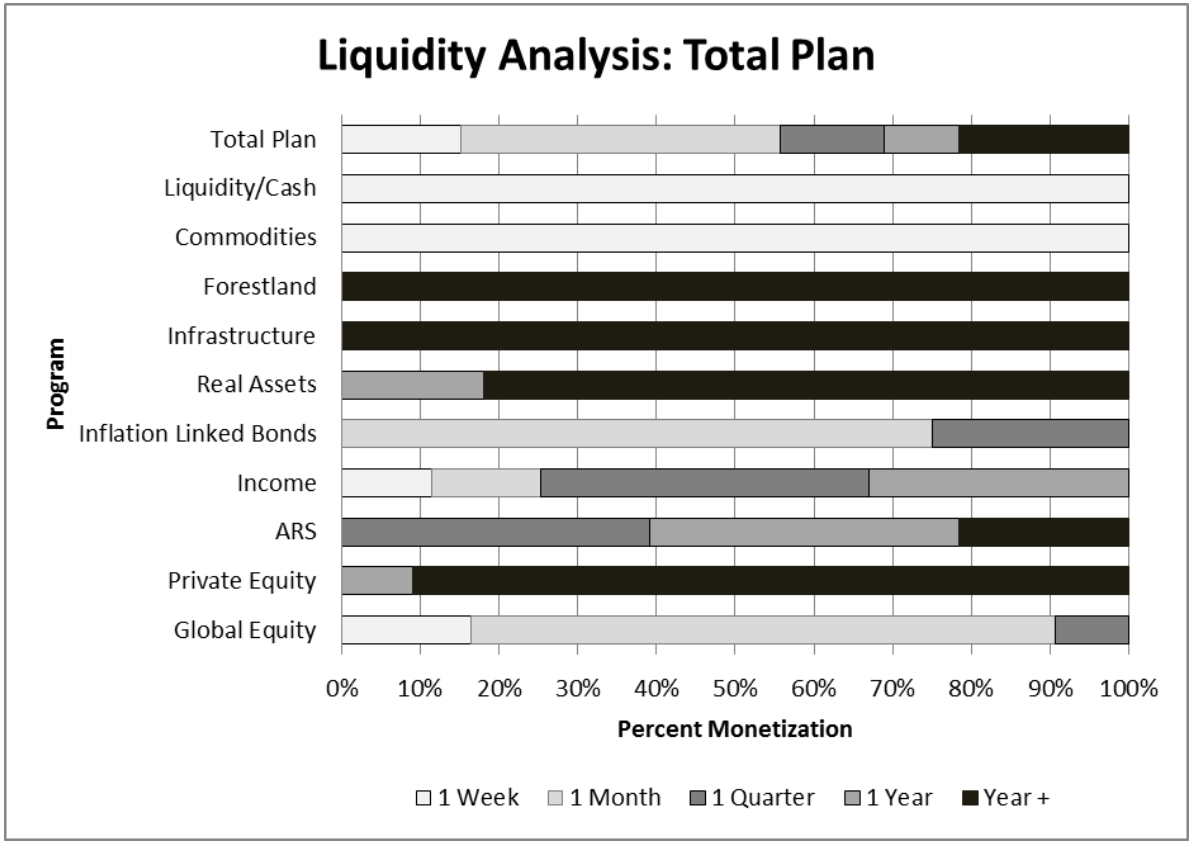
** As of 11/30 the fund posted 4mm to the brokers*

 # As of 11/30 Mortgage TBA Exposure was 4mm in mark to market value, i.e. CalPERS had exposure to counterparties

As of 11/30 CalPERS futures activity required 653mm posted to Citigroup and 284mm to Goldman

Liquidity Analysis

As of September 30, 2012



	1 Week	1 Month	1 Quarter	1 Year	Year +
Total Fund by Time Bucket	15%	40%	13%	10%	22%
Total Fund Cumulative	15%	56%	69%	78%	100%