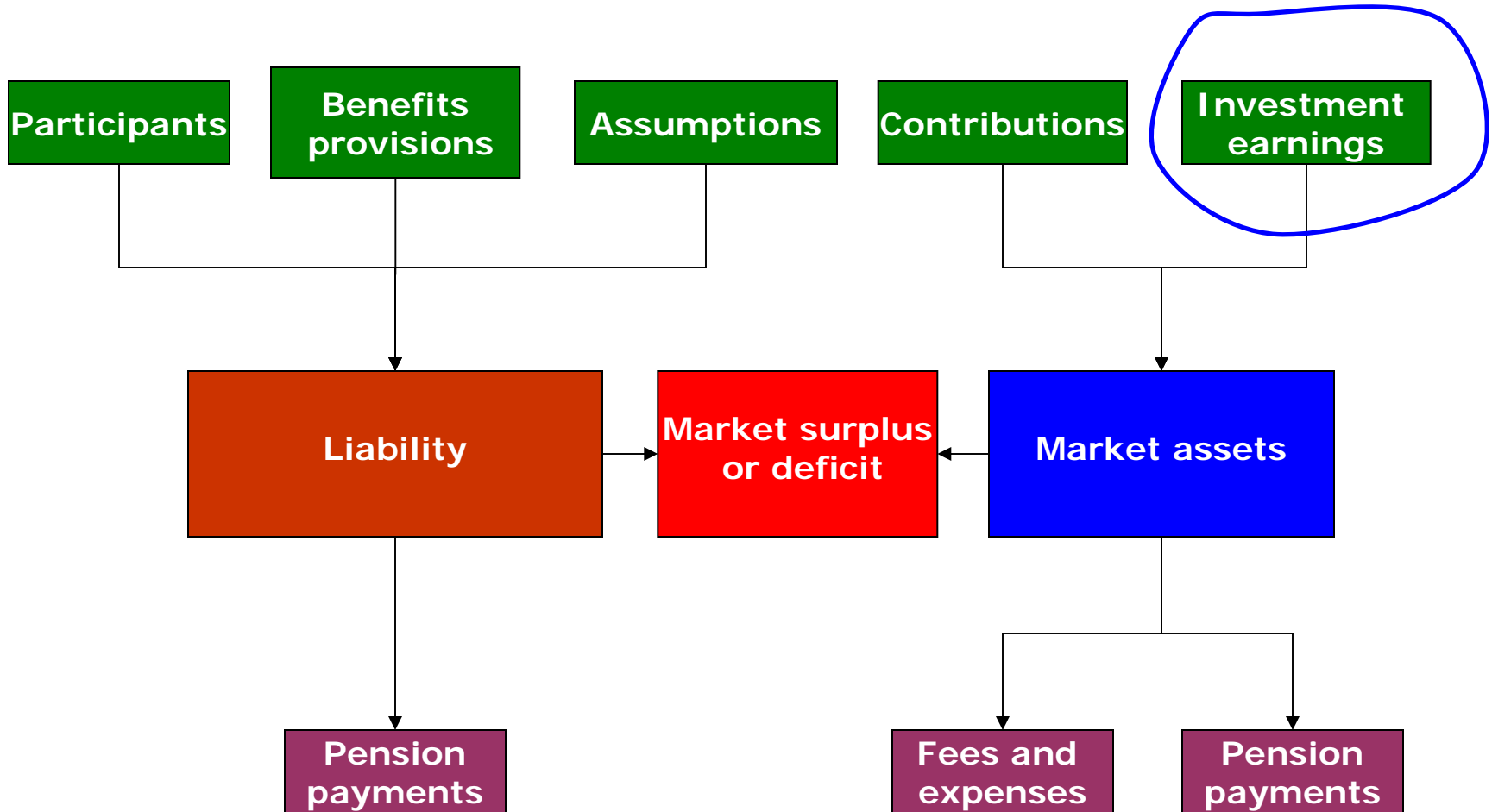


Attachment “A” to Report Number 2 of the Pension Committee - April 6, 2011



University of Toronto Pension Investment Risk and Return Targets

How A Defined Benefit Plan Works



Pension investment risk and return targets affect investment earnings. Investment earnings impact market surplus/deficit and level of contributions.

Tentative Timetable for Consideration of Investment Targets and Strategy

- Pension risk and return targets:
 - April 6, 2011 orientation on current targets.
 - June 10, 2011 (tentative) consider asset/liability study and recommended risk and return targets.
 - September 28, 2011 approve risk and return targets.
- Investment strategy (including asset allocation):
 - September 28, 2011 consider recommended investment strategy.
 - December 14, 2011 approve investment strategy.

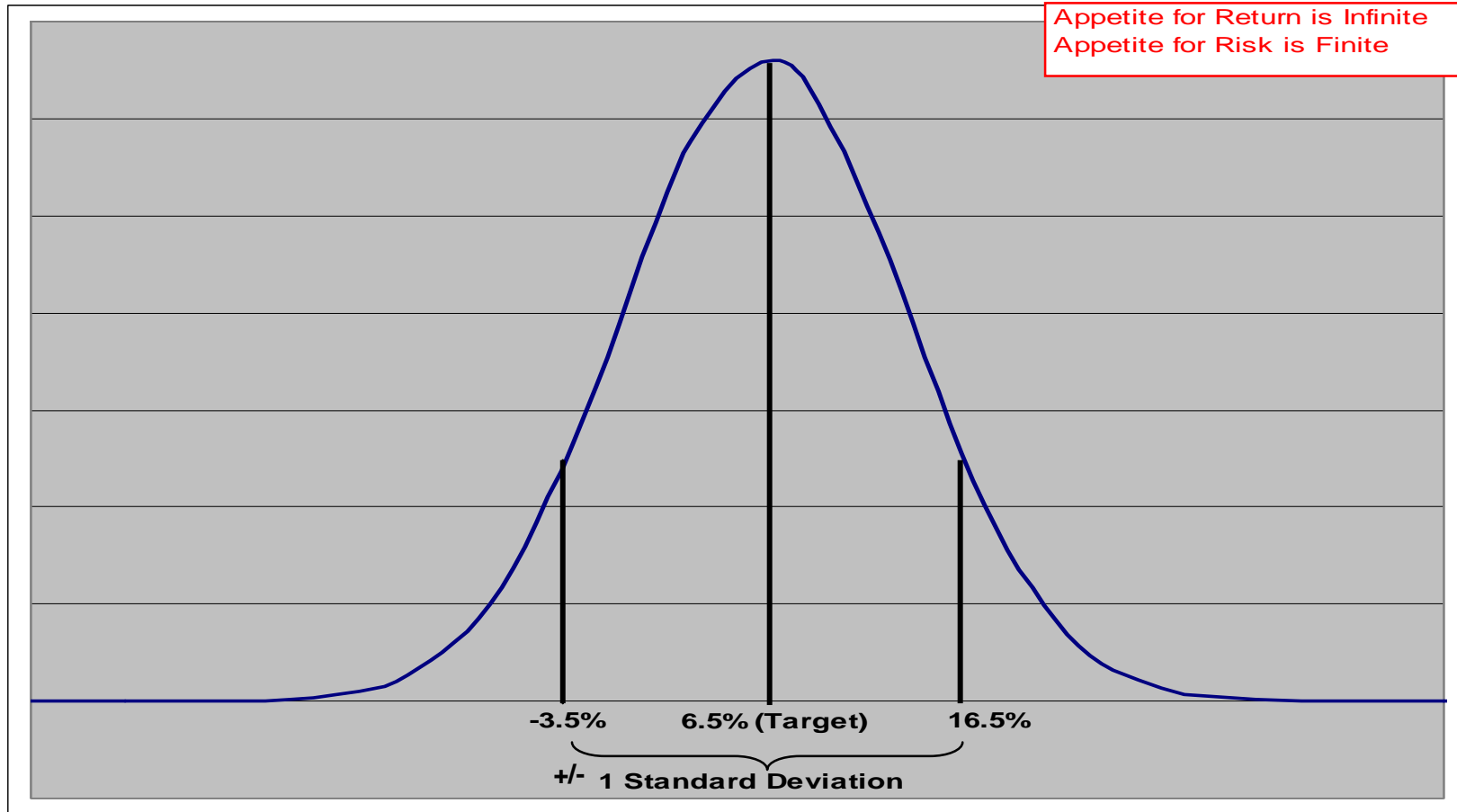
Current Pension Investment Risk and Return Targets

- **Risk target:**
 - 10% annual standard deviation over 10 years.
 - the risk target overrides and constrains the return target.
 - articulates lower tolerance for downside risk.
- **Return target:**
 - minimum 4% real return, net of inflation, investment fees and expenses over 10 years.
 - Return target is constrained by the 10% risk target.

SIP&P's are required to have return targets.

What Risk and Return Targets Mean, Assuming Inflation at 2.5%

Appetite for Return is Infinite
Appetite for Risk is Finite



Actual annual nominal return is expected to range between +16.5% and -3.5% two thirds of the time over a ten year period.

Description of Pensions 2007

U of T pensions are defined benefit plans:

- **U of T registered pension plan (RPP).**
- **U of T (OISE) registered pension plan.**
- **U of T unregistered pension plan – supplemental retirement arrangement (SRA).**

The RPP and OISE plans are pooled in the pension master trust.

This study examines the RPP and assumes that the OISE plan, with only 4% of the assets, will follow the same investment strategy.

The SRA fund is invested in LTCAP and is not included in this pension investment study.

Hewitt's Process 2007

- 1. valued liabilities by adjusting the July 1, 2006 actuarial valuation for planned changes to assumptions about life expectancy and, going forward, assuming that the valuation discount rate would vary with changes in real return and nominal return.**
- 2. identified the minimum investment risk way (not zero investment risk, which is not possible) to invest the assets, known as the liability matching portfolio - LMP.**
- 3. considered how much risk would be incurred to achieve returns higher than those possible under the LMP.**
- 4. selected optimal portfolios for these liabilities with the highest expected return for a given amount of risk or the lowest level of relative risk for a given amount of return (known as efficient frontier analysis).**

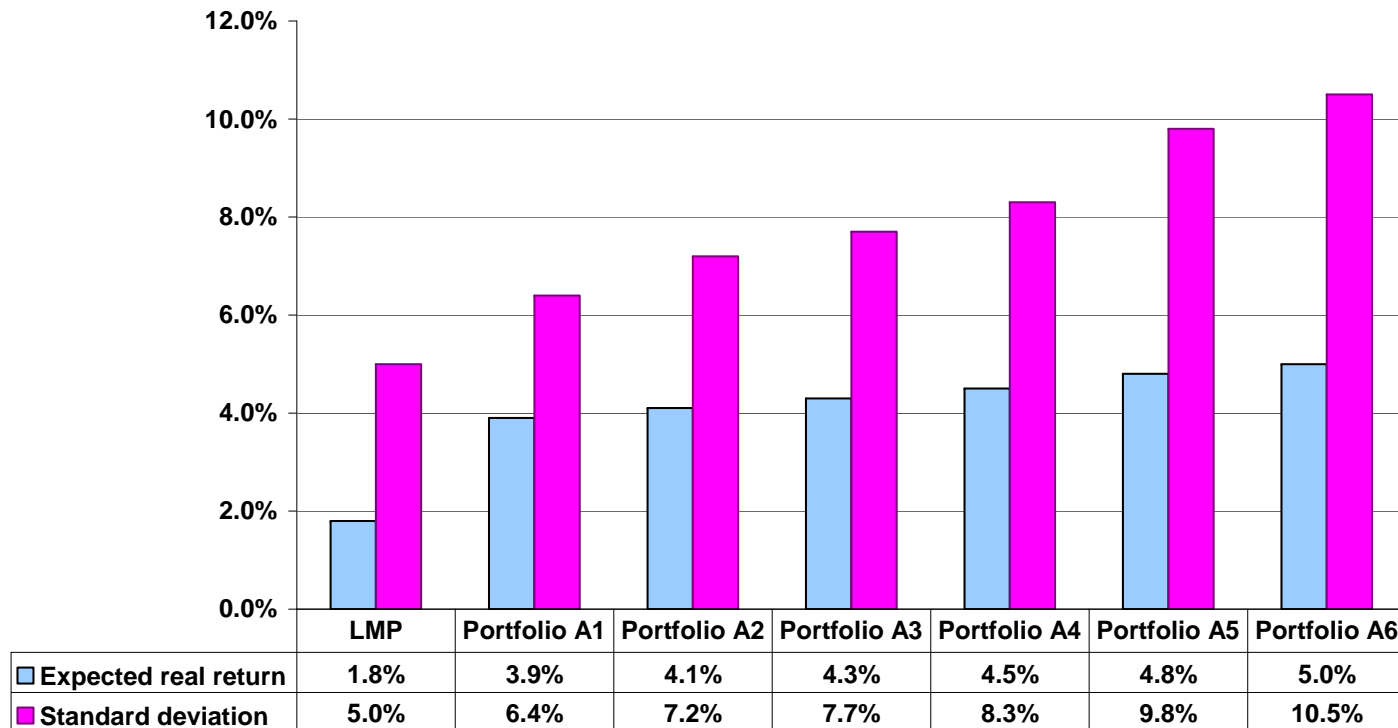
Hewitt's Process 2007, continued

5. identified the risk and return targets associated with selected candidate portfolios.
6. ran 5,001 different market scenarios for each portfolio over a 10 year period to determine the range of outcomes for each portfolio under different market conditions; market scenarios reflect forward-looking consensus economic assumptions.
7. estimated the potential range of surpluses and deficits associated with these outcomes.
8. estimated the probability of special payments at various levels, to crystallize the risk of the outcomes in operating budget terms.
 - Note: assumes all special payments would be added to the pension fund regardless of the size of the surplus.

Hewitt's Pension Asset/Liability Study 2007

(excludes SRA Assets and OISE assets)

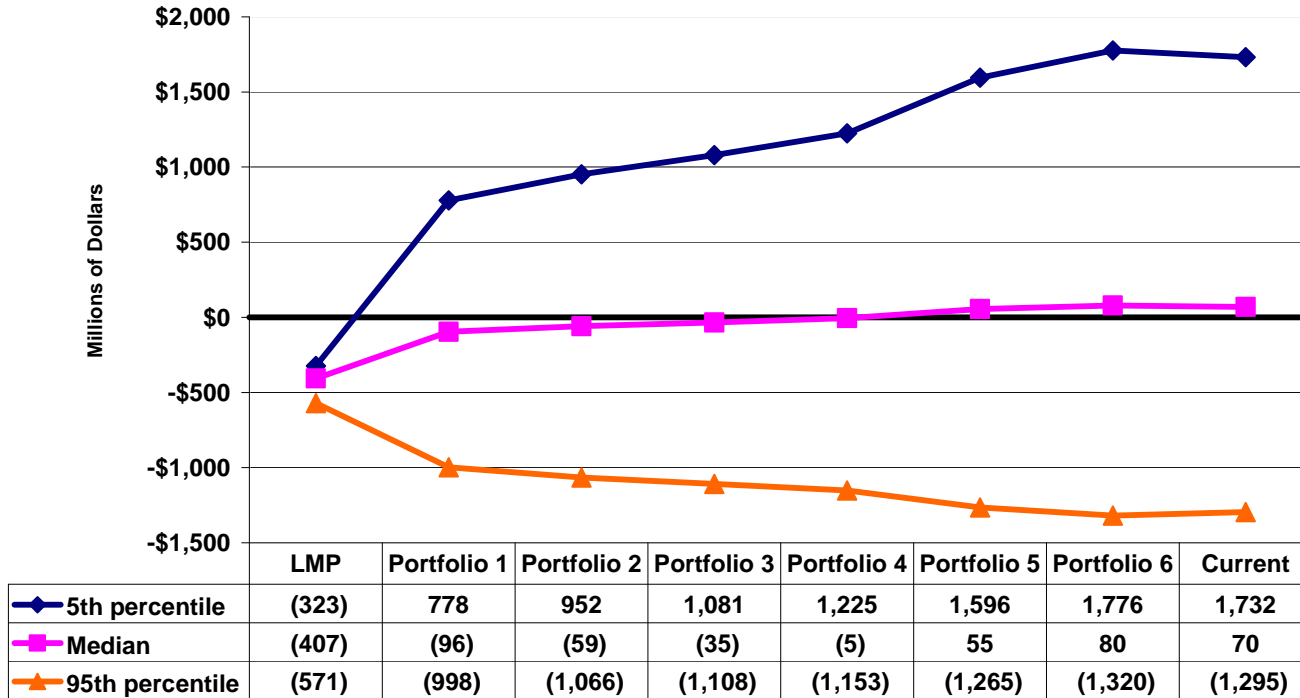
University of Toronto Pension Risk and Return Targets



**With a risk level of 9.8%, target real return would be 4.8%.
With a risk level of 7.2%, target real return would be 4.1%**

Hewitt's Results 2007

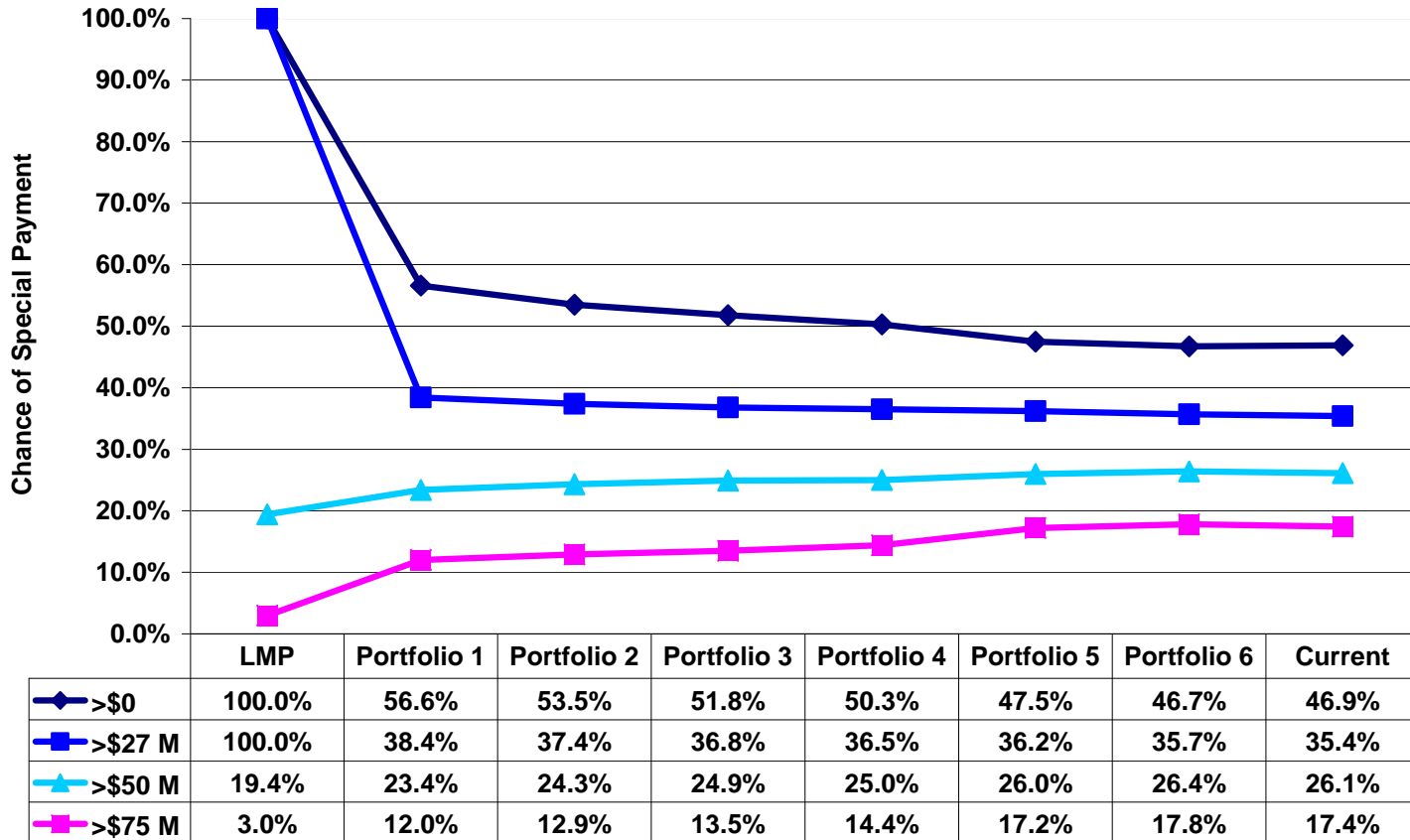
University of Toronto Pension Plan
 Surplus/Deficit Probabilities in 2011
 over 5,001 Market Scenarios for each Portfolio



The greater the risk and return, the wider the range of possible outcomes.

Hewitt's Results 2007

University of Toronto Pension Plan
Probability of University Special Payments Exceeding Various Levels (2011-2012), Including \$27 Million 2007-2011



There is a bit more than 1/3 chance that a special payment > \$27 M will be needed in 2011-2012 if special payments are made 2007-2011.

Summary of Asset/Liability Study Risk and Return Combinations 2007

Portfolios	Risk and Return Targets		Probability of University Special Payments Exceeding Various Levels in 2011-2012, Assuming \$27 M Contributed 2007-2011				Surplus/Deficit Possible Outcomes in 2011 over 5,001 Scenarios Assuming \$27 M Contr. 2007-2011		
	Risk Target	Return Target	>\$0	>\$27 M	>\$50 M	>\$75 M	5th	Median	95th
		Percentile					Percentile		
Liability matching portfolio	5.0%	1.8%	100.0%	100.0%	19.4%	3.0%	(323.0)	(407.0)	(571.0)
Portfolio 1, with alternatives	6.4%	3.9%	56.6%	38.4%	23.4%	12.0%	778.0	(96.0)	(998.0)
Portfolio 2, with alternatives	7.2%	4.1%	53.5%	37.4%	24.3%	12.9%	952.0	(59.0)	(1,066.0)
Portfolio 3, with alternatives	7.7%	4.3%	51.8%	36.8%	24.9%	13.5%	1,081.0	(35.0)	(1,108.0)
Portfolio 4, with alternatives	8.3%	4.5%	50.3%	36.5%	25.0%	14.4%	1,225.0	(5.0)	(1,153.0)
Portfolio 5, with alternatives	9.8%	4.8%	47.5%	36.2%	26.0%	17.2%	1,596.0	55.0	(1,265.0)
Portfolio 6, with alternatives	10.5%	5.0%	46.7%	35.7%	26.4%	17.8%	1,776.0	80.0	(1,320.0)

The greater the risk and return, the wider the range of possible surplus/deficit outcomes.

There is a bit more than 1/3 chance that a special payment > \$27 M will be needed in 2011-2012 (end of 5 year modeling period).

Role of Judgment 2007

- “It is important to note that this modeling focuses on portfolio volatility and that volatility for an individual asset class varies over time”.
- “There are also more risks associated with investments than just volatility, such as liquidity risk and the risk associated with the complexity of individual transactions and with asset classes as a whole.”
- “There are no mathematical models that capture all elements of risk or that can predict what behaviours will ensue as various possible outcomes begin to unfold.”
- “The mathematical models should be viewed as tools that help in assessing risk, but they do not provide a complete and comprehensive assessment of all the risks associated with making investment choices.”
- “Judgment must be applied to the results obtained from modeling and to take into account the broader environment in which the targets are being considered”.

Note; quotes are taken from December 2007 report to Business Board.

Result of judgment was that risk and return targets were maintained. Return target was NOT increased to reflect the better returns predicted by the models within the 10% risk target.