

San Diego City Employees' Retirement System

Discussion of DROP Interest Rates

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DROP Interest Rates

- Background
- Desirable DROP interest rate characteristics
- Options
 - In general
 - Options utilizing published indices
 - Potential problems using published indices
 - Alternative options for selecting a fixed rate
- Conclusions



Background

- DROP interest rates
 - DROP participation account balances
 - DROP annuities
- Since 1997, SDCERS has been using the actuarial investment return assumption for both rates
- Actuarial investment return assumption was changed effective 7/01/08 from 8% to 7.75%
- In December 2008, SDCERS' Board voted to lower both DROP interest rates to the new 7.75% actuarial investment return assumption, and to consider a further change in 2009
- In January 2009, SDCERS' Board reviewed options to utilize a different DROP interest rate from the actuarial return assumption
- Before making the final determination, the Board asked for more information



Desirable DROP Interest Rate Characteristics

- Reflective of the investable time horizon
- Reflective of the current markets for similar investments
- Determinable in advance of application
- Fix rate for at least 12 months
- Rate is publicly available (and will continue to be)
- Selected rate is understandable and defensible



Options In General

1. Select a fixed rate reflecting
 - a. the investment time horizon
 - b. input from the actuary
 - c. input from other systems
 - d. pertinent published indices

2. Select a rate based on a published index
 - a. short term interest rates for interest crediting
 - b. longer term interest rates for annuity conversions

Note: SDMC requires linkage between the interest crediting and the annuity conversion rates:

- a. *The annuity conversion rate cannot be greater than the rate used for member account interest crediting, **unless***
- b. *The interest crediting rate is less than 5% in which case the annuity conversion rate could never be greater than 5%*



Interest Rate Options For Crediting DROP Members' Participation Accounts

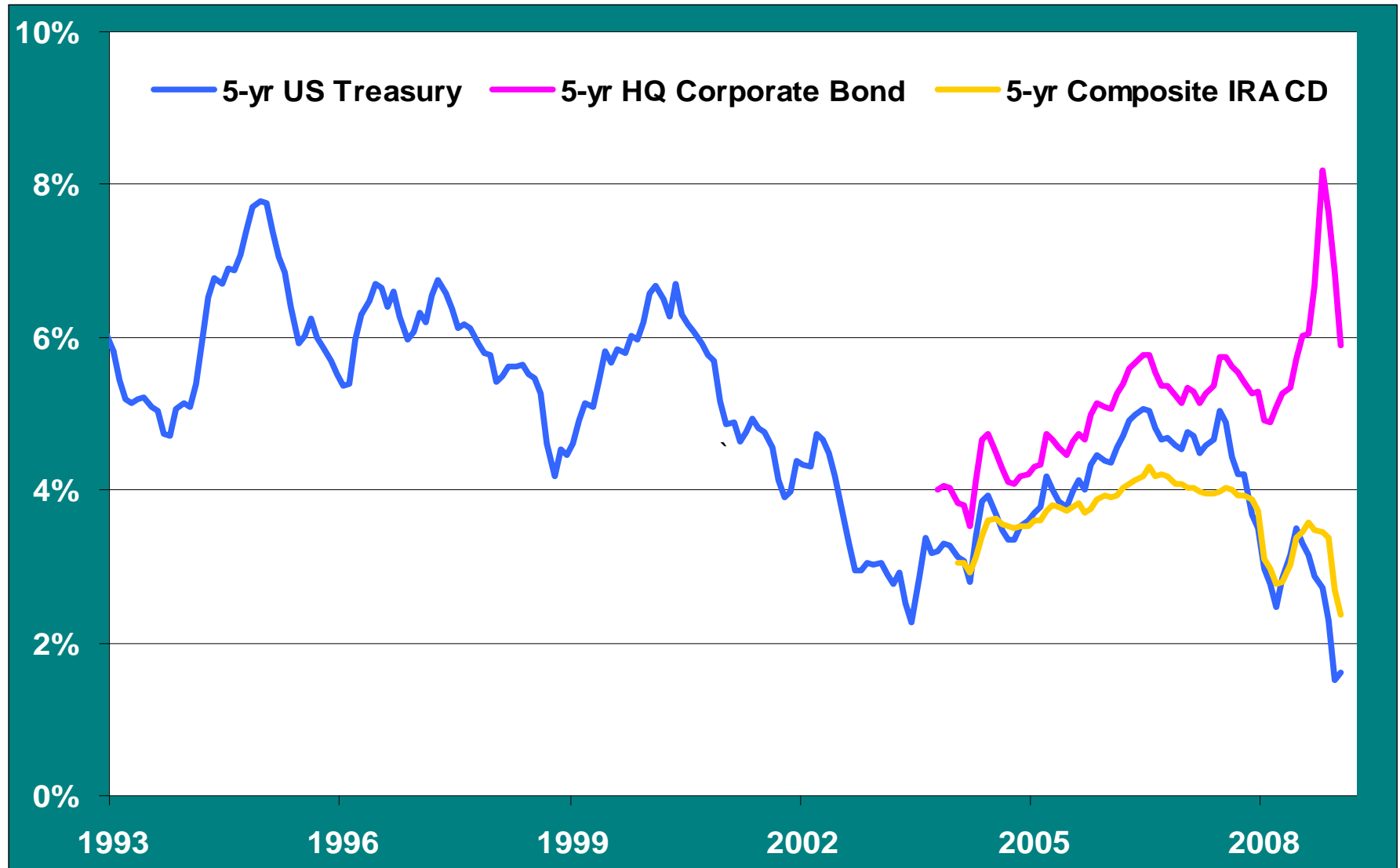


Interest Rate for DROP Participation Account

- Investment time horizon is at most 5 years
- Average holding period will be around 2-3 years with more invested as horizon nears
- Proposed index options
 - 5-year US Treasury (UST)
 - 5-year High Quality Corporate (HQC)
 - 5-year Composite IRA CD
- Determine the most recent 12 month average of the selected index as of the November Board meeting for application next calendar year

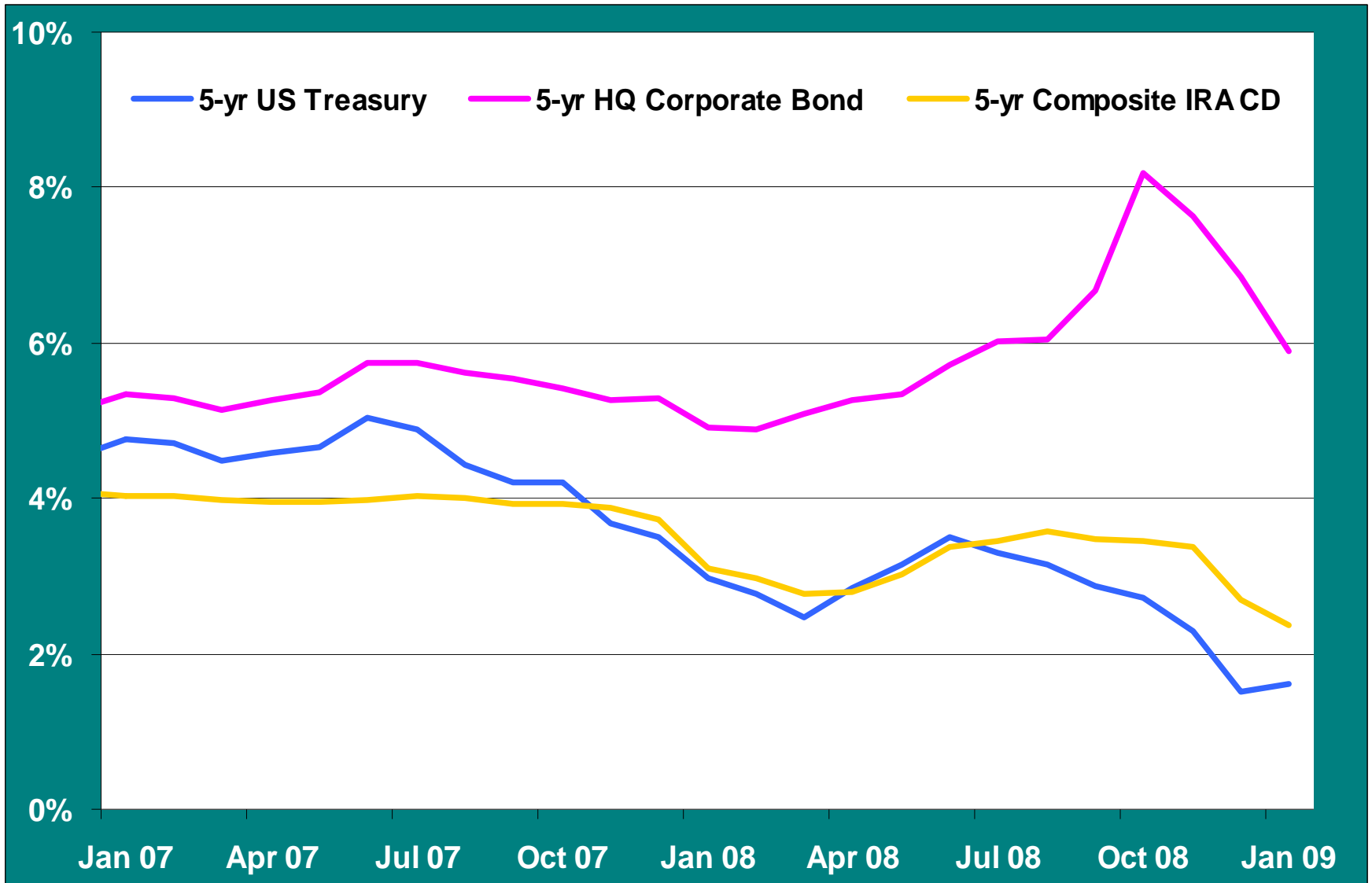


Historical Indices





Recent Monthly Indices



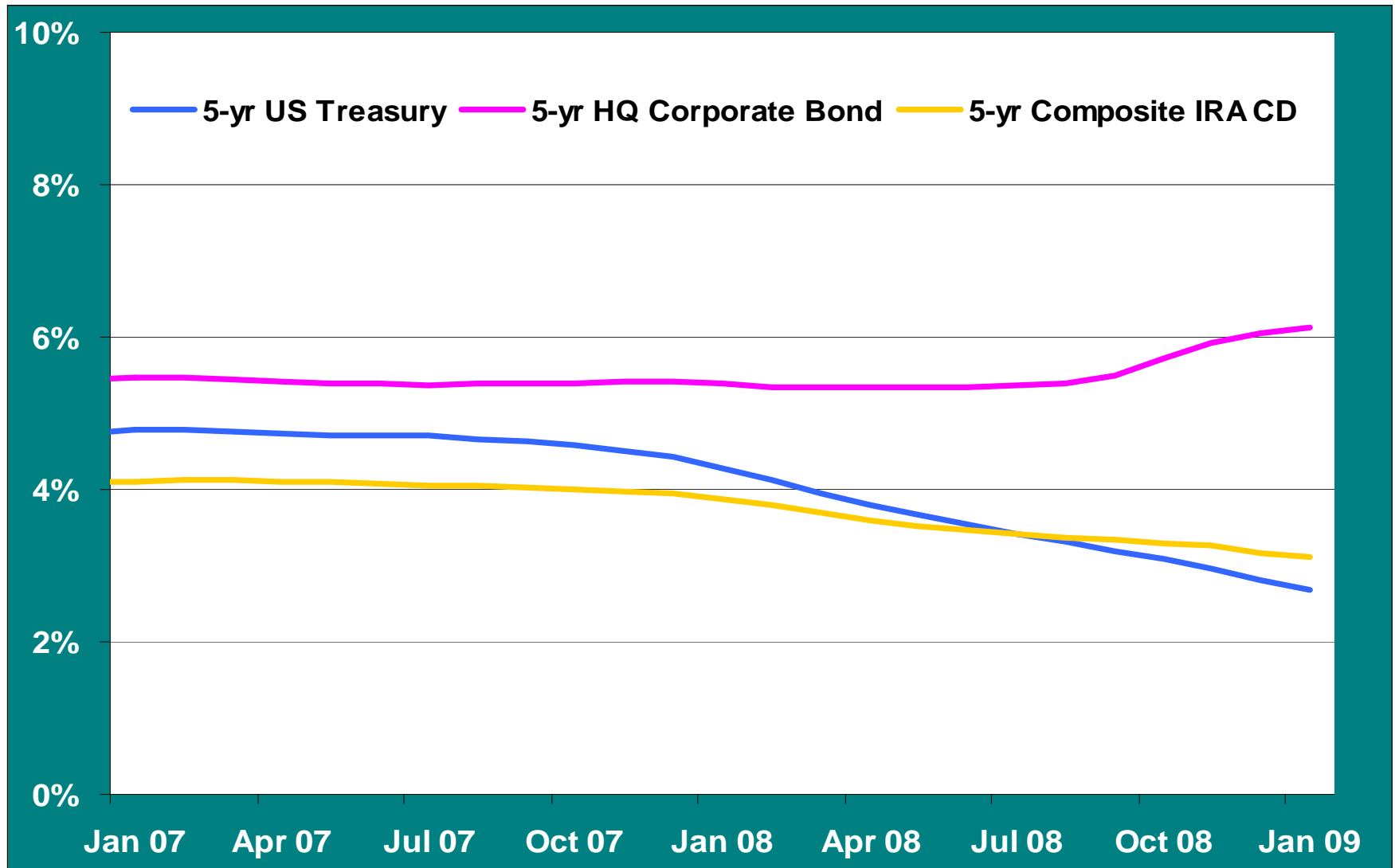


Recent Monthly Indices

	5-yr US Treasury	5-yr HQ Corporate Bond	5-yr Composite IRA CD
Jan-07	4.75%	5.35%	4.02%
Feb-07	4.71%	5.29%	4.02%
Mar-07	4.48%	5.13%	3.98%
Apr-07	4.59%	5.27%	3.96%
May-07	4.67%	5.36%	3.95%
Jun-07	5.03%	5.75%	3.98%
Jul-07	4.88%	5.74%	4.03%
Aug-07	4.43%	5.62%	4.01%
Sep-07	4.20%	5.53%	3.94%
Oct-07	4.20%	5.41%	3.92%
Nov-07	3.67%	5.27%	3.87%
Dec-07	3.49%	5.30%	3.73%
Jan-08	2.98%	4.92%	3.09%
Feb-08	2.78%	4.89%	2.98%
Mar-08	2.48%	5.09%	2.77%
Apr-08	2.84%	5.26%	2.79%
May-08	3.15%	5.33%	3.03%
Jun-08	3.49%	5.71%	3.38%
Jul-08	3.30%	6.02%	3.46%
Aug-08	3.14%	6.04%	3.58%
Sep-08	2.88%	6.68%	3.48%
Oct-08	2.73%	8.18%	3.45%
Nov-08	2.29%	7.64%	3.38%
Dec-08	1.52%	6.84%	2.69%
Jan-09	1.60%	5.90%	2.38%



Rolling 12 Month Average Indices





Desirable DROP Interest Rate Characteristics For Crediting Member Accounts

5 UST

5 HQC

IRA CD's

- Reflective of the investable time horizon
- Reflective of the current markets
- Determinable in advance of application
- Rate is publicly available (and will continue to be)
- Selected rate is understandable and defensible

Yes	Yes	Yes
Yes for risk free investing	Typically yes, today's default risk is high	Yes, very reflective for individuals
Yes	Yes	Yes
Yes	Yes, but sample dependant	Yes, but sample dependant
Yes	No	Widely understandable and defensible



Potential Problems Using Published Indices

- Rates vary, sometimes markedly, during the year (this could make the rate outdated by time is first applied)
- UST rates are “risk-free,” so expect lowest available fixed yield
- Use of 5-year HQC rates was defensible in the past, but the current market climate and default rates may make such use less defensible in the future
- Use of 5-year IRA CD rates may be more defensible



Alternative Option

Select a Rate Not Directly or Automatically Linked

- Annual review by the Board (November meeting) of 5-year UST and published IRA CD rates
 - 5-year UST rate
 - January 30, 2009 was 1.85%
 - Previous 12 month average was 2.68%
 - 5-year IRA CD rate
 - January 29, 2009 was 2.38%
 - Previous 12 month average was 3.11%
- The Board selects an interest crediting rate within a range suggested by the actuary
 - In the present markets Cheiron would suggest a rate between 2.5% and 4.0%



Interest Rate Options For DROP Annuities

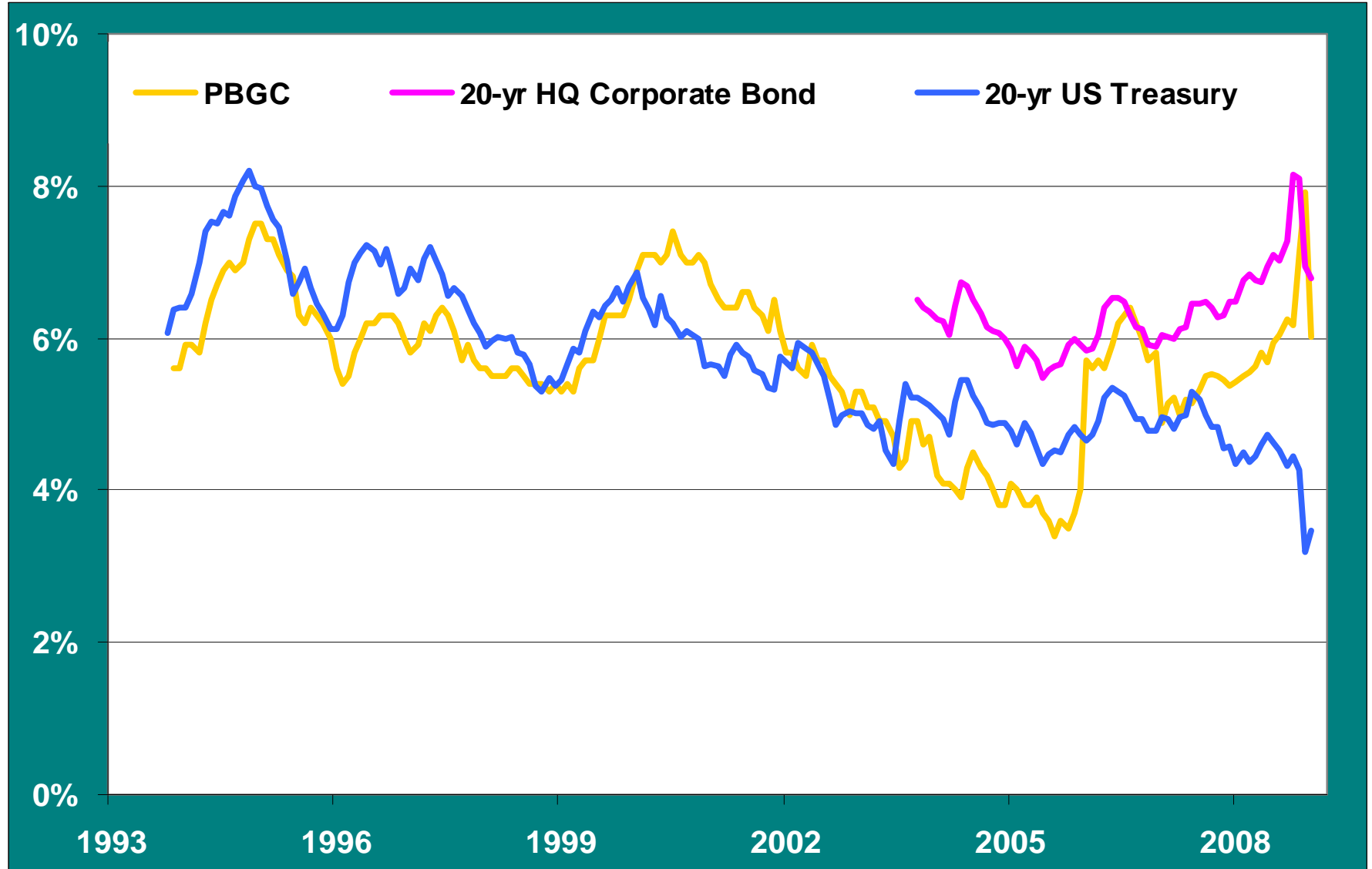


Interest Rate for DROP Annuities

- Investment time horizon is 15 - 30 years
- Proposed index options
 - PBGC immediate annuity interest rate
 - 20-year High Quality Corporate (HQC)
 - 20-year US Treasury
- Determine the most recent 12 month average of the selected index as of the November Board meeting for application next calendar year

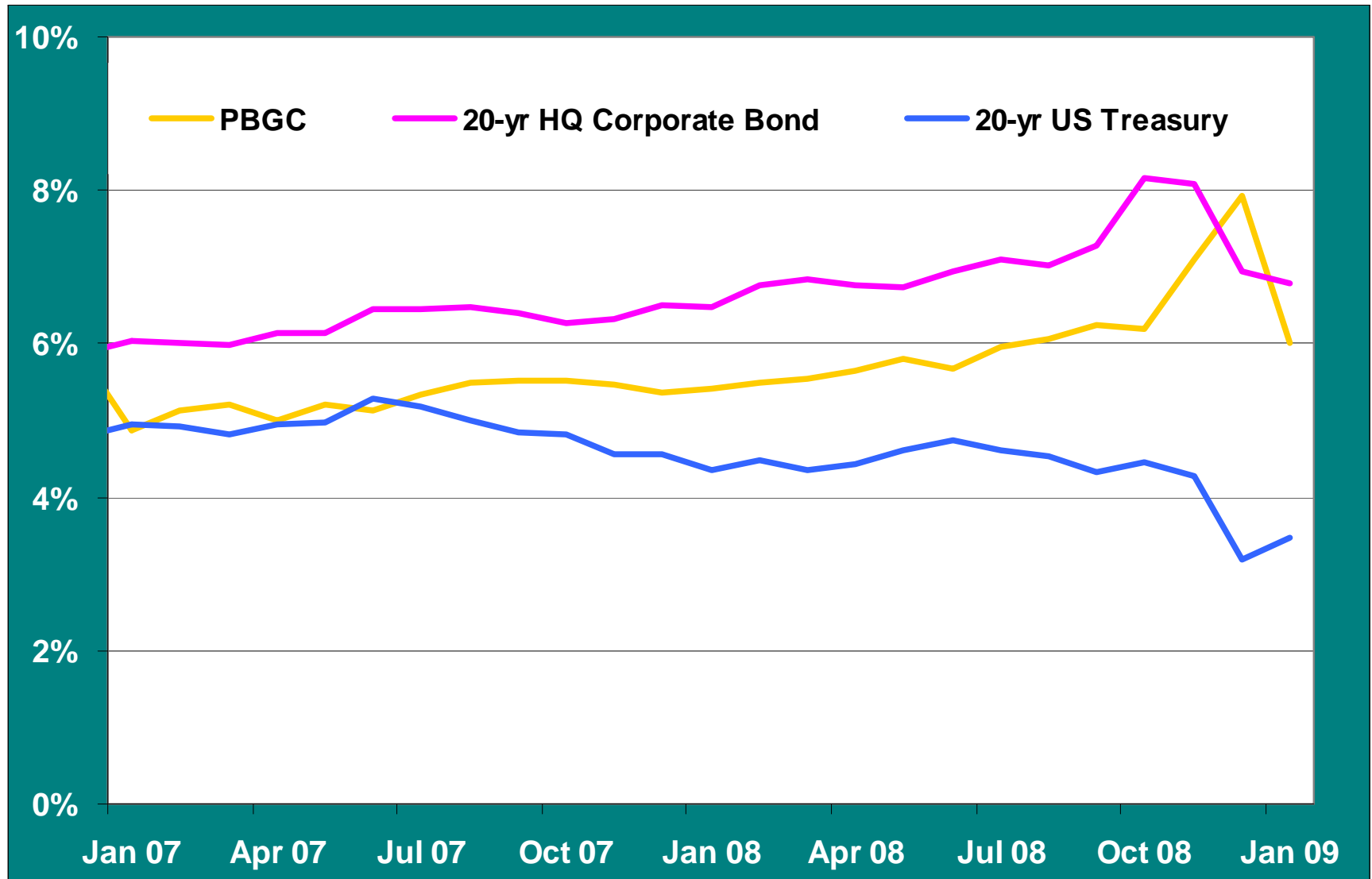


Historical Indices





Recent Monthly Indices



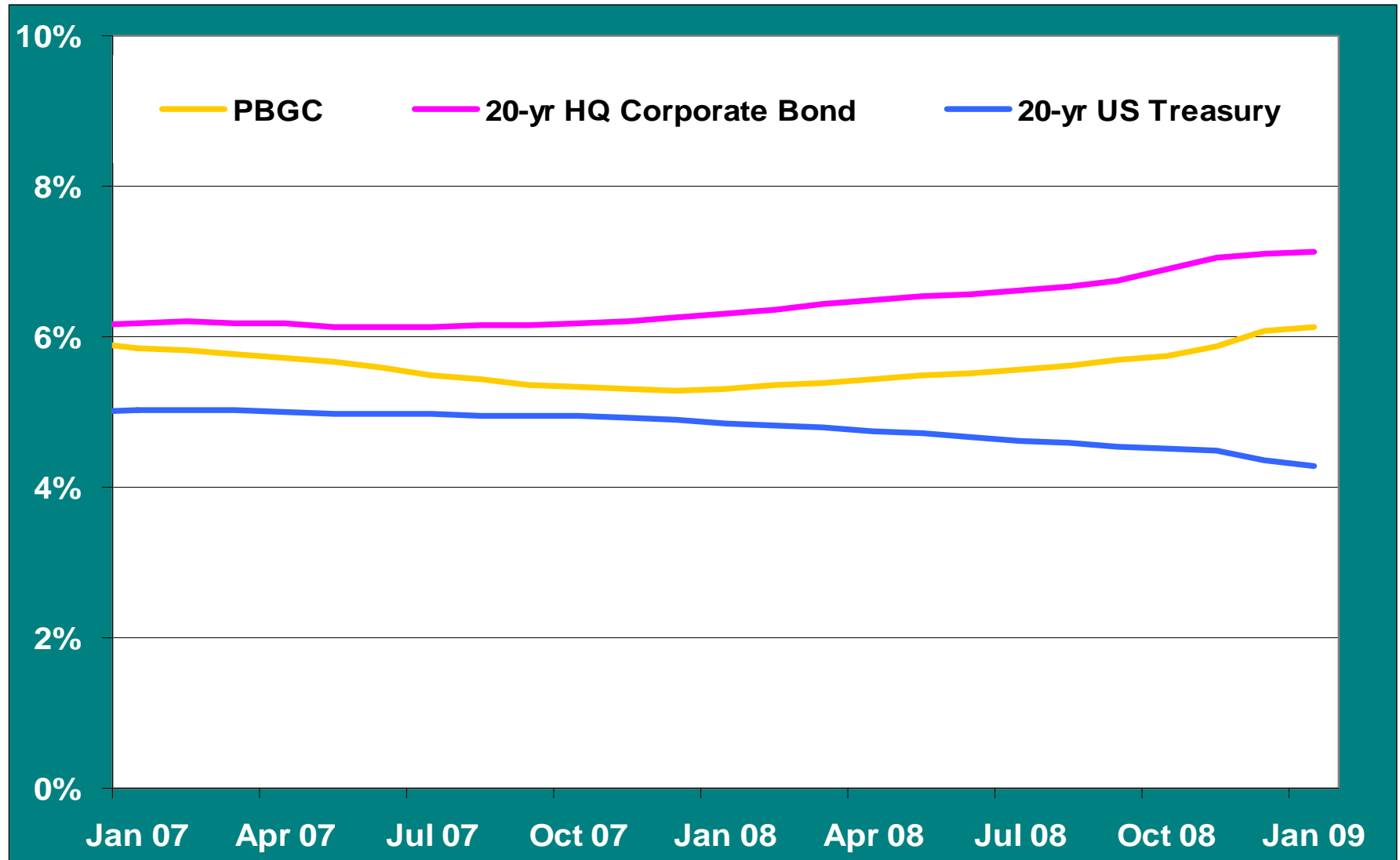


Recent Monthly Indices

	PBGC	20-yr HQ Corporate Bond	20-yr US Treasury
Jan-07	4.88%	6.04%	4.95%
Feb-07	5.13%	6.01%	4.93%
Mar-07	5.22%	5.99%	4.81%
Apr-07	4.99%	6.13%	4.95%
May-07	5.20%	6.14%	4.98%
Jun-07	5.14%	6.45%	5.29%
Jul-07	5.33%	6.45%	5.19%
Aug-07	5.49%	6.48%	5.00%
Sep-07	5.53%	6.39%	4.84%
Oct-07	5.51%	6.26%	4.83%
Nov-07	5.46%	6.31%	4.56%
Dec-07	5.37%	6.49%	4.57%
Jan-08	5.42%	6.48%	4.35%
Feb-08	5.50%	6.75%	4.49%
Mar-08	5.54%	6.84%	4.36%
Apr-08	5.64%	6.75%	4.44%
May-08	5.81%	6.73%	4.60%
Jun-08	5.68%	6.95%	4.74%
Jul-08	5.95%	7.09%	4.62%
Aug-08	6.05%	7.03%	4.53%
Sep-08	6.24%	7.28%	4.32%
Oct-08	6.18%	8.16%	4.45%
Nov-08	7.09%	8.09%	4.27%
Dec-08	7.92%	6.94%	3.18%
Jan-09	6.02%	6.79%	3.46%



Rolling 12 Month Average Indices





Desirable DROP Interest Rate Characteristics For Converting Member Accounts into Annuities

	PBGC	20 HQC	20 UST
<ul style="list-style-type: none">• Reflective of the investable time horizon	Yes	Yes	Yes
<ul style="list-style-type: none">• Reflective of the current markets	Yes, for risk free investing	Typically yes, today's default risk is high	Yes
<ul style="list-style-type: none">• Determinable in advance of application	Yes	Yes	Yes
<ul style="list-style-type: none">• Rate is publicly available (and will continue to be)	Yes	Yes	Yes today but recently was not
<ul style="list-style-type: none">• Selected rate is understandable and defensible	Yes	No	Yes



Potential Problems Using Published Indices

- All rate options vary, sometimes markedly, during the year. This could make the rate outdated by time it's applied
- PBGC rates may not always be market rates because of mortality table used to arrive at market annuity values
- Current corporate default rates are historically high
- Long term US Treasuries are risk free and be may be considered too “ultra safe”



Alternative Option

Select a Rate Not Directly or Automatically Linked

- Annual review by the Board (November meeting) of PBGC annuity and 20-year Treasury rates
 - PBGC annuity rates
 - January 2009 was 6.02% (rates are published monthly)
 - Previous 12 month average was 6.14%
 - 20-year Treasury rate
 - January 30, 2009 was 3.86%
 - Previous 12 month average was 4.29%
- The Board selects an interest crediting rate within a range suggested by the actuary
 - In the present markets Cheiron would ordinarily suggest a rate between 4.0% and 5.5%
 - But since the member account interest crediting rate will be less than 5%, the annuity conversion rate cannot exceed 5%, so pick 5%, as current annuity rates are near that level



Final Comments on Likely Impact of Lowering DROP Interest Rates

- Expect future DROP elections to decline from past levels
- Expect behavioral change of later retirements than in the past
- Lowering the annuity interest rate will lower SDCERS' investment risk
- All the above should serve to decrease future SDCERS' liabilities and related costs



Discussion