

# Why Everything You Know About PERA (That Matters) Is Wrong

Joshua Sharf

Independence Institute

December 2014

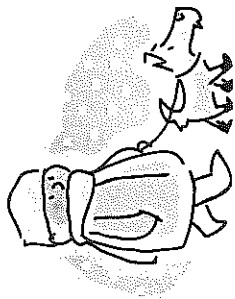
# Discount Rate

What are PERA's promises worth?

What are the State's promises worth?

Discount Rate is a way of measuring how much those promises, 30 years in the future, are worth today.

# Discount Rate – Suppose You Just Borrowed the Money



The Bond Buyer

4.4% Interest

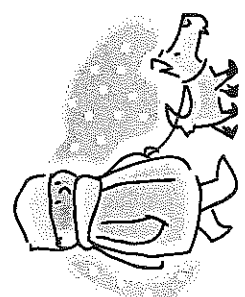


\$100,000,000 in 30 Years



The Bond Sellers

# Discount Rate – Suppose You Just Borrowed the Money



The Bond Buyer



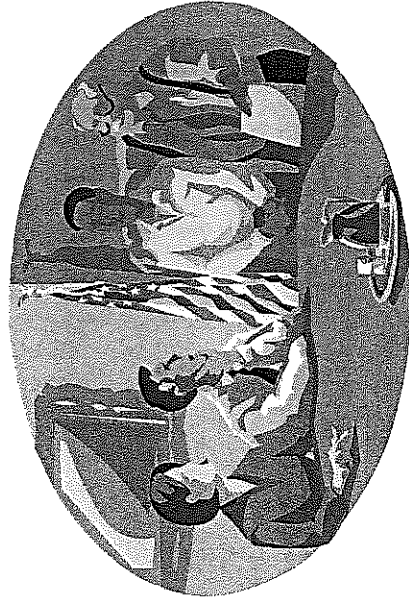
\$27,000,000 Today

This is what that *promise*, 30 years from now is worth today.  
**Present Value**

4.4% Interest



\$100,000,000 in 30 Years



The Bond Sellers

# Discount Rate – What PERA Does

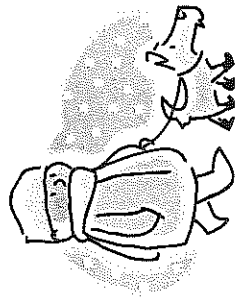


PERA

\$11,000,000 Today

This is what that *promise*, 30 years from now is worth today.

7.5% Interest



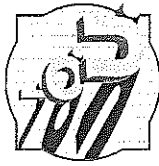
The Bond Buyer

\$27,000,000 Today

This is what that *promise*, 30 years from now is worth today.

**Present Value**

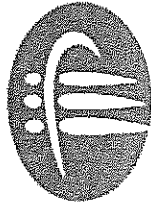
4.4% Interest



\$100,000,000 in 30 Years

?

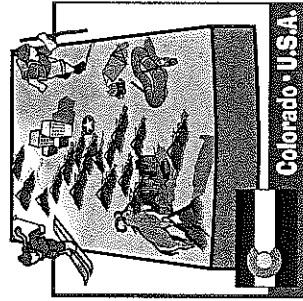
# Discount Rate – Who’s Making the Promise?



COLORADO  
**PERA**

A Mutual Fund with Returns of 7.5%  
And with the **Risk** I expect for 7.5%

?



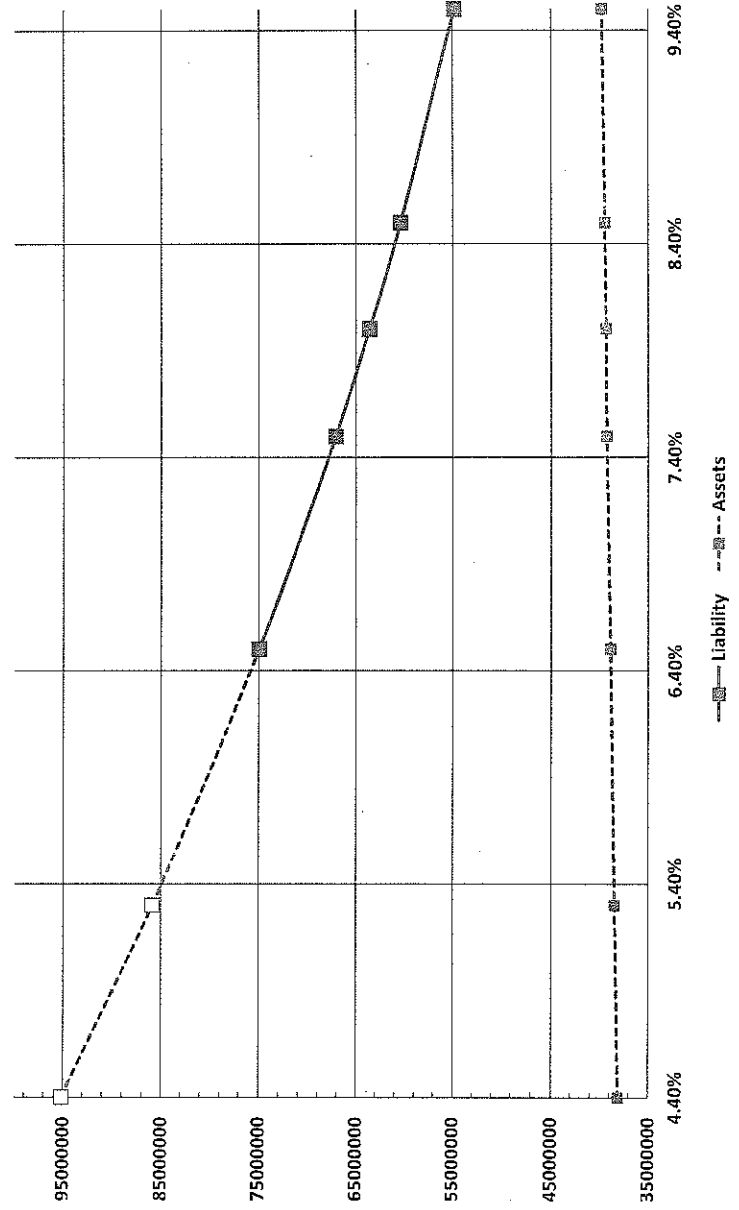
A Sovereign Entity That Borrows at 4.4%  
And with the **Risk** I expect for 4.4%



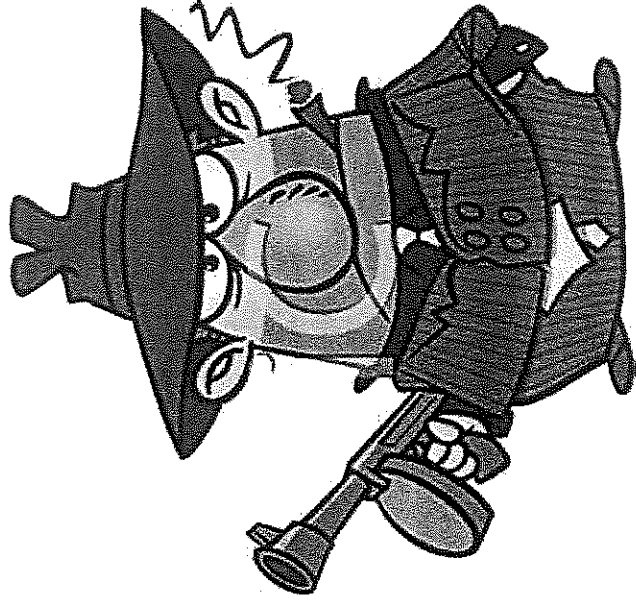
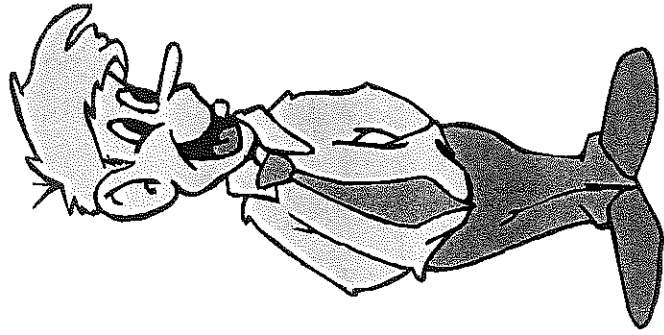
# So How Well-Funded Is PERA?

Moody's 2013

PERA Funded Levels

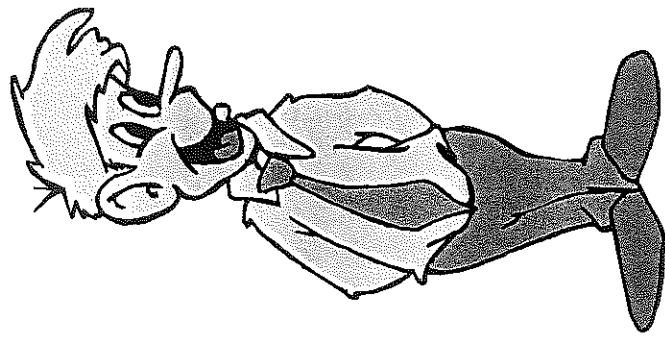


# Why Risk Matters





# Why Risk Matters



1/2

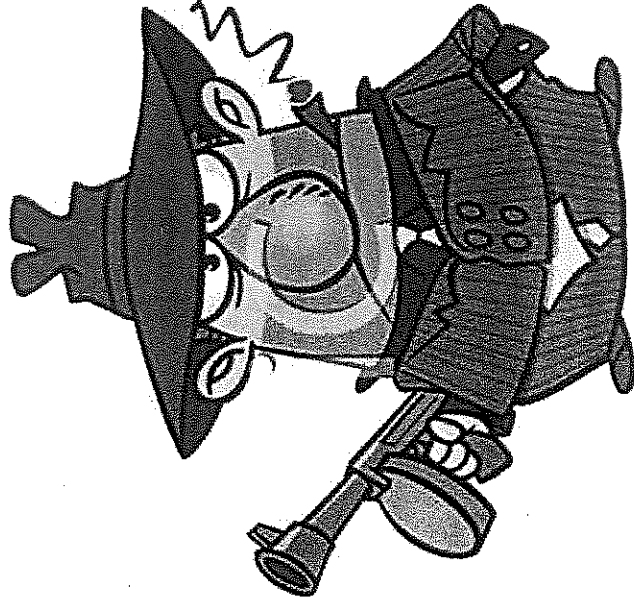
\$0

+



1/2

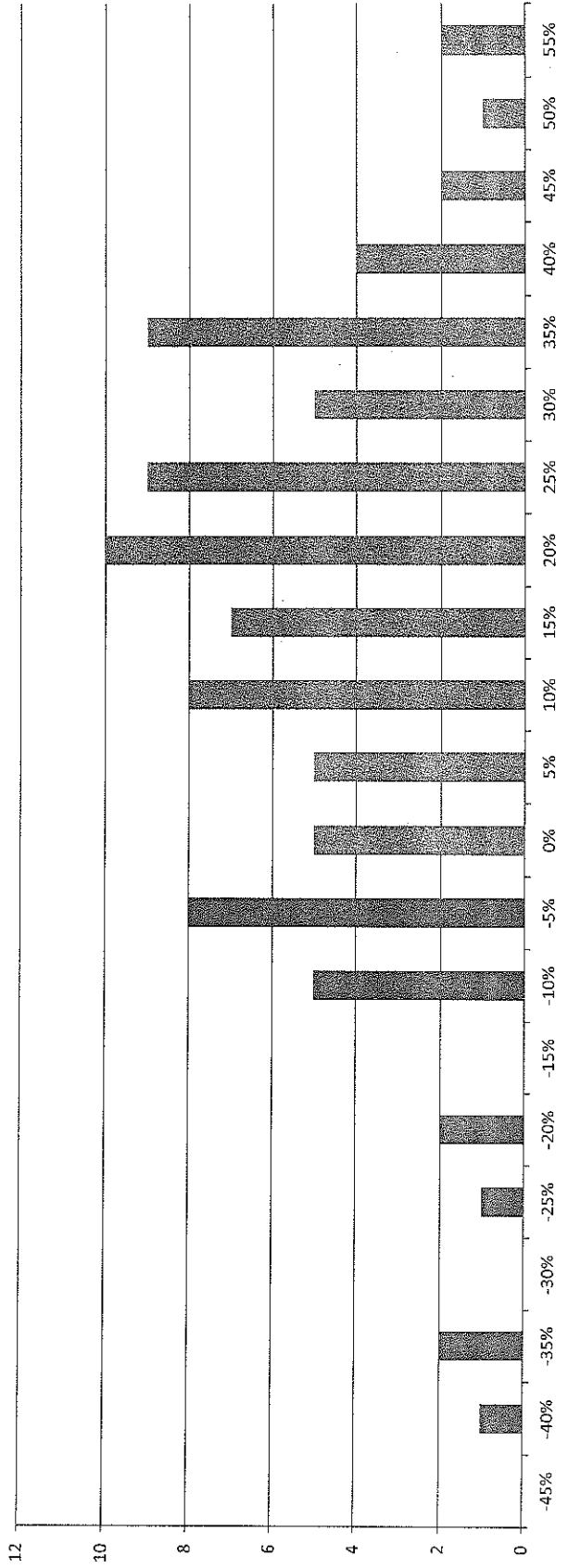
=



# Why Risk Matters

## S&P 500 Annual Return

1926 - 2011



# PERA Funded % and Stocks

Source CAFR 1984 - 2012

