

NORTH CAROLINA



LOCAL  
GOVERNMENT  
INVESTMENT  
ASSOCIATION

Winter Conference  
Village of Pinehurst, NC

Carolina Inn  
80 Carolina Vista Drive

# The Investment Analyst Challenge

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PFM

# Rules of the Game

- (1) Designate a Score Keeper for your Table
- (2) Use the Lettered Cards to indicate your answer
- (3) Prizes for the winning team

# Level 1

## Economy & Interest Rates

**TIME'S UP!**

# Interest Rates



"Can you increase its range?"

# Question 1

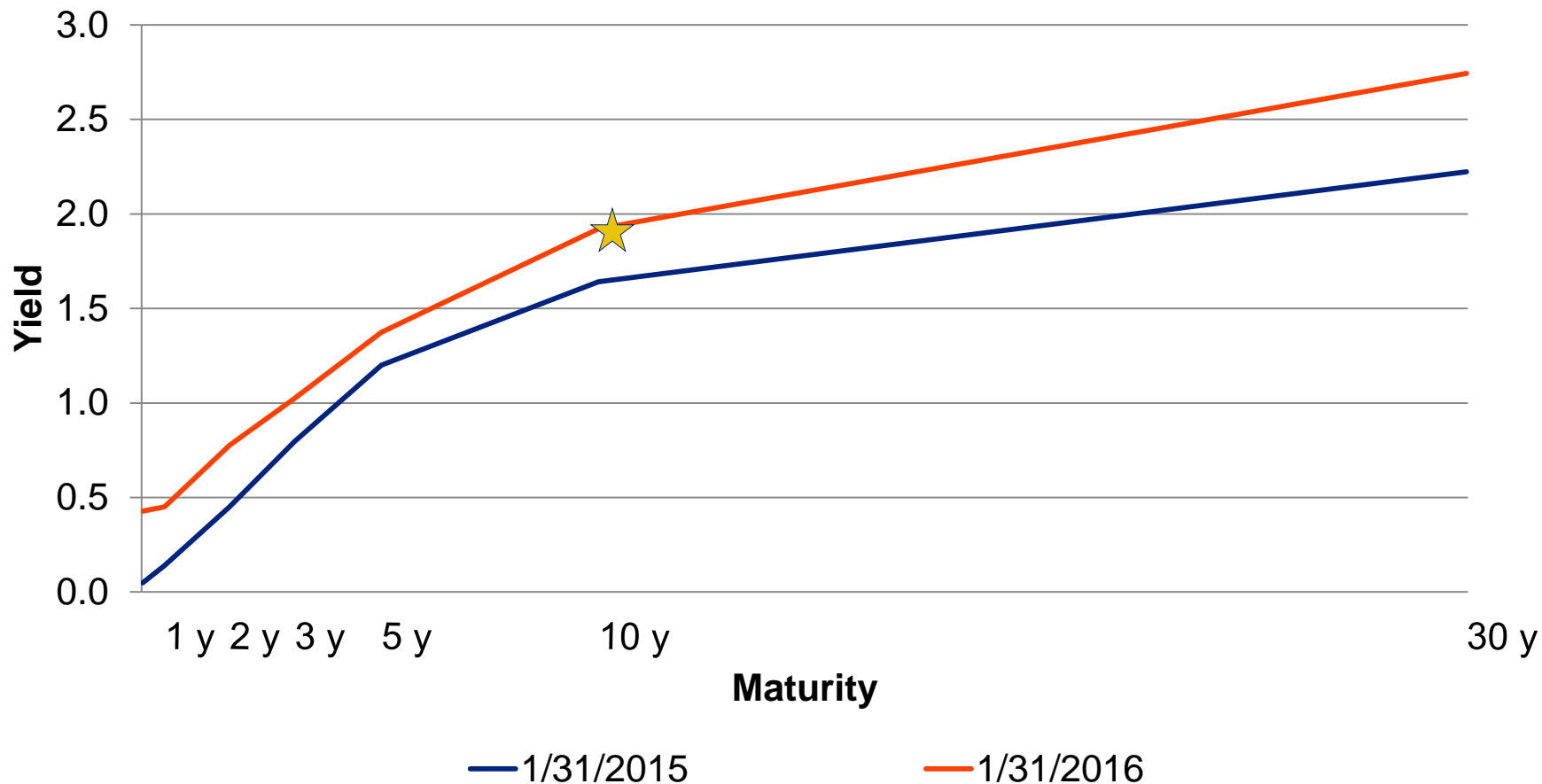
What was the yield<sup>1</sup> on the 10-year U.S. Treasury note at the end of January 2016?

- a. ~ 1.0%
- b. ~ 1.9%**
- c. ~ 2.3%
- d. ~ 3.9%

*Source: Bloomberg (as of February 1, 2016)*

# U.S. Treasury Yield Curve

U.S. Treasury Yield Curves  
January 31, 2015 and January 31, 2016



Source: Bloomberg

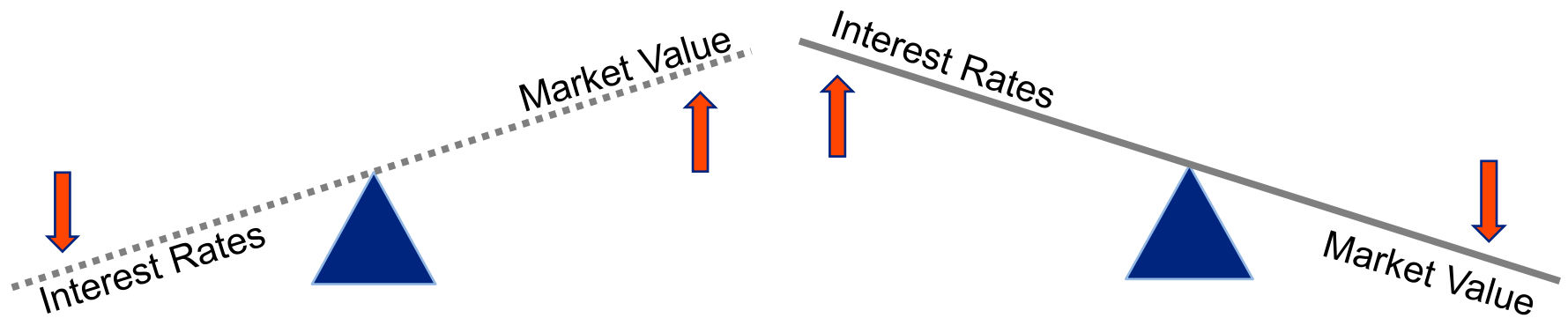
## Question 2

When interest rates rise, what happens to the market value of a security?

- a. Rises
- b. Falls**
- c. It depends on the method of accounting used
- d. It depends on the magnitude of the change in rates

# Interest Rate Volatility

- The effect of interest rate changes on the price/return of a security or portfolio
- Interest rates and portfolio value are **inversely** related





# Question 3

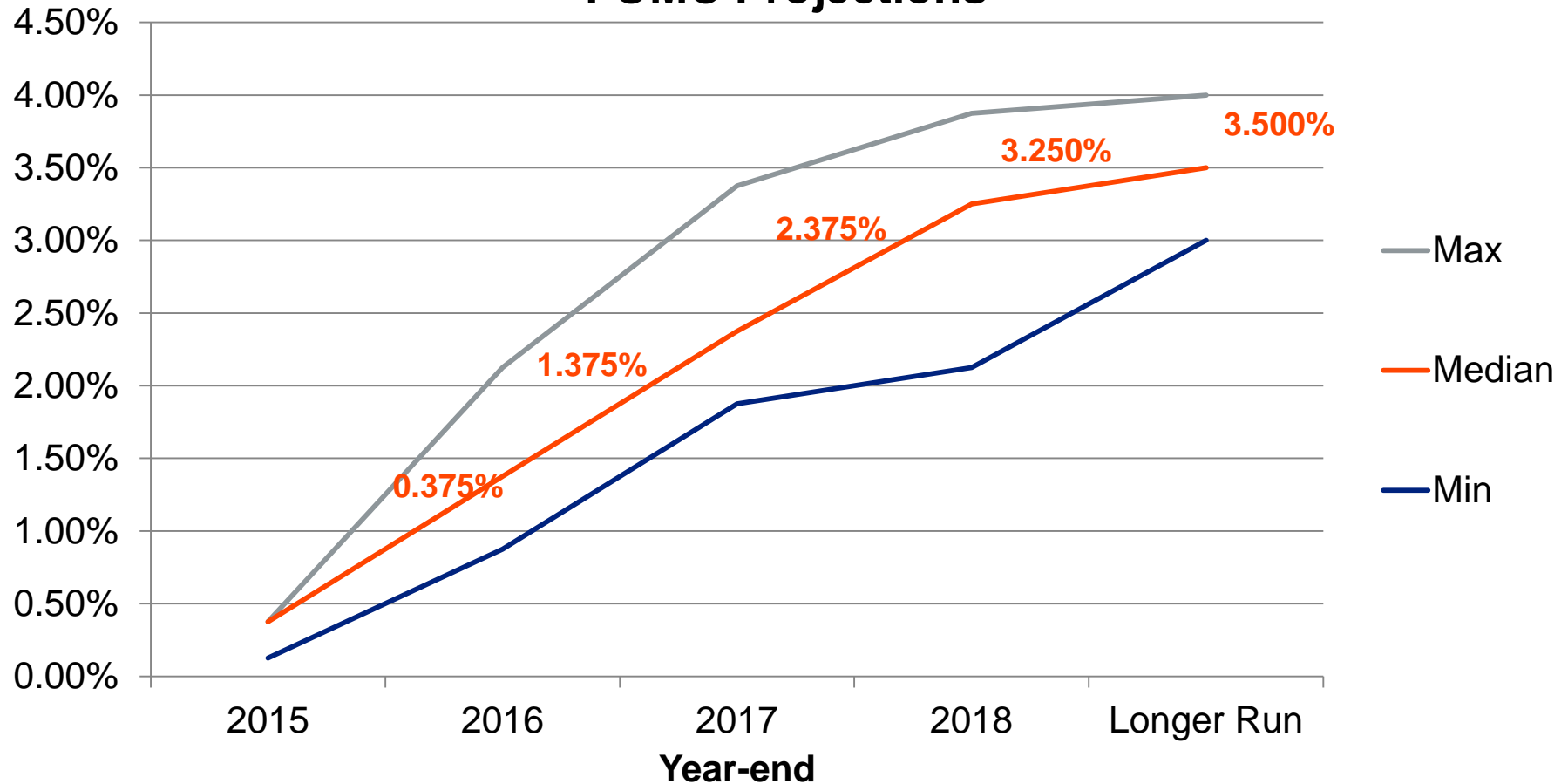
The monetary policy objectives of the Federal Reserve are:

- I. Consistent economic growth
- II. Maximum employment
- III. Stable prices and moderate long-term interest rates
- IV. Favorable value of the U.S. dollar

- a. I, II, III, IV
- b. II only
- c. I, II, III
- d. II, III

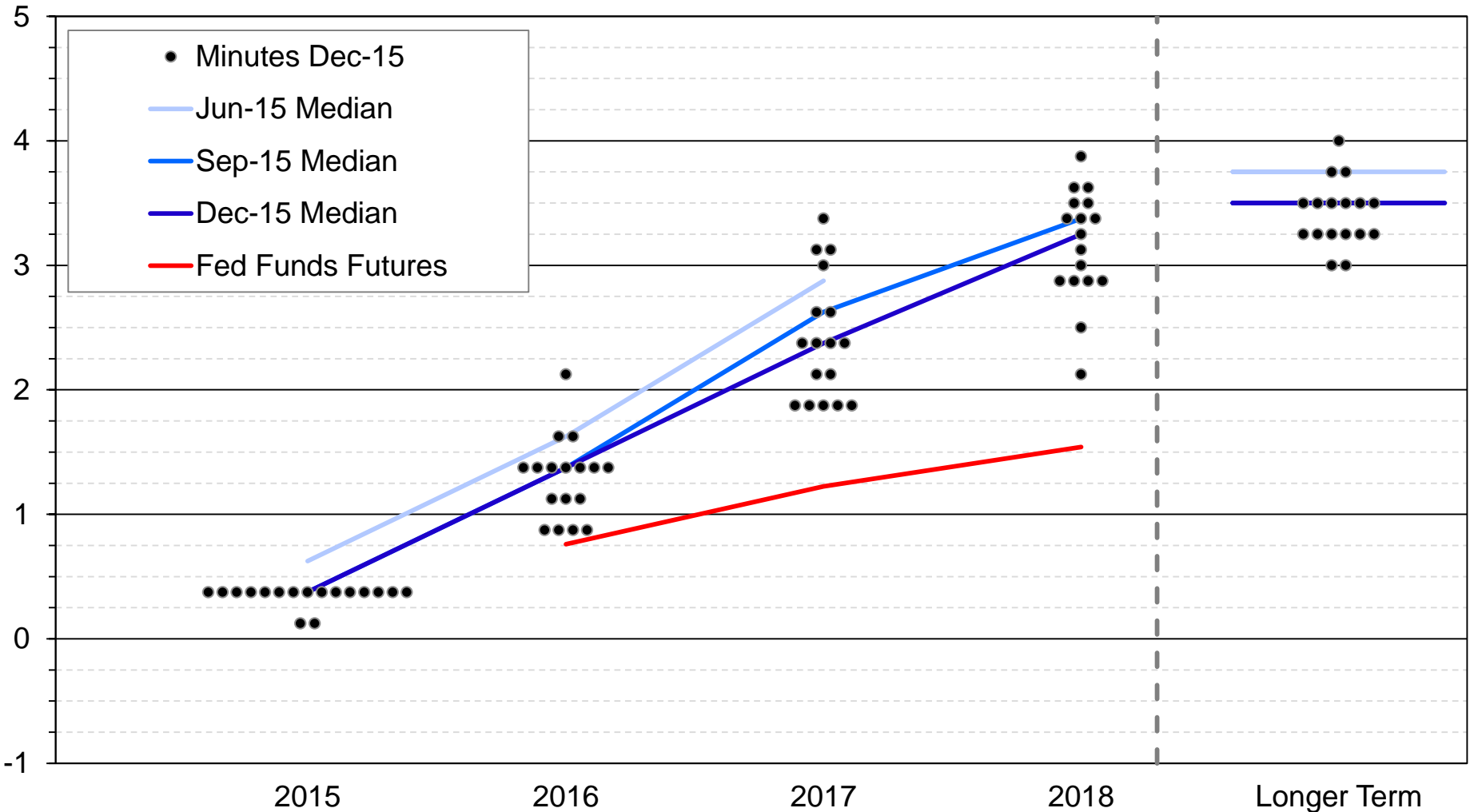
# Projected Future Rates

## Fed Funds Target Rate FOMC Projections



Source: Federal Reserve, as of 1/7/2016

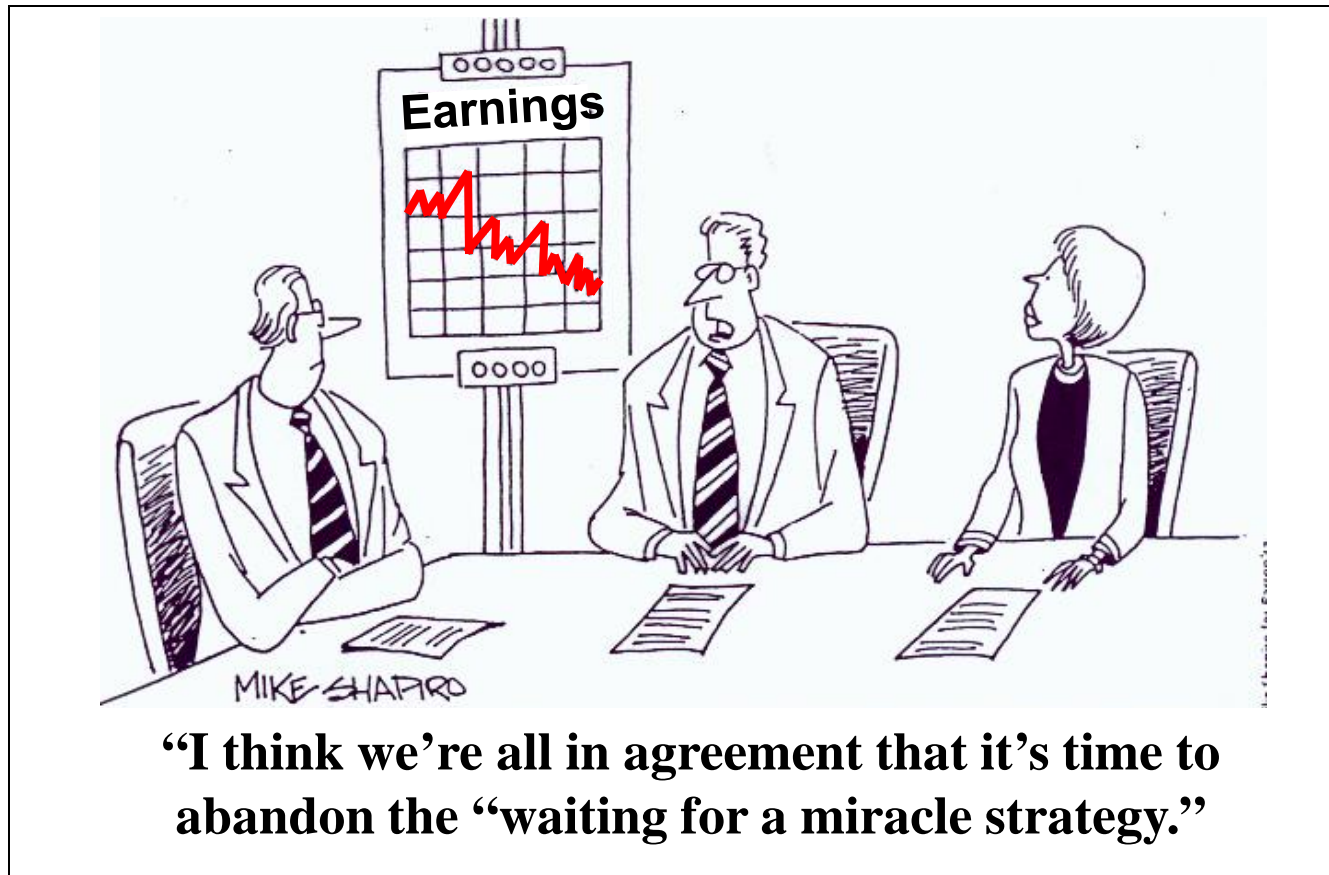
# FOMC "Dot Plot" from December Meeting



Source: FOMC; Fed Funds Futures as of 1/7/2015

# Level 2 Portfolio Strategy

**TIME'S UP!**



**“I think we’re all in agreement that it’s time to abandon the “waiting for a miracle strategy.”**

# Question 4

What can an investor do to hedge risk within their portfolio?

- a. Diversify security purchases among different issuers
- b. Purchase securities with an active secondary market
- c. Match portfolio maturities to expected cash flows
- d. All of the above

# Risks Associated with Investing

Type of Risk	Definition
<b>Interest Rate Risk</b>	Variability of return/price related to changes in interest rates
<b>Credit Risk</b>	Risk of default or decline in security value due to conditions outside investors control
<b>Purchasing Power Risk</b>	Loss of purchasing power over time as a result of inflation
<b>Liquidity Risk</b>	Inability to sell portfolio holdings at a competitive price
<b>Reinvestment Risk</b>	The risk that a security's cash flow will be reinvested at a lower rate of return than what is being earned by the security

# Question 5

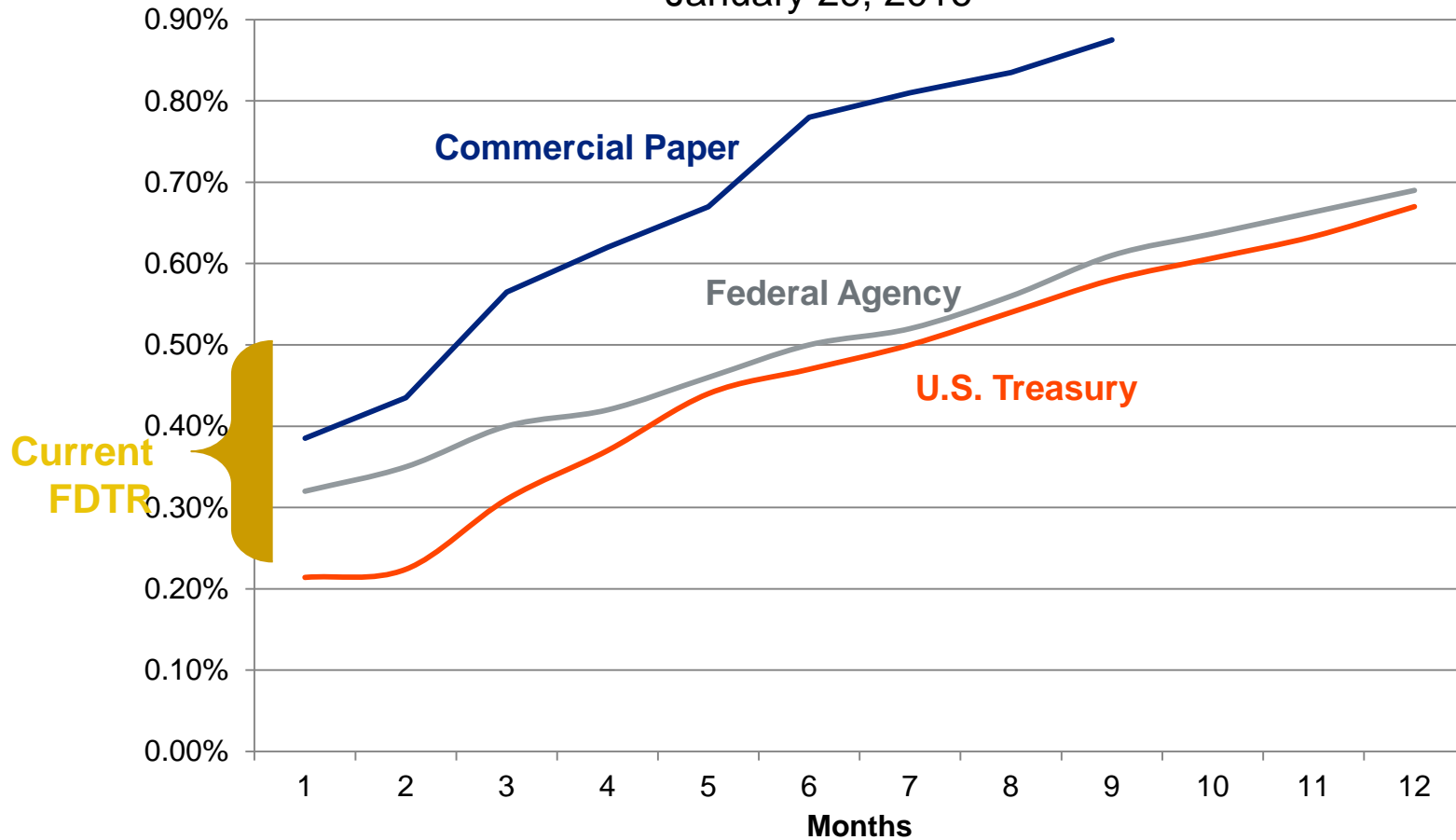
In the current interest rate environment, commercial paper generally has a \_\_\_\_\_ yield than a federal agency discount note maturing on the same date.

- a. Higher
- b. Lower
- c. The same
- d. Can't tell



# Short Term Rates

Money Market Yield Curve  
January 29, 2016



Source: Bloomberg

# Question 6

When should an investor initiate a swap (sell one security in order to buy another)?

- a. The investor needs to liquidate securities to meet cash flow requirements
- b. In order to generate incremental investment income
- c. If the yield on the security being sold is higher than the yield on the security being purchased
- d. All securities should be held to maturity

# Reasons for Swaps

- Need for periodic rebalancing
  - passage of time
  - changing interest rates
  - cash flow assumptions
- To generate incremental income
- To enhance total return

# Why Do Swap Opportunities Exist

- Market inefficiencies
- Market volatility
- Different expectations about future interest rates
- Different credit outlooks
- Changes in cash flow requirements



# Level 3 Alphabet Soup



**TIME'S UP!**



# Question 7

Which of the following securities are not permitted investments for a local government or authority in North Carolina?

- i. Revenue Bonds issued by a New York municipality
  - ii. Corporate Notes issued by a AAA-rated corporation
  - iii. Asset Backed Securities issued by a AAA-rated corporation
  - iv. Certificates of Deposit issued by a North Carolina credit union
- 
- a. i, ii, iii, and iv
  - b. ii and iii
  - c. iii only
  - d. ii, iii, and iv

# Permitted Investments

Investment	North Carolina General Statute 159-30
U.S. Treasury Securities	✓
Federal Agencies Securities	✓
Certificates of Deposit with banks having a principal office in North Carolina	✓
Repurchase Agreements	✓
North Carolina Capital Management Trust	✓
North Carolina State and Local Government Bonds	✓
Commercial Paper	✓
Corporate Bonds	Not Permitted
Negotiable Certificates of Deposit	Not Permitted
Bank Deposits in Approved North Carolina Depositories	✓
Mutual Funds in permitted securities listed above	✓

Source: North Carolina General Statute 159-30

## Question 8

Primary government securities dealers are large, well capitalized firms who agree to make a market in the entire spectrum of Treasury instruments. True or False, Primary dealers are designated by the Securities and Exchange Commission?

- a. True
- b. False



# Primary Dealers

Bank of Nova Scotia, New York Agency	Jefferies LLC
BMO Capital Markets Corp.	J.P. Morgan Securities LLC
BNP Paribas Securities Corp.	Merrill Lynch, Pierce, Fenner & Smith Incorporated
Barclays Capital Inc.	Mizuho Securities USA Inc.
Cantor Fitzgerald & Co.	Morgan Stanley & Co. LLC
Citigroup Global Markets Inc.	Nomura Securities International, Inc.
Credit Suisse Securities (USA) LLC	RBC Capital Markets, LLC
Daiwa Capital Markets America Inc.	RBS Securities Inc.
Deutsche Bank Securities Inc.	Societe Generale, New York Branch
Goldman, Sachs & Co.	TD Securities (USA) LLC
HSBC Securities (USA) Inc.	UBS Securities LLC

\* Source: New York Federal Reserve; as of December 7, 2015

# Question 9

On the annual financial statements, GASB 31 & 72 requires investments to be reported at:

- a. Cost
- b. Book Value
- c. Fair Value
- d. Par

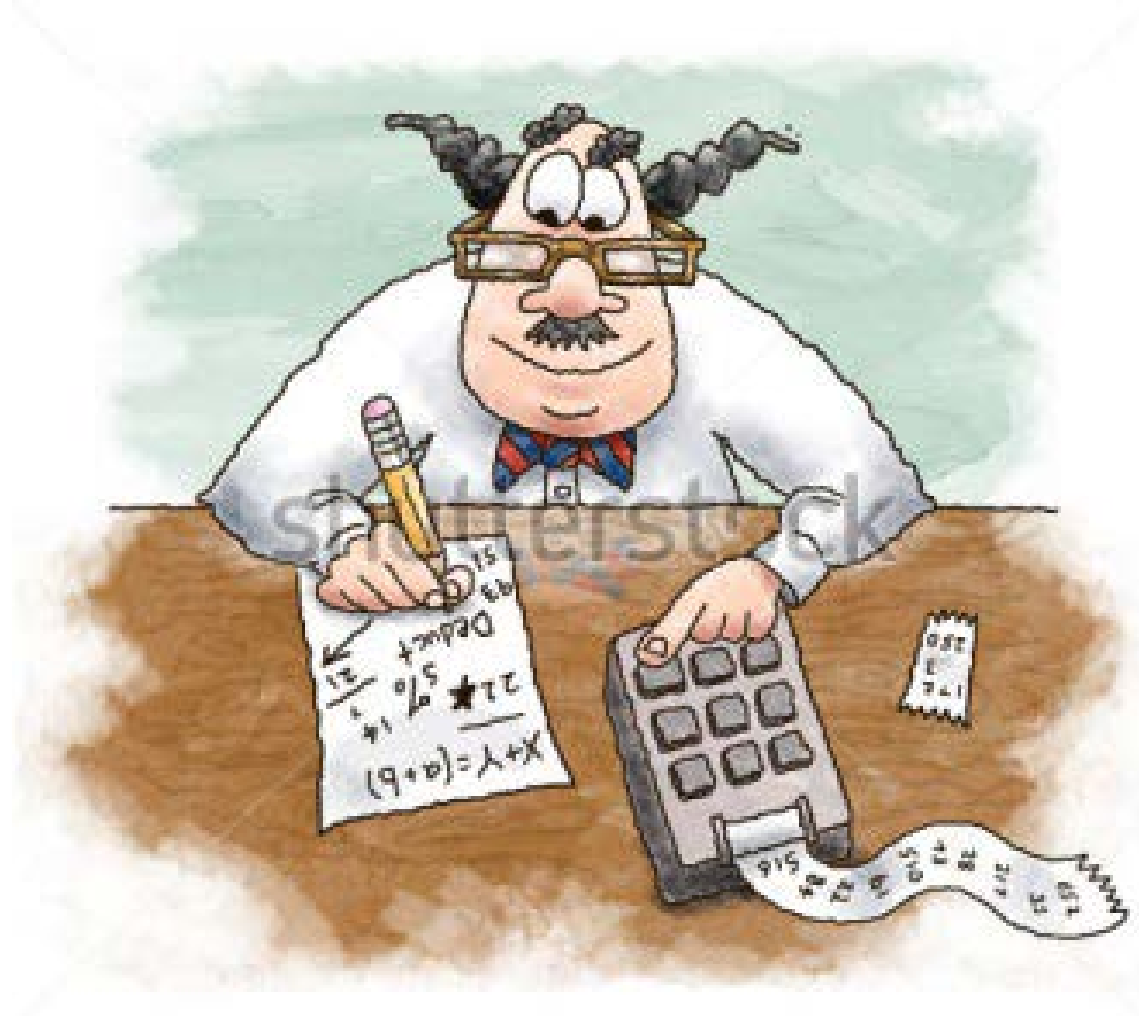
# GASB 31

- **GASB 31: “Statement on Accounting and Financial Reporting for Certain Investments and for External Investment Pools”**
  - Balance Sheet: Report investments at *fair value*
  - Operating Statement: recognize the change in fair value from year to year
- **GASB 31 Exceptions:**
  - Investments with a remaining maturity (at the time of investment) of one year or less may be accounted for on an amortized cost basis
  - Non-participating contracts (cannot be sold)
    - non-negotiable certificates of deposit
    - non-recourse guaranteed investment contracts and repurchase agreements
  - 2a-7 like pools
    - money market mutual funds
    - LGIP

# GASB 72

- **GASB 72: “Fair Value Measurement and Application”**
  - Price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
  - Effective June 15, 2015
- **GASB 72 Valuation Techniques:**
  - **Market Approach**
  - Cost Approach
  - Income Approach
- **Fair Value Hierarchy of Inputs**
  - **Level 1**
  - Level 2
  - Level 3

# Tallying the Scores



# Tie Breaker

Prior to December 2016, what was the last date The Federal Open Market Committee (FOMC) raised the federal funds target rate?

**Closest Answer Wins!**

# Important Disclosures and Disclaimers

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