

ARIZONA-AMERICAN WATER COMPANY

**DOCKET NO. W-01303A-09-0343
AND DOCKET NO. SW-01303A-09-0343**

**SURREBUTTAL TESTIMONY
ON COST OF CAPITAL**

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

APRIL 15, 2010

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1 **INTRODUCTION**

2 Q. Please state your name, occupation, and business address.

3 A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed
4 by the Residential Utility Consumer Office ("RUCO") located at 1110 W.
5 Washington, Suite 220, Phoenix, Arizona 85007.

6
7 Q. Please state the purpose of your surrebuttal testimony.

8 A. The purpose of my testimony is to comment on the proposed agreement
9 between Arizona-American Water Company, Inc.'s ("AAWC" or
10 "Company") rebuttal testimony on RUCO's recommended rate of return on
11 invested capital (which includes RUCO's recommended capital structure,
12 cost of long-term debt and cost of common equity) for the two water
13 districts and three wastewater districts that AAWC is seeking rate
14 increases for in this proceeding.

15
16 Q. Have you filed any prior testimony in this case on behalf of RUCO?

17 A. Yes, on March 8, 2010, I filed direct testimony with the Commission on the
18 cost of capital issues in this case. I also filed, under separate cover, direct
19 testimony on AAWC's request for an infrastructure improvement
20 surcharge.

21

22

23

1 Q. Are you also filing surrebuttal testimony on the infrastructure improvement
2 surcharge that the Company is requesting in this case?

3 A. Yes. I have also filed a separate piece of surrebuttal testimony on the
4 infrastructure improvement surcharge issue.

5

6 Q. How is your surrebuttal testimony on cost of capital organized?

7 A. My surrebuttal testimony contains five parts: the introduction that I have
8 just presented; a summary of AAWC's rebuttal testimony; a section on
9 capital structure; a section on the cost of debt; and, a section on the cost
10 of equity capital.

11

12 **SUMMARY OF AAWC's REBUTTAL TESTIMONY**

13 Q. Have you reviewed AAWC's rebuttal testimony?

14 A. Yes. I have reviewed the rebuttal testimony of Company witnesses,
15 Thomas M. Broderick and Dr. Bente Villadsen, filed on March 22, 2009,
16 which address the cost of capital issues in this case.

17

18 Q. Please summarize the Company's rebuttal testimony.

19 A. Mr. Broderick's rebuttal testimony states that AAWC has accepted ACC
20 Staff's recommended 7.2 percent weighted average cost of capital
21 including ACC Staff's recommended capital structure, cost of short-term
22 and long-term debt, and cost of common equity. In light of the fact that
23 AAWC has abandoned her cost of capital recommendations, Dr. Villadsen

1 devotes her entire rebuttal testimony to my recommended cost of common
2 equity. She states why she believes my recommended 9.50 percent cost
3 of common equity is not reasonable and makes adjustments to the models
4 that I have used in my cost of equity analysis.

5

6 **CAPITAL STRUCTURE**

7 Q. Please compare the capital structure recommendations of ACC Staff and
8 RUCO.

9 A. A comparison of ACC Staff and RUCO's capital structures are as follows:

10

11

ACC Staff

12

Short & Long-Term Debt 61.14%

13

Common Equity 38.86%

14

15

RUCO

16

Short-Term Debt 13.29%

17

Long-Term Debt 47.56%

18

Common Equity 39.15%

19

20

As can be seen above there is very little difference between the capital
21 structures being recommended by ACC Staff witness Juan C. Manrique
22 and myself. Mr. Manrique's capital structure contains slightly less debt
23 than the capital structure that I am recommending.

1 **COST OF DEBT**

2 Q. Have you made any changes to your recommended costs of short-term
3 and long-term debt?

4 A. No, I have not.

5

6 Q. Please compare the costs of long-term debt being recommended by ACC
7 Staff and RUCO for AAWC.

8 A. ACC Staff and RUCO are recommending the following:

9

10 ACC Staff

11	Short & Long-Term Debt	4.91%
----	------------------------	-------

12

13 RUCO

14	Short-Term Debt	3.91%
15	Long-Term Debt	5.47%

16

17 Q. What is the difference between ACC Staff's recommended cost of debt
18 and RUCO's recommended cost of debt?

19 A. As can be seen above ACC Staff's Mr. Manrique has elected to combine
20 his recommended costs of short-term and long-term debt into a single
21 weighted cost of debt of 4.91 percent.

22

1 Q. What would the weighted cost of RUCO's recommended costs of short-
2 term and long-term be if you took the same approach as Mr. Manrique
3 has?

4 A. RUCO's weighted cost of debt would be 5.02 percent, or eleven basis
5 points higher than ACC Staff's weighted cost of debt, and would produce
6 the same weighted average cost of capital that I am recommending in this
7 case.

8

9 **COST OF EQUITY CAPITAL**

10 Q. Have you made any changes to the 9.50 percent cost of common equity
11 that you recommended in your direct testimony?

12 A. No.

13

14 Q. What costs of equity capital are ACC Staff and RUCO recommending?

15 A. The costs of common equity presently being recommended by ACC Staff
16 and RUCO are as follows:

17

18 ACC Staff 10.70%

19 RUCO 9.50%

20

21 Presently there is a 120 basis point difference between our respective
22 recommended costs of common equity.

23

1 Q. What are the weighted average costs of capital (“WACC”) presently being
2 recommended by ACC Staff and RUCO?

3 A. The WACC presently being recommended by ACC Staff and RUCO are
4 as follows:

5		
6	ACC Staff	7.20%
7	RUCO	6.77%

8
9 As can be seen above, there is a 43 basis point difference between Mr.
10 Manrique’s recommended WACC and my recommended WACC.

11

12 Q. Has there been any recent activity in regard to interest rates?

13 A. Yes. On March 16, 2010, the Federal Reserve decided not to increase or
14 decrease the federal funds rate and kept it between zero and 0.25
15 percent. According to the minutes to the Federal Open Market
16 Committee’s meeting, the Fed affirmed its plan to keep interest rates
17 "exceptionally low" for a long time as evidenced in this excerpt:

18
19 The Committee will maintain the target range for the federal
20 funds rate at 0 to ¼ percent and continues to anticipate that
21 economic conditions, including low rates of resource utilization,
22 subdued inflation trends, and stable inflation expectations, are
23 likely to warrant exceptionally low levels of the federal funds rate
24 for an extended period. To provide support to mortgage lending
25 and housing markets and to improve overall conditions in private
26 credit markets, the Federal Reserve has been purchasing \$1.25
27 trillion of agency mortgage backed securities and about \$175
28 billion of agency debt; those purchases are nearing completion,
29 and the remaining transactions will be executed by the end of
30 this month. The Committee will continue to monitor the economic
31 outlook and financial developments and will employ its policy

1 tools as necessary to promote economic recovery and price
2 stability.¹
3

4 The next FOMC meeting is scheduled for April 27, 2010.

5

6 Q. Please address Dr. Villadsen's argument that your recommended 9.50
7 percent cost of common equity is too low to attract investors during a
8 period of turbulence in the financial markets.

9 A. I would say that my 9.50 percent return on common equity for AAWC
10 looks very attractive to investors considering the fact that, as of January
11 22, 2010, Value Line's analysts are projecting a long-term (i.e. the 2012-
12 2014 time frame) 8.00 percent return on book common equity for the
13 water utility industry as a whole. Value Line's long-term return on
14 common equity for American Water Works, the parent company of AAWC,
15 is 6.00 percent (Attachment E of my direct testimony). My recommended
16 9.50 percent cost of common equity is 350 basis points higher than Value
17 line's long-term projection for the Company's parent.

18

19 Q. How do you respond to Dr. Villadsen's position that investors are more
20 wary of water company stocks, which have been traditionally viewed as
21 safe investments, during periods of financial uncertainty?

22 A. My response is that the investment community doesn't seem to view
23 AAWC's parent in that light. As can be seen in Attachment A of my

¹ Minutes of the Federal Open Market Committee meeting held on March 16, 2010
<http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20100316.pdf>

1 testimony, American Water Work's stock price has experienced a definite
2 upward trend over the past year. AAWC's parent company increased in
3 value from \$17.33 per share on April 23, 2009, to 21.48 per share on April
4 13, 2010 which is higher than Aqua America's price per share of \$17.97.
5 If anything, there clearly appears to be a demand for American Water
6 Works shares despite the recent economic climate.

7

8 Q. What is your opinion of Dr. Villadsen's argument that water utilities are
9 riskier despite the fact that their betas are falling?

10 A. Dr. Villadsen has testified in prior cases that water utility stocks were
11 riskier as evidenced by the fact that their betas, which measure a
12 security's risk in relation to the market as a whole, were increasing. I fail
13 to see how water utilities are riskier now, given the fact that their betas are
14 falling, because lower betas indicate lower risk in relation to the market as
15 a whole.

16

17 Q. Please address Dr. Villadsen's criticism that your DCF estimates of
18 external growth are also biased downward.

19 A. Dr. Villadsen has taken issue with my calculation of "v" for the external
20 growth rate estimate portion of the DCF's growth component. This
21 calculation takes into consideration the fact that, while in theory a utility's
22 stock price should move toward a market to book ratio of 1.0 if regulators
23 authorize a rate of return that is equal to a utility's cost of capital, in reality

1 a utility will continue to issue shares of stock that are priced above book
2 value.

3 As pointed out by Dr. Villadsen, I explained in my direct testimony that this
4 same assumption was incorporated into the DCF analysis performed by
5 Mr. Stephen Hill, ACC Staff's cost of cost of capital witness, in a prior
6 Southwest Gas rate case proceeding.² Mr. Hill used the same methods
7 that I have used in arriving at the inputs for his DCF model. His final
8 recommendation for Southwest Gas Corporation, which was adopted by
9 the Commission, was largely based on the results of his DCF analysis,
10 which incorporated the same valid market-to-book ratio assumption that I
11 have used consistently in cases before the Commission.

12
13 Q. Please explain why a utility's stock will tend to move toward book value, or
14 a market-to-book ratio of 1.0, if regulators allow a rate of return that is
15 equal to the cost of capital of firms with similar risk.

16 A. As I stated in my direct testimony, the market value of a utility's stock will
17 tend to move toward book value, or a market-to-book ratio of 1.0, if
18 regulators allow a rate of return that is equal to the cost of capital of firms
19 with similar risk. This premise is recognized among practitioners who
20 have testified in cost of capital proceedings³.

² Docket No. G-01551A-04-0876

³ Carleton, Willard T. and Morin, Roger A.

1 Despite Dr. Villadsen's criticism of my DCF methodology in her rebuttal
2 testimony, I believe that a utility's market price should equal its book price
3 over the long run if regulators allow a rate of return that is equal to the
4 utility's cost of capital. That is assuming that the utility's rate of return
5 ("ROR") is comparable to the rates of return of other firms in the same risk
6 class. I believe that a better explanation of this concept is one that I have
7 used in the past and assumes that if a hypothetical utility's book price is
8 \$20.00 per share and regulators adopt a rate of return that is equal to the
9 utility's cost of capital of 10.00 percent, the utility will earn \$2.00 per share
10 ("EPS"). With earnings of \$2.00 per share, and a market required rate of
11 return on equity of 10.00 percent, for firms in the utility's risk class, the
12 market price of the utility's stock will set at \$20.00 per share ($\$2.00 \text{ EPS} \div$
13 $10.00\% \text{ ROR} = \$20.00 \text{ per share price}$). If the utility records earnings that
14 are higher than the earnings of other firms with similar risk, the market
15 value of the utility's shares will increase accordingly ($\$2.50 \text{ EPS} \div 10.00\%$
16 $\text{ROR} = \$25.00 \text{ per share}$). On the other hand, if the utility posts lower
17 earnings, the stock's market price will fall below book value ($\$1.50 \text{ EPS} \div$
18 $10.00\% \text{ ROR} = \$15.00 \text{ per share}$).

19 Because of economic forces beyond the control of regulators, it is not
20 reasonable to assume that the utility will have earnings that match those
21 of firms of similar risk in every year of operation. In some years, earnings
22 may drop causing the market-to-book ratio to fall below 1.0, while in other
23 years the utility may have earnings that exceed those of other firms in its

1 risk classification. However, over the long run the utility's earnings should
2 average out to the earnings that are expected based on its level of risk.
3 These average earnings over time will result in a market-to-book ratio of
4 1.0. A 1.0 ratio may never be achieved in practice and many investors
5 may not even care what the market-to-book ratio is as long as they
6 receive their required rate of return.

7

8 Q. Are there any other reasons why your market-to-book ratio calculation that
9 is valid?

10 A. Yes. Each of the other utilities included in my sample, are engaged in
11 unregulated activities to some degree. Because it is difficult to obtain a
12 sample comprised only of "pure play" utilities, the calculation that I have
13 employed in my DCF model helps to eliminate the impact that those
14 unregulated operating segments would have on the market-to-book ratio
15 of the utilities included in my sample.

16

17 Q. Please respond to Dr. Villadsen's argument that your overall CAPM
18 results are below the current yields on Baa/BBB debt instruments.

19 A. I am not recommending that the Commission adopt my CAPM results. I
20 am recommending a cost of common equity of 9.50 percent which is 315
21 to 359 basis points over the most recent yields of 6.35 percent to 5.91
22 percent for Baa/BBB-rated and A-rated utility bonds respectively
23 (Attachment B).

1 Q. Is Dr. Villadsen correct in her assertion that you did not use the
2 appropriate proxy for a risk-free rate in your CAPM model?

3 A. No. Despite Dr. Villadsen's assertion, I have used an appropriate
4 Treasury instrument to calculate the risk premium in my CAPM model for
5 regulatory purposes. As I have stated in my direct testimony, the life of a
6 5-year treasury instrument closely matches the three to five year time
7 frame in which utilities, such as AAWC, apply for rates.

8
9 Q. Please address Dr. Villadsen's argument regarding your reliance on
10 geometric means in your CAPM analyses.

11 A. As I stated in my direct testimony there is an on-going debate over which
12 is the better average to rely on. However, it is important to recognize that
13 the information on both means, published by Morningstar, is widely
14 available to the investment community. For this reason alone I believe
15 that the use of both means in a CAPM analysis is appropriate.

16
17 Q. Has the Commission authorized rates of return that were derived through
18 the use of both arithmetic and geometric means in prior decisions?

19 A. Yes, a case that specifically comes to mind involved UNS Gas Inc., in
20 which Decision No. 70011, dated November 27, 2007, stated the
21 following:

22
23 "We agree with the Staff and RUCO witnesses that it is appropriate
24 to consider the geometric returns in calculating a comparable
25 company CAPM because to do otherwise would fail to give

1 recognition to the fact that many investors have access to such
2 information for purposes of making investment decisions.”
3

4 In the UNS Gas, Inc. case, the ACC Staff witness was Mr. David C.
5 Parcell who, as I do, consistently relies on both arithmetic and geometric
6 means in our CAPM analyses. Also, when he testified in the Arizona
7 Water case, Mr. Parcell, Staff’s expert, acknowledged that he uses both
8 geometric and arithmetic means in his testimony and did so in this case.⁴
9 Mr. Parcell further testified that Value Line calculates both historic and
10 prospective growth rates on a geometric or compound growth rate basis.⁵
11 He further testified that because investors, the Securities & Exchange
12 Commission and this Commission use arithmetic and geometric means,
13 analysts developing cost of capital should too.⁶
14

15 Q. Please respond further to Dr. Villadsen’s criticism of your reliance on
16 geometric means in the CAPM model.

17 A. The best argument in favor of the geometric mean is that it provides a
18 truer picture of the effects of compounding on the value of an investment
19 when return variability exists. This is particularly relevant in the case of
20 the return on the stock market, which has had its share of ups and downs
21 over the 1926 to 2008 observation period used in my CAPM analysis.
22

⁴ T: 1345-46

⁵ Id.

⁶ Id.

1 Q. Can you provide an example to illustrate the differences between the two
2 averages?

3 A. Yes. The following example may help. Suppose you invest \$100 and
4 realize a 20.0 percent return over the course of a year. So at the end of
5 year 1, your original \$100 investment is now worth \$120. Now let's say
6 that over the course of a second year you are not as fortunate and the
7 value of your investment falls by 20.0 percent. As a result of this, the
8 \$120 value of your original \$100 investment falls to \$96. An arithmetic
9 mean of the return on your investment over the two-year period is zero
10 percent calculated as follows:

11

$$\begin{aligned} 12 \quad & (\text{year 1 return} + \text{year 2 return}) \div \text{number of periods} = \\ 13 \quad & (20.0\% + -20.0\%) \div 2 = \\ 14 \quad & (0.0\%) \div 2 = \underline{0.0\%} \end{aligned}$$

15

16 The arithmetic mean calculated above would lead you to believe that you
17 didn't gain or lose anything over the two-year investment period and that
18 your original \$100 investment is still worth \$100. But in reality, your
19 original \$100 investment is only worth \$96. A geometric mean on the
20 other hand calculates a compound return of negative 2.02 percent as
21 follows:

22

$$23 \quad (\text{year 2 value} \div \text{original value})^{1/\text{number of periods}} - 1 =$$

1 Q. Please explain.

2 A. In order to believe that the results produced by the arithmetic mean are
3 appropriate, you have to believe that each return possibility included in the
4 calculation is an independent draw. However, research conducted by
5 CKM demonstrates that year-to-year returns are not independent and are
6 actually auto correlated (i.e. a relationship that exists between two or more
7 returns, such that when one return changes, the other, or others, also
8 change), meaning that the arithmetic mean has less credence. CKM also
9 explains two other factors that would make the Morningstar arithmetic
10 mean too high. The first factor deals with the holding period. The
11 arithmetic mean depends on the length of the holding period and there is
12 no "law" that says that holding periods of one year are the "correct"
13 measure. When longer periods (e.g. 2 years, 3 years etc.) are observed,
14 the arithmetic mean drops about 100 basis points. The second factor
15 deals with a situation known as survivor bias. According to CKM, this is a
16 well-documented problem with the Morningstar historical return series in
17 that it only measures the returns of successful firms. That is, those firms
18 that are listed on stock exchanges. The Morningstar historical return
19 series does not measure the failures, of which there are many. Therefore,
20 the return expectations in the future are likely to be lower than the
21 Morningstar historical averages. After conducting their analysis, CKM
22 conclude that 4.0 percent to 5.5 percent is a reasonable forward-looking
23 market risk premium. Adding my 2.43 percent risk free yield on a 5-year

1 Treasury instrument to these two estimates indicates a cost of equity of
2 6.43 percent to 7.93 percent. My recommended cost of equity of 9.50
3 percent falls above. Given the fact that utilities generally exhibit less risk
4 than industrials, a return in the low end of this range could be considered
5 reasonable. My recommended cost of common equity of 9.50 percent is
6 305 basis points higher the low end of the range.

7

8 Q. Does your silence on any of the issues or positions addressed in the
9 rebuttal testimony of Mr. Broderick, Dr. Villadsen or any of the Company's
10 other witnesses constitute acceptance?

11 A. No, it does not.

12

13 Q. Does this conclude your surrebuttal testimony?

14 A. Yes, it does.

ATTACHMENT A

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Range 21
52 week 16
Open
Vol / Avg. 595,097

Dow	11,019.42	0.12%	
S&P 500	1,197.30	0.07%	
Utilities		-0.29%	
AWK	21.48	-0.32%	

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Key stats and ratios

	Q4 (Dec '09)	2009
Net profit margin	6.08%	-9.55%
Operating margin	22.98%	7.11%

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				Va
	Company name	Price	Change	Chg
AWK	American Water Works C...	21.48	-0.07	-0.3%
SWWC	SouthWest Water Company	10.48	0.00	0.0%
WTR	Aqua America, Inc.	17.97	+0.09	0.5%
AWR	American States Water Co.	37.04	0.00	0.0%
CWT	California Water Servi...	38.51	+0.52	1.3%
ARTNA	Artesian Resources Corp.	17.67	+0.04	0.2%
SJW	SJW Corp.	27.27	+0.41	1.5%
MSEX	Middlesex Water Company	17.44	+0.15	0.8%
CTWS	Connecticut Water Serv...	23.15	+0.20	0.8%
YORW	The York Water Company	13.96	+0.13	0.9%
CDZI	Cadiz Inc.	12.53	+0.09	0.7%

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Description

American Water Works Company, Inc. is a water and wastewater utility company. The Company provides approximately 16 million people with drinking water, wastewater and other water-related services in 35 states and two Canadian provinces. It operates in two segments: Regulated Businesses and Non-Regulated Businesses segments. During the year ended December 31, 2009, the Company's Regulated Businesses accounted for 90.4% of its total operating revenue. During 2009, its Non-Regulated Businesses accounted for 10.6% of the Company's total operating revenue. In December 2009, the Company acquired Environmental Management Corporation (EMC). During 2009, the Company closed on seven acquisitions (six regulated water and wastewater systems, and one in its non-regulated segment).

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- [Mark F. Strauss](#) President of American Water Enterprises
- [Kathy L. Pape](#) President, Pennsylvania American Water
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EBITD margin	-	17.88%
Return on average assets	1.09%	-1.75%
Return on average equity	3.65%	-5.75%
Employees	7,700	-
Carbon Disclosure Rating	-	-

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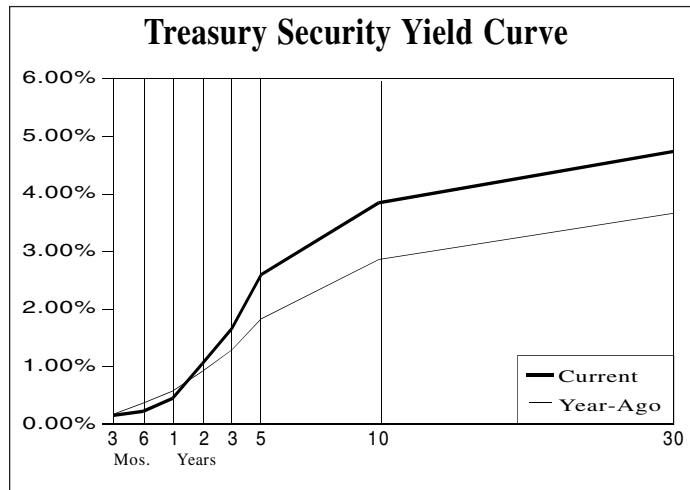
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ATTACHMENT B

Selected Yields

	Recent (4/07/10)	3 Months Ago (1/06/10)	Year Ago (4/08/09)		Recent (4/07/10)	3 Months Ago (1/06/10)	Year Ago (4/08/09)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.50	0.50				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.18	0.14	0.33				
3-month LIBOR	0.30	0.25	1.14				
Bank CDs							
6-month	0.25	0.29	0.83				
1-year	0.44	0.54	1.04				
5-year	1.99	2.02	2.05				
U.S. Treasury Securities							
3-month	0.16	0.05	0.18				
6-month	0.23	0.14	0.37				
1-year	0.45	0.36	0.58				
5-year	2.60	2.59	1.83				
10-year	3.85	3.82	2.86				
10-year (inflation-protected)	1.52	1.37	1.53				
30-year	4.74	4.69	3.67				
30-year Zero	5.00	4.88	3.67				
Mortgage-Backed Securities							
GNMA 6.5%	2.66	3.70	3.40				
FHLMC 6.5% (Gold)	1.96	2.72	2.79				
FNMA 6.5%	2.25	2.81	2.79				
FNMA ARM	2.76	3.24	3.15				
Corporate Bonds							
Financial (10-year) A	5.24	5.60	7.85				
Industrial (25/30-year) A	5.76	5.83	6.27				
Utility (25/30-year) A	5.91	5.86	6.20				
Utility (25/30-year) Baa/BBB	6.35	6.50	7.63				
Foreign Bonds (10-Year)							
Canada	3.63	3.62	2.90				
Germany	3.12	3.38	3.21				
Japan	1.41	1.34	1.46				
United Kingdom	4.06	4.05	3.35				
Preferred Stocks							
Utility A	6.00	5.94	6.35				
Financial A	6.63	6.80	7.80				
Financial Adjustable A	5.48	5.48	5.48				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	4.44	4.25	4.95				
25-Bond Index (Revs)	4.94	4.95	5.75				
General Obligation Bonds (GOs)							
1-year Aaa	0.38	0.28	0.47				
1-year A	1.18	1.25	1.20				
5-year Aaa	1.86	1.68	2.03				
5-year A	2.81	2.79	3.45				
10-year Aaa	3.31	3.29	3.20				
10-year A	4.29	4.20	4.75				
25/30-year Aaa	4.46	4.47	4.77				
25/30-year A	5.51	5.41	6.25				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.78	4.83	6.30				
Electric AA	4.79	4.74	6.40				
Housing AA	5.73	5.76	6.70				
Hospital AA	5.19	5.04	6.65				
Toll Road Aaa	4.78	4.80	6.45				

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	3/24/10	3/10/10	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1103635	1163154	-59519	1100918	1055784	925591
Borrowed Reserves	88326	101275	-12949	124739	184163	314469
Net Free/Borrowed Reserves	1015309	1061879	-46570	976179	871620	611121

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	3/22/10	3/15/10	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1716.1	1708.2	7.9	4.9%	7.3%	9.9%
M2 (M1+savings+small time deposits)	8480.1	8490.1	-10.0	-2.4%	0.4%	0.9%