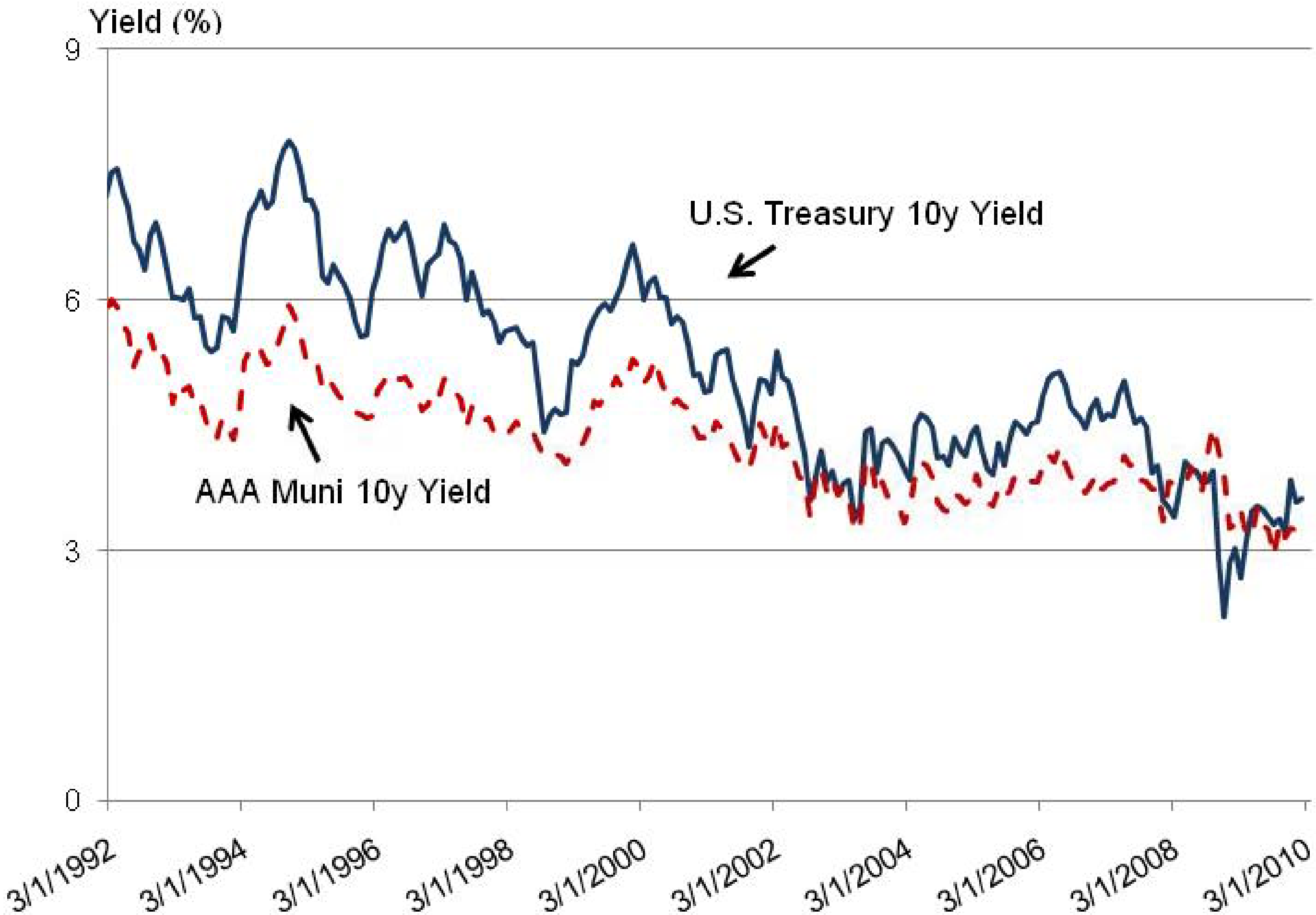
Build America Bonds At Year One

Alan B. Krueger
Assistant Secretary for Economic Policy
U.S. Dept. of Treasury

Contents

Tax-Exemption Leads to Lower Borrowing Costs

- Tax-exempt yields have been ~80% of U.S. Treasury yields



NOTE: Data are from Bloomberg.

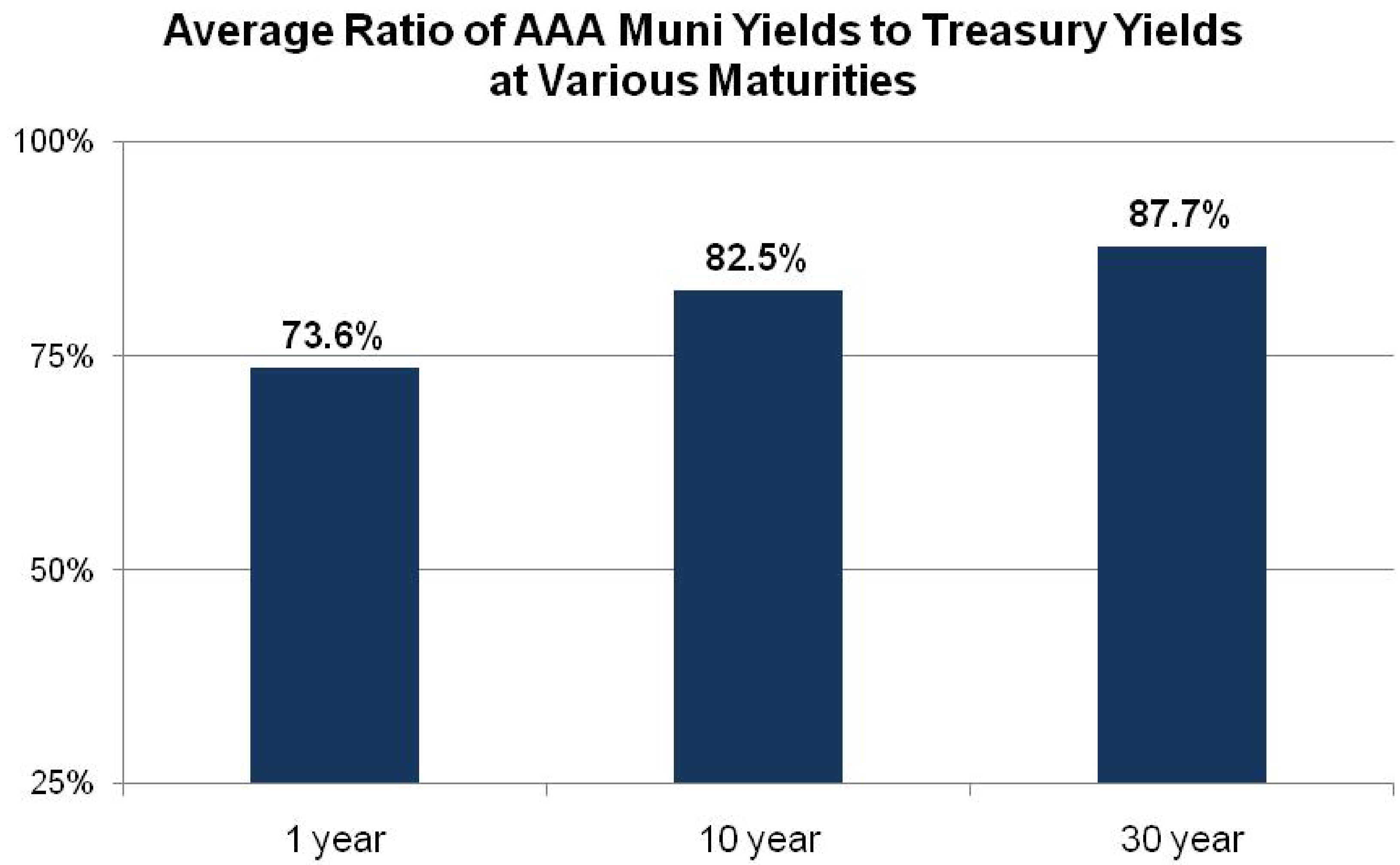
Marginal Tax Rates of Investors in Tax-Exempt Bonds

- Poterba and Verdugo (2008): Average marginal tax rate of tax-exempt bond holders is 26.8 percent.

Marginal Tax Rate	Tax-Exempt Interest ($ bn)	Tax-Exempt Interest (% of total)
0%	$ 5.0 bn	8.8 %
0 – 10 %	0.9	1.6
10 – 15 %	6.0	10.5
15 – 25 %	8.0	13.9
25 – 30 %	9.4	16.3
30 + %	28.1	48.9
TOTAL	**57.5**	**100.0**

NOTE: Data are from 2004 Survey of Consumer Finances, as reported in Poterba and Verdugo 2008, Table 6.

The Discount over Treasuries is Greater for Shorter Duration Munis



Note: The figures are computed as the average of monthly ratios of tax-exempt yields to UST yield s from 1991 to 2007. Data are from Bloomberg.

Tax Expenditure May be Target Inefficient

~80-90% goes to the issuers in the form of lower borrowing costs

Tax Expenditure is $39 billion per year (OMB FY 2011).

~10-20% goes to investors with marginal tax rates higher than the subsidy received by issuers

NOTE: Estimates of the inefficiency are discussed in a recent CBO/JCT report on tax credit bonds

Contents

Recovery Act Innovation: BABs

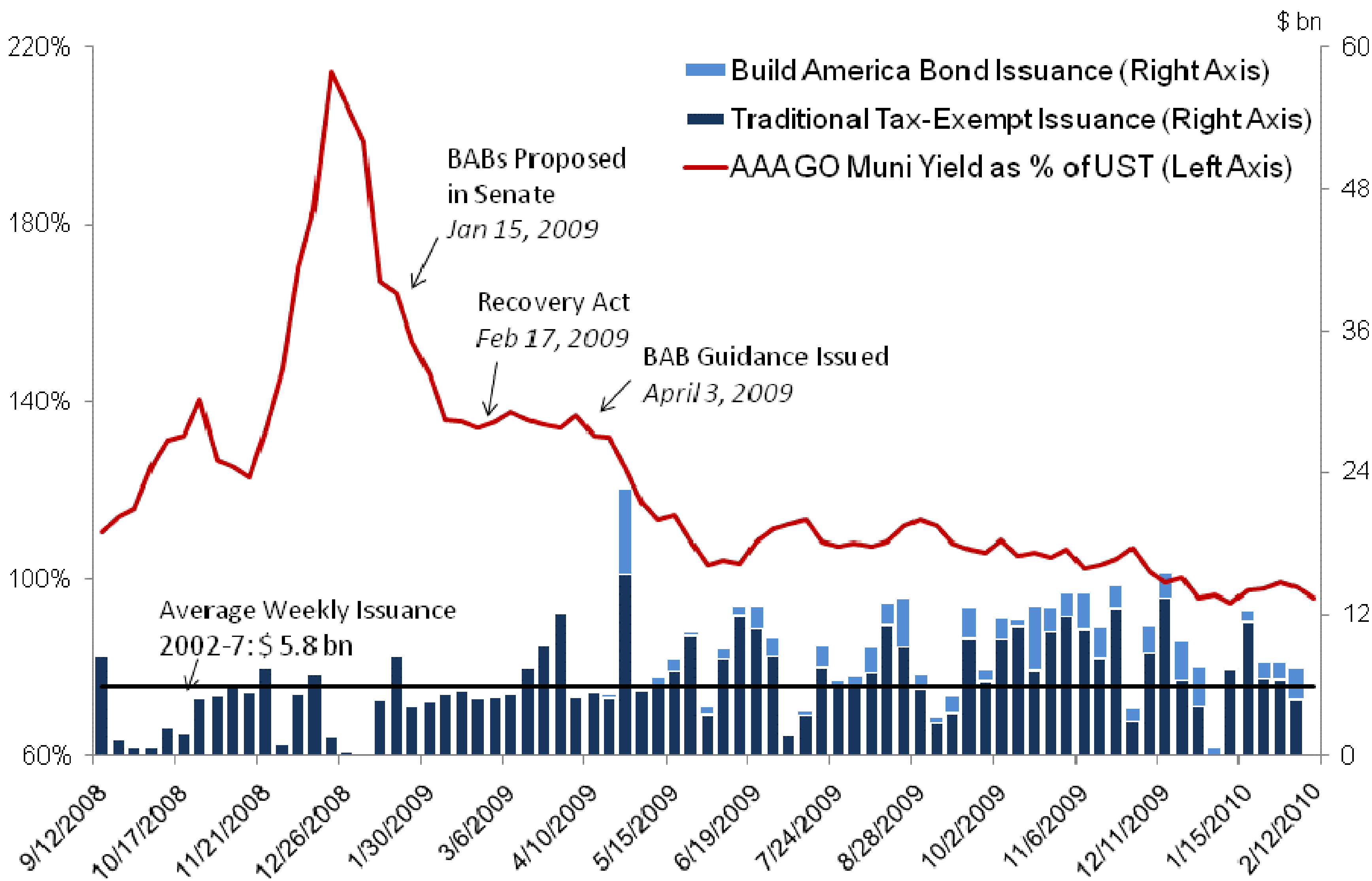
- Build America Bonds (BABs) are taxable bonds that pay a 35 percent interest subsidy to the issuer to offset borrowing costs.
- They were created by ARRA and can be issued in unlimited quantities for building projects through 2010.
- The subsidy is paid directly to issuers:
  - This allows issuers to enjoy lower borrowing costs, while investors receive yields comparable to other taxable debt.
  - The subsidy is meant to be generous to stimulate investment
  - BABs are *target efficient* because each dollar of revenue foregone by the Federal government benefits State and local government entities by a dollar.
  - By avoiding third party investors to implicitly transfer aid to State and local government, the subsidy streamlines the tax compliance framework and is easier for the IRS to administer.

Issuance to Date

- Since the BABs program was launched on April 3rd, 2009 through February 28th, 2010:
  - $78 billion BAB issuance;
  - BABs now constitute about 20 percent of municipal bond issuance;
  - A total of 46 states & DC have participated in the program, with a total of 834 separate issues so far.

- BABs are complementary with traditional tax-exempt debt:
  - From April 1st to February 28th, 2010, over $395 billion of traditional tax-exempt bonds have been issued

BABs Were Created When the Muni Market was Under Stress



BABs Have Helped Traditional Muni Market

- BABs appeal to a wider range of investors, including tax-exempt investors such as pension funds and sovereign wealth funds.
  - By democratizing municipal finance, many market observers believe BABs relieved supply pressure and brought down tax-exempt market yields.

- "By reducing new-issue supply in the tax-exempt market, they have had the effect of lowering yields there. Estimates of the effect of BABs on tax-exempt yields are in the neighborhood of 20 to 30 basis points or more." *Bond Buyer, November 2, 2009*.

- The Federal government also benefits as a reduction in yields lowers tax expenditure.

BABs Have Stimulated Activity

"The BABs program has produced huge benefits for California. Our state has enormous infrastructure needs. Meeting those needs requires a massive investment. The BABs program has allowed us to increase our capital investment by billions of dollars this year, and in the process provided our workers and businesses a much-needed economic boost. To top it off, BABs have been a bargain for California taxpayers. They will save hundreds of millions of dollars on interest payments."

- Bill Lockyer
  California State Treasurer
  November 23, 2009

Contents

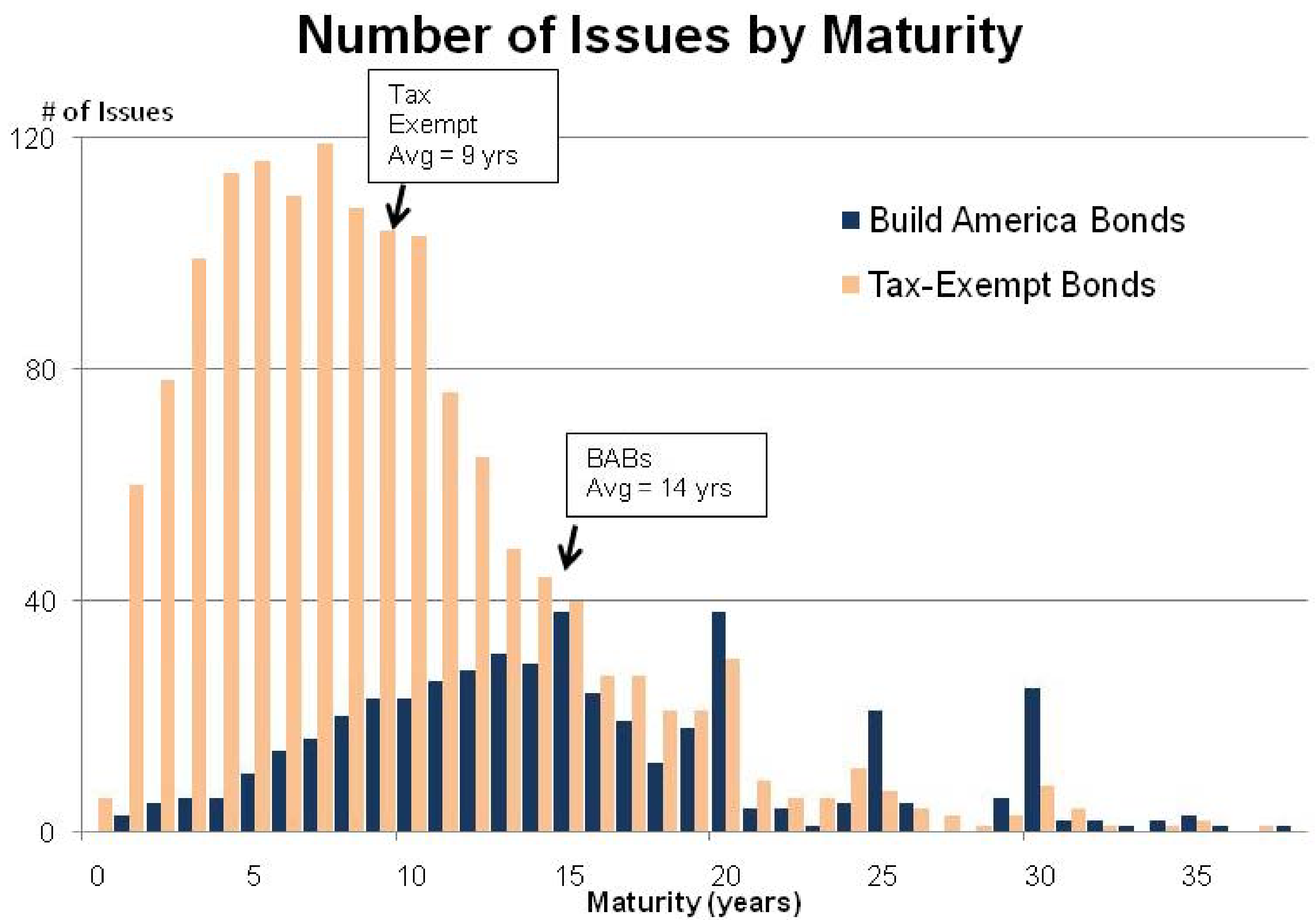
Comparing BABs to Tax-Exempt Bonds: Research Design

- From April to September, there were 332 separate issues of BABs; 92 of those issues included both BABs and tax-exempt Bonds issued by the same issuer on the same day.

  Examples:
  - Alexandria, VA issued $797 million of bonds on June 30: $352 million of tax-exempt bonds and $445 million of BABs. The proceeds were used for ‘public improvements’
  - Galveston County, TX issued a series of bonds on September 1 that included three bonds with maturities in 2011: a tax-exempt bond for $580,000, a BAB for $1.59 million, and another BAB for $2.69 million.

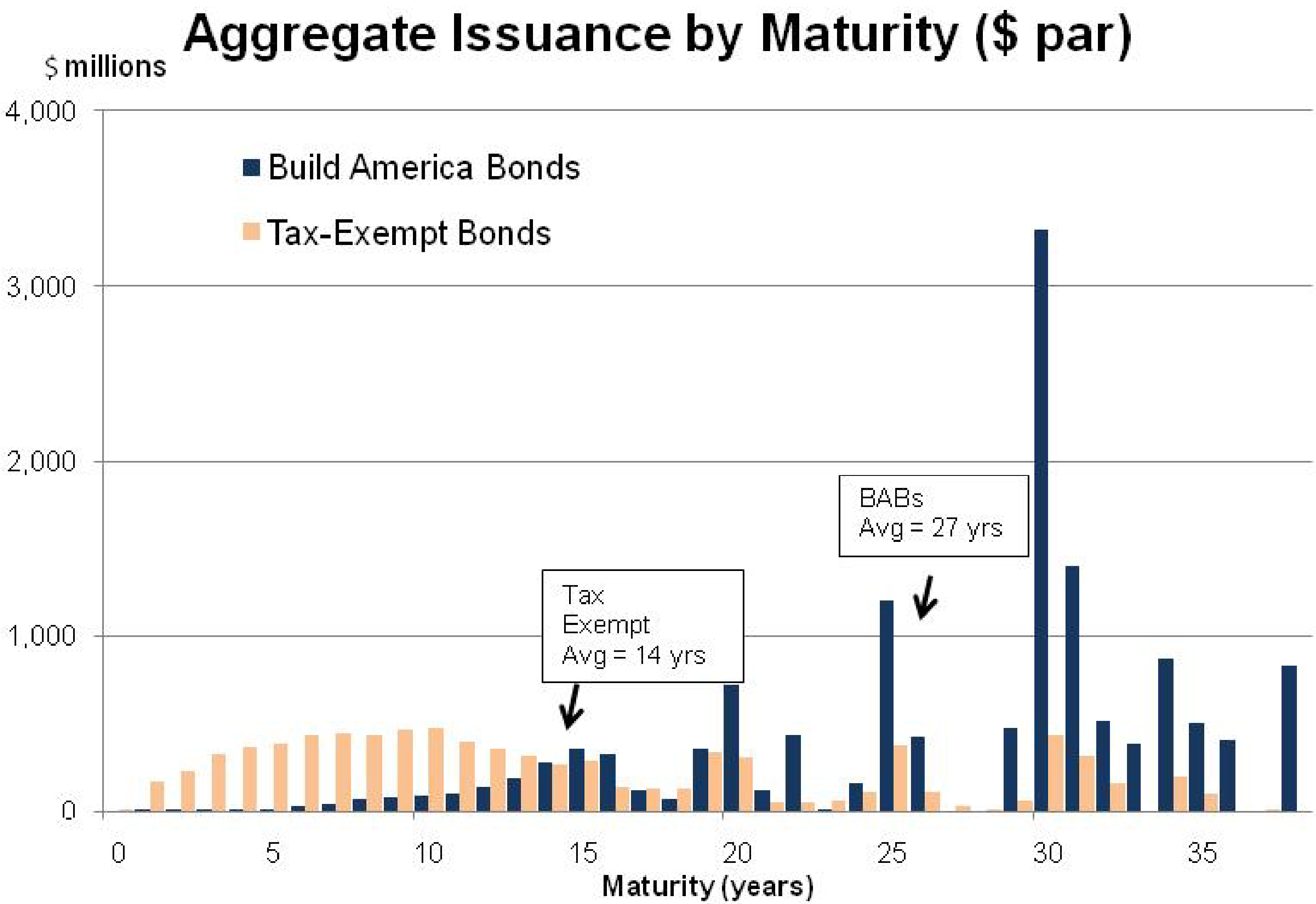
- Allows for “fixed effects” regression estimation.

Issuance by Maturity for Same Day Issuers



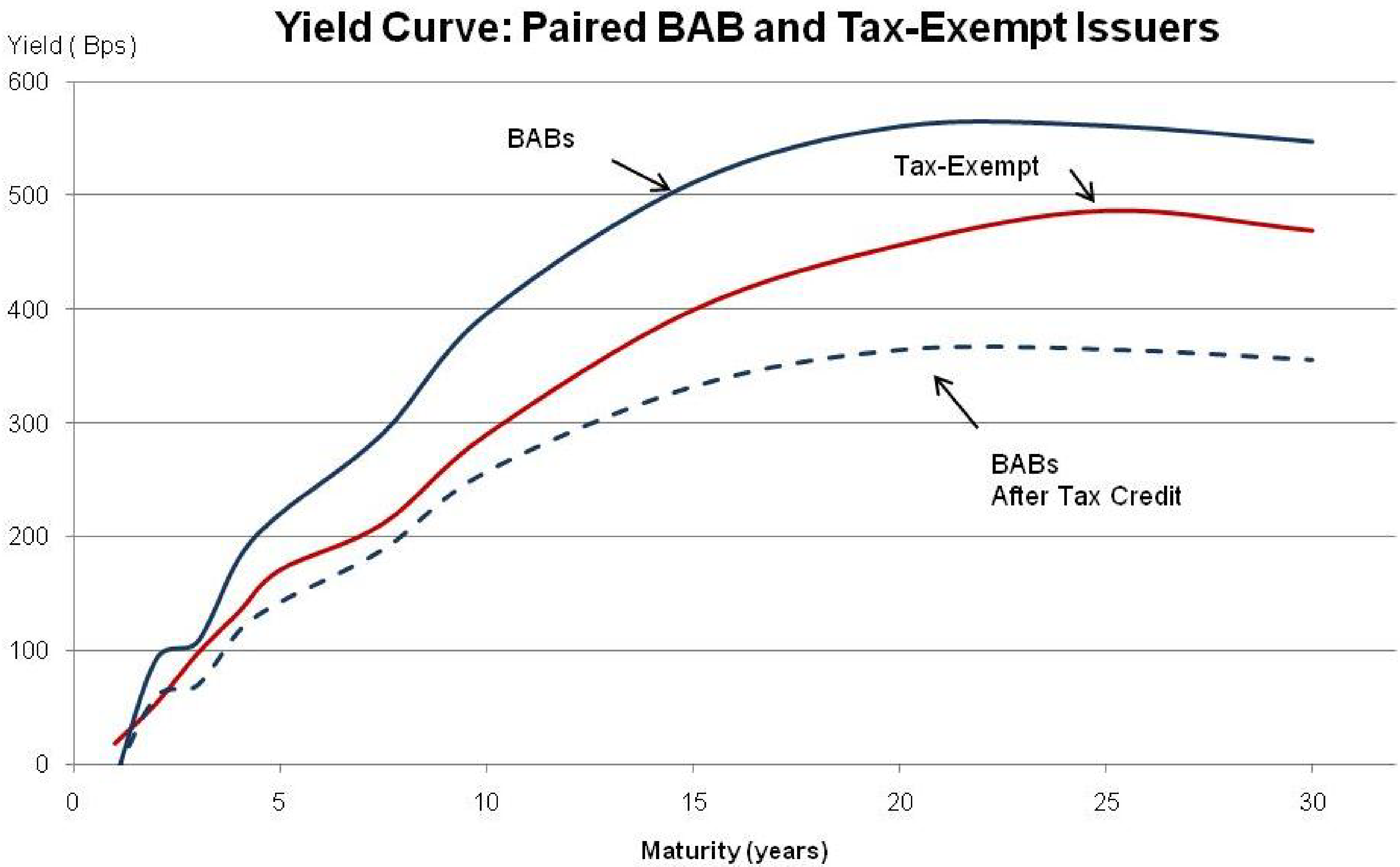
Source: Economic Policy Analysis of Bloomberg data.

Issuance by Maturity for Same Day Issuers - Weighted



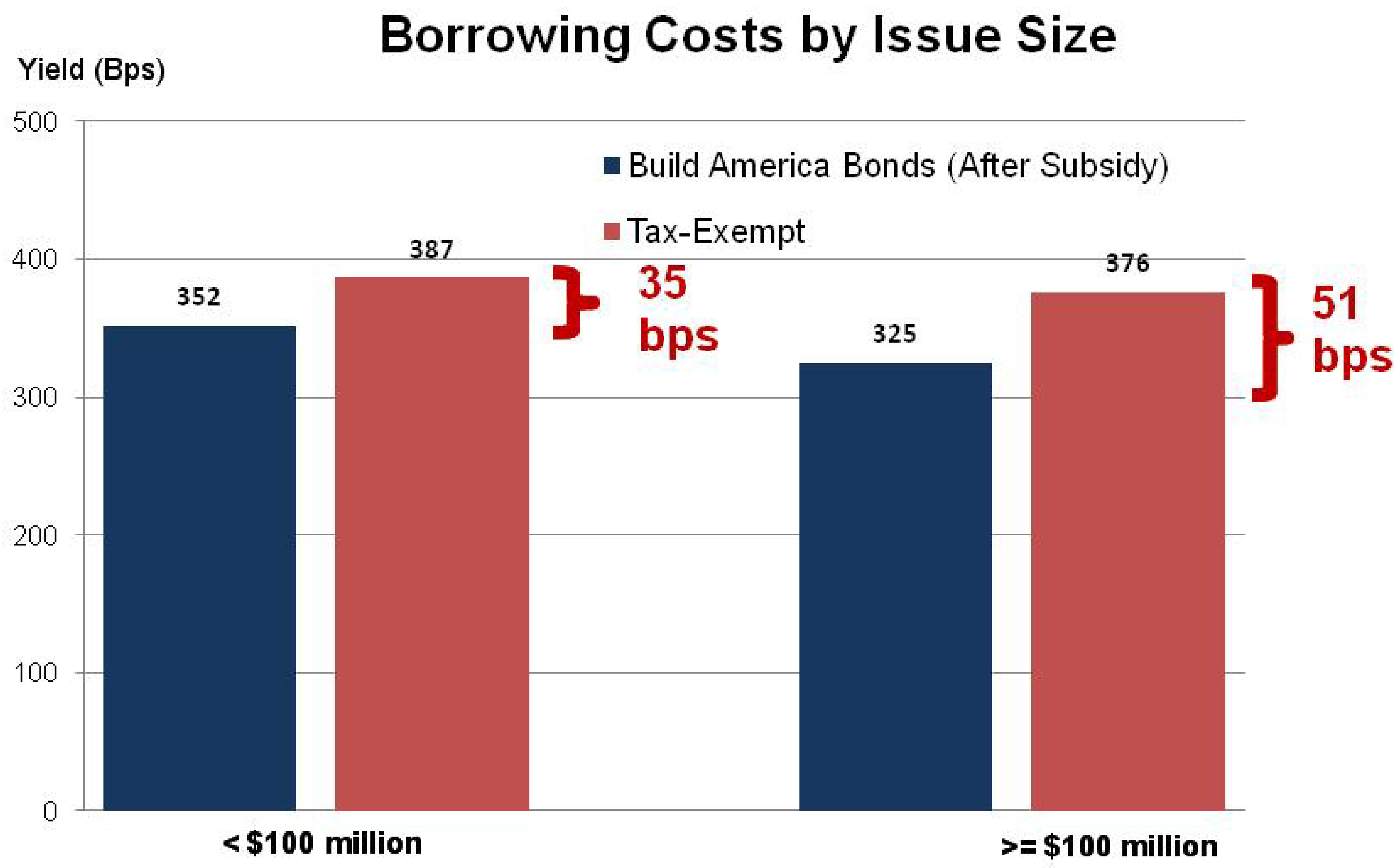
Source: Economic Policy Analysis of Bloomberg data.

BABs Provide a Lower Total Cost of Borrowing



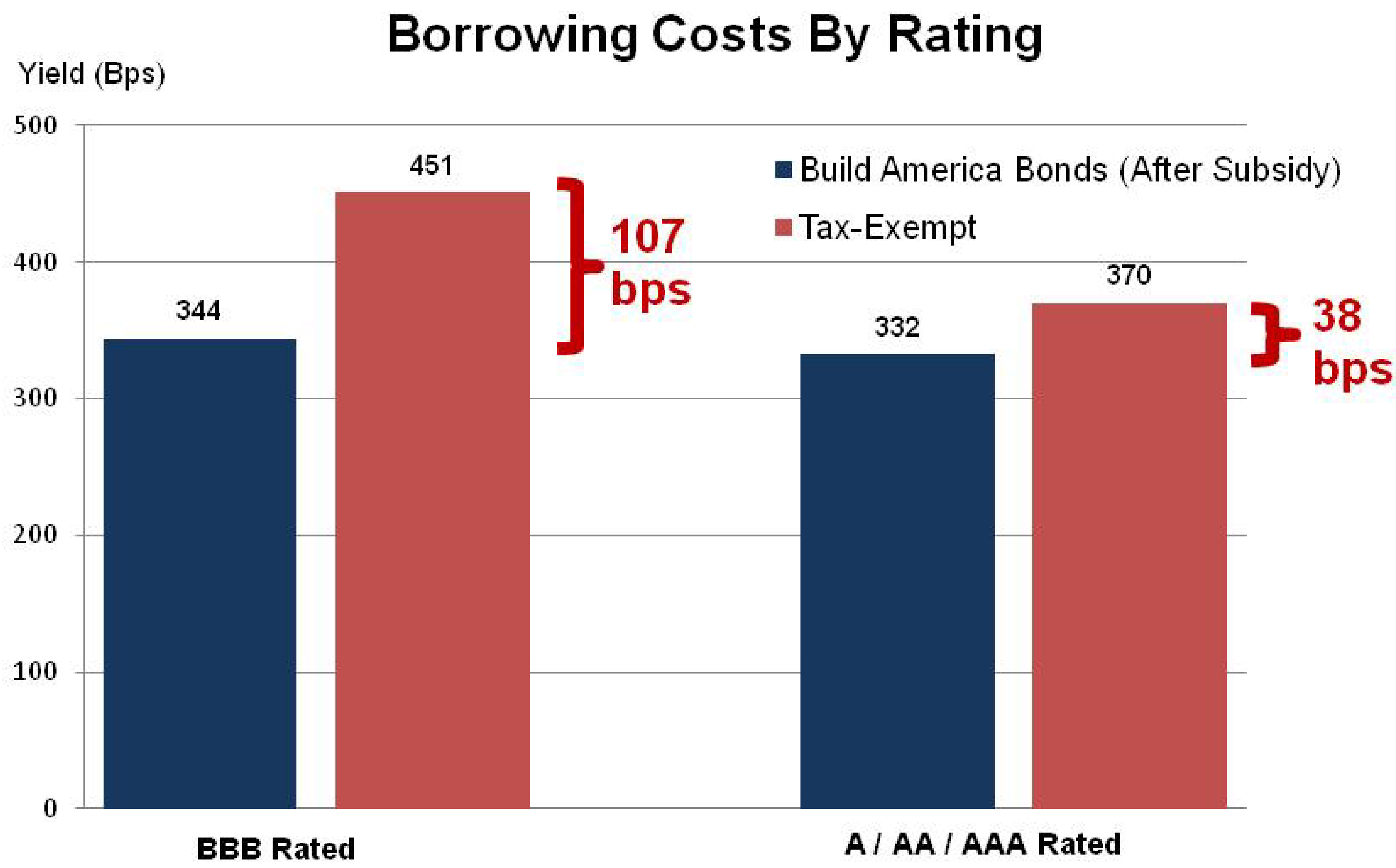
<u>NOTE</u>: The yield curve is estimated from a multivariate regression. The sample is restricted to municipalities that issued both BABs and tax-exempt debt on the same day. In addition to the controls for maturity length, the multivariate regression includes controls for the size of the issue, the rating, the characteristics of the bond (callable, sinkable) and issuer fixed effects, which control for issuer specific characteristics.

BABs Provided Larger Savings for Larger Issuers



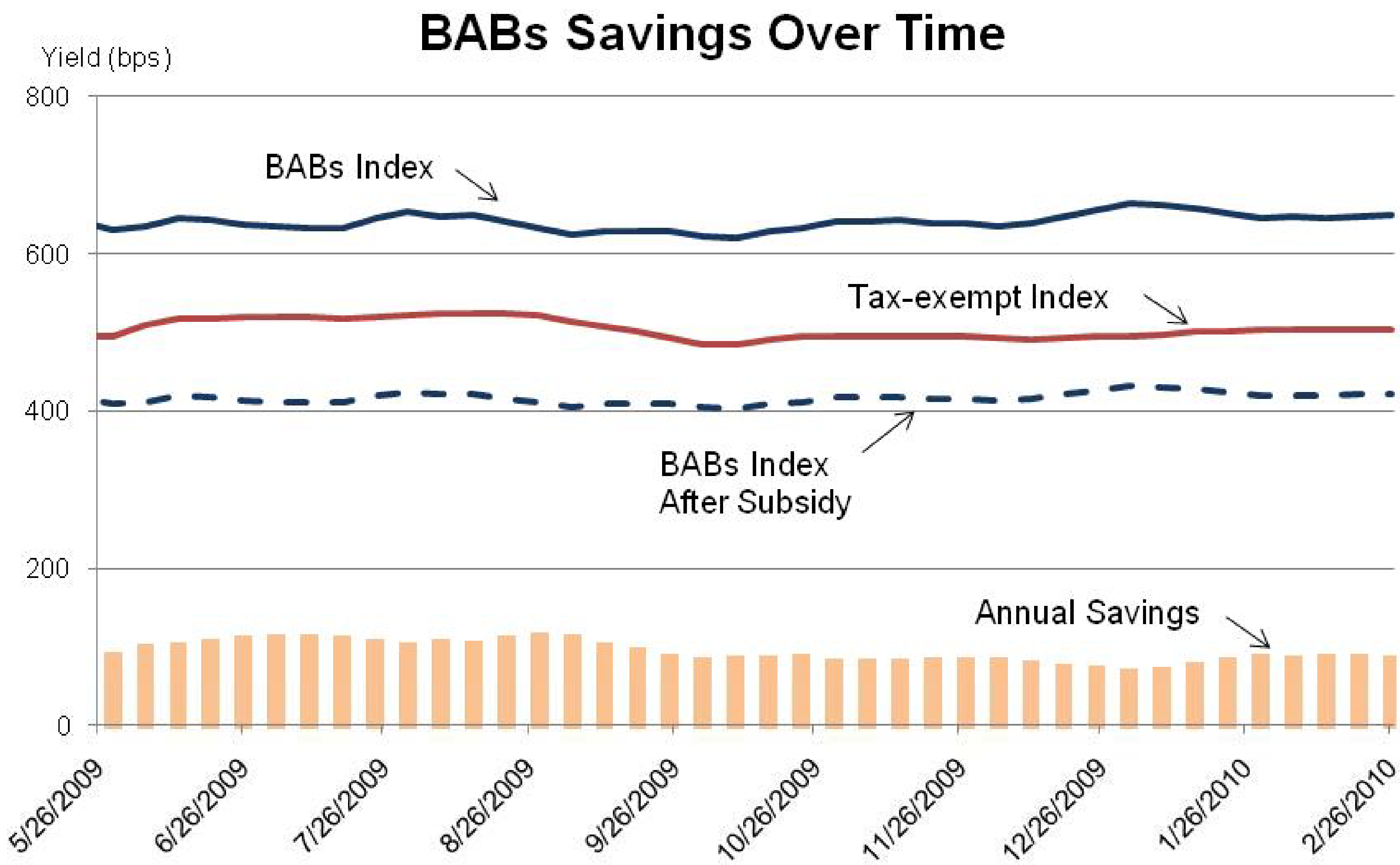
NOTE: Estimated savings are from a multivariate regression that includes interaction terms between a BABs indicator variable and an indicator variable for size class. The interaction term is statistically significant at the 5 percent level.

BABs Provided Larger Savings for Lower-Rated Issuers



NOTE: Estimated savings are from a multivariate regression that includes interaction terms between a BABs indicator variable and an indicator variable for rating class. The interaction terms is statistically significant at the 5 percent level.

Savings from BABs have Remained Large Over Time



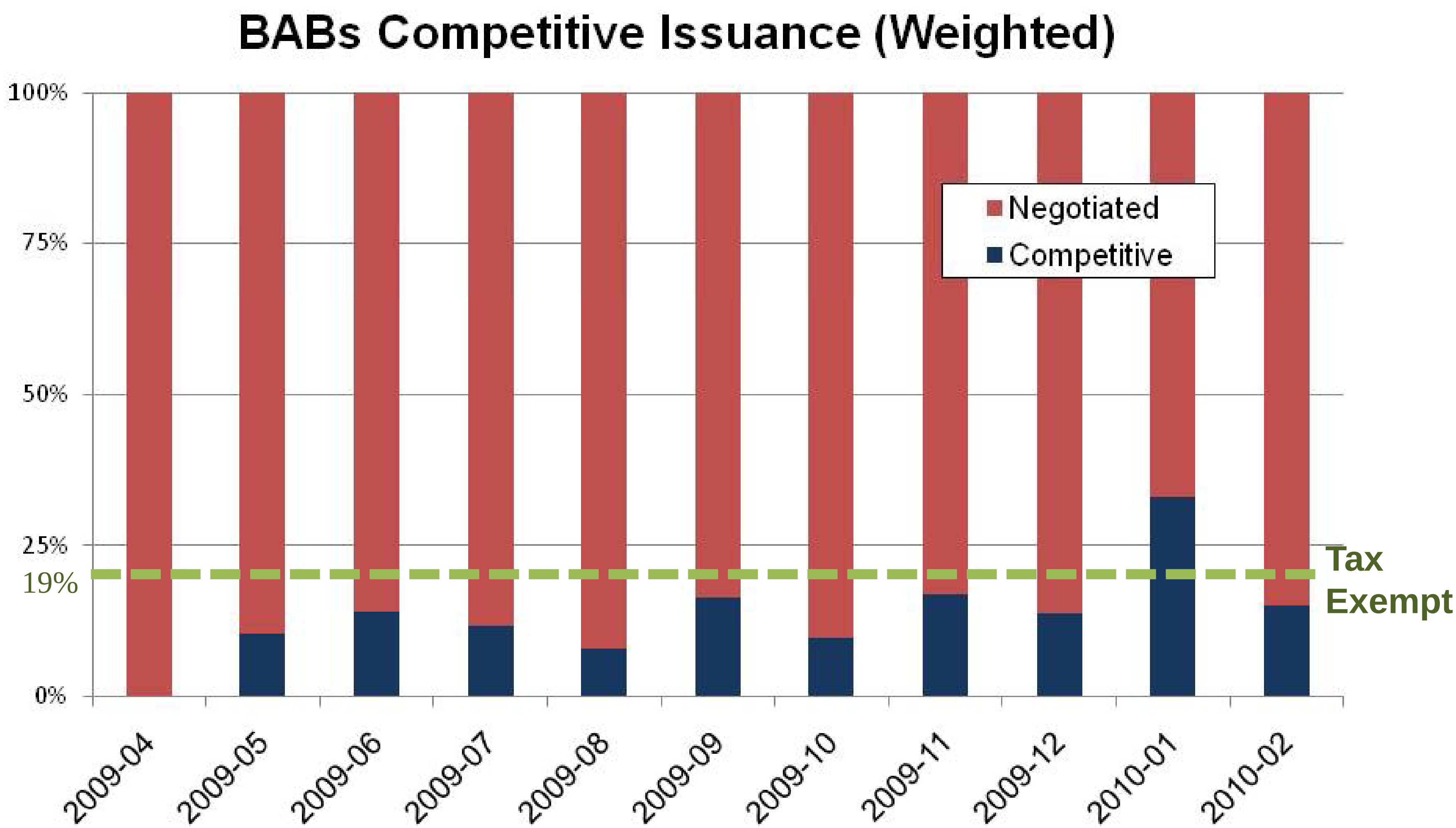
<u>NOTE</u>: The BABs Index was constructed from 24 large BAB issues that came to market before July. These 24 issues constitute approximately $12 billion in par issuance. The BABs Index is weighted by maturity issue size. The Tax-Exempt Index was constructed by weighting comparable indices (in terms of rating and maturity) according to the weights in BABs Index. Savings are estimated to be the difference between the Tax-Exempt Index and the BABs Index after the tax credit.

Contents

The Economics of Underwriting Spreads

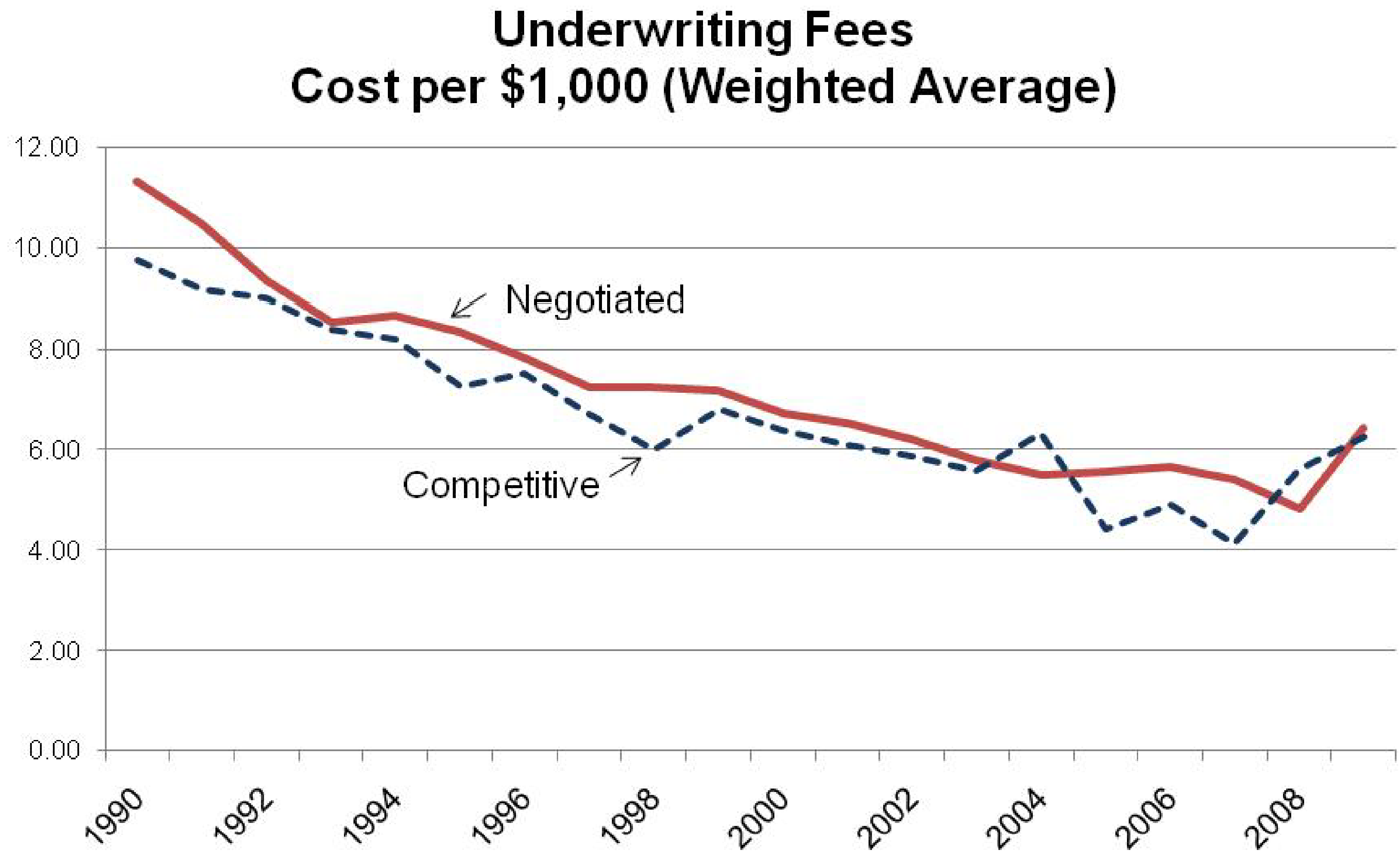
- From the government’s perspective, underwriting fees should be set so as to minimize total borrowing costs, taking into account the underwriting spread as well as the impact on coupon costs.
- Assessing underwriting fees is complicated because fees vary with the complexity of the deal, size of the deal, risk and difficulty of placement, the amount of work involved, and other factors.
- Also, new products typically require upfront investments and involve greater uncertainty, so they are likely to have higher underwriting spreads.
- Competition and reduced uncertainty are likely to bring down underwriting spreads and lower borrower costs.

BABs Are Increasingly Issued Competitively



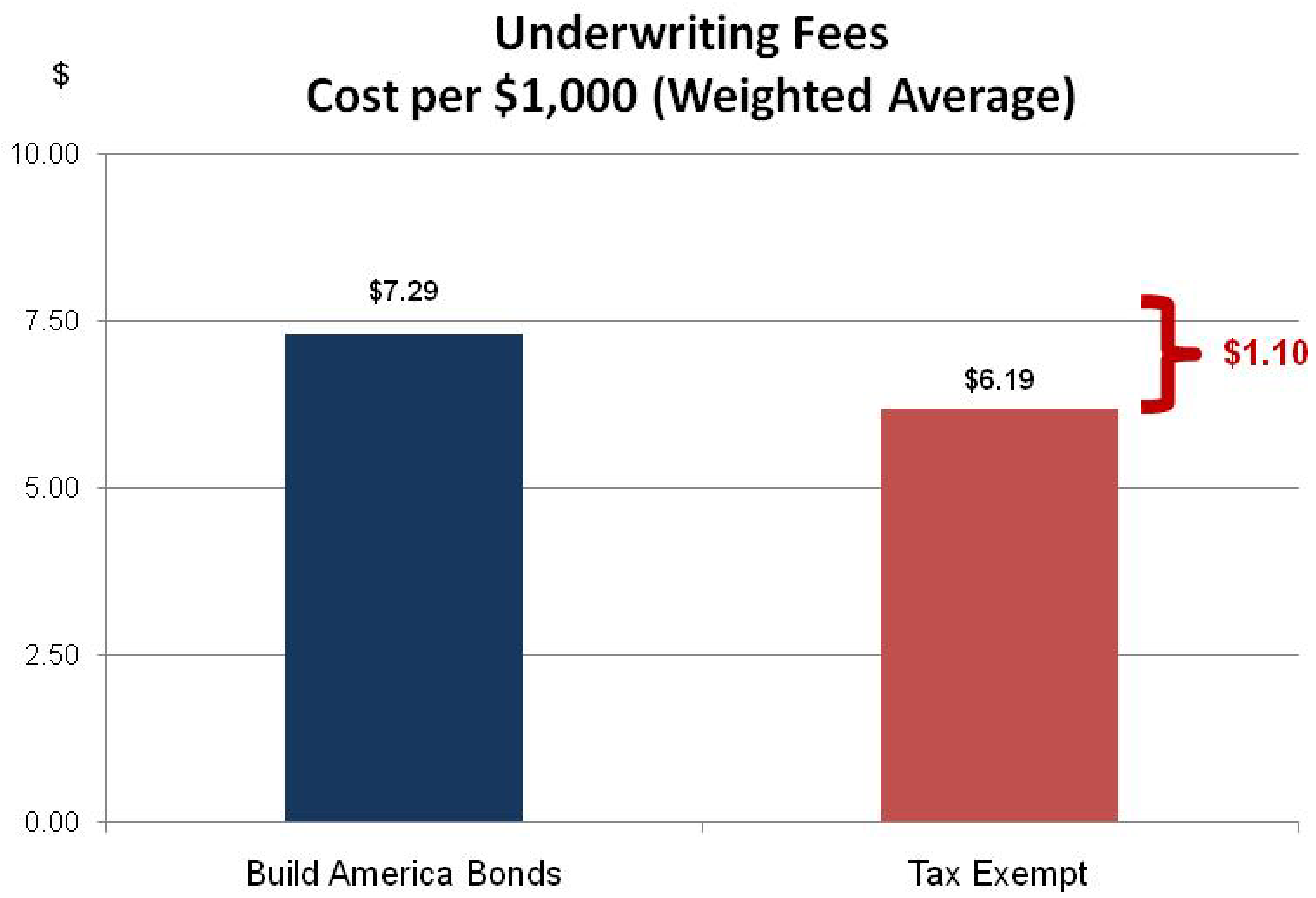
NOTE: Data are from Bloomberg and include all BAB issuance to date.

Fees for Competitive Sales Are Usually Lower, on Average



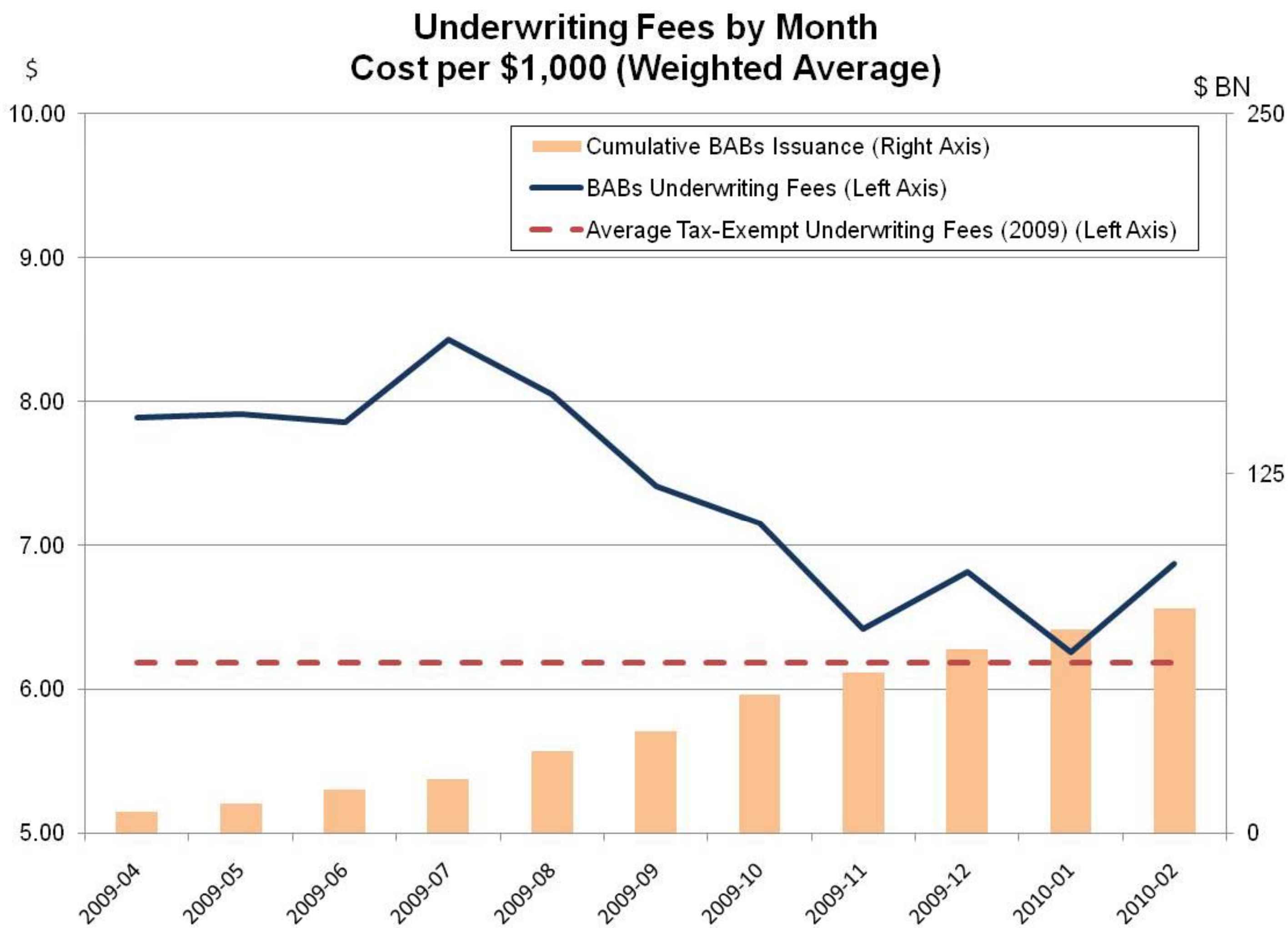
NOTE: Data are from Thomson / Reuters.

BABs Have Had Higher Underwriting Fees, 2009 – Feb 2010



__NOTE__: Data are from Thomson / Reuters and are weighted by par issuance

But BABs Underwriting Fees have Come Down Over Time



NOTE: Based on data from Thomson/Reuters.

Underwriting Fees in Perspective

- Suppose a $10 million 30-year bond is issued
- Suppose coupon is 700 bps for BABs and 550 bps for Tax-Exempt
- After subsidy coupon for BABs is 455
- Suppose underwriting spread is 60 bps for tax-exempt and 75 bps for BABs.
- In this case, *first-year* borrowing costs are still 80 bps lower for issuing BABs.
- In the next 29 years, borrowing costs are 95 bps lower per year.

Contents

2010 and Beyond

- Administration proposed to make BABs permanent in 2011 Budget and use a revenue neutral subsidy rate
- Administration also proposes expanding uses of BABs
    - Capital projects
    - Refundings
    - Short-term governmental working capital
    - 501c(3) nonprofit entities
- Also working with Congress to convert tax credit bonds, such as Qualified School Construction Bonds ($22 bn issuance authorized), to the BABs direct payment model.
- By expanding and making the BABs program permanent, the Administration seeks to create more certainty and more competition that will lower underwriting spreads and borrowing costs.
- BABs are an example of the Administration building on a highly successful ARRA program