MEMORANDUM

TO: File
FROM: James P. Sinnott
RE: Business conducts consultation with Peter Shapiro, Swap Financial Group
DATE: September 2, 2010

On August 9, 2010, Lourdes Gonzalez, Joanne Rutkowski, Cindy Oh, Caite McGuire, Lori Schock, Christine Sibille, Rich Ferlauto, and Martha Haines of the Securities and Exchange Commission and Phyllis Cela, Ted Kneller, Barry McCarty and Todd Prono of the Commodities Futures Trading Commission consulted with Peter Shapiro of Swap Financial Group.[1]

The participants discussed an overview of the current swaps and security-based swaps markets and current documentation of transactions. The participants also discussed the role of a swaps advisor in a transaction. Mr. Shapiro also provided a power point presentation titled "Dodd-Frank Title VII: Business Conduct and Special Entities," which is attached, to structure the discussion. In addition, to supplement the discussion, Mr. Shapiro provided additional information via email on August 11, 2010. The text of which is copied below. To the email, he attached a sample fairness opinion from a transaction and an FAQ circulated by the Denver Public School System in response to a New York Times article regarding their pension financing.

> Thank you for your hospitality Monday at your offices. I enjoyed our discussion, and only wish we had more time. The details of how swaps work, and especially of how "special entities" like governments and non-profits use them, are intricate, but are easily capable of being understood, particularly by as thoughtful a group as you have put together. I would be happy to devote more time to providing you with a more thorough picture. There are many nuances to this market – lots of gray areas – and less black and white than some of the popular commentary would have you believe.
>
> I'm attaching two things of interest. First, as we discussed, is a sample Fairness Opinion that we, as swap advisors, provide for our clients attesting to the fairness of swap pricing. As I mentioned, our firm introduced the concept of using fairness opinions on swaps to the swap markets more than a decade ago. Over the several years, fairness opinions have come into broad use, and are looked to by tax counsel, auditors and other key professionals as a sign that the swap was properly priced. As I mentioned in our discussion, the Special Entity rules call for the "independent representative" to represent that pricing is fair and that the transaction is appropriate. Our fairness opinions do the former, but not the latter. We could, however, easily do the latter (i.e. certify as to

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[1] On August 31, 2010 and September 1, 2010, SEC and CFTC staff followed up with Mr. Shapiro to obtain additional clarity on matters discussed at the August 9, 2010 meeting, including disclosures of the "daily mark" and other calculations in a swap transaction, material incentives and conflicts of interest and other potential areas of concern regarding the rulemaking required under the Dodd-Frank Act.

appropriateness), assuming of course that the transaction is, in fact, appropriate. There have been times in our practice when a client wanted to do a transaction that we felt was questionable, but we still assisted to make sure that the pricing was fair. If we encounter such a situation in the future under the new rules, we will have to think long and hard about how to approach it.

Second, I'm attaching hereto a very good Q&A that was put out today by the Denver Public Schools in response to Gretchen Morgenson's article in the New York Times last week. I mentioned at our discussion that I thought the article wasn't very good. It was not till I read the Denver Public Schools response, however, that I realized how many factual inaccuracies the article contained. Morgenson is far from alone in having trouble grappling with swap-related issues. With the perspective of the DPS response, this appears to have been a particularly poor piece of reporting. DPS is not our client, but we understand what they did pretty well, and their response is credible.

Please let me know what further assistance my firm or I can provide to you. You have one of the most difficult rulemaking tasks in history in front of you. If there is any way we can help make your job easier, and make sure that you have all the information you need to make the tough calls required by the legislation, please let me know. We believe very strongly that it is in our clients' interest to make sure you have everything you need.

Best,
Peter Shapiro
Managing Director
Swap Financial Group

Mr. Shapiro again followed up with an email on August 30, 2010, the text of which is copied below:

On the Dodd-Frank issues we discussed a few weeks back, I think it would be great to pick back up on some of the subjects we never fully discussed to due to lack of time: (1) dealer disclosure of conflicts and material interests; (2) when is a dealer serving as an "advisor" and when are they not in an advisory relationship under the Dodd-Frank Special Entity provisions; (3) what should constitute appropriate standards for determining if an "independent representative" meets the requirements of the Special Entity provisions in Title VII; (4) what would constitute the dealer's "reasonable basis to believe" that the independent rep meets the requirements of the statute; etc.

There are some important subtleties about the ISDA documentation structure and existing market practice that, I believe, fall significantly short of what Dodd-Frank is aiming to achieve. I think there are several workable approaches that are worth considering.

Please let me know if there would be a good time to review, either in person or by phone.

Best,
Peter

Dodd-Frank Title VII:
Business Conduct and Special Entities

Briefing for SEC/CFTC Joint Working Group
August 9, 2010

Swap Financial Group
Peter Shapiro
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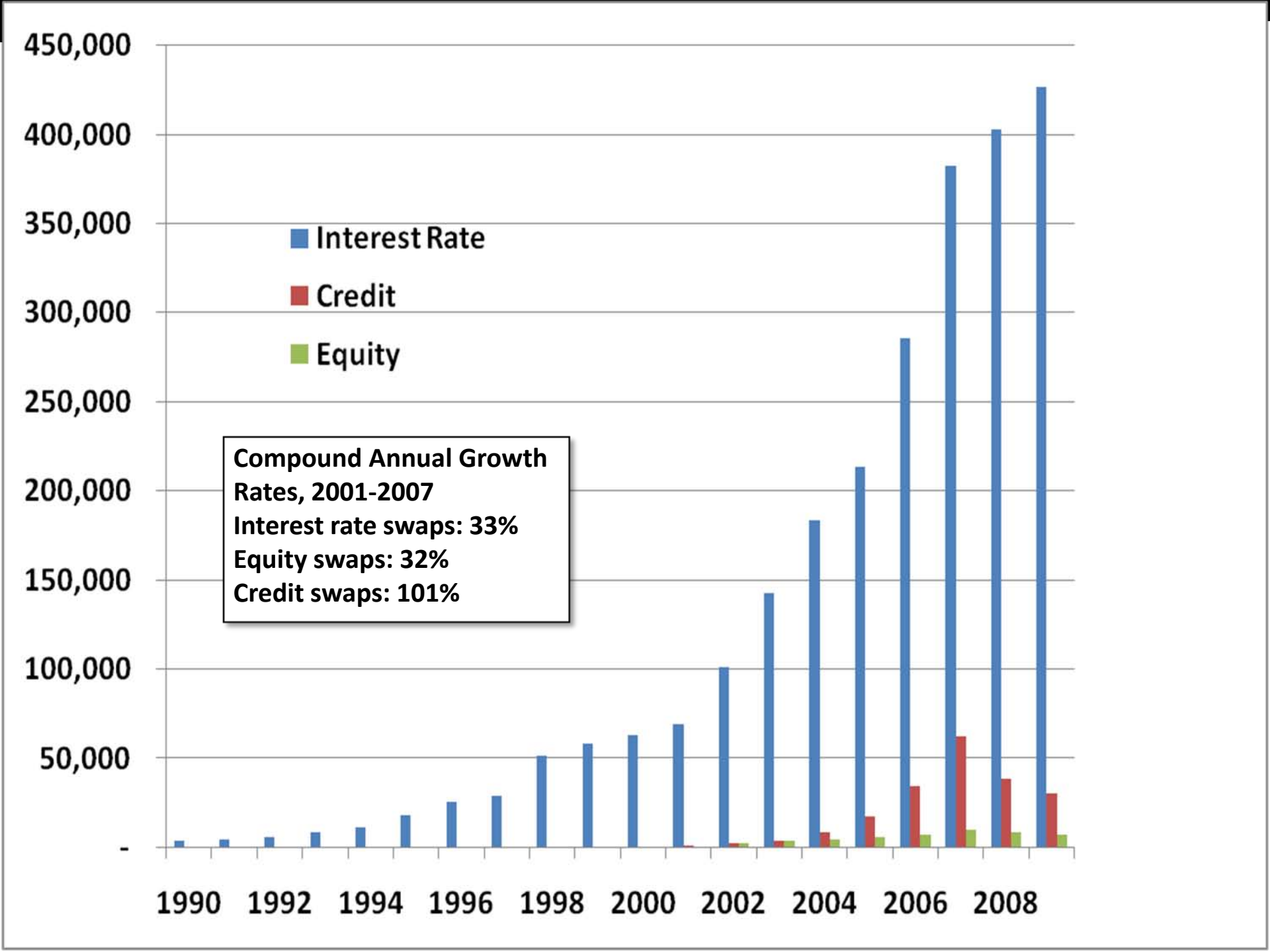
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Interest Rate
Credit
Equity
Compound Annual Growth Rates, 2001-2007
Interest rate swaps: 33%
Equity swaps: 32%
Credit swaps: 101%
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008

Swap market participants

Dealers

Arbitrageurs & Speculators

End Users (Corporations, Governments, Non-Profits, Investors)

Role of the dealer

- Unable to perfectly match client trades
- Must be “market maker”
- Credit intermediation – one end-user is not exposed to another’s credit
- Processing, bookkeeping, payment calculation

How swap dealers make money

- No “bets” – I win, you lose – except prop desks
- Mark-up or “spread” between price charged to the client and cost of dealer’s hedge
- Advisor’s job determine mark-up by establishing dealer’s hedge price
- Establishing hedge prices is easiest in the most liquid markets (LIBOR), but is attainable in the most markets
- Goal: Fair, disclosed profit margin, agreed to by the client, in all negotiated deals

Role of arbitrageur

- Speculation – pure profit
- Biggest risk taker
- Very picky on timing
- Not just hedge funds: Dealer ‘prop desks’ play dominant role (key issue: two hats)

End-users: ‘Special entities’

- Governments: 45 states/state agencies, all major cities, most major counties, many mid-sized cities/counties, some school districts; most big infrastructure agencies (airports, transit, water-sewer authorities); most state housing finance agencies
- Non-profits: Hundreds of hospitals and health care systems; hundreds of higher-ed and private schools; about 100 cultural and research institutions (Council on Foreign Relations, Carnegie Endowment, Museum of Modern Art, Getty Museums, Phillips Collection)
- ERISA plans: Widespread use, often through intermediaries

Are all 501c3's 'special entities'

- Dodd-Frank : "any endowment, including an endowment that is an organization described in section 501(c)(3)"
- Does designation only apply to swaps done by or for the 501c3's "endowment"?
- Example: Harvard Management Co. does swaps for the endowment (to create commodity, currency or equity exposures). Harvard's Office of Treasury Management does swaps to hedge university borrowing costs.
- What about schools and hospitals with no endowment?
- Are there "endowments" that are not in 501c3's?

Why swap?

- Savings: Provide substantially better economic results than those available in the conventional bond market
- Flexibility: Provide a solution to a financial problem which is not available in the conventional market
- Speed: Take advantage of market opportunity swiftly

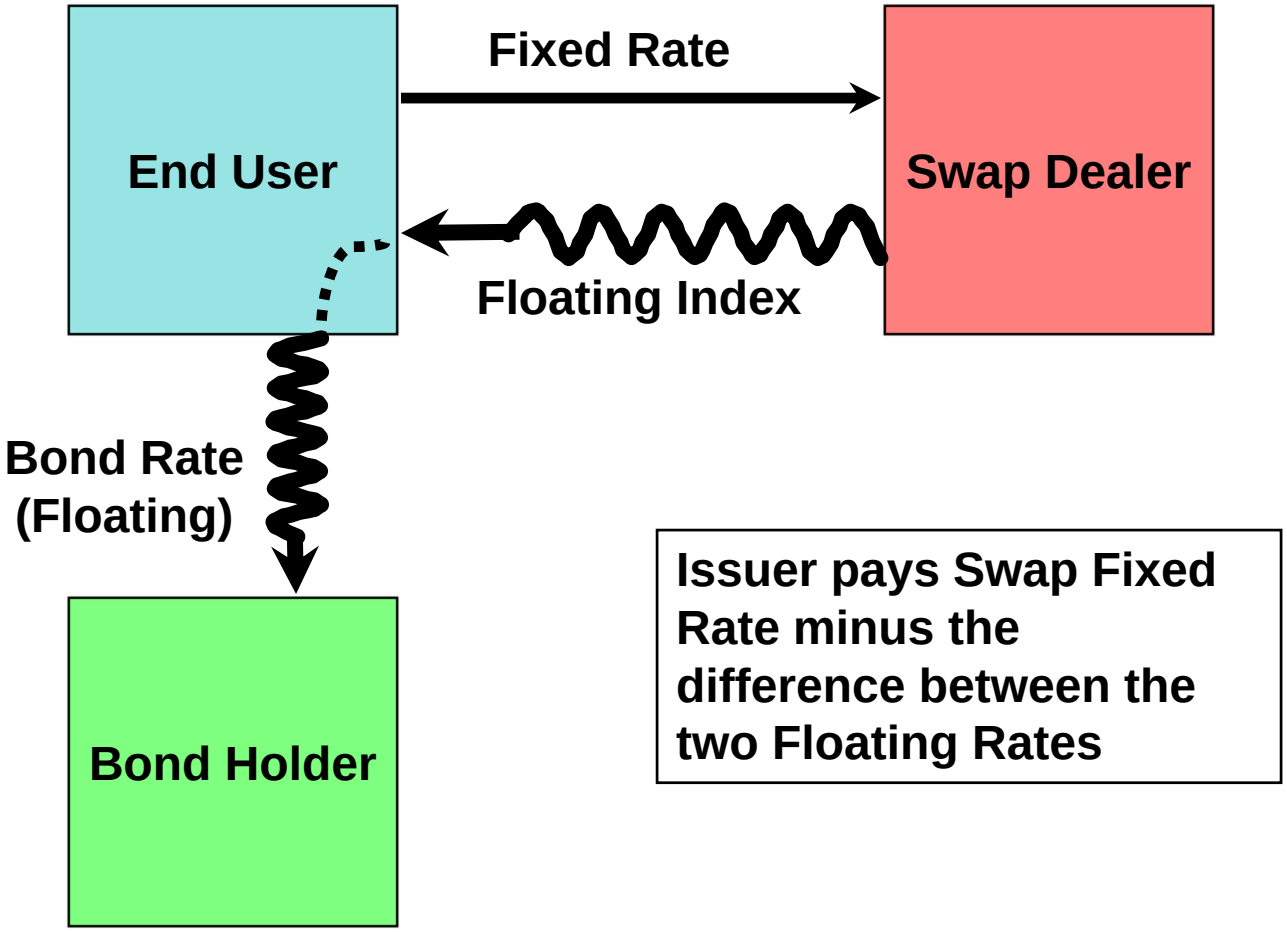
Key swap types

Most governments and non-profits use swaps to hedge debt (not investments)

Key types of swaps (in order of frequency used)

- Synthetic fixed
- Forwards
- Basis swaps
- CMS swaps
- Caps
- Synthetic floating

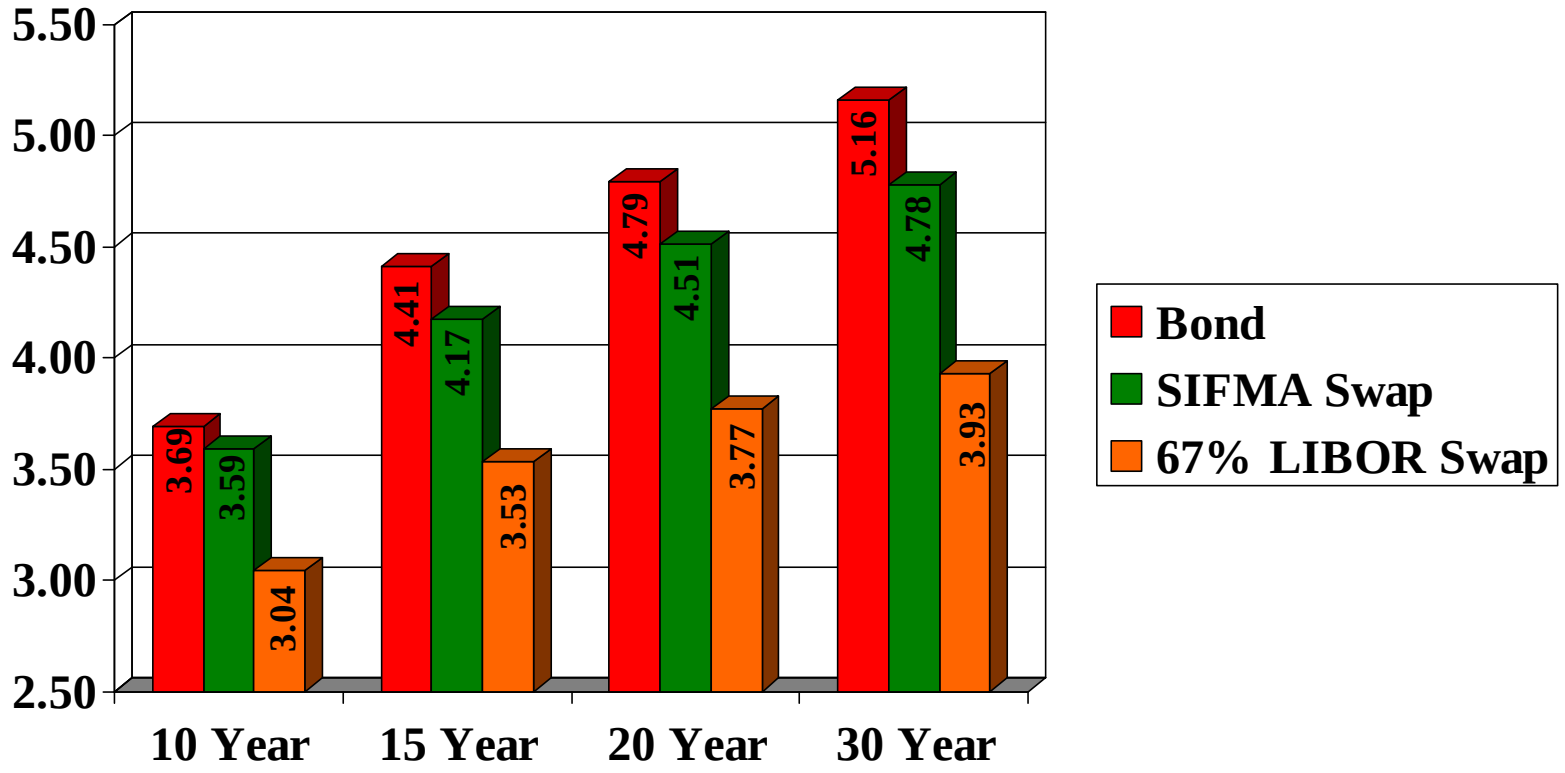
Typical swap – ‘synthetic fixed’



Swap indexes

- The floating side of a swap is usually an index
- Two important floating indexes are:
  - LIBOR (London Interbank Offered Rate): Dominant index for taxable floating rates
  - SIFMA (Securities Industry and Financial Markets Association Municipal Swap Index): Dominant index for tax-exempt floating rates
- Many tax-exempt issuers use a percentage of LIBOR (between 64% and 70%) as the floating index, for greater liquidity and savings

Tax-exempt bonds vs. swaps



Note: Swap rate includes 100 bps cost for LOC/remarketing. Both swaps and bonds have 10 year calls.

Swap pricing

- Pricing varies from transparent to near-opaque, depending on product
- Starting point is “mid-market”

What is mid-market?

- Markets are quoted as “bid” and “offered”
- Mid-market (“mid”) is the hypothetical halfway point between the bid side (end user receives fixed) and the offered side (end user receives floating)
- Mid is the starting point for all pricing discussions

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Pg. 260

GovPX/ICAP SwapPX US Medium Term Swaps vs 3M LIBOR 06/05 09:12 PG 260

Term	TrPrice	TrYld	SwapSpd-SA		SA (30/360)	ANN (A/360)	SpdChg
2Y	99.266/274	4.962 /950	40.75	44.75	5.364 /404	5.354 /394	- 0.25
3Y	98.272/280	4.923 /915	43.25	47.25	5.352 /392	5.344 /384	- 0.25
4Y		4.918 /912	45.00	49.00	5.365 /405	5.358 /398	+ 0.00
5Y	99.092/096	4.912 /909	47.75	51.75	5.388 /428	5.380 /420	+ 0.00
6Y		4.917 /913	49.00	53.00	5.404 /444	5.398 /438	- 0.50
7Y		4.922 /918	50.75	54.75	5.428 /468	5.421 /461	- 0.25
8Y		4.927 /922	52.25	56.25	5.447 /487	5.442 /482	- 0.25
9Y		4.932 /927	53.75	57.75	5.467 /507	5.461 /501	- 0.25
10Y	96.190/204	4.937 /931	55.00	59.00	5.484 /524	5.480 /520	- 0.25
11Y		4.937 /933	57.25	61.25	5.508 /548	5.503 /543	- 0.50
12Y		4.937 /931	58.75	62.75	5.522 /562	5.518 /558	- 0.25
13Y		4.937 /933	60.50	64.50	5.540 /580	5.535 /575	- 0.25
14Y		4.937 /933	62.25	66.25	5.558 /598	5.553 /593	- 0.25
15Y		4.961 /957	61.00	65.00	5.568 /608	5.564 /604	- 0.25
20Y		4.984 /980	63.00	67.00	5.612 /652	5.608 /648	- 0.25
25Y		5.006 /004	62.00	66.00	5.625 /665	5.622 /662	+ 0.00
30Y	95.230/240	5.029 /028	59.75	63.75	5.627 /667	5.622 /662	+ 0.25

Dealer's spread to mid

Three components

1) Hedge cost
2) Credit reserve
3) Dealer profit

Key questions: What's "on market"? What's fair?

What makes hedge cost vary?

- Different products have different hedging costs
- Less liquidity = wide bid-offered spread
- Occasional issue: Time of day

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Term		Bid	Ask	Time		Bid	Ask	Time		Bid	Ask	Time
Percentage of Libor vs BMA Muni Index					Quarterly Bond Rate vs BMA Muni Index				BMA Muni Bond Index Spread vs Libor			
1Y	1)	66.5625	68.5625	7:02	12)	3.609	3.718	7:02	23)	1.70	1.81	7:02
2Y	2)	66.9375	68.9375	7:02	13)	3.580	3.687	7:02	24)	1.66	1.77	7:02
3Y	3)	67.2500	69.2500	7:02	14)	3.589	3.695	7:02	25)	1.64	1.75	7:02
4Y	4)	67.5625	69.5625	7:02	15)	3.610	3.717	7:02	26)	1.63	1.73	7:02
5Y	5)	67.7500	69.7500	7:02	16)	3.634	3.741	7:02	27)	1.62	1.73	7:02
7Y	6)	68.6250	70.6250	7:02	17)	3.710	3.818	7:02	28)	1.59	1.70	7:02
10Y	7)	69.6250	71.6250	7:02	18)	3.804	3.913	7:02	29)	1.55	1.66	7:02
12Y	8)	70.1875	72.1875	7:02	19)	3.862	3.972	7:02	30)	1.53	1.64	7:02
15Y	9)	70.9375	72.9375	7:02	20)	3.935	4.046	7:02	31)	1.50	1.61	7:02
20Y	10)	71.8750	73.8750	7:02	21)	4.015	4.127	7:02	32)	1.46	1.57	7:02
30Y	11)	72.9375	74.9375	7:02	22)	4.083	4.195	7:02	33)	1.40	1.51	7:02

All Rates Quoted vs. the BMA Muni Index (Act/Act)
Libor = 3 Month Libor Act/360

Prices are Indicative only, % are as of 3pm Close

What makes credit reserve vary?

- Ratings
- Type of credit
  - G.O. , water and sewer
  - Transit and toll facilities, state HFA's
  - Public power generators, solid waste
  - Private higher ed, health care
  - Nursing homes, convention centers
- Different dealers – different standards

What makes profit vary?

- Experience in negotiations/competition
- Desirability of client
- Deal size
- Deal difficulty and time

Spread components

	‘Fair’ range	Observed range
Hedge cost	**0.5 to 3 bps**	**0 to 7 bps**
Credit reserve	**0.5 to 10 bps**	**0 to 40+ bps**
Dealer profit	**0.5 to 9 bps**	**-2 to 50+ bps**

Nuances: When mid is hard to find

- Mid is often not as certain as is represented
- Reasons:
  - Product complexity
  - Model differences
  - Varying skills at hedge execution
  - “Unhedgeable” elements
- Examples to follow

Example 1: Simple LIBOR swap

- Tower 111
  - Manhattan apartment project
  - $100 million, 10-yr amortizing LIBOR swap
  - Strong credit guarantee
- Bids (SFG model mid was 5.591%)
  - PNC: 5.600%
  - Bank of New York: 5.599%
  - Bank of America: 5.597%
  - Wachovia: 5.595%

Example 2: Large BMA swap

- East Bay Municipal Utility District
  - Premier managed water and sewer utility
  - $392 million, 19-yr amortizing BMA swap
- Bids (SFG model mid was 3.393%)
  - Lehman Brothers: 3.454%
  - Bear Stearns: 3.414%
  - Merrill Lynch: 3.412%
  - Citibank: 3.412%
  - Siebert Brandford Shank: 3.4069%

Example 3: Embedded options

- California Housing Finance Agency
  - Nation's leading State HFA, largest swap user
  - $82.5 million taxable, 10-yr LIBOR swap with embedded options
- Bids (SFG mid was 5.62%)
  - Merrill Lynch: 5.683%
  - JPMorgan: 5.670%
  - Citibank: 5.615%
  - Goldman Sachs: 5.604%
  - Bank of America: 5.594%
  - UBS: 5.590%

Example 4: Ultra-long cap

- NewYork-Presbyterian
  - NYC's largest and most prestigious non-profit hospital system
- Board wanted to use an interest rate cap for protection for its floating rate debt
- Bought longest caps in history
  - 30 years (record had been 17, most under 10)
  - Capped BMA at 6%

Bid results: March 2005

Dealer	30-Year BMA Cap
JPMorgan	367 bps
Bear Stearns	380 bps
BNP Paribas	413 bps
Merrill Lynch	446 bps
Bank of America	468 bps
Bank of New York	471 bps
Lehman Brothers	515 bps

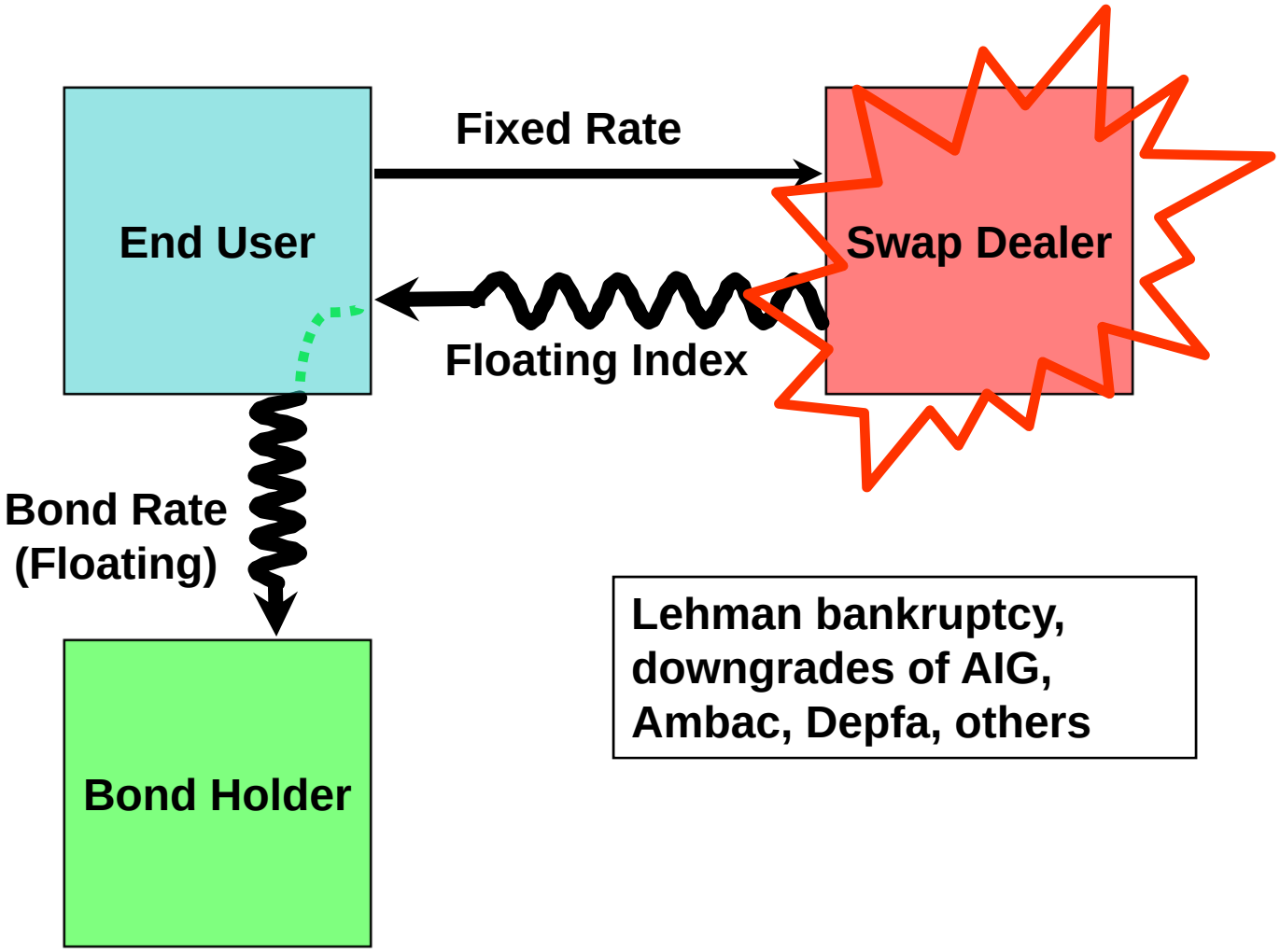
Bid results: November 2006

Dealer	30 Year BMA Cap
Lehman Brothers	241 bps
Royal Bank of Canada	247 bps
BNP Paribas	255 bps
JPMorgan	260 bps
Bear Stearns	274 bps
Bank of New York	291 bps
Merrill Lynch	293 bps
Bank of America	294 bps
Bank of Montreal	329 bps

Take-aways

- Pricing transparency can be obtained for most straightforward swap structures
- For complex structures, swap pricing is more “translucent” than “transparent”
- In negotiation:
  - Importance of leveling playing field with strong, experienced advice
  - Get break-out of spread components, including profit
- In competition:
  - Importance of large enough group, and right competitors

Realized risk #1: Counterparty



Terminating (and valuing) a swap

- Swaps can be terminated at one party's option, or because of a termination event or event of default.
- There is no prepayment penalty for terminating early – instead there is a gain or loss, called a termination payment.
- Media misnomer: "termination fee"
  - Payment direction and size is solely market-based
- The termination payment is based on:
  - Interest rates at time of termination
  - Remaining years to scheduled maturity
  - Notional principal amount

How termination works

- Compare original contract swap rate with current market rate for a swap ending on the same date
- Multiply rate difference times dollar size and years remaining, present valued
- Example: Original rate (5.50%); current rate (4.50%); difference (1.00%) times size ($10 mm = $100,000) times years remaining (10 years = $1 mm), present valued (at 4.50% = $770,000)

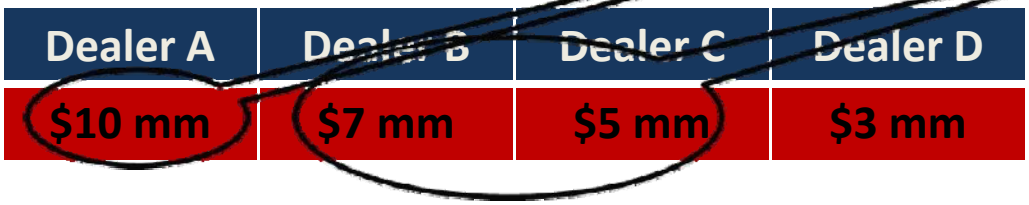
Measuring Termination Exposure

Assume Issuer has entered into a $100 million 30-year swap paying 4.50% and receiving the BMA Municipal Swap Index. The table shows the Replacement Value of the swap at future points in time, assuming 200 and 100 basis point increases in rates, and no principal amortization.

	Remaining Life of Swap		
	10 Years	**15 Years**	**20 Years**
200 basis points	$11,975,000	$14,574,000	$16,994,000
100 basis points	$6,344,000	$7,874,000	$9,432,000

Termination by default (Lehman)

- Most swaps were ‘synthetic fixed’ (end user pays fixed, receives floating)
  - Rates down sharply → Swap value against issuer (Good!)
- Termination value: ‘Market Quotation’
  - Four quotes
  - Knock-out high, low; average remainder
- Replacement: Best bid
- Result: Net benefit to end user



Replacement: $10 mm

Termination: $6 mm

Net Benefit: $4 mm

Where end users got hurt

Where MTM was positive to issuer

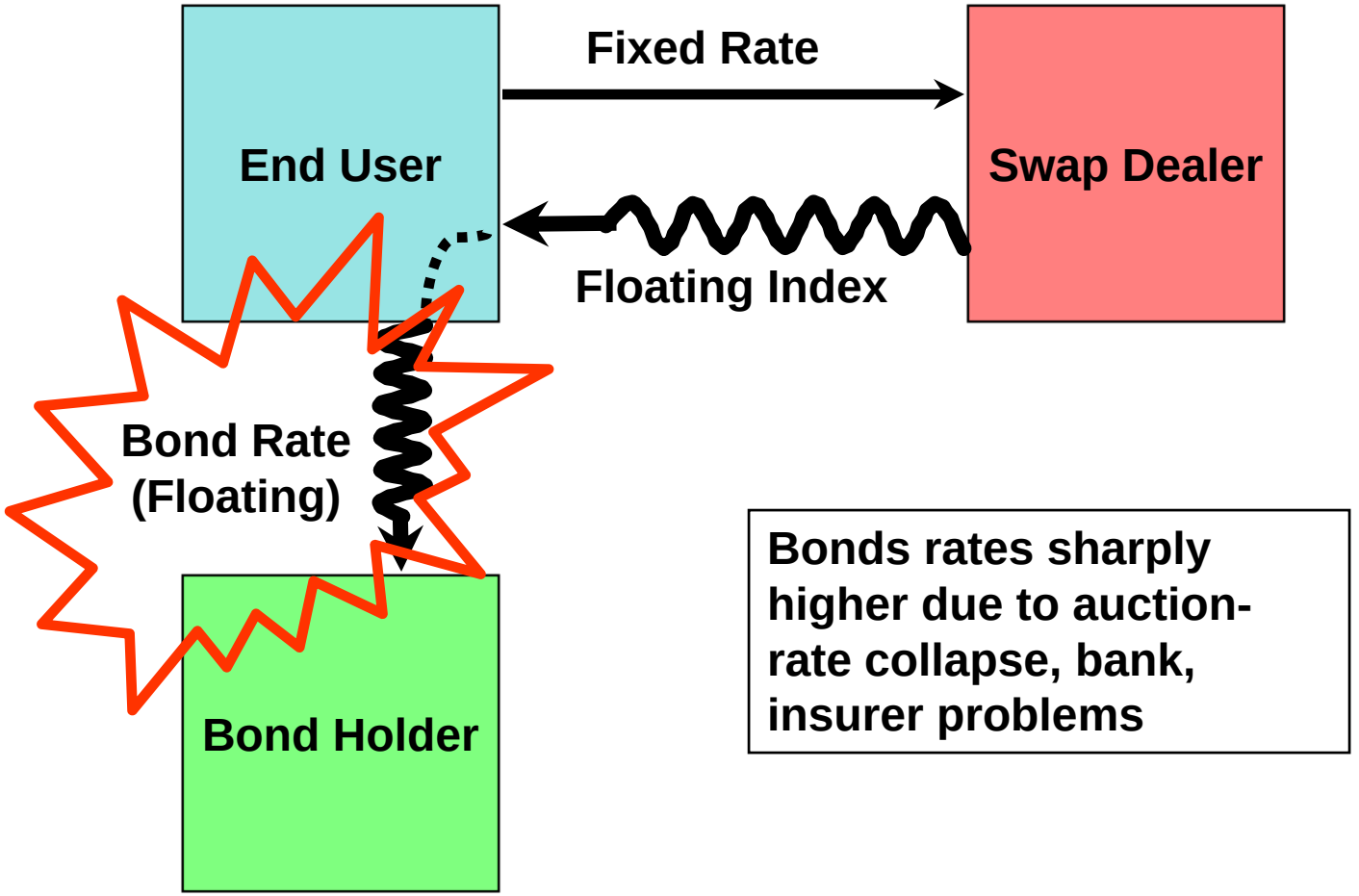
- Synthetic floating (issuer pays floating, receives fixed) – because rates were down
- Caps (issuer paid up front for rate protection)
- Basis swaps (mid-’09 on, not’08 or early ’09)
- Likely outcome: LB claimants will get 50-60 cents on dollar; LBDP claimants will get 100
- Active market to sell “crystallized” claims at “double discount”

Swap valuation

Valuation varies slightly based on purpose

1. Financial reporting purposes ("MTM"), is done at mid-market with no adjustment
   - Not true "liquidation cost" if the end-user were forced to optionally terminate
2. Collateral calculation purposes: Calculating party will generally embed some spread in its favor
3. Termination purposes: True replacement cost, including full execution costs in current market

Realized risk #2: Basis risk



Domino Theory

Subprime

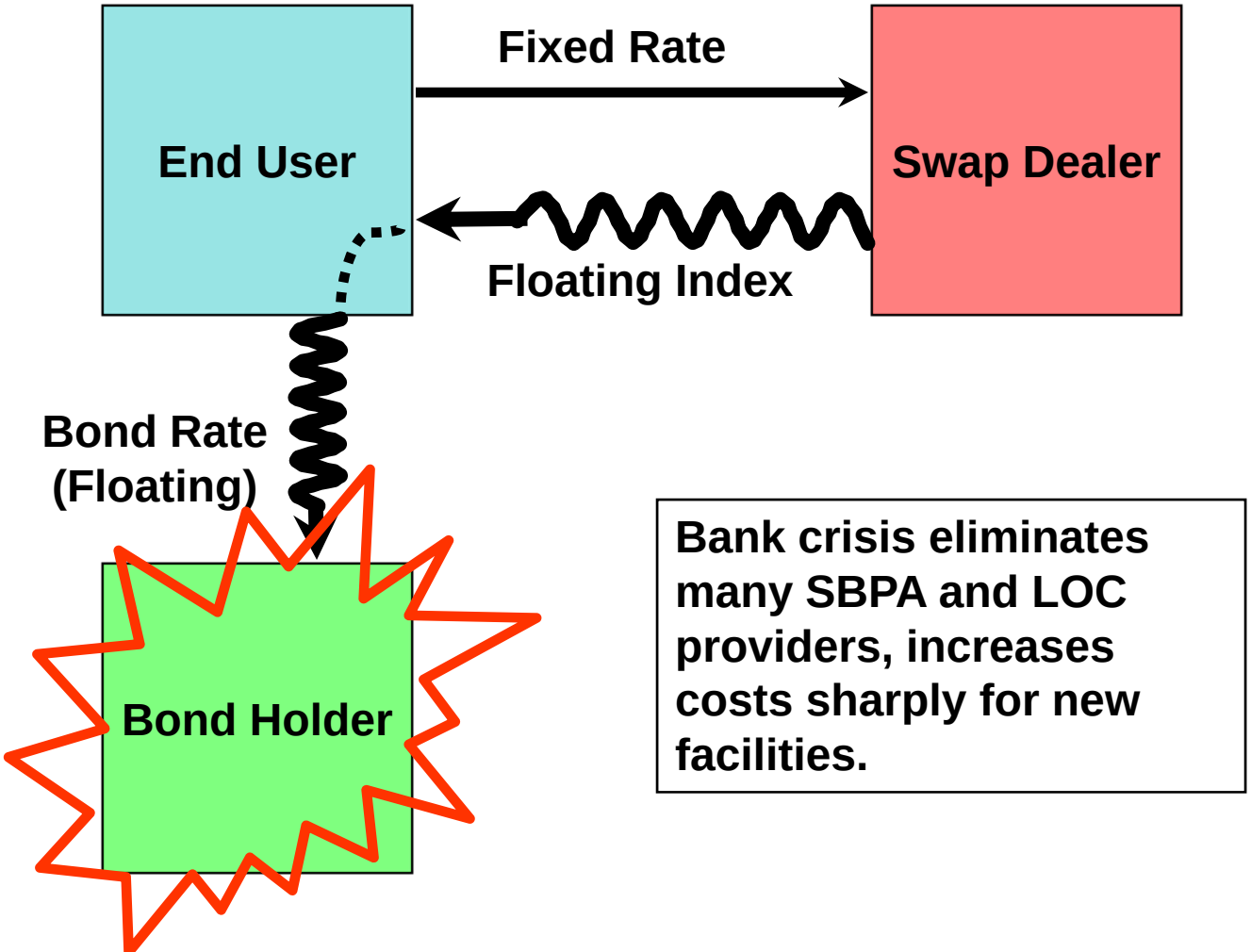
- Bond insurer meltdown
- Auction rates fail
- VRDB conversions eat up bank capacity
- Insured VRDB's trade poorly, hit banks, or are restructured

- Bank balance sheets balloon with toxic assets
- Remarketing desks unable to support VRDB's
- Unheard-of number of bank bonds
- Skyrocketing cost of LOC's, SBPA's

Resolving basis risk

- Refunding Auction Rates to VRDB's
- Refunding insured VRDB's to uninsured or replacing SBPA's with LOC's
- Replacing weak SBPA/LOC banks with stronger ones
- Or, quite commonly, throwing in the towel, and refunding fixed and paying swap termination cost
- Bottom line: Cost to municipal issuers
- Key note: Fed came to rescue of banks, corporate CP market, but gave cold shoulder to muni issuers

Realized risk #3: Rollover risk

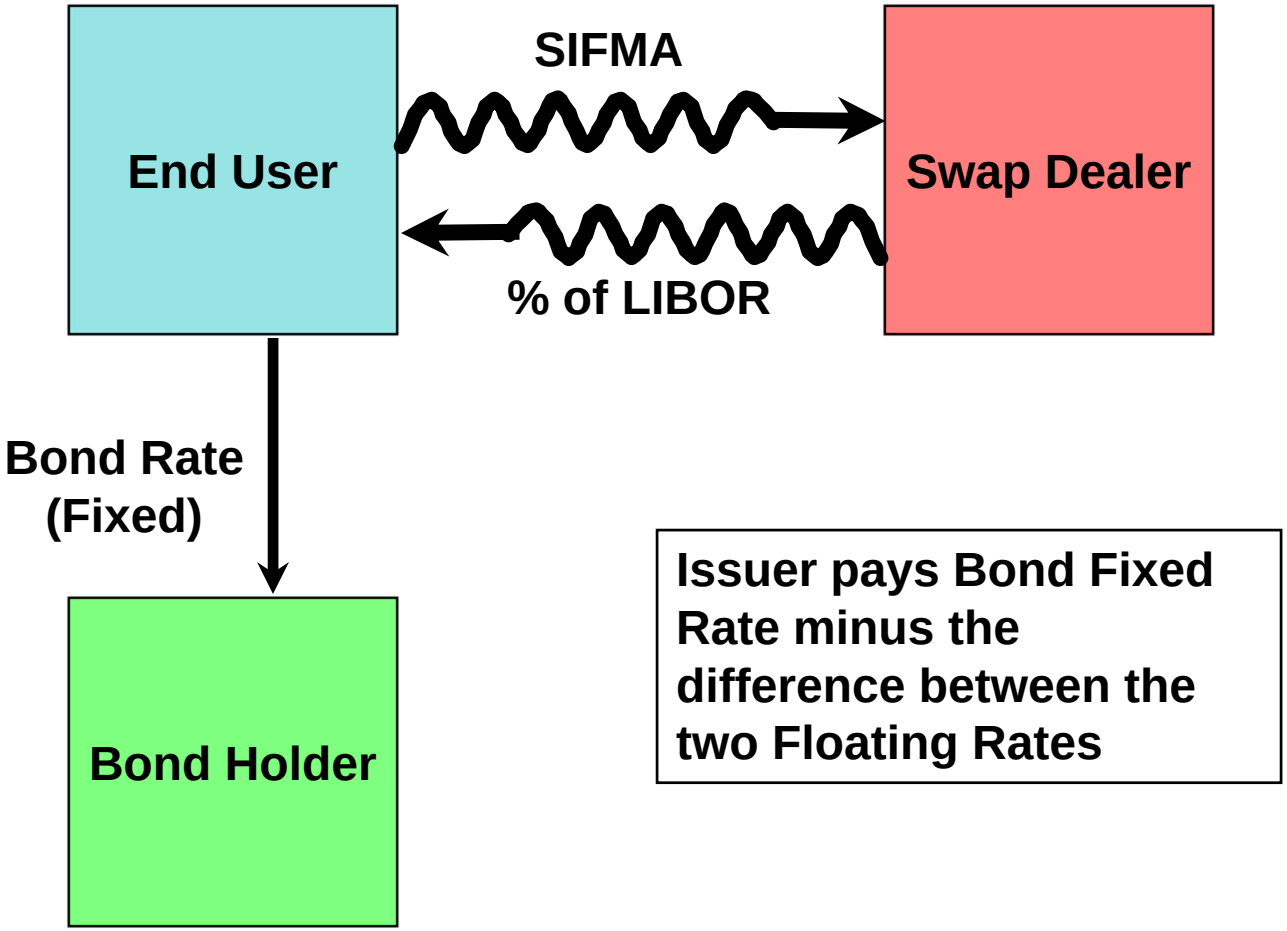


Bank crisis eliminates many SBPA and LOC providers, increases costs sharply for new facilities.

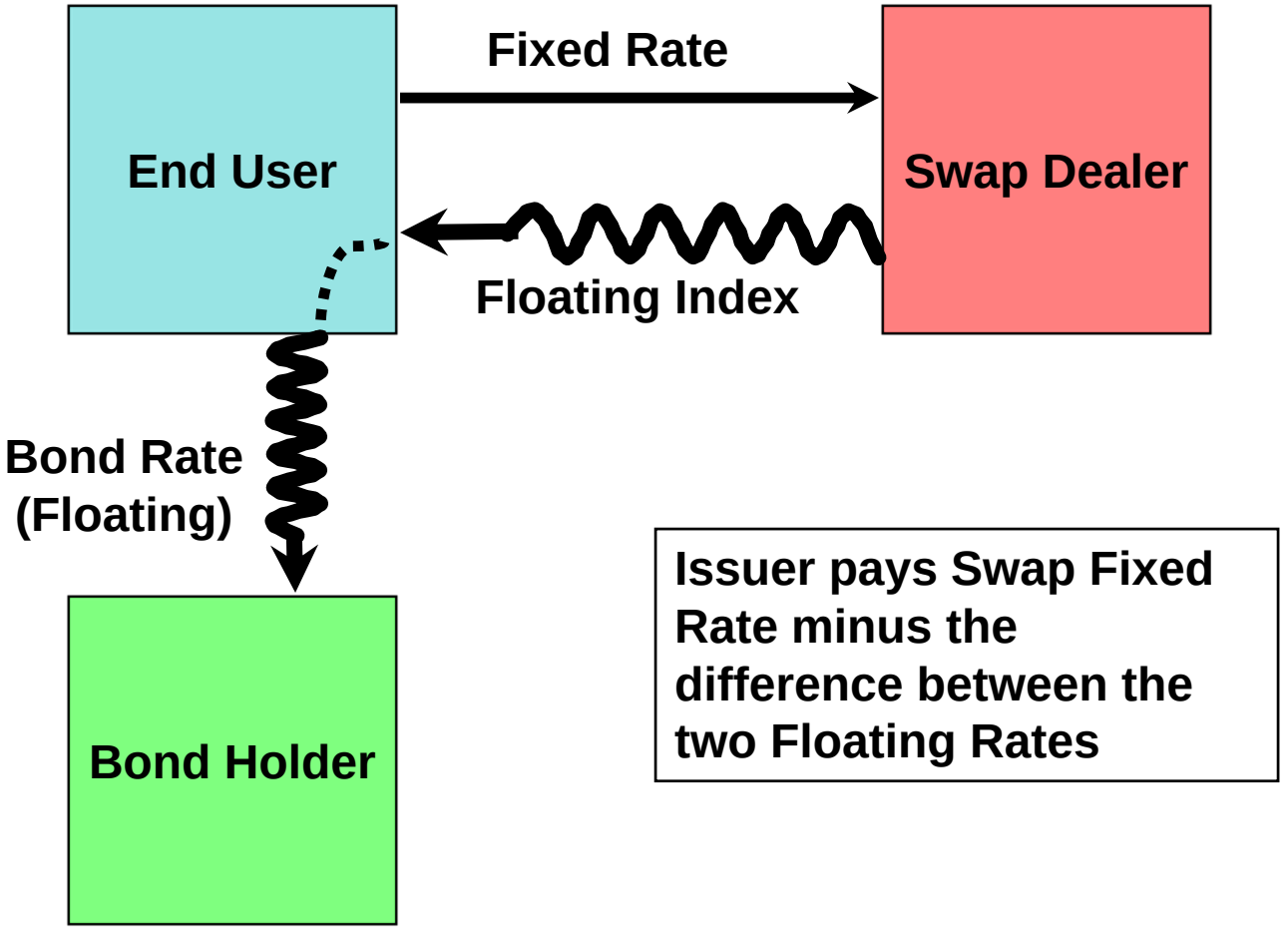
Resolving rollover risk

- Replacement of tainted bank facilities
- Keep new high-cost facilities short, in anticipation of declining future cost (already occurring)
- Replace VRDB's with alternative short-term products
- Bottom line: Unanticipated costs

Fixed rate bonds with basis swap



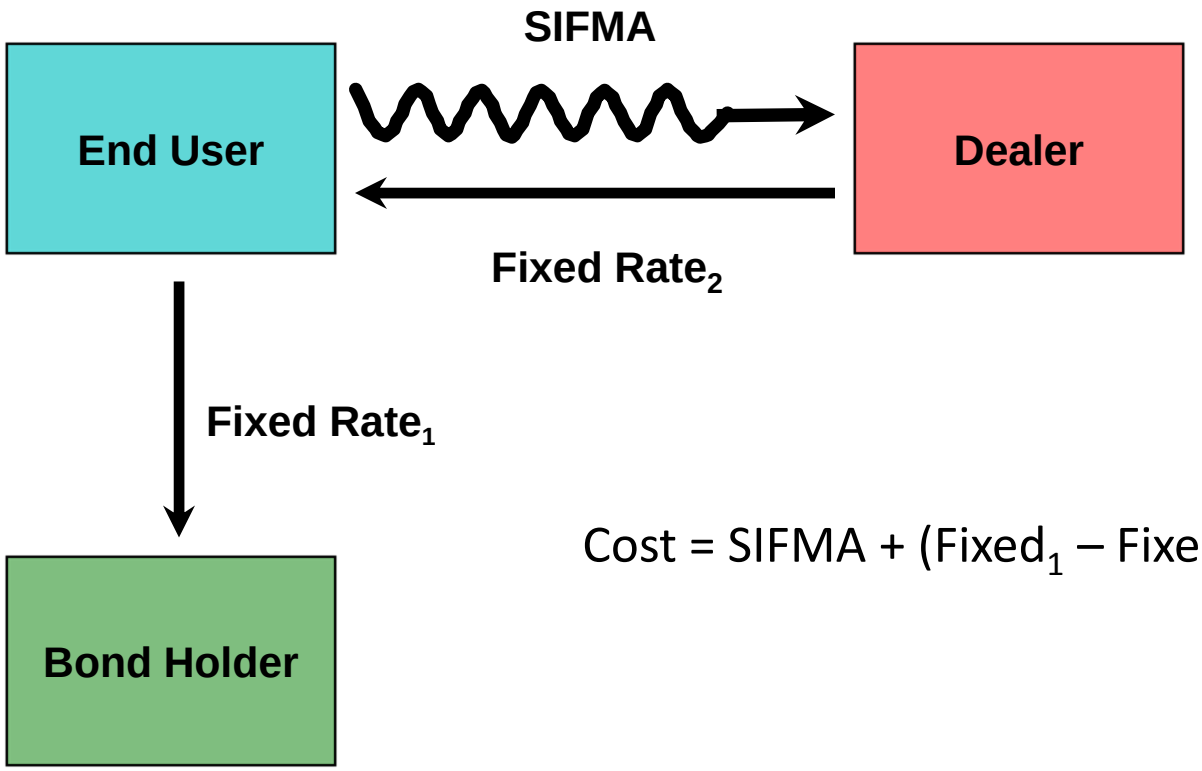
Typical swap – ‘synthetic fixed’



Basis swap - motivations

- Same basis risk as % of LIBOR synthetic fixed
- No floating bond costs/risks (bank LOC cost, rollover risk, remarketing cost)
- Lower MTM volatility (less counterparty risk, less collateral posting risk)
- Retains call feature on fixed rate bonds

Synthetic Floating Rate Debt

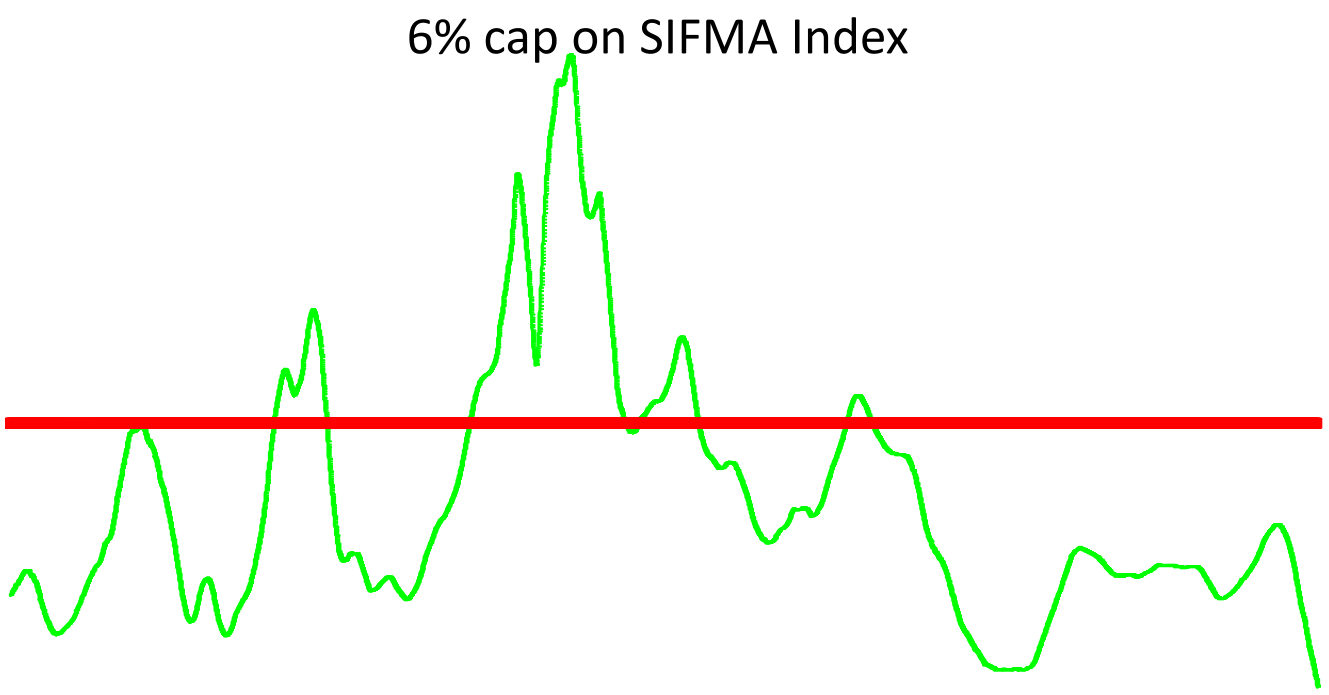


Cost = SIFMA + ($Fixed_1$ – $Fixed_2$)

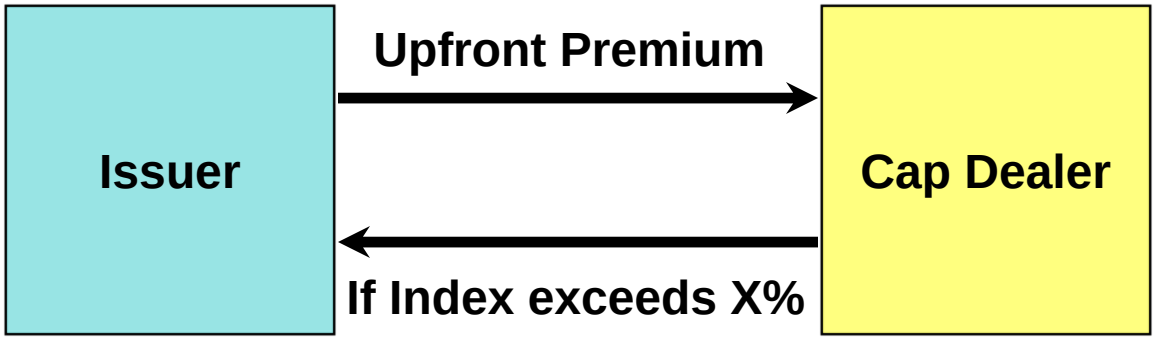
Synthetic floating - motivations

- No LOC cost, rollover risk
- Cash flow is index-based; no remarketing risk
- MTM moves opposite synthetic fixed, so can offset existing synthetic fixed exposure
- All-in cost may be lower than conventional floating

How a cap works



Interest rate cap



Why Cap?

- Provide protection against rising variable rates
- Meet requirements of credit provider, state law, or indenture
- Allow use of floating rate debt but still be able to satisfy requirements of rating agencies and ability to live within known revenue constraints

Swap scandals

- West Basin Municipal Water District, California – Board members indicted, suit against financial advisor
- Jefferson County, Alabama – “The Banks that Fleeced Alabama”
- Florida panhandle – hidden fees trigger potential taxability
- Philadelphia – City treasurer and lead banker go to jail

Special entity conduct requirements

Dealer must:

- Verify that entity is Eligible Contract Participant
- Disclose:
  - Material risks and characteristics
  - Any material incentives or conflicts of interest
  - “Daily mark of the transaction”
- Communicate in a fair and balanced manner
- Meet other requirements set by the Commission “in the public interest . . .”

If dealer is “advisor”

Dealer must:

- “Act in the best interests” of special entity
- Obtain information to determine that a recommended swap is in the SE’s best interest, including financial status, tax status, financial objectives, and other information prescribed by the Commission

Key questions:

1. What does “acting as an advisor” mean?
2. Does acting in the best interest imply a fiduciary duty?
3. What “other information” should Commission prescribe?

If dealer is non-advisor counterparty

Dealer must have reasonable basis to believe that SE has "independent representative" with:

- Sufficient knowledge to evaluate transaction and risks
- Not subject to statutory disqualification
- Independent of dealer
- Duty to act in best interests of SE (or ERISA fiduciary)
- Makes "appropriate disclosures"
- Provides reps re fair pricing and appropriateness

Key questions:

1. Can independent representative be an SE employee?
2. In the absence of a credentialing scheme, how to determine independent rep expertise?

Swap dealer vs. bond underwriter

- Most commonly, SE's do swaps with their key banker who also acts as bond underwriter or lender
- "Two Hat" role leads to confusion
  - Underwriter is intermediary between issuer and investor
  - Swap Dealer is counterparty with conflicting interests
  - Commission should prescribe clear, plain English disclosure of the differing interests and incentives
- Act allows Commission prescribe form of disclosure of "material incentives" of dealer
  - Should Commission require disclosure of spread from mid-market at time of pricing? Profit margin?

End user exemption

- Must not be “financial entity”
  - Avoid capturing Housing Finance Agencies, Clean Water Revolving Funds, state bond banks, etc.
- What is “hedging or mitigating commercial risk”?
  - Simple for synthetic fixed, forwards caps
  - But what about synthetic floating to achieve prudent mix of fixed/floating debt?
  - Basis swaps to take on SIFMA-LIBOR risk for lower cost?
  - Amendment of pre-existing swaps?
- Notify Commission how it “generally meets its financial obligations” on swaps
  - Nature of notice: Standing, one-time, or per transaction?
  - Timing of notice: Pre-trade or contemporaneous?

Future topics

- Real-time price reporting
- Collateral posting issues
- AIG, Berkshire Hathaway – dealers, major swap participants, or end users?

Swap Financial Group

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June 30, 2010

City of Philadelphia
Office of the City Treasurer
1401 JFK Boulevard
Municipal Services Building, Room 640
Philadelphia, PA 19102

Attn: Rebecca Rhynhart
City Treasurer

Re: Fairness Opinion on the Pricing of the Termination of the Interest Rate Swap Between the City of Philadelphia and Merrill Lynch Capital Services, Inc.

Dear Rebecca:

As per your request and as swap advisor to the City of Philadelphia (the "City"), in conjunction with the termination of an interest rate swap agreement (the "Swap") which the City had previously entered into with Merrill Lynch Capital Services, Inc. (the "Counterparty"), Swap Financial Group, LLC, performed a market-based valuation of market-standard interest rate swaps of the same format and structure as the Swap using market prices in effect at the time of the termination pricing on June 30, 2010 (the "Termination Pricing Date").

The Swap was originally entered into to create synthetic fixed rate debt in conjunction with the future issuance of variable rate bonds for the City's Water Department and was previously amended on December 20, 2007 and February 10, 2009. As a result of the City's decision to issue the bonds in fixed rate form, the City has determined to terminate the Swap on June 30, 2010. Under the terms of the Swap, beginning August 1, 2010 (the "Effective Date") the City is obligated to make semiannual payments at a fixed rate of 4.52275% to the Counterparty in return for receiving monthly floating rate payments based upon the USD-SIFMA Municipal Swap Index.

The notional amount of the Swap on the Termination Pricing Date was $90,000,000 and the scheduled termination date of the Swap was January 1, 2037. The total payment that the City will make to the Counterparty in connection with the City's early optional termination of the Swap is $[TBD], which will be due on July 2, 2010.

Our pricing valuation was based on the terms contained within the ISDA confirmation for the Swap and methodology which we believe to be consistent with accepted practice in the market for terminations of swaps comparable to the Swap. Based on these terms and the prevailing level of U.S. Treasury securities, the relevant LIBOR swap spreads, and the relevant SIFMA/LIBOR

ratios, we determined a termination value for the Swap. It is our opinion that the City is paying a fair price to terminate the Swap, and that a different counterparty, in an arms-length market transaction committed to at the time of the unwind, would have been willing to make the same respective payment in return for unwinding swaps of the same structure.

We advise you that we have performed no due diligence on the financial condition of either the City or of the Counterparty and can make no representation as to either counterparty's financial soundness. We are not a counterparty or an affiliate or agent of the Counterparty to the Swap and, in keeping with Swap Financial Group's strict ethical practices, no payment has been or will be made to us by the Counterparty in connection with the Swap or the issuance of bonds by the City.

Swap Financial Group, LLC, is an established advisor and arranger of swaps within the industry for municipal-indexed interest rate swaps, options, and derivatives, is professionally knowledgeable of the transaction types represented in this valuation and is experienced in the financial aspects and risks of swaps. As an arranger of interest rate swaps, please be aware that Swap Financial Group continually conducts transactions among participants in these markets, including both dealers and end-users, during our normal course of business operations.

Swap Financial Group, LLC

By: _____

Q&A on Pension Financing and NYT Story

In an effort to help ensure the DPS community—particularly our staff, retirees, and taxpayers—has true and accurate information regarding the 2008 financing of our pension obligations and the overall strength of our pension fund, the district is providing an FAQ sheet that provides basic facts about our 2008 pension financing and the overall strength of our pension fund, in response to the misinformation contained in last week's New York Times article.

Q: Has Denver Public Schools lost money on the 2008 pension financing?

A: No. In fact, the financing has saved the district more than $20 million compared to its previous pension obligations. Each additional month going forward, the Disrict is saving $1.4 million dollars compared to not having done the financing. The NYT story reads: "Since it struck the deal, the school system has paid $115 million in interest and other fees, at least $25 million more than it originally anticipated." The facts are that, although the financial collapse of 2008 did temporarily reduce the projected savings from the financing by $25 million, the district is still $20 million ahead versus not having done the financing, which has allowed us to avoid the drastic budget cuts being faced by other metro-area districts. Without the pension financing, we would have paid $136 million over this same period.

Q: Is the District's budget being negatively impacted by the pension financing?

A: No. The District's budget is in a much stronger position as a result of the financing. The article alleges that DPS budget "woes" from state budget cuts are being "aggravated" by the financing. In fact, where other neighboring districts are going through painful teacher layoffs and furloughs, DPS is having no layoffs and no furloughs.

Q: How has the pension financing affected teacher hiring?

A: The savings from the 2008 pension financing has allowed the district to hire new teachers and avoid the widespread layoffs and furloughs seen in many other districts across Colorado. NYT story: "(DPS Superintendent Tom) Boasberg maintains that the deal has allowed Denver to hire teachers while other school districts are cutting back. But Henry Roman, president of the Denver Classroom Teachers Association, said that fewer teachers had been hired this year than in previous years." It is certainly true that we are not, as a result of the state budget cuts, hiring as many new teachers this year as last, but that does not in any way take away from the fact that the pension financing has allowed us to be hiring rather than laying off. DPS yesterday welcomed 400 new teachers to the District, the only school district in Colorado that is hiring new teachers on this scale.

Q: Has the pension financing undermined the health of the DPS pension fund?

A: No. A report issued last month by an independent auditor hired by PERA (the state's pension fund) determined that the DPS Division of PERA is far healthier than the Schools Division and that we're on track to be fully funded nearly a decade before any other division of PERA. In fact, the report revealed that the DPS pension fund is projected to be 140% funded at the end of the 30-year projection period. Click here to view a 30-year projection graph. The NYT article does not mention or acknowledge the report by PERA's independent actuary but implies that DPS will

face additional pension expenses as a result of the financing. NYT: “If a shortfall still exists in 2015, the merger requires that it be closed.” In fact, as the PERA report revealed, the DPS pension is not a shortfall position compared to the PERA school division, which is the comparison required under law, but is in a substantial surplus position. As such, DPS is projected by the PERA actuary to see a reduction in pension expenses in the future.

Q: Was the 2008 pension financing a new and different type of financing structure for DPS?

A: No. DPS copied in 2008 the structure it used in 2005. In addition, more than 100 public entities in Colorado alone have used variable rate debt over 500 different times in the last 12 years. NYT story: “Denver schools had issued pension certificates before, but this time the banks added a little spice to the recipe: an interest-rate swap that made the variable rate mimic a fixed-rate instrument.” This is false. Simple background research would have revealed that DPS had done the same type of pension financing in 2005, before Mr. Bennet or Mr. Boasberg had joined DPS, as it did in 2008.

Q: Is the 2008 pension financing performing today much worse than projected?

A: No. Approval for the financing was given by the DPS Board on the basis that the rate would be 6%. The rate is currently at 6.1%. In both cases, all fees are included. NYT story: “In the end, a deal that JPMorgan said would have an interest rate of around 5 percent spiked to 8.59 percent during its first fiscal year, and has since settled down to an average rate of 7.12 percent today.” There was never a 5% projection. Board approval was given on the basis of a projection of a 6% interest rate. The financing costs did spike during the financial crisis of 2008, and our all-in cost during that year of the financial meltdown was indeed 8.59% as a result of the failure of our bonds to sell during the liquidity crisis. But, since then, our rates have settled down over the last year plus to an average rate of 6.1%, not 7.12% as the article mistakenly claims. At this 6.1% rate, the District is saving $1.4 million a month or over $16 million a year compared to not having done the transaction.

Q: Was the pension financing essentially the same as replacing a re-financeable fixed rate mortgage with a homeowner’s adjustable-rate mortgage?

A: No. The 2008 financing is the exact opposite of a variable-rate mortgage, which is at the mercy of rises or falls in market interest rates. NYT: “The Denver schools essentially made the same choice some homeowners make: opting for a variable-rate mortgage that offered lower monthly payments, with the risk that they could rise.” Even the article itself later exposes the inaccuracy of this statement when it notes that the DPS financing, like most variable rate transactions, includes an interest rate hedge or “swap” to mean that the district, unlike a homeowner on an ARM, has no exposure to fluctuations up or down in market interest rates. In addition, the article erroneously claims: “Like a homeowner, Denver essentially started out with the equivalent of a standard, fixed-rate mortgage that allowed it to refinance if interest rates fell.” This is not true. In 2008, Denver’s pension debt it took out in 1997 was not callable and could not be refinanced like a standard home mortgage when interest rates fell.

DPS leadership takes very seriously its responsibility as financial stewards of our taxpayers’ hard-earned money. We welcome and encourage honest, thorough scrutiny of how that money is being handled. And last week, an independent audit commissioned by the state’s pension fund (PERA) concluded that DPS is far healthier than any other division of PERA and is on track to be fully funded almost a full decade before any of the other PERA divisions.

The 2008 pension financing has produced substantial savings that have been invested directly in the classroom, and it has provided greater security for our retirees by bolstering the long-term strength of the pension fund.