

Interest Rate Swap Futures a la Carte – Using Single-Sided Swap Futures

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01 July 2016

Futures exchanges that want to improve their interest rate swap product offerings would be wise to introduce a deconstructed menu approach. Exchanges that recognize the simplicity and flexibility of these types of futures contracts will not only be able to offer a wider product offering that appeals to a broader client base, they will also be able to use their swap futures products to attract a larger market share of the lucrative OTC swap clearing space by offering intra-product collateral off-sets and OTC portfolio compression.

Many of my local eateries have moved to an a la carte approach for lunch. First, I get to choose a protein, and then I add a starch; next, I select a few veggies and maybe add a garnish or sauce. The simplicity of the process makes it easy to order a great meal.

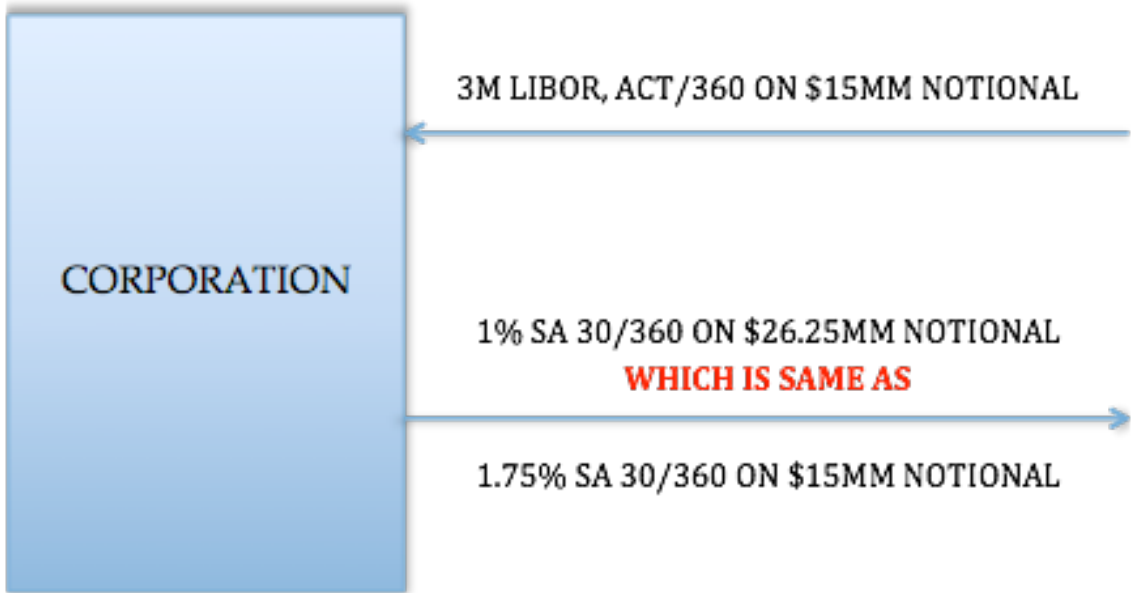
Futures exchanges that want to improve their interest rate swap product offerings would be wise to borrow from this deconstructed menu approach.

For example, assume exchanges offered a swap futures menu that looked like this:

| TODAY'S MENU | |
|---|---------------|
| Fixed Rate Choices | Present Value |
| 1% Semi-Annual, 30/360 | \$94,000 |
| 1% Annual, ACT/360 | \$95,000 |
| 1% Quarterly, ACT/360 | \$95,500 |
| Floating Rate Choices | |
| 6M LIBOR, ACT/360 | \$184,000 |
| 3M LIBOR, ACT/360 | \$164,500 |
| 1M LIBOR, ACT/360 | \$136,000 |
| OIS, ACT/360 | \$117,000 |
| ALL CHOICES HAVE A TEN YEAR TENOR AND ARE BASED ON \$1MM NOTIONAL | |

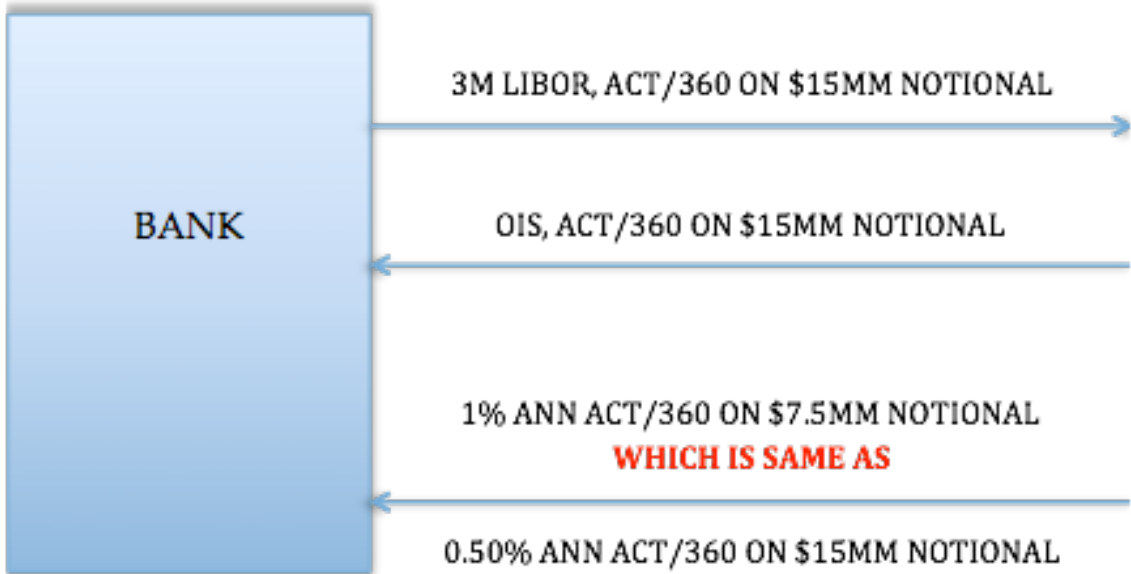
Now imagine a corporate treasurer using this menu to hedge his company’s 10 year, \$15MM floating rate loan. The corporate treasurer may decide to go long 15 of the 3M LIBOR, ACT/360 contracts to hedge the uncertainty of future floating interest rates. Rather than paying for the floating rate contracts upfront, the treasurer may instead decide to go short the 1% Semi-Annual, 30/360 contracts and pay over time. The resulting transaction would look like this:

| <u>CONTRACT TYPE</u> | <u>LONG/ SHORT</u> | <u>NUMBER OF CONTRACTS</u> | <u>PRICE/ CONTRACT</u> | <u>TOTAL AMOUNT</u> |
|------------------------|------------------------|--------------------------------|----------------------------|-------------------------|
| 3M LIBOR, ACT/360 | LONG | 15.00 | \$164,500 | \$2,467,500 |
| 1% Semi-Annual, 30/360 | SHORT | 26.25 | \$94,000 | <u>-\$2,467,500</u> |
| | | | SUM | \$0 |



Meanwhile, imagine the bank that made the loan trying to hedge its funding mismatch. The bank could lock in the amount of floating rate interest it is going to receive over the life of the loan by selling 15 of the 3M LIBOR, ACT/360 contracts. Simultaneously, the bank could hedge its daily Fed Funds funding cost for the next 10 years by going long 15 of the OIS, ACT/360 contracts. Since there is a credit spread between OIS and 3M LIBOR, the bank would have enough “change” left over to buy an additional contract of 1% Annual, ACT/360. The result would be:

| <u>CONTRACT TYPE</u> | <u>LONG/ SHORT</u> | <u>NUMBER OF CONTRACTS</u> | <u>PRICE/ CONTRACT</u> | <u>TOTAL AMOUNT</u> |
|----------------------|------------------------|--------------------------------|----------------------------|-------------------------|
| 3M LIBOR, ACT/360 | SHORT | 15.00 | \$164,500 | -\$2,467,500 |
| OIS, ACT/360 | LONG | 15.00 | \$117,000 | \$1,755,000 |
| 1% Annual, ACT/360 | LONG | 7.50 | \$95,000 | <u>\$712,500</u> |
| | | | SUM | \$0 |

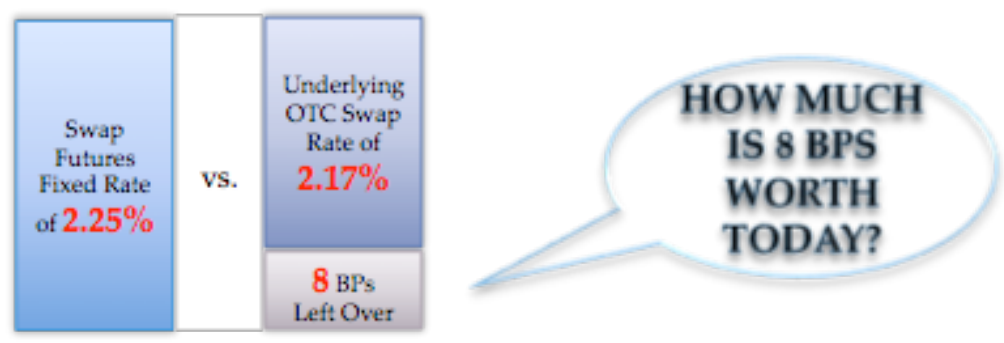


Derivatives pros will say that the menu example above puts the cart before the horse by using the present value of cash flows to determine break-even swap rates. They will also accurately note that market prices for these term annuity products are never static, as each tick in market swap rates results in a simultaneous change in the present value.

Nonetheless, the menu concept does offer a good example of a better way forward for exchanges and clearing houses as they look to upgrade their swap futures product designs. After all, the current swap futures offerings that are listed globally can only be described as uninspired.

[Related: “[Single-Sided Swap Futures: A Better Way to Trade Interest Rate Swap Futures](#)”]

All of the classic fixed vs. floating swap futures contracts now available insist upon a fixed interest rate that is almost never equal to the market rate. As a result, traders have to convert OTC swap rates into quasi-bond prices associated with off-market swap futures coupons.



The resulting lack of transparency in the process makes buy-side clients uncomfortable and timid with respect to the product. And the lack of an apples-to-apples basis between the OTC spot rate and the futures contract price makes it difficult for market-makers to feel intuitively confident in their trading.

Meanwhile, floating vs. floating swap futures don't even exist on exchanges. The OTC versions of floating vs. floating swaps have become quite popular since the financial crisis as tools for either hedging against or speculating on potential economic calamities. Additionally, the regulatory changes in the OTC swaps market itself with respect to collateral and clearing have resulted in much greater demand for hedging Fed Funds-related indices such as OIS.

Which brings us back to the a la carte approach to swap futures. Exchanges that recognize the simplicity and flexibility of these types of futures contracts will not only be able to offer a wider product offering that appeals to a broader client base, they will also be able to use their swap futures products to attract a larger market share of the lucrative OTC swap clearing space by offering intra-product collateral off-sets and OTC portfolio compression via EFP.

Fortunately, a template for the a la carte approach to swap futures already exists with patent pending Single Sided Swap Futures (SSSF). SSSF take advantage of the novel concept of separating the two legs of an interest rate swap into distinct contracts. The contracts are traded against each other as a spread in a simultaneous, cash-less exchange. The resulting economics of the spread transaction mirror that of an OTC swap. But the fungibility of the futures contracts allow for constant netting of offsetting positions. Best of all, SSSF eliminate the need for any of the cumbersome bond price quoting conventions that are a big part of current swap futures problem.

More information about Single Sided Swap Futures can be found at www.StonewyckInvestments.com.