GFOA Advisory

Use of Debt-Related Derivatives Products

GFOA Advisories identify specific policies and procedures necessary to minimize a government’s exposure to potential loss in connection with its financial management activities. It is not to be interpreted as GFOA sanctioning the underlying activity that gives rise to the exposure.

Background. A derivative - or swap\(^1\) - is a financial instrument created from or whose value depends upon (is derived from) the value of one or more separate assets or indices of asset values. As used in public finance, derivatives may take the form of interest rate swaps, futures and options contracts, options on swaps and other hedging mechanisms such as rate locks. Derivative products have been used in the debt, risk and asset management programs of state and local governments and other debt issuing authorities. Although it is appropriate to retain a derivatives advisor to assist in a transaction, issuers are advised that they should have a level of in-house expertise necessary to understand the core aspects and risks of a derivatives transaction. Simply stated if you do not feel you understand and can explain the transaction, it is probably not appropriate for your use.

When used properly derivative products can be effective interest rate management tools, which can provide a governmental entity financial flexibility, opportunities for interest rate savings, alter the pattern of debt service payments, create variable rate exposure, or change variable rate payments to fixed rate and otherwise limit or hedge variable rate payments. However, as observed during and after the financial crisis of 2008 and 2009 (“the Financial Crisis”), there are significant risks involved with such transactions, especially when other related markets - such as the variable rate market - trigger events in swap contracts. Some governments have experienced collateral calls, and involuntary and voluntary termination of their swaps, which, for some, came at a substantial cost. As a result, governments have significantly curtailed engaging in these types of transactions since the Financial Crisis.

To alert governments to the risks associated with derivative products, GFOA maintains an Advisory (Use of Derivatives and Structured Investments by State and Local Governments for Non-Pension Fund Investment Portfolios - 2010) which specifically advises state and local government finance officers to exercise extreme caution in the use of derivatives and structured finance products. Governmental entities must learn about and understand the potential risks and rewards of derivative and structured products, before deciding if they should be used. Governments must understand fully the characteristics of these instruments and have the ability (internal staff and external advisors) to determine the fair market...
price and be aware of the market, legal, accounting, credit and disclosure risks involved. It is also recommended that issuers read and understand the most current rating agency guidance regarding the effect of derivatives on ratings, prior to execution of a derivatives contract.

Following the Financial Crises, Congress and regulators took steps to regulate the derivatives market, both in the public finance and corporate sectors. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") and subsequent Commodity Futures Trading Commission (CFTC) rulemaking have established Business Conduct Rules for dealers. The regulations provide for safe harbors which include issuer representations and the need for a governmental entity to have a Qualified Independent Representative (QIR) – a professional that is independent from the swap dealer (the QIR has not been associated with a swap dealer within the past year and has not been recommended by the swap dealer).

Additionally, Dodd-Frank contains other regulations that issuers should be familiar with if considering swaps (see reference section). Before a dealer will engage in any discussions or executions of derivative transactions with a municipal counterparty (or any issuer defined as a Special entity under the CFTC rules), the swap dealers are requiring issuers to adhere to the August 2012 and March 2013 Protocols, which effectively amend any existing ISDA Agreements to allow them to fulfill their obligations under the regulations. These protocols mandate the use of the new CFTC Interim Compliant Identifier (CICI) legal entity identifier system for each Issuer Counterparty. The August 2012 Protocol addresses the swap dealers’ Business Conduct Rules and suitability issues and requires issuers to select a QIR, make certain representations and maintain internal policies and procedures including swap policies and policies regarding the selection of the QIR.

The March 2013 Protocol covers swap clearing requirements and provides for an "End-User Exception" that allows issuers an exception to the clearing requirements if the issuer meets certain criteria. Swap dealers will require adherence to March 2013 Protocol before transacting any derivative. Instead of adhering to the Protocols, Issuers may choose to execute Bi-Lateral Agreements with each swap counterparty. The Bi-lateral Agreements incorporate essentially the same representations under the Protocols. Adhering to Protocols typically is more efficient for issuers with multiple swap counterparties as it allows issuers to provide information, make elections and representations one time.

**Recommendation.** The Government Finance Officers Association (GFOA) advises that state and local governments exercise caution in the use of derivative instruments. Unless your government has the appropriate expertise to understand and resources to monitor the transactions, prepare financial reports, and audit footnotes for swap transactions on an ongoing basis, as well as manage the variable rate instruments and liquidity facilities associated with the instrument, it should not enter into swaps. Issuers must understand fully the characteristics of derivative
instruments, have the ability together with its QIR Advisor to determine a fair market price and be aware of the legal, accounting, credit, and disclosure issues involved. These instruments should not be used for speculation, but only to manage risks associated with an issuer's assets or liabilities and only in conformity with financial policies that reflect the risk tolerances and management capabilities of the issuer. These products should only be used when the issuer has developed:

1. A comprehensive derivatives policy that includes:
   a. Evidence of clear legal authorization to enter into swap contracts and guidelines for how derivative products fit within the overall debt management program.
   b. Documentation of the expected impact of the derivative on the issuer's underlying bond ratings. Credit rating agencies evaluate the risks of a derivative and its impact on the issuer's rating. An issuer should understand the impact if any, prior to entering into a transaction. A financial advisor or QIR should assist the issuer in evaluating the likely rating considerations.
   c. Policies and procedures in place for the hiring of a QIR.
   d. Determining the scope of work for the QIR. In addition to transaction assistance, an issuer should have the QIR assist with securing the CICI number for the transaction, ensuring that the transaction qualifies as an end user exemption, and adherence to other CFTC rules.
   e. Procurement of a written recommendation from the QIR that the transaction should be undertaken.
   f. A list of the types of derivative products that may be used or are prohibited.
   g. A requirement that the issuer work with the QIR to document the incremental value of the swap transaction versus the cash market, including a valuation of call option considerations. Call option considerations should include valuing the swap if non-callable versus a comparable non-callable bond; and valuing the cost of imbedding a call option in the swap to provide some potential protection for the issuer to manage the termination costs.
   h. Prohibition or restrictions into taking upfront payments or premiums, and on selling options.
   i. The conditions under which these types of products can be utilized (i.e. bidding procedures, minimum benefit thresholds, valuation of no call or call options\(^2\), policy on collateralization, and terms of master agreements).
   j. The maximum allowable notional amount of derivatives contracts, or a means of determining such amount, e.g., by reference to floating rate assets.
   k. Guidelines for selecting counterparties of high credit quality and addressing the risks.
1. Prior to the execution of a transaction, a requirement that the issuer document that the transaction contemplated fits the requirements of the derivatives policy.

m. A written fairness opinion from the QIR that the transaction was priced at market with a fair pricing.

2. A sufficient understanding of the products. The GFOA encourages all financial officers to learn about the risks and potential benefits of using derivatives. A decision whether or not to use derivatives must be made on an informed basis. Training is essential both in evaluating the use of derivatives and in managing their use.

3. The internal staffing and expertise to manage, monitor, and evaluate these products properly (either on their own or in combination with a QIR). Tax counsel may also need to be consulted. Issuers must have in place:

a. Methods for measuring, evaluating, monitoring and managing risks associated with derivative products, including:

i. Basis risk - the mismatch between variable rate debt service and the variable rate index used to determine swap payments. Basis risk can also occur when a divergence arises between the index associated with the bonds, and that of the derivative. This divergence could be caused by a number of factors including but not limited to, changes in credit spreads/trading values, tax law changes, absolute levels of interest rate and supply and demand. This risk can be managed through the a matching of the bond index with that of the derivative index, creation of an interest rate reserve fund, or conservative budgeting strategies.

ii. Interest rate risk - how the movement of interest rates over time affects the market value of the instrument. Interest rate risk can arise as a.) cashflow risk - which is the risk that any market factors (including interest rates or ratios) may increase cashflow from expectations, and b.) Mark-to-Market risk - also affected by market factors depending on the trade (interest rates, ratios, yield curve, etc.).

iii. Collateral Posting risk - the risk that market movements or an issuer downgrade will cause the market value of the swap to be negative enough that the issuer has to post collateral under a Credit Support Annex (CSA). Issuers should be mindful of the different rating standards applied to corporate and municipal credits when evaluating collateralization thresholds and understand that this is a negotiable requirement. Termination and collateral requirements should reflect relative comparable credit strengths of the parties determined on a corporate equivalent or global rating basis.

iv. Counterparty risk - the risk that the counterparty fails to make required payments, experiences rating downgrades, or files for bankruptcy protection. This is particularly important if an issuer has more than one swap with a counterparty and the documents
contain cross-default provisions. This can be addressed through the establishment of ratings thresholds, guidelines for exposure levels and, particularly, collateralization requirements.

v. Termination risk - the need to terminate the transaction in a market that dictates a termination payment by one of the counterparties. Market practice allows governmental issuers to limit the instances in which this can occur. This risk can also be mitigated through the identification of revenue sources for and budgeting of potential termination payments, structuring the swap so that refunding bond proceeds can be used for termination payments and subordinating the lien status of potential payments. Issuers are cautioned to understand the potential for termination costs to change over time in different interest rate environments and should document the sensitivity to these factors. Issuers are cautioned to ensure that counterparties do not impose excessive or unnecessary fees at termination in excess of amounts allowed for in the swap documents, and are urged to consult with their financial advisors about negotiating the terms of a termination payment. 3

vi. Market-access risk - the risk that the markets may be closed or that an issuer may not be able to enter the credit markets due to its own credit quality deteriorating. For example, to complete a derivative's objective, a new money bond issuance or a refunding may be planned in the future. If at that time the markets are not functioning or an issuer is unable to enter the credit markets, expected cost savings may not be realized while the issuer will continue to be subject to its obligations required by the derivative contract.

vii. Amortization risk - the mismatch of the maturity of the swap and the maturity of the underlying bonds or a mismatch in the amortization of the swap and bonds. This should be eliminated by making the maturity and amortization of the swap match those of the bonds.

viii. Rollover risk – the underlying variable rate bond related to the swap will typically have a liquidity feature or put feature that will require periodic remarketing, rollover or renewal. This requires transactions fees and the risk that a change in the issuer’s credit, or a change in market conditions may economically disadvantage the issuer.

ix. Credit risk - the occurrence of an event modifying the credit rating of the issuer or its counterparty. This should be addressed through minimizing cross defaults and the favorable negotiation of credit event triggers in the underlying documentation.

b. Methods for selecting and procuring derivative products, including when competitive bids and negotiated transactions are warranted, and knowledge of pricing conventions and documentation standards.
c. Guidelines governing the proper disclosure of material information relating to executed derivative products to the issuer's governing body, in financial statements, to the rating agencies, to investors in connection with bond offerings, and through secondary market disclosure. Internal disclosure should include information about legal authority, risks, guidelines and market value. Official Statement and secondary market disclosure should comport with current market practice.

d. Procedures and personnel responsible for internally managing and monitoring the issuer’s (i) obligations (also known as operational risk), such as monitoring rates, calculating and making payments, managing collateral, and budgeting and accounting for derivatives appropriately and (ii) exposure, such as counterparty credit, collateral posting levels, variable rate exposure levels and basis risk. Pursuant to applicable accounting requirements, these procedures must include the development of a methodology for providing periodic termination value analyses.

4. Documentation Standards. The new regulatory framework dictates that all derivative transactions be documented using standardized forms, as standardized terms make it easier for market participants to analyze transactions, which minimizes costs. Documentation in the municipal swap market is accomplished through the negotiation and execution of the forms of documents published by the International Swaps and Derivatives Association, Inc. (ISDA). ISDA has updated these forms to conform to the new CFTC regulations. The GFOA also advises that many provisions in such forms are subject to negotiation and therefore recommends that finance officers have a QIR to advise on negotiations and amend ISDA documents as changing market conditions warrant. Specifically, the provision of collateral by one or both parties to a swap under certain circumstances is determined at the time the swap is executed. The form of that potential collateral may also be decided at the point of execution or may be postponed until such collateral is required. Collateral is identified in a Credit Support Annex (“CSA”), and while it will add legal costs to the original transaction and has the potential of never being used, the GFOA recommends it be completed simultaneous with the execution of the swap to avoid having to negotiate collateral arrangements under distressed circumstances.

5. Ongoing Monitoring. Once an issuer has adopted a derivatives policy and executed a derivatives transaction, the issuer should monitor and, to the extent possible, take action to limit its exposure to the risks described above. Because opportunities in the derivatives market change frequently, the GFOA encourages finance officers to keep abreast of such market conditions.
References.

SIFMA/GFOA March 2013 Webinar: Municipal Swaps - Understanding the New World of Regulation

GFOA Best Practice: Debt Management Policy, 2012

GFOA Advisory: Use of Derivatives and Structured Investments by State and Local Governments for Non-Pension Fund Investment Portfolios, 2010

GFOA Public Policy Statement: Regulation of Derivative Products, 1994

Swaps in the Aftermath of the Banking Debacle, Peter Schapiro, Government Finance Review, 2/2013

CICI identifier page - www.ciciutility.org


GFOA Publication: Elected Official’s Guide to Debt Issuance, Patricia Tigue and J.B. Kurish, 2005

Understanding Municipal Derivatives, David Taub, Government Finance Review, 2005

GFOA Derivatives Checklist, 2010

GASB – Derivative Instruments: A Plain-Language Summary of GASB Statement No. 53


Moody’s U.S. Public Finance – Potential Risks of Variable Rate Debt and Interest Rate Swaps for U.S. State and Local Governments are Heightened by Economic and Financial Crisis, October 2009.


Notes.

1 Commodity Exchange Act definition of a swap - “any agreement...that provides on an executory basis for the exchange...of one or more payments based on the value or level of one or more...rates, currencies, commodities, securities, instruments of indebtedness,
indices, quantitative measures, or other financial or economic interests or property of any kind...and that transfers, as between the parties to the transaction, in whole or in part, the financial risk associated with a future change in any such value or level without also conveying a current or future direct or indirect ownership interest in an asset (including any enterprise or investment pool) or liability that incorporates the financial risk so transferred."

2 The cost of many of the problems experienced by municipalities with swaps could have been reduced had the municipalities been able to terminate swaps at lower costs. One way to reduce the cost of termination is to imbed an issuer call option in the swap. Historically bonds have call options as a matter of course and historically most municipalities have not had call options imbedded in their swaps. It is important to evaluate the portion of the value in the swap that is being derived from the elimination of the call option versus the value being derived from other components of the swap transaction. When undertaking a swap, municipalities should evaluate the incremental value and or cost of imbedding a call option in the swap. Depending on market conditions, call options in swaps may increase costs which should be evaluated versus the risk reduction obtained.

3 Terminating Swaps and Re-indexing - There may be opportunities to restructure or re-index a swap to obtain savings or a reduction in the size of the swap. When evaluating these types of transactions, Issuers should be aware that there are potential tax consequences to the modification of an existing swap. The issuer should get advice from a qualified bond counsel regarding any potential adverse tax consequences of a partial termination or re-indexing for example.


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