



A GFOA **advisory** identifies 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.

Use of Debt-Related Derivatives Products and the Development of a Derivatives Policy (2003, 2005 and 2010) (DEBT)

Background. In recent years, the use of derivative products became more prevalent in the debt and risk management programs of state and local governments and other issuing authorities. A derivative 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 caps, floors, collars and rate locks.

Derivative products can be important interest rate management tools that, when used properly, can increase a governmental entity's financial flexibility, provide opportunities for interest rate savings, alter the pattern of debt service payments, create variable rate exposure, change variable rate payments to fixed rate and otherwise limit or hedge variable rate payments. Recent market experience has also shown, however, that derivatives, when used to hedge a particular bond issue, can limit an issuer's flexibility with respect to such bond issue.

Issuers are cautioned that recent economic turmoil and associated credit downgrades have resulted in many collateral calls and, in some cases, involuntary terminations at severe cost to governmental entities.

Governmental issuers must learn about and understand the potential risks and rewards of derivative products in order to evaluate them properly as financing tools. Issuers must understand fully the characteristics of derivative instruments, have the ability 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.

Advisory. The Government Finance Officers Association (GFOA) advises that state and local governments exercise great caution in the use of derivative instruments and use them only when the issuers have developed:

1. A sufficient understanding of the products. The GFOA encourages all financial officers to learn about the potential risks and benefits of using derivatives. A decision whether or not to use derivatives should be made on an informed basis. Training is essential both in evaluating the use of derivatives and in managing their use.
2. The internal staffing and expertise to manage, monitor and evaluate these products properly, either on their own or in combination with a swap or financial advisor, tax counsel and/or monitor. 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. This risk can be managed through the creation of an interest rate reserve fund or conservative budgeting strategies.

- ii. Tax risk - the risk created by potential tax events that could affect swap payments. Careful attention should be paid to tax event triggers in the underlying swap documents.
 - iii. Interest rate risk – how the movement of interest rates over time affects the market value of the instrument.
 - iv. Collateralization risk – the risk that market movements or an issuer downgrade will cause the market value of the swap to decrease 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.
 - v. 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.
 - vi. 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 ensure that counterparties do not impose excessive or unnecessary fees at termination in excess of amounts allowed for in the swap documents.
 - vii. 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 or that credit may become more costly. 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.
 - viii. Rollover or 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 coterminous with those of the bonds.
 - 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. The 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.
3. A comprehensive derivatives policy. A derivatives policy should include:

- a. Evidence of clear legal authorization to enter into such arrangements and guidelines for how derivative products fit within the overall debt management program.
- b. A list of the types of derivative products that may be used or are prohibited.
- c. The conditions under which these types of products can be utilized (*i.e.* bidding procedures, minimum benefit thresholds, terms of master agreements).
- d. The maximum amount of derivatives contracts, or a means of determining such amount, *e.g.*, by reference to floating rate assets.
- e. Guidelines for selecting counterparties of high credit quality and addressing the risks presented under item 2 above.

The GFOA recommends 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 almost universally accomplished through the negotiation and execution of the forms of documents published by the International Swaps and Derivatives Associations, Inc. (ISDA)."¹ The GFOA also advises that many provisions in such forms are subject to negotiation and therefore recommends that finance officers have advisors familiar with such forms and amend ISDA documents as changing market conditions warrant, provided that such changes benefit the issuer. 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.

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.

It is also recommended that issuers read and understand the most current material regarding the effect of derivatives on ratings prior to execution of a derivatives contract.

References.

- GFOA Best Practice, *Debt Management Policy*, 2003.
- GFOA, *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.
- Fitch Ratings, *Guidelines for Interest Rate Swaps and Variable-Rate Debt*, May, 2005.
- Moody's Investors Service, *Swaps and the Municipal Market: The Impact of Swaps and FASB 133 on Municipal Credit Quality*, October 2002.
- Standard & Poor's, *Public Finance Criteria: Municipal Swaps*, November, 2004.

Approved by the GFOA's Executive Board, March 5, 2010.

¹ National Federation of Municipal Analysts, *White Paper on Disclosure for Swaps* (February 2004)