

# **DERIVATIVE MANAGEMENT GUIDELINE OF THE UNIVERSITY OF CINCINNATI**

---

## **PURPOSE**

This guideline will provide a management framework for the use of financial derivatives and related financial instruments for the University of Cincinnati (University). This guideline applies to the use of derivatives for capital financing only, but not for investment or speculative purposes. Use of derivatives for other purposes will be discussed under those appropriate University guidelines or policies.

## **AUTHORIZATION AND RESPONSIBILITIES**

By authority of Sections 3345.11 and 3345.12 of the Ohio Revised Code, state universities can issue obligations to construct auxiliary facilities and educational facilities, or to refund obligations previously issued. Under this authority, the University is required to obtain authorization of such obligations via resolution of its board of trustees.

The University is authorized by its Board of Trustees (Board) to issue obligations, through the adoption of a general bond resolution dated May 7, 1974, as amended on March 27, 2001; and by the Trust Agreement dated as of May 1, 1974, as amended and restated by the Amended and Restated Trust Agreement, dated as of May 1, 2001, as supplemented. The University is required to obtain Board authorization for new obligations, or to refund existing obligations through a Series Resolution as required by the Trust Agreement.

The Amended and Restated Trust Agreement and Series Resolutions define the Fiscal Officer and authorize the Fiscal Officer to enter into, modify, or terminate [“modify” and “terminate” will be added to the resolution] derivative contracts on behalf of the University in connection with the issuance of these obligations.

The Fiscal Officer is responsible for managing this Derivative Policy and ensuring that the University follows it.

## **PERMITTED USES**

Derivatives are appropriate risk management tools when they achieve a specific financial objective consistent with overall financial policy, and may be used for the purposes listed below in the context of a financing (current or future) or the University’s existing debt portfolio.

1. To achieve material economic benefit by lowering the expected cost of capital. Cost savings estimates shall be adjusted for costs of issuance, ongoing support costs, call options, and swap transaction costs. Examples include synthetic fixed rate debt, synthetic variable rate debt, swaptions, and basis swaps.
2. To prudently hedge risks, such as interest rate risk, tax risk, and basis risk.

3. To manage levels of fixed or variable rate exposure.
4. To achieve diversification of a particular bond offering and more flexibility in meeting overall financial objectives than can be achieved in conventional markets.

Derivatives will not be used:

1. To engage in speculative strategies. A derivative that creates floating rate exposure as part of the fixed and floating mix shall **not** be deemed to be a speculative strategy;
2. To take a highly leveraged derivative position, that significantly increases the University's exposure to interest rate movements;
3. Where the final maturity of the derivative is materially greater than the final maturity of the underlying (outstanding or anticipated to be issued) debt;
4. If the fair market value of the transaction cannot be readily and reliably determined at all times by the University, their financial advisor or their swap advisor;
5. When the transaction structure and terms result in a lack of liquidity and the inability to timely terminate the transaction at market.

#### **PERMITTED INSTRUMENTS**

All derivative transactions executed by the University must be tied to specifically identified debt and there can be no material amortization risk with respect to such derivatives (i.e., the notional amount and amortization of any derivative must not materially exceed the principal amount and amortization of the University debt to which it is linked, though it may be less than the debt amortization.). The University may utilize the following derivatives, after identifying the specific financial objective to be realized and assessing the attendant risks:

1. Interest Rate Swaps – Immediate or forward starting (i) floating-to-fixed rate swaps, designed to capture current market fixed interest rates or eliminate variable rate exposure, and (ii) fixed-to-floating rate swaps, designed to create additional variable interest rate exposure.
2. Basis Swaps – Floating-to-floating rate swaps to manage basis risk, tax risk, yield curve risk, or to lower expected borrowing costs.
3. Interest Rate Caps – Financial contracts (caps, collars, floors) which limit exposure to interest rate volatility.
4. Options on Swaps – Sale or purchase of options to commence or cancel interest rate swaps.
5. Rate Locks – Often based on interest rate swaps, used to hedge an upcoming fixed rate bond issue.
6. Other swap-related financial products that the University considers appropriate for use pursuant to the terms of this policy.

The University may not use derivatives that:

1. Create extraordinary leverage or financial risk;
2. Lack adequate liquidity to terminate at fair market value; or
3. Provide insufficient price transparency to allow reasonable valuation.

#### **LIMITATION ON USE OF DERIVATIVES**

1. Overall Limitation. The University shall limit the total notional amount of derivatives to an amount not to exceed 50 % of the outstanding debt.
2. Limitation on Tax-Risk Derivatives. Derivative transactions in which the University assumes tax risk shall not exceed 25 % of the total outstanding debt. The 25% limitation is not meant to apply to the tax-risk inherent in variable rate debt.

#### Considerations:

1. In assessing compliance with this limitation, the University shall take into account existing or pending interest rate exchange contracts under which payments do not begin until a future date. The underlying debt to which these derivatives are related will be considered as part of outstanding debt even if it has not yet been issued. It is expected that this future debt is reasonably foreseeable and will have been included in a Board Resolution authorizing its future issuance. For example if a percentage of LIBOR swap is to be executed on a forward starting basis to hedge interest rate risk for a future bond issue, both the swap and the bonds would be counted in assessing the Overall Limitation. A swap based on percentage of LIBOR and related to tax-exempt bonds would also be assessed against the Limitation on Tax Risk.
2. If multiple derivatives serving different purposes are associated with a single bond issue, the notional amount of those derivatives will not be additive. For example, if a basis swap is added to effectively change the index of a floating to fixed rate swap, for purposes of this limitation, the combination of these swaps will count as a single swap. A second example is a cap used in conjunction with a variable payer swap.

#### **RISK EVALUATION**

The University shall evaluate each proposed derivative transaction to assess the types and degree of risk associated with that transaction and to consider what means are available and can be taken to mitigate such risks. A specific determination must be made that the expected benefits outweigh the identified risks compared to the traditional fixed rate bond market. This review will be **documented** by the University with the help of its swap advisor; it will include a cash flow and market value sensitivity analysis for each swap.

For each transaction in isolation, and in the context of all financial assets and liabilities, the University shall perform a risk evaluation of the following factors:

<b>Risk</b>	<b>Risk Description</b>	<b>Risk Mitigation</b>
Market/ Interest Rate	The rate of interest paid may increase on variable rate bonds or variable rate swaps.	Limit the University's total variable rate exposure; caps and collars may be used with synthetic variable rate debt. <b>Monitor</b> interest rate markets in order to fix variable rate debt and terminate synthetic variable rate swaps when economically feasible.
Basis	The risk of receiving insufficient payments from the variable receipt component of a fixed rate swap to pay the interest due on the underlying variable rate debt issued by the University.	Construct variable rate swap formulas to closely match the anticipated trading pattern of the University's variable rate debt across a range of interest rate environments. Limit total exposure to variable receipts based on taxable indices that support tax-exempt variable debt, as set forth in "Limitation on Derivatives".
Tax	The risk associated with a rise in tax-exempt interest rates relative to taxable interest rates as would result from a decrease in the federal marginal corporate or personal income tax rates, or the full or partial elimination of the exemption from taxation of debt issued by the University.	Limit total variable rate and synthetic fixed rate debt in which the University receives a variable payment based on a taxable index or rate, as set forth in "Limitation on Derivatives".
Termination	The risk that a swap could be terminated and a market based termination payment would be required. This could be due to several events, which include ratings downgrade, covenant violations, swap or bond payment defaults. This could also be an event relative to the counterparty whereby the event is outside of the University's control.	Progressive collateralization or budgeting of potential termination payments as conditions increase the possibility of a termination payment.
Counterparty	The risk that the counterparty does not perform pursuant to the terms of the interest rate exchange agreement.	Limit total counterparty exposure by 1. limiting total notional amount of derivatives with any single counterparty, 2. incorporating individual, ratings-based counterparty exposure limits, and 3. establishing minimum counterparty ratings. See "Counterparty Risk and Collateral" and "Qualified Counterparties".
Credit/Rating	The occurrence of an event which would modify the credit rating of the counterparty, and thereby lowering its creditworthiness.	<b>Monitor</b> the rating of counterparties and their guarantors and take appropriate actions as per swap agreements.
Operational	The risk that the University or the counterparty may not have the adequate systems, policies, or practices to ensure timely and accurate cash flow exchanges and compliance with collateral provisions.	Continue to refine policies and practices to ensure timely compliance by the University with applicable swap agreement provisions. Third party swap monitoring may be utilized to mitigate this risk.

<b>Risk</b>	<b>Risk Description</b>	<b>Risk Mitigation</b>
Amortization	The risk that the notional value of a swap contract could become mismatched versus the amortization of a particular series of fixed or floating rate bonds to which the swap is tied.	Swap agreements may have the flexibility to adjust notional amounts, including optional termination provisions, to ensure a one-to-one match with the underlying bonds throughout the life of the swap (as required by Ohio law).

### **PROCUREMENT OF DERIVATIVES**

The University is responsible for determining the method of procurement for derivatives and related financial products. All services related to derivative financial products, including swaps, will be procured in a manner consistent with standing practices for procuring investment banking and other services, so as to provide the University with the highest level of services at the best available terms and pricing. The University may use competitive bidding or a negotiation process to procure swaps and other derivative products.

### **QUALIFIED COUNTERPARTIES**

The University shall be authorized to enter into derivative transactions only with qualified counterparties. Qualified counterparties must be rated at least "Aa3" or "AA-" or equivalent by any one of the nationally recognized rating agencies (i.e. Moody's Investor Services, Standard and Poor's or Fitch Ratings). In addition, the counterparty must have a demonstrated record of successfully executing derivative transactions with both private and municipal entities. Each counterparty shall have a minimum capitalization of at least \$100 million.

### **COUNTERPARTY RISK AND COLLATERAL**

In order to diversify counterparty risk, and to limit the University's credit exposure to any one counterparty, the following guidelines will be considered:

1. The total net notional amount per counterparty may not exceed 50% of outstanding notional. If the total notional amount with a counterparty is less than \$100 million, then this limitation shall not apply.
2. A Net Termination Exposure will be calculated and subject to a Maximum level based on counterparty credit ratings.

The Net Termination Exposure is defined as the sum of the **current market value** and the **projected exposure** of all derivatives with a single counterparty. The University will calculate Net Exposure on an annual basis or as market conditions warrant for each counterparty. Projected exposure shall be calculated based on the swap's potential termination value taking into account the effects on market value of changes in the relevant yield curve of +/- 100 basis points. The result will be compared to the Maximum to determine whether any action is required based on the counterparty's current ratings.

The Maximum Net Termination Exposure is the aggregate limit for a counterparty. Thresholds are shown in the table below and depend on the credit ratings of the counterparty and whether or not collateral has been posted. If the counterparty has more than one rating, the lowest rating will govern for purposes of determining the allowable level of exposure.

<b>Counterparty Credit Ratings</b>	<b>Maximum Uncollateralized Net Termination Value</b>	<b>Maximum Net Termination Exposure</b>
AAA Category	\$25 million	\$35 million
AA Category	\$20 million	\$30 million
A Category	\$10 million	\$20 million
BBB+/Baa1	\$0	\$10 million
BBB or Below	None	None

These guidelines are not intended to retroactively require additional collateral posting for existing transactions, or mandate or otherwise force automatic termination of existing agreements. The University recognizes that changing market conditions require some flexibility and interpretation, so exposure limits are meant to be interpreted as guidelines rather than strict rules. If the exposure limit is exceeded by a counterparty, the University, in consultation with its legal counsel and swap advisor, shall explore remedial strategies to mitigate this exposure. The guidelines will also be used in making a determination as to whether a particular proposed transaction should be executed given existing and projected exposure to a specific counterparty.

#### **MANAGEMENT AND REPORTING**

The University will seek to maximize the benefits and minimize the risks it carries by actively managing any swaps. Management shall entail continual **monitoring** of market conditions, in conjunction with the swap counterparty, as well as the University's swap advisor for emergent opportunities and risks. **Quarterly reviews** will be conducted between the University and its swap advisor. Active management may include modifications of existing positions including:

1. Early termination of all or a portion of any derivatives
2. Shortening or lengthening the term of the swap
3. Sale or purchase of options
4. Application of basis swaps
5. Changing the floating leg index

As part of this review process a quarterly report will be prepared to document the status and performance of all derivatives. The report will include at least the following information for each derivative:

1. Description (initial notional amount and type of derivative)
2. Applicable bond series

3. Remaining notional amount
4. Final maturity
5. Counterparty and their ratings
6. Market value (for each derivative and sub-totaled by counterparty)
7. Collateral postings and credit enhancement (if any)
8. Rates paid and received
9. Basis comparison between variable swap leg and bond payments

If a swap agreement has been terminated during the period, the University will document a summary of that agreement including the date and amount of any termination payment or receipt.

At the end of each fiscal year, the University will provide or cause to be provided to the Board all information required to comply with applicable guidelines and requirements of GASB and other information that may be requested for disclosure compliance purposes.

#### **DOCUMENTATION**

The University shall record its capital financing derivatives in accordance with current accounting principles generally accepted in the United States (U.S. GAAP). Counterparties shall be required to provide mark-to-market valuations of derivatives upon request. The University may also seek independent payment verifications and valuations from the University's swap advisor.

The University will use standard International Swaps Derivatives Association (ISDA) swap documentation including the Schedule to the Master Agreement and optionally a Credit Support Annex. Documentation should include the following terms:

1. The University reserves the right to optionally terminate at market at any time over the entire term of the agreement;
2. The specified indebtedness related to credit events in the master agreement should be narrowly defined referring only to specific debt;
3. There shall be a minimum counterparty credit rating of "BBB/Baa2"; Counterparty credit ratings below these levels shall trigger an additional termination event;
4. Termination value should be determined by "market quotation" methodology and the termination shall be in U.S. dollars;
5. Governing law for swaps will be New York law, but should reflect Ohio law authorization provisions;
6. The Jurisdiction of Adjudication shall be Ohio;

## **OUTSIDE REVIEW**

Before entering a derivative, the University may contract with a swap advisor or financial advisor for services which may include the following:

1. A review of University debt related documents such as the Trust Indenture, Authorizing Resolutions and Derivative Policy;
2. A review of the University's existing debt structure in relation to the proposed derivative transaction;
3. An analysis of the various alternative derivative structures available to the University;
4. An analysis of the interest rate risk, basis risk, termination risk, credit risk, market-access risk and other risks of entering into the derivative;
5. Review and University education of the derivative documents where applicable;
6. Negotiation of the derivative transaction;
7. A report which describes the transaction, market, pricing and other resources used to complete the derivative transaction;
8. A plan for the University to monitor interest rate risk, basis risk, termination risk, credit risk, market access risk and other risks, as well as the market valuation of the transaction;
9. A determination of the proper accounting treatment of the derivative under U.S. GAAP.
10. A review of the derivative to assure that the derivative meets the requirements of this Derivative Management Policy.