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Office of the President

TO MEMBERS OF THE COMMITTEE ON FINANCE:

ACTION ITEM – CONSENT

For Meeting of July 13, 2011

AUTHORIZATION TO APPROVE INTEREST RATE SWAP GUIDELINES

EXECUTIVE SUMMARY

The recommendation to approve the Interest Rate Swap Guidelines will direct the use of interest rate swaps in conjunction with the Regents' debt portfolio. Interest rate swaps may be utilized by the Regents as part of their overall asset/liability risk management strategy for revenue bond programs.

INTEREST RATE SWAP GUIDELINES

The Regents may enter into interest rate swap transaction(s) if the transaction is expected to result in:

- reduced exposure to changes in interest rates on either a current or future debt issue (through the use of anticipatory hedging instruments)
- ability to manage asset/liability interest rate risk
- lowered net cost of capital compared to bonds
- increased flexibility in meeting overall financial objectives than can be achieved in the bond market
- increased ability to manage the Regents' credit exposure to financial institutions and other entities through the use of offsetting swaps and other credit management products

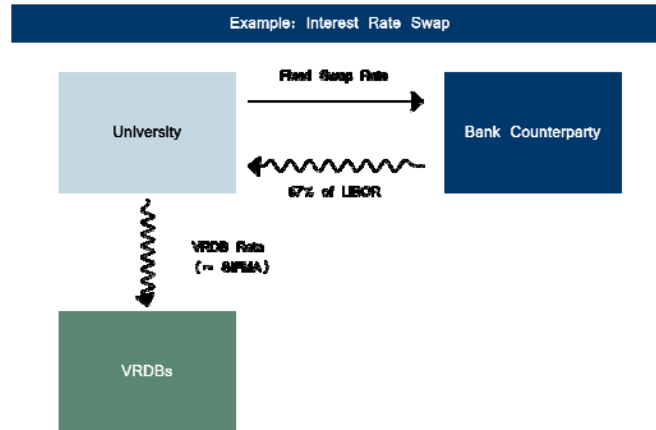
The approval to enter into interest rate swaps will be constrained such that each individual swap transaction will require the Chief Financial Officer to prepare for the President, the Chairman of the Board and the Chair of the Committee on Finance an updated analysis of the University's risks and exposure, both with and without the proposed new swap agreement. This will be attached as part of the authorization request.

RECOMMENDATION

The President recommends that the Committee on Finance recommend to the Regents that the Interest Rate Swap Guidelines for the University's debt portfolio, as shown in Attachment 1, be approved.

BACKGROUND

The Regents may utilize interest rate swaps for their revenue bond program as part of their overall asset/liability risk management strategy. While the Regents have traditionally managed rate risk in their revenue bond program by selling long term fixed rate bonds, interest rate swaps can be used as an alternative method to manage capital market exposure. Swaps are contractual obligations where two counterparties agree to exchange payments in the future based upon a reference index. In a typical interest rate swap two counterparties will exchange fixed interest payments for variable interest payments over a defined period. An example diagram is provided:



In this example, the University issues variable rate debt (in the form of variable rate demands bonds, "VRDBs") and converts its interest rate exposure to a fixed rate by entering into an interest rate swap with a Counterparty. The variable rate paid by the University on the variable rate debt is designed to be offset by the variable rate received on the interest rate swap, leaving the University with a net fixed rate of interest. The combination of selling variable rate debt and "swapping to fixed" in certain markets can produce a net fixed rate which is lower than that which could be achieved by selling traditional fixed rate bonds.

Interest rate swaps can also be used to limit the University's exposure to interest rate increases rather than establishing a fixed rate. A type of swap referred to as an interest rate cap can be used in conjunction with variable rate debt to allow the University to take advantage of short-term interest rates (which are typically lower than long term rates) while limiting the exposure to rising short-term rates should they increase in the future. This strategy is often used to assist in the alignment of short-term assets and liabilities.

The University may consider the use of interest rate swaps in connection to its debt portfolio to provide savings versus solutions that are available in the conventional bond market, as well as to provide a hedge against rising interest rates, or to manage asset/liability interest rate risk.

Interest rate swaps are commonly used among issuers of both taxable and tax-exempt debt in order to manage interest rate exposure on their balance sheets. Within the higher education sector, interest rate swaps are widely used as well. Institutions which have executed interest rate swaps recently include the University of Texas, Vanderbilt, Duke, MIT, Yale, Northeastern, Boston University, etc. to name just a few. While interest rate swaps do not provide superior solutions to every financing need, they do provide additional options and may provide benefits vis-à-vis traditional financing alternatives after the risks and benefits are properly considered.

DOCUMENTATION

The documentation associated with an interest rate swap that the University may execute would typically include the following:

- **ISDA Master Agreement** – This is a standard printed agreement governed by the Internal Swaps and Derivatives Association. The Master Agreement sets out standard terms which apply to all transactions entered into between the two parties, including procedural issues associated with defaulting counterparties, terminating existing agreements, delivery of notices, etc.
- **Schedule** – The Schedule makes amendments to the Master Agreement to customize the agreement between the two counterparties. The Schedule includes the selection of various options presented in the Master Agreement (i.e. whether payments between the parties are netted or paid separately, the timing of payments, etc.) and allows for the addition of provisions not contained in the Master Agreement.
- **Credit Support Annex** – In certain swap transactions, one counterparty may be required to post collateral to the other counterparty to secure their obligations under the contract. The Credit Support Annex contains provisions associated with the posting and return of collateral, the types of collateral that may be used, and all other credit terms associated with the posting of collateral.
- **Confirmation** – The Confirmation is the actual trade ticket which documents each transaction executed under the Master Agreement. The Confirmation will include information such as the size of the transaction (referred to as the Notional Amount), highlight which counterparty is paying the fixed rate and which is paying the floating rate, the fixed rate which is to be paid, the index on which the floating rate will be based, the termination date of the transaction, etc.

MAJOR RISKS

While interest rate swaps may provide the University with savings and flexibility, swaps are derivative transactions and are not without risks. The Interest Rate Swap Guidelines are intended to provide a framework from which the University can both monitor and manage these

risks. As highlighted in the Interest Rate Swap Guidelines, the major risks associated with swaps include, but are not limited to:

- **Counterparty Risk** – The risk that the counterparty to the contract will not be able to meet its contractual obligations under the swap at some time over the life of the contract,
- **Termination Risk** – The risk that the interest rate swap may need to be terminated at some point prior to the planned termination date, requiring a termination payment by the University and/or the unanticipated need to replace the contract for the remainder of the originally scheduled period.
- **Basis Risk** – The risk that the exposure being hedged by the interest rate swap is not exactly offset by the transaction (i.e., the risk associated with the fact that, while the University's taxable VRDBs may be hedged based upon movements in the LIBOR index, and the University's taxable debt would be expected to generally track LIBOR as well, the relationship between the two may not be one-for-one).

These risks are each addressed in the Interest Rate Swap Guidelines. The Guidelines also address various quantitative measures which are used to help the University measure swap exposure on both individual transactions as well as on the entire swap portfolio which will assist in the evaluation of risk.

(Attachment below)

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
INTEREST RATE SWAP GUIDELINES
(July, 2011)

Under the University's Standing Order 100.4(nn) the President has the authority to enter into interest rate swap transactions. The President has delegated sole authority to enter into these transactions, in a manner consistent with the guidelines enumerated below, to the Executive Vice President – Chief Financial Officer (CFO) under DA 2252.

A. GUIDELINES

I. PURPOSE

These guidelines will direct the use of interest rate swaps in conjunction with the Regents' debt portfolio. Interest rate swaps can be utilized by the Regents as part of its overall asset/liability risk management strategy for its revenue bond programs. The Regents may enter into interest rate swap transaction(s) if the transaction is expected to result in at least one of the following:

- to reduce exposure to changes in interest rates on either a current or future debt issue(through the use of anticipatory hedging instruments)
- to manage asset/liability interest rate risk
- to lower the overall expected net cost of capital of a borrowing as compared to products available in the bond market
- to manage variable interest rate exposure consistent with prudent debt practices
- to achieve more flexibility in meeting overall financial objectives than can be achieved in the bond market
- manage the Regent's credit exposure to financial institutions and other entities through the use of offsetting swaps and other credit management products

These guidelines apply only to interest rate swaps and do not apply to commodity, currency or credit default swaps or other types of hedging or derivative products, which are not authorized by the Regents.

The Regents will not enter into swaps for speculative purposes.

II. NON-SPECULATION

While the Regents may use swaps to increase or decrease the amount of floating-rate exposure on its balance sheet, the Regents will not enter into swaps under any of the following circumstance as determined in each case by the President or as delegated to the CFO:

- The swap exposes the Regents to extraordinary leverage or risk;
- The swap serves a purely speculative purpose, such as entering into a swap for the sole purpose of trading gains;
- The Regents is unable to reasonably anticipate that it will have sufficient liquidity or financing capacity to terminate the swap at market levels if it should need to;
- There is insufficient pricing data available to allow the Regents and its advisors to adequately value the swap.

III. AUTHORITY

Prior to entering into a specific swap transaction, the transaction must receive: 1) approval of the Chair Board of Regents (or the Vice Chair if the Chair is not available) and the Chair of the Committee on Finance (or the Vice Chair if the Chair is unavailable) and 2) and an opinion from counsel to the effect that (a) that the agreement relating to the swap transaction is a legal, valid and binding obligation of the Regents and the counterparty and (b) that entering into the transaction complies with applicable state and Federal laws.

IV. SENIOR MANAGEMENT OVERSIGHT

The President shall direct the CFO to review this policy periodically to take into account business and market changes. The CFO shall be responsible for insuring the implementation of this policy and proposing amendments to the policy to take into consideration, any or all of the following, as applicable:

- An analysis of the reasonableness of the proposed activities in relation to the Regents' overall financial condition and capital levels;
- An analysis of the risks that may arise from the implementation of a swap portfolio;
- An analysis of the performance of existing and pro forma swap transactions over time as market conditions may change;
- Impact of counterparty exposure as counterparty credit ratings change over time;
- Potential effects that the swap portfolio may have on the credit ratings of any Regents' obligations assigned by the rating agencies;
- The relevant accounting guidelines;
- The relevant tax treatment; and
- An analysis of any changes to any applicable legislation and any new legal restrictions which may impact the enforceability of the swap obligations.

V. FORM OF AGREEMENTS

Each interest rate swap transaction shall be governed by the terms and conditions as set forth in the International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement, as amended or supplemented by Schedules, Credit Support Annexes and Confirmations. The swap agreements between

the Regents and each qualified swap counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions and provisions as the CFO deems necessary or desirable.

VI. QUALIFIED SWAP COUNTERPARTIES

Swaps will be executed with counterparties possessing minimum counterparty ratings in the "AA" ratings category by at least one nationally recognized rating agency. Counterparties may meet these ratings criteria based on their own credit ratings or the credit ratings of their guarantors or credit enhancers. Exceptions may be granted if specifically approved in writing by the CFO. All counterparties will be required to post collateral (subject to threshold amounts) for the Regents' benefit in the event they fall below specific ratings thresholds.

VII. METHODS OF SOLICITING AND PROCURING SWAPS

Swaps can be procured on a competitive or negotiated basis.

BASIS OF AWARD

Competitive Bid. As a general rule, a competitive selection process will be used whenever reasonable, if the product is relatively standard, if it can be broken down into standard components, if multiple providers have proposed a similar product to the Regents, or if competition will not create market pricing effects that would be detrimental to the Regents' interests. If it is determined that a Swap should be competitively bid, the Regents may employ a hybrid structure to reward unique ideas or special effort by reserving a specified percentage of the Swap to the firm presenting the ideas on the condition that the firm match or improve upon the best bid. The competitive bid should solicit bids from a minimum of three firms. Solicitations for bids must be made only to potential counterparties who are qualified under the terms of this policy.

Negotiated Transaction. The CFO may procure swaps by negotiated methods in the following situations as he or she determines:

(a) A determination is made by the CFO that due to the complexity of a particular swap; a negotiated process is advisable.

(b) A determination is made that a negotiated transaction will assist the Regents and reward innovation and a high level of service in the provider's capacity as part of the Regent's investment banking team;

(c) A determination is made that the negotiated process will facilitate counterparty diversification which is in the best interest of the Regents;

(d) A determination is made that the negotiated process will avoid market pricing effects that would be detrimental to the Regent's interest.

To provide safeguards on negotiated transactions, the Regents will secure outside professional financial advice to assist in the process of structuring, documenting and pricing the transaction and to render an

opinion that a fair price was obtained. In all transactions, regardless of procurement method, the counterparty shall be required to first disclose any and all payments to third parties (including lobbyists, consultants and attorneys) who had any involvement in assisting the counterparty in securing business with the Regents.

VIII. MANAGEMENT OF SWAP RELATED RISK

Swap agreements present certain risks for the Regents. The CFO will consider the following risks and follow the related guidelines and parameters upon entering into each Swap agreement.

COUNTERPARTY RISK. Swaps are financial contracts under which the parties assume credit exposure to one another. Limiting the maximum potential exposure caused by a concentration of swap agreements with one counterparty is advisable. In order to manage this risk the CFO will:

1) Target the maximum potential exposure of Swaps between a particular Counterparty and the Regents not to exceed 50% of the total maximum potential exposure of the Regents' entire swap and overall credit portfolio, when logistically possible. Exposures on off-setting swaps may be considered when calculating net maximum potential exposure.

2) Require collateralization provisions by the counterparty based on credit rating thresholds.

AA-/Aa3 and above	$30 million
A+/A1	$20 million
A/A2	$10 million
A-/A3	$5 million
Baa1/BBB+ and below	Zero

3) Require optional termination rights for the benefit of the Regents if the counterparty is downgraded below the "A" ratings category by a nationally recognized ratings agency.

TERMINATION RISK. A swap termination, in general, should produce a benefit to the University either through a receipt of payment from a termination, or if a termination payment is made by the University, through conversion to a more beneficial debt position. The University can consider a provision in a swap agreement that permits an optional termination at any time over the term of the swap. In some circumstances, a termination payment by or to the University may be required in the event of termination of a swap agreement due to a counterparty default or decrease in credit rating.

AMORTIZATION RISK. Mismatched swap and bond amortization schedules can result in a less than perfect hedge and create additional risk. The amortization schedules of the debt and associated swap should be closely matched for the duration of the swap. The term and notional amount of the swap should generally not exceed the term and amount of the associated debt.

BASIS RISK. There exists the potential for the cashflows on the underlying floating rate bond issue to not match the floating leg of the swap. To mitigate this risk, any index chosen as the basis of a swap agreement shall be an industry recognized market index that includes but is not limited to SIFMA (Securities Industries and Financial Market Association) Municipal Swap Index or LIBOR (London Interbank Offered Rate). The potential risk of the University is making/receiving payments based on the specified index should be evaluated and quantitatively measured prior to entering into a swap.

TAX RISK. The risk that tax-exempt bond rates may unexpectedly increase or fluctuate due to changes in the tax code is called tax risk. Tax risk is present in all tax-exempt debt issuances. When entering into swaps associated with tax-exempt bonds, tax risk involves tax-exempt bond rates consequently diverging from the specified swap index (a form of basis risk). Tax risk should be evaluated prior to entering into a swap agreement. This risk will be regularly monitored.

IX. MEASURING SWAP EXPOSURE

The Regents will measure swap exposure not based on notional amount, but rather on the risk to the Regents of potential termination payments (either by the Regents or to the Regents by the counterparties). Maximum potential exposure also referred to as "Peak Exposure," will be determined by a quantitative measure that reflects the size, term, and projected volatility of the swaps. Peak Exposure provides a quantification of the Regents' worst case swap exposure. It is calculated by applying stress tests to the Regents' swaps to show how large the potential termination costs of the swaps could be if markets moved in an extremely adverse manner. Market movements are typically calculated assuming a two standard deviation change in market rates, based on historic volatilities, to provide better than 95% degree of confidence.

In order to accurately determine the potential risks from entering into new interest rate swaps, prior to entering into new swap agreements, the CFO will prepare for the President, the Chair of the Board and the Chair of the Finance Committee an updated analysis of Peak Exposure, both with and without the proposed new swap agreement. This will be attached as part of the authorization request.

In order to limit the Regents' counterparty risk, the Regents will seek to avoid excessive concentration to a single counterparty or guarantor by diversifying its counterparty exposure over time. Exposure to any counterparty or guarantor will be measured using peak exposure analysis.

X. REPORTING

The Annual Financial Report prepared by the University of California Office of the President and presented to the Board of Regents will discuss all interest rate swaps. The notes to the financial statements shall include the following information:

- A summary of swap agreements, including but not limited to the type of swap, the rates paid by the Regents and received by the Regents, indices, and other key terms.
- Market values of the Regents' swap agreements.

- The credit rating of each swap counterparty or credit enhancer (where relevant).
- Actual collateral posting by a swap counterparty, if any, per swap agreement and in total by swap counterparty.
- Any termination events that have occurred.
- A summary of derivative instrument activity during the reporting period and balances at the end of the reporting period.

The Regents may hire a financial advisor to assist in the monitoring of its swaps on an on-going basis.

B. DEFINITIONS

Authorized Representative – Includes the President and as delegated Executive Vice President – CFO.

Counterparty – The participant to which an exchange of payments is made.

Interest Rate Swap - Involves exchanging a fixed amount per payment period for a payment that is not fixed, or in the case of a basis swap, an amount based on one floating rate index for another. In an interest rate swap, the principal amount is never exchanged.

ISDA Master Agreement - The International Swaps and Derivatives Association (ISDA) is a trade organization of participants in the market for over-the-counter derivatives. The ISDA Master Agreement is a standardized contract that serves as the framework between two counterparties to enter into a swap.

London Interbank Offered Rate (LIBOR) – The interest rate that the banks charge each other for loans (usually in Eurodollars). A commonly used base index for swap agreements.

Notional Amount - Nominal or face amount that is used to calculate payments for the swap agreement.

SIFMA Index - The Securities Industry and Financial Markets Association Municipal Swap Index , produced by Municipal Market Data, is a 7-day high-grade market index comprised of tax-exempt variable rate demand bonds. It is the principal floating rate index for municipal floating rate bonds.