Accounting for Interest Rate Swaps

Joanna D. Majewska

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NORTHERN ILLINOIS UNIVERSITY

"Accounting for Interest Rate Swaps"

A Thesis Submitted to the

University Honors Program

In Partial Fulfillment of the

Requirements of the Baccalaureate Degree

With University Honors

Department of Accountancy

by

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ABSTRACT:

Interest rate swap agreements are rapidly gaining popularity as the tool of choice for managing financial uncertainties. Unfortunately, since they are relatively new and the FASB has not yet issued a formal pronouncement as to how they should be accounted for, it is up to the users of interest rate swaps to decide on the accounting method. The FASB has, however, issued several pronouncements pertaining to disclosures about interest rate swaps in the financial statements. This paper defines what interest rates are, examines current reporting requirements, analyzes selected company disclosures, and determines how interest rate swaps should be accounted for. To accomplish my goal, I have researched existing FASB pronouncements, articles already written on the topic of interest rate swaps, and I also looked at a number of annual reports to determine compliance with disclosure requirements. What I found was that even though the existing FASB pronouncements (SFAS No. 105, SFAS No. 107, and SFAS No. 119) specifically outline
what types of information should be disclosed for interest rate swap transactions, many companies meet only the minimum requirements, and some don't even meet the bare minimum. I believe that merely disclosing interest rate swaps in the footnotes to the financial statements is not enough. The swap transactions should be included on the face of the financial statements. The interest rate swap agreements should be accounted for by marking them to market and they should be divided into those held for trading purposes, with gains or losses recognized in current income, and those held for other purposes, where gains or losses would be deferred as a separate component of equity.
INTRODUCTION

Interest rate swap agreements are becoming a very popular tool for managing the financial performance of a company, yet they are probably the least understood tool available. This paper will focus on defining and classifying interest rate swaps; analyzing the purpose and magnitude of swap transactions; analyzing the current reporting requirements and accounting treatment of interest rate swaps; and a survey of how companies currently comply with interest rate swap disclosure requirements. It will also provide a recommendation for accounting for, and disclosures of, interest rate swap transactions.

INTEREST RATE SWAPS DEFINED

Interest rate swaps are customized contractual agreements between two parties that provide for an exchange of interest payments on a specified principal amount over specified period of time. One party agrees to pay a fixed rate of interest over the term of the agreement and receive a floating rate of interest. When engaging in a swap transaction, a party can go from a fixed rate of interest to a variable rate, or vice versa. The counterparty receives the fixed rate payments and pays a floating rate of interest. The swap involves only the interest on the notional amount and no principal is ever exchanged (Marki 20).

CLASSIFICATION OF INTEREST RATE SWAPS

There are several possible methods of classifying interest rate swaps. First, interest rate swaps can generally be classified into two basic types: Asset-Based Interest Rate Swaps and Liability-Based Interest Rate Swaps. The objective of an Asset-Based swap is to transform the return on a portfolio from floating to fixed for one counterparty only. Asset-Based swaps currently account for about 5 percent of all swaps transacted. On the other hand, the objective
same amount. Interest rate swaps have become one of the most widely used ways of raising fixed-rate capital.

Swaps are an arbitrage mechanism which allows the counterparties to take advantage of differing perceptions as to who is a good credit risk in the world financial market (Khoury 459). Because different borrowers face different market imperfections, some companies are able to take advantage of those imperfections through private agreements. It is important to note that the market imperfections are present not only in the U.S. but in the international financial markets as well. For example, a U.S. corporation may have a comparative advantage in obtaining a lower variable rate financing on a debt, while a European company might have an advantage in the fixed rate Eurobond market but it would prefer to obtain lower-rate financing. Through a swap arrangement then, the European company receives the U.S. floating rate and the U.S. company takes advantage of the fixed rate offered in the European market. Through the swap, both companies enjoy improved economic conditions.

According to some analysts, interest rate swaps allow interest cost savings through a much greater flexibility in portfolio management. The swaps provide “quick, inexpensive, and effective method to reduce the sensitivity of a portfolio to fluctuations in interest rates” (Khoury 463). For example, it is possible to match interest-sensitive assets with interest-sensitive liabilities in terms of their duration. The portfolio manager has the ability to vary the debt/asset mix in the portfolio by type and maturity of the instrument, without having to issue new debt or acquire or generate new assets. The riskiness of the portfolio does not change because often an intermediary financial institution, such as a commercial or an investment bank, will provide a guarantee to the swap at hand.

**MAGNITUDE OF SWAP TRANSACTIONS**

Interest rate swaps were introduced in 1978, but they did not garner attention until 1981. It was at that time that the World Bank raised $290 million in fixed rate loans and
subsequently swapped those loans for IBM floating rate liabilities in Swiss francs and Deutsche marks (Khoury 459). In 1986 the size of the swap market was estimated to be in the $200-250 billion range. Merril Lynch indicated that its swap volume grew in 1986 from $220 million a month in January to $2 billion a month in August (Khoury 459). The tremendous growth of interest rate swapping is generally attributed to the low cost of arranging the swap and the simplicity of the method. The commercial and investment banks now play more active roles in arranging and guaranteeing swap transactions for other parties. As a result, it has become easier for companies to enter into interest rate swap agreements. As more commercial and investment banks enter the market as intermediaries, those banks may bear most or all of the credit risks associated with the swaps.

Interest rate swaps lack a strong secondary market because of their heterogeneity. The swaps are private transactions made to fit the contracting counterparties. This considerable drawback is being addressed partially by requiring a collateral for the party with a weaker credit, by marking the weaker credit to market and by the purchase of implicit or explicit insurance (Khoury 461). These methods by no means represent a permanent solution, and the market still remains in the evolutionary stage.

CURRENT REPORTING REQUIREMENTS

Statement of Financial Accounting Standards No. 105

SFAS No. 105 - “Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk” is effective for fiscal years ending after June 15, 1990. This Statement establishes requirements for all entities to disclose information about financial instruments with off-balance-sheet risk of accounting loss. The risk of accounting loss from a financial instrument includes the following:
The Financial Accounting Standards Board considered the usefulness of disclosure of information for small, nonpublic, or predominantly nonfinancial entities. After considering the costs and benefits of the disclosures required by SFAS No. 105, the Board concluded that the disclosures are important for small and nonpublic entities and should be required (SFAS No. 105, ¶ 117). The Board also concluded that even though this statement would have its greatest effect on the financial reporting of those entities whose assets and liabilities are primarily financial instruments, financial instruments with off-balance-sheet risk as well as those with concentrations of credit risk may constitute a rather significant part of the assets and liabilities of predominantly nonfinancial entities also (¶ 119). Therefore, disclosures about them are useful and should be required.

Statement of Financial Accounting Standards No. 107

This statement, titled “Disclosures about Fair Value of Financial Instruments”, is effective after fiscal years ending December 15, 1992, except for entities with less than $150 million in total assets, which get an additional three years to implement the Statement. This Statement extends the existing fair value disclosure practices for some instruments by requiring all entities to disclose the fair value of financial instruments, both assets and liabilities recognized and not recognized in the statement of financial position, for which it is practical to estimate the fair value. If it is not practical to estimate the fair value, disclosure of descriptive information pertinent to estimating the value of an instrument is required. Fair values of financial instruments depict the market’s assessment of the present value of net future cash flows directly or indirectly embodied in them, discounted to reflect current interest rates as
Statement of Financial Accounting Standards No. 119

"Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments", SFAS No. 119, is effective for the fiscal years ending after December 15, 1994, except for entities with less than $150 million in total assets, for which it becomes effective for years ending after December 15, 1995. In contrast to SFAS No. 105 and 107, which require disclosure about financial instruments in general, SFAS No. 119 relates specifically to disclosures of information about derivative financial instruments. It requires disclosures either in the body of the financial statements or in the accompanying footnotes of the following information by category of financial instrument:

- the face or contract amount (or notional principal amount if there is no face or contractual amount)
- the nature and terms, including, at minimum, a discussion of the credit and market risk of those instruments, the cash requirements, and the related accounting policies (SFAS No. 119, ¶ 8).

The Statement also requires disclosure about the purpose for which the derivative financial instruments are held or issued, either for trading or for purposes other than trading (¶ 9). Trading purposes include dealing and other trading activities measured at fair value with gains and losses recognized in earnings. The following disclosures are required for instruments held or issued for trading purposes:

- the average fair value of those derivative financial instruments during the reporting period, presented together with the related end-of-period fair value, distinguishing between assets and liabilities
- the net gains or losses arising from trading activities during the reporting period, disaggregated by class, business activity, risk, or other category that is consistent with the management of those activities and where the net trading gains or losses are reported in the income statement. If disaggregation is other than by class, the
entity also shall describe for each category the classes of derivative financial instruments, other financial instruments, and nonfinancial assets and liabilities from which the net trading gains and losses arose (¶ 10).

The following disclosures are required about instruments held or issued for purposes other than trading:

- a description of the entity's objectives for holding or issuing the derivative financial instruments, the context needed to understand those objectives, and its strategies for achieving those objectives, including the classes of derivative financial instruments used

- a description of how each class of derivative financial instrument is reported in the financial statements, including the policies for recognizing (or reasons for not recognizing) and measuring the derivative financial instruments held or issued, and when recognized, where those instruments and related gains and losses are reported in the statements of financial position and income

- for derivative financial instruments that are held or issued and accounted for as hedges of anticipated transactions (both firm commitments and forecasted transactions for which there is no firm commitment)

  1. a description of the anticipated transactions whose risks are hedged, including the period of time until the anticipated transactions are expected to occur

  2. a description of the classes of derivative financial instruments used to hedge the anticipated transactions

  3. the amount of hedging gains and losses explicitly deferred

  4. a description of the transactions or other events that result in the recognition in earnings of gains or losses deferred by hedge accounting (SFAS No. 119, ¶ 11).

FASB Emerging Issues Task Force 84-7: Termination of Interest Rate Swaps

The Task Force reached a consensus that gains and losses on terminated interest rate swaps that were accounted for as hedges should not be recognized immediately in income because the termination of a swap accounted for as a hedge is closely analogous to a
terminated futures hedge described in SFAS No. 80 (EITF 84-7, ¶3). Under that Statement, gain or loss on a terminated hedge, to the extent it has been an effective hedge, must continue to be deferred and recognized when the offsetting gain or loss recognized on the hedged transaction. However, no consensus was reached as to how gains and losses on non-hedged transactions should be accounted for (¶ 4).

**FASB Emerging Issues Task Force 84-36: Interest Rate Swap Transactions**

The Task Force reiterated its consensus on Issue 84-7 that gains and losses on termination of interest rate swaps that were accounted for as hedges should not be recognized immediately in income. The Task Force discussed the accounting for a swap transaction if the purpose of entering into the transaction is to change the nature of a liability. The Task Force agreed that, if there is an underlying debt obligation on the balance sheet of the company entering into the swap transaction, the company should account for the swap arrangement like a hedge of the obligation and record interest expense using the revised interest rate, with any fees or other payments amortized as yield adjustments (EITF 84-36, ¶ 3).

**ACCOUNTING TREATMENT OF INTEREST RATE SWAPS**

**General Business Practices**

Currently, there is no accounting pronouncement that specifically addresses the accounting for interest rate swaps, therefore companies have to rely on established policies relating to financial instruments with characteristics similar to those of interest rate swaps. One of the pronouncements that has provided some guidance is SFAS No. 80, “Accounting for Futures Contracts”. According to that Statement, how an entity accounts for futures
contracts depends on the nature of the futures position and its relationship to the financial position of the entity. An entity would recognize a change in the market value of an open futures contract as a gain or loss in the period of the change in the market value unless one of two conditions occurs: the contract qualifies as a hedge of a present exposure or it relates to a qualified anticipated transaction. In order for the contract to qualify under either scenario, the company must match the contract in question with identifiable assets, liabilities, or anticipated transactions.

To the extent that a futures contract qualifies as a hedge, changes in the market value should be reported as adjustments to the carrying value of the hedged item. If the futures contract is intended to hedge any item carried at fair value, this accounting treatment is obviously inapplicable because the company simply immediately recognizes the changes in the fair market value of the contract in income. If a futures contract relates to a qualifying anticipated transaction, a firm includes the cumulative change in the contract’s fair market value in the measurement of the transaction when it actually occurs.

When the guidelines of SFAS No. 80 are applied to interest rate swaps, different accounting treatments may be appropriate depending on the nature of the swap position and its relationship to the financial position of the entity. For example, as Rue, Tosh and Francis explain, during the term of the matched and hedged swaps, the counterparts accrue the net swap settlement as an adjustment to interest expense (49). Also, in these two types of swaps, the expected future cash flows are not recorded until interest is accrued on the related debt obligation. This means that those swaps are not marked to market, even if interest rate fluctuations are of such magnitude that the contract results in substantial gains or losses. Since
matched and hedged swaps are considered to be integral components of the obligation to which they are related, the treatment of those contracts is the same as the treatment of the underlying obligation (Rue, Tosh and Francis 45). For example, if the underlying asset is carried at cost, then the value of the swap is generally also carried at cost. Under the current GAAP, changes in the market value of debt that arise from changes in market interest rates are not recognized. Therefore, the unrealized gains and losses associated with the swapped future cash flows are also not recognized. If a matched or hedged interest rate swap is terminated early, the termination will be accounted for under the guidelines of SFAS No. 80. SFAS No. 80 requires that when gains and losses are deferred (the transaction qualifies as a hedge), those gains or losses then become a part of the carrying value of the hedged item. When the hedge is terminated the carrying value of the hedged item is not adjusted, instead gains and losses continue to be deferred until the hedged item is sold or otherwise disposed of (Rue, Tosh and Francis 45).

Unmatched swaps are considered to be investments in rate speculation and some experts propose that they “be accounted for like other similar investments of the enterprises” (Rue, Tosh and Francis 46). This poses a problem, however, because there is a wide range of accounting methods used among different types of entities with respect to different instruments. Some industries carry some or all of their investments at market, while others, such as banks for example, use the cost method to account for the majority of their investments. If that isn’t confusing enough, GAAP requires only some types of investments to be carried at market by substantially all entities. Since unmatched swaps are similar to futures
contracts, that similarity would indicate that unmatched swaps should be accounted for at market.

The last type of interest rate swaps is the offsetting swap. Essentially it is a matched/hedged swap that includes an intermediary who holds an offsetting swap position when it arranges and holds counterbalancing customer swaps that effectively nullify the interest rate risk exposure accompanying each (Rue, Tosh and Francis 46). Offsetting swaps are off-balance sheet contracts carried at market value and currently the changes in the market value of these contracts are reflected in interest income or interest expense. The fees or premiums received or paid in connection with the arrangement and servicing of the swap are deferred and amortized to income (by the intermediary) or expense (by the parties to the swap) over the term of the agreement.

**FASB Developments**

The Financial Accounting Standards Board is now in the process of developing recognition and measurement criteria for derivative financial instruments. Currently, the following three proposals are under consideration: the SFAS No. 80 approach; the modified SFAS No. 80 approach; and the SFAS No. 119 approach (Munter 39). The first approach would be to fully adapt the provisions of SFAS No. 80. Under this approach, all derivatives would be marked to market value. For those not defined as hedges under that statement, the gains or losses from the market value adjustments would be included in income. The gains and losses on hedges of identifiable assets and liabilities would be treated as an adjustment to the carrying value of the asset or liability. The gains or losses on hedges of firm commitments or anticipated transactions would be deferred to the balance sheet.
This approach has precedence, in that it is consistent with the current treatment of gains and losses on futures under SFAS No. 80, but there are concerns among FASB members about reporting the deferred gains and losses on firm commitments and anticipated transactions as assets and liabilities (Munter 39). The alternative proposal that has the support of the FASB staff would require that derivatives used for trading purposes be marked to market and gains or losses on the adjustments be recognized in income. For the derivatives that are designated as hedges of existing assets, liabilities, or firm commitments, the market value adjustment would be included in equity, as long as the derivative reduced the market value exposure of the entity (Munter 39).

The final alternative includes an expansion of the second approach. It would require that all derivatives be marked to market. However, it would use the terminology presented in SFAS No. 119 to divide derivatives into those held for trading purposes and those held for other purposes (Munter 40). The gains or losses on those held for trading purposes would be recognized in current income. The gains or losses incurred on those held for risk management purposes (held for purposes other than trading) would be deferred as a separate component of equity (Munter 40). This approach would be similar to the treatment of marketable securities under SFAS No. 115.

All three of the approaches being considered by FASB involve marking derivatives to their market value. They differ, however, in the manner in which unrealized gains and losses would be accounted for under each of the proposals. Regardless of the treatment of the unrealized gains and losses, any of the proposed accounting methods would result in inclusion
of derivative instruments in the financial statements, instead of just being disclosed in the notes to the financial statements.

**Suggested Accounting Entries**

The following suggested approach for accounting for matched interest swaps was developed by Rue, Tosh, and Francis (46-49).

Assume two firms, A and B, each borrow $10 million over a ten-year period. Firm A is judged to be a better credit risk than B and can borrow this sum for ten years at a fixed rate of 9.5% or at a variable rate of the one-year T-bill rate plus 0.25%. A chooses to borrow at the fixed rate. For the same loan term and principal amount, firm B is offered a fixed rate of 11% or variable rate of T-bill rate plus 0.5%. Firm B chooses to borrow at the variable rate. Under the terms of a ten-year swap agreement between the two firms, A’s 9.5% fixed rate obligation will be transformed into variable rate debt with an interest rate equal to the Treasury bill rate less 0.5%, while B’s variable rate debt will be transformed into a fixed rate loan at 10.5%.

Assuming that the rate on B’s outstanding debt is pegged to the Treasury bill rate on an annual basis, the swap agreement would require B to pay A 1.75% on the face amount at the end of the first year. Subsequent payments will depend on the T-bill rate on the anniversary date of B’s loan. At the time the agreement is entered into and based upon the available estimates of future rates (the current rate), A expects that B will owe him a like amount over each of the following nine years. Therefore, A initially expects a ten-year receivable from B.

A should recognize the receivable from B and should reflect the time value of money (in this case 7.75%) in measuring the receivable. At the time the receivable is recorded, A will also recognize an increase in the bonds payable balance. At the end of the first year, A will
receive $175,000 from B. This amount represents a payment of one year’s accrued interest at 7.75% on the receivable plus a partial payment of the receivable balance. The accrued interest on the receivable should be shown as an offset against interest expense for the period. At the end of the year, A will also accrue and pay interest on the bond liability. Interest expense will accrue at the effective interest rate of 7.75% on the bond carrying value of $11,187,621. Interest paid will be based on the contractual rate of 9.5% and the principal amount of $10,000,000.

The general principles underlying A’s accounting for the swap are also applicable to B. Originally, B issued $10,000,000 at 8.75% T-bill rate plus 0.5% (i.e. 8.75%). At the inception of the swap B also expects to make to A 10 payments of $175,000 each. The swap agreement transforms B’s variable rate debt into an obligation with a 10.5% fixed rate. Accounting for the swap requires the recognition of a swap liability equal to the present value of the expected swap payments discounted at B’s cost of capital of 10.5%. The debit to record the swap liability is made to bonds payable/swap discount. This is reasonable because we can view the situation as B issuing 8.75% debt to creditors requiring a return of 10.5%. However, the “discount” is paid to A over the life of the swap agreement. At the end of year one, B will make a payment to A and make a payment on the outstanding debt. If at the beginning of year two the T-bill rate increases from 8.25% to 9.0%, B will reduce its swap payable and the bonds payable/swap discount account accordingly.

**Company A**

**Year One:**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Cash</td>
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<td></td>
</tr>
<tr>
<td>Bonds Payable</td>
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<td>10,000,000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1,187,621</th>
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</thead>
<tbody>
<tr>
<td>Swap Receivable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds Payable/Swap Premium</td>
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<td>1,187,621</td>
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<tr>
<td>Cash</td>
<td>175,000</td>
<td>Swap Receivable</td>
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<tr>
<td>--------------</td>
<td>---------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>92,041</td>
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<tr>
<td>Interest Expense</td>
<td>867,041</td>
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<tr>
<td>Bonds Payable/Swap Premium</td>
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<tr>
<td>Cash</td>
<td>950,000</td>
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**Year Two:**

<table>
<thead>
<tr>
<th>Cash</th>
<th>175,000</th>
<th>Swap Receivable</th>
<th>89,389</th>
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<tbody>
<tr>
<td>Interest Expense</td>
<td>85,611</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Expense</td>
<td>860,611</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds Payable/Swap Premium</td>
<td>89,389</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>950,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Company B**

**Year One:**

<table>
<thead>
<tr>
<th>Cash</th>
<th>10,000,000</th>
<th>Bonds Payable</th>
<th>10,000,000</th>
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</thead>
<tbody>
<tr>
<td>Bonds Payable/Swap Discount</td>
<td>1,052,585</td>
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<tr>
<td>Swap Payable</td>
<td>1,052,585</td>
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<td></td>
</tr>
<tr>
<td>Swap Payable</td>
<td>64,479</td>
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<tr>
<td>Interest Expense</td>
<td>110,521</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>175,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Interest Expense | 939,479 |
| Bonds Payable/Swap Discount | 64,479 |
| Cash          | 875,000 |

**Year Two (assuming rate increase):**

| Swap Payable | 423,476 |
| Bonds Payable/Swap Discount | 423,476 |
| Swap Payable   | 40,714   |
| Interest Expense/ | 59,286   |
| Cash          | 100,000  |
SURVEY OF ANNUAL REPORT DISCLOSURES

The following are examples of how some companies comply with the disclosure requirements for interest rate swaps. Only those excerpts from the financial statements and footnotes that relate specifically to interest rate swaps are included.

ADELPHIA COMMUNICATIONS CORPORATION

FINANCIAL FOOTNOTES

“ACC has entered into fixed and floating interest rate swap agreements with banks, Olympus and the Managed Partnerships to mitigate its exposure to interest rate fluctuations by attempting to achieve an appropriate balance between its fixed and variable debt. At March 31, 1995, ACC had an aggregate notional principal amount of $802,000 outstanding under such agreements, which expire from 1996 through 2000. These agreements provide for a weighted average interest rate of 7.88% at March 31, 1995. ACC is exposed to credit loss in the event of nonperformance by the counterparties, although it does not expect any such nonperformance. Net settlement amounts under these swap agreements are recorded as adjustments to interest expense during the period incurred.”

EVALUATION

Under SFAS No. 105, the company does disclose the notional amount of interest rate swap agreements. However, the discussion of credit and market risks, the nature and terms of
the instruments, and accounting policies is minimal. There is no mention at all of the cash requirements or policies for collateral requirements.

SFAS No. 107 requires the disclosure of the fair value of the financial instruments used. Adelphia is not disclosing the fair value of its swap contracts nor the reason for this lack of disclosure. Since the company is violating most of the requirements of SFAS No. 105 and 107, it is also in turn violating some of the more important requirements of SFAS No. 119. It is, however, disclosing that interest rate adjustments are made to interest expense during the period incurred. That disclosure would be more valuable to the financial statements users if the amounts of adjustments were presented.

AIRGAS, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

“(k) Financial Instruments - In hedging interest rate exposure, the Company enters into interest rate swap agreements. These instruments are not entered into for trading purposes and the Company has the ability and intent to hold these instruments to maturity. The Company only uses non-leveraged instruments. When interest rates change, the difference to be paid or received is accrued and recognized as interest expense over the life of the agreement. The fair values of the Company’s financial instruments are estimated based on quoted market prices for the same or similar issues.

Swap agreements - In managing interest rate exposure, principally under the Company’s floating rate revolving credit facilities, the Company has entered into thirteen interest rate swap agreements during the period from June 1992 through March 31, 1995. The
interest rate swap agreements are with major financial institutions having a total notional principal amount of $138 million at March 31, 1995. Approximately $119 million of the swap agreements require fixed interest payments based on an average effective rate of 7.3% for remaining periods ranging between 3 and 8 years. The remaining $19 million of swap agreements require floating rates (6.5% at March 31, 1995). The effect of the swap agreements was to increase interest expense $1.2 million and $1.4 million in 1995 and 1994, respectively. Under the terms of four of the swap agreements, the Company has elected to receive the discounted value of the counterparty’s interest payments up front. At March 31, 1995, approximately $2.0 million and $7.0 million of such payments were included in accrued expenses and other non-current liabilities respectively.

The Company continually monitors its positions and the credit ratings of its counterparties, and does not anticipate nonperformance by the counterparties. The net gain to settle all interest rate swap agreements at March 31, 1995 was approximately $900,000.

The aggregate maturities of the Company’s interest rate swaps by type of swap for the five years ending March 31, 2000 and thereafter are as follows (in thousands):

<table>
<thead>
<tr>
<th>Years Ending March 31,</th>
<th>Notional Principal Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pay-Fixed</td>
</tr>
<tr>
<td>1998</td>
<td>$30,000</td>
</tr>
<tr>
<td>1999</td>
<td>12,500</td>
</tr>
<tr>
<td>2000 and thereafter</td>
<td>76,074</td>
</tr>
</tbody>
</table>

**EVALUATION**

As required by SFAS No. 105, the Company discloses the notional amounts of the swap contracts, as well as the nature and terms of those contracts. As for disclosing the fair
market value of the interest rate swaps, the Company states that the fair values of the financial instruments used are estimated based on quoted market prices for the same or similar issues, but the only concrete disclosure is the statement that "the net gain to settle all interest rate swap agreements at March 31, 1995 was approximately $900,000."

Under SFAS No. 119, the disclosures state that interest rate swaps are used for nontrading purposes, that the resulting changes in interest rates are accrued and recognized as interest expense over the life of the agreement. The dollar amount of those changes is also disclosed for selected years.

AMERICAN AIRLINES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF ACCOUNTING POLICIES

DERIVATIVE FINANCIAL INSTRUMENTS: (...) Net settlements under interest rate swap agreements are reflected in interest expense on the accrual basis.

6. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

As part of the Company’s risk management program, American uses a variety of financial instruments, including interest rate swaps (...). The Company does not hold or issue derivative financial instruments for trading purposes.

NOTIONAL AMOUNTS AND CREDIT EXPOSURES OF DERIVATIVES

The notional amounts of derivative financial instruments summarized in the tables which follow do not represent amounts exchanged between the parties and, therefore, are not a measure of the Company’s exposure resulting from its use of derivatives. The amounts exchanged are calculated based on the notional amounts and other terms of the instruments, which relate to interest rates, exchange rates or other indices.

The Company is exposed to credit losses in the event of nonperformance by counterparties to these financial instruments, but it does not expect any of the counterparties to fail to meet its obligations. The credit exposure related to these financial instruments is represented by the fair value of contracts with a positive fair value at the reporting date,
reduced by the effects of master netting agreements. To manage credit risk, the Company selects counterparties based on credit ratings, limits its exposure to a single counterparty under defined guidelines, and monitors the market position of the program and its relative market position with each counterparty. The Company also maintains industry-standard security agreements with the majority of its counterparties which may require the Company or the counterparty to post collateral in certain situations. As of December 31, 1994, no collateral was required under these agreements.

INTEREST RATE RISK MANAGEMENT

American enters into interest rate swap contracts to effectively convert a portion of its fixed-rate obligations to floating-rate obligations. Under the contracts, American agrees with other parties to exchange, at specified intervals, the difference between fixed-rate and floating-rate interest amounts calculated on a notional principal amount. Because American's operating results tend to be better in economic cycles with relatively high interest rates and its capital investments tend to be financed with long-term fixed-rate instruments, interest rate swaps in which American pays the floating rate and receives the fixed rate are used to reduce the impact of economic cycles on American's net income.

The following table indicates the notional amounts and fair values of the Company's interest rate swap agreements (in millions):

<table>
<thead>
<tr>
<th></th>
<th>December 31 1994</th>
<th>December 31 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Notional Amount</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Interest Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swap Agreements</td>
<td>$ 1,980</td>
<td>$(174)</td>
</tr>
</tbody>
</table>

The fair values represent the amount the Company would have to pay to terminate the agreements at December 31, 1994 and 1993, respectively. The rise in interest rates in 1994 resulted in a decrease in the market value of the interest rate swap agreements.
At December 31, 1994, the weighted average remaining duration of the interest rate swap agreements in effect was 4.6 years. The weighted average floating rates and fixed rates on the contracts outstanding were:

<table>
<thead>
<tr>
<th></th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1994</td>
</tr>
<tr>
<td>Average floating rate</td>
<td>5.720%</td>
</tr>
<tr>
<td>Average fixed rate</td>
<td>5.207%</td>
</tr>
</tbody>
</table>

Floating rates are primarily based on LIBOR and may change significantly, affecting future cash flows. The net impact of the interest rate swap program on interest expense was a decrease of $14 million and $6 million in 1994 and 1993, respectively. The impact on the Company's weighted-average borrowing rate for the periods presented is immaterial."

**EVALUATION**

American Airlines, Inc. discloses the reasons for utilizing interest rate swaps, extensively discusses the credit risk exposures, and steps taken to prevent losses. The notional amounts and the fair values are disclosed, along with average interest rates corresponding with the contracts. The company also discusses how the net settlements under the interest rate swap agreements are reflected in the financial statements, and what the actual impact of interest rate swaps on the interest expense is for the years under discussion.

**RECOMMENDATIONS**

The use of interest rate swaps to manage financial risks has been increasing rapidly over the past few years. Unfortunately, some companies are using the swaps without fully understanding their possible ramifications. Even though the Financial Accounting Standards Board has issued several statements regarding the required disclosures relating to the use of interest rate swaps, some companies are disclosing only the bare minimum of the information
required and others are not even meeting the required minimum. I think that FASB will need to issue a standard specifically stating how interest rate swap contracts should be accounted for very soon, since there are several possible methods that can be used. My suggestion is to use the third approach (discussed on page 14), because it is the only proposal requiring that all derivatives, not only those held for trading purposes, be marked to market.
EXAMPLE 1- Nonfinancial Entity

Note U: Summary of Accounting Policies

Interest Rate Swap Agreements

The differential to be paid or received is accrued as interest rates change and is recognized over the life of the agreements.

Note V: Interest Rate Swap Agreements

The Corporation has entered into interest rate swap agreements to reduce the impact of changes in interest rates on its floating rate long-term debt. At December 31, 19XX, the Corporation had outstanding 2 interest rate swap agreements with commercial banks, having a total notional principal amount of $85 million. Those agreements effectively change the Corporation’s interest rate exposure on its $35 million floating rate notes due in 1993 to a fixed 12 percent and its $50 million floating rate notes due in 1998 to a fixed 12.5 percent. The interest rate swap agreements mature at the time the related notes mature. The Corporation is exposed to credit loss in the event of nonperformance by the other parties to the interest rate swap agreements. However, the Corporation does not anticipate nonperformance by the counterparties.
EXAMPLE 2- Financial Entity

Note X: Summary of Accounting Policies

Interest Rate Swap Agreements

The Corporation is an intermediary in the interest rate swap market. It also enters into interest rate swap agreements both as trading instruments and as means of managing its interest rate exposure.

As an intermediary, the Corporation maintains a portfolio of generally matched offsetting swap agreements. These swaps are carried at market value, with changes in value reflected in non-interest income. At the inception of the swap agreements, the portion of the compensation related to credit risk and ongoing servicing is deferred and taken into income over the term of the swap agreements.

Interest rate swap agreements used in trading activities are valued at market. Realized and unrealized gains and losses are included in trading account profits. Unrealized gains are reported as assets and unrealized losses are reported as liabilities. The differential to be paid or received on interest rate swap agreements entered into to reduce the impact of changes in interest rates is recognized over the life of the agreements.

Note Y: Financial Instruments with Off-Balance-Sheet Risk

The Corporation is a party to financial instruments with off-balance-sheet risk in the normal course of business to meet the financing needs of its customers and to reduce its
own exposure to fluctuations in interest rates. These financial instruments include, among others, interest rate swaps. Those instruments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the statement of financial position. The contract or notional amounts of those instruments reflect the extent of involvement the Corporation has in particular classes of financial instruments.

The Corporation controls the credit risk of its interest rate swap agreements through credit approvals, limits, and monitoring procedures. Unless noted otherwise, the Corporation does not require collateral or other security to support financial instruments with credit risk.

Interest rate swap transactions generally involve the exchange of fixed and floating rate interest payment obligations without the exchange of the underlying principal amounts.

Though swaps are also used as part of asset and liability management, most of the interest rate swap activity arises when the Corporation acts as an intermediary in arranging interest rate swap transactions for customers. The Corporation typically becomes a principal in the exchange of interest payments between the parties and, therefore, is exposed to loss should one of the parties default. The Corporation minimizes its exposure to the interest rate risk inherent in intermediated swaps by entering into offsetting swap positions that essentially counterbalance each other.

Entering into interest rate swap agreements involves not only the risk of dealing with counterparties and their ability to meet the terms of the contracts but also the interest rate risk associated with unmatched positions. Notional principal amounts often are used to
express the volume of these transactions, but the amounts potentially subject to credit risk are much smaller.
APPENDIX 2 -  
SAMPLE DISCLOSURES UNDER SFAS NO. 107 (¶31-32)

Example 1 - Financial Entity

Note V: Disclosures about Fair Value of Financial Instruments

The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate that value:

*Investment securities and trading account assets*

For securities and derivative instruments held for trading purposes (which include interest rate swaps) and marketable equity securities held for investment purposes, fair values are based on quoted market prices or dealer quotes. For other securities held as investment, fair value equals quoted market price, if available. If a quoted market price is not available, fair value is estimated using quoted market prices for similar securities.

*Interest rate swap agreements*

The fair value of interest rate swaps (used for hedging purposes) is the estimated amount that the Bank would receive or pay to terminate the swap agreements at the reporting date, taking into account current interest rates and the current credit-worthiness of the swap counterparties.

The estimated fair values of the Bank’s financial instruments are as follows:

<table>
<thead>
<tr>
<th>Financial assets:</th>
<th>19X9</th>
<th>19X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and short-term investments</td>
<td>$XXX</td>
<td>$XXX</td>
</tr>
<tr>
<td>Trading account assets</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>Investment securities</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>Loans</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>Less: allowance for loan losses</td>
<td>(XXX)</td>
<td>XXX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carrying Amount</th>
<th>Fair Value</th>
<th>Carrying Amount</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$XXX</td>
<td>$XXX</td>
<td>$XXX</td>
<td>$XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
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<tr>
<td>XXX</td>
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<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>(XXX)</td>
<td></td>
<td>XXX</td>
<td></td>
</tr>
</tbody>
</table>
Financial liabilities:
- Deposits XXX XXX XXX XXX
- Securities sold not owned XXX XXX XXX XXX
- Long-term debt XXX XXX XXX XXX

Unrecognized financial instruments:
- Interest rate swaps
  - In a net receivable position XXX XXX XXX XXX
  - In a net payable position (XXX) (XXX) (XXX) (XXX)
- Commitments to extend credit (XXX) (XXX) (XXX) (XXX)
- Standby letters of credit (XXX) (XXX) (XXX) (XXX)
- Financial guarantees written (XXX) (XXX) (XXX) (XXX)

* The amounts shown under "carrying amount" represent accruals or deferred income (fees) arising from those unrecognized financial instruments. Interest rate swaps and other derivative instruments entered into as trading activities are included in "trading account assets" or "securities sold not owned."
WORKS CITED


