

Limited Benefit Method: An Alternative to the Multiple Investment Sinking Fund Yield

BY RAY JAMES

Ray James from Ivory Consulting provides an overview of the various methods used to measure lease tax benefits, including the alternate limited benefit method, which has become popular as focus has shifted to both leverage and lease accounting considerations.



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Have you ever employed the Multiple Investment Sinking Fund (MISF) yield in analyzing your lease transactions? Did you find it useful? Some people prefer using it because it is an established industry standard, while others believe it has pitfalls.

For many years, the MISF yield has been used to analyze lease transactions. Typically, the MISF is used in the same manner from one leasing company to the next, which makes it a useful measurement when buying and selling lease transactions. However, the MISF's greatest weakness is that it does not reflect the impact of deferred tax benefits on most leasing companies' portfolios because leasing companies do not typically recognize the tax benefits in the same way that the MISF calculation recognizes them. Therefore, more and more companies are turning to an alternative to the MISF yield for analyzing lease transactions. This article describes the attractive alternative.

To begin a defensible analysis of MISF and its alternative, it is necessary to examine the major ways tax benefits are measured in the equipment finance industry. It is important to understand these differences for a number of reasons:

- You may not be receiving proper credit for tax benefits generated from your leases. If you are a subsidiary of a larger organization, you need to have an appropriate tax sharing agreement based on mutually recognized tax benefits that are pushed down to you.
- Some lessors have begun to calculate the tax benefits associated with leasing in ways that produce very different results than when using traditional methods.

- Knowledge of others' calculation approaches could help you win a deal if you know how a competitor treats tax benefits.
- Knowledge of others' methods could help you in seeking and negotiating with suitable syndication partners.

With that background, a short explanation of the two primary ways lessors have historically measured yields associated with equipment leasing is useful.

Lease Tax Benefits Not Recognized — Lease Treated as a Loan Using the Internal Rate of Return Calculation

Some lenders view leasing simply as a product with flexibility and a preferred collection position over lending and do not bother to recognize the associated tax benefits. In many cases, this occurs with small-ticket leases where the rate of interest is very significant and the additional yield from tax benefits is therefore relatively small. Usually this situation is limited to small-ticket leasing or high-risk lending.

To illustrate, this lease is nothing more than a loan for yield measurement purposes, producing for a simple internal rate of return (IRR) as the effective rate:

Assumptions

Asset cost:	\$100,000
Deferred tax:	n/a
Simple loan rate:	4.00%
Effective rate:	4.00% (simple IRR)
Tax benefit to lessor:	0.00%

Traditional Method

Historically, lenders that want to measure tax benefits have used a widely accepted method, which, for lack of a better name, we refer to as the traditional method. This method essentially determines the amount of current tax due and the amount of deferred tax due at some point in the future, and applies this cash flow to reducing the investment balance in the asset. It is calculated on an after-tax basis so that both revenue and expenses are expressed after tax. Thus, with both current tax and deferred tax recognition, the basis in the asset is paid down faster near the beginning of the lease and then more slowly toward the end of the lease.

The traditional method assumes that a company always has an ongoing use for conventional tax benefits during the measurement period. Ultimately, this is a zero-sum tax flow benefit as the current and deferred tax balances reverse out to zero by the end of the lease. However, the front-loading of the benefits enhances the yield. The yield that is calculated is an after-tax yield and is traditionally converted into a pre-tax equivalent yield by dividing the after-tax yield by one minus the tax rate. This is commonly termed the “pre-tax equivalent MISF nominal yield.”

Consider the transaction depicted on the right:

In this straightforward example, the traditional method uses the pre-tax cash flows less the actual taxes paid to produce the after-tax nominal yield. This after-tax nominal yield is divided by one minus the tax rate (1.00-0.35), to produce the pre-tax nominal yield (4.63%), which is compared to the basic IRR to determine the value of the lease tax benefits. In this case, it was 0.63%. Of note, the taxes for 2017, 2018 and 2019 were negative in the chart to the right, which means that these were tax savings and paid down the investment. The tax benefit in the early years was offset by larger tax payments in the later years.

Limited Benefit Method

Over the last several years, an alternate tax benefit measurement, or yield, has become popular. This method, the limited benefit method, came into being as some companies began to focus on both leverage and lease accounting considerations. Perhaps the Basel II discussions on risk and leverage ratios have made leverage an increased focus for many lenders. *Barron's Accounting Handbook* defines leverage (debt to equity ratio) as total liabilities divided by shareholders' equity.¹ Per SFAS 109 and the *Vest Pocket CPA* handbook, “the deferred tax liability, usually enjoyed by the lessor, is brought over from the liability side of the balance sheet

Assumptions

Asset cost:	\$100,000
Term:	60 months
Rent:	\$1,534.87 (advance)
Residual:	20% or \$20,000
Tax depreciation:	5-year MACRS
Lessor tax:	35% with December tax year-end
Commencement:	July 1, 2017

Period Ending	Equity & Expenses	Rent & Residual	Taxes	After-Tax Cash Flow
30-Dec-17	\$100,000.00	\$9,209.23	\$(3,776.77)	\$(87,014.00)
30-Dec-18		\$18,418.47	\$(4,753.54)	\$23,172.00
30-Dec-19		\$18,418.47	\$(273.54)	\$18,692.00
30-Dec-20		\$18,418.47	\$2,414.46	\$16,004.00
30-Dec-21		\$18,418.47	\$2,414.46	\$16,004.00
30-Dec-22		\$29,209.23	\$8,207.23	\$21,002.00
TOTAL	\$100,000.00	\$112,092.33	\$4,232.32	\$7,860.01

Results

Pre-tax IRR of rents plus residual:	4.00%
After-tax nominal yield (rents, residual & taxes):	3.01%
Pre-tax nominal yield (3.01% / (1 - tax rate)):	4.63%
Tax benefit to lessor:	0.63%

to reduce the lessor's investment only when a leveraged lease is involved.”² Therefore, it can be argued that the only real benefit of the current and deferred tax liability is the associated reduction in borrowed debt and the associated interest expense.

Note that the lessor must have recourse debt for the limited benefit method yield to be relevant. Like the traditional method, the limited benefit method calculates the value of the deferred tax by assuming that a company has an ongoing use for conventional tax benefits during the measurement period. Rather than pay down the investment with the current and deferred tax, this method simply adds the interest saved through reduced recourse debt to the pre-tax revenue to determine a new yield. The yield enhancement from the interest reduction is usually much less under the limited benefit method than under the traditional method. > >

¹ “Barron's Accounting Handbook,” Joel Siegel & Jae Shim, *Barron's Educational Series, Inc.*, 2006. (pages 251-252).

² “The Vest Pocket CPA”, Joel Siegel, Nick Dauber & Jae Shim, *John Wiley & Sons, Inc.*, 2008. (page 173).

Assumptions

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Residual:	20% or \$20,000
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Lessor tax:	35% with December tax year-end
Commencement:	July 1, 2017
Borrowing rate of lessor:	2.00%

Period Ending	Equity & Expenses	Rent & Residual	Memo: Average Current & Deferred Tax	Pre-tax Interest on Current & Deferred Tax	Pre-tax Cash Flow+ Interest on Current & Deferred Tax
30-Dec-17	\$100,000.00	\$9,209.23	\$728.00	\$14.56	\$(90,776.20)
30-Dec-18		\$18,418.47	\$6,483.00	\$129.66	\$18,548.18
30-Dec-19		\$18,418.47	\$10,297.00	\$205.94	\$18,624.41
30-Dec-20		\$18,418.47	\$10,345.50	\$206.91	\$18,625.38
30-Dec-21		\$18,418.47	\$8,777.50	\$175.55	\$18,594.02
30-Dec-22		\$29,209.23	\$4,812.50	\$96.25	\$29,305.48
TOTAL	\$100,000.00	\$112,092.33		\$828.87	\$12,921.20

Results

Pre-tax IRR of rents plus residual:	4.00%
After-tax nominal yield (rents, residual & taxes):	N/A
Pre-tax nominal yield:	4.27%
Tax benefit to lessor:	0.27%

With the equipment leasing industry beginning to use two different methods to determine tax benefits — the traditional and limited benefit methods — the selection of a method will also be a determinant of profitability.

Consider the assumptions above, which now also include the lessor's borrowing rate:

The limited benefit method uses the pre-tax cash flows plus interest saved from the reduced borrowing (calculated using the lessor's borrowing rate), to produce the pre-tax nominal yield. In this example, the pre-tax nominal yield (4.27%) is compared to the basic IRR (4.00%) to determine the value of the deferred tax, producing a benefit of 0.27%. The deferred tax grows to a maximum around the mid-point of the lease and declines to zero with the last tax payment.

The equipment leasing industry has known for decades that, all other things being equal, tax benefits significantly enhance the lessor's yield, making the lease product more profitable than a straight loan. Since most equipment lessors approach the tax and yield analyses the same way, differences in tax benefit calculations are usually due to differing tax rates and tax year-ends. For example, lessors have recognized that originating a lease near the end of a lessor's tax year provides the largest deferred tax benefit. State and local taxes may produce a further deferred tax benefit. As a result, some lessors

choose to syndicate transactions based upon the fiscal year end of the investor, and/or based on state and local tax situations. With the equipment leasing industry beginning to use two different methods to determine tax benefits — the traditional and limited benefit methods — the selection of a method will also be a determinant of profitability.

Summary from previous examples (shown to the right):

This article represents the thoughts and support of many lessors in the equipment finance industry who have spent time researching the issues discussed herein and developing the limited benefit approach with Ivory Consulting, the makers of SuperTRUMP. Ivory Consulting is sharing these thoughts so that lessors may review these concepts internally and with their advisors as appropriate. Ivory Consulting does not offer tax advice — please consult your tax advisor. Thank you to everyone who contributed to these analyses. ■

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Assumptions

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Tax depreciation:	5-year MACRS
Lessor tax:	35% with December tax year-end
Commencement:	July 1, 2017
Borrowing rate of lessor:	2.00%

As a Loan	4.00%	4.00%	n/a
Traditional	4.00%	4.63%	0.63%
Limited Benefit	4.00%	4.27%	0.27%



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tomorrow.
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with that.

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