Equipment ownership is a hallmark of equipment leasing that sets it apart from other types of financing transactions. However, an equipment lessor may not desire to be exposed to all the risks of equipment ownership, especially the risk of a decline in the value of the equipment at the end of the lease term below the lessor’s expected value. An equipment lessor can reduce its exposure to a decrease in value of leased equipment by purchasing a residual value guarantee. Another way an equipment lessor may reduce its residual exposure is to realize value from its residual interest earlier than the end of the lease term by selling or exchanging all or a portion of its residual value.

Residual values are the non-financial component of a lease investment. Unlike accounting standards for transfers, exchanges and guarantees of financial assets, there is minimal accounting guidance pertaining to residual value transactions. As a result, accounting for these transactions relies on the application of principles rather than specific rules, especially since these transactions often involve considering the residual value component of a lease separately from the financial component of the lease. Fortunately, the applicable principles are familiar to accountants: recognizing transfers of risks and rewards, recognizing obligations incurred, and conservatism. In fact, conservatism is the overriding theme of the applicable accounting standards.

There is minimal accounting guidance pertaining to residual value transactions. As a result, accounting for these transactions relies on the application of principles rather than specific rules.
may receive an up-front fee, a fee during the term of the guarantee, a portion of the sales proceeds upon sale of the leased asset at lease maturity, or some combination of these receipts, as compensation for providing the guarantee.

**Guarantor accounting**—The guarantor’s accounting for a residual value guarantee is prescribed by FASB Interpretation No. 45, *Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, an interpretation of FASB Statements No. 5, 57, 107 and rescission of FASB Interpretation No. 34 (FIN 45). However, FIN 45 specifically excludes guarantees issued by insurance companies that are accounted for in accordance with accounting standards for insurance companies, including residual value insurance accounted for under those accounting standards. Also, this discussion assumes the guarantor is a third party to the lease transaction, not the lessee. FIN 45 also excludes lessee residual value guarantees from its scope when the lease is a capital lease.

Under FIN 45, the guarantor must recognize the guarantee on its balance sheet by recording a liability, even if it never expects to actually make a payment as a result of the guarantee. The liability is the accounting entry required to acknowledge the fact that, as described in FIN 45, the guarantor has obligated itself to stand ready to perform under the terms of the guarantee. The initial amount of the liability must be its fair value. FIN 45 specifically distinguishes this liability from the liability the guarantor would incur if it had to make a payment under the guarantee. The easiest way to think about the initial fair value of the obligation to stand ready to perform is as the flip side of the fee a guarantor would charge to enter into the guarantee, assuming it is a stand-alone transaction. In this simple situation, the fee collected is equal to the liability incurred. And, because the guarantor collected a fee, the fee received is the offset to the initial liability entry. After recording the initial liability and fee received, the guarantor must determine when it can recognize the fee as income and when to reduce the liability, if appropriate, ultimately to zero.

Revenue should generally be recognized equally each period during the guarantee term, which is typically the same as the lease term. This revenue recognition method is supported by analogy to Emerging Issues Task Force Issue No. 85-20, *Recognition of Fees for Guaranteeing a Loan* (EITF85-20). EITF85-20 requires a guarantor of another party’s debt to recognize any fees received in exchange for the guarantee over the term of the guarantee. As guarantee fee income is recognized, the initial liability will be reduced. The liability will be zero at the end of the guarantee/lease term and all of the fee income will have been recognized. If the guarantor is entitled to additional compensation based on the sales price of the leased asset at lease termination, this additional income should not be recognized until the leased asset is sold and the amount earned is known with certainty and fully realizable.

The FIN 45 liability in this example functions like deferred income, but is described differently. FIN 45 does not prescribe how to account for the liability after it is initially recorded, so it is up to the guarantor to make sure accounting for the liability in this manner over the term of the guarantee is appropriate given the transaction.

No accounting guidance specifically supports deferring costs incurred to originate residual value guarantees and incremental transaction costs associated with guarantees should not be deferred. Residual value guarantees are not lending transactions and are not included in the scope of FASB Statement No. 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases*. As a result, the timing of transaction income may not be matched with the timing of transaction costs.

Residual value guarantees expose the guarantor to equipment value risks, similar to the equipment value risks associated with owned assets. The accounting standard covering losses on residual value guarantees is FASB Statement No. 5, *Accounting for Contingencies* (FAS 5). In accordance with FAS 5, the guarantor should recognize a loss on the guarantee, if any, in the period it determines a loss is both probable and reasonably estimable. A guarantor should review its residual value guarantee periodically to determine whether events or changes in circumstances indicate it should record a loss related to the guarantee. Although the accounting literature does not require periodic reviews of residual value guarantees for potential losses, it is a best practice for public companies to review their residual value guarantees for potential losses at least quarterly. Continu-
ing with the simple guarantee example, if the guarantor concludes it incurred a loss on the residual value guarantee, it should cease income recognition and consider the remaining liability on its balance sheet when determining the amount of the loss to be recognized (the remaining liability would reduce the loss).

To summarize, when a guarantor receives a fee to guarantee the value of leased assets in the future, the guarantor must:

1) record a liability to recognize its obligation to stand ready to perform and the amount of the liability must be its fair value;
2) record the fee received, which will equal the liability at the inception of the guarantee;
3) expense transaction costs as incurred and
4) recognize guarantee fee income over the term of the guarantee equally each period by reducing the initial liability.

Also, the guarantor should periodically review the guarantee and record a loss, if any, in accordance with FAS 5 in the period the loss is incurred.

In addition to recognizing the guarantee in the financial statements, FIN 45 also requires the following disclosures in notes to the financial statements: the total amount guaranteed (undiscounted); the current carrying amount of the liability for the guarantor’s obligations under the guarantee; and, separately, any guarantee provisions that would allow them to recover amounts paid under the guarantee. Since a guarantor’s potential payment under a residual value guarantee is generally reduced by the fair value of the guaranteed asset, FIN 45’s requirement to disclose the total amount guaranteed is conservative.

**Lessor accounting**—When a lessor enters into a residual value guarantee has a direct impact on the classification of the lease and the recognition of lease income over its term. If the guarantee is present at lease inception, the guaranteed portion of the residual value is considered a minimum lease payment, a receivable with credit risk, instead of an unguaranteed residual value.
When a lessor enters into a residual value guarantee has a direct impact on the classification of the lease and the recognition of lease income over its term.

subject to equipment value risk. As a result, the lease is more likely to be classified as a direct financing lease.

On the other hand, if the residual value guarantee is obtained after the inception of the lease (assuming a third party guarantee), the impact of the guarantee in the lessor’s financial statements is deferred until lease maturity. The guarantee is not reflected in the lessor’s lease accounting because the classification of the lease is determined at lease inception. Similarly, if the lessor obtains an increase in the amount of a residual value guarantee during the lease term, the increase is not reflected in the lessor’s lease accounting or recognized in the lessor’s financial statements prior to lease maturity. FASB believes that recognizing an increase in the amount of a residual value guarantee prior to the end of the lease term might result in recognizing revenue before it is realized, which is inconsistent with fundamental accounting principles. (See FASB Technical Bulletin No. 79-14, Upward Adjustment of Guaranteed Residual Values)

The difference in accounting treatment reflects the application of the historical cost model and, again, the convention of conservatism.

Value Sharing & Sales

Instead of, or in addition to, reducing its equipment value risk, a lessor may wish to realize value from its residual investment prior to lease maturity by selling or exchanging an interest in its residual value. The important concepts that apply to accounting for these transactions are based on transfers of risks and rewards of ownership and, once again, conservatism.

Purchaser accounting—An investment in a residual value is the right to all or a portion of the benefits of the leased asset at the end of the lease term, in the form of the right to own the asset or the right to receive all or a portion of the proceeds from the sale or release of the asset at the end of the lease term. An investment in a residual value should initially be recognized on the purchaser’s balance sheet at an amount equal to its fair value, which would typically equal its cost. Because the investor would expect a return on its investment, fair value at acquisition would be less than the amount the purchaser expects to collect at lease maturity. However, the purchaser is not permitted to record any income on its investment in the residual between the acquisition date and lease maturity. Instead, income on the investment is recognized at the end of the lease term when its profit is determined with certainty.

As with the accounting standard for residual value guarantees, the accounting standard for investments in residuals has a conservative bias. In FASB Technical Bulletin No. 86-2, Accounting for an Interest in the Residual Value of a Leased Asset (FTB 86-2), FASB explained its reasoning for prohibiting a residual interest owner from recognizing income on its residual investment, even though a lessor would recognize income on the same residual investment if it was part of a lease. Once again, FASB reasoning centered on the notion that an interest in a residual value is not realized and cannot be considered realizeable until ultimate sale or disposition. As one participant in the discussion put it “one should not count your chickens before they hatch.” They added that it is not appropriate to analogize to the residual portion of a lease agreement to support income recognition when the financing elements of a lease transaction are not present. In fact, even a lessor that sells substantially all its lease payments receivable but retains its residual investment is prohibited from recognizing income on its residual investment. The prohibition against recognizing income on a residual investment does not apply if the acquired residual value was guaranteed at lease inception because the guarantee converted the residual to a financial asset and accruing income on a financial asset is not prohibited.

An owner of a residual interest should review its residual value investment periodically to determine whether events or changes in circumstances indicate it is impaired. FTB 86-2 prescribes accounting for impairments of residual investments. Although FTB 86-2 does not require periodic impairment reviews of residual investments, it is a best practice for public companies to review their residual investments for potential losses at least quarterly. Under FTB 86-2, an investment in a residual interest is impaired if its fair value has declined below its book value and the decline is determined to be other than temporary. This other-than-temporary criterion is the same as the criterion lessors must use to determine if the residual value component of a direct financing lease investment is impaired. Other-than-temporary, as it relates to residual interests and leases, is not specifically defined in the accounting literature. Although FASB issued Staff Position 115-1/124-1, The Mean-
ing of Other-Than Temporary Impairment and Its Application to Certain Investments in November 2005, residual investments are excluded from the scope of this guidance. Therefore, an investor’s judgment will be required to determine whether a residual investment is impaired, keeping the spirit of this requirement in mind. Once a residual investment has been written down, it cannot be increased in the future, even if its fair value increases. Note that even though the specific criteria for determining whether a residual investment is impaired is different than the criteria for determining whether a loss has been incurred on a residual value guarantee, in practice an investor and a guarantor should probably come to similar impairment or loss conclusions given the same set of circumstances.

**Lessor (seller) accounting**—The primary accounting determination that the lessor must make is whether the sale or exchange of a residual interest can be accounted for as a sale. No accounting standards specifically address sales of residual values, but there are at least two areas that provide guidance by analogy. The criteria provided in FASB Statement No. 13, *Accounting for Leases* (FAS 13) to determine whether the sale of an asset subject to an operating lease can be recorded as a sale can also be used to help determine whether the sale of a residual value interest should be accounted for as a sale. The criteria in EITF Issue No. 88-18, *Sales of Future Revenue*, may also be helpful to determine whether a sale has occurred. The underlying concept in this accounting literature is that a sale of property should be accounted for as a sale unless the seller retains...
An owner of a residual interest should review its residual value investment periodically to determine whether events or changes in circumstances indicate it is impaired.

Substantial risks of ownership in the property. A seller may retain substantial risks of ownership by assuring the recovery of the purchaser’s investment in the residual interest or making other commitments that expose the seller to substantial equipment value risks associated with the residual interest. Judgment may be required to determine whether substantial risks of ownership have been transferred.

If the lessor does not retain substantial risks of ownership, then it should account for the sale or exchange as a sale by reducing the residual value component of the lease by the portion sold, and recording a gain or loss on sale based on the difference between the sales price and the book value of the residual interest sold. The book value of the residual interest should include (be reduced by) its associated unearned income. Total future lease income would be reduced, since the lessor’s investment in the lease would be smaller, but the accounting yield on the investment should not change as a result of the sale.

If the lessor retains substantial risks of ownership, then the proceeds received from the sale should be accounted for as a borrowing. To account for the sale as a borrowing, the lessor must initially record a liability equal to the consideration received. During the remaining term of the lease the lessor should record interest expense using the interest rate implicit in the sale, which is the rate that would cause the initial liability to grow to the portion of the residual value sold as of the end of the lease. At lease maturity, when the asset is sold and the portion of the sales proceeds due to the residual interest owner is paid, the liability would be reduced to zero.

Note that this discussion only applies to the unguaranteed residual value component of direct financing leases, including leveraged leases. Although operating leases have a residual value (also referred to as salvage value), the residual value component of the lease is not separately reported on the balance sheet. Therefore, any discussion of accounting for a sale or exchange of the residual value component of an operating lease would be a discussion pertaining to the entire operating lease asset. These types of transactions would likely not meet the criteria to be accounted for as sales. FASB Statement No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities, prescribes accounting standards for sales or transfers of guaranteed residual values.

With regard to sales of the unguaranteed residual value component of leveraged leases, these principles apply. However, these transactions may be complex. For example, a lessor may write an in-the-money call option on its residual value instead of selling an interest in its residual value. This option structure, the unique leveraged lease accounting model and the absence of specific accounting literature addressing these transactions add complexity to accounting for these transactions. The lessor will need to determine whether immediate recognition of the sale is appropriate based on the terms and substance of the transaction. Instead, it may be preferable to account for the option proceeds as a change in important assumption in the leveraged lease cash flows, or record the option proceeds as a liability until the option expires or is exercised.

If the lessor transfers an interest in the residual value in exchange for services related to the origination of the lease, then the lessor should account for the exchange as if it sold the residual interest. However, instead of recording proceeds received and gain or loss on sale, the lessor should reduce the lease’s residual value and unearned income components by the fair value of the residual interest transferred. Accounting for the exchange in this manner will result in a reduced yield on the lease. The result would be the same if the lessor exchanged cash for the services and capitalized the amount paid under FASB Statement No. 91, Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases.

These concepts and examples are fairly simple. In practice, residual value transactions may be much more complex. However, even with additional complexity, these transactions can be appropriately accounted for by focusing on the relevant accounting principles: conservatism, whether the risks and rewards of ownership have been transferred, and whether an obligation has been incurred. And because conservatism is the overriding theme of applicable accounting standards, when judgment is required, it should generally be applied with a conservative bias.

ELT thanks Theo Schuldt, GATX Corporation, San Francisco, for this month’s article.