Grant Thornton

Accounting Alert

Updated as of February 12, 2019
Accounting Alert 2019-01
Updated questions are identified with an asterisk (*)

Reporting issue: Lessee accounting under ASC 842

Determining the incremental borrowing rate

One of the most significant challenges for lessees applying ASC 842, *Leases*, is determining the incremental borrowing rate (IBR) used to calculate the lease liability. While the IBR is defined in ASC 842, there is little authoritative guidance regarding how a lessee should go about estimating this rate.

When accounting for a lease under ASC 842, a lessee must recognize a lease liability at an amount equal to the present value of the remaining lease payments. To calculate present value, a lessee typically uses a discount rate equal to its IBR. The IBR is the rate of interest a lessee would have to pay to borrow, on a collateralized basis, an amount equal to the lease payments for a term similar to the lease term in a similar economic environment as the lease.

The discount rate is a critical component in accounting for a lease, because it directly affects how the lessee determines the carrying amount of the lease liability and the right of use asset for both operating and finance leases. For finance leases, the discount rate also affects the lessee's statement of comprehensive income, since the rate determines the amount of interest expense recognized each reporting period.

The following questions and answers are designed to help clarify how a lessee should estimate the IBR.

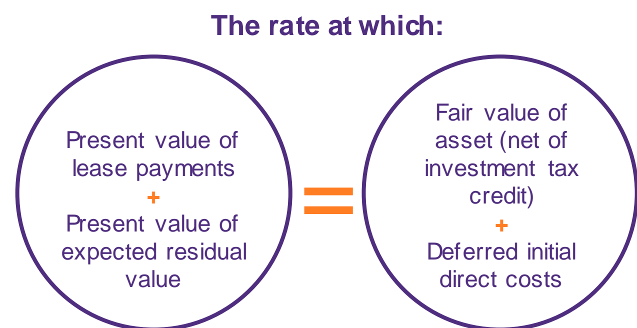
1. Are there circumstances in which a lessee should not use its IBR as its discount rate?

We believe that in most cases, lessees will use the IBR as the discount rate for lease accounting purposes.

ASC 842 stipulates that a lessee must use the rate implicit in the lease to discount the lease payments if this rate is readily determinable. If the rate implicit in the lease is not readily determinable, then a lessee must use its IBR to discount the lease payments.

Under ASC 842, lessees that are not public business entities are also permitted to make an accounting policy election to use a risk-free discount rate instead of the rate implicit in the lease or the IBR.

Although ASC 842 requires a lessee to use the rate implicit in the lease, if readily determinable, as the discount rate, in practice a lessee typically is unable to readily determine the rate implicit in the lease, because calculating the rate requires input from the lessor. The rate implicit in the lease is the discount rate that satisfies the following equation.



Because the lessee is typically unable to readily determine both the lessor's expected residual value and the amount of any deferred initial direct costs incurred by the lessor, most lessees will use the IBR to calculate present values when applying ASC 842. In our view, it would not be appropriate for a lessee to use its own estimates of these amounts to compute the rate implicit in the lease.

In addition, lessees should be aware that a rate specified in the contract does not necessarily represent the rate implicit in the lease. If a contractual rate is specified, a lessee should determine that the rate was

calculated consistent with the definition of the rate implicit in the lease in ASC 842.

2. How does the amount of the lease payments affect a lessee's IBR?

The IBR is the rate the lessee would pay to borrow an amount equal to the lease payments, as defined in ASC 842 (see Section 1.4 in our publication *Leases: Navigating the guidance in ASC 842*, for more information about lease payments).

For example, the IBR for a ten-year lease with fixed $10,000 annual payments would be based on a borrowing with a principal amount of $100,000. Although in practice the principal amount of a hypothetical borrowing generally has little impact on the IBR, a lessee should consider whether the magnitude of the lease payments affects the IBR in light of its particular circumstances.

*3. Is a lessee required to estimate the IBR based on borrowing with a repayment pattern that matches the payment pattern in the lease?**

Based on discussions with the FASB staff, we believe that the phrase "over a similar term" in the definition of IBR refers to the timing of each lease payment as well as the "lease term" as defined in ASC 842. Therefore, we believe that a lessee must estimate the IBR based on a loan that amortizes in a similar pattern to the lease payments over the lease term.

4. How does the lease term affect a lessee's IBR?

A lessee's IBR reflects a borrowing with a term that is similar to the lease term, as defined in ASC 842 (see Section 1.5 in *Leases: Navigating the guidance in ASC 842* for more information about the lease term). In general, the interest rate increases as the borrowing term increases.

5. How should a lessee consider renewal and termination options when estimating the IBR?

For leases with renewal and termination options, we believe a lessee should make an accounting policy election to estimate either (1) the borrowing rate on debt with a fixed term that matches the "lease term," as defined in ASC 842, or (2) the borrowing rate on debt with extension and prepayment options that mirror the renewal and termination options, respectively, in the lease. We believe the latter approach is consistent with the guidance in ASC 842-20-35-5(a), which precludes a lessee from remeasuring the discount rate when there is a change in the lease term or in the lessee's assessment of whether it will exercise an option to purchase the underlying asset if the discount rate "already reflects that the lessee has an option to extend or terminate the lease or to purchase the underlying asset."

6. How does collateral affect a lessee's IBR?

A lessee's IBR reflects a borrowing that is fully collateralized. For a lease with lease payments that total $100,000, the IBR should reflect the rate on a borrowing with a principal amount of $100,000, collateralized by an asset (or assets) with a fair value of $100,000. In general, the addition of collateral to a borrowing arrangement reduces the interest rate. In addition, as the "quality" of the collateral increases, the interest rate declines, because higher quality collateral better protects the lender's investment in the debt. For example, U.S. government bonds would generally be viewed as higher quality collateral than sovereign debt issued by a government whose economy is highly inflationary.

7. If a lessee only borrows on an unsecured basis, can it use its unsecured borrowing rate as its IBR?

No. Full collateralization must be presumed for purposes of estimating the IBR, regardless of whether a lessee typically borrows on an unsecured basis.

It is important to distinguish between *recourse* and *collateral* when determining the IBR, especially if a lessee is referencing the rate on an existing borrowing arrangement and must determine whether it needs to adjust the rate to reflect collateralization.

Recourse debt provides the lender with the legal right to pursue the borrower's assets if the debt is not repaid, whereas collateral refers to specific assets in which the borrower has granted a security interest to the lender. The IBR reflects the existence of both recourse and collateral. In other words, when estimating the IBR, a lessee starts with a rate based on a full recourse debt obligation, and then adjusts that rate to reflect full collateralization.

8. Should the lessee presume that the collateral is the asset underlying the lease for purposes of estimating the IBR?

ASC 842 does not specify the type of asset that should be presumed as collateralizing the borrowing. In our view, a lessee can presume the collateral to be any asset that the lessee could pledge, and the lender would accept, as collateral. Since the lessee does not own the asset underlying the lease, it would generally be unable to pledge that asset as collateral. However, a lessee might be able to pledge its leasehold interest as collateral.

9. How does the economic environment affect a lessee's IBR?

A lessee's IBR is based on a borrowing arrangement executed in an economic environment similar to the lease's economic environment. Two key aspects of the economic environment that could affect the IBR are *jurisdiction* and *currency*.

A lessee should consider the jurisdiction where the lease is executed when estimating its IBR. For example, a lessee that executes U.S. dollar-denominated leases in the United States, United Kingdom, and France must consider the rate it would incur to borrow funds in each of those countries when estimating its IBR for leases executed in each of those countries. If the cost of borrowing U.S. dollars in each of those countries differs based on the jurisdiction where the loan is executed, the lessee should reflect these differences in the IBR applied to leases executed in those countries.

In addition, a lessee should consider the currency in which the lease is denominated when estimating its IBR. For example, a lessee might execute two leases in Japan, one denominated in Japanese yen and the other in U.S. dollars. The IBR for these leases would differ since the lessee incurs different rates to borrow Japanese yen and U.S. dollars within a single jurisdiction.

10. What are some methods for estimating the IBR?

ASC 842 does not prescribe a method for estimating the IBR, and there are a variety of methodologies in practice that a lessee could use. We believe that a lessee should consider what information is readily available in deciding how to estimate the IBR. Therefore, we've summarized some potential methods based on a starting point that will vary, depending on what information is readily available to a particular reporting entity.

Rate on lessee's debt

A lessee might have borrowed under a debt facility that it can reference when estimating its IBR. However, it would generally not be appropriate for a lessee to simply use the contractual interest rate on an existing debt facility as its IBR, without adjusting the contractual rate so that it satisfies the definition of the IBR, including the timing of the debt facility's origination compared to the lease commencement date. In other words, if a lessee issues debt in January and intends to use the rate on that debt as an input to its IBR for measuring a lease commencing in July of the same year, the lessee should consider whether any events or changes in circumstances have occurred between January and July that warrant an adjustment to the rate on the borrowing arrangement to reflect a current borrowing rate as of July.

If the debt is unsecured, then a lessee should adjust the yield to reflect the full collateralization of the borrowing. A lessee should also consider the particular characteristics of the referenced borrowing, such as original issuance discounts and debt issuance costs, which increase the yield on the debt compared to the debt's coupon rate. A lessee should refer to the effective interest rate on the debt, which includes the effect of discounts and debt issuance costs, when estimating its IBR.

Borrowing rate of entities similar to the lessee

A lessee might look to public debt markets to determine the borrowing rates for entities with credit similar to the lessee. Under this approach, the lessee must adjust the referenced borrowing rate so that it satisfies the definition of the IBR, similar to when a lessee references the effective interest rate on its own debt. For example, if the referenced borrowing rate is associated with unsecured debt, then a lessee must adjust the yield to reflect full collateralization.

Rate quoted by a lender

A lessee might ask a lender to provide a written quoted rate at which the lessee could borrow, and then use that quoted rate as the basis for estimating the IBR. If a lessee takes this approach, we believe it should develop a process to ensure that (1) the rate is based on assumptions that align with the IBR definition in ASC 842, and (2) the quoted rate represents an actual rate at which the lessee could execute a borrowing arrangement. In our view, depending on facts and circumstances, obtaining a written quote from a single lender may not provide a sufficient basis for estimating the IBR.

11. Can a lessee use a variable-interest rate as an input for estimating its IBR?

A lessee can use a variable-interest rate to estimate its IBR, but it would need to convert the variable rate into a fixed rate for this purpose. To make this conversion, a lessee could refer to a hypothetical at-market interest-rate swap in which the borrower makes fixed-interest payments to, and receives variable-interest payments from, the swap counterparty. Since the fair value of this hypothetical swap would be zero on the date it's executed, the fixed-interest payments could be used to estimate the IBR. It is important to note that in most cases, the implied fixed-interest rate will not equal the effective variable-interest rate as of the date the IBR is estimated.

12. Can a lessee that lacks a credit rating use information from public debt markets to estimate its IBR?

Without a credit rating, a lessee would have to estimate its credit rating in order to use information from public debt markets to estimate its IBR. One method for estimating an entity's credit rating is to compare its financial ratios and other metrics to those of rated borrowers. For example, if a lessee determines that its financial ratios and metrics are similar to those of issuers of traded debt securities who are rated BBB-, then the lessee could refer to information about yields on secured bonds issued by BBB- borrowers for purposes of estimating the IBR.

13. How would a lessee estimate IBRs for varying maturities?

Once a lessee determines an IBR for a particular maturity, it can determine IBRs for other maturities by referring to an appropriate yield curve. A yield curve simply plots a debt instrument's yield as a function of time to maturity.

Assume that a lessee enters into a secured borrowing arrangement on September 1, 20X8, with a term of 15 years and a yield of 5.5 percent. The lessee determines that this yield and maturity date most closely correspond to the yield curve for a borrower rated BBB- as of September 1, 20X8. The lessee could then use that yield curve to derive its IBR for various lease terms.

14. How can a lessee adjust an unsecured rate to reflect collateral?

There is no single prescribed approach for adjusting an interest rate to reflect collateral under ASC 842. One approach we have seen in practice is to reference the interest rate or the yield curve for a borrower with a credit rating that is one notch higher than the credit rating associated with an unsecured borrowing rate. For example, a lessee determines that the yield on its unsecured debt most closely corresponds with the yield curve for a senior secured debt issuer rated BBB-. The lessee might refer to the yield curve for senior secured debt of a borrower rated BBB (one notch higher than a borrower rated BBB-) to estimate the IBR.

15. Is a lessee required to engage a valuation specialist to estimate the IBR?

A lessee is not required to engage a valuation specialist to estimate the IBR, but it might determine that assistance from an outside valuation specialist is necessary in certain situations, depending on what information is readily available and to what extent the lessee's finance personnel are familiar with valuation concepts and techniques.

In general, a lessee is more likely to require assistance from a valuation specialist in the following circumstances:

- A lessee has only a variable-rate revolving credit facility to use as a basis for estimating its IBR.
- A lessee is not rated by a major credit-rating agency and does not have any rated debt that is traded.
- A lessee has a large multicurrency lease portfolio.
- A lessee has no access to corporate debt-market yield curve data.
- A lessee has ultralong term leases (for example, 99 years) that make it difficult to obtain interest rates for debt with similar characteristics.

In addition, a lessee might want to engage a valuation specialist to initially develop a methodology to estimate the IBR, and then bring that methodology "in house" for subsequent use.

16. Is it appropriate to consider materiality in establishing a method for estimating the IBR?

Yes, it is appropriate to consider materiality when estimating the IBR, provided that the methodology used results in an estimate that complies with the guidance in ASC 842.

We do not believe it is appropriate for a lessee to rely solely on a sensitivity analysis and a materiality assessment when estimating the IBR. For example, in our view, it would be inappropriate for a lessee to (1) establish a "reasonable" range for its IBR without referencing inputs, such as rates on existing borrowing arrangements, (2) assess whether using the IBR at either end of that range materially affects the financial statements and, if not, (3) arbitrarily choose a rate within the range (such as the midpoint) to account for its leases under ASC 842.

However, we believe that a sensitivity analysis and materiality assessment could be used to supplement an entity's IBR estimation process, for example, to assess whether the estimated IBR is reasonable.

17. Can a lessee estimate the IBR for a portfolio of leases rather than separately for each lease?

A lessee is permitted to apply the guidance in ASC 842 on a portfolio basis rather than lease-by-lease, provided that the lessee reasonably expects that the results of applying the guidance on a portfolio basis will not materially differ from applying this guidance on a lease-by-lease basis.

Since materiality is unique for each lessee, there is no single method all reporting entities can use to group leases into portfolios. According to Paragraph BC201 of ASU 2016-02, *Leases*, a lessee can use a portfolio approach only if a reasonable portfolio can be determined. A "reasonable portfolio" consists of leases that share common key characteristics, such as lease terms and underlying assets.

18. Is a lessee required to estimate the IBR on the date when each lease commences?

We believe that lessees may apply a convention to periodically compute the IBR (for example, once a quarter) for leases entered into, or that require remeasurement of the discount rate, during the intervening period, provided that such an approach would not materially differ from a lease-by-lease approach. This approach would mostly benefit lessees with a high volume of leasing activity.

Since a lessee would not necessarily know the characteristics, such as the term and currency, of leases that will commence during the intervening period, a portfolio or matrix of IBRs could be estimated each period, and the IBR that most closely matches the term of a new lease could be used to account for that lease during the intervening period.

For example, on January 1, 20X9, a lessee estimates a matrix of IBRs as shown in the following table. Note that this table is presented for illustrative purposes only. The actual terms and currencies represented in the table will vary for lessees that choose to periodically compile IBRs in this manner.

Term (years)	USD	EUR	JPY
1	3.8%	1.0%	1.1%
3	4.6%	1.8%	1.6%
5	5.1%	2.5%	2.1%
10	5.8%	3.8%	2.9%
30	6.4%	4.7%	4.1%

During the quarter ended March 31, 20X9, the lessee enters into a three-year lease denominated in U.S. dollars. Based on its current IBR matrix, the lessee uses a discount rate of 4.6 percent to account for this lease.

If a lessee adopts an approach to periodically update a matrix of IBRs, it must decide how often to update this information. How frequently a lessee should update its rates depends on its level of leasing activity and the stability of both the lessee's credit and the economic environments in which it executes leases.

A lessee that adopts this approach should also have a process in place to update its rates at an interim date relative to its established update schedule if a significant event occurs or there is a change in circumstances, which indicates the latest rates no longer reflect the lessee's IBR.

19. Can a subsidiary use its parent's IBR to account for its leases?

A subsidiary can sometimes use its parent's IBR to account for its leases. The FASB noted in Paragraph BC201 of ASU 2016-02 that there are situations where a subsidiary might use the parent's IBR, such as when the subsidiary lacks a separate treasury function, leading the parent to negotiate the lease and implicitly guarantee the lessee's payments to the lessor. In such a case, the Board noted that the pricing of the lease is more significantly influenced by the parent's credit standing than the subsidiary's credit standing and that it would therefore be appropriate for the subsidiary to refer to its parent's IBR in accounting for the lease.

Regardless of whether a subsidiary qualifies to use its parent's IBR, it must consider the economic environment in which the lease was entered into, including the currency in which the lease is denominated, when determining the IBR. In other words, the subsidiary would determine its IBR for a lease as if the parent was the lessee, and since the parent would consider the currency in which a lease is denominated when determining an appropriate IBR to apply to that lease, so should the subsidiary.

20. Can a lessee use the rate on a secured revolving line of credit as its IBR?

Because secured revolving lines of credit are often over-collateralized and it is not appropriate for a lessee to use an over-collateralized rate as its IBR, a lessee could use the rate on a secured revolving line of credit as an input to estimating its IBR, but would need to adjust the rate so that it does not reflect an over-collateralized borrowing.

21. How should a lessee that is unable to borrow estimate its IBR?

If a lessee is not creditworthy and is unable to borrow, we believe that it should estimate its IBR based on the yield for the lowest-rated traded corporate debt with characteristics that match the lease (for example, term and economic environment), adjusted for full collateralization as necessary.

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