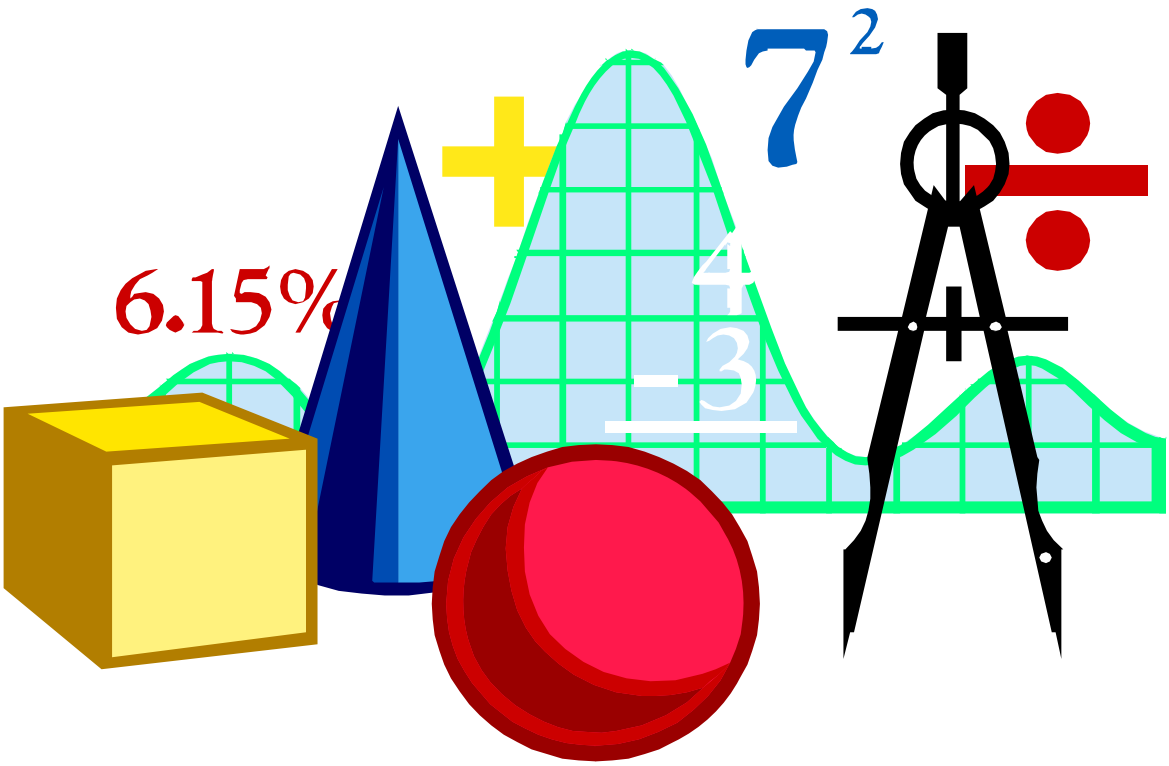
Leased Fee



and

Leasehold Valuation

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Leased Fee and Leasehold Valuation

INTRODUCTION

Up to this chapter, the income, expenses and discount rates used assumed typical market levels. Frequently, however, income-producing properties are subject to one or more existing leases that may or may not be at market levels. Existing leases can affect the typical investment returns by their impact on one or more of the following four factors:

1. net operating income;
2. reversionary value estimate;
3. financing options; and
4. investment risk.

Ownership interests subject to existing leases in which the right to occupy and use a property is conveyed to an outside party are referred to as “leased fee interests” or "leased fee estates." An appraisal that requires estimating the market value of a property subject to one or more existing leases therefore is an assignment requiring estimation of the market value of the leased fee estate. The ownership interest held by a tenant who has an existing lease is referred to as the lewroha~d Interest or "leasehold estate." An appraisal that requires estimating the market value of a tenant's interest created by a lease is an assignment requiring estimation of the market value of the leasehold estate. According to the Uniform Standards of Professional Appraisal Practice (USPAP), any property subject to an existing lease to a nonrelated party must be considered in an appraisal.

The value of a leased fee interest could be greater than, less than, or equal to the market value of the fee simple (unencumbered) interest, depending on the circumstances. The market value of the leased fee interest is the most probable price that a property would bring in an open market after consideration of the impact of existing leases. The typical purchaser of a leased fee interest is a real estate investor. (Fee simple interests might be had by businesses that use the space. Leasehold estates usually would be had by tenants.) The market value, therefore, is the most probable price a "typical" purchaser of a leased fee interest would pay for the property assuming the effect of the leases.

The value of the leased fee interest equals the sum of the present value of the net operating income (NOI) generated by a property with consideration of any existing leases plus the present value of the reversionary proceeds from the resale of the property at the end of the holding period. It represents the value to a typical investor in leased real estate. The discount rate used is the rate desired by that investor, considering the riskiness of the interest.

The value of the leasehold interest is the present value of the rent differential created by a lease under which the contract rent is not equal to the current market rent. The contract rent may be higher or lower than the market rent. The leasehold value is the present value of the incremental rent differentials discounted at a rate of return desired by purchasers of leasehold interests, usually other tenants.

The value of the leased fee interest(s) plus the value of the leasehold interest(s) may or may not equal the value of the fee simple interest(s). Real estate investors who buy leased fee estates and tenants who buy leasehold estates operate in different markets and may have different investment criteria. Furthermore, the investment horizons of these two classes of owners may be different. For example, the typical real estate investor may be considering a 10-year holding period for an investment in a leased fee estate, whereas a typical tenant for a food store may be considering acquiring a leasehold estate in a below-market lease that has a remaining term of 20 years.

There may be more than one below-market lease in a property, a circumstance that would result in the creation of multiple leasehold estates, all with different lease terms and, therefore, different potential buyers. Some textbooks present methods of valuing leased fee and leasehold interests that assume the sum of the leased fee interest and the

leasehold interest equals the fee simple interest. However, one must be careful when making this assumption.

CASH-FLOW FORECASTING WITH EXISTING LEASES

The first step in estimating the market value of a leased fee interest is to prepare a cash-flow forecast that considers the impact of any leases. The existing leases may affect the income, operating expenses, holding period selected and resale forecast. As when forecasting cash flows representing the fee simple interest, appraisers must consider all factors affected by a lease agreement, including occupancy, tenant turnover at the expiration of the lease, renewal options and expense treatment, and must consider all relevant market factors when estimating leased fee cash flows.

Even when estimating the value of a leased fee estate, the appraiser begins by considering market conditions and market rental rates that would apply for evaluation of a fee simple estate. This provides the appraiser with a benchmark with which to compare the contractual lease terms. The appraiser must then read and consider the contractual arrangements in each lease. The degree of different between the existing contractual agreement and other typical market lease arrangements may have a significant impact on the most logical approach to forecasting the lease income. For example, a renewal option with payments that appear to be significantly below projected market rates is much more likely to be exercised than one with an option requiring payments higher than current market rates.

THE LEASE AGREEMENT

The basic lease instrument contains the following elements and provisions:

- date of agreement and parties to the lease;
- description of the leased premises;
- uses allowed for the property;
- commencement date and length of time of the lease;
- payment amount or method of calculation of rent;
- responsibility for expenses:
  - property taxes,
  - insurance,
  - utilities,
  - janitorial and maintenance, and
  - management;
- method of handling of delinquent payments;
- records and books of account;
- alteration or improvement restrictions;
- restrictions on the operation of the tenant's business;
- restrictions on assignment or subletting; use of common areas and facilities;
- responsibility for maintenance of tenant space;
- conditions for surrender of premises;
- rules and regulations;
- liability insurance;
- indemnification of landlord;
- government regulations;
- remedies in the event of total or partial destruction;
- rights in the event of condemnation;
- right of entry;
- responsibility for legal expense;
- statement that the lease represents the entire agreement;
- requirements for any notices;
- future options in the lease; and
- subordination and partial invalidity of the lease.

The appraiser must read each lease agreement in detail and be aware of the common provisions. The following sections consist of brief discussions of some of the key provisions.

Date of Agreement and Parties to the Lease

The date of agreement is a key consideration in estimating the income to be collected under a lease. The key dates are the date of execution of the lease, the date the rental payments begin, the date the lease expires, the date of any renewal options and the date of notice. Additionally, an appraiser should identify the parties to the lease in order to ascertain whether the transaction is arm's length. A non-arm's length lease is not usually considered in estimating the value of a leased fee

interest because the owner could conceivably cancel the lease before selling the property.

Description of the Leased Premises and Uses Allowed for the Property

The leased premises must be legally described and the use identified for the lease to be enforceable. Care should be taken to ensure that the description of the leased premises matches the space being occupied. Failure to describe accurately the property being leased may result in cancellation of the lease.

Commencement Date and Length of Time of the Lease

When making projections of rental income, the starting and ending dates of each lease must be considered. When leases expire, the appraiser must make an assumption about how that space will be leased in the future. The income expected from lease renewals can be quite different from that expected during the current lease term.

Payment Amount or Method of Calculation of Rent

Either the rental amount or the method of calculating the rental payment under the current terms and option periods must be clearly defined. As indicated in earlier chapters, market rent is the typical rent for a tenant space under current market conditions. There are other terms used to identify rent paid under a lease agreement:

- Contract rent is the actual rental payment specified in a lease. Contract rent may be greater than, less than or equal to economic rent and/or market rent.
- Percentage rent is a type of rent that is based on a percent of sales from the property, usually associated with a guaranteed base rent.
- Overage rent is rent paid in addition to a fixed base rent; it is usually based on a variable figure, such as a percent of sales or an index.
- Excess rent is the amount by which contract rent exceeds market rent because of unfavorable lease terms. The additional rent could be a result of market changes, sales overage clauses, and/or poor negotiating skills on the part of the tenant.

Contract rent can include fixed payments (either level or with gradual changes) or payments that vary based on changes in a specific price index such as the Consumer Price Index. The perceived investment risk associated with a leased fee cash-flow forecast may be affected by the contract rent provisions. A lease with a fixed rental payment would typically be a riskier arrangement for a property owner than rental payments that provided for rental increases based on changes in an index.

Responsibility for Expenses

All leases specifically identify the party responsible for paying for building operating expenses. If all operating expenses are paid by the landlord, the lease is referred to as a gross lease. If all the operating expenses (except, possibly, for management fees) are paid by the tenant, the lease is referred to as an absolute net lease. If responsibility for expenses is shared by the tenant and the landlord, the lease is referred to as a net lease. The degree of "netness"of a lease depends on the proportion of operating expenses paid by the tenant. Historically, a net lease meant that the tenant paid for property taxes, insurance and exterior maintenance. The term "net net net lease" or "triple net lease" was sometimes used to refer to each of these expense items that were net. In today's market. however, there is no obvious set pattern of expense treatment for specific property types. It is vital, therefore, that an appraiser actually identify the method of expense treatment in every lease affecting a property. It is likely that the method of expense treatment may vary for different tenants in the same building. In some instances, a portion or all of an operating expense is "passed through" to a tenant. The amount of the expense passthrough could be based on a pro rata share of space leased or be based on an increase in an expense over a base level. Following is an example of an expense passthrough.

☒ Example

Tenant name		ABC Bank
% Net rental area occupied		20%
Property tax base amount (1985 expense)		$22,500.
Current property tax amount (1990 expense)		$28,600.
Expense stop: Pro rata share of property taxes above 1985 levels.		
	Passthrough Calculation	
1990 Expense	*1985 Base*	*Excess*
$28,600.	- $22,500.	$6,100.
Excess	*% Occupied*	*Passthrough*
$6,100.	x .20	= $1,220.

Remaining Lease Provisions

The remaining provisions listed address specific issues such as the ability to alter or sublet the space; remedies in case of condemnation, bankruptcy or destruction of the premises; and rules pertaining to the use of the property. These provisions do not usually have a direct impact on the cash-flow forecast but are vitally important should a controversy arise between tenant and landlord. It is important for an appraiser to know whether any of the provisions of a lease are being disputed or litigated. Many of these issues are legal in nature, and an appraiser should never attempt to practice law. If an issue arises that an appraiser cannot answer, outside professional advice should be sought.

NET OPERATING INCOME FORECASTS

Forecasting net operating income (NOI) for a leased fee interest may be simple or may be one of the most complicated and time consuming tasks an appraiser can undertake. The net income from a single tenant building subject to a longtenn, absolute net fixed payment lease would be the contract income less a minor adjustment for management fees. Conversely, an NOI forecast for a multitenant office building with a variety of indexed leases with varying expiration dates, expense passthroughs and multiple renewal options requires making judgments and performing mathematical calculations for numerous variables. Ultimately, the forecast should represent the appraiser's best judgment, given current market conditions and the existing leases.

The starting point of any forecast begins with determination of the contractual rent for each leased space. If unleased space exists, the appraiser must consider whether that space will eventually be leased. This involves making an assumption about what rate the space will lease for and how long it will take for the space to be absorbed by the market.

The vacancy and credit loss allowances should be forecast after consideration of the impact of the leases. If a property is subject to long-term leases covering 100 percent of the tenant space, it would appear logical to assume no or belowmarket vacancy during the term of the lease. Again, it is important to remember that the leased fee cash-flow forecast should theoretically reflect the expectations of the typical investor for the property type being appraised.

Income from sources other than space rentals may be considered in the NOI forecast. This forecast could be affected by a contractual arrangement (radio tower rent on the top of a high-rise building, for example) that may not equal market rent for the income source. In estimating other income in this instance, the actual contractual income rather than market income should be included in the income forecast for the leased fee interest.

Finally, the operating expenses are deducted from the income each year to arrive at each year's NOI. The operating expenses must be adjusted for the impact of expense-stop (passthrough) provisions in the leases. Expense passthrough income may be reported directly as income or as an offset to expenses. In either case, the net effect should be the same. Total annual fixed expenses such as property tax and insurance are typically affected little by existing leases. Total annual charges for

some variable expenses such as management fees, however, can vary significantly from property to property if they are a function of collected income. The appraiser must recognize this and consider the relationship between incomes and expenses in a leased fee analysis.

RESALE PROCEEDS FORECAST

The value of a leased fee estate indudes the rights to cash flow from sale of the property at the end of the investment holding period. The estimated value of the reversion may or may not be the same as would be expected for a fee simple estate, depending on whether all existing leases have expired by the end of the investment holding period. Recall that the following three methods were discussed to estimate the sales price of a fee simple estate:

1. actual dollar forecast;
2. change in value over the holding period; and
3. using a terminal capitalization rate.

Estimating the resale price (reversion) for a leased fee estate can be a more difficult task because the NOI is affected by existing leases. This could mean that the percentage change in the NOI over time for the leased fee estate may be significantly different than what the expected change in NOI would be for a fee simple estate. For example, consider the following projections:

Percentage Change in NOI						
Year	*1*	*2*	*3*	*4*	*5*	*% Change*
Market NOI	$100,000.	$105,000.	$110,000.	$115,000.	$120,000.	+20%
Leased Fee NOI	$75,000.	$75,000.	$90,000.	$105,000.	$120,000.	+60%

*In this instance, the first-year leased fee NOI is well below the $100,000 market estimate because of a series of below-market leases. By year 5, however, all of the leases have expired and the NOI is equal to market levels.

In this case, the leased fee NOI increased by 60 percent, whereas the market NOI increased by only 20 percent. The leased fee NOI increased at a greater percentage rate because of the assumption that leases were renewed at the higher market rate.'

It is important for the appraiser to recognize that in cases where there is a significant change in NOI because of lease renewals, the change in the value of the leased fee estate over the same time period may not be nearly as great. To understand why this is the case, we must consider two factors:

1. The value of the leased fee estate depends on both the NOI from the existing leases and the proceeds from resale of the property at the end of the holding period.
2. The resale price of the property at the end of the holding period depends on the expected NOI in the years after the property is sold.

If most or all of the leases have been renewed at the market rental rate by the time the property is sold, then the estimated value of the reversion may be virtually the same as the estimated value for a fee simple estate would have been. Thus, although the NOI for the leased fee estate may be significantly lower than that of a fee simple estate over the investment holding period, the value of the leased fee estate may not be affected nearly as much because of the contribution of the resale proceeds to the total value of the leased fee estate.

In the above example, suppose we want to estimate the value of the property at the end of a Year holding period by applying a terminal capitalization rate to the NOI for year 5.2 Using a 10 percent terminal capitalization rate, we have:

Year	*NOI*	*Terminal Cap Rate*	*Estimated Resale*
5	$120,000.	0.10	$1,200,000.

The estimated reversion is $1.2 million. Because all existing leases have been renewed at the market rate by year 5, this value is the same as it would have been for a fee simple estate. Now consider the value of the leased fee estate for the 5-Year holding period by discounting the leased fee NOI and reversion estimate calculated above. If the appropriate discount rate is 15 percent, the value of the leased fee estate is as follows:

Estimated Value of Leased Fee Estate

Year	*1*	*2*	*3*	*4*
Cash flow	$75,000.	$75,000.	$90,000.	$1,305,000.*
Discount rate (15%)	0.86957	0.75614	0.65752	0.57175
Present value**	$65,218.	$56,711.	$59,177.	$746,134.
Total Present Value	$927,240.			

*Includes the reversion

**At a 15% discount rate

Now consider the value of the fee simple estate, using the same 15 percent discount rate:

Estimated Value of Fee Simple Estate

Year	*1*	*2*	*3*	*4*
Cash flow	$100,000.	$105,000.	$110,000.	$1,315,000.*
Discount rate (15%)	0.86957	0.75614	0.65752	0.57175
Present value**	$86,957.	$79,395.	$72,327.	$751,851.
Total Present Value	$990,530.			

*Includes the reversion

**At a 15% discount rate

Note that the impact of the below-market leases on the value of the leased fee estate is not as great as the impact on the NOI. Whereas the NOI for the leased fee estate increased by 60 percent from the end of year I to the end of year 5, the value of the leased fee estate increased by slightly less than 30 percent from the beginning of year 1 to the beginning of year 5 (end of year 4 when sold). In contrast, NOI and value for the fee simple estate both increased by about 20 percent over the same period.

In the above example, the terminal capitalization rate for the leased fee estate was assumed to be the same as that of a fee simple estate. This was based on the assumption that all leases had expired. If some of the leases had not expired by the end of the holding period, the terminal capitalization rate would have to be adjusted accordingly. For example, suppose that in the previous example one of the leases would not expire until after year 5, making the leased fee NOI lower than the fee simple NOI in year 5 by $5,000. I f the same terminal capitalization rate of 10 percent were used, the estimated reversion would be lower by $50,000. This would not be correct: It would be analogous to assuming that the $5,000 loss in income would have a permanent impact on value, rather than an impact for only 1 year. Clearly, the effect of $5,000 less income for 1 year cannot exceed $5,000! A slightly lower terminal capitalization rate could be used to reflect the $5,000 increase in the leased fee NOI after year 5 because of the lease renewal.6 Because the increase in NOI due to the lease renewal is for 1 year only, the impact on the terminal

capitalization rate would not be great, but it clearly must be considered.

It is obviously easier to project the reversion if we can select a holding period that extends beyond the expiration of the last lease. If it is not possible to select such a holding period, extreme care should be taken when estimating the reversion. The reversion at that time should reflect the present value of the future benefits to be received by the next ubyer after consideration of the remainin lease(s) at that point.

Whichever method is used to forecast the reversion, the appraiser should test the reasonableness of the estimate by comparing the implied change in NOI, value and capitalization rates to ensure that the relationships are logical, given current and expected market conditions.

LEASED FEE DISCOUNT (YIELD) RATE

The leased fee discount rate is the interest rate that discounts all expected future leased fee cash flows to a present value equal to the present value of the leased fee interest. The leased fee discount rate can be higher, lower, or equal to the fee simple property discount rate, depending on the circumstances. The relative position of the leased fee discount rate compared with the fee simple property discount rate depends on the relationship of risk in the two interests. It is possible that because of the excellent credit of a building tenant, a strong below-market lease and/or a lease with built-in risk protection such as a CPI adjustment and expense stops, the leased fee discount rate logically could be below the property discount rate. When preparing the leased fee cash-flow forecasts, the appraiser should consider the risk implications involved in the assumptions selected and should translate these judgments into relative changes in the ultimate leased fee discount rate selected to estimate leased fee value.

LEASED FEE CASH-FLOW FORECAST—A CASE STUDY

Following are assumptions for a leased fee cash-flow forecast for an office building. The building and expense assumptions are the same as those used in examples in chapters 7 and 9, except that it is now assumed that three tenants have existing leases in the building.

☒ Example

Given:

Gross building area	24,000 square feet (SF)
Net building area	20,000 SF

Tenant	*Leased Area*	*Current Annual Rent*	*Contract Rent per SF*	*Remaining Term*	*Market Rent per SF*	*Comments*
C&B Bank	10,000 SF	$100,000.	$10.00	4 Yrs	$15.00	Tax stop above $0.20 per SF
Valley Mortgage	6,000 SF	$69,000.	$11.50	1 Yr	$15.00	2-year option @ $13.00 SF
Apex Insurance	4,000 SF	$48,000.	$12.00	3 Yrs	$15.00	2% annual increase

Assumptions:

Market rent	Increasing by 4% per year.
Vacancy	6% of released space; 0 during term of existing leases.
Management	5% of effective gross income.
Property tax	$11,900; level for 3 years, increasing to $15,000 in years 4 and 5.
Insurance	$0.20 per square foot net rentable area, increasing by 3% per year.
Utilities	$1.25 per square foot of gross area, increasing by 5% per year
Janitorial	$0.90 per square foot of net rentable area, increasing by 4% per year.
Maintenance	$4,000, increasing by 3% per year.

Conclusions. Resale value equals the implied sales price from the fee simple implied reversion because all leases are at market rents by the end of 5 years. The implied terminal capitalization rate would be approximately 9.5 percent.

The projected cash flows based on the above assumptions are as follows:

☒ Example

Income and Expense Forecast

Year	*1*	*2*	*3*	*4*	*5*
Income:					
C&B Bank	$100,000.	$100,000.	$100,000.	$100,000.	$175,479.
Valley Mortgage	69,000.	78,000.	78,000.	101,238.	105,287.
Apex Insurance	48,000.	48,960.	49,939.	67,492.	70,192.
Total	$217,000.	$226,960.	$227,939.	$268,730.	$350,958.
Vacancy @ 6%	-0	-0	-0	-10,124.	-21,057.
Effective Gross Income	$217,000.	$226,960.	$227,939.	$258,606.	$329,901.
Expenses:					
Management	$10,850.	$11,348.	$11,397.	$12,930.	$16,495.
Property tax	11,900.	11,900.	11,900.	15,000.	15,000.
Insurance	4,000.	4,120.	4,244.	4,371.	4,502.
Utilities	30,000.	31,500.	33,075.	34,729.	36,465.
Janitorial	18,000.	18,720.	19,469.	20,248.	21,057.
Maintenance	4,000.	4,120.	4,244.	4,371.	4,502.
Total Expenses	$78,750.	$81,708.	$84,329.	$91,649.	$98,021.
Passthroughs	3,950.*	3,950.*	3,950.*	5,500.	0
NOI	$142,200.	$149,202.	$147,560.	$172,457.	$231,880.

* $11,900./20,000 SF = $0.595 - $0.20 =$0.395 x 10,000 SF = $3,950.

The NOI calculated above begins at $142,200 in year 1 and increases to $231,880 in year 5. By year 5, all existing leases have expired. Once a lease expired, rental rates were increased to the implied market rent at that time, and the vacancy allowance was based on 6 percent of this market income.

FEE SIMPLE VALUE ESTIMATE

For contrast, following is a review of the fee simple cash-flow assumptions and the property value estimates found in chapter 9. The value of the fee simple interest is as follows:

☒ Example

Assumptions:	
Market rent	$15.00 per square foot.
Income	Increasing 4% per year for 5 years.
Vacancy	Level at 6% per year.
Management	5% of effective gross income.
Property tax	$11,900. Level for 3 years, increasing to $15,000. In years 4 and 5.
Insurance	$0.20 per square foot of net rentable area, increasing by 3% per year.
Utilities	$1.25 per square foot of gross area, increasing by 5% per year.
Janitorial	$0.90 per square foot of net rentable area, increasing by 4% per year.

Maintenance	$4,000. Per year increasing by 3% per year.				
Year	*1*	*2*	*3*	*4*	*5*
Potential Gross Income	$300,000.	$312,000.	$324,480.	$337,459.	$350,958.
Vacancy @ 6%	- 18,000.	- 18,720.	- 19,469.	- 20,248.	- 21,057.
EGI	$282,000.	$293,280.	$305,011.	$317,211.	$329,901.
Management	$ 14,100.	$ 14,664.	$ 15,251.	$ 15,861.	$ 16,495.
Property tax	11,900.	11,900.	11,900.	15,000.	15,000.
Insurance	4,000.	4,120.	4,244.	4,371.	4,502.
Utilities	30,000.	31,500.	33,075.	34,729.	36465.
Janitorial	18,000.	18,720.	19,469.	20,248	21,057.
Maintenance	4,000.	4,120.	4,244.	4,371.	4,502.
Total Expenses	$ 82,000.	$ 85,024.	$ 88,183.	$ 94,580.	$ 98,021.
NOI	$200,000.	$208,256.	$216,828.	$222,631.	$231,880.

The fee simple value using a 12 percent property discount rate and an estimated resale price of $2.4 million was shown in chapter 9 to be as follows:

☒ Example

Estimated year-6 NOI	=	$240,000. (based on separate analysis)
Resale	=	NOI (sixth year) / Termianl R0
	=	$240,000./0.10
	=	$2,400,000.

Year	*Cash Flow*		*Present Value Factor @ 12%*		*Present Value*
1	$ 200,000.	x	0.892857	=	$ 178,571.
2	208,256.	x	0.797194	=	166,020.
3	216,828.	x	0.711780	=	154,334.
4	222,631.	x	0.635518	=	141,486.
5	231,880.	x	0.567427	=	131,575.
5 (resale)	2,400,000.	x	0.567427	=	1,361,825.
Total present value		x		=	$2,133,811.

LEASED FEE VALUE ESTIMATE

The leased fee value estimate can now be found by discounting the leased fee NOI, and resale can be forecast by the leased fee discount rate. Assuming that all leases have expired after the 5-year holding period, the same resale price can be used that was used when estimating the fee simple value, as shown above.

The value found by assuming the leased fee discount rate is 12 percent.

Year	*Cash Flow*		*Present Value Factor @ 12%*		*Present Value*
1	$ 142,200.	x	0.892857	=	$ 126,964.
2	149,202.	x	0.797194	=	118,943.
3	147,560.	x	0.711780	=	105,030.
4	172,456.	x	0.635518	=	109,599.
5	231,880.	x	0.567427	=	131,575.
5 (resale)	2,400,000.	x	0.567427	=	1,361,825.
Total present value		x		=	$1,953,936.

Under the above assumptions, the leased fee value estimate is $1,953,936. The implied overall capitalization rate (in this case, the leased fee capitalization rate) is 7.28 percent ($142,200/$1,953,936), and the implied change in value over the holding period is 22.83 percent ($2,400,000/$1,953,936 - 1).

If the appraiser believes the leased fee investment would beless risky because of the tenant mis and/or the level of market rents and therefore selected a leased fee dsicount rate lower than the property discount rate of 12 percent, say, 11 percent, the leased fee value estimate wouled be as follows:

Year	*Cash Flow*		*Present Value Factor @ 12%*		*Present Value*
1	$ 142,200.	x	0.900901	=	$ 128,108.
2	149,202.	x	0.811622	=	121,096.
3	147,560.	x	0.731191	=	107,895.
4	172,457.	x	0.658731	=	113,602.
5	231,880.	x	0.593451	=	137,609.
5 (resale)	2,400,000.	x	0.593451	=	1,361,825.
Total present value					$2,032,592.

Assuming a leased fee discount rate of 11 percent, the leased fee value estimate is $2,032,592. The reudction in the discount rate has resulted in a value estimate of $78,656. or about 4 percent higher. The best method of testing which leased fee discount rate to use is to analyze sales of comparable leased fee interests and examine the discount rate and income pattern change relationships implied by th eprice paid for properties, as demonstrated in the previous rate analysis example.

MARKET RENT EQUIVALENCY ADJUSTMENT

In the preceding tables the value of the fee simple interest is $2,133,811 and the value of the leased fee interest, assuming a 12 percent leased fee discount rate, is $1,953,936; assuming an 11 percent leased fee discount rate, the value is $2,032,592. The difference in value between each of these numbers is:

	11%	*12%*
Fee Simple Interest	$2,133,811.	$2,133,811.
Leased Fee Interest	-2,032,592.	-1,953,936.
Difference	$ 101,219.	$ 179,875.

The bottom line represents the differences between the value of the fee simple ownership interest and the leased fee ownership interest for both rates. The conclusion about which of the amounts is the best estimate of the difference depends on the appraiser's assessment of current

market conditions and the tenant profile. The chosen amount represents the difference between the property interests appraised and is referred to as the market rent equivalency adjustment. It is the value loss attributable to the existing leases. It represents the value of the property without consideration of the leases less the value of the property to a typical investor after consideration of the leases.

Some textbooks advocate estimating the impact of the leases by discounting the NOI difference by a rate of return and deducting this amount from the fee simple interests. In this case, the NOI difference is as follows:

Year	*1*	*2*	*3*	*4*
Fee Simple PGI	$200,000.	$208,256.	$216,828.	$222,631.
Leased Fee PGI	-142,220.	-149,202.	-147,560.	-172,457
Rent Difference	$ 57,800.	$ 59,054.	$ 69,268.	$50,174.

The leases expire in 4 years, so only 4 years were used in the above analysis. Discounting the above cash flows at 12 percent results in a present value of $179,875. This is virtually the saTne as the difference in the value of the fee simple estate and leased fee estate shown above, if the leased fee estate and fee simple estate are both valued at a 12 percent discount rate. (The difference is due to rounding.) However, if the leased fee estate and fee simple estate are not valued using the same discount rate, discounting the difference in rents, as illustrated above, will not give the correct difference in value. For example, when the leased fee estate was valued at an 11 percent discount rate, the difference in value between the leased fee estate and the fee simple estate was $101,219. To obtain the same answer by discounting, the NOI difference would require a discount rate in excess of 100 percent! The best approach to estimating the market rent equivalency adjustment, therefore, is to estimate the value of each interest by either the discount cash flow approach or yield capitalization and find the difference between the two. The market rent equivalency adjustment will be used later in chapter 16 (Cost Approach) and chapter 17 (Direct Sales Comparison Approach) to adjust these two approaches for the property rights appraised.

As a final comment, it should be noted that the market rent equivalency adjustment discussed above represents a difference between the value of the leased fee estate and fee simple estate. We will see in chapter 16 that this adjustment is necessary when using the cost approach to estimate the value of a leased fee estate because without this adjustment, the value arrived at with the cost approach represents the value of a fee simple estate. However, this difference in value does not necessarily represent the value of the leasehold estate. As discussed earlier, the value of the leased fee estate plus the value of the leasehold estate do not necessarily have to add to the value of the fee simple estate. To value the leasehold estate, we take the perspective of a typical tenant who is concerned with the rent savings as discussed next.

LEASEHOLD VALUE ESTATE

The leasehold interest is the ownership interest of a lessee or tenant. The value of any leasehold interest is the leasehold estate and is the present value of any net benefits to another tenant. From a cash-flow standpoint, the benefits arise when the effective contract rental payments are less than current market rental rates for the space. It is possible for a property to be attractive to another tenant for reasons other than potential rental savings, but consideration of these factors is beyond the scope of this book.

As mentioned earlier, the cash flows arise from effective rental savings throughout the term of a lease. To translate these future benefits into a present value, each must be discounted by an interest rate. The interest rate used represents the "typical" return requirement for a "typical" purchaser of the interest and is referred to as the "leasehold discount rate."

Following is an example showing the calculation of a leasehold value, assuming a 5-year lease.

☒ Example

Market Rent Estimate for Term of Lease

Market rent for 20,000 square feet is $15 per square foot, increasing by 4 percent per year. The contract rent equals $225,000 per year for 5 years. The value of the leasehold estate, assuming a 12 percent leasehold discount rate, is as follows:

	Market		*Contract*				*Present Value*		
Year	*Rent*		*Rent*		*Difference*		*@ 12%*		*Present Value*
1	$300,000.	-	$225,000.	=	$ 75,000.	x	0.8929	=	$ 66,967.
2	312,000.	-	$225,000.	=	87,000.	x	0.7972	=	69,356.
3	324,480.	-	$225,000.	=	99,480.	x	0.7118	=	70,810.
4	337,459	-	$225,000.	=	112,459.	x	0.6355	=	71,468.
5	350,958.	-	$225,000.	=	125,958.	x	0.5674	=	71,469.
Value of Leasehold									$350,070.

In this case, the present value of the rent savings is $350,070, which represents the value of the leasehold estate.

SUPPORTING LEASEHOLD DISCOUNT RATES

The best source of discount rates is sales of leasehold interests. The rate is found by finding the internal rate of return that discounts the rental benefits over the term of the lease to a present value equal to the price paid for the leasehold. For example, suppose a lease is purchased by Tenant B from Tenant A for $225,000. The lease is for 10 more years and the contract rent is $175,000 for each of those 10 years. The current market rent for the space is $200,000, and it is anticipated that market rent will increase by 2 percent each year. We see that the implied leasehold discount rate is slightly above 12 percent, as shown below:

Year	*Market Rent*		*Contract Rent*		*Rental Savings*
0		-		=	($225,000.)
1	$200,000.	-	$175,000.	=	25,000.
2	204,000.	-	$175,000.	=	29,000.
3	208,080.	-	$175,000.	=	33,080.
4	212,242.	-	$175,000.	=	37,242.
5	216,486	-	$175,000.	=	41,486.
6	220,816.	-	$175,000.	=	45,816.
7	225,232.	-	$175,000.	=	50,232.
8	229,737.	-	$175,000.	=	54,737.
9	234,332.	-	$175,000.	=	59,332.
10	239,019.	-	$175,000.	=	64,019.
Leasehold discount rate = 0.1211 or 12.11%					

SUMMARY

Many types of income property are purchased subject to existing leases. Thus, the investor is purchasing a leased fee estate, not a fee simple estate. To estimate the value of the leased fee interest, the appraiser must consider how the terms of the existing leases will affect the projected net operating income (NOI) and resale price of the property.

This chapter discussed typical lease provisions that can affect the projected NOI and discussed how the NOI and resale price can be estimated for a leased fee estate. The relationship between the discount rate for leased fee estates versus fee

simple estates was shown to depend on the relative riskiness of each estate.

The relationship between the value of the leased fee estate and fee simple estate is referred to as a "market rent equivalency adjustment." It was emphasized that this difference in the value between the two estates does not necessarily represent the value of the leasehold estate, because the typical tenant who would purchase an interest in a leasehold estate may have a different investment perspective. The value of a leasehold estate depends on the rent savings associated with that estate. The value of these rent savings may or may not be equivalent to the difference in value between the leased fee estate and fee simple estate.

KEY TERMS

- absolute net lease
- contract rent
- date of agreement
- excess rent
- expense passthrough
- fee simple interest
- gross lease pace mdex
- leased fee interest
- leasehold interest
- market rent equivalency adjustment
- net lease
- overage rent
- parties to the lease
- percentage rent

QUESTIONS

1. How do existing leases affect the estimated NOI for a property?
2. Should the value of a fee simple estate be equal to the sum of the values Of the leased fee estate and the leasehold estate?
3. Do you think the same discount rate should be used to estimate the value of the fee simple estate and that of the leased fee estate?
4. What is meant by a market rent equivalency adjustment?
5. What lease provisions do you think would have the greatest impact on the estimated NOI?
6. What is the difference between overage rent and excess rent? How do you think each of these kinds of rent affects the riskiness of a leased fee estate?
7. What is meant by a "net" lease? What expenses are typically net?
8. What is an expense passthrough? How do you think the existence of expense passthroughs affects the riskiness of the leased fee estate?
9. Why is it desirable to use an investment projection period that extends beyond the term of existing leases?
10. Due to existing leases, a property is projected to have NOI of $90,000 per year for each of the next 5 years. All of the leases will have expired at the end of the 5 years. If the property were not encumbered by existing leases, the appraiser estimates that the NOI would be $100,000 for the first year and increase by 3 percent each year over a projected holding period of years.
    a) Estimate the value of the fee simple estate by discounting the cash flows at a 12 percent discount rate. Assume that the resale price at the end of the fifth year can be estimated by applying a 9 percent terminal capitalization rate to the sixth-year NOI.
    b) Estimate the value of the leased fee estate by discounting the appropriate cash flows at an 11 percent discount rate.
    c) What does the difference in the answers for parts A and B represent?

END NOTES

1. If market rents are falling and existing leases are above market rental rates, the NOI could decrease at a much greater rate than the market rate.
2. Recall that we apply the terminal capitalization rate to the NOI 1 year after the end of the holding period because this is the NOI to the next owner.

3. For simplicity the discount rate for the leased fee estate and fee simple estate is assumed to be the same. They would differ if there were a difference in the riskiness associated with investing in each estate.
4. For fee simple estates, it is logical that NOI and value change at approximately the same rate over time.
5. $5,000/0.10 = $50,000.
6. Recall that the capitalization rate depends on the expected change in NOI. Thus an additional increase in NOI due to lease renewals implies a lower terminal capitalization rate.
7. Refer to chapter 9 to review the assumptions. The resale price was estimated by applying a terminal capitalization rate to an estimate of the year-6 NOI.