A lease is a contractual agreement between a lessor and a lessee that gives the lessee the right to use specific property, owned by the lessor, for a specified period of time in return for stipulated, and generally periodic, cash payments (rents).

**Basics of Leasing**

- Lease term
- Rental payments
- Executory Costs
- Restrictions
- Noncancelable
- Early termination
- Default

**Advantages of Leasing**

- 100% Financing at Fixed Rates
- Protection against Obsolescence
- Flexibility
- Less Costly Financing
- Alternative Minimum Tax Problems
- Off-Balance Sheet Financing

**Accounting by Lessee**

- Operating Lease
  
  - Journal Entry:
    - Rent expense \( xxx \)
    - Cash \( xxx \)

- Capital Lease
  
  - Journal Entry:
    - Leased equipment \( xxx \)
    - Lease obligation \( xxx \)

A lease that transfers substantially all of the benefits and risks of property ownership should be capitalized (only noncancelable leases may be capitalized).

The expense recorded on a capital lease and an operating lease are THE SAME over the life of the asset. In a capital lease it hits the P&L via interest expense and depreciation expense VS operating, it all goes into rent expense.

In a capital lease, think of it as a sale. The commitment to the lessor is a debt and should be treated like any other debt (current vs. noncurrent, accrue interest etc.) The asset gets depreciated just like if it were owned/purchased.

### Compare capital vs. operating lease

**FACTS**
- Lease a computer worth $3,000
- Lease term: 3 yrs
- Annual payment: $1,143
- Estimated life of a computer: 4 yrs
- Effective borrowing rate: 7%

**PRESENT VALUE OF PAYMENTS**
- $3,000

<table>
<thead>
<tr>
<th>CAPITAL LEASE</th>
<th>YEAR ONE</th>
<th>YEAR TWO</th>
<th>YEAR THREE</th>
<th>YEAR FOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>3,000</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>210</td>
<td>145</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>Interest expense</td>
<td>903</td>
<td>596</td>
<td>1,088</td>
<td>(5)</td>
</tr>
<tr>
<td>Capital lease obligation</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>Total</td>
<td>2,913</td>
<td>2,191</td>
<td>2,916</td>
<td>2,916</td>
</tr>
</tbody>
</table>

**OPERATING LEASE**
- Rent expense: $1,143
- No OPENING ENTRY!

**COMPARE EXPENSE OF THE TWO:**
- CAPITAL LEASE: Interest expense $429, Depreciation expense $3,000
- OPERATING LEASE: Rent expense $3,429

**DIFFERENCE BETWEEN THE TWO OVERALL:**
- $0

### Capitalization Criteria

- Leases that DO NOT meet any of the four criteria are accounted for as Operating Leases.

- **Lease Agreement**
- **Transfer of Ownership**
- **Bargain Purchase**
- **Lease Term >= 75%**
- **PV of Payments >= 90%**

- Capital Lease: Yes, Yes, Yes, Yes, Yes
**Capitalization Criteria**

- **Lease Agreement**
  - Transfer of Ownership
    - No
  - Bargain Purchase
    - No
  - Lease Term $\geq 75\%$
    - No
  - PV of Payments $\geq 90\%$
    - No
  - Yes: Capital Lease

**Operating Lease**

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    - No
  - No: Yes

**Minimum lease payments:**
- Guaranteed residual value
- Penalty for failure to renew
- Bargain purchase option

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**Three important concepts:**
- Minimum lease payments
- Executory costs
- Discount rate
**REAL WORLD**

The leasing companies are hip to these criteria and go out with a lease that they believe satisfies the requirements. They usually run really tight (i.e., PV of payments is 90% of the fair value of the asset).

Just because the leasing company says it works as an operating lease, doesn’t make it so!!

**TEXT example from p.1097**

Lessor and Lessee sign a lease agreement dated January 1, 2005 which required Lessor to lease equipment to lessee beginning January 1, 2005. Terms are:

- 5 year, noncancelable lease term, equal annual payments at beginning of year of $25,981.62
- Fair value of equipment is $100,000 at inception and has 5 yr. Life and no residual value
- Lessee pays all executory costs directly, except property tax which is $2,000 per year and part of the annual payment of $25,981.62
- No renewal options and equipment reverts to Lessor at termination
- Lessee borrowing rate is 11%, Lessor implicit rate is 10% and known to Lessor
- Lessee depreciates on a straight line basis.

Instructions

Prepare the journal entries on the books of the Lessee that relate to the lease agreement through December 31, 2009.
Payment: 25,981.62  OPENING ENTRY: 100,000
Property tax (2,000.00)  Equipment 100,000
Lease portion 23,981.62  Capital lease obligation 100,000
Rate 10%  U1/05 ENTRY: 23,982
Life of asset 5  Lease liability 23,982
PV 100,000  Property tax expense 2,000
Cash 25,982

* smaller of lessee borrowing rate or lessor implicit rate
12/31/05 ENTRY: 7,602
IS THIS A CAPITAL LEASE? YES- 100% OF LIFE IS >75% AND PV of Payments > 90%
Depreciation expense 20,000
accum dep 20,000
LEASE AMORTIZATION SCHEDULE
Accrued interest 7,602
LEASE PMT INTEREST REDUCTION LIABILITY 1/1/06 PAYMENT:
1/1/05- OPENING 100,000.00  Property tax expense 2,000
1/1/05 PAYMENT 23,981.62 - 23,981.62  76,018.38  Lease liability 16,380
1/1/06 PAYMENT 23,981.62 7,601.84 16,379.78 59,638.60  Interest payable 7,602
1/1/07 PAYMENT 23,981.62 5,963.86 18,017.76 41,620.84  Cash 25,982
1/1/08 PAYMENT 23,981.62 4,162.08 19,819.54 21,801.30 -
1/1/09 PAYMENT 23,981.62 2,180.13 21,801.49 -
ETC.

Accounting depends on whether the residual is guaranteed or not:
- Not Guaranteed: As if it did not exist
- Guaranteed: As if the guaranteed amount is a final payment (gain/loss results on final payment depending on what the value of the property is)

DISCOUNT THE BARGAIN! (if get 10 for 2, then what is the PV of the cost of the $8 bargain?? The cost= PV of the $2 payment)
If there is a bargain purchase option, then you assume it will be paid and the asset transferred at the end of the term. Think of it as a final lease payment. For instance- 3 year lease at $100 per year, 10% implicit rate. Can buy the item for $75 at the end of the term when it's fair value would be $150. Then the PV of the payments is:

PV of lease payment $250
PLUS PV of $75 in the future $ 56
PV of the lease $306
Solution E21-2

FACTS
- Term of lease: 50 months
- Monthly rent: $200
- Rate: 12%
- Guaranteed res. Value: $1,180
- Life of asset: 60 months

This is a capital lease because two of the criteria are met (only need one met):
- Lease term: 50
- Life of asset: 60
- 83% > 75% requirement
- PV of payments (since residual is guaranteed, it is included)
  - PV of payments: $7,839.22
  - PV of residual: $717

ENTRY TO RECORD:
- Leased equip under cap lease $8,556.71
- Lease liability $8,556.71

1st Month Entry:
- Depreciation expense $147.53
- Accum. Dep $147.53
- Lease liability $114.43
- Interest expense $85.57
- Cash $200.00

Benefits Available To The Lessor
1. Interest Revenue
2. Tax Incentives
3. High Residual Value

Capitalization Criteria (Lessor)

Group I
- Transfer of ownership
- Bargain purchase option
- Lease term => 75% of economic life of leased property
- Present value of minimum lease payments => 90% of FMV of property

Group II
- Collectibility of the payments required from the lessee is reasonably predictable.
- No important uncertainties surround the amount of unreimbursable costs yet to be incurred by the lessor under the lease (lessor’s performance is substantially complete or future costs are reasonably predictable).

Why Group II Requirements?

Lessor: Direct Financing vs. Sales Type Leases

If all the criteria are met, then it is either a direct financing or sales-type lease to the lessor:
- Direct Financing: Lessor is not making money from selling the product, they are in it for the financing aspect (more like a lender). It works just like the capital lease we just spoke of for lessee, but in reverse (interest income, lease receivable VS interest expense, interest receivable)
- Sales-Type: Lessor is getting a financing fee, but also making money from the product itself as well (they may be a manufacturer or retailer). More complicated - need to deal with any profit the lessor is making from selling the asset.
Any Group 1 Criteria Met?

- Collectibility of Payments Reasonably Certain?
- Lessors Performance Substantially Complete?
- In Asset FMV >Bookvalue?
- Sales-Type Lease?

If both yes, then it is a Direct Financing Lease. If any is no, then it is an Operating Lease.

Capitalization Criteria (Lessor)

- Gary Anderson, UCSB

### Direct Financing Lease

**Payment**: 100
- **Period**: 3
- **Rate**: 8%
- **PV**: 258
- **FV**: 258
- **Cost**: 258

**UPON “SALE”**
- **Cap lease receivable**: 258
- **Asset**: 200

**YR 1**
- **Cash**: 100
- **Interest income**: 21
- **Cap lease receivable**: 79

**YR 2**
- **Cash**: 100
- **Interest income**: 14
- **Cap lease receivable**: 86

**YR 3**
- **Cash**: 100
- **Interest income**: 7

### Operating Lease

Is it possible that a lessor having not met both criteria will classify a lease as an operating lease but the lessee will classify the same lease as a capital lease? In such an event, who will have the asset on their books?
Capitalization Criteria

Transfer of Ownership

Bargain Purchase

Lease Term >= 75%

PV of Payments >= 90%

Operating Lease

No

Yes

Capital Lease

Lease Agreement

Yes

Discount Rate:

Lessee computes the PV of the minimum lease payments using the lessee’s incremental borrowing rate.