

THEME: LOANS vs. LEASES

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ACCOUNTING TERM: Lease

A lease is an agreement under which the owner of property permits someone else to use it for a fee. The owner is the lessor and the user is the lessee.

FEATURE ARTICLE: Loans VS. Leases.

One of the most frequent questions I get asked is “Shall I lease or buy?” This decision is usually predicated by the desire to obtain the highest deduction or tax savings. The first step in answering the “lease or buy” question is to clarify the difference between these two purchasing options.

When you buy an item you either pay cash for it all at once, or, you sign an agreement, called a promissory note, to pay for it over time. When you buy and make installment payments you are considered to have entered into a “contract of sale”. From an accounting and tax standpoint you have purchased an asset and incurred a liability. The asset cost is deducted over a period of time through an expense category called depreciation. (See the article theme “Depreciation”) Usually, a down payment of a certain amount is required to consummate the purchase. Note how this transaction is set up on the books using the following journal entry:

DESCRIPTION	DEBIT	CREDIT
Fixed Assets	10,000	
Notes Payable		7,500
Cash		2,500

DESCRIPTION	DEBIT	CREDIT
Depreciation Expense	2,000	
Accumulated Deprec		2,000

When payments are made on the note there are two components to consider, i.e., principal and interest. Principal is the original amount borrowed and interest is the cost of borrowing the money. Since interest is a cost, it is a deductible expense and has its own category. For instance:

DESCRIPTION	DEBIT	CREDIT
Notes Payable	500	
Interest Expense	50	
Cash		550

Do you see that in a “contract of sale” the expense deduction comes from two sources, depreciation and interest?

Next, let’s look at leases. There two types of leases from the standpoint of the lessee: a “dirty” lease and a “true” lease. The “dirty” lease is called a “capital lease” or a “lease obligation” in accounting circles, and, a “true” lease is called an “operating lease”.

A **capital lease** is one in which the rights and risks of ownership of the property have been transferred to the lessee. The lessee must evaluate the provisions of a lease in order to determine if the lease should be classified as a capital lease or an operating lease.

How does the lessee do this? This is the tough part. There are four criteria to use and if any one of them fit, then the lease should be treated as a capital lease:

1. The lease transfers ownership of the property to the lessee by the end of the lease term.
2. The lease contains a bargain purchase option (Like a \$1.00 buyout)
3. The lease term is equal to 75% or more of the estimated economic life of the leased property.
4. The present value of the minimum lease payments, at the beginning of the lease term, is at least equal to 90% of the fair value of the leased property.

I recognize that at this point I may have left some of you behind. But, **don’t give up just yet.** Look, most of the lease contracts you are going to enter into contain the first two criteria. If the lease contracts do, don’t worry about the last two criteria. If they don’t and the lease doesn’t appear to have the characteristics of an operating lease (see below), then you should check with your accountant to make sure you are giving the lease the proper accounting treatment.

In the United States, the Internal Revenue Service (IRS) and the Financial Accounting Standards Board (FASB) feel that this type of contract is so similar to a “contract of sale” that they should be given the same accounting and tax treatment. (If you live outside the U.S. you will want to find out what your government’s policy is on this subject.)

The cost of leasing is built into the lease payment but is not stated separately as is interest on a note. However, the IRS considers it to be the same. Therefore, a Capital Lease is set up the same as a Notes Payable.

DESCRIPTION	DEBIT	CREDIT
Asset	10,000	
Capital Lease		8,900

Cash		1,100
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Note here that the cash down payment is less than the contract of sale above. This is one advantage of buying through a lease. Normally, the down payment includes only the first and last payment of the lease ($\$550 + \$550 = \$1,100$).

DESCRIPTION	DEBIT	CREDIT
Depreciation	2,000	
Accumulated Deprec		2,000

Often you will find that the leasing company does not give you the actual cost of the asset you are buying. What they will do is give you the total cost of the lease. For instance, if your lease payments are \$550 per month for twenty months then the total lease contract will be stated as \$11,000. You must remember to find out the actual value of the asset (\$10,000) in order to record it accurately on your balance sheet and depreciation schedule.

The rule is that the cost of the asset can never exceed its fair market value. There may be other costs called “executory costs” included in the lease payments. These are items such as insurance, maintenance, and property tax. These items can be expensed in each payment as they are incurred.

DESCRIPTION	DEBIT	CREDIT
Capital Lease	500	
Interest Expense	45	
Executory Costs	5	
Cash		550

The \$550 lease payment is split up in the same manner as the principal and interest payment of the notes payable except that you may have to include the executory costs.

The only difference between a Capital Lease and a Contract of Sale purchase is that the down payment on the lease may be less. The deductible expense is the same.

An **operating lease** (or “true lease”) is one in which the lessor retains the rights and risks of ownership. The lessee is simply obtaining the right to use the property for the term of the lease and no more. If the four criteria above are not met then the lessee should treat the lease as an operating lease.

If, at the end of the term of an operating lease, you decide to keep the property, then, technically you should be required to pay the fair market value of the item at that time. However, many lessors offer the leased property at 10% of its original fair market value. This practice of using a 10% buyout at the end of the

lease term does not constitute a “bargain purchase option”. In addition, the bookkeeping is simpler, because the full cost of the lease payments is simply treated as a rent expense each month. There is no asset recorded on the books, no Capital Lease Payable or Interest Expense. Here is how the journal entry looks each month:

DESCRIPTION	DEBIT	CREDIT
Equipment Lease Expense	550	
Cash		550

Unless you can write off the equipment all in one year using the 179 Election (described in the November 2005 newsletter #49), you can probably expense this property faster than a “contract of sale” does using depreciation and interest. In twelve months, using my example, you could deduct \$6,600 in one year assuming you bought the property on January 1. Remember, this is U.S. tax policy, so if you, the reader, do not live in the U.S., you will want to find out how it works in your country.

Note: The accounting for a lessor is, of course, handled differently than for a lessee. I have not included that discussion here because most of you will be in the position of a lessee. If you are in the business of leasing, then certainly you will need to find out the proper accounting treatment for your lease contracts.

What about automobile leasing vs. buying? This is a whole different ball game. The politicians have tinkered with the auto deduction over the years and made it very complicated. However, the bottom line in the U.S. is: there are statutory limitations as to how much you can depreciate an automobile in one year, depending on the cost of the auto and when you bought it. If you lease an auto, there may be an advantage; however, it depends on the lease terms. You can write off the payments (modified by the business use percentage) each month, which could very well exceed the allowable depreciation amounts.

In an effort to find parity between the lease payments and the allowable depreciation amounts, the IRS constructed Lease Inclusion Tables. The idea is to modify the amount of the lease payments by the amount found in the Lease Inclusion Tables. However, the amount you have to include from these tables is astoundingly small. Understandably, no one is complaining about the higher write off. It’s worth looking into.

QUESTION: What Is The Difference Between Simple and Compound Interest?

There are three parts you must know in order to figure out interest:

1. The **principal** (amount being borrowed).
2. The **rate** of interest (usually expressed as a percentage)
3. The **time** or length of the note (usually stated in years, months or days).

For example: Let's say you borrowed \$1,000 for one year at 10%. The equation is simple. $\$1,000 \times 10\% = \100 . It is assumed that if you held this note for one full year you would owe the lender \$100. This is almost a no-brainer, right? But, what happens if you borrow the money for less than a year, or for more than a year? Now you need more information.

If you borrow money for less than a year, it is customary to use "simple" interest. Here is why: If a loan is paid off within a year the lender has the opportunity to reinvest the funds and make more money; If you borrow money for more than a year the lender does not have that opportunity so interest owed on the loan is added to principal and then interest is earned on interest. This is called compounding and can be done annually, semi-annually, quarterly, bi-weekly, weekly, daily, or any agreed upon time frame.

Simple interest normally uses a 360 day year for simplicity, i.e., 30 day months. Interest calculated this way earns a little more than if using a 365 day year. Here is an example for a 90 day loan:

Ordinary Interest = 360 day year:

$$\$1,000 \times 10\% = \$100 \text{ divided by } 360 \text{ days} = .277 \text{ cents per day} \times 90 = \$24.93$$

Exact Interest = 365 day year

$$\$1000 \times 10\% = \$100 \text{ divided by } 365 \text{ days} = .273 \text{ cents per day} \times 90 = \$24.57$$

Sometimes all you know is the starting date of the loan and the ending date. Therefore, you will have to count the number of days in between. It may help to remember the little rhyme:

Thirty days hath September,
 April, June, and November;
 All the rest have thirty-one,
 Excepting February alone,
 Which hath but twenty-eight, in fine,
 Till leap year gives it twenty-nine.

A note written on June 15 and ending on August 14 would be how many days?

June 15 to June 30 = 15 days
 July 1 to July 31 = 31 days

August 1 to Aug 14 = 14 days
60

Compound interest uses a 365 day year in its calculation. Here is an example:

<u>Year</u>	<u>Principal</u>	<u>Interest @ 5%</u>	<u>Amount</u>
1 st Year	\$4,000.00	\$ 200.00	\$4,200.00
2 nd Year	4,200.00	210.00	4,410.00
3 rd Year	4,410.00	220.50	4,630.50
4 th Year	4,630.50	231.52	4,862.02
5 th Year	4,862.02	<u>243.10</u>	5,105.12
Total Interest		\$1,105.12	

Simple interest would be calculated as $\$4,000 \times 5\% = \$200 \times 5 \text{ yrs} = \$1,000$. You can see that the compound interest method earns \$105.12 more than the simple interest method.

TIP: How To Figure The Interest On A Note With Irregular Payments.

If you are a lender or a borrower you can usually generate what is called an “amortization schedule” that tells you exactly how much principal and interest is to be paid for each month for the term of the note. This is very convenient because you can determine exactly how much interest you have paid for tax purposes and you know exactly the amount of your balance due.

Normally, these schedules are set up to be compounded daily. Compounding daily will give you the greatest amount of interest to earn or pay. You can negotiate to have the compounding done weekly, monthly, quarterly, etc., if the payments are to be made uniformly. But, suppose the borrowers pay whenever they get some money, or they pay payments ahead of time. That nice, neat little amortization schedule becomes useless. If you find yourself in this situation, there is an easy way to run the calculations if you, the lender, are not too fussy about losing a little interest. As long as both parties agree, compounding can be done when each payment is made.

Let’s say that you sold your business on an installment basis by taking back a \$20,000 note at 10%. It’s a two-year demand note, meaning there are no set payments but the whole thing is due in two years. Your borrower made six random payments to pay you off.

<u>Date</u>	<u>Description</u>	<u>Add Interest</u>	<u>Subtract Payments</u>	<u>Principal</u>
01/01				\$20,000.00
05/07	127 days @ 5.48 =	695.96	5,000.00	15,695.96

08/23	108 days @ 4.30	=	464.40	3,500.00	12,660.36
12/31	130 days @ 3.47	=	451.10	1,500.00	11,611.46
03/15	74 days @ 3.18	=	235.32	5,000.00	6,846.78
07/29	136 days @ 1.88	=	255.68	2,500.00	4,602.46
12/15	139 days @ 1.26	=	175.14	4,777.60	0

You can see that the mechanical process is simply multiplying the principal times the interest rate and dividing the result by 365 days to get the interest per day figure:

$$\$20,000 \times 10\% = \$2,000 \text{ divided by } 365 = \$5.48 \text{ per day}$$

The next step is to figure out the number of days between payments and multiply that number times the daily interest rate to arrive at the interest earned between payments:

Jan = 31 days
 Feb = 28 days
 Mar = 31 days
 Apr = 30 days
 May = 7 days
 127 x 5.48 = 695.96

Add the interest earned to the beginning principal, subtract the payment to arrive at the remaining principal balance:

\$20,000.00 Starting principal balance
 695.96 Interest
 <5,000.00> Payment
 \$15,695.96 Balance as of May 8

This balance, of course, is your beginning principal balance for the next time you run the calculation. Be careful to set it up properly on a sheet of ledger paper, count your days accurately, double-check your math, and it should do the job.

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