

CHAPTER 26

Leasing

I. DEFINITIONS

LESSEE

- a 1. The user of an asset in a leasing arrangement is called the:
- a. lessee.
 - b. lessor.
 - c. guarantor.
 - d. trustee.
 - e. manager.

LESSOR

- b 2. The owner of an asset in a leasing arrangement is called the:
- a. lessee.
 - b. lessor.
 - c. guarantor.
 - d. trustee.
 - e. manager.

OPERATING LEASE

- c 3. A shorter-term lease under which the lessor is responsible for the insurance, taxes, and upkeep while the lessee can cancel the lease on short notice is called a(n) _____ lease.
- a. open
 - b. straight
 - c. operating
 - d. financial
 - e. tax-oriented

FINANCIAL LEASE

- d 4. A longer-term, fully-amortized lease under which the lessee is responsible for insurance, taxes, and upkeep and which the lessee generally cannot cancel without incurring a penalty is called a(n) _____ lease.
- a. open
 - b. straight
 - c. operating
 - d. financial
 - e. tax-oriented

TAX-ORIENTED LEASE

- d 5. A financial lease in which the lessor is the owner for tax purposes is called a(n) _____ lease.
- a. open
 - b. straight
 - c. operating
 - d. tax-oriented
 - e. tax-exempt

LEVERAGED LEASE

- a 6. A financial lease in which the lessor borrows a substantial fraction of the cost of the leased asset on a nonrecourse basis is called a(n):
 - a. leveraged lease.
 - b. sale and leaseback arrangement.
 - c. operating lease.
 - d. tax-oriented lease.
 - e. straight lease.

SALE AND LEASEBACK

- b 7. A financial lease in which the lessee sells an asset to the lessor and then leases it back is called a(n):
 - a. leveraged lease.
 - b. sale and leaseback arrangement.
 - c. operating lease.
 - d. tax-oriented lease.
 - e. straight lease.

NET ADVANTAGE TO LEASING

- c 8. The net present value that is calculated when deciding whether to lease an asset or to buy it is called the:
 - a. open interest net present value.
 - b. depreciated net present value.
 - c. net advantage to leasing.
 - d. profitability index.
 - e. average accounting ratio for leasing.

II. CONCEPTS

LEASING VERSUS BUYING

- b 9. Which one of these statements is correct concerning the lease versus buy decision?
 - a. The lessor is primarily concerned with returning the asset at the end of the lease term without incurring any additional charges.
 - b. The lessee is primarily concerned about the use of the asset.
 - c. If Dell Computer became a lessor of its own computers they would be doing direct leasing.
 - d. A firm should always purchase an asset rather than lease it if the asset has a positive salvage value.
 - e. Dell Computer would be a captive finance company if it became a lessor of its own computers.

DIRECT LEASE

- d 10. In a direct lease the lessor:
 - I. is the end user of the asset.
 - II. buys the leased asset from the manufacturer.
 - III. owns the asset.
 - IV. is generally an independent leasing company.
 - a. II and III only
 - b. I and IV only
 - c. III and IV only
 - d. II, III, and IV only
 - e. I, II, III, and IV

OPERATING LEASE

- d 11. Which of the following statements represent characteristics of an operating lease?
 - I. The lessee is generally responsible for the maintenance of the leased asset.
 - II. The lease payments are sufficient to fully cover the lessor's cost of purchasing the asset.
 - III. The lease term is less than the economic life of the asset that is being leased.
 - IV. The lessee generally has the right to cancel the lease early.
 - a. I and III only
 - b. II and IV only
 - c. I and II only
 - d. III and IV only
 - e. I, II, and III only

OPERATING LEASE

- d 12. To determine whether or not an operating lease should be cancelled early, the lessee should compare the:
 - a. number of months they have leased the asset to the number of months remaining in the lease period.
 - b. present value of the future lease payments to the amount already invested in the lease.
 - c. future value of the asset to the salvage value at the time the lease expires.
 - d. present value of the future lease payments to the value they place on the asset at that point in time.
 - e. rate of return on the lease to their current internal financing cost.

OPERATING LEASE

- a 13. Which one of the following statements is correct concerning an operating lease?
 - a. The leased asset will have a significant residual value at the end of the lease term.
 - b. The lease will be recorded as a capital lease on the balance sheet of the lessee.
 - c. The lessor can terminate the lease at any time without penalty.
 - d. The lease term is generally equal to the economic life of the leased asset.
 - e. The lessee is responsible for the maintenance and insurance related to the leased asset.

OPERATING LEASE

- c 14. If a firm wishes to keep a lease off of its balance sheet, it needs to use a(n):
- a. tax-oriented lease.
 - b. leveraged lease.
 - c. operating lease.
 - d. sale and leaseback arrangement.
 - e. financial lease.

OPERATING LEASE

- e 15. If you are analyzing a firm's financial position, you should:
- a. completely ignore any financial leases in which the firm is involved.
 - b. completely ignore any operating leases since they do not affect the balance sheet.
 - c. consider the effects of an operating lease only if it is recorded as a liability on the firm's balance sheet.
 - d. ignore the operating leases since the amount shown as a liability is offset by an equal amount recorded as an asset of the firm.
 - e. consider the effects that all of the operating leases may have on the firm.

OPERATING LEASE

- a 16. A firm that is very cyclical in nature and requires extra equipment only during its peak periods should consider leasing that equipment using a(n) _____ lease.
- a. operating
 - b. tax-oriented
 - c. sale and buyback
 - d. leverage
 - e. financial

FINANCIAL LEASE

- e 17. A financial lease:
- I. is generally a fully amortized lease.
 - II. usually requires the lessor to insure the asset.
 - III. is generally cancelable without penalty if the lessee provides 30 days advance notice.
 - IV. is referred to as a capital lease by accountants.
- a. I and III only
 - b. II and IV only
 - c. I and II only
 - d. II and III only
 - e. I and IV only

TAX-ORIENTED LEASE

- b 18. If a firm does not expect to owe taxes for a few years and needs some equipment, the firm should:
- a. lease the equipment and retain the tax benefits.
 - b. lease the equipment with the lessor retaining the tax ownership of the asset.
 - c. borrow the money to buy the asset and then depreciate it using MACRS depreciation.
 - d. buy the equipment with cash and depreciate it using MACRS.
 - e. buy the equipment and depreciate it straight-line over the life of the asset.

LEVERAGED LEASE

- d 19. If a lessor borrows money on a nonrecourse basis to purchase an asset which will be leased to another party, then:
 - a. the lessor is responsible for the payments on the borrowed funds whether or not the lessee pays the lease payments.
 - b. the lessee is required to send the lease payments directly to the lender of the funds as payment on the loan to the lessor.
 - c. the loan is considered paid in full if the lessee discontinues making the lease payments or terminates the lease early.
 - d. the lessor is only obligated to make loan payments as long as the lessor is collecting the lease payments.
 - e. the lessor must pursue the lessee if the lessee fails to make the agreed upon lease payments.

SALE AND LEASEBACK AGREEMENT

- c 20. If a firm enters a sale and leaseback agreement, then:
 - I. the lessee will benefit from an immediate cash inflow.
 - II. both the lessor and the lessee to that agreement may benefit if the lessor can benefit more from the tax benefits of ownership than can the lessee.
 - III. the lease automatically becomes a nonrecourse lease.
 - IV. the lessee forfeits the right to repurchase the asset at a later date.
 - a. I and III only
 - b. II and IV only
 - c. I and II only
 - d. II and III only
 - e. III and IV only

CAPITAL LEASE

- a 21. Which of the following factors will classify a lease as a capital lease for accounting purposes?
 - I. The lease transfers ownership of the asset to the lessee by the end of the lease.
 - II. The lease term is 75 percent or more of the estimated economic life of the asset.
 - III. The lessee can buy the asset at fair market value at the end of the lease.
 - IV. The initial present value of the lease payments equals or exceeds 80 percent of the fair market value of the asset.
 - a. I and II only
 - b. II and III only
 - c. III and IV only
 - d. I and III only
 - e. II and IV only

CAPITAL LEASE

- d 22. A capital lease is recorded as an asset on the balance sheet in an amount equal to:
 - a. the dollar amount of each lease payment multiplied by the total number of lease payments in the original agreement.
 - b. the dollar amount of each lease payment multiplied by the number of lease payments remaining.
 - c. the dollar amount of each lease payment multiplied by the number of lease payments per year.
 - d. the lesser of the present value of the remaining lease payments or the cost of the asset.
 - e. the future value of the lease agreement at the time the agreement was made.

LEASES AND THE IRS

- e 23. Which one of the following correctly states one of the conditions the IRS sets on leases for them to be considered valid for tax purposes?
 - a. The term of the lease should be greater than 75 percent of the estimated economic life of the asset.
 - b. The lease should have high payments at the beginning of the lease period and low payments at the end of the lease period.
 - c. Any renewal option should be based on a value which is less than the fair market value of the asset at the time of renewal.
 - d. The lessee should have the option to purchase the asset at a discounted price at the end of the lease term.
 - e. The lessor must have a reasonable expectation of earning a profit without considering taxes.

INCREMENTAL CASH FLOWS

- e 24. The incremental cash flows of leasing consider which of the following?
 - I. the cost of the asset
 - II. the lease payment amount
 - III. the applicable tax rate
 - IV. the annual depreciation expense
 - a. I and III only
 - b. II and IV only
 - c. II, III, and IV only
 - d. I, II, and IV only
 - e. I, II, III, and IV

LEASE DISCOUNT RATE

- c 25. The relevant discount rate for evaluating a lease is the firm's:
 - a. cost of equity financing.
 - b. pre-tax cost of borrowing.
 - c. after-tax cost of borrowing.
 - d. cost of working capital.
 - e. rate of return on short-term assets.

TAXES AND LEASING

- c 26. Which of the following statements are correct concerning taxes and leasing?
- I. Tax-deferral is a legitimate reason for leasing.
 - II. The lessor should be the party with the higher tax bracket.
 - III. Leases should increase the total taxes paid.
 - IV. If a firm has significant net operating losses, they should be the lessor in a lease.
- a. I and III only
 - b. II and IV only
 - c. I and II only
 - d. II and III only
 - e. III and IV only

TAXES AND LEASING

- d 27. The IRS will disallow any lease that:
- a. has a lease term in excess of three years.
 - b. has a term that is less than one-half of the economic life of the asset.
 - c. involves a lessee that has net operating losses.
 - d. appears to exist solely to defer taxes.
 - e. reduces the combined tax obligations of the lessor and the lessee.

REASON FOR LEASING

- c 28. The most cited reason why firms enter into lease agreements is to:
- a. lower taxes.
 - b. improve cash flows.
 - c. reduce uncertainty.
 - d. avoid balance sheet reporting.
 - e. bypass restrictive loan covenants.

III. PROBLEMS**AFTER-TAX LEASE PAYMENT**

- b 29. Aldo, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$59,000 and has a 3-year life. The equipment will be worthless after the 4 years and will have to be replaced. The company has a tax rate of 34 percent, a cost of borrowed funds of 10 percent and uses straight-line depreciation. The equipment can be leased for \$22,000 a year. What is the amount of the after-tax lease payment?
- a. \$7,480
 - b. \$14,520
 - c. \$14,750
 - d. \$16,500
 - e. \$22,000

AFTER-TAX LEASE PAYMENT

- c 30. Saturn, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$38,000, has a 3-year life and will be worthless after the 3 years. The equipment will be replaced. The cost of borrowed funds is 8 percent and the tax rate is 34 percent. The equipment can be leased for \$14,500 a year. What is the amount of the after-tax lease payment?
- a. \$4,930
 - b. \$5,333
 - c. \$9,570
 - d. \$12,667
 - e. \$14,500

DEPRECIATION TAX SHIELD – STRAIGHT LINE

- b 31. Aldo, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$59,000, has a 4-year life and is worthless after the 4 years. The company has a tax rate of 34 percent, a cost of borrowed funds of 10 percent and uses straight-line depreciation. The equipment can be leased for \$16,000 a year. What is the amount of the annual depreciation tax shield?
- a. \$4,559
 - b. \$5,015
 - c. \$5,333
 - d. \$5,517
 - e. \$5,600

DEPRECIATION TAX SHIELD – STRAIGHT LINE

- b 32. Saturn, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$38,000, has a 3-year life and is worthless after the 3 years. The cost of borrowed funds is 8 percent and the tax rate is 34 percent. The equipment can be leased for \$14,500 a year. What is the amount of the annual depreciation tax shield if the firm uses straight-line depreciation?
- a. \$3,988
 - b. \$4,307
 - c. \$4,738
 - d. \$5,005
 - e. \$5,570

DEPRECIATION TAX SHIELD – MACRS

- a 33. Jamestown Industries is contemplating the acquisition of some new equipment. The purchase price is \$40,000. The equipment has a 4-year life after which time it will be worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$11,000 a year. The firm can borrow money at 7 percent and has a 35 percent tax rate. What is the amount of the depreciation tax shield in year 4?
- a. \$1,037
 - b. \$2,075
 - c. \$2,400
 - d. \$2,964
 - e. \$3,112

DEPRECIATION TAX SHIELD – MACRS

- b 34. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is \$60,000. The equipment has a 4-year life after which time it will be worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$16,500 a year. The firm can borrow money at 9 percent and has a 34 percent tax rate. What is the amount of the depreciation tax shield in year 3?
- a. \$1,512
 - b. \$3,023
 - c. \$3,294
 - d. \$8,607
 - e. \$8,892

NET ADVANTAGE TO LEASING – STRAIGHT LINE

- c 35. Pluto, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$38,000, has a 3-year life and is worthless after the 3 years. The after-tax discount rate is 5 percent. The annual depreciation tax shield is \$4,307 and the after-tax annual lease payment is \$9,240. What is the net advantage to leasing??
- a. -\$2,641
 - b. -\$1,337
 - c. \$1,108
 - d. \$1,333
 - e. \$3,427

NET ADVANTAGE TO LEASING – STRAIGHT LINE

- d 36. Saturn, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs \$54,000, has a 3-year life and is worthless after the 3 years. The pre-tax cost of borrowed funds is 8 percent and the tax rate is 34 percent. The equipment can be leased for \$19,500 a year. What is the net advantage to leasing?
- a. -\$2,970
 - b. -\$1,500
 - c. \$1,667
 - d. \$2,556
 - e. \$2,818

NET ADVANTAGE TO LEASING – MACRS

- b 37. Bleckly Industries is contemplating the acquisition of some new equipment. The purchase price is \$80,000. The equipment has a 4-year life after which time it will be worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$21,500 a year. The firm can borrow money at 9 percent and has a 35 percent tax rate. What is the net advantage to leasing?
- a. \$6,298
 - b. \$6,334
 - c. \$6,372
 - d. \$6,467
 - e. \$6,481

NET ADVANTAGE TO LEASING – MACRS

- e 38. Big Top, Inc. is contemplating the acquisition of some new tents. The purchase price is \$148,000. The tents have a 4-year life after which time they are worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent and 7.41 percent depreciation over years 1 to 4, respectively. The tents can be leased for \$39,000 a year. The firm can borrow money at 9 percent and has a 34 percent tax rate. What is the net advantage to leasing?
- a. \$12,809
 - b. \$13,006
 - c. \$13,124
 - d. \$13,488
 - e. \$13,697

NET ADVANTAGE TO LEASING – MACRS – NO TAX

- d 39. Big Top, Inc. is contemplating the acquisition of some new tents. The purchase price is \$148,000. The tents have a 4-year life after which time they are worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The tents can be leased for \$39,000 a year. The firm can borrow money at 9 percent and has a 34 percent tax rate. The firm does not expect to pay any taxes for the next 6 years because of their accumulated net operating losses. What is the net advantage to leasing?
- a. \$13,697
 - b. \$14,001
 - c. \$18,778
 - d. \$21,651
 - e. \$22,222

NET ADVANTAGE TO LEASING –STRAIGHT LINE – NO TAX

- b 40. Home Delivery is considering the purchase of a delivery truck costing \$58,000. The truck can be leased for 3 years at \$21,000 per year or it can be purchased at an interest rate of 8.5 percent. The estimated life of the truck is 3 years. The corporate tax rate is 34 percent. The company does not expect to owe any taxes for the next several years due to accumulated net operating losses. The firm uses straight-line depreciation. What is the net advantage to leasing?
- a. \$1,459
 - b. \$4,366
 - c. \$5,289
 - d. \$18,904
 - e. \$20,836

NET ADVANTAGE TO LEASING – STRAIGHT LINE – NO TAX

- a 41. Your firm is considering either leasing or buying some new equipment. The lessor will charge \$27,500 a year should you decide to lease. The purchase price is \$50,000. The equipment has a 2-year life after which time it will be worthless. Your firm uses straight-line depreciation and can borrow money at 8 percent. Your firm has sufficient tax loss carryovers to offset any potential taxable income the firm might have over the next five years. What is the net advantage to leasing?
- a. \$960
 - b. \$1,037
 - c. \$2,074
 - d. \$4,630
 - e. \$5,000

NET ADVANTAGE TO LEASING – STRAIGHT LINE – NO TAX

- c 42. Your firm is considering either leasing or buying some new equipment. The lessor will charge \$21,000 a year should you decide to lease. The purchase price is \$57,000. The equipment has a 3-year life after which time it will be worthless. Your firm uses straight-line depreciation and can borrow money at 8 percent. Your firm has sufficient tax loss carryovers to offset any potential taxable income the firm might have over the next five years. What is the net advantage to leasing?
- a. \$1,247
 - b. \$1,989
 - c. \$2,881
 - d. \$4,410
 - e. \$6,000

NET ADVANTAGE TO LEASING – SALVAGE VALUE – STRAIGHT LINE – NO TAX

- a 43. Your firm is considering either leasing or buying some new equipment. The lessor will charge \$27,500 a year should you decide to lease. The purchase price is \$50,000. The equipment has a 2-year life after which time it is expected to have a resale value of \$15,000. Your firm uses straight-line depreciation and can borrow money at 8 percent. Your firm has sufficient tax loss carryovers to offset any potential taxable income the firm might have over the next five years. What is the net advantage to leasing?
- a. -\$11,900
 - b. -\$480
 - c. \$960
 - d. \$8,400
 - e. \$13,820

NET ADVANTAGE TO LEASING – SALVAGE VALUE – STRAIGHT LINE – NO TAX

- a 44. Martin Industries is weighing a lease versus a purchase of some new machinery. The purchase price is \$160,000. The equipment has a 4-year life after which time it is expected to have a resale value of \$70,000. Your firm uses straight-line depreciation and can borrow money at 8 percent. The equipment can be leased for \$30,000 a year for 4 years. The firm does not expect to owe any taxes for the next six years because of accumulated net operating losses. What is the net advantage to leasing?
- a. \$9,184
 - b. \$9,233
 - c. \$9,908
 - d. \$11,209
 - e. \$11,618

NET ADVANTAGE TO LEASING – SALVAGE VALUE – STRAIGHT LINE

- a 45. Your firm is considering either leasing or buying some new equipment. The lease payments will be \$19,000 a year. The purchase price is \$50,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$10,000. Your firm uses straight-line depreciation, borrows money at 8 percent and has a 35 percent tax rate. What is the net advantage to leasing?
- a. -\$4,916
 - b. -\$4,651
 - c. -\$1,708
 - d. \$2,104
 - e. \$2,998

NET ADVANTAGE TO LEASING – SALVAGE VALUE – STRAIGHT LINE

- c 46. Your firm is considering either leasing or buying some new equipment. The lease payments will be \$11,000 a year. The purchase price is \$30,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$5,000. Your firm uses straight-line depreciation, borrows money at 9 percent and has a 34 percent tax rate. What is the net advantage to leasing?
- a. -\$6,980
 - b. -\$2,731
 - c. -\$1,301
 - d. -\$845
 - e. \$936

BREAK-EVEN LEASE PAYMENT

- d 47. Jupiter Enterprises is considering the purchase of some new equipment costing \$72,000. This equipment has a 2-year life after which time it will be worthless. The firm uses straight-line depreciation and borrows funds at a 9 percent rate of interest. The company's tax rate is 35 percent. The firm also has the option of leasing the equipment. What is the amount of the break-even lease payment?
- a. \$26,589
 - b. \$32,803
 - c. \$39,189
 - d. \$40,906
 - e. \$41,009

BREAK-EVEN LEASE PAYMENT

- c 48. A firm borrows money at 8 percent, uses straight-line depreciation and has a 35 percent tax rate. The firm's break-even after-tax annual lease payment on a piece of equipment is \$12,309. How much will the firm have to pay annually to the lessor to lease this equipment?
- a. \$8,001
 - b. \$13,379
 - c. \$18,937
 - d. \$27,478
 - e. \$35,169

BREAK-EVEN LEASE PAYMENT

- e 49. Home Delivery is considering the purchase of a delivery truck costing \$58,000. The truck will be used for 4 years after which time it will be worthless. The financing rate for the purchase is 9 percent and the corporate tax rate is 34 percent. The firm uses straight-line depreciation. What is the break-even lease payment amount?
- a. \$15,392
 - b. \$16,206
 - c. \$16,715
 - d. \$17,481
 - e. \$17,857

SALVAGE VALUE

- d 50. Your firm is considering either leasing or buying some new equipment. The lessor will charge \$21,000 a year should you decide to lease. The purchase price is \$56,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$12,000. Your firm uses straight-line depreciation, borrows money at 8 percent and has a 35 percent tax rate. What is the after-tax salvage value of the equipment?
- a. \$3,360
 - b. \$4,800
 - c. \$5,400
 - d. \$6,240
 - e. \$6,740

SALVAGE VALUE

- d 51. Smith & Sons is considering either leasing or buying some new equipment. The lease payments would be \$21,000 a year. The purchase price is \$65,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$12,000. Your firm uses straight-line depreciation, borrows money at 8 percent and has a 35 percent tax rate. What is the after-tax salvage value of the equipment?
- a. \$4,200
 - b. \$5,700
 - c. \$6,300
 - d. \$7,800
 - e. \$8,100

ANNUAL CASH FLOW – MACRS

- a 52. Jamestown Industries is contemplating the acquisition of some new equipment. The purchase price is \$40,000. The equipment has a 4-year life after which time it will be worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$11,000 a year. The firm can borrow money at 7 percent and has a 35 percent tax rate. What is the incremental annual cash flow for year 2 if the company decides to lease the equipment rather than purchase it?
- a. -\$13,372
 - b. -\$7,904
 - c. -\$4,778
 - d. -\$2,916
 - e. -\$928

ANNUAL CASH FLOW – MACRS

- e 53. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is \$35,000. The equipment has a 4-year life after which time it will be worthless. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$9,500 a year. The firm can borrow money at 8 percent and has a 35 percent tax rate. What is the incremental annual cash flow for year 3 if the company decides to lease the equipment rather than purchase it?
- a. -\$9,238
 - b. -\$8,607
 - c. -\$8,219
 - d. -\$8,007
 - e. -\$7,990

ANNUAL CASH FLOW – STRAIGHT LINE

- c 54. Your firm is considering either leasing or buying some new equipment. The lease payments will be \$11,000 a year. The purchase price is \$30,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$5,000. Your firm uses straight-line depreciation, borrows money at 9 percent and has a 34 percent tax rate. What is the incremental cash flow for year 1 if the company decides to lease the equipment rather than purchase it?
- a. -\$21,000
 - b. -\$14,400
 - c. -\$10,660
 - d. -\$7,140
 - e. -\$3,570

ANNUAL CASH FLOW – STRAIGHT LINE – NO TAX

- a 55. Your firm is considering either leasing or buying some new equipment. The lease payments will be \$13,000 a year. The purchase price is \$35,000. The equipment has a 3-year life after which time it is expected to have a resale value of \$7,000. Your firm uses straight-line depreciation, borrows money at 7 percent, and has a 35 percent tax rate. The company does not expect to owe any taxes for at least 5 years because they have accumulated net operating losses. What is the incremental cash flow for year 2 if the company decides to lease the equipment rather than purchase it?
- a. -\$13,000
 - b. -\$12,533
 - c. -\$10,600
 - d. -\$8,450
 - e. -\$7,500

ANNUAL CASH FLOW – SALVAGE VALUE – MACRS

- c 56. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is \$35,000. The equipment has a 4-year life. The company expects to sell the equipment at the end of year 4 for \$8,000. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$9,500 a year. The firm can borrow money at 8 percent and has a 35 percent tax rate. What is the incremental annual cash flow for year 4 if the company decides to lease the equipment rather than purchase it?
- a. -\$15,083
 - b. -\$13,740
 - c. -\$12,283
 - d. -\$9,740
 - e. -\$7,083

ANNUAL CASH FLOW – SALVAGE VALUE – NO TAX

- b 57. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is \$35,000. The equipment has a 4-year life. The company expects to sell the equipment at the end of year 4 for \$8,000. The firm uses MACRS depreciation which allows for 33.33 percent, 44.44 percent, 14.82 percent, and 7.41 percent depreciation over years 1 to 4, respectively. The equipment can be leased for \$9,500 a year. The firm can borrow money at 8 percent and has a 35 percent tax rate. The company does not expect to owe any taxes for at least the next 5 years due to accumulated net operating losses. What is the incremental annual cash flow for year 4 if the company decides to lease the equipment rather than purchase it?
- a. -\$18,408
 - b. -\$17,500
 - c. -\$12,500
 - d. -\$9,500
 - e. -\$8,000

IV. ESSAYS

FINANCIAL LEASES

58. List and briefly explain the three types of financial leases.

The three types of financial leases are tax-oriented, leveraged, and sale and leaseback agreements. Explanations of these are found in section 26.1.

REASONS FOR LEASING

59. Five good reasons for leasing are listed in the text. List and briefly explain them.

The reasons are: 1. Taxes may be reduced, 2. The lease contract may reduce uncertainty, 3. Transactions costs may be lower with leasing, 4. Leasing may require fewer restrictive covenants and 5. Leasing may encumber fewer assets than secured borrowing.

LEASING VERSUS BUYING

60. What are the key differences between leasing and buying?

Briefly, in buying, the firm arranges the financing itself, purchases the asset and holds title to the asset. In a leasing arrangement, the leasing firm does these things.

NET ADVANTAGE TO LEASING

61. The chapter describes the “leasing paradox”. What is this paradox? Would you call leasing a “zero-sum game”? Under what conditions can leasing be financially advantageous for both the lessor and the lessee?

The leasing paradox is that, given identical tax and borrowing rates, the lessee’s cash flows will be equal in size (but opposite in sign) to those of the lessor. In other words, leasing would be, at best, a break-even proposition for both parties. The existence of tax differentials, differential transactions costs and different borrowing terms are a few of the reasons that leasing can be worthwhile for both parties in a world with market frictions.

AUTOMOBILE LEASING

62. The leasing of automobiles by consumers has grown substantially in recent years, to the point where not only new vehicles are being leased, but used autos as well. Why do you think this type of leasing has become so popular? These auto leases sometimes allow the lessee to buy the car at a specified price at the end of the lease. Explain the option involved here.

Consumer leasing of automobiles has grown to a large extent because consumers have tended to acquire very little equity in the cars they buy, after owning them for only one to three years due to the long financing terms provided. Thus, by leasing, the consumer doesn’t have to worry about equity or residual value if they trade cars every two years or so. In a lease, they simply put the auto back to the lessor, or, more correctly, they choose to let their call option on the automobile expire. Many leases are constructed with very low transaction costs. Also, if the lessee uses the car for business there may be tax motivations for leasing.

APPROPRIATE DISCOUNT RATE

63. When calculating net present value earlier in the text, the appropriate cost of capital for a project was determined by the use of the funds not the source. However, in this chapter we calculated the net advantage to leasing by discounting the cash flows at the lessee's aftertax borrowing rate. Aren't we violating our basic NPV principles here? Explain.

We use the after-tax borrowing rate because we are deciding which is better, leasing or buying. Essentially, we have assumed the decision to acquire the asset has already been made via other analysis.