

# Χρηματοδότηση & Χρηματοοικονομική Ανάλυση Γεωργικών Επιχειρήσεων (286)

**Μισθώσεις**

# Finance lease versus operating lease (IAS 17)

<b>Finance lease</b>	<b>Operating lease</b>
<b>Transfer of substantially all risks and rewards of ownership</b>	<b>No transfer of substantially all risks and rewards of ownership</b>
Transfer of ownership at the end of lease term	No transfer of ownership at the end of lease term
Option to purchase the asset at a price expected to be exercised	No option to purchase the asset, or option to purchase not expected to be exercised
Present value of MLPs equals to substantially all of the FV of the asset	Present value of MLPs differs substantially from the FV of the asset
Leased asset's nature only suitable for lessee	There can be several users of the asset

**Key for classification: substance over form**

# Finance lease versus operating lease (IAS 17)

– Leasing for Lessors still applicable under IFRS 16

<b>Lease type</b>	<b>Balance Sheet</b>	<b>Income Statement</b>
<b>Finance – Lessee</b>	Asset Accumulated depreciation Lease obligation Reduction in lease obligation	Depreciation expense Finance expense
<b>Finance – Lessor</b>	Receivable Reduction in receivable	Sale of asset Finance income
<b>Operating – Lessee</b>	Off balance sheet	Rental expense
<b>Operating – Lessor</b>	Asset Accumulated depreciation	Rental income Depreciation expense

# Indications for a finance lease (IAS 17)

- Transfer ownership by the end of lease term
- Option to purchase (low price)
- Lease term is major part of the economic life
- Present value minimum lease payments amounts to substantially all of the fair value
- Specialised nature
- If lease can be cancelled, costs for lessee
- Gains or losses in residual value flow to lessee
- Lessee has ability to lease a secondary period for a low rental

# Minimum Lease Payments (MLPs) – IAS17

MLPs =

Payments over lease term

+ Guaranteed residual value

+ Bargain purchase option

– Contingent rent

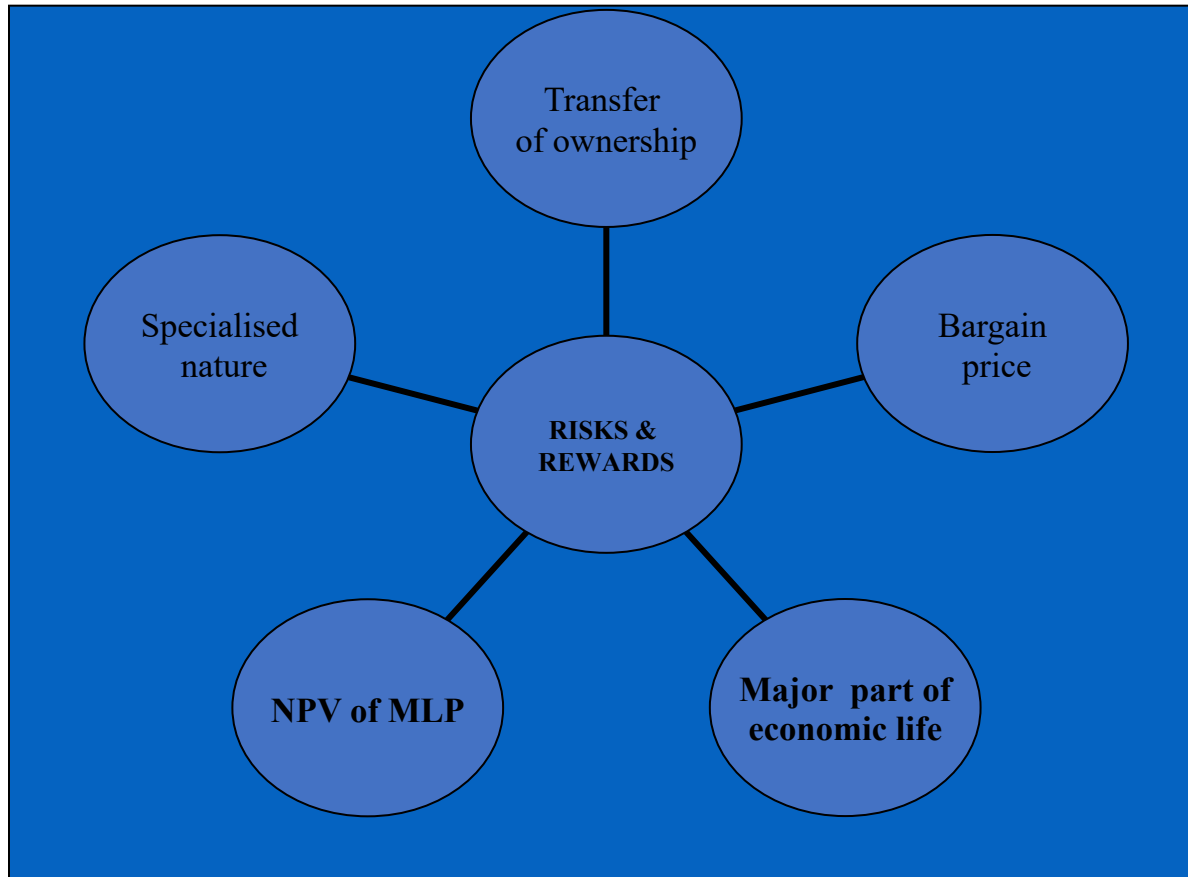
– Reimbursement of costs paid by lessor

(e.g. maintenance, insurance, taxes, supplies, replacement parts)

**Commonly referred to as executory costs:**

The lessee reimburses the lessor for the lessor's expense payments

# Finance lease versus operating lease (IAS17)



# Key element for classification as finance lease (IAS 17):

Are substantially all of the risks and rewards of the ownership transferred to the lessee?

# Tutorial 4: Assignment 2 Heineken report 2011 - Leasing

Heineken enters into a long-term lease for a machine. The value of the machine is €14,740

The lease terms call for an annual payment of €4,000 for 6 years (in arrears) which approximates the useful life of the machine. At the end of the lease period the title to the machine passes to Heineken.

Heineken's interest rate for the unpaid part of the obligation is 16%.



Question 1: Is This a Finance Lease under IAS17?

# Answer question 1

Yes, this is a finance lease:

- Heineken will be legal owner at the end of the lease period
- The lease term covers the economic life of the leased asset

Question 2: Compose a payment schedule for this lease

## Answer question 2: Payment Schedule on 16% Finance Lease

Year	A Lease Payment	B Interest of Unpaid Obligation (D x 16%)	C Reduction of Lease Obligation (A - B)	D Balance of Lease Obligation (D - C)
Beginning				14,740
1	4,000	2,358	1,642	13,098
2	4,000	2,096	1,904	11,194
3	4,000	1,791	2,209	8,985
4	4,000	1,438	2,562	6,423
5	4,000	1,028	2,972	3,450
6	4,000	550	3,450	-
	<b>24,000</b>	<b>9,260</b>	<b>14,740</b>	

The last year's interest equals €550 (€4,000 - €3,450).

Question 3: Give the journal entries referring to this lease contract of Heineken for year 1 under IAS17.

- a) Lease contract
- b) Payment of the lease obligation year 1
- c) Interest payment year 1
- d) Depreciation year 1

# Answer question 3

a)	Leased asset	14,740
	Lease liability	14,740
b)	Lease liability	1,642
	Cash	1,642
c).	Interest expense (p/l)	2,358
	Cash	2,358
d).	Depreciation expense leased asset (p/l)	2,457 (*)
	Accum.depreciation leased asset	2,457

(\*) Annual Depreciation =  $14740/6 = 2457$

Question 4: Give the journal entries referring to this lease contract of Heineken for year 1 under IFRS 16

- a) Lease contract
- b) Payment of the lease obligation year 1
- c) Interest payment year 1
- d) Depreciation year 1

# Answer question 4

a)	Right-of-use asset	14,740	
	Lease liability		14,740
b)	Lease liability	1,642	
	Cash		1,642
c)	Interest expense (p/l)	2,358	
	Cash		2,358
d)	Depreciation expense leased asset (p/l)	2,457	
	Accum.depreciation right-of-use asset		2,457



## Question 5: Compose the journal entries for the lessor in year 1 under IAS 17 and IFRS16

Which journal entries could be made in year 1 by the lessor ?

- a at establishment of lease contract
- b when receiving the first lease payment

# Answer question 5

a	lease receivable	14.740	
	asset		14.740
b	cash	4.000	
	interest income (p/l)		2.358
	lease receivable		1.642

# Answer question 5 (alternative approach)

a	lease receivable	24.000	
	unearned interest income (bs)	9.260	
	asset	14.740	

b	cash	4.000	
	unearned interest income	2.358	
	interest income (p/l)	2.358	
	lease receivable	4.000	

Question 6 : Which journal entry would have Heineken made in year 1 had this been an operating lease (under IAS17)?

# Answer question 6

Lease (rental) expenses 4.000

cash 4.000

Question 7 : Which journal entry would Heineken make in year 1 under IFRS16 (if this had been an operating lease under IAS17 and not qualified as an operating lease under IAS16 criteria)?

In IFRS 16 there are still two forms of “operating leases” for contracts:  
< € 5,000  
< 12 months

# Answer question 7

a)	Right-of-use asset	14,740	
	Lease liability		14,740
b)	Lease liability	1,642	
	Cash		1,642
c)	Interest expense (p/l)	2,358	
	Cash		2,358
d)	Depreciation expense leased asset (p/l)	2,457	
	Accum.depreciation right-of-use asset		2,457

Question 8 : which journal entry would the lessor make in case of situation question 7?



## Answers question 8

Cash	4,000	
Lease income		4,000
Depreciation expenses	2,457	
Accum depreciation		2,457

So both lessee and lessor capitalize and depreciate the same asset!!

# Week 4 Assignment 3 Heineken report 2011

## Leasing (Advanced assignment; see also remarks on ending slide)

On 30 June 2012 Heineken enters into a lease transaction for the acquisition of a vehicle.

- The Fair value (FV) of the vehicle at the inception of the lease was \$89,721.
- Lease establishment costs incurred by the lease company totalled \$1,457 (Initial direct costs (IDC))
- The lease agreement is for 4 years and the economic life of the vehicle is 6 years.
- The annual lease payments (payable in advance on 30 June each year) are \$23,900. This includes \$1,900, representing a reimbursement of insurance paid by the lessor.
- The lease is cancellable, but will incur a penalty equal to 2 years lease payments.
- The present value of Minimum lease payments (MLP) has been calculated to be \$85,457.
- The estimated residual value of the asset at the end of the lease term is \$15,000 and the guaranteed residual value is \$7,500.
- Heineken intends on returning the asset to the lease company at the end of the lease term.
- The interest rate implicit in the lease is 7%.

### **Required:**

Determine whether the lease is an operating or finance lease (under IAS17)

Note:

• **Minimum lease payments (MLP)**

**Annual Lease Payments + guaranteed residual value + bargain purchase option - contingent rent - reimbursements of costs paid by the lessor (executory costs)**

• First step: calculate the discount rate (i). **FV + IDC = pv of (MLP+unguaranteed RV)**

$$89.721 + 1.457 = 22.000/(1+i)^0 + 22.000/(1+i)^1 + 22.000/(1+i)^2 + 22.000/(1+i)^3 + 15.000/(1+i)^3 \Rightarrow i = 0,07$$

• Second step:

$$PVMLP = 22.000/(1,07)^0 + 22.000/(1,07)^1 + 22.000/(1,07)^2 + 22.000/(1,07)^3 + 7.500/(1,07)^3 = 85.457$$

# Classification Of Lease

Is the lease non-cancellable?

Is ownership to be transferred at end of the lease term?

Does the term of the lease cover a major part of the asset's economic life?

# Classification Of Lease

Is the lease non-cancellable?

- The lease is cancellable, but a significant monetary penalty will apply – therefore the lease is deemed to be non-cancellable

Is ownership to be transferred at end of the lease term?

- No – Heineken expects to return the asset to the lessor

Does the term of the lease cover a major part of the asset's economic life?

- The lease term is for 67% of the economic life of the asset (4/6 years)
- Unlikely that this would be considered to be a major part of the asset's life

# Classification Of Lease

Does the present value of MLP represent substantially the FV of the asset?

Does the lessee bear substantially all ownership risks and rewards?

Conclusion:

# Classification Of Lease

Does the PV of MLP represent substantially the FV of the asset?

- $(85,457 / (89,721 + 1,457)) = 93.7\%$
- This represents substantially all the FV of the lease asset.

Does the lessee bear substantially all ownership risks and rewards?

- It appears so...

Conclusion:

In spite of the mixed signals above, this lease of Heineken should be classified as a finance lease under IAS17 criteria as substantially all the risks and rewards of ownership pass to the lessee

# Remarks about advanced leasing (IAS17)

- Minimum lease payments:  
annual lease payments adjusted for bargain purchase option, guaranteed residual value, contingent rent and reimbursements to the lessor
- In case of an automatic transfer of ownership at the end of the lease term:  
a 100% guaranteed residual value or a bargain price option; no need for calculating PV of MLP (pv mlp = fair value)
- Guaranteed residual value is either:  
amount that lessee will pay to lessor at the end of the lease to purchase the asset  
  
OR  
the value that lessor will realize if lessee returns the asset
- Initial recognition for the lessee:  
the lower of the PV of the MLP's and the fair value
- If it is not certain that the leased asset will be purchased by lessee:  
depreciation term is the shorter of the lease term and the useful economic life. If it is certain then use the useful life.
- In case of a guaranteed residual value: depreciation term is the lease term.
- In case of a bargain purchase option: depreciation term is the useful economic life
- The payments schedule is not per definition the same for the lessor and the lessee!  
(in the scheme of payments of the lessor the unguaranteed residual value is included)