# INTERNATIONAL CORPORATE FINANCE

Company's Capital Structure

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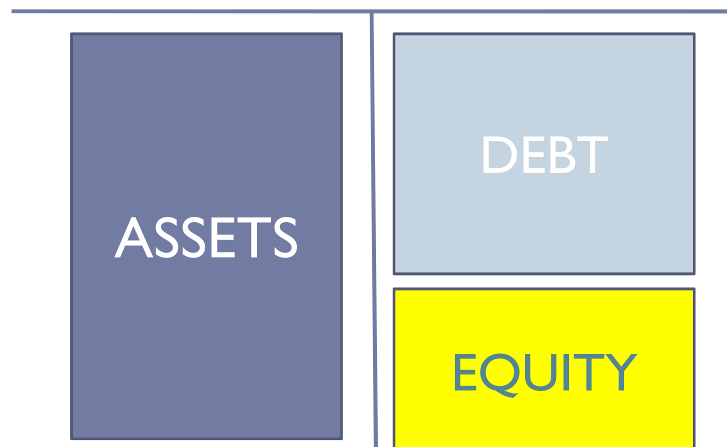
## Company's Balance Sheet

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## Debt or equity question - when relevant?

- Company is being started
- New Subsidiary is being etablished
- New project is being considered
- Expansion decision is made
- Original owner wants to take some cash out

- So, when the Company needs financing

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## Equity vs. Debt

- Equity – financing (in form of money or in-kind contribution) that Company's owners invest into the venture.
  - Equity investors become the Company's (co-) owners. Ownership unit is called 'share'. The equity investors are entitled to share in profits.

- Debt – financing that creditors are willing to give the Company, and the Company is obliged to return in the future.

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## Corporate perspective Debt vs Equity

- Company is being started

or

- New project is being considered
- Original owner wants to take some cash out

- So, when the Company needs financing

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## Advantages and disadvantages of Debt

- Interest is tax deductible (lowers the effective cost of debt)
- Debt-holders are limited to a fixed return – so stockholders do not have to share profits if the business does well
- Debt holders do not have voting rights

- Cash flow predictibility necessary
- Higher debt ratios lead to greater risk and higher required interest rates (to compensate for the additional risk)

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## Financing rental gain example

- Property business: hotel
- Yield: 6% pre tax, net opex
- Cost: USD 1mio,
- Tax rate (t) is 20%
- Debt cost: LIBOR + 200bp (20 year mortgage).
- Libor is now 0%, long term rates around 2%
- Your bank offers only equal principal instalment (here 5% pa)

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## Financing rental gain – equity only

- Buy property that is yielding 6% pre tax, net opex for USD 1mio, tax rate (t) is 20%
- You can borrow for LIBOR + 200bp (20 year mortgage).
- Libor is now 0%, long term rates around 2%
- Your bank offers only equal principal installment (here 5% pa)

- If you buy property cash
- Your return is 4.8%
- Annual cash flow for shareholders is $48 000

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# Financing rental gain – loan (1)

- Buy property that is yielding 6% pre tax, net opex for USD 1mio, tax rate (t) is 20%
- You can borrow for LIBOR + 200bp (20 year mortgage).
- Libor is now 0%, long term rates around 2%
- Your bank offers only equal principla installment (here 5% pa)

- How much approximately can you borrow?
- Annual free cash flow for debt service: FCDS=6%×(1-t)×1mio = $48,000
- Debt service (in short term) is: Loan×5% + Loan×2%
- Tax shield is MaxLoan×2%×t (to the extent its lower than gross profit)
- So: MaxLoan×5% +MaxLoan×2% = CFDS + MaxLoan×2%×t

  MaxLoan = $ 727 727

- Lets assume you take $ 700 000 loan

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# Financing rental gain – loan (2)

- Buy property that is yielding 6% pre tax, net opex for USD 1mio, tax rate (t) is 20%
- You can borrow for LIBOR + 200bp (20 year mortgage).
- Libor is now 0%, long term rates around 2%
- Your bank offers only equal principla installment (here 5% pa)

- Loan od $ 700 000 and cash of $ 300 000
- Annual CFDS=(6%×1mio-2%×700k)×(1-t)= $ 36 800
- If you pay back the installement (of $35k) the annual cash flow for shareholders = $ 1 800 (i.e. mere 0.6%). Lower than previously?
- But you now have repaid one installment so there remains less debt to pay back, so actually for return calculation your installment could be ignored, as the installemnt is effectively your non cash profit .

  Therefore levered return $ 36 800 / 300 000 = 12.2%

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# Financing rental gain – leverage

- Unlevered investment of $1mio yields 4.8% p.a.
- 70% levered investment yields 12.2% p.a.

- How was it possible?
- The cost of debt was 4% (expected long term) significantly lower vs 6% business return. Therefore we could have increased equity return when taking on loan.
- Increase in return was obtained thanks to (i) leverage and (ii) tax shield

- Is that all leverage impact?

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# Financing rental gain – exit price

- Unlevered investment of $1mio yields 4.8% p.a.
- 70% levered investment yields 12.2% p.a.
- Exit after 2 years, selling price $ 1 100 000, Prepayment fee 1%
- We ingnore time value of money for simplicity

- Unlevered example
  - 2 years profits add to $96k
  - Sales revenues were $1100k, therefore tax is 20k (20% of 100,000)
  - Total cash inflows for equity is 96k + 1100k - 20k = 1176k
  - Therefore return on equity investment is 176 000 /1 000 000 = 17.6%

- Levered example
  - 2 years profits add to approx. $3.6k (2x1.8k)
  - Sales revenues were $1.1mio, therefore capital gain tax is $20k
  - Loan remaining to be repaid $630k , prepayment fee $6.3 mio
  - Therefore all inflows for equity is 3.6k + 1100k -20k
  - When we deducer repayment of loan and prepayment fee (total 636.3) we have net result of 447.3k
  - As a result the return on capital investmetn is $ 147 300 / 300 000 = 49.1%

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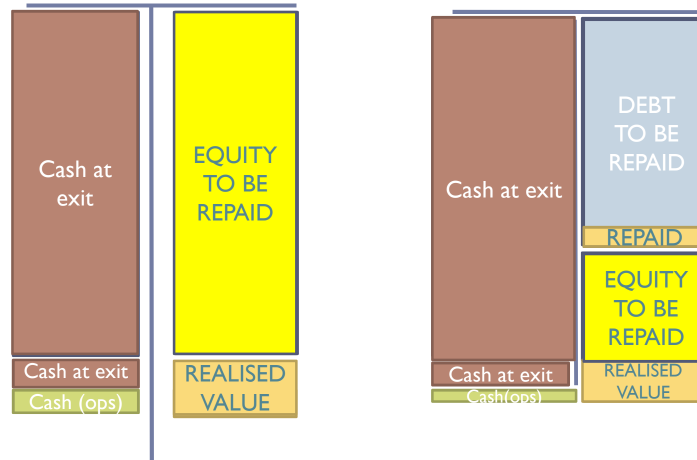
# How was this possible?

- Unlevered investment of $1mio gave 17.6% (1.176x money) at exit
- Levered investment of $300k gave 49.6% (nearly 1.5x money) at exit

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# Financing rental losses – exit @loss

- Unlevered investment of $1mio yields 4.8% p.a.
- 70% levered investment yields 12.2% p.a.
- Exit after 2 years, selling price $ 900 000, Prepayment fee 1%

- Unlevered example
  - 2 years profits add to $96k
  - Sales revenues were $ 900k, therefore tax return is 20k
  - Total inflows for equity is 96k + 900k + 20k = 1016 k
  - Therefore return on equity investment is 16 000 /1 000 000 = 1.6%

- Levered example
  - 2 years profits add to approx $3.6k
  - Sales revenues were $ 900k, therefore tax return is $18.4k (all tax paid)
  - Loan remaining to be repaid $630k , prepayment fee $6.3 mio
  - Therefore net inflows for equity is (3.6k + 900k +18.4k- 636.3) = 285.7
  - in return is $ - 14 300 / 300 000 = **MINUS** 4.77%

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## Situation One

You are a successful businessman. You started in the tourist business 10 years ago, first 5 years renting a house you inherited, thereafter building your first hotel (by taking mortgage over land, your apartment and selling the inherited house).

The hotel was so popular that you shortly decided to built another one. Thanks to good publicity your two hotels are now well known. You finance it wth new mortgage secured over both hotels.

You would like to expand (built a network of 3-5 hotels) and you cheaply bought a nice land in three tourist districts.

How can you finance your expansion. What are pros and cons of different options? Do you built hotels one by one or all at once?

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## Financing real estate

- Land value and real estate is tangible, therefore its relatively easy to borrow
- Hotels generate relatively stable revenues stream which can help to service the debt.
- However do yout think revenues form two hotels would be sufficient to pay back loans?
- You need to decide if you want a „no-cash" slow growth or build all hotels at once
- If you want quick growth you would most likely need new equity. Where would you look for it?

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## Situation Two

You are leading a large oil group, that has a refinery and a network of petrol stations. The Company is listed at the Hungarian stock exchange. You see the opportunity in entering the oil exploration. Thanks to your business contacts you have identified an interesting piece of land in Kazakhstan. The largest shareholder approves this strategy, however some minorities consider it too risky.

How do you finance your plans? Within the existing Company or by establishing new one? Do you use debt or equity?

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## Situation Three

You are a bright postgraduate. Together with your friend you developed a social internet network for graduates of your uni but business-oriented (split by the type of job performed). It became popular and you started make money on adds. You financed it by „friends and family" money.

Than another uni asked you to replicate this, which you did partly via prepayment from uni, but rest from own profits form first project.

Now you have the idea to expand the business onto 100 universities in US. This requires USD 200 million into IT, with expected profits of 30 million a year, but possible only after ca. 2 years when systems gain popularity.

A well known business man offered you help in raising 95% finance for 66% of your company and profits. Do you accept his help? What options to finance you have and which would you choose.

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