Company-Taxation for foreign investors

- Cost of Capital and Tax Shield
- Avoidance of Double Taxation

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I. Value Based Management
VBM

Definition

- VBM is an approach to management whereby the company's overall aspirations, analytical techniques, and management processes are aligned to help the company maximize its value by focusing management decision making on the key drivers of shareholder value

- VBM is based on two elements
    - the value creation objective
    - the management processes and systems

The Value Creation Objective

- Shareholders are interested in increasing the value of their shares

- Therefore, the goal is to maximize the value of the company (Rappaport)

Discounted Cash Flow Method

= valuation method widely used in the context of VBM

- Value of a business= the present value of all the cash flows that the business is expected to bring in the future and that are estimated over an unlimited period of time

- The DCF method is preferred to other methods because it creates an objective picture

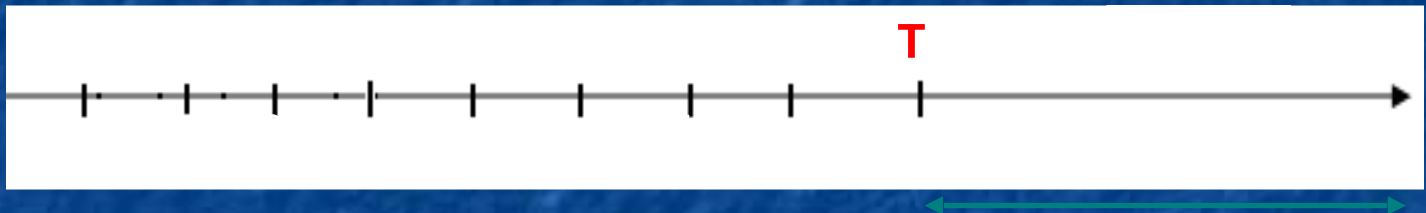
Calculating the Value

- There are two main variables to be calculated:
  1) The future expected cash flows
  2) The discount rate to be used

$$\left(\frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \ldots\ldots\ldots + \frac{CF_n}{(1+r)^n} \right)$$

The Continuing Value

- After determining the length of the forecast for the rest of the period a CV can be calculated:



From T on, we calculate the Continuing Value

$$CV_T = \frac{FCF_{T+1}}{r-g}$$

Taxation and VBM

- An effective tax management can have a positive impact on shareholder value

⇕

a. Low Taxes will increase FCF

b. Taxes influence the Cost of Capital
WACC

Definition of the WACC:

$$WACC = k_e \frac{E}{(E + D)} + k_d \ (1 - \text{tax rate}) \frac{D}{(E + D)}$$

with:

k_e = cost of equity

k_d = cost of debt (before tax)

E = Equity (in funding mix)

D = Debt (in funding mix)

Formula

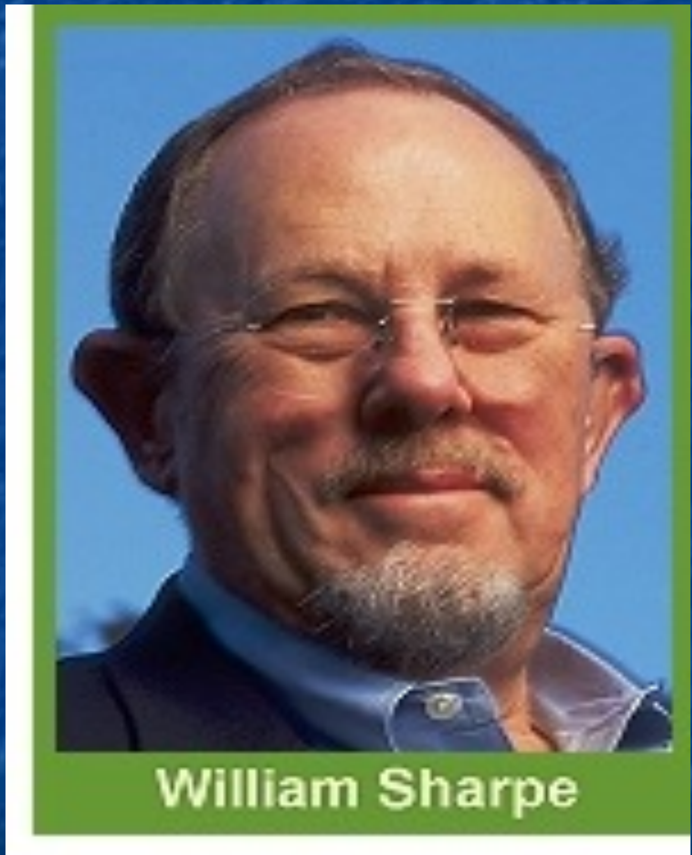
$$\text{Cost of equity } (k_e) =$$

$$r_f + \text{Equity beta} * [\, E(r_m) - r_f) \,]$$

with:

r_f	=	Risk-free rate of return
$[\, E(r_m) - r_f \,]$	=	Market risk premium
$E(r_m)$	=	Expected rate of return on the overall market portfolio
Beta	=	Systematic risk of equity

Security Market Line



- born in 1934, USA
- extended Portfolio Theory to CAPM (1964)
- Nobel Prize in Economics 1990*

*(shared with H.Markowitz and M. Miller)

Security Market Line

- **Security Market Line (CAPM)**: enlarges the idea of the Capital Market Line by adding the thoughts of specific and systematic risk

  > CAPM shows that under very simplifying premises the super-efficient portfolio = market portfolio

  > CAPM distinguishes between specific risk and systematic risk of a portfolio or asset

  > SML graphs a positive correlation between risk and return; plots the results of CAPM for all different betas

Forms of Risk

total risk

<u>specific risk</u>

- risk that affects an individual asset; e.g the reputation of a company is ruined due to current management activities
- can be diversified by holding optimized portfolios
- no compensation for investors

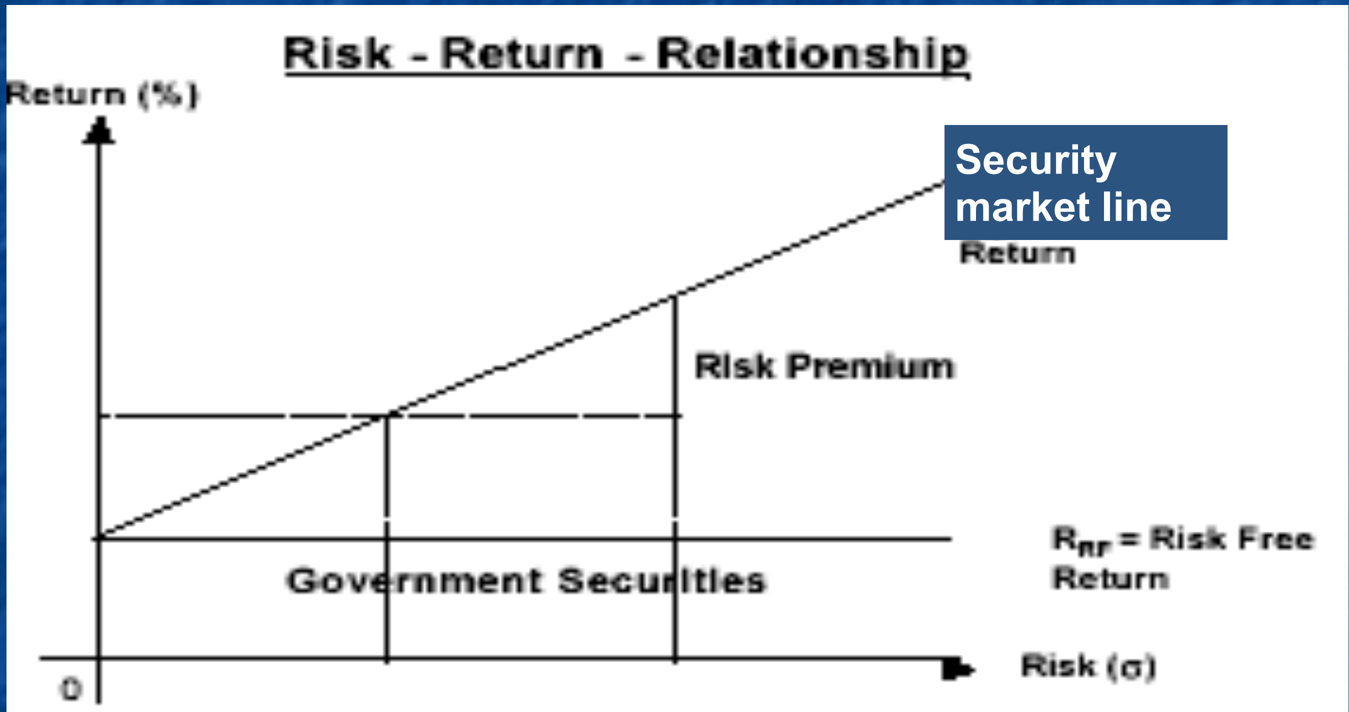
<u>systematic risk</u>

- risk that affects the whole market; e.g. political decisions, natural catastrophe
- cannot be diversified by holding portfolios
- for taking systematic risk investors will be compensated by higher returns

CAPM - Premises

- ❖investors are risk averse, want to maximize their assets within one period
- ❖fixed amount of risky stocks are traded and any separation can be made
- ❖homogenous expectations
- ❖investments can be made to a risk-free rate
- ❖perfect capital market
- ❖no taxes, no transaction costs

Security Market Line



What is BETA ?

BETA: a relative risk measure, that estimates the individual sensitivity of single company assets (or portfolios) on systematic risk in relation to the reaction of the overall market

Interpretation of BETA (ß)

Beta = 0 **risk free investments (e.g. government bonds)**

Beta < 1 **return does not react very sensitive on marketwide influences (less risky asset)**

Beta = 1 **return sensitivity is equal to the return sensitivity of the market-portfolio**

Beta > 1 **return changements above the average (more risky asset)**

II. International Double Taxation

&

Double Taxation Conventions

Advantages for Holdings

- Complexity of the decision making process can be reduced by splitting up a big company into several independent companies
- Concentration on the core business
- Settlement of subsidiaries near the regional markets
- Reduction of Hierarchy and increase in flexibility
- Strategic Alliances between subsidiaries and foreign companies
- Transfer of profits to countries with favorable tax rates

Foreign subsidiary and double taxation:

Total revenue	+ 21,000,000
- Expenses before depreciation	- 14,000,000
- Depreciation	- 2,000,000
= Earnings before tax	= 5,000,000
- *Host government tax (20 %)*	- 1,000,000
= Earnings after tax	= 4,000,000
+ Depreciation (noncash expense)	+ 2,000,000
= Gross Cash Flow	= 6,000,000
Fund remitted by subsidiary (100%)	6,000,000
- *Withholding tax on dividends (5%)*	- 300,000
= Remitted funds after withholding tax	= 5,700,000
Exchange rate (0.50)	
= CF to parent	2,850,000

Methods for avoiding international double taxation

Non DTC countries	***DTC countries***
According to respective national provisions - **→ *Unilateral relief:*** ***U.K.:*** ***• ICTA 1988, ss 788-816*** ***USA:*** ***• § 901 IRC*** ***Germany:*** ***• § 34c Income Tax*** ***• § 8b (1), 26 (1) Corp. Tax***	**According to** ***DTCs*** **→ *Bilateral relief:*** ***• see OECD-Model*** ***• see several DTCs***

Structure of a DTC (OECD-Model)

Structure of the OECD-Model:

1) **Definition of *„Personal Scope“* and *„Tax Covered“* (see Art. 1 und 2 OECD-Model)**

2) **General Definitions (see Art. 3 bis 5 OECD-Model):**

   - „Company“

   - „Residence“

   - „Permanent Establishment“

Structure of a DTC (OECD-Model)

For the „Relief from Double Taxation“
see Art. 23A OECD-Model:

<u>2 Methods</u>:

(a)Credit method

(b) Exemption method

Structure of a DTC (OECD-Model)

Taxes on Income:

- Income from Immovable (Real) Property (Art. 6)
- Business Profits (Art. 7)
- Shipping and Air Transport (Art. 8)
- Associated Enterprises (Art. 9)
- Dividends (Art. 10)
- Interest (Art. 11)
- Royalties (Art. 12)
- Gains (Art. 13)
- Independent Personal Services (Art. 14)
- Dependent Personal Services (Art. 15)
- Directors`Fees (Art. 16)
- Artistes and Athletes (Art. 17)
- Pensions, Anuuities, Alimony, and Child Support (Art. 18)
- Government Service; Social Security (Art. 19)
- Visiting Professors and teachers; Students and Trainees (Art. 20)
- Other Income (Art. 21)

DTC (OECD-Model):

Individual *country A*	**Participation** ⇒ ⇐ **Dividends**	**Comp.** *country B*

1. **Dividends shall be taxed**

   in dividend-receiving country

   Art. 10 (1) OECD-Model

2. **Credit method**

   Art. 23 A (2) OECD-Model

1. **Withholding tax = 15 %**

   Art. 10 (2) OECD

2. **Corp. tax**

DTC (OECD-Model):

Head-Office

country A

Permanent Establishment
country B

Exempted from taxation

1. **Principle of Permanent Establishment**
   Art. 7 i.V.m. Art. 5 OECD

2. **Problem:**

   Calculation of PE-profits

   Art. 7 (2), (3) OECD

DTC (OECD-Model):

Comp. 1 *country A*	Participation ⇒ ⇐ Dividends	**Comp. 2** *country B*

1. Dividend shall be taxed in dividend-receiving country

2. Credit method

   Art. 23 A (2) OECD

1. Withholding tax

   ⇒ 5 or 15 %

   Art. 10 (2) OECD

2. Corporation tax

Special case: Intercompany dividends

Normal regulation in German DTC *(see DTC: Germ./USA):*

Comp. 1 *Country A*	Participation ⇒ ⇐ Dividends	Comp. 2 *country B*

1. Exempted from Corporation tax:

   (a) see Art. 23 (2) DTC: USA

   ⇒ for at least 10% holding of shares

   (Activity-Clause possible !)

   (b) see § 8b (1) German CT

2. Add 5 % of exempted dividend:

   § 8b (5) German CT

1. Withholding tax

   ⇒ 5 or 15 %

   Art. 10 (2) DTC: USA

2. Corporation tax

European Parent/Subsidiary Directive

1. Goal of the Directive:

Intercompany-dividends shall be exempted from Withholding Tax.
That means that the parent company can receive dividends from the subsidiary amounting to 100 %.

2. Conditions for applying the Directive:

1.) **Parent- and subsidiary company are limited companies**

2.) **Residence of both companies in the European Union**

3.) **Both companies are liable to Corporation Tax**

European Parent/Subsidiary Directive

Status of parent company:

(1) **<u>The parent company holds at least 25 % of subsidiary-shares</u>**

(Germany applied the Directive fixing a lowest participation of 10 %.)

(2) **<u>Holding period of shares: at least 2 years</u>**

(Germany applied the Directive fixing a one year period.)

Provisions on double taxation:

I. Imputation / Credit method

→ Foreign taxes are offset against domestic taxes on foreign source income

→ The foreign tax credits are limited to the amount of tax that would have been paid domestically

Conditions of applying the credit method:

- The person applying the imputation method has to be identical with the foreign tax payer
- A certain amount of income is double taxed
- The foreign country has to impose taxes similar to German Income Tax

Credit method (in Germany):

→ **Imputation / Credit method:**

- Sect. 34c (1) EStG = German Income Tax Law
- Sect. 26 (1) KStG = German Corporation Tax Law

Example:

Foreign tax rate: 50 % German tax rate: 38 %

(1) German Income Tax on worldwide income:

Foreign profits	100
Domestic profits	200
	300

Income Tax: 114

(2) Credit limit to the amount of tax that would have been paid domestically:

114 * 100/300 = 38

(3) Tax credit:

Income Tax	114
Tax credit	- 38
payable	76

Total tax load: 76 + 50 = 126

Provisions on double taxation:

II. Exemption method:

→ If a German limited company holds shares in another (domestic or foreign) limited company the dividends distributed to it are exempted from taxation in Germany

- see German DTCs

and

- Sect. 8b (1) KStG = German Corporation Tax Law

<u>§ 8b subparagraph 5 German Corporation Tax</u>

→ **5 % of the exempted dividends** distributed by foreign corporations to German corporations must be **<u>added to the taxable profits</u>**, if foreign dividends are **<u>exempted from taxation</u>** in Germany

Background of this regulation:

For the purpose of taxation expenses that are connected with tax-free-income are not considered to be deducted from net profits. This also applies to tax-exempt-dividends in the case of inter-company participation.

According to German law it is assumed that 5% of these tax-free-dividends are related with special expenses, such as financial and administrative costs. This means that the total profit has to be increased by this amount.)

III. Comparison OECD Model UN Model

DTC (OECD-Model):

Comp. 1
country A

Patents, licences ⇒

⇐ Royalties

Comp. 2
country B

1. Royalties shall be taxed in the income receiving country ⇒ **No tax charge allowed !**

Art. 12 (1) OECD

DTC (UN-Model):

Comp. 1 *country A*	Patents, licences ⇒ ⇐ Royalties	**Comp. 2** *country B*

1. **Dividend shall be taxed in dividend-receiving country**

2. **Credit method**

   Art. 23 A (2) OECD

Withholding tax

can be charged !

⇒ **must be limited**

Art. 12 (2) UN

⇒ **max. of 10 % in China**

IV. Appendix

Glaobalization and Development of Tax Systems

Benefits from globalization

→ **Name important <u>benefits</u> (see Vito Tanzi)**

- **better allocation of resources**
- **greater access to foreign goods and services greater range of choice**
- **decreasing costs of travel and transport**
- **decreasing costs of information**

Negative aspects from globalization

(Vito Tanzi)

1. Crossborder effects of national policies:
   - "Spillover-effects" in an integrating world economy
   - Political competition derives from economical competition. This process has an impact on:

     → increasing tax competition among countries
     → tax incentives in order to attract foreign investments
     → Risk of reduction in tax revenue ("tax degradation")
     → market distortions

EXAMPLES:

- Multinational companies establish integrated production processes with an incentive to lower world-wide tax liabilities

- Transfer pricing and the risk of tax migration

- Portfolio-investors and the problem of under-reporting interest flows
  → risk of capital flight

The future of tax systems

2. Competition

- can reduce the ability of governments financing the welfare state
- might reduce the rates of the VAT´s as the mobility of population raises
- is likely to induce countries to reduce their effectiv tax rates on corporate income to attract capital inflows
- is likely to change the general concept of income tax
  → from the concept of global income tax to a schedular approach to taxation
  → Progressive and low tax rates on capital incomes, wages / salaries and rentals according to their degree of mobility → "Dual Tax System"

Corporation Tax Systems

Systems	*Countries*	*Tax rates (%)*	*Relief*
Classical System (without tax relief)	Switzerland	8.5	Shareholder Level
	Irland	12.5	Shareholder Level
Classical System (with tax relief for shareholder)	Belgium	34	Parts of the dividend are not liable to income tax
	Germany (from 08)	38,6 (29.83)	Corp. Tax and Trade Tax
	Denmark	28	
	France	33.3	
	Luxemburg	22	50 % tax free
	Netherlands	31.5	50 % tax free
	Austria	25	
	Sweden	28	
	Italy	33	
	USA	35	
Exemption system: Tax exemption for shareholder	Greece	32	A part of CT is imputed to the shareholder as a tax credit
	Litovania	15	
	Slovakia	19	
Partial Imputation system: partial tax credit	Japan	30	
	Canada(Ontario)	22.1	
	Spain	35	
	UK	30	
Imputation system: full tax credit	Malta	35	All of the CT is imputed to the shareholder as a tax credit
	Norway	28	