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***Value Management and  
Transfer Pricing in an  
Integrating World -  
A Trend towards Convergence  
and Diversity***

## Structure of the Topic:

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- 1. MNEs and comparative advantages
- 2. Value Management in Asia + Europe
- 3. Transfer Pricing Strategy
- 4. Institutional Response in  
Asia + Europe

# 1. MNEs and comparative advantages

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- a. **Financial markets** gained importance
- b. Trend towards **global networks** and **global products**
- c. Question: Convergence vs. Diversity
- d. Analysis is based on the **approach to comparative capitalism**  
(Hall / Soskice)

## 2. Value Management in Asia + Europe

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a. Corporate Finance & Strategy

b. Main strategy = **Value creation** EP, EVA, DCF  
= Capital \* (ROIC – WACC)

c. New owners: **Institutional investors**  
and shareholder value orientation

d. Shift of power from management to  
shareholders (Principle-agent conflicts)

# The Value Creation Objective

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- Alfred Rappaport: Create Value for the Shareholders
- Maximizing the Market Value of the Company

# DCF Valuation Model

- Determine the PV of future FCF
- 2 main variables:
  - 1) The future expected cash flows
  - 2) The discount rate to be used

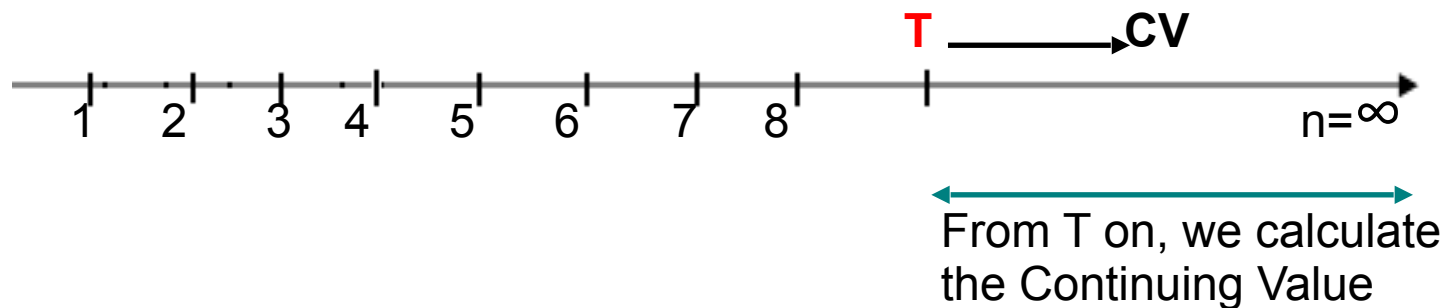
$$\text{Value} = \left( \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \dots + \frac{CF_n}{(1+r)^n} \right)$$

Where:

$CF_i$  = the cash flow forecasted for an unlimited time period, from 1 to n  
 $r$  = the discount rate used to translate future cash into its present value

# The Continuing Value (CV)

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



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

# Taxation and VBM

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➡ 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



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

with:

$k_e$  = *cost of equity*

$k_d$  = *cost of debt (before tax)*

$E$  = *Equity (in funding mix)*

$D$  = *Debt (in funding mix)*



# Cost of Equity ( $k_e$ )

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$$k_e = R_f + \text{Beta} * [ E(R_m - R_f) ]$$

*with :*

$R_f$  = Risk Free Rate

$[ E(R_m - R_f) ]$  = Market Premium

$E(R_m)$  = Expected Returns of the Overall Market Portfolio

Beta = Systematic Risk

# Security Market Line

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- ❖ 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

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- ❖ **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

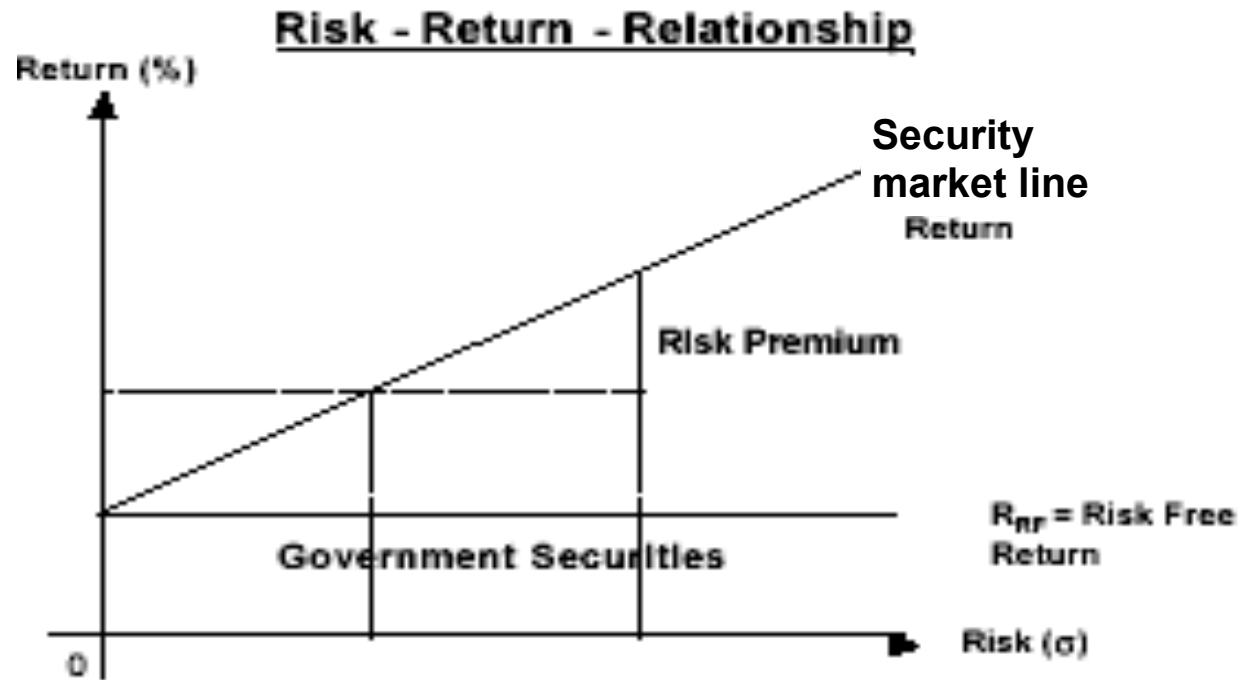
# CAPM - Premises

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- ❖ 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



# Interpretation of BETA ( $\beta$ )

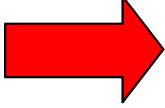
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- Beta = 0**      **risk free investments  
(e.g. government bonds)**
- Beta < 1**      **return does not react very sensitive on  
marketwide influences (less risky asset)**
- Beta = 1**      **return sensitivity is equal to the return  
sensitivity of the market-portfolio**
- Beta > 1**      **return changes above the  
average (more risky asset)**

# Interpretation of BETA ( $\beta$ )

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A low beta does not guarantee low total risk. A portfolio or asset with a low beta can be still highly volatile due to specific risk.

 **The volatility of a low beta portfolio or asset just has a low correlation with the volatility of the whole market!**



## 2. Value Management in Asia + Europe

> Institutional changes in diff. countries

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### *Liberal & Coordinated Market Economies*

***LME:*** U.S + Great Britain

***CME:*** Germany, Japan, South Korea

(a) industry-based coordination

(b) group-based coordination

***Special case:*** China

# 3. Transfer Pricing Strategy

> Taxation and Value Management

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**Fiscal law** influences decisions managers take in a value oriented environment

 maximizing shareholder value



Taking advantage of the global network by applying Transfer Pricing strategies

# 3. Transfer Pricing Strategy

## > What is Transfer Pricing ?

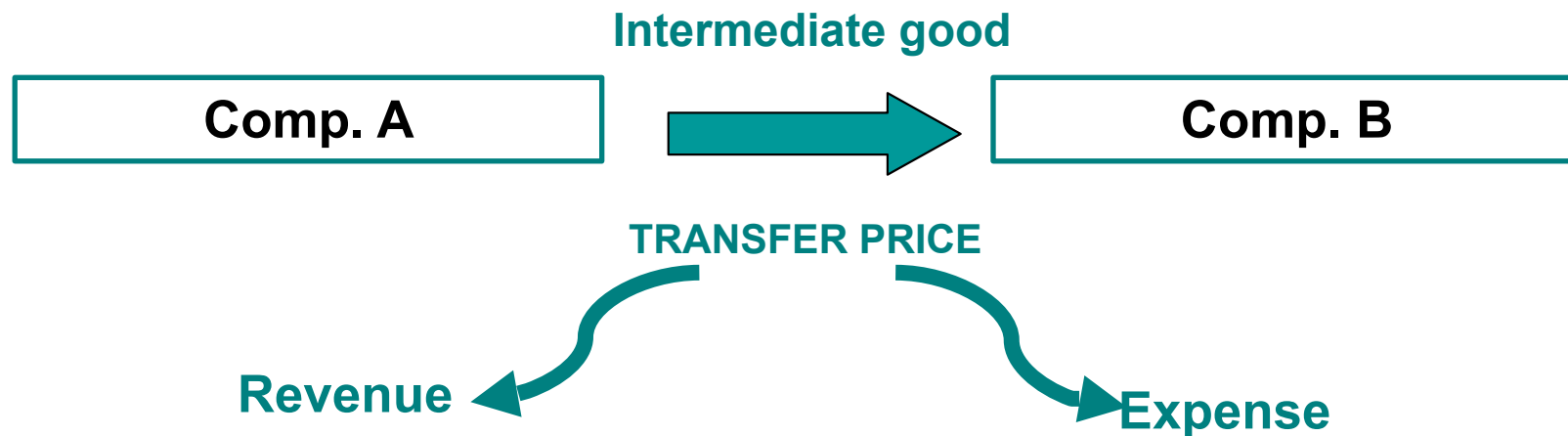
- A considerable proportion of the world trade occurs within MNCs = 60 %
- ● **Transfer Price**  
= *price set for transactions within the divisions of a MNC*
- By manipulating Transfer Prices MNCs can avoid taxes, tariffs on imported goods or avoid foreign exchange restrictions

# 3. Transfer Pricing Strategy

**Case:** corporation A is controlling corporation B

**Company A = produces an intermediate good**

**Company B = transforms it into a final good and sells it in the market**



# Example: Scenario A

## Country A

Tax rate = 60%

Selling price = 300,000

## Country B

Tax rate = 20%

Production Cost = 100,000

**TP = 200,000**

WACC = 10%

	Parent (Country A)	Affiliate (Country B)	Overall
<b>Sales</b>	300,000	<b>200,000</b>	120,000
<b>Expense</b>	<b>(200,000)</b>	(100,000)	
<b>Profit before tax</b>	100,000	100,000	
<b>tax:</b>			
Country A	(60,000)		
Country B		(20,000)	
<b>after tax profit</b>	40,000	<b>80,000</b>	
<b>WACC= 10%</b>			
<b>Value= FCF/ WACC</b>	400,000	800,000	<b>1,200,000</b>

# Example: Scenario B

## Country A

Tax rate = 60%

Selling price = 300,000

## Country B

Tax rate = 20%

Production Cost = 100,000

**TP = 250,000**

WACC = 10%

	<u>Parent</u> Country A	<u>Affiliate</u> Country B	Overall
<b>Sales</b>	300,000	<b>250,000</b>	
<b>Expense</b>	<b>(250,000)</b>	(100,000)	
<b>Profit before tax</b>	50,000	150,000	
<b>tax:</b>			
Country A	(30,000)		
Country B		(30,000)	
<b>after tax profit</b>	20,000	<b>120,000</b>	<b>140,000</b>
<b>WACC= 10%</b>			
<b>Value= FCF/ WACC</b>	200,000	1,200,000	<b>1,400,000</b>

## 4. Institutional Response in Asia & Europe

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- Especially **high tax countries** responded to **losses of tax revenues**
- **OECD Transfer Pricing Guidelines** were published in 1995
- **Adoption of the Guidelines in the OECD countries**

# 4. Institutional Response in Asia & Europe

## > Legal Background

### OECD Transfer Pricing Guidelines

- ***Arm's length principle:***  
*The prices set on transactions between related parties should be determined as if those parties were independent.*
- **Tax authorities are allowed to adjust transfer prices by using methods that are based on the arm's length principle.**



# OECD Guidelines Transfer Pricing Methods

## > **Traditional methods** > accepted by all countries

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### 1) **Comparable Uncontrolled Price Method**

- Price for *controlled* transactions = Price for **comparable uncontrolled** transactions

### 2) **Resale Price Method**

- The gross margin that would be charged by unrelated firms under the same circumstances (selling price)

### 3) **Cost Plus Method**

- Standard cost of production of the related seller + cost mark-up that unrelated sellers would charge

# OECD Guidelines Transfer Pricing Methods

## > **Transactional Profit Methods** > not generally accepted

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### 1) **Profit Split Method**

Determine the overall profit from a *controlled* transaction and then split this profit between the two parties according to each party's contribution.

➤ OECD rejected this method, because adjustment is not based on comparable transactions ! Accepted in the U.S. and China.

### 2) **Transactional Net Margin Method**

According to this method the net profit margin that related enterprises could earn should be comparable with that of unrelated enterprises.

## 4. Institutional Response in Asia & Europe

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- Governments and tax authorities try to minimize their losses resulted from tax avoidance.
- Fiscal policy is dominated by the industrialized nations.
- **Similar policy response in Asia, Europe and the U.S.**
- Reaction to transfer pricing appears to underline the **diverging interests of industrialized, emerging and developing countries** (Chan/Lo 2004).
- **84% of the developing countries** felt that the foreign affiliates operating in their countries used income shifting to avoid tax liability (UNCTAD 1999).

# Conclusion > Diverse pattern

<b><i>Value Management Shareholder Value</i></b>		<b><i>&amp; Institutional Response to Transfer Pricing</i></b>
Strong pressure towards <b>convergence</b>	<b>Liberal</b> Market Economies	Dominated by viewpoint of <b>industrialized countries</b>  Goal: Avoiding decreases in tax revenues
	<b>Coordinated</b> Market Economies	<b>Developing countries</b> have own interests to defend  Goal: restrictions on profit repatriation and other nontax factors