



**POLITECNICO**  
MILANO 1863

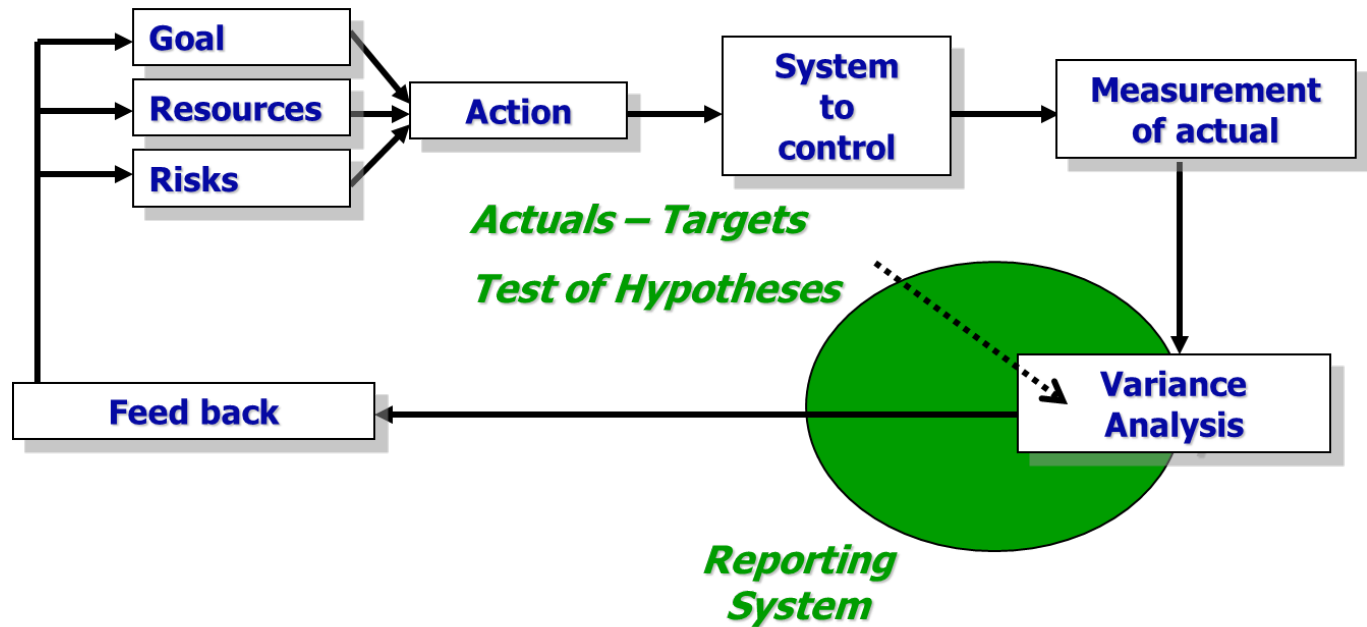
# Performance Management

## *Transfer pricing*

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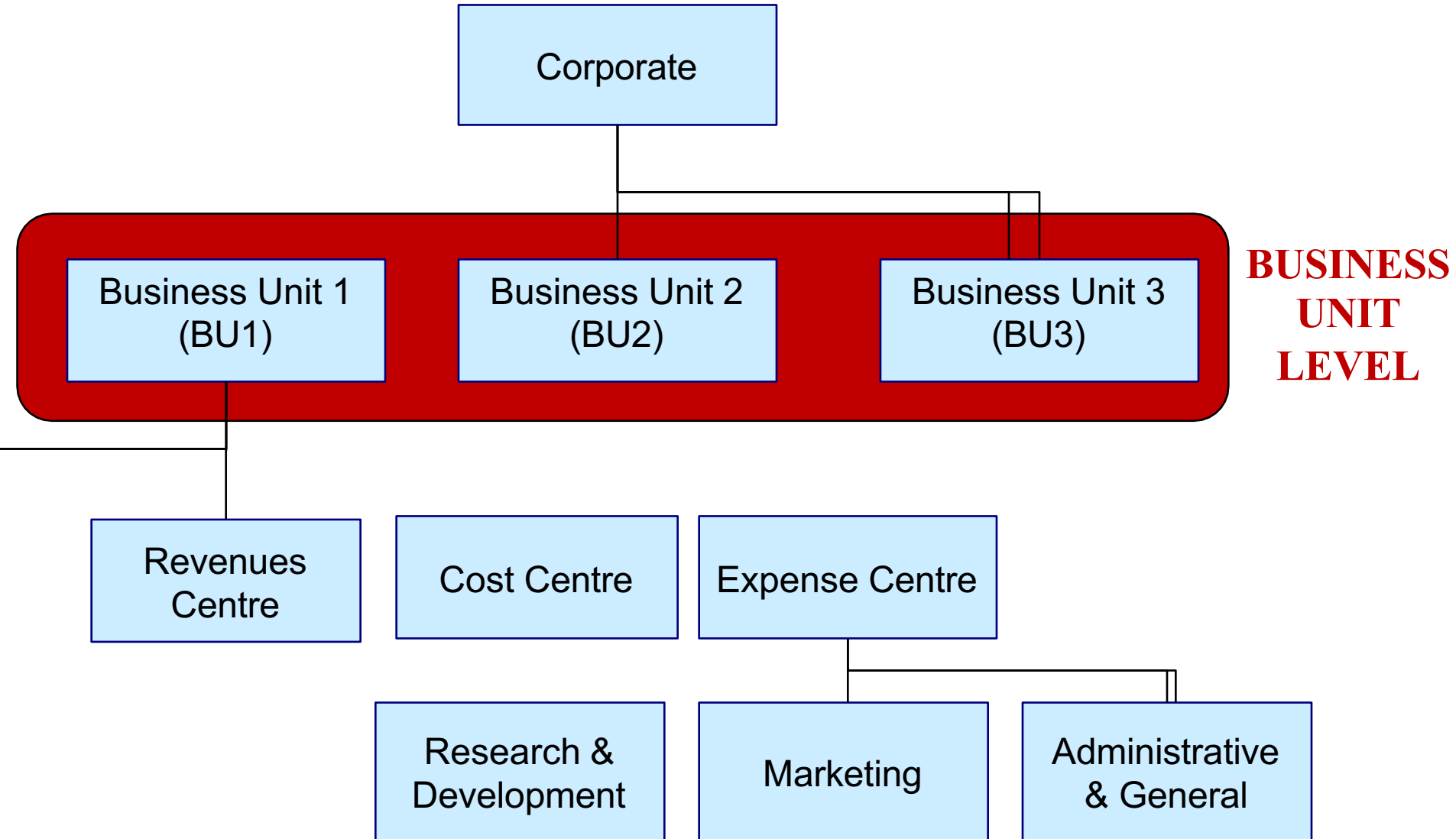
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# Management Control Cycle

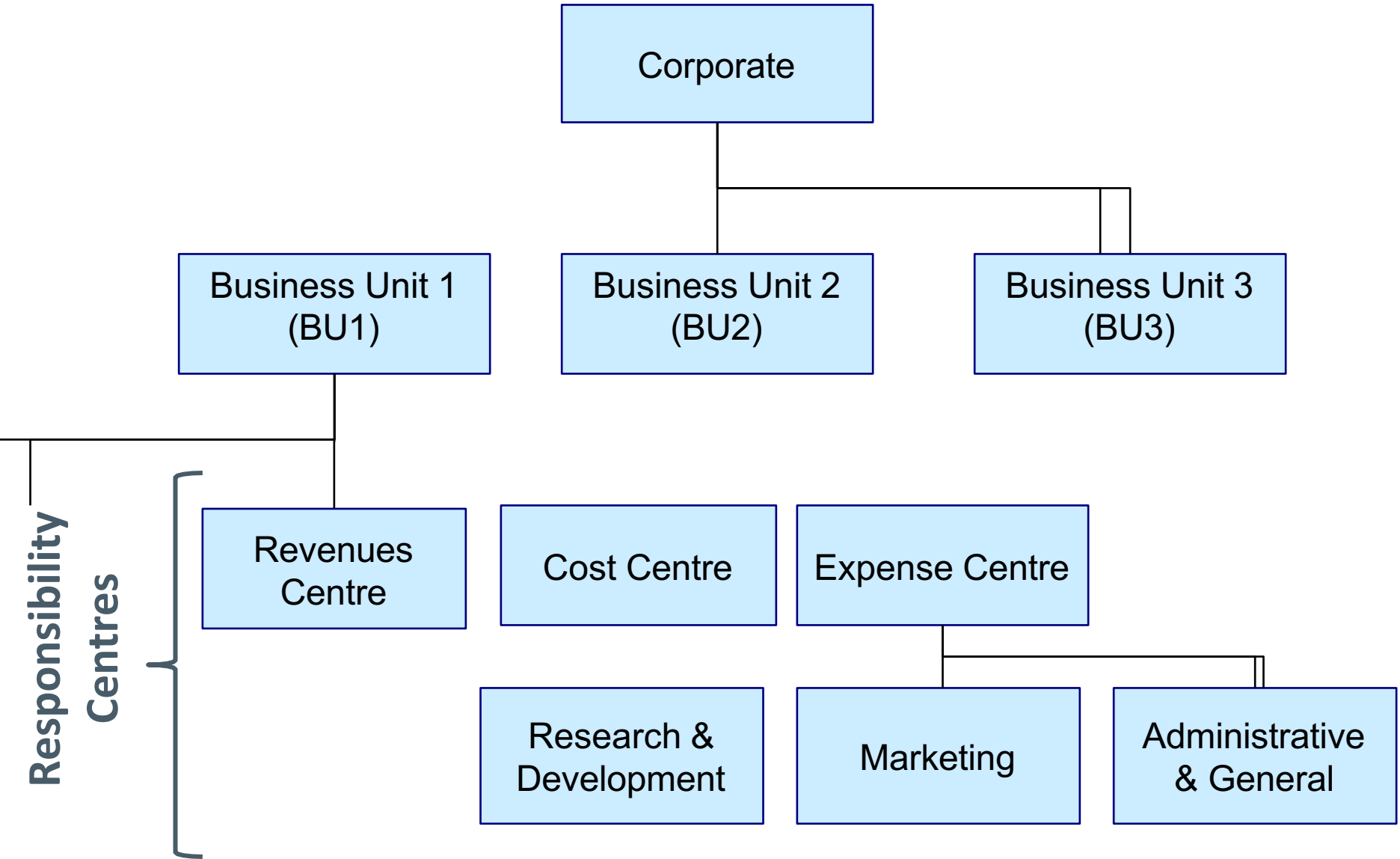


**Process of communication**  
to a manager who is responsible for  
the allocation or the use of specified resources  
of information regarding current and expected performance  
that are relevant for her decision-making  
(Brusati, 1996)

# Hierarchy Levels: The Business Unit level



# Hierarchy Levels: The Responsibility Centers



# Reporting at the Business Unit level:

## Focus on the EBIT generated by each Business Unit

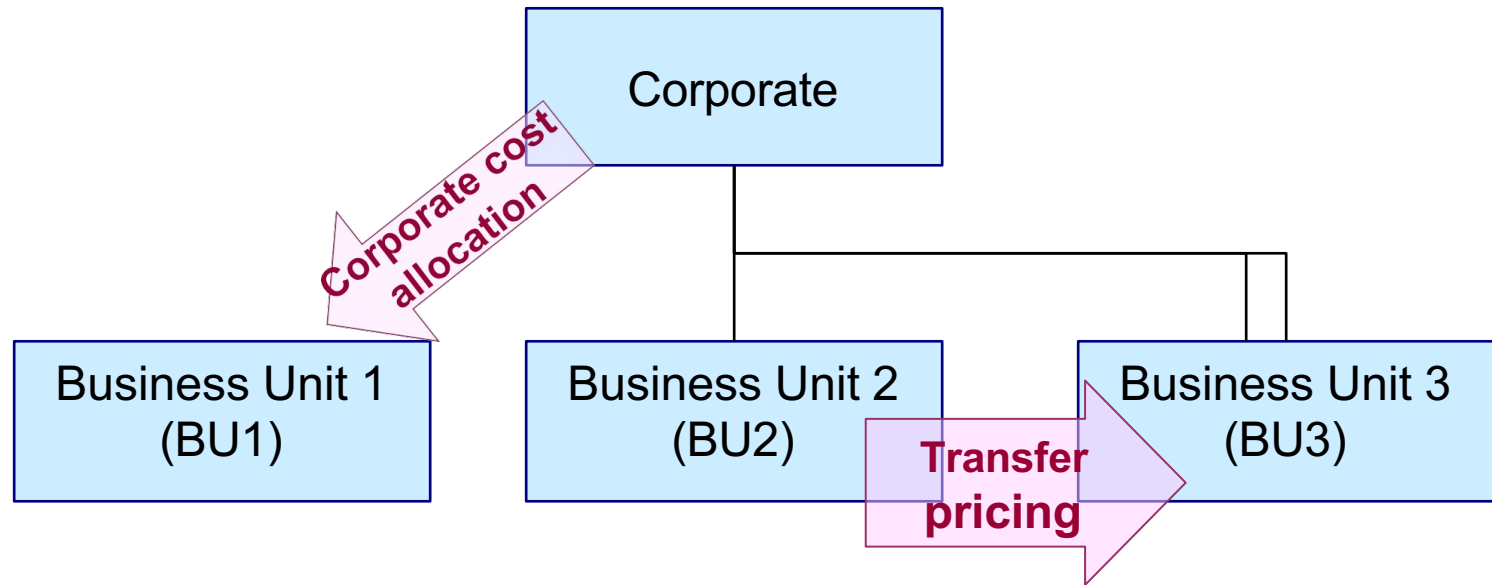
Hierarchy	Value-based Indicators	Accounting-based Indicators	Value-Drivers
Corporate	Backbone of the reporting system <ul style="list-style-type: none"> <li>EV or E</li> </ul>	ROE NPM	Selected drivers for competitive advantages
Business Units	Sometimes <ul style="list-style-type: none"> <li>Cash generation</li> </ul>	Backbone of the reporting system <ul style="list-style-type: none"> <li>ROI or ROA</li> <li>RI or EVA**</li> <li>Segment margin*</li> </ul>	Selected drivers for competitive advantages
Responsibility Centres		Revenues Costs/Expenses	Backbone of the reporting system

\*\* *Economic Value Added (EVA) = NOPAT – WACC \* Invested Capital*

\* *Segment margin = Revenues – Direct costs = Contribution margin – Direct fixed costs*



# Two relevant issues to breakdown corporate's EBIT into business units' EBIT



**Reporting at the Business Unit level relies mainly on accounting-based indicators to be applied to the Income Statement till the EBIT. To generate it, two relevant issues arise:**

- Resources used by BUs but managed at the corporate level  
(**corporate cost allocation problem**)
- Existing transactions with other BUs within the company (intra-company exchanges)  
(**transfer pricing problem**)



# BU exchanges and the Transfer Prices

Transfer price is a “fictitious” price for evaluating intra-company exchanges: it is the price one division charges for a product or service supplied to another unit.

The transfer price is:

- A cost to the receiving division
- A revenue to the supplying division

Once defined, transfer prices affect:

- Divisions performances
- Divisions decisions
- Company result



# Transfer prices' goals

Transfer prices are a relevant problem: nearly 60% of world trading activity is intra-company

A transfer pricing system is required for several purposes:

- to provide information that motivates divisional managers to make good economic decisions;
- to communicate data that will lead to goal-congruent decisions;
- to provide information for evaluating divisional performances;
- to ensuring divisional autonomy;
- to plan tax, intentionally moving profits between divisions or locations





# Transfer prices and taxes

The divisional exchanges for multinational companies can be used for **transferring profit** from one country to another taking advantage of different tax rates (income taxes, duties,...)

IN 1995 OECD (Organisation for Economic Co-operation and Development) published a guidance reflecting an international consensus reached by OECD member countries

<https://www.oecd.org/tax/transfer-pricing/oecd-transfer-pricing-guidelines-for-multinational-enterprises-and-tax-administrations-20769717.htm>

tax

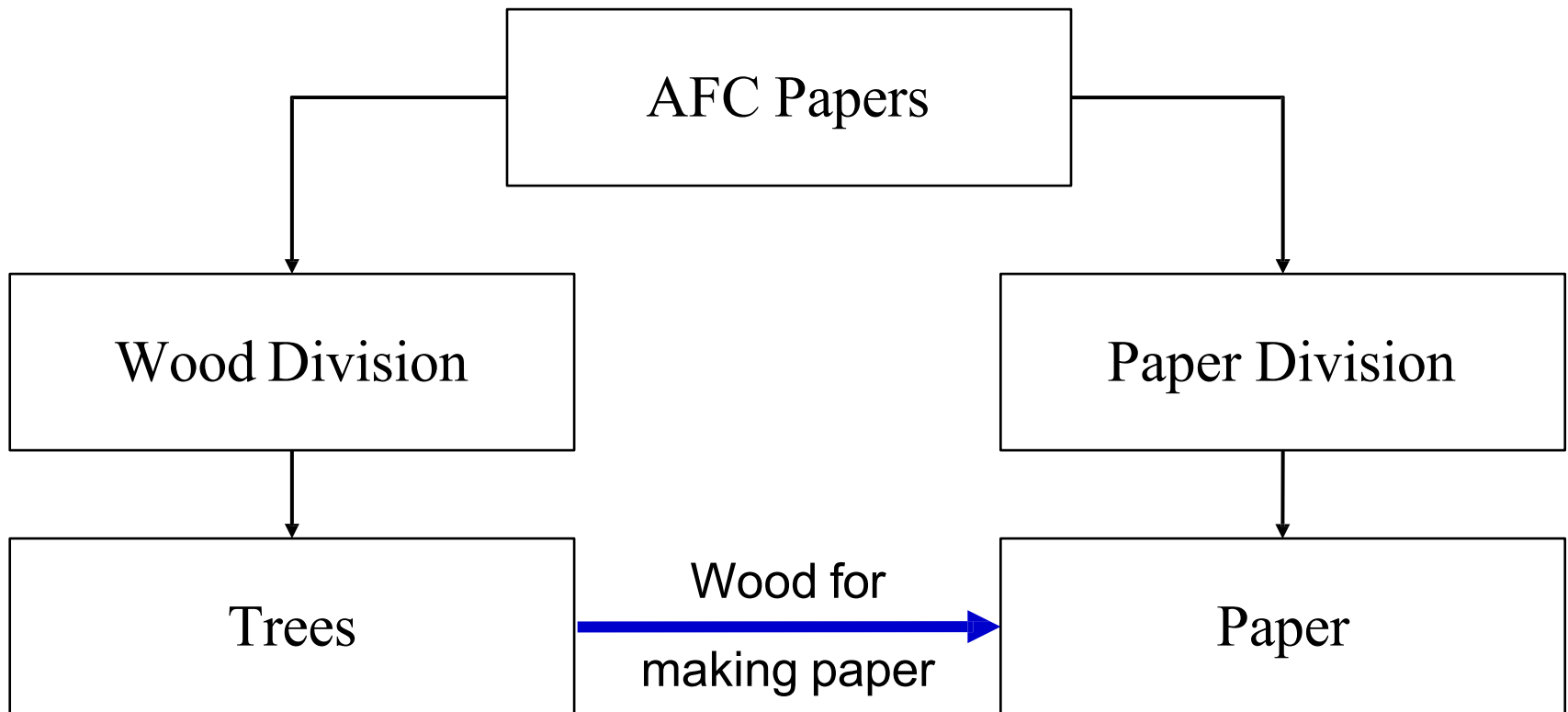
"arm's length principle" should be used to determine transfer prices for tax purposes. This principle states that the transfer prices for dealings between associated enterprises should be those which would have been agreed between them, for comparable transactions in comparable circumstances, had they been independent entities acting at arm's length.

## Which Transfer Pricing Methods?



## Case Study on Transfer Prices (adapted from McGraw Hill)

**L.O. Explain the general transfer pricing rules and understand the underlying basis for them.**



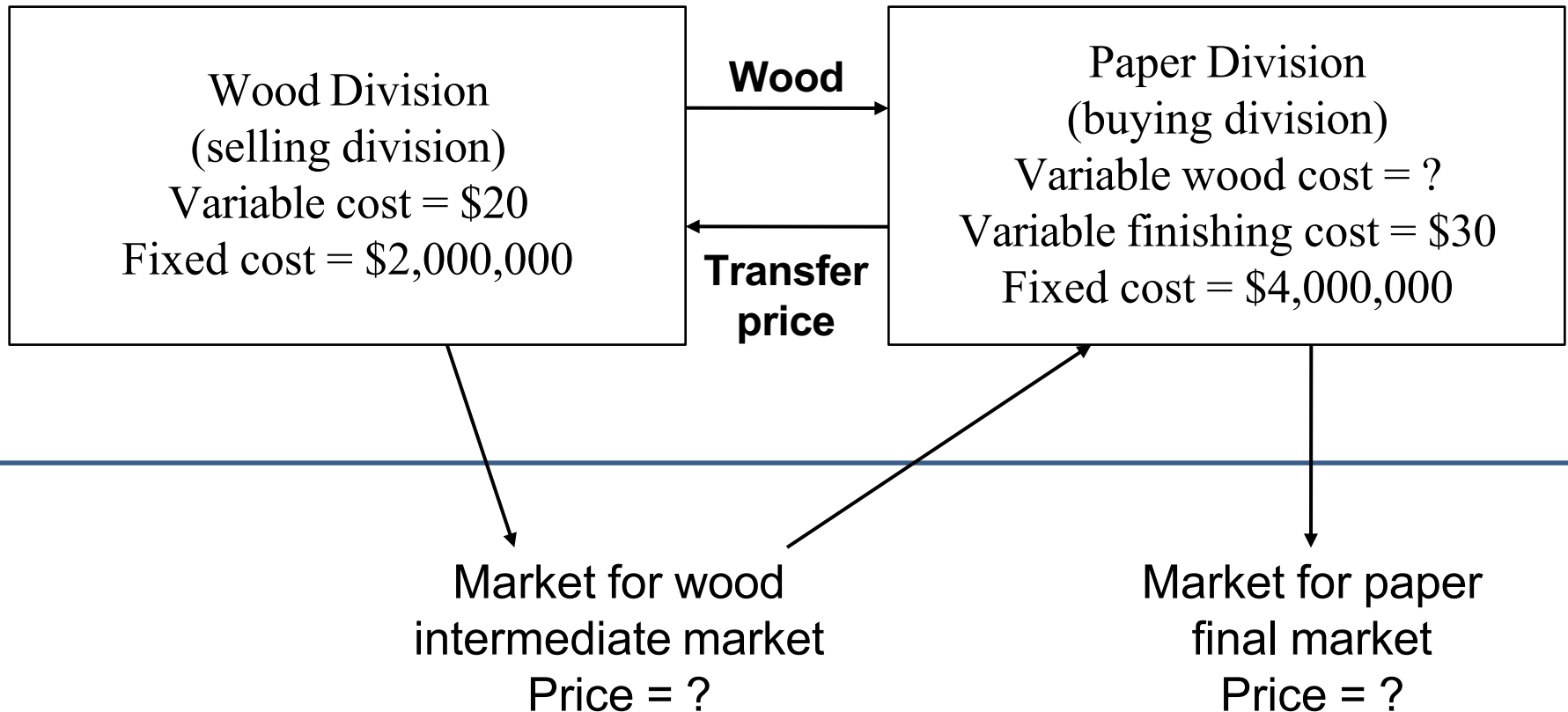
## The Setting

### AFC Papers Cost and Production Data

	Wood	Paper
Average units produced	100,000	
Average units sold		100,000
Variable manufacturing cost per unit	\$ 20	
Variable finishing cost per unit		\$ 30
Fixed divisional cost (unavoidable)	\$2,000,000	\$4,000,000

# The Setting

## AFC Papers – Resources Flow



## AFC Papers Example

- Assume the following data for the wood division:

Capacity in units	100,000
Selling price to outside	\$ 60
Variable price per unit	\$ 20
Fixed price per unit (based on capacity)	\$ 20

# AFC Papers Example

- The Paper Division is currently purchasing 100,000 units from an outside supplier for \$50, but would like to purchase units from the Wood Division.



if we buy it from inside more than outside, it's not efficient!

what about outside

paper buy from wood in 20 is good for paper  
but wood can sell it 50 to outside, so kpi of wood  
will decrease

quality problem

## AFC Papers Example

$$\text{Transfer price} = \text{Variable Cost (VC)} + \text{Lost contribution margin (CM)}$$

If the Wood Division  
is working at capacity:

$$\text{Transfer price} = \$20 + \$40$$

If the Wood Division  
has idle capacity:

$$\text{Transfer price} = \$20 + \$0$$

## Business Units VS Corporate

Variable manufacturing cost (Wood Division) per unit	\$ 20
Variable finishing cost (Paper Division) per unit	\$ 30
Other data:	
Final market (paper) price	\$120
Intermediate market (grade A wood) price	\$ 60
Intermediate market (grade B wood) price	\$ 50



# Business Units VS Corporate

- Grade B wood: \$50 internal transfer price

## Alternative 1:

cost efficiency

	Wood		Paper
Sales:			
\$ 50 × 100,000 (transfer)	\$5,000,000		
\$120 × 100,000 (transfer)			\$12,000,000
Variable costs:			
\$ 20 × 100,000	\$2,000,000		
\$ 50 × 100,000 (transfer)			\$ 5,000,000
\$ 30 × 100,000 (processing)			3,000,000
Fixed costs	<u>\$2,000,000</u>		<u>4,000,000</u>
Operating profit	\$1,000,000		\$ -0-
Total company operating profit		\$1,000,000	

## Business Units VS Corporate

- Grade A wood: \$60 internal transfer price

### Alternative 2:

	Wood		Paper
Sales:			
\$ 60 × 100,000 (transfer)	\$6,000,000		
\$120 × 100,000 (transfer)			\$12,000,000
Variable costs:			
\$ 20 × 100,000	\$2,000,000		
\$ 60 × 100,000 (transfer)			\$ 6,000,000
\$ 30 × 100,000 (processing)			3,000,000
Fixed costs	<u>\$2,000,000</u>		<u>4,000,000</u>
Operating profit	\$2,000,000		\$ (1,000,000)
Total company operating profit		\$1,000,000	

motivational result problem

# Transfer Pricing Methods

- 3 Market-based transfer prices
- 2 Cost-based plus mark up transfer prices:
  - Full actual cost
  - Full standard cost
  - Marginal cost
- 4 Negotiated transfer prices
- 1 Dual transfer prices

you can change it only once in a year based on oscd, you can't change it during the year



## Market-based transfer prices

Which prices should we use?

- Listed prices of identical/similar products/services
- Actual price of intermediate products if sold to external customers
- Price offered by competitors

Problems:

- Non-homogeneous markets
- High variability of prices
- Strategic divisions



## Cost-based plus mark up transfer prices

$$\text{Transfer Price} = \text{cost} + \text{mark-up}$$

There are different configurations:

- Full actual cost transfer prices:
  - Sum of the cost of all resources that are used in producing a good or delivering a service.
  - **Problem:** Specific responsibilities of BUs
- Full standard cost transfer prices:
  - Budgeted costs of all resources that are going to be used in the long term.
  - **Problem:** Decision-making
- Marginal cost transfer prices
  - Sum of variable costs (variable direct costs + variable indirect costs)
  - **Problem?** in long run, quiet high fix cost won't be improved



# Negotiated Transfer Prices

Negotiated transfer prices: the divisions of a company are free to **negotiate the transfer price between themselves** and then to decide whether to buy and sell internally or deal with outside parties

Information related to market prices or marginal and full costs can inform the negotiation process.

**Pros** and **cons**:

- Increased **autonomy**;
- Emphasis on **adapting capability** of business units;
- **Decreased integration**.



## Dual Transfer Prices

Under a **dual transfer pricing** scheme, the **selling price** received by the upstream division **differs from the purchase price** paid by the downstream division.

Usually, the motivation for using dual transfer pricing is to allow the selling price to exceed the purchase price, resulting in a corporate-level subsidy that encourages the divisions to participate in the transfer.

For example:

- For the selling division the **TP = 110%** of its full manufacturing cost
- The buying division pays **95%** of the external market price

**Pros:** Increased **integration**

**Cons:** Possible sub-optimized decisions



# Which method?

INTEGRATED ENTERPRISE

INTEGRATION

BU with TRANSFER PRICES

PRICES BASED ON MARKET OR COST

PRICES NEGOTIATED WITHIN «RANGES»

«PURE» NEGOTIATED PRICES

INDEPENDENT COMPANIES

ADAPTABILITY

BU1 NP=100 30% | 50%  
BU2 COST=950 5% | 50%  
PRICE=2000





## Real examples

After two years in court, Apple and the Irish government still hope to overturn the EU's controversial 2016 decision to recoup a tax bill of €13 billion (\$14.4 billion) plus €12 billion in interest. The stakes are high if the EU General Court rules against the iPhone maker.

The US technology company has operated in European markets through Ireland for decades. The company first set up its Irish operation in 1980 and today has more than 6,000 employees in the country, but the operation had a dual structure with a head office running parallel to the manufacturing plant.

The European Commission believes that Apple's effective tax rate in Ireland fell to an all-time low of 0.005% in 2014, but the company maintains that the rate is misleading because it includes Apple's global revenue and the global business effective rate was 24.6%.



## Real examples

The internal revenue system has investigated that Microsoft is using transfer pricing , among other things or method of booking prices and sales between subsidiaries that lends to the opportunity to report earning in lower tax jurisdiction.

Companies routinely and legally book profit overseas to avail lower tax rate and avoid hefty 35% levy on profit in the US.

Microsoft accumulated \$44.8 billion non-US earning and reinvested aboard, accounting in deferred taxes of about \$14.5 billion.

Microsoft did not specify how did they employ cash earned aboard but reinvestment could be anything from buying an office or parking money in the bank. While storing money overseas prevented them from repatriation tax.

Microsoft stated that "primarily due to a higher mix of earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations centers in Ireland, Singapore and Puerto Rico, which are subject to lower income tax rates."

Forty-six percent (about \$ 32 billion) of the total sales came from overseas in the year 2011 , however, pre-tax profit tripled over the past six years to \$19.2 billion. In contrast, its US earning have dropped from \$11.9 billion to \$8.9 billion in the same period. Thereby now 68% of the total earning are made by from foreign earning.



**Which of the following statements about transfer prices among business units that are part of the same legal entity is TRUE?**

2:29:00

- A. Among the different options, DUAL transfer prices should be preferred
- B. In the case of FULL ACTUAL cost plus mark-up, inefficiencies of the upstream unit (the seller) do not affect the downstream unit (the buyer), because they are absorbed as a corporate cost
- C. Among the different options, FULL STANDARD cost-based plus mark-up transfer prices should be preferred even if they need to be redefined very frequently
- D. In case of an internal transaction among business units, there is no impact on the taxes incurred by the corporation



### **The introduction of a transfer pricing systems based on full standard cost plus mark up:**

- A. Can have an effect of the taxes paid by the selling unit, when the selling and the buying units are two different legal entities.
- B. Has always a fiscal effect on both the selling and the buying units.
- C. Can have a fiscal effect on the buying unit, even if the selling and the buying units are not two different legal entities.
- D. Does not have a fiscal effect.