

#### Cost Allocations – Overview

- 1. Motivation for the importance of cost allocations.
- 2. How do we allocate costs?
- 3. Effects of cost allocations?
- 4. Examples
- 5. Concluding comments



# Why are cost allocations important?

Consider the apartment you shared with someone that was not related to you, how did you pay for the following?

- Rent	- Electric
- Phone	- Cable
- Food	- Gas

Does the method you allocate costs matter? Why?

Will the method you select affect the total cost incurred?



Consider a very simple example where an individual buys an office building and rents the building to tenants.

The owner of the office building has a problem. She has to pay for common area maintenance costs such as:

- Lighting and heating in the lobby and halls
- Snow removal and parking lot maintenance.
- Security
- Building Management
- Roof maintenance
- Property taxes

All of the tenets in the office building benefit from these expenditures.

What should the manager do?



1. What happens if the manager does not charge the tenants for these costs?

2. What happens if the manager charges an average rate per tenant?

3. How are these costs consumed? What is the cost object?

- 4. What costs need to be assigned?
- 5. How would you assign them?



How would you assign the costs of a maintenance department to the tenants of the building?

Why doesn't the tenants rent include a CAM charge? Why is this separate from the rent?



Now think of the firm as the office building and each of the tenants as a product the firm manufactures.

Common area costs include the cost of the plant, the payroll department, the janitorial staff, the benefits office, the accountants, etc...

These costs must be allocated to the products.

How the costs are allocated is going to affect the profits of the entire firm, and the behavior of the manager.



# Why Allocate Costs

- Third Party reimbursements
  - Rate regulated industries
  - Governmental subsidies
  - Cost plus contracts
- External Reporting/Taxes
  - FASB and IRS requires allocation.
- Costing products accurately is important.
  - Decision Making
  - Control



Southwestern Bell Telephone Co. has acknowledged that some Washington lobbying expenses incurred by its parent corporation were improperly included in the company's regulated interstate rate base.

The lobbying expenses totaled about \$1.4 million over a five-year period and included money spent to promote changes in the Modified Final Judgment, according to documents submitted this month to the Federal Communications Commission.

Charles Mason 04/30/1990 Telephony COPYRIGHT 1990 Intertec Publishing Corporation



As part of its costs related to treating Medicaid patients, St. Elizabeth Medical Center in Covington included \$13,466 for Cincinnati Reds box seats. Owensboro-Daviess County Hospital included a \$35,000 payment to settle a sexual-harassment case against a doctor. And Columbia Suburban Hospital in Jefferson County put down \$117,700 worth of free meals for doctors. These were among the expenses that Kentucky hospitals submitted as part of their costs in reports to the state Medicaid program.

KAY STEWART, The Courier-Journal 10/06/1996 The Courier-Journal



According to <u>Strategic Cost Management</u>, Free Press, 1993.

There is a billion-dollar-a-year market in strategic cost management consulting services dominated by such firms as Bain & Company, Boston Consulting Group, Booz-Allen & Hamilton, McKinsey etc.



There are also consulting firms that develop niche groups that are experts in cost allocations for example:

Brattle Group – Energy Department

We address the economic and financial issues raised by the allocation of costs over time or among different services and customers.



#### What costs are allocated?

In a single product firm, that has one customer, and only one division there is no need to worry about cost allocations.

Most companies are:

- Multi Divisional
- Offer a variety of Products
- Thousands of Customers

Divisions, products, and customers consume common costs at different rates, or in different amounts.

An effective cost allocation system will more accurately trace the shared costs of production to the divisions, products and customers that consume those costs.



What are the common Costs of production ?

#### **Overhead**

- 1. How are overhead costs consumed in the plant?
- 2. Can these costs be traced back to products?
- 3. What costs can and can not be traced back to individual products?
  - Electricity Ma
    - MaintenanceBenefits department

Plant costsCEO time

- Customer service
- 4. How do we allocated the costs that can not be traced back to the product?
- 5. Does the method used to allocate these costs matter?



The method of allocating costs and the amount of costs allocated are important for the following reasons:

1. The method of allocating costs will determine the use of common assets.

- Internal Taxation
- Internal Subsidization

2. The method of allocation may also affect whether divisions compete or coordinate.

- Insulating Allocation
- Non-insulating allocation.
- 3. Cost allocations affect performance and compensation.



# Jolsen International (Prob 7-7)

See the exercise "Jolsen International": Problem 7-7 in Zimmerman, Jerold L. *Accounting for Decision Making and Control (4<sup>th</sup> Edition)*. McGraw-Hill/Irwin, 2002, pp 362-3.



#### Bio Labs (Prob 7-13)

See the exercise "Bio Labs": Problem 7-13 in Zimmerman, Jerold L. *Accounting for Decision Making and Control (4<sup>th</sup> Edition)*. McGraw-Hill/Irwin, 2002, pp 368.



#### Nixon and Ross (prob 7-19)

See the exercise "Nixon and Ross": Problem 7-19 in Zimmerman, Jerold L. *Accounting for Decision Making and Control (4<sup>th</sup> Edition)*. McGraw-Hill/Irwin, 2002, pp 373-5.



#### Cosmo Inc (Prob 8-3)

See the exercise "Cosmo Inc.": Problem 8-3 in Zimmerman, Jerold L. Accounting for Decision Making and Control (4<sup>th</sup> Edition). McGraw-Hill/Irwin, 2002, pp 417-8.



# Cost Allocations Part I - Summary

1. Cost allocations are important for a variety of reasons.

2. The methods used to allocate costs can influence a manager's behavior:

- Tax on a particular activity
- Insulate manager
- Subsidize the use of common assets.
- 3. Start on how cost allocations are done.