# Budgeting

## **Budgets and Organizational Architecture**

- A budget is management's forecast of revenues, expenses, or profits in a future time period.
- Knowledge: Budgets communicate key planning assumptions such as product prices, units sales, and input prices.
- Partition Decision Rights: Budget sets guidelines on resources available for each segment.
- Performance Evaluation: Responsibility center's actual performance is compared to budget.

#### Variances:

- A statistic that describes the differences between the observations and the predictions.
- A managerial accounting term: the difference between the budgeted and actual amount.
- Related, but distinct. Managerial accounting variances are more closely related to 'errors' in statistics.

#### Variances:

- Variances are termed 'favorable' and 'unfavorable' based on their impact on income.
- Keep in mind that budgets are plans, so any variance is evidence that things did not go according to plan.

#### Variances:

- Favorable (F) variance: actual revenue > budgeted revenue actual expense < budgeted expense
- Unfavorable (U) variance: actual revenue < budgeted revenue actual expense > budgeted expense

## **Example: Country Club**

• Responsibility Centers: 1 profit center and 2 cost centers

- Measurement: Monthly reports compare actual revenues and expenses to budget.
- Budget process separates decision rights.
  - Initiation and implementation by professional managers.
  - Ratification and monitoring by Board of Directors and members.

## **Example: Private University**

## Responsibility centers in 4 colleges: 2 cost centers, 2 profit centers.

- Knowledge:
  - Number of students drives revenue forecasts.
  - Faculty market drives faculty salary expense.
- Decision rights:
  - Lower levels prepare initial budgets.
  - Higher levels review and ratify budget.
- Agency problems:
  - Empire building: request "too large" a budget.
  - Externalities: Cost centers are more likely to add unprofitable programs than profit centers.

Is Auxiliary Services a responsibility center? How should it be evaluated?

## **Example: Large Corporation**

- Responsibility centers:
  - 2 cost (manufacturing and marketing)
  - 1 profit (paper and toner supplies)
- Knowledge:
  - Vertical transfers (lower to higher levels)
  - Horizontal transfers (marketing to manufacturing)
  - Identify potential bottlenecks in production
  - Identify financing needs
- Contracting:
  - Budgets are internal contracts between operating segments
  - Divisional managers negotiate budgets
  - Executive managers negotiate disputes and review budgets for consistency with corporate strategy

### Trade-off: Communication vs. Evaluation

- Budgets are used for both decision management and decision control.
- Optimal decision making requires managers fully reveal private knowledge about production and market conditions during budget negotiations.
- When budgets are also used for performance evaluation, managers have an incentive to make biased budget forecasts so that their actual performance will look good relative to budget.

## **Budget Ratcheting**

- Ratchet effect: Basing next year's standard of performance on this year's actual performance.
- Disadvantages:
  - Performance targets usually adjusted upward
  - Employees reduce output to avoid being held to higher standards in the future
- Possible Solution:
  - Eliminate budget targets
  - Estimate next year's sales
  - More frequent job rotation
- Summary: While the ratchet effect creates dysfunctional behavior, the alternatives might produce even greater problems.

# Trade-off: Bottom-up vs. Top-down

- Top-down budgets:
  - Knowledge: Top management can make accurate aggregate forecasts
  - Decision rights: Begin with aggregate forecasts for firm, and then disaggregate down to lower levels
  - Decision control more important than decision management

#### Trade-off: Bottom-up vs. Top-down

- Bottom-up budgets (participative budgeting):
  - Knowledge: Lower levels have more knowledge than top
  - Decision rights: Person being held responsible for meeting the target makes the initial budget forecast
  - Decision management more important than decision control

## Modern Approaches to Budgeting

- Building the budget in two distinct steps
  - Step 1: Construct budgets in operational terms (Lowest levels of the organization)
  - Step 2: Developing a financial plan based on the operational plans from Step 1.

## Modern Approaches to Budgeting

- Constructing budgets for financial planning (decision management), but not using budgets as performance targets (decision control)
- Units are judged by comparing their actual performance with the actual performance of defined "peer units".
- Actual rewards can include consideration of both financial and non-financial performance measures.

# Discuss the Following Assertions

- No simple "one-size-fits-all" panacea exists for resolving the conflict between decision management versus decision control when it comes to budgeting.
- Nor is such a solution ever likely to be found.

#### Trade-off: Resolving Disagreements

- Top executive officers of firms have final decision rights over the entire budget process.
- Top executives resolve disputes among lower levels.
- After adoption, the budget is an informal set of contracts among the various units of the firm.

#### Short-run vs. Long-run

- Firms that use only short-term (annual) budgets do not create adequate incentives for long-term maintenance and responding to new opportunities.
- Strategic planning requires long-term budgets (2, 5, or 10 years).
- Financial lending institutions often require cash flow projections for the length of any proposed borrowing.
- Many firms require managers to prepare both short-term and long-term budgets as part of the periodic budget review.

## Line-Item Budgets

- Line-item budgets authorize managers to spend only up to the specified amount on each line item.
- Advantages:
  - Tight control reduces opportunities for managers to take actions inconsistent with firm goals
- Disadvantages:
  - Inflexible in responding to unanticipated needs
  - Little incentive for cost savings

#### Facilitating Rolling Budgets

- Cisco uses an 18-month rolling budget versus a static budget.
- Advantages:
  - Keeps budget more current in a changing environment
  - Managers may react in a more timely manner by better integrating planning and execution.
- Disadvantages:
  - Costs of software and management time

 Key Solution: Use a single standardized web page for data entry and automatic roll up to the company-wide budget.

# **Budget Lapsing**

Budget lapsing is a requirement that funds allocated for a particular year cannot be carried over to the following year.

- Advantages:
  - Tighter control than budgets that do not lapse
  - Prevents risk-averse managers from accumulating funds
- Disadvantages:
  - Encourages wasteful spending near end of fiscal year

## Static Budgets

- Do not vary with volume, such as costs that should be fixed
- Volume changes may create budget variances
- Since managers are not insulated from volume changes, they have incentives to mitigate impact of adverse volume changes

## Flexible Budgets

- Do adjust for changes in volume, such as semivariable costs that include a fixed and variable component
- Evaluate performance after adjusting for volume effects
- Manager is not held responsible for volume changes See Self-Study Problems.

## Incremental vs. Zero-Based Budgets

- Incremental budgeting:
  - Begin with current year's core budget and make incremental changes
  - Review focuses on incremental changes and may ignore inefficiencies in core budget
- Zero-based budgeting (ZBB):
  - Mandates each line item in total must be justified each year
  - Motivates managers to eliminate inefficient expenses
  - Useful when firm is changing strategic direction
  - Becomes less useful when same justifications are used each year

#### Appendix: Master Budget Example

## Study Figure 6-3.

- Logical relationships
  - Sales budget drives production and purchasing
  - Production drives materials and labor budget

- Production and sales drive inventory and cost of goods sold
- Master budget statements
  - Budgeted income statement
  - Budgeted balance sheet
  - Budgeted cash flows

# **Budgets and Economic Darwinism**

- Budgets may result in suboptimal performance because:
  - Too much emphasis on financial rather than nonfinancial measures
  - Short-term rather long-term results
  - Maximizing incentive bonuses for manager rather than firm value
  - Too much time analyzing budget variances
- Despite all these problems, budgets persist in firms.
- The economic Darwinism principle implies budgeting must be yielding benefits at least as large as their costs.