Topic 4: Strategic control vs Financial Control

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Strategic Control

Control is taking measures that synchronize outcomes as closely as possible with plans

- Traditionally, has been almost completely based on financial performance
- Hence, top internal accounting officer became the “In Charge” official for organization control policies and procedures
- What do we call the chief accounting officer of an organization?

- Answer: The Controller
  - Financial Information was primary source
  - Rewarded Efficiency
  - Encouraged Dysfunctional Behavior
Strategic Control

- Integrates Quantitative & Qualitative Measures
- Uses Financial and Non-financial information
- Customer (External) focus
- Rewards based upon relative contributions to organization success
- Encourages desired organizational behavior
Strategic Control and Control Systems

Should motivate people toward desired organizational behavior rather than promote dysfunctional behavior.

Traditional
- Meeting Budget
- Production Efficiency
- Inputs
- Quantitative Performance (Mostly Financial)

1990’s thru 21st Century
- Customer Satisfaction
- New Product Development Rates
- Outcomes
- Quantitative & Qualitative Performance
Who is evaluated?

- **Traditional**
  - Individuals
  - Functions
  - Responsibility Centers

- **1990’s thru 21st Century**
  - Individuals
  - Teams (Groups)
  - Cross-Functional People
Basis of Rewards control Systems

Traditional

Efficiency
Profits
ROI

1990’s thru 21st Century

Quality
Innovation
Creativity
Overall Company Performance
Focus of Contemporary Control Systems

Traditional

Internal

1990’s thru 21st Century

Macro Environment
Industry Environment
Internal
What is Financial Control?

- Financial control involves the use of financial measures to assess organization and management performance.
  - The focus of attention could be a product, a product line, an organization department, a division, or the entire organization.
  - Focuses only on financial results.
Role of Financial Control
Financial Control

- This topic focuses on broader issues in financial control, including the evaluation of organization units and of the entire organization.

- Managers use and consider:
  - Internal financial controls
    - Information used internally and not distributed to outsiders
  - External financial controls
    - Developed by outside analysts to assess organization performance
Decentralization vs Centralization

- Decentralization is the process of delegating decision-making authority to frontline decision makers.

- Centralization is best suited to organizations that:
  - Are well adapted to stable environments.
  - Have no major information differences between the corporate headquarters and the employees.
  - Have no changes in the organization’s environment that require adaptation by the organization.
Changing Environment

- In response to increasing competitive pressures, many organizations are changing the way they are organized and the way they do business.

- This is necessary because they must be able to change quickly in a world where technology, customer tastes, and competitors’ strategies are constantly changing.
Becoming More Adaptive

- Being adaptive generally requires that the organization’s senior management delegate or decentralize decision-making responsibility to more people in the organization.

- Decentralization:
  - Allows motivated and well-trained organization members to identify changing customer tastes quickly.
  - Gives front-line employees the authority and responsibility to develop plans to react to these changes.
From Task to Results Control

- In decentralization, control moves from task control to results control
  - From where people are told what to do
  - To where people are told to use their skill, knowledge, and creativity to achieve organization objectives
Responsibility Centers and financial control

- A responsibility center is an organization unit for which a manager is held accountable.
- A responsibility center is like a small business.
- But it is not completely autonomous.
  - Its manager is asked to run that small business to achieve the objectives of the larger organization.
- The manager and supervisor establish goals for their responsibility center.
Coordinating Responsibility
Centers

- For an organization to be successful, the activities of its responsibility units must be coordinated.

- Sales, manufacturing, and customer service activities are often very disjointed in large organizations, resulting in diminished performance.
  - In general, nonfinancial performance measures detect coordination problems better than financial measures.
Responsibility Centers & Financial Control

- Organizations use financial control to provide a summary measure of how well their systems of operations control are working.
- When organizations use a single index to provide a broad assessment of operations, they frequently use a financial number because these are measures that their shareholders use to evaluate the company’s overall performance.
Responsibility Center Types

- The accounting report prepared for a responsibility center reflects the degree to which the responsibility center manager controls revenue, cost, profit, or return on investment.

- Four types of responsibility centers:
  - Cost centers - Accountable for costs only
  - Revenue centers - Accountable for revenues only
  - Profit centers - Accountable for revenues and costs
  - Investment centers - Accountable for investments, revenues, and costs
Cost Center

- Organizations evaluate the performance of cost center employees by comparing the center’s actual costs with budgeted cost levels for the amount and type of work done.
- Other critical performance measures may include:
  - Quality
  - Response time
  - Meeting production schedules
  - Employee motivation
  - Employee safety
  - Respect for the organization’s ethical and environmental commitments
Revenue Center

- A responsibility center whose members control revenues but do not control either the manufacturing or acquisition cost of the product or service they sell or the level of investment made in the responsibility center.

- Some revenue centers control price, the mix of stock on hand, and promotional activities.
Costs Incurred by Revenue Centers

- Most revenue centers incur sales and marketing costs and have varying degrees of control over those costs.

- It is common in such situations to deduct the responsibility center’s traceable costs from its sales revenue to compute the center’s net revenue.
  - Traceable costs may include salaries, advertising costs, and selling costs.
Profit Center

- A responsibility center where managers and other employees control both the revenues and the costs of the products or services they deliver.

- A profit center is like an independent business, except that senior management, not the responsibility center manager, controls the level of investment in the responsibility center.

- Most units of chain operations are treated as profit centers.
Investment Center

- A responsibility center in which the manager and other employees control revenues, costs, and the level of investment in the responsibility center

- For example, General Electric has diverse business units
  - Including Energy, Technology Infrastructure, GE Capital, Home & Business Solutions, and NBC Universal

- Senior executives at General Electric developed a management system that evaluated these businesses as independent operations—in effect as investment centers
Using Performance Measures to Influence vs. Evaluate Decisions

- The choice of the performance measure may influence decision-making behavior.

- When more costs or even revenues are included in performance measures, managers are more motivated to find actions that can influence incurred costs or generated revenues.
A dairy faced the problem of developing performance standards in an environment of continuously rising costs.

- The costs of raw materials, which were 60% - 90% of the final costs, were market determined.
- Should the evaluation of the managers depend on their ability to control the quantity of raw materials used rather than the cost?
- Senior management announced that it would evaluate managers on their ability to control total costs.
The managers quickly discovered that one way to control raw materials costs was through long-term fixed price contracts for raw materials.

- Contracts led to declining raw materials costs.
- The company could project product costs several quarters into the future, thereby achieving lower costs and stability in planning and product pricing.

- When more costs or revenues are included in performance measures, managers are more motivated to find actions that can influence incurred costs or generated revenues.
Despite the problems of responsibility center accounting, the profit measure is so comprehensive and pervasive that organizations prefer to treat many of their organization units as profit centers.

- Because most organizations are integrated operations, the first problem designers of profit center accounting systems must confront is the interactions between the various profit center units.
The Segment Margin Report

A common form of the Segment Margin Report for an organization that is divided into responsibility centers includes one column for each profit center.

<table>
<thead>
<tr>
<th>Item</th>
<th>New Car Sales</th>
<th>Used Car Sales</th>
<th>Body Shop</th>
<th>Service Department</th>
<th>Lease Sales</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$976,350</td>
<td>$1,235,570</td>
<td>$445,280</td>
<td>$685,210</td>
<td>$635,240</td>
<td>$3,977,650</td>
</tr>
<tr>
<td>Variable costs</td>
<td>764,790</td>
<td>954,850</td>
<td>235,450</td>
<td>427,400</td>
<td>517,360</td>
<td>2,899,850</td>
</tr>
<tr>
<td>Contribution margin</td>
<td>$211,560</td>
<td>$280,720</td>
<td>$209,830</td>
<td>$257,810</td>
<td>$117,880</td>
<td>$1,077,800</td>
</tr>
<tr>
<td>Other costs</td>
<td>75,190</td>
<td>58,970</td>
<td>126,480</td>
<td>185,280</td>
<td>46,830</td>
<td>492,750</td>
</tr>
<tr>
<td><strong>Segment margin</strong></td>
<td><strong>$136,370</strong></td>
<td><strong>$221,750</strong></td>
<td><strong>$83,350</strong></td>
<td><strong>$72,530</strong></td>
<td><strong>$71,050</strong></td>
<td><strong>$585,050</strong></td>
</tr>
<tr>
<td>Allocated avoidable costs</td>
<td>$69,870</td>
<td>74,650</td>
<td>64,540</td>
<td>65,290</td>
<td>22,490</td>
<td>296,840</td>
</tr>
<tr>
<td>Income</td>
<td>$66,500</td>
<td>$147,100</td>
<td>$18,810</td>
<td>$7,240</td>
<td>$48,560</td>
<td>$288,210</td>
</tr>
<tr>
<td>Unallocated costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>325,000</td>
</tr>
<tr>
<td>Dealership profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($36,790)</td>
</tr>
</tbody>
</table>
Evaluating the Segment Margin Report

What can we learn from the *segment margin report*?

- The contribution margin for each responsibility center is the value added by the manufacturing or service-creating process before considering costs that are not proportional to volume.
- A unit’s segment margin is an estimate of the long-term effect of the responsibility center’s shutdown on the organization after fixed capacity is redeployed or sold off.
Evaluating the Segment Margin Report

- The unit’s income is the long-term effect on corporate income after corporate-level fixed capacity is allowed to adjust.

- The difference between the unit’s segment margin and income reflects the effect of adjusting for business-sustaining costs.
Good or Bad Numbers

- Organizations use different approaches to evaluate whether the segment margin numbers are good or bad.
- Two sources of comparative information are:
  - Past performance
  - Comparable organizations
- Evaluations include comparisons of:
  - Absolute amounts
  - Relative amounts
Planning and Controlling Profit

- Profit is a measure of the value creation
- Planning profit requires a number of assumptions based on data, both historical and not
Planning profit: The profit wheel’s steps

- Estimate the level of sales
- Forecast operating expenses (variable and nonvariable costs)
- **Calculate expected Profit**
- Price the investment in new assets
- Close the “profit wheel”
Key Financial Measures
based on the analysis of the principal components of the profit, cash, and ROE wheels

- Sales
- Profit or net income
- Cash flow (i.e. EBITDA)
- Investment in new assets
- Return on equity (or Return On Capital Employed)
- Net income/sales = profitability
- Sales/assets = asset turnover
Earnings before Interest, Taxes, Depreciation, and Amortization

- A simple technique to estimate operating cash flow
- It is a rough measure that ignores any changes in working capital needed to operate the business
ROCE

- It is $\frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Capital employed}}$
- In this ratio, capital employed refers to the assets within a manager’s direct span of control.
- Most businesses use ROCE in different way, so it is relevant to understand what is included in the denominator.
Measuring Return on Investment

- Dupont, as a multiproduct firm, pioneered the systematic use of return on investment (ROI) to evaluate the profitability of its different lines of business
  - ROI = Income/ Investment
- The following slide presents Dupont’s approach to financial control in summary form
The DuPont System

- The DuPont system of financial control focuses on ROI and breaks that measure into two components:
  - A return measure that assesses efficiency
  - A turnover measure that assesses productivity

- It is possible to compare these individual and group efficiency measures with those of similar organization units or competitors
The Dupont ROI Control System

Return on Investment 12.5%

Efficiency 5.55%

Operating Income $5,000,000

Sales $90,000,000

divided by

plus

Working Capital $13,000,000

Total Investment $40,000,000

Permanent Investment $27,000,000

Cash $1,000,000

Manufacturing Cost $50,000,000

Selling Cost $18,000,000

Shipping Cost $2,000,000

Administrative Cost $15,000,000

Inventories $7,000,000

Accounts Receivable $5,000,000
DU – PONT MODEL

Return on Investment

Net Profit Ratio

Net Profit

Sales

Cost of Goods Sold

Selling & Distribution Expenses

Capital Turnover Ratio

Sales

Capital Employed

Working Capital

Fixed Assets

Current Assets

Current Liabilities
The DuPont System

- The productivity ratio of sales to investment allows development of separate turnover measures for the key items of investment
  - The elements of working capital
    - Inventories, accounts receivable, cash
  - The elements of permanent investment
    - Equipment and buildings
- Comparisons of these turnover ratios with those of similar units or those of competitors suggest where improvements are required
Assessing Productivity Using Financial Control

- The most widely accepted definition of productivity is the ratio of output over input.

- Organizations develop productivity measures for all factors of production, including people, raw materials, and equipment.
Questioning the ROI Approach

- Despite its popularity, ROI has been criticized as a means of financial control:
  - Too narrow for effective control
  - Profit-seeking organizations should make investments in order of declining profitability until the marginal cost of capital of the last dollar invested equals the marginal return generated by that dollar
EVA

Traditionally, Profit After Tax is shown in the Profit & Loss Account to indicate the profit available to the shareholders, both preference and equity. Ability to maintain dividend is not a test of profit adequacy. Ability to generate Economic Value Added is the only test of profit adequacy. Any surplus generated from operating activities over and above the cost of capital is termed as EVA.

A measure of the corporate surplus that should be shared by the employees, managers and shareholders.

Focuses on clear surplus in contradiction to the traditionally used profit available to the shareholders.
Using Economic Value Added

- **Economic value added** (EVA—previously called *residual income*) equals income less the economic cost of the investment used to generate that income.

  If a division’s income is €13.5 million and the division uses €100 million of capital, which has an average cost of 10%:

  \[
  \text{Economic value added} = \text{Income} - \text{Cost of capital}
  \]

  \[
  = \text{€13,500,000} - (\text{€100,000,000 \times 10\%})
  \]

  \[
  = \text{€3,500,000}
  \]
Using Economic Value Added

- Like ROI, EVA evaluates income relative to the level of investment required to earn that income.
- Unlike ROI, EVA does not motivate managers to turn down investments that are expected to earn more than their cost of capital.
Using Economic Value Added

- Organizations now use economic value added to identify products or product lines that are not contributing their share to organization return, given the level of investment they require.
  - These organizations have used activity-based costing analysis to assign assets and costs to individual products, services, or customers.
  - This allows them to calculate the EVA by product, product line, or customer.

- Organizations can also use economic value added to evaluate operating strategies.
ECONOMIC VALUE ADDED MODEL

Economic Value Added

Adjusted Operating Profit Before Interest After Tax

Profit before Interest

Income

Cost of Goods Sold

Selling & Distribution expenses

Adjusted Operating Profit Before Interest After Tax

Interest

Expenses without Interest

Tax

Interest Rate

Cost of Debt

Cost of Equity

Cost of Debt

Cost of Equity

Weighted Average Cost of Capital

Fixed Assets

Investment

Working Capital

Capital Employed

Risk free Rate

Adjustment for Systematic Rate
ROI vs EVA

Divergence exists between ROI and % of EVA on capital employed

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>1998-99</th>
<th>1999-00</th>
<th>2000-01</th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI (%)</td>
<td>14.43</td>
<td>17.34</td>
<td>19.44</td>
<td>14.18</td>
<td>19.21</td>
</tr>
<tr>
<td>WACC (%)</td>
<td>10.02</td>
<td>10.44</td>
<td>12.55</td>
<td>10.65</td>
<td>12.27</td>
</tr>
<tr>
<td>Basic EVA on Capital Employed (%)</td>
<td>4.51</td>
<td>7.07</td>
<td>4.99</td>
<td>2.27</td>
<td>3.28</td>
</tr>
<tr>
<td>(Weight based on book Value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic EVA on Capital Employed (%)</td>
<td>5.19</td>
<td>7.73</td>
<td>6.03</td>
<td>4.26</td>
<td>5.38</td>
</tr>
<tr>
<td>(Weight based on market Value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosed EVA on Capital Employed (%)</td>
<td>5.44</td>
<td>9.63</td>
<td>7.23</td>
<td>2.80</td>
<td>5.46</td>
</tr>
<tr>
<td>(Weight based on book Value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosed EVA on Capital Employed (%)</td>
<td>6.12</td>
<td>10.29</td>
<td>8.27</td>
<td>4.79</td>
<td>7.56</td>
</tr>
<tr>
<td>(Weight based on market Value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Efficacy of Financial Control

Critics of financial control have argued that:

- Financial information is delayed—and highly aggregated—information about how well the organization is doing in meeting its commitments to its shareowners.
- This information measures neither the drivers of the financial results nor how well the organization is doing in meeting its other stakeholders’ requirements.
The Efficacy of Financial Control

Financial control may be an ineffective control scorecard for three reasons:

- Focuses on financial measures that do not measure the organization’s other important attributes
- Measures the financial effect of the overall level of performance achieved on the critical success factors, and it ignores the performance achieved on the individual critical success factors
- Oriented to short-term profit performance, seldom focusing on long-term improvement or trend analysis, instead considering how well the organization or one of its responsibility centers has performed this quarter or this year
The Efficacy of Financial Control

- If used properly, financial results provide crucial help in assessing the organization’s long-term viability and in identifying processes that need improvement.
- Financial control should be supported by other tools since it is only a summary of performance.
- Financial control does not try to measure other facets of performance that may be critical to the organization’s stakeholders and vital to the organization’s long-term success.
The Efficacy of Financial Control

- Financial control can provide an overall assessment of whether the organization’s strategies and decisions are providing acceptable financial returns.
- Organizations can also use financial control to compare one unit’s results against another.
## North West Chemical: key ratios

<table>
<thead>
<tr>
<th>Metric</th>
<th>NWC</th>
<th>Industry</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit Margin</td>
<td>2.52%</td>
<td>4.00%</td>
<td>Poor</td>
</tr>
<tr>
<td>ROE</td>
<td>7.20%</td>
<td>15.60%</td>
<td></td>
</tr>
<tr>
<td>DSO</td>
<td>43.2 days</td>
<td>32.0 days</td>
<td></td>
</tr>
<tr>
<td>Inv. turnover</td>
<td>5.00x</td>
<td>8.00x</td>
<td></td>
</tr>
<tr>
<td>F.A. turnover</td>
<td>4.00x</td>
<td>5.00x</td>
<td></td>
</tr>
<tr>
<td>T.A. turnover</td>
<td>2.00x</td>
<td>2.50x</td>
<td></td>
</tr>
<tr>
<td>Debt/ assets</td>
<td>30.00%</td>
<td>36.00%</td>
<td>Good</td>
</tr>
<tr>
<td>TIE</td>
<td>6.25x</td>
<td>9.40x</td>
<td>Poor</td>
</tr>
<tr>
<td>Current ratio</td>
<td>2.50x</td>
<td>3.00x</td>
<td></td>
</tr>
<tr>
<td>Payout ratio</td>
<td>30.00%</td>
<td>30.00%</td>
<td>O.K.</td>
</tr>
</tbody>
</table>
Finally…

- Financial measures that were relevant in the past are becoming obsolete, and they are replaced by new ratios.
- Financial measures cannot be used for managerial and operational control, since they miss the link with the actions the employees are responsible for.
- Financial measures often focus on a short term.
- Financial measures highlight results, gaps, but don’t say much about how to define the actions to fill the gap.