2 Segment Reporting

The previous chapter provided insight into the preparation of performance reports by area of responsibility. The notion of holding unit managers accountable only for activities and costs under their control was introduced, along with a promise that the topic would be further developed within the present chapter. It is now time to give added consideration to the measurement and reporting of such segmented business data. A segment can be defined in many ways, but one prevailing view is that it is a discrete business unit for which separate financial information is prepared and evaluated by an operating decision maker within the organization. This decision maker usually has authority to allocate resources and judge performance of the unit, and typically relies upon the segment's financial reports in making those calls. Thus, it is quite important that segmented data be prepared in ways that facilitate thoughtful and correct decisions.

2.1 Internal Reporting of Segment Data

Within the scope of the introductory definition, a segment might be a region, territory, division, product category, department, or other classification. A "segment" as judged by upper management might be made up of "sub segments" that are, in turn, judged by middle managers. The segmentation of an entity is a highly subjective process. The goal is divide/allocate overall performance outcomes to the various moving pieces that make up the entire entity. In other words, segment data should indicate what each part of the entity is contributing to the overall basket of business outcomes.

2.2 The Problem of Segment Income Measurement

Great care must be taken to develop a very logical structure for evaluating the income of individual segments. Recall the distinction between direct costs and indirect costs. Direct costs are easily traced to and associated with a particular business segment; indirect costs are not. It is fairly easy to understand how direct costs should be pinned on a particular segment in measuring its results. Indirect costs are a more vexing problem. They may be necessary costs for the overall organization to function, but how are they to be allocated to segments? Virtually any allocation scheme is potentially arbitrary. Furthermore, such costs may be well beyond the control of the segment to which they are potentially assigned. For instance, a soft drink company may engage in an expensive national advertising campaign that benefits ten different bottling plants; how much (if any) advertising cost should be assigned to each plant? It is an interesting question – especially if you are a plant manager whose compensation is tied to the profitability of your operation.

Another problem of segment profit measurement is that a direct cost can become indirect as it is pushed down within an organization. This problem can be understood from the perspective of an example that might be quite familiar to you. Suppose you share an apartment with a roommate. The apartment may have a separate electric meter, and you and your roommate probably get a single bill representing your shared usage. The electricity cost is a direct cost clearly matched to your apartment. But, how is the cost to be shared between you and your roommate? Probably, you and your roommate have an agreement to split the cost equally. This split will occur even though you and your roommate do not use exactly the same quantity of electricity. At the individual person level, the electricity cost is an indirect allocated cost, even though it is a direct cost of your apartment. In similar fashion, many business costs can be traced to a segment at one level, but are simply allocated to the sub segments. Because these allocations impact the perceived profitability of individual business units, great care must be exercised in the allocation and interpretation process.

It is not uncommon for a business to develop a model for allocating indirect costs to business units. The allocation scheme is often the subject of debate and consternation. Depending on the scheme in play, there will likely be winners and losers. But, more likely than not, each business unit will feel that their profit measurement is unduly burdened by more than a fair share of indirect cost absorption.

2.3 Contribution Income Statement Format

To mitigate for the aforementioned allocation problems, managerial accountants sometimes prepare a contribution income statement for each segment. This internal use document is consistent with responsibility accounting. Rather than focusing on segment profit/loss after taking into account all business costs, it instead identifies each segment's controllable elements. The exact format of the statement can vary considerably, but it generally facilitates identification of each unit's contribution margin, controllable fixed costs, and uncontrollable fixed costs. The net of these cost elements comprise the segment margin. Costs that cannot be traced directly to a subunit are considered only at higher levels.

Zen Computers is a diversified company with two primary divisions – Computer Hardware and Systems Support. The Hardware unit focuses on personal computers (PCs) and personal digital entertainment devices (PDE). Below are partial contribution income statements for Zen. Review these statements carefully, taking into consideration the various notes appended to the illustration:

Directly traced to overall division, but not individual product unit

Typical contribution margin as determined under variable costing method

Controllable by management and directly traceable to segment (e.g. supervisory salaries)

A key number in evaluating *management performance* for applicable unit

Not controllable by management but incurred by segment (e.g., property taxes, depreciation, etc.)

A key number in evaluating *business viability* for applicable unit

20X5 DIVISIONAL REPORT FOR HARDWARE
CONTRIBUTION INCOME STATEMENTS (in thousands of dollars)

	Division Total	PCs	PDEs	Non-Traceable
Net sales	$ 18,000	$ 12,000	$ 6,000	
Less:				
Variable Product Costs	$ 6,600	$ 4,800	$ 1,800	
Variable SG&A	1,800	1,200	600	
Total Variable Costs	$ 8,400	$ 6,000	$ 2,400	
Contribution Margin	$ 9,600	$ 6,000	$ 3,600	
Less: Controllable Fixed Costs	3,200	2,000	800	400
Controllable Contribution Margin	$ 6,400	$ 4,000	$ 2,800	$ (400)
Less: Uncontrollable Fixed Costs	1,000	500	300	200
Segment Margin	$ 5,400	$ 3,500	$ 2,500	$ (600)

20X5 CORPORATE SUMMARY REPORT
CONTRIBUTION INCOME STATEMENTS (in thousands of dollars)

	Company Total	Hardware	Systems
Net sales	$ 29,000	$ 18,000	$ 11,000
Less:			
Variable Product Costs	$ 12,100	$ 6,600	$ 5,500
Variable SG&A	2,900	1,800	1,100
Total Variable Costs	$ 15,000	$ 8,400	$ 6,600
Contribution Margin	$ 14,000	$ 9,600	$ 4,400
Less: Controllable Fixed Costs	5,200	3,200	2,000
Controllable Contribution Margin	$ 8,800	$ 6,400	$ 2,400
Less: Uncontrollable Fixed Costs	1,900	1,000	900
Segment Margin	$ 6,900	$ 5,400	$ 1,500
Less: General Corporate Costs	1,700		
Net Income	$ 5,200		

Not traceable to individual divisions

In examining the divisional report for the hardware business (shaded in yellow), notice that separate segment margins were computed for each product unit (PCs and PDEs). The segment margin helps identify if each product is supporting its imbedded cost structure. Within each product segment, a distinction is drawn between the segment margin and the controllable contribution margin. This distinction is important in differentiating between management performance vs. business viability. In other words, management is charged with controlling certain costs, and management performance can be judged based on the controllable margin. However, a business unit may necessarily incur additional fixed costs that are beyond the control of management; these uncontrollable fixed costs must be considered in evaluating the viability of a business unit, independent of the assessment of management performance.

Note that certain costs incurred by the hardware division could not be assigned to a specific product segment (these costs are noted in the separate column for non traceable costs). These costs are included in the totals of the hardware division, but are not useful in evaluating the performance of the individual products.

The hardware division is carried forward into the corporate summary report (shaded in green), and totaled together with results of the systems division. Certain general corporate expenses were not traceable to individual divisions/products, and are only taken into consideration in the overall corporate income calculations. This type of contribution income statement reporting helps remove the bias that can result from arbitrary allocation of common costs and is sometimes helpful in identifying which business segments are targets for expansion, restructure, or discontinuance.

2.4 External Reporting of Segment Data

For corporate management to correctly discharge their duties, it is quite apparent why overall financial data must be disaggregated into segmented information. However, this same management group may be reluctant to share such information for external reporting. The reasons can vary, but one important point is that some units may be performing very well, and management does not wish to attract the attention of potential competitors. Conversely, some units may be a drag and management would rather not call attention to business mistakes.

Nevertheless, rules developed by the Financial Accounting Standards Board do require public companies to present a limited amount of financial information for each business segment. Potential investors usually find these added disclosures to be quite revealing. Generally, a company must provide descriptive information about its reportable operating segments, and note the revenues, operating profits, and identifiable assets of each significant segment. The standard also requires that segment data be reconciled to corporate totals, specifically noting the general corporate costs that were not traceable to individual segments.

At the top of the following page is a reduced/edited/highlighted illustration (actual rules require other disclosures about capital expenditures, etc., by segment; those amounts are redacted from this illustration) of segment data prepared by a public company, as taken from filings with the Securities and Exchange Commission:.

The FASB rules require that companies identify their externally reported segments using the same logic that is used to identify and manage segments on an internal basis. Although it is not illustrated here, you might also find it interesting to know that these same rules require companies to externally report information about geographic areas of operation (in a global context, such as Asia, Europe, the Americas, etc.) and the existence of major customers who comprise over 10% of a company's revenue stream.

Operating segments

The Company has two reportable segments as defined by the FASB No. 131, Disclosures about Segments of an Enterprise and Related Information: (1) Electrical and Industrial Products and (2) Galvanizing Services. The Electrical and Industrial Products Segment provides highly engineered specialty components supplied to the power generation transmission and distribution market, as well as products to the industrial market. The Galvanizing Services Segment provides hot dip galvanizing services to the steel fabrication industry through facilities located throughout the south and southwest. Hot dip galvanizing is a metallurgical process by which molten zinc is applied to a customer's material. The zinc bonding renders a corrosive resistant coating enhancing the life of the material for up to fifty years.

Information regarding operations and assets by segment is as follows:

	20X5	20X4	20X3
		(In thousands)	
Net sales:			
Electrical and Industrial Products	$ 100,542	$ 88,916	$ 134,861
Galvanizing Services	51,886	47,285	48,509
	$ 152,428	$ 136,201	$ 183,370
Segment Operating income (a):			
Electrical and Industrial Products	$ 7,282	$ 6,363	$ 14,868
Galvanizing Services	9,556	8,642	8,963
Total Segment Operating Income	$ 16,838	$ 15,005	$ 23,831
Reconciliation of segment income to corporate income:			
General corporate expenses (b)	$ 7,718	$ 5,913	$ 5,869
Interest expense	1,637	2,407	3,945
Other (income) expense, net	76	(193)	122
	$ 9,431	$ 8,127	$ 9,936
Income before income taxes	$ 7,407	$ 6,878	$ 13,895
Total assets:			
Electrical and Industrial Products	$ 79,424	$ 74,061	$ 86,278
Galvanizing Services	45,042	42,222	44,036
Corporate	4,169	3,743	3,723
	$ 128,635	$ 120,026	$ 134,037

(a) Segment operating income consists of net sales less cost of sales, specifically identifiable selling, general and administrative expenses, and other income and expense items that are specifically identifiable to a segment.

(b) General Corporate Expense consists of selling, general and administrative expenses that are not specifically identifiable to a segment.