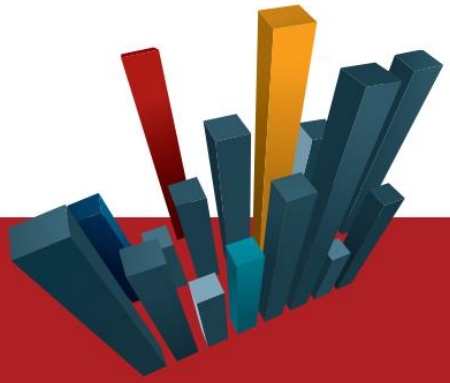
FOURTH EDITION

HEALTH CARE FINANCE

Basic Tools For Nonfinancial Managers

JUDITH J. BAKER
R.W. BAKER



Part V: Tools to Review and Manage Comparative Data

CHAPTER 13: COMMON SIZING, TREND ANALYSIS & FORECASTED DATA

Common Sizing

- Common sizing puts data on the same relative basis.

Common Sizing: Example

- Common sizing converts numbers to percentages so that comparative analysis can be performed. The worksheet below shows the assets of two hospitals.

Same Year for All Three Hospitals

	Hospital 1		Hospital 2		Hospital 3	
Current Liabilities	$100,000	20%	$500,000	25%	$400,000	80%
Long-term debt	400,000	80%	1,500,000	75%	100,000	20%
Total liabilities	$500,000	100%	$2,000,000	100%	$500,000	100%

Common Sizing: Practice Exercise 13-I

	Same Year for both Hospitals			
	Hospital A		Hospital B	
Current Assets	$ 2,000,000	**20%**	$ 8,000,000	**20%**
Property, Plant & Equipment	7,500,000	**75%**	30,000,000	**75%**
Other Assets	500,000	**5%**	2,000,000	**5%**
Total Assets	$10,000,000	**100%**	$40,000,000	**100%**

Trend Analysis

- Trend analysis compares figures over several time periods.

Trend Analysis: Example

Trend analysis allows comparison of figures over time.

	Hospital 1					
	Year 1		Year 2		Difference	
Current Liabilities	$100,000	20%	$500,000	25%	$50,000	50.0%
Long-term debt	400,000	80%	1,500,000	75%	50,000	12.5%
Total liabilities	$500,000	100%	$2,000,000	100%	$100,000	

Trend Analysis: Practice Exercise 13-II

	Hospital A			
	Year 1	Year 2	**Difference**	
Current Assets	$1,600,000	$ 2,000,000	**$ 400,000**	**25%**
Property, Plant & Equipment	6,000,000	7,500,000	**1,500,000**	**25%**
Other Assets	400,000	500,000	**100,000**	**25%**
Total Assets	$8,000,000	$10,000,000	**$2,000,000**	

Comparative Analysis of Operating Data: Horizontal Analysis

- Usually involves converted $ to %.
- Called “horizontal analysis” because computation of the % is across, or horizontal.
- Refer to examples in this chapter.

Comparative Analysis of Operating Data: Vertical Analysis

- Usually involves converted $ to %.
- Called “vertical analysis” because computation of the % is up and down, or vertical.
- Refer to examples in the chapter.

Forecast Definition

- The dictionary defines “to forecast” as: “. . .to calculate or predict some future event or condition, usually as a result of study and analysis of available pertinent data”. (Merriam Webster’s Collegiate Dictionary, 10th ed., s.v. “Forecast”)

Forecasting Results

- Managers can use three levels of forecasts:
- Short Range — Next year
- Intermediate Range — 5 years from today
- Long Range — The next decade and beyond

Forecasting Approaches

- The manager's forecasting approach usually involves three source levels:
- Level 1 — Directly involved personnel
- Level 2 — Electronic & statistical information
- Level 3 — Executive-level judgment

Forecasting Types

- The three most common types of healthcare forecasts include:
- Revenue forecasts
- Staffing forecasts
- Operating expense forecasts

Forecasting Results

- Assumptions affect forecasted results, and are the basis of the numbers in your forecast. For example:
- Computing a staff requirement of 3 lab technicians requires an assumption.
- Computing the salary and fringe benefits for each of the technicians requires another assumption.
- When the salary and fringe benefit dollars are computed for the 3 lab technicians, the resulting figure becomes part of your forecast.

Forecasting Results

- Five important assumptions, (especially when forecasting for revenues) include:
- Utilization Changes
- Patient Mix Changes
- Contractual Allowance Changes
- Trend Analysis
- Payer Changes

Contractual Allowance: Practice Exercise 13-III

- A: The unit has recorded 2,000 procedures.
- A: 500 procedures are attributed to each payer.
- A: Net revenue and contractual allowance as follows:

Payer #	Gross Charges	% Paid by Each Payer	Net Revenue per Procedure	Contractual Allowance per Procedure
1	$100.00	90%	$90.00	$10.00
2	$100.00	80%	$80.00	$20.00
3	$100.00	70%	$70.00	$30.00
4	$100.00	50%	$50.00	$50.00

Contractual Allowance: Assignment Exercise 13-3

- A: The unit has performed 2,000 procedures.

Of these,

Payer 1 = 30% x 2,000 = 600 procedures

Payer 2 = 40% x 2,000 = 800 procedures

Payer 3 = 20% x 2,000 = 400 procedures

Payer 4 = 10% x 2,000 = 200 procedures

Proof Total = 2,000

Contractual Allowance: Assignment Exercise 13-3

- A: The net revenue per procedure and the contractual allowance per procedure for each payer is as follows:

Payer #	Gross Charges	% Paid by Each Payer	Net Revenue per Procedure	Contractual Allowance per Procedure
1	$100.00	80%	$80.00	$20.00
2	$100.00	70%	$70.00	$30.00
3	$100.00	50%	$50.00	$50.00
4	$100.00	90%	$90.00	$10.00

Contractual Allowance: Assignment Exercise 13-3

- A: The total net revenue computation for each payer is as follows:

Payer #	Number of Procedures	Times Net Revenue per Procedure per Payer	Equals Total Net Revenue per Payer
1	600	$80.00	$48,000
2	800	$70.00	$56,000
3	400	$50.00	$20,000
4	200	$90.00	$18,000
Total	2,000		$142,000

Contractual Allowance: Assignment Exercise 13-3

- A: The total contractual allowance computation for each payer is as follows:

Payer #	Number of Procedures	Times Contractual Allowance per Procedure per Payer	Equals Total Contractual Allowance per Payer
1	600	$20.00	$12,000
2	800	$30.00	$24,000
3	400	$50.00	$20,000
4	200	$10.00	$ 2,000
Total	2,000		$58,000

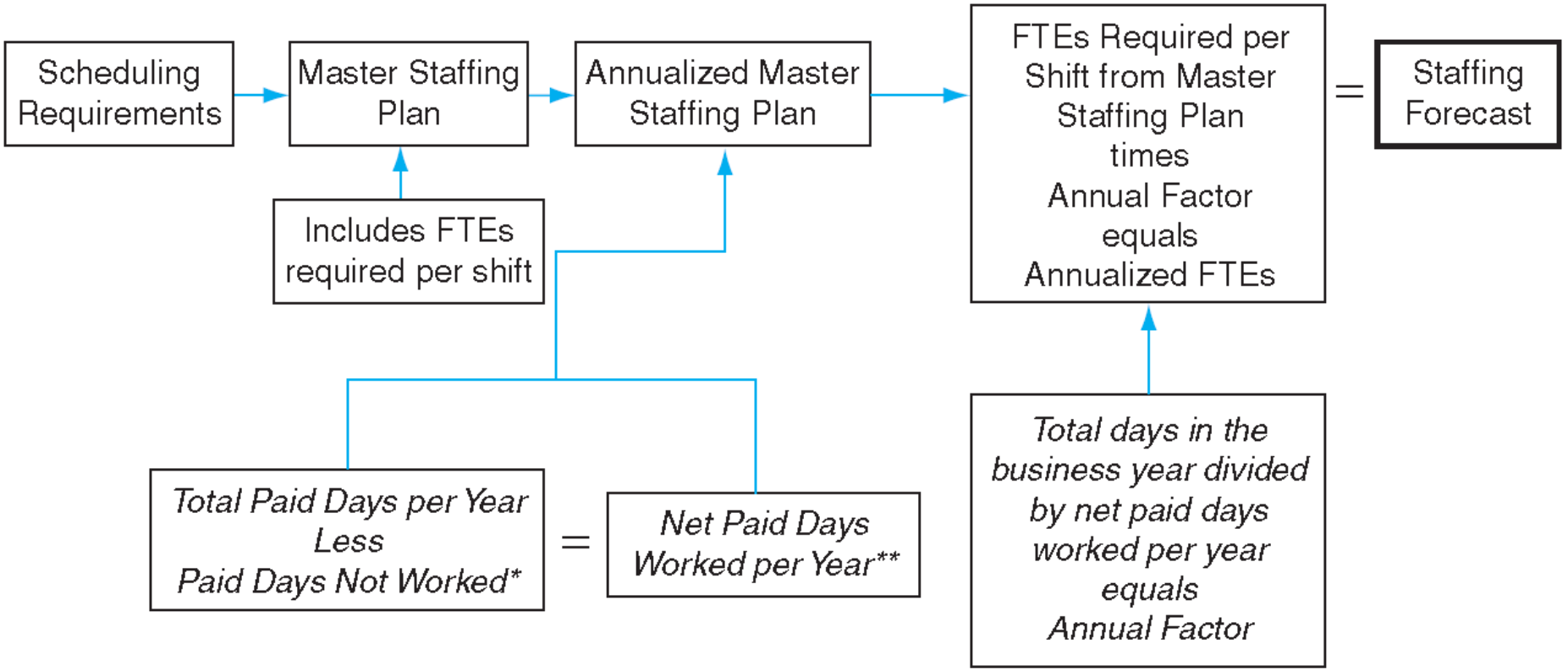
Forecasting Results

- Managers often have to prepare staffing forecasts
- Watch for
  - Non-Controllable Expense Problems
  - Required Minimum Staff Levels
  - Labor Market Problems
- More details are in the chapter.

Staffing Forecasts

- A staffing forecast has many parts. A master staffing plan should include all units and all hours and days required to cover all positions with the units.
- Refer to Figure 13-4 “Components of the Staffing Forecast” in the text. (Computation of an annual staffing factor is also illustrated in Figure 13-4.)

Figure 13–4 Components of the Staffing Forecast



*Paid Days Not Worked = Nonproductive Days
**Net Paid Days Worked = Productive Days

Capacity Level Issues in Forecasting

- In the health care industry, “capacity” refers to levels of services; that is, the ability to produce or provide a certain amount of specific healthcare services.
- In the manufacturing industry, on the other hand, “capacity levels” refer to production levels, such as the ability to produce a certain number of widgets.

Capacity Level Issues in Forecasting

- Limitations on healthcare capacity levels generally involve:
- Space & equipment availability
- Staffing availability
- Refer to details in this chapter.

Final Words About Forecasts

- In summary: the ultimate accuracy of a forecast rests on the strength of its assumptions
- And always remember: forecasting is an important part of the budget process.