

Budget Ratios - Updation

ICAI has added some more ratios in the list of Budget Ratios. We have discussed three main ratios in the classroom i.e. (a) Activity Ratio (b) Capacity Ratio and (c) Efficiency Ratio.

ICAI has added three more ratios in the list as follows :

$$(i) \quad \text{Calendar Ratio} = \frac{\text{Actual No. of Working Days}}{\text{Budgeted No. of Working Days}} \times 100$$

Note : The logic of this ratio can be matched with Calendar Variance of standard costing. If actual no. of working days are higher, then the ratio is Favourable. Hence, actual no. of working days to be taken in the numerator.

$$(ii) \quad \text{Standard Capacity Usage Ratio} = \frac{\text{Budgeted Hours}}{\text{Maximum possible hours in a budget period}} \times 100$$

Note : No logic is provided by ICAI for this ratio. But, on careful study we can say that it is the ratio between budgeted hours planned to be used out of total possible hours.

$$(iii) \quad \text{Actual Capacity Usage Ratio} = \frac{\text{Actual Hours}}{\text{Maximum possible hours in a budget period}} \times 100$$

Note : Again no logic is provided by ICAI for this ratio. But, on careful study we can say that it is the ratio between actual hours utilised out of total possible hours.

Let's take an example from ICAI module, to revise the earlier 3 ratios and 3 new ratios -

Following data is available for DKG & Co. :

Standard working hours	8 hours per day of 5 days per week
Maximum capacity	50 employees
Actual working	40 employees
Actual hours expected to be worked in four week period	6,400 hours
Standard hours expected to be earned in four week period	8,000 hours
Actual hours worked in four week period	6,000 hours
Standard hours earned in four week period	7,000 hours

The related period is of 4 weeks. In this period, there was a special holiday due to national event. Calculate the following ratios :

- (1) Efficiency Ratio
- (2) Activity Ratio
- (3) Calendar Ratio
- (4) Standard Capacity Usage Ratio
- (5) Actual Capacity Usage Ratio
- (6) Actual Usage of Budgeted Capacity Ratio

Solution :

Working Notes :

(a) Maximum possible hours in a budget period

$$\begin{aligned} &= 8 \text{ hours/day} \times 5 \text{ days/week} \times 4 \text{ weeks} \times 50 \text{ employees} \\ &= 8,000 \text{ hours} \end{aligned}$$

It is given in the question as standard hours expected to be earned in four week period

(b) Budgeted Hours

$$\begin{aligned} &= 8 \text{ hours/day} \times 5 \text{ days/week} \times 4 \text{ weeks} \times 40 \text{ employees} \\ &= 6,400 \text{ hours} \end{aligned}$$

It is given in the question as Actual hours expected to be worked in four week period

(c) Actual hours worked in four week period (i.e. Actual Hours) = 6,000 hours (given)

(d) Standard hours earned in four week period (i.e. Standard Hours) = 7,000 hours (given)

(e) Budgeted No. of Working Days = 5 days/week \times 4 weeks = 20 days

(f) Actual No. of Working Days = 20 days - 1 special holiday = 19 days

(1) Efficiency Ratio

$$\begin{aligned} &= \frac{\text{Standard Hours}}{\text{Actual Hours}} \times 100 \\ &= \frac{7,000}{6,000} \times 100 = 116.67\% \end{aligned}$$

(2) Activity Ratio

$$\begin{aligned} &= \frac{\text{Standard Hours}}{\text{Budgeted Hours}} \times 100 \\ &= \frac{7,000}{6,400} \times 100 = 109.375\% \end{aligned}$$

Note : The above formula is derived from OH Volume Variance.

$$(3) \text{ Calendar Ratio} = \frac{\text{Actual No. of Working Days}}{\text{Budgeted No. of Working Days}} \times 100$$

$$= 19 / 20 \times 100 = 95\%$$

(4) Standard Capacity Usage Ratio

$$= \frac{\text{Budgeted Hours}}{\text{Maximum possible hours in a budget period}} \times 100$$

$$= 6,400 / 8,000 \times 100 = 80\%$$

(5) Actual Capacity Usage Ratio

$$= \frac{\text{Actual Hours}}{\text{Maximum possible hours in a budget period}} \times 100$$

$$= 6,000 / 8,000 \times 100 = 75\%$$

(6) Actual Usage of Budgeted Capacity Ratio (i.e. Capacity Ratio)

$$= \frac{\text{Actual Hours}}{\text{Budgeted Hours}} \times 100$$

$$= 6,000 / 6,400 \times 100 = 93.75\%$$

Note : This is the ratio which we had studied in the classroom as Capacity Ratio. We had derived it from OH Capacity Variance.

Student Note :

The wordings of capacity ratios are confusing. But that is ICAI style and you will have to remember the name and formula to get the marks. ICAI has already asked a question based on the above formulae in May 2019 exam for 5 marks.

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