

Week 12 – Standard Costs for Control

- Part of budgetary control system can be used for evaluating performance and controlling operations
- 3 basic parts:
 1. **Predetermined or standard cost if developed:** standard cost is a budgeted cost of 1 unit of product including cost of material, labour & OH
 2. **Actual cost incurred in product process is measured**
 3. **Actual cost is compared to standard cost to determine a cost variance**

Standard Cost Variances

<u>Direct Material Standards</u>	<u>Direct Labour Standards</u>	<u>Variable Overhead Standards</u>	<u>Fixed Overhead Standards</u>
Direct material quantity variance	Direct labour efficiency variance	Variable overhead efficiency variance	Fixed overhead budget variance
Direct material (purchase) price variance	Direct labour rate variance	Variable overhead spending variance	Fixed overhead volume variance

DM quantity variance: measure of the effect on cost of using different quantity of material in production compared with standard quantity that should've been used for the actual production output → = $SP(AQ - SQ)$; $AQ > SQ$ = Unfavourable (UF)

- SP = standard price
- AQ = Actual quantity used
- SQ = Standard quantity used (given **actual output**) (SQ per unit output x Actual output)

DM (purchase) price variance: caused by difference between actual price paid for materials; and budgeted/standard price anticipated → = $PQ(AP - SP)$; $AP > SP$ = UF

- PQ = quantity purchased
- AP = actual price (unit price x quantity)
- SP = standard price (unit price x quantity)

DL rate variance: caused by difference between actual labour rate paid employees; and budgeted/standard labour rate anticipated → = $AH(AR - SR)$; $AR > SR$ UF

Possible reason for DL rate variance: higher-skilled workers

- AH = actual hours used
- AR = actual rate per hour
- SR = standard rate per hour

DL efficiency variance: caused by difference between actual hours worked by employees; and standard labour hours allowed → = $SR(AH - SH)$; $AR > SR$ = UF

Possible reason for DL efficiency variance: higher skilled workers are more efficient, well-maintained machinery, experienced workers, high quality RM

- AH = actual hours used
- SH = standard hours allowed, given **actual output** (SH per unit of output x Actual output)
- SR = standard rate per hour

Variable OH spending variance: measure difference between actual VOH and standard VOH rate multiplied by actual activity = $Actual\ VOH - (AH \times SVR)$;

Actual > Standard = UF

Where SVR is not given, use Pre. OH rate formula

- AH = actual direct labour hours or any other cost driver
- SVR = standard variable overhead rate

Variable OH efficiency variance: measure difference between actual activity and standard activity allowed, given actual output multiplied by standard VOH rate = $SVR(AH - SH)$; $AH > SH = UF$

- SH = standard direct labour hours allowed for **actual output**
- AH = actual direct labour hours
- SVR = standard VOH rate (SH per unit of output x actual output)

Fixed overhead budget variance: difference between actual FOH and budgeted FOH = $Actual\ FOH - Budgeted\ FOH$; $Actual\ FOH > Budgeted\ FOH = UF$

- If budgeted FOH is not given: budgeted fixed OH per unit x budgeted no. of units (use all budgeted figures)
- This is the real control variance for Fixed OH costs

Fixed overhead volume variance: difference between budgeted FOH and FOH applied to production (difference between budgeted & actual OH units)

= $budgeted\ fixed\ overhead - applied\ fixed\ overhead^*$; $Budgeted > Applied = UF$

Provide info capacity utilisation, doesn't provide useful info for controlling FOH costs

- ***Applied fixed OH = pre. FOH rate/unit x actual units produced**
- **Pre. FOH rate = pre. OH rate per hour x standard hrs per unit**
- Budgeted FOH based on budgeted output
- Applied FOH based on actual output

Investigating significant variances and taking corrective actions

- management by exception: only significant cost variances are reported and investigated
- which variances are significant? Size of variance; recurring variances; trends; controllability

Behavioural impact of standard costing

- standard costing can be used to evaluate performance of managers, employees and departments
- comparing performance with standards/budgets can be used to determine salary increases, bonuses and promotions
- these practices can profoundly influence behaviour:
 - motivate positive behaviours
 - encourage the manipulation of data and reports and dysfunctional activities and decisions