Good Evening,

This is a follow up of the in-class conversation we had a few weeks back regarding Case 5 – Gomez Electric; more specifically regarding how the delta related to variance was calculated.

In the solution proposed, both in Direct and Absorption costing methods, variance from budget was calculated by multiplying the product cost by the quantity Produced. (8k for product A, 10k for product B and 5k for Product C).

I am not certain that this accurately reflects the actual variance, because product costs used included a portion of Manufacturing Overheads, both Fixed and Variable, that was calculated on a per-unit basis using the budgeted quantity rather than the production quantity.

This makes no difference for Products A and B, since both products go through departments 1 and 2 and the sum of their quantity of units produced (8k and 10k respectively for a total of 18k) is equal to the sum of their budgeted production unit quantity (10k and 8k respectively for a total of 18k). Therefore, for products A and B, by coincidence, the errors in costs cancel each other out.

This does not hold for Department 3, since all 3 products go through the department. From Exhibit 1, Mfg OH costs were estimated on a per unit basis by dividing departmental OH costs (33.6k$ and 14.4k$ for Variable and Fixed respectively), by the budgeted quantity of units that was forecasted to go through the department (10k units of A, 8k units of B and 6k units of C for a total of 24k units as a denominator). This yielded a unit cost of 1.4$/unit for Variable mfg OH and 0.6$/unit for Fixed OH, both of which were incorporated in the total Full and Direct costs presented (and used in the solution) in Exhibit 3.

The error arises when computing the variance, since the denominator used in the proposed solution differs from the denominator used in the budget. More specifically, the solution proposes to use the quantity of units produced (8k+10k+5k = 23k), not the quantity of units budgeted (24k) in order to determine the overall budgeted costs. This gives as a basis to compute the variance for Department 3: 23k \* 1.4$ = $32,220 for budgeted Total Variable Manufacturing OH and 23k \* 0.6$ = $13,800 for budgeted Total Fixed Manufacturing OH. These differ from the budgeted numbers presented in Exhibit 1 for Dept. 3’s OH ($33,600 and $14,400 for Variable and Fixed respectively).

This error occurred since the denominator was changed when scaling back up to what was used to scale down to a per unit basis.

As a result, the total budget $s used to calculate the variance for AC required to be adjusted to include an additional 1k units \* (1.4$ + 0.6$) = $2k, for a total budgeted amount of $816k + $2k = $818k, yielding a variance of $818.7k – $818k = $0.7k.

For Direct Costing the adjustment is 1k units \* 1.4$ = $1.4k, for a total budgeted amount of $758.1 + $1.4k = $759,5k, yielding a variance of $764.3k – $759.5k = 4.8k$.

On a 3/4M$ budget, a few thousand dollars won’t change much…

Also, it appears that the matching concept of financial accounting was not taken into consideration in the solution proposed. More specifically, for the units produced but not sold (1k for Product A and 1K for product C), the manufacturing costs should be inventorized and not incurred during this period. This would have a direct impact on the NI computation, since we account for all the costs of units produced, yet revenues only reflect the units sold.

Just my 2 cents… Like you mentioned in class, all answers are good. For the final exam I’ll follow the solution proposed if a similar question is proposed; much simpler.

Have a good evening.

Regards,

Simon