

# Variance analysis

Variance analysis compares the budgeted (planned) income and expenditure of a business with the actual income and expenditure over a period of time. Budgets outline what a manager thinks will happen. Variance analysis compares the forecast with reality. When this comparison is made, there are three possible outcomes:

- **A favourable variance.** This occurs when the actual budget situation is better than the forecast and can happen when:
  - the actual costs are lower than the budgeted costs
  - the actual income is higher than the budgeted income
- **An adverse variance.** This occurs when the actual budget situation is worse than the forecast and can happen when:
  - the actual costs are higher than the budgeted costs
  - the actual income is lower than the budgeted income
- **No variance.** This means that the actual budget situation was the same as the forecasted budget.

## Concept

### Change

Change is a way of improving future planning for businesses. Business budgets need to be adjusted according to strategic and tactical factors, and in response to changes in the external environment. If budgets are not adjusted by businesses, the planning process and business objectives/targets become unrealistic or irrelevant.

**Table 1** shows the budget for 2021 for the Cosy Guest House in Hong Kong, which offers one room for guests. The room costs 2000 HKD per night, regardless of the time of year. The owner pays herself a salary. The information includes the budgeted figures, the actual figures and the variance. The variance is calculated by subtracting the budgeted figure from the actual figure.



**Figure 1.** The Cosy Guest House offers just one room.  
Credit: Kiyoshi Hijiki, Getty Images

**Table 1.** Budget for the Cosy Guest House for the period ending 2021. \*[F] indicates a favourable budget variance; [A] indicates an adverse budget variance.

All figures in thousands of HKD	Budgeted figures	Actual figures	Variance
Income			
Sales revenue	400	550	150 [F]*
Total income	400	550	150 [F]
Costs			
Salary	300	300	0
Mortgage payment	50	50	0

All figures in thousands of HKD	Budgeted figures	Actual figures	Variance
Advertising	5	10	5 [A]*
Electricity	10	15	5 [A]
Other overheads	5	20	15 [A]
<b>Total costs</b>	<b>370</b>	<b>395</b>	<b>25 [A]</b>
<b>Net income</b>	<b>30</b>	<b>155</b>	<b>125 [F]</b>

### Exam tip

If the budget is for a cost centre, there will be no variance calculated for income.

Look carefully at **Table 1** to see what happened with the Cosy Guest House in 2021. Start by looking at the income. The Cosy Guest House had a projected income of 400 000 HKD. However the actual income was much higher, at 550 000 HKD. This resulted in a favourable budget variance of 150 000 HKD. This favourable variance is marked in the table with the letter [F].

Now look at the costs. Some of the actual costs, such as the salary of the owner and the mortgage payment, were in line with projected costs; the variance in these items was 0. However, the actual costs for advertising, electricity and other overheads was higher than the budgeted figures, resulting in adverse budget variances. These are marked in the table with the letter [A].

The actual net income of 155 000 HKD was higher than the budgeted net income of 30 000 HKD. This resulted in a favourable budget variance of 125 000 HKD.

It is important to realise that the adverse budget variances shown in the costs for **Table 1** are not actually negative for the business. On the contrary, it seems that the increased advertising expenditure may have had a positive effect on sales revenue. In addition, the increase in electricity and other overheads was likely due to the higher-than-expected

room sales. So, while a variance may be labelled as ‘adverse’, the information needs to be considered in the context of the entire budget situation to understand whether the adverse variance was truly negative for the business or not.

Exam tip

An adverse cost variance is not always a bad thing. If variable costs have increased as a result of increased sales, this is a cost that most managers will be happy to pay, as long as enough working capital is available.

Activity

**Learner profile:** Knowledgeable  
**Approaches to learning:** Thinking skills (transfer)

Taking the example from Pedro’s Fix-It in [Section 3.9.2 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/constructing-a-budget-id-39333\)](#), use the information in the budget below to:

- Calculate the variances.
- Indicate whether each variance is favourable [F] or adverse [A].

Budget for Pedro’s Fix-It for year ending 2023 (in thousands of BRL).

	Budgeted figures	Actual figures	Variance
Income			
Sales revenue	950	925	
Total income	950	925	
Costs			
Salaries	385	385	
Electricity	50	60	

	Budgeted figures	Actual figures	Variance
Rent	300	300	
Advertising	40	30	
Other overheads	60	55	
<b>Total costs</b>	<b>835</b>	<b>830</b>	
<b>Net income</b>	<b>115</b>	<b>95</b>	

## Case study



**Figure 2.** Inflation causes business costs to rise, often unexpectedly.

Credit: Jonathan Kitchen, Getty Images

The term inflation refers to an increase in the general price level in an economy. Inflation affects both businesses and consumers negatively. Consumers pay higher prices for products. But businesses also pay higher prices for their inputs; both physical inputs and labour. This can create a positive feedback loop where prices for a key resource increase, causing business costs to rise. Businesses raise prices to cover those costs and consumers, who are also workers, ask for higher salaries and wages. This increases business costs again and can cause further increases in prices. In early 2022, countries around the world experienced higher than expected inflation. Inflation rates in many countries where prices had been quite stable for decades, neared double digits. They were even higher in countries with histories of less stable prices.

In early 2022, countries around the world experienced higher than expected inflation. Inflation rates in many countries where prices had been quite stable for decades, neared double digits. They were even higher in countries with histories of less stable prices.

There were many reasons for this increase in inflation. Supply chains had been disrupted by the COVID-19 pandemic. Businesses found it difficult to obtain the resources they needed and had higher costs. Many workers in high income countries, unhappy with their working conditions, quit their jobs in what was called 'The Great Resignation', so many businesses found it difficult to recruit workers. Salaries and wages rose. In addition, geopolitical conflict disrupted global oil, gas and food markets, sending resource prices higher.

As a result, many businesses faced significantly higher costs of production than they had planned. Other businesses saw decreases in revenues as consumers had to direct more of their spending on necessity goods. Their budget variances for both the income and costs were adverse.

### Questions

1. Define adverse variance. [2 marks]
2. Explain why inflation is likely to cause adverse variances for businesses for both costs and income. [4 marks]