

# Sensitivity Analysis

## Profit Projections

### Overview

Sensitivity analysis evaluates how variations in key assumptions impact the projected profits. It helps stakeholders understand potential risks and the range of outcomes under different scenarios.

### Key Assumptions

Variable	Base Case	Optimistic Case	Pessimistic Case
Sales Volume	10,000 units	12,000 units (+20%)	8,000 units (-20%)
Unit Price	\$50	\$55	\$45
Variable Cost/Unit	\$30	\$28	\$33
Fixed Costs	\$100,000	\$100,000	\$100,000

### Profit Projection Summary

Scenario	Projected Profit	Change from Base
Base Case	\$100,000	â€”
Optimistic Case	\$164,000	+64%
Pessimistic Case	\$31,000	-69%

### Analysis

The sensitivity analysis indicates that profit projections are most sensitive to changes in sales volume and unit price. Under the optimistic scenario, higher sales and better pricing significantly boost profits. Conversely, the pessimistic case demonstrates the impact of reduced demand and higher costs, resulting in diminished profitability.

### Important Notes

- Sensitivity analysis results are based on assumed variable changes and may differ in real business conditions.
- Ensure all assumptions are documented clearly for transparency and repeatability.
- Review and update the analysis regularly as internal and external factors evolve.
- This document should supplement, not replace, detailed financial modeling and expert judgment.

