

Dynamic Assumption Scenario Testing - Training Document

Dynamic Assumption Scenario Testing - Growth Rates and Assumptions Training Document

Purpose:

This document provides a set of predefined growth rates and associated assumptions to use as inputs for training the GPT model. These growth rates are categorized based on specific financial and operational drivers.

Predefined Growth Rates by Assumption Type:

1. Revenue Growth Rates:

- Base Case: 5% annually (stable market conditions).
- Optimistic Case: 10-15% annually (new product launches, increased market penetration).
- Pessimistic Case: 0-2% annually (economic downturn, increased competition).

- Assumptions:
 - * Base Case: Consistent sales performance, no major disruptions.
 - * Optimistic Case: Higher marketing spend, successful customer acquisition strategies.
 - * Pessimistic Case: Reduced consumer demand, supply chain challenges.

2. Operating Expense Growth Rates:

- Base Case: 3% annually (aligned with inflation).
- Optimistic Case: 1-2% annually (cost-saving initiatives, automation).
- Pessimistic Case: 5-7% annually (inflationary pressures, unexpected expenses).

- Assumptions:

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- * Base Case: Regular cost increases tied to inflation.
- * Optimistic Case: Efficiency improvements, renegotiated supplier contracts.
- * Pessimistic Case: Rising energy prices, higher labor costs.

3. Capital Expenditure (CapEx) Growth Rates:

- Base Case: 5% annually (regular maintenance investments).
- Optimistic Case: 10-20% annually (strategic growth projects, capacity expansion).
- Pessimistic Case: 0% or reduced spending (cost-cutting measures).

- Assumptions:
 - * Base Case: Ongoing maintenance and minor upgrades.
 - * Optimistic Case: Expansion into new markets, facility upgrades.
 - * Pessimistic Case: Delayed projects, reduced cash flow availability.

4. Interest Rate Changes:

- Base Case: +0.25% annually (gradual rate adjustments).
- Optimistic Case: No change or reduced rates (central bank easing).
- Pessimistic Case: +1-2% annually (tightening monetary policy).

- Assumptions:
 - * Base Case: Moderate economic growth, stable inflation.
 - * Optimistic Case: Economic slowdown, reduced inflation pressures.
 - * Pessimistic Case: High inflation, aggressive rate hikes by central banks.

5. Foreign Exchange Rate Movements:

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- Base Case: +/- 2% annually (normal volatility).
- Optimistic Case: Favorable FX movements, +5-10% annually.
- Pessimistic Case: Adverse FX movements, -5-10% annually.

- Assumptions:
 - * Base Case: Balanced trade flows, stable global conditions.
 - * Optimistic Case: Strengthening of domestic currency due to economic growth.
 - * Pessimistic Case: Weakening currency due to external shocks or trade deficits.

Usage in GPT Training:

- Use these predefined growth rates to simulate real-world financial scenarios for training.
- Include baseline financial statements with these growth rates applied for comparative analysis.
- Test GPT responses to varying input combinations to validate its scenario modeling capabilities.

Example Inputs and Expected Outputs:

- Input: 'Apply optimistic revenue growth of 15% and reduce CapEx growth to 5%.'

Expected Output: Adjusted financial statements showing increased top-line growth with moderate investment impact.

- Input: 'Assume a 2% FX depreciation and raise interest rates by 1%.'

Expected Output: Updated income statement and balance sheet showing lower net income due to FX and higher debt servicing costs.

End of Document.