Quick Comparison Table

Term	What it Represents	Owned or Owed?	Purpose	Examples
Asset	Economic value	Owned	Generate income/benefits	Cash, buildings, inventory
Liability	Financial obligation	Owed	Settle debts or expenses	Loans, accounts payable
Product	Good or service	Neither	Satisfy consumer demand	Cars, apps, food, consulting

Common ALM Formulas & Techniques

1. **Gap Analysis**

- Measures the difference between rate-sensitive assets (RSA) and rate-sensitive liabilities (RSL).
- **Formula:**
  Gap = RSA − RSL
- **Interpretation:**
- Positive Gap → Asset-sensitive (benefits from rising interest rates)
- Negative Gap → Liability-sensitive (benefits from falling interest rates)

2. **Net Interest Margin (NIM)**

- Indicates profitability from interest-earning activities.
- **Formula:**
  NIM = (Interest Income − Interest Expense) / Average Earning Assets

3. **Duration Analysis**

- Assesses the sensitivity of asset and liability values to interest rate changes.
- **Formula:**
  Duration Gap = Duration of Assets − (Duration of Liabilities × (Liabilities / Assets))

4. **Value at Risk (VaR)**

- Estimates potential loss in value due to market risk.
- **Formula (simplified):**
  $VaR = Z \times \sigma \times \sqrt{t} \times \text{Portfolio Value}$
- *Z* = confidence level factor
- *σ* = standard deviation
- *t* = time horizon

5. **Liquidity Gap Analysis**

- Tracks mismatches in cash inflows and outflows across time buckets.
- **Formula:**
  Liquidity Gap = Maturing Assets − Maturing Liabilities
- Done for each time bucket (e.g., 1–14 days, 15–28 days, etc.)

6. **Asset Coverage Ratio**

- Evaluates ability to cover debts with tangible assets.
- **Formula:**
  Asset Coverage Ratio = ((BVTA − IA) − (CL − STDO)) / Total Debt
- *BVTA* = Book Value of Total Assets
- *IA* = Intangible Assets
- *CL* = Current Liabilities
- *STDO* = Short-Term Debt Obligations