

# Asset Allocation & Return Forecasting Model using Excel VBA

## Purpose

Built for William, the Chief Risk Manager of a private equity firm, this model enables structured capital allocation among:

- **Asset Class 1** (max 15%),
- **Asset Class 2** (max 40%),
- **Asset Class 3** (max 25%),
- **Cash Reserve** (up to 20%, earning bank interest).

Each class is further diversified into industry sub-sectors with user-defined return expectations.

For each asset class, William has a sector-based allocation plan as detailed below:

### ***Class 1:***

AI and IT (10%)

Consumer (40%)

Energy (50%)

### ***Class 2:***

Banks (50%)

Energy (10%)

AI and IT (40%)

### ***Class 3:***

Global Supply Chain (30%)

Energy (20%)

Automotive (50%)

Marry has done the industry analytics concluded ***annual return*** for each sub-sector as below:

Banks -1% to 8%

AI and IT 8% to 15%

Consumer-5% to 3%

Energy 0% to 8%

Global Supply Chain -5% to 5%

Automotive -10% to 5%

## Usage Instructions

1. Open the Excel file and enable macros.
2. Click the “Run Allocation Model” button on the sheet or through the VBA interface.
3. Enter expected returns and duration when prompted.
4. Review the displayed output showing expected overall return or any allocation/input errors.