

# **Mutual Funds Market Analysis and Performance Insights**

## **(2019-2025)**

### **Project Overview**

This project analyses the Indian Mutual Funds market from 2019–2025, focusing on fund mobilization, redemptions, net inflows, and assets under management (AUM) across various scheme types and categories. Using Power BI, the data was cleaned, modeled, and visualized to uncover key investment trends and fund performance insights over time.

### **Project Objectives**

#### **1. Analyse Market Trends:**

To study the overall trends in the Indian Mutual Funds industry from 2019–2024, focusing on fund mobilization, redemptions, inflows, and outflows across various scheme types.

#### **2. Evaluate Fund Performance:**

To assess the performance and growth of mutual fund categories — Equity, Debt, Hybrid, and Solution-Oriented schemes — based on Net Assets Under Management (AUM) and Net Inflows.

#### **3. Understand Investor Behaviour:**

To identify how investor preferences have shifted between open-ended, close-ended, and interval schemes over time in response to market dynamics.

#### **4. Compare Scheme Categories:**

To compare and visualize the contribution of different scheme categories and their performance metrics using interactive Power BI dashboards.

### **Data Sources:**

- Source Description and Timeline :** Indian Data Portal (2019-2024) & Association of Mutual Funds in India (2024-2025)
- Domain :** Finance

### **Problem Statement:**

- To analyse mutual fund performance across different scheme types and categories to identify top-performing funds.
- To study investor behaviour through inflow and outflow trends for understanding investment patterns over time.
- To evaluate fund mobilization, redemption, and asset management data to assess market growth and stability.
- To compare the performance of open-ended, close-ended, and interval schemes for strategic investment insights.
- To identify which scheme categories (Equity, Debt, Hybrid, Solution Oriented, Others) attract the most investors and funds.

- To examine monthly and yearly AUM trends for forecasting market potential and investor confidence.
- To analyse the relationship between the number of investors (folios) and asset growth for understanding investor engagement.

### Attribute Details:

Attribute Name	Data Type	Description
<b>ID</b>	Integer	Unique identifier for each record or entry.
<b>DATE</b>	Date	Reporting date for the mutual fund data (monthly basis).
<b>Scheme Name</b>	Text	Name of the specific mutual fund scheme.
<b>Scheme Type</b>	Category	Type of the scheme – Open Ended, Close Ended, or Interval.
<b>Scheme Category</b>	Category	Category under which the scheme falls (e.g., Equity, Debt, Hybrid, Solution Oriented, Others).
<b>No. of Schemes</b>	Whole Number	Total number of schemes available under that category at the given time.
<b>No. of Folios</b>	Whole Number	Total number of investor accounts (folios) for that scheme — indicates investor participation.
<b>Funds Mobilized (INR in crore)</b>	Decimal Number	Total amount of money invested (inflows) during the period, in crores of INR.
<b>Repurchase/Redemption (INR in crore)</b>	Decimal Number	Total amount withdrawn or redeemed by investors (outflows) during the period, in crores of INR.
<b>Net Inflow (+ve)/Outflow (-ve) (INR in crore)</b>	Decimal Number	Net money movement after accounting for inflows and outflows. Positive = Inflow, Negative = Outflow.
<b>Net Assets Under Management (INR in crore)</b>	Decimal Number	The total market value of assets managed by the fund after liabilities — represents fund size.
<b>Average Net Assets Under Management (INR in crore)</b>	Decimal Number	Average AUM during the reporting period — helps assess fund stability and performance.
<b>No. of Segregated Portfolios</b>	Whole Number	Number of segregated portfolios within the fund created for managing specific assets or risks.

<b>Net Assets Under Management in Segregated Portfolio (INR in crore)</b>	Decimal Number	Assets managed specifically under segregated portfolios, in crores of INR.
<b>Inflow Outflow Status</b>	Text	Indicates whether the fund experienced an <b>Inflow</b> (positive net investment) or <b>Outflow</b> (negative net investment) in the given period.

## Tools and Technologies:

### Microsoft Excel:

Used Excel ETL Tool Power Query for initial data collection, cleaning, and transformation. Performed data consolidation, removal of duplicates, and preparation of consistent formats before importing into Power BI.

### Microsoft Power BI:

The primary tool for data modelling, analysis, and dashboard creation. DAX (Data Analysis Expressions) was used to build custom measures and KPIs, while Power Query Editor handled data transformation and integration.

## Data Preprocessing (Excel/Preprocessing)

### Data Collection:

Collected Mutual Funds data for the years 2019–2024 from the *Indian Data Portal* and 2024–2025 data from *Association of Mutual Funds* financial source, where monthly data was stored in separate Excel sheets.

### Data Consolidation:

Combined all monthly Excel sheets (2024–2025) into a single Excel workbook and removed subtotal and description rows for consistency.

### Automation Using Macros:

Used Excel Macros Recording to automate repetitive formatting tasks such as column alignment, text formatting, and style standardization across all sheets.

### Data Cleaning in Power Query:

Imported the datasets into Power Query Editor in Power BI to perform cleaning operations — filled empty cells using the *Fill Down* feature, standardized text formats, and ensured uniform data types.

### Data Transformation:

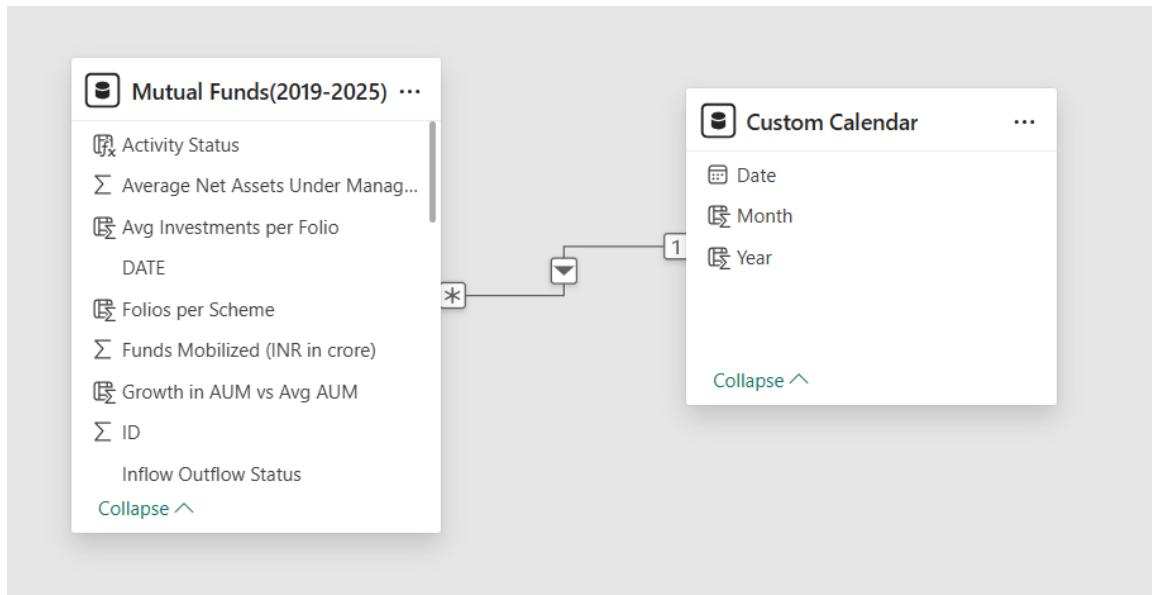
Added a calculated flag column for better classification and applied consistent formulas and field names to align both datasets (2019–2024 and 2024–2025).

### Data Integration:

Appended the cleaned and formatted datasets from both time periods to create a unified dataset covering 2019–2025, ready for visualization and analysis.

## Data Modelling and DAX (Power BI)

**Data Modelling:** In data modelling, a **Calendar Table** was created and linked to the **main dataset** using the **Date** field to enable time-based analysis and trend visualization.



## Calculated Columns and DAX Measures:

Using DAX (Data Analysis Expressions), several calculated columns, measures, and parameters were created to enhance analytical insights.

DAX Components Created:

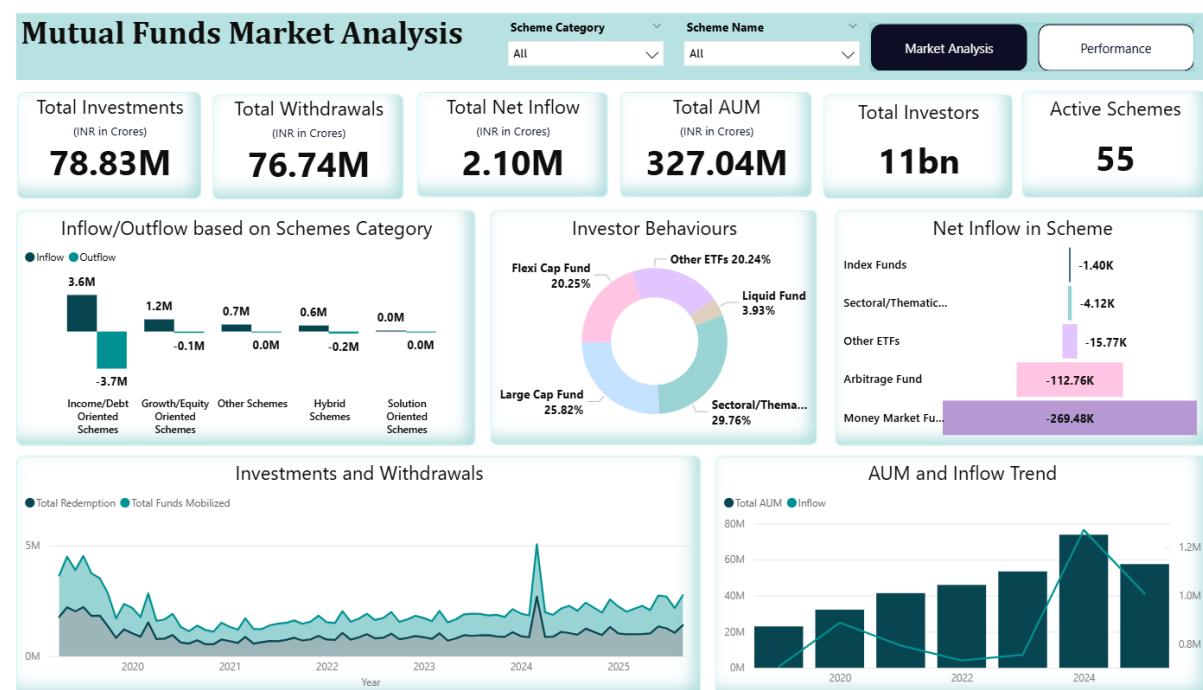
- **Calculated Columns:**
  - Inflow/Outflow Status
  - Activity Flag
- **Measures:**
  - Total Funds Mobilized
  - Total Withdrawals (Redemptions)
  - Total Net Inflow / Outflow
  - Total Net Assets Under Management (AUM)
  - Inflow Percentage (%)
  - Average Investment per Scheme
- **Parameters:**
  - Funds Parameter (to analyse fund movement trends)
  - Investors Parameter (to compare investor participation levels)

## Analysis and Visualizations (PowerBI)

To address the identified problem statements, a series of **interactive Power BI visualizations** were developed. Various charts such as **bar charts**, **line graphs**, **donut charts**, **tree maps**, and **KPI cards** were used to analyse mutual fund performance across scheme types and categories, highlighting top-performing funds.

1. To analyse **fund performance** across different scheme types and categories, **bar charts** were used to identify the top-performing funds and compare performance across scheme categories.
2. To study **investor behaviour** through inflow and outflow trends, a **stacked area chart** was created to visualize investment patterns and movement of funds over time.
3. To evaluate fund mobilization, redemption, and asset management data, custom-made parameters, table visuals, and **KPI metrics** were developed to assess market growth, total inflows, redemptions, and AUM stability.
4. To compare the performance of open-ended, close-ended, and interval schemes, **bar charts** were utilized to represent and analyse differences in fund performance and investor participation.
5. To identify which **scheme categories** attract the most **investors and funds**, a combination of **slicers, bar graphs, funnel charts, and tree maps** was used to provide interactive category-wise analysis.
6. To examine **monthly and yearly AUM** trends for forecasting market potential and investor confidence, a **stacked area chart** was implemented to highlight growth patterns and trends over time.
7. To analyze the relationship between the number of **investors and asset growth**, a **donut chart** was used to represent investor engagement and proportional contribution of each scheme to overall asset distribution.

## Mutual Funds Market Analysis



## Mutual Funds Market Analysis

Scheme Category: Growth/Equity Oriented Schemes | Scheme Name: All | Market Analysis | Performance

Total Investments (INR in Crores)

**2.85M**

Total Withdrawals (INR in Crores)

**1.78M**

Total Net Inflow (INR in Crores)

**1.07M**

Total AUM (INR in Crores)

**126.39M**

Total Investors

**8bn**

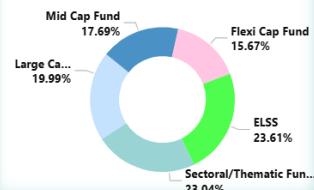
Active Schemes

**17**

Inflow/Outflow based on Schemes Category



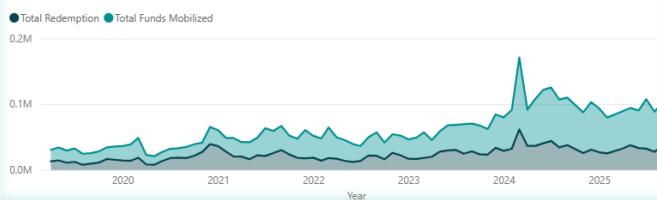
Investor Behaviours



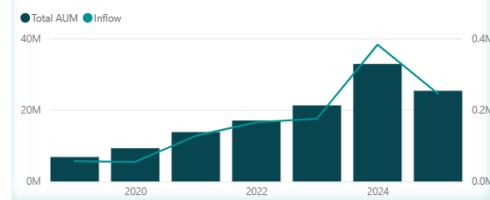
Net Inflow in Scheme



Investments and Withdrawals



AUM and Inflow Trend



## Performance Insights

### Performance Insights

Scheme Category: All | Scheme Name: All | Funds: All | Market Analysis | Performance

Total AUM(INR in Cr)

**327.04M**

AUM of Segregated Accounts

**13.82K**

Segregated Accounts

**886**

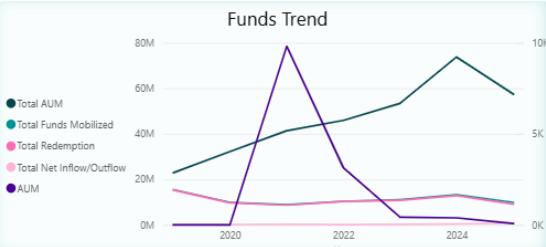
AUM by Scheme Category



AUM and Investors



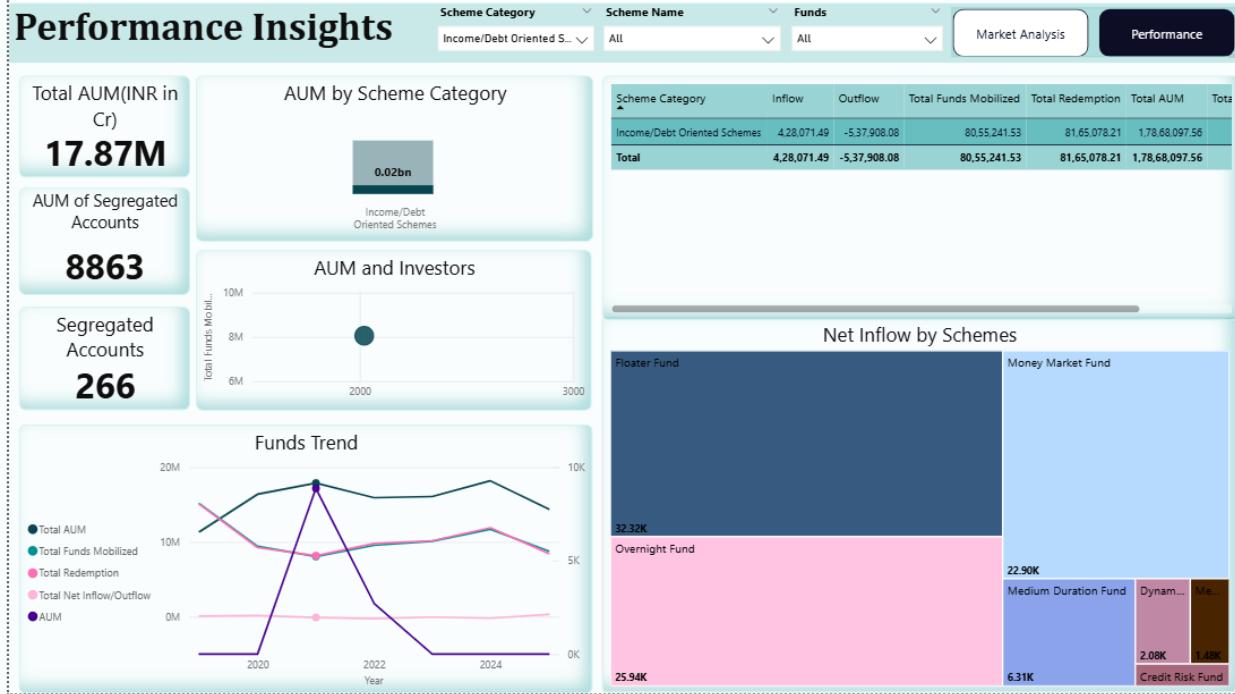
Funds Trend



Scheme Category	Inflow	Outflow	Total Funds Mobilized	Total Redemption	Total AUM
Growth/Equity Oriented Schemes	12,07,436.15	-1,37,253.13	28,53,882.20	17,83,699.12	12,63,91,070.78
Hybrid Schemes	5,98,553.71	-1,97,920.41	17,47,577.37	13,46,944.01	4,12,81,316.43
Income/Debt Oriented Schemes	36,33,842.85	-36,89,673.16	7,26,77,378.05	7,27,33,208.83	11,01,41,641.94
Other Schemes	6,95,429.97	-26,481.41	15,27,083.74	8,58,135.27	4,67,11,593.00
Solution Oriented Schemes	13,899.93	-39.08	26,470.45	14,609.73	25,18,190.26
<b>Total</b>	<b>61,49,162.59</b>	<b>-40,51,367.19</b>	<b>7,88,34,391.82</b>	<b>7,67,36,596.76</b>	<b>32,70,43,812.41</b>

Net Inflow by Schemes





## Insights

- **Open-Ended Schemes** emerged as the most preferred investment type, showing the highest fund mobilization and investor participation.
- The year **2024** recorded the **peak values** in both **Net Assets Under Management (AUM)** and **total inflows**, indicating strong market growth and investor confidence.
- “**Other ETFs**” category received the **highest inflows**, reflecting increased investor interest in exchange-traded instruments.
- **Income and Debt Oriented Schemes** showed significant inflow trends, suggesting that investors favoured stable, low-risk investment options.
- **Liquid Fund Schemes** attracted the **maximum number of investors**, implying a preference for short-term, high-liquidity investments.
- A consistent **year-over-year increase in investor count (folios)** highlights growing trust and engagement in the mutual fund market.
- **Money Market Funds** exhibited a **notably high outflow**, indicating potential profit booking or shifts in investor strategy toward other scheme types.

## Conclusion

The integration of Excel and Power BI enabled a complete analysis of the Indian Mutual Funds market from 2019 to 2025, covering scheme types, categories, inflows, outflows, investor counts, and assets under management. Data from multiple sources was cleaned, transformed, and modelled to create interactive dashboards for performance and trend analysis. The study revealed that Open-Ended Schemes received the highest funding, AUM and inflows peaked in 2024, and Liquid Funds attracted the most investors, while Money Market Funds showed higher outflows. Overall, the project effectively turned complex financial data into clear insights on market trends and investor behaviour.