This is a start to visualizing my OLAP data warehouse. The fact and dim tables are not final as mostly it is what AI suggested.

Firms like Bloomberg or Yahoo Finance likely structure their data behind the scenes, and how you can model your OLAP warehouse to support diverse queries (e.g., per-ticker vs. across-tickers, financials vs. prices).

**✅ Conceptual OLAP Schema Overview**

Most OLAP financial warehouses follow a **star schema** (sometimes snowflake for normalized dimensions). Here's a high-level structure based on common financial data sources:

**Fact Tables (measurable metrics over time)**

* **Fact\_Close\_Prices**
  + **Primary\_key – composite key.**
  + ticker\_id (FK)
  + date\_id (FK)
  + close\_price
  + volume
  + adj\_close, etc.
* **Fact\_Financials**
  + ticker\_id (FK)
  + fiscal\_period\_id (FK)
  + report\_type (e.g., 10-K, 10-Q)
  + total\_revenue, net\_income, eps, assets, etc.
* **Fact\_Valuation\_Ratios**
  + ticker\_id (FK)
  + date\_id or fiscal\_period\_id (FK)
  + pe\_ratio, pb\_ratio, roe, etc.

**Dimension Tables (descriptive attributes)**

* **Dim\_Ticker**
  + ticker\_id
  + symbol
  + company\_name
  + sector
  + industry
  + exchange
* **Dim\_Date**
  + date\_id
  + calendar\_date
  + day\_of\_week, month, quarter, year
* **Dim\_Fiscal\_Period**
  + fiscal\_period\_id
  + start\_date, end\_date
  + fiscal\_year, fiscal\_quarter