An Entity-Relationship (E-R) diagram for an Asset Liability Management (ALM) system would illustrate the relationships between key entities involved in managing a financial institution's assets and liabilities. Common entities include: Account, Asset, Liability, Customer, Product, Transaction, Risk, and Scenario. Relationships would show how these entities interact, for example, an Account holding Assets and Liabilities, Products being associated with Accounts, and Risks being associated with specific Scenarios and Products.

Entities:

- **Account:**

  Represents a financial account (e.g., checking, savings, loan) with attributes like account number, type, currency, and balance.

- **Asset:**

  Represents a financial asset held by the institution (e.g., loans, securities, real estate) with attributes like asset type, value, maturity date, and interest rate.

- **Liability:**

  Represents a financial obligation of the institution (e.g., deposits, bonds, borrowings) with attributes like liability type, amount, maturity date, and interest rate.

- **Customer:**

  Represents the individual or entity associated with accounts.

- **Product:**

  Represents the financial products offered by the institution (e.g., loans, deposits, investment products) with attributes like product type, interest rate, fees, and terms.

- **Transaction:**

  Represents individual financial transactions affecting accounts (e.g., deposits, withdrawals, payments) with attributes like transaction date, amount, type, and account.

- **Risk:**

  Represents different types of financial risks (e.g., interest rate risk, liquidity risk, credit risk) with attributes like risk type, risk level, and tolerance.

- **Scenario:**
  Represents different possible future economic or market conditions (e.g., interest rate increases, recession) used for stress testing and scenario analysis.

Relationships:

- **Account - Asset:** An account can hold multiple assets (one-to-many).
- **Account - Liability:** An account can hold multiple liabilities (one-to-many).
- **Account - Customer:** An account is owned by a customer (one-to-many).
- **Account - Product:** An account is associated with a specific product (many-to-one).
- **Transaction - Account:** A transaction affects a specific account (many-to-one).
- **Asset - Risk:** An asset can be exposed to various risks (many-to-many).
- **Liability - Risk:** A liability can be exposed to various risks (many-to-many).
- **Scenario - Risk:** A scenario can impact the level of risk (many-to-many).
- **Scenario - Asset/Liability:** A scenario can affect the value or characteristics of assets and liabilities.

Example:

A simple example would be a "Loan" asset. It would be linked to a "Customer" account through the "Account" entity. The "Loan" asset would also be linked to "Interest Rate Risk" and "Credit Risk". A "Scenario" (e.g., a sudden interest rate increase) would be linked to the "Interest Rate Risk" entity, indicating how that scenario impacts the loan.