



BNY MELLON

MUTUAL FUNDS AND FX OVERVIEW

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Agenda

- I. Introduction
- II. Mutual Fund Types
- III. How Mutual Funds are Purchased and Redeemed
- IV. Introduction to Foreign Exchange

Objectives

- Define a Mutual Fund
- Explain the Mutual Fund Types
- List Mutual Funds investment objectives
- Describe how Mutual Funds are Purchased and Redeemed
- Define the Foreign Exchange Market
- Understand basic FX quoting conventions
- Identify the key reasons for foreign exchange trades

Definition of a Mutual Fund

A mutual fund is an investment company that acquires funds by selling shares to shareholders, and invests those funds in a portfolio of securities. The combined holdings, or pooled assets, the mutual fund owns are known as its portfolio.

Each mutual fund has a specific investment objective.

Owning shares in an investment company means owning part of the portfolio and the income that the holdings generate.

Investment Company

Investment Company	US	Europe	Far East
Open End Shares bought and sold on a continuous basis; referred to as "continuously offered".	<ul style="list-style-type: none"> • Mutual Fund 	<ul style="list-style-type: none"> • Mutual Fund • Investment Fund • Open End Investment Company (OEIC) • Unit Trust 	<ul style="list-style-type: none"> • Mutual Fund • Open end Fund
Closed End Sell a fixed number of shares at one time (in an initial public offering) that later trade on a secondary market. Actively managed with a defined investment strategy.	<ul style="list-style-type: none"> • Closed end Fund 	<ul style="list-style-type: none"> • Closed end Investment Fund • Investment Trust 	<ul style="list-style-type: none"> • Closed end Mutual Fund • Closed end Fund
Unit Investment Trust Make a one-time public offering of only a specific, fixed number of redeemable securities issued as "units" and which will terminate on a date specified at the creation of the UIT. On the termination date, Unit holders have the option to receive the principal amount, rollover to the next issue, or receive the securities in-kind.	<ul style="list-style-type: none"> • Unit Investment Trust (UIT) 		

History and Regulation of Mutual Funds

- Concept of pooled investments originated in Belgium in 1822
- First open-end funds appeared in US in 1924
- Regulations created safeguards to protect investors
 - US
 - > Securities Act of 1933
 - Mutual funds register with Securities Exchange Commission and provide disclosure to investors Prospectus
 - > Securities Exchange Act of 1934
 - > Investment Company Act 1940
 - Since the Investment Company Act of 1940, a mutual fund is one of three basic types of investment companies available in the United States
 - Registered Investment Company
 - Reg 17

History and Regulation of Mutual Funds

- Slow growth until late 70's
- Regulation
 - UK
 - > Mutual Funds regulated by FSA
 - Financial Services Act 1986
 - Financial Services and Markets Act (FSMA) 2000
- Rapid growth in 80's and 90's
 - No load index and money market funds
 - Introduction of Retirement Savings Plans

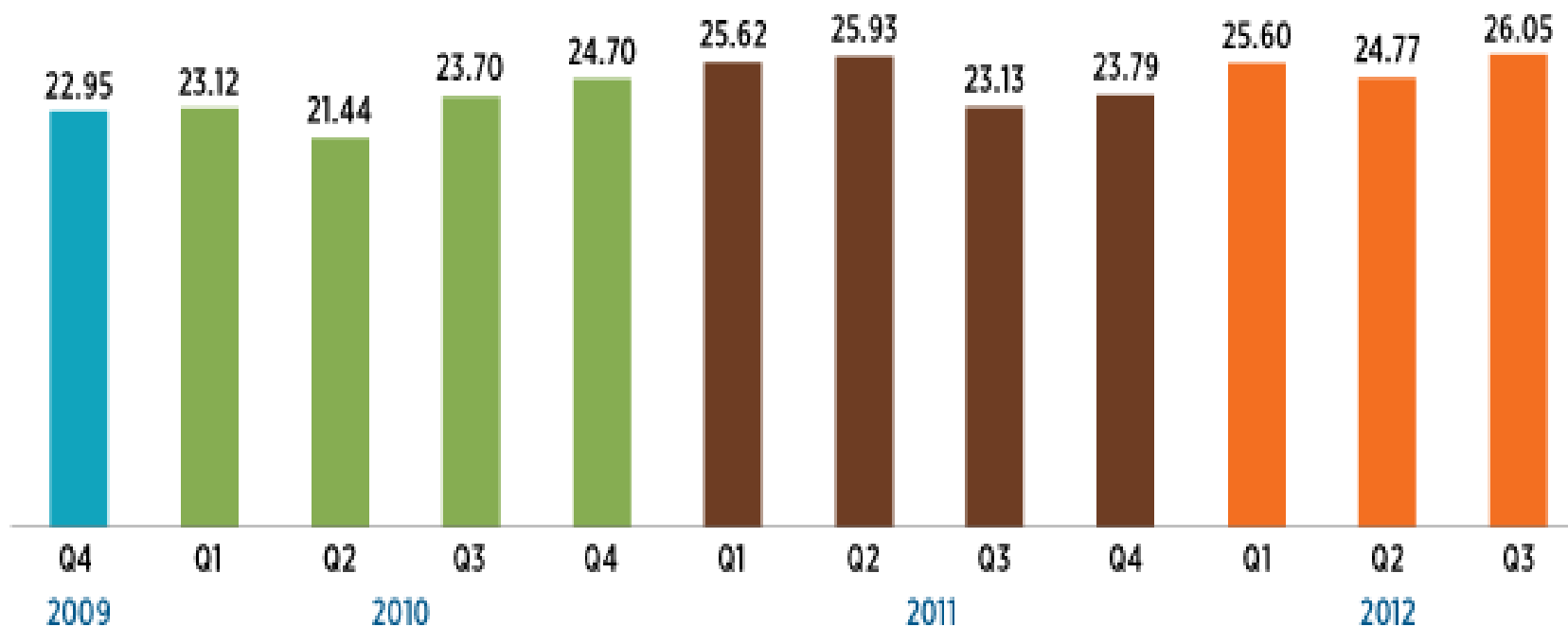
History and Regulation of Mutual Funds

IRS REGULATION OF MUTUAL FUNDS TO QUALIFY AS A REGISTERED INVESTMENT COMPANY (RIC)

- Be a US Corporation under Investment Company Act 1940 for taxable year
- Elect to be taxed as RIC
- Pass gross income test
- Meet Asset test
- Comply with diversification tests
- Distribute 90% of taxable income to shareholders

Worldwide Mutual Fund Assets

Trillions of U.S. dollars, end of quarter



Investment Company Institute (ICI)

2. SECTION TWO

MUTUAL FUND TYPES

Types of Mutual Funds

- Stock Funds
- Bond Funds
- Money Market Funds
- Hybrid
- Income
- Domestic
- Global
- International
- Emerging Market
- Index
- Diversified
- Specialized

Types of Mutual Fund (Continued)

- Domestic
- Global (throughout the world)
- International (invests in securities outside investor's country)
- Emerging Market
- Index
- Diversified
- Specialized

Mutual Fund Investment Objective

PRESERVATION OF CAPITAL

A mutual fund invests safe, high credit quality securities with the objective to preserve capital.

INCOME

–Dividends and Interest

To seek income, a fund will invest in securities that earn income in the form of dividends and interest. The fund then pays its shareholders from the income it has earned in the form of a dividend.

–Capital Gains Distributions

When a fund sells a security in its portfolio that has increased in price, the fund incurs a capital gain. At the end of the year, the fund distributes these capital gains (minus any capital losses) to investors.

- Taxable Distributions
- Non-taxable Income distributions

CAPITAL APPRECIATION

To seek capital appreciation, a Fund will invest in securities with the potential that their price will increase over time.

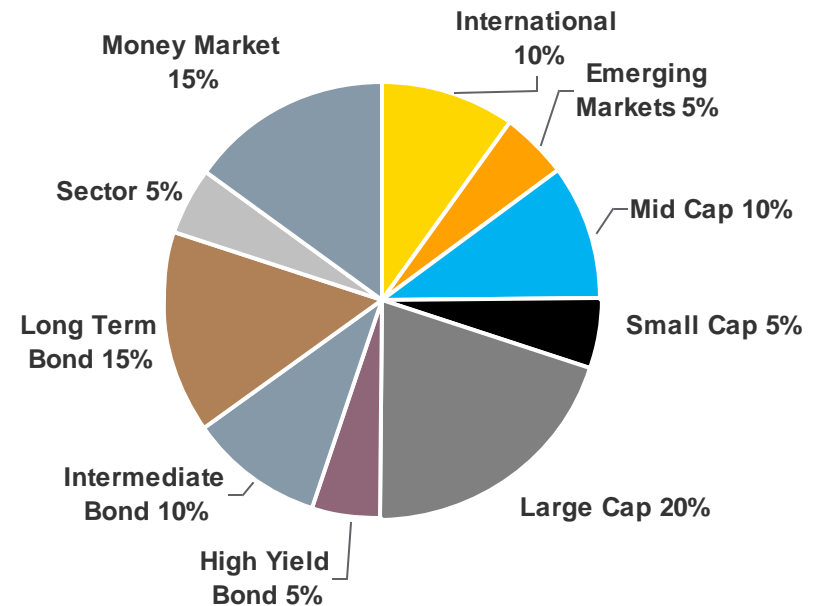
Asset Allocation

INVESTING IN MUTUAL FUNDS IS BASED ON:

- Time Horizon
- Risk tolerance
- Objective(s)

Investing in different types of mutual funds will diversify an investor's holdings.

Asset allocation is a strategy how an investor can choose their investments in different types of mutual funds.



Sample asset allocation strategy

3. SECTION THREE

**HOW MUTUAL FUNDS ARE PURCHASED AND
REDEEMED**

How Mutual Funds are Purchased and Redeemed

PURCHASE

Investors purchase mutual fund shares directly from the fund, or through an intermediary: bank, broker, Financial Adviser

- Mutual Fund Shares are Continuously Offered

REDEMPTION

Investors can sell their shares back to the fund on any business day.

EXCHANGE

Involves a redemption out of one fund and a purchase into another fund of the same fund family

MUTUAL FUND SHARE PRICE

Net Asset Value (NAV)

$$\text{NAV} = \text{assets} - \text{liabilities} / \text{total number of shares outstanding}$$

Net Asset Value (NAV) Calculation

ABC Mutual Fund owns a portfolio of stocks worth \$105,535,259.25, with liabilities of \$4,502,336.00 and 15,246,285 outstanding shares.

Valuation Formula

$$\frac{\text{Current Market Value of Fund Assets} - \text{Fund Liabilities Total}}{\text{Outstanding Participant Shares}} = \text{NAV}$$

$$\frac{\$105,535,259.25 - \$4,502,336.00}{15,246,285} = \$6.63$$

- Typically calculated once a day at market close.
- Purchase and Redemption of mutual fund shares is close of day price.

Investor Ownership

Ownership equals a share of pooled assets in proportion to the contribution.

$$\frac{\text{Investor Contribution}}{\text{Value of Fund ABC}} = \frac{\$262,500}{\$105,535,259.25} = .025\%$$

Shareholder Distributions



The diagram consists of two large, light blue arrows pointing to the right, stacked vertically. The top arrow is labeled 'Interest & Dividends' and the bottom arrow is labeled 'Capital Gains: Short term vs. long term'. Both arrows have a thin black outline and a slight 3D effect with a darker blue shadow on the right side.

Interest & Dividends

Capital Gains: Short term vs. long term

Mutual Fund Fees and Expenses

Mutual funds may charge shareholder fees and regular, recurring expenses. Funds typically pay these expenses out of fund assets — which means that investors indirectly pay these costs.

SEC rules require funds to disclose both fees and expenses in the fund's prospectus.

- **Fees**

- Redemption
- Account Maintenance
- Management
- Distribution (12b-1)

- **Operating Expenses**

Mutual Fund Advantages

- Professional Management
- Diversification
- Affordability
- Convenience
- Liquidity
- Choice
- Rewards
 - Dividends
 - Capital Appreciation

FOREIGN EXCHANGE

Foreign Exchange Market

- What is the Foreign Exchange Market?
 - Market where currencies are bought and sold
- No physical market — Over-The-Counter (OTC)
- Main Trading Centers: London, New York, Frankfurt, Tokyo, Hong Kong, Singapore
- 24 hours a day (except weekends) Based on India times:

New Zealand Opens 1:30 am

Australia 2:30 am

Japan- 4:30 am

Singapore & HK- 5:30 am

London 1:30 pm to 10 pm

New York 6:30 pm to 2:30 am

Terminology

FX RATE/EXCHANGE RATE

The price of one currency expressed in terms of another currency

BASE CURRENCY

The first currency in a currency pair (**USD**/JPY)

QUOTED CURRENCY

The second currency in a currency pair (USD/**JPY**)

RATES

Exchange rates are quoted in per unit of the base currency.

TOP CURRENCIES

USD, Euro, GBP, Yen

Foreign Exchange Quoting Basics

Each foreign exchange pair is traditionally noted as:

XXX/YYY
(base – XXX/quoted – YYY)

One unit of base currency (xxx) can be exchanged for (???) amount of quoted currency (YYY)

Example:

EUR/USD -or- 1 Euro-1.3045 Dollar*
(base/quoted) (base/quoted)
*One Euro can be exchanged for 1.3045 USD

FX Example

SCENARIO

U.S. resident needs 1,840,000 JPY to pay for the purchase of an asset in Japan. They are quoted an exchange rate of USD/JPY = 115.

QUESTIONS

What is the Base Currency?

- **USD**

What is the Quoted Currency?

- **JPY**

How many USDs will it cost to receive 115 JPY?

- **1 USD**

How many JPYs will this person receive for 1 USD?

- **115 JPY**

How many USD will it cost to receive 1,840,000 JPY?

- **16,000 USD** **(1,840,000/115)**

Expressing Exchange Rates

- A foreign exchange rate is a means of expressing the value of one currency (called base currency) in terms of another (called counter currency)

Quote	Base	Counter
USD/INR	1 USD=	62.00 INR
USD/JPY	1 USD=	99.6995 JPY

FX Quoting Conventions

Standard Quoting Convention

Established **base** currency order when exchanging with other currencies:
EUR – GBP – AUD – NZD – USD/YYY (where YYY is any other currency)

Direct Quotation

1 foreign currency = (x) home currency units
(**USD/INR**) 1USD = 61 INR

Indirect Quotation

1 home currency unit = (x) foreign currency units
(**INR/USD**) 1 INR = 0.016 USD

FOREIGN EXCHANGE	
Euro	£1 equals
1.72094-2	

Types of FXs

SPOT:

- Most common of FXs
- Trade today for a value date usually no greater than two business days out

FORWARD

- Obligates its parties to exchange specified quantities of currencies at a pre-specified exchange rate for a future date (greater than 2 days)
- Known as hedging

SWAPS

- Simultaneous purchase and sale of a given amount of currency at 2 different value dates.
- Locks in rate of the purchase and the sale
- 2 FX contracts:
 - Near-end
 - Far-end

FX OPTIONS – Right without obligation to exchange currencies on a specific future date at an agreed rate

Reasons for Executing an FX (Client)

COVER PURCHASE COSTS – RECEIVE VS. PAYMENT

REPATRIATE PROCEEDS – DELIVER VS. PAYMENT

CORPORATE EVENTS

- Rights offerings
- Bond calls

INCOME EVENTS

- Cash Dividends
- Interest

Thank You



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