



BNY MELLON

Packaged Products and Other Security Types

Business L1 Training iNautix



Course Outline

- MUTUAL FUNDS
- EXCHANGE TRADED FUNDS
- UNIT INVESTMENT TRUSTS
- FUND OF FUNDS
- HEDGE FUNDS
- DEPOSITORY RECEIPTS
- REAL ESTATE INVESTMENT TRUST
- ANNUITIES
- FX & TREASURY



Section 1

Mutual Funds

Mutual Funds

DEFINITION:

- A mutual fund is a professionally managed type of collective investment scheme that pools money from many investors to buy stocks, bonds, short-term money market instruments, and/or other securities
- Investors get share of the fund in proportion to their contribution to the fund.
- Mutual funds are managed by professionals who employ an investment strategy to meet the objectives(goal, growth, current income etc) stated in the prospectus.

Mutual Funds (Cont'd)

ADVANTAGES :

- Diversification: Reduce risk by offsetting losses from some securities with gains in other securities.
- Professional Money management : In-depth market research and analysis is performed when choosing the fund's investments.
- Liquidity: Fund shares can be liquidated upon request any day that the stock market is open
- Convenience: Many funds have relatively low initial investment requirements, automatic purchase plans, and automatic dividend reinvestments.

DISADVANTAGES :

- No involvement in the decision-making process: With a mutual fund, the portfolio manager makes all the decisions on buying and selling individual securities for the fund.
- Taxes: You may have to pay taxes for capital gains and/or income distributed by the fund during the course of the year.
- Risk and reward: Limit the potential appreciation of a single security.

Mutual Funds Types By Flexibility

Open Ended Funds

- Investors buy and sell shares back to the fund itself
- There is no limit on the number of shares the fund can issue
- Units trade at NAV and same price for all orders – no matter what time of day the order to buy or sell was entered.

Closed End mutual funds

- Issue Fixed no. of units
- Units traded in exchange & OTC's and redeemed only on termination.
- Unit price largely demands on supply demand conditions and trade at par or premium or discount to NAV.

$$\text{Premium / Discount (\%)} = (\text{Market Value} - \text{NAV}) / \text{NAV}$$

Mutual Funds Types Investment Objective

EQUITY FUNDS

- Invest in Equity with the primary purpose being to provide growth of capital
- For investors with longer-term investment horizon and higher risk appetite

BALANCED FUNDS

- Invest in a mix of stocks, bonds and money market instruments
- For investors looking for a mix between growth of capital and current income

BOND FUNDS

- The main goal of these types of funds is to provide current income by investing in U.S. government, corporate or municipal debt obligations

MONEY MARKET FUNDS

- These are the lowest-risk investment among all mutual funds in that they represent short-term investments in large, creditworthy banks and corporations
- However, they tend to provide the lowest returns. The main objective is to maintain a stable share price to protect capital

Mutual Funds Types – Load

- **Front End Load**

- Funds where a commission or sales charge applied at the time of the initial purchase
- Deducted from the investment amount and, as a result, it lowers the size of the investment

- **Back End Load**

- A fee (sales charge or load) that investors pay when selling mutual fund shares within a specified number of years. The fee amounts to a percentage of the value of the share being sold
- The fee percentage is highest in the first year and decreases yearly until the specified holding period ends, at which time it drops to zero

- **No-Load**

- No load funds do not impose any sales charges on investors

Mutual Funds Types - Example

- **On 1st Jan**

- ABC fund has a NAV = \$12. The front-end and back end load for the fund is 3% .
- On 1st Jan The Offer price would be $12 + (3\% \text{ of } 12) = 12.36$.
- An investment of \$1000 would give 80.91 units.

- **On 31 Jan**

- the NAV is \$14. The Selling price would be $14 - (3\% \text{ of } 14) = \13.58 .
- Upon *redemption* of 80.91 units investor would get \$1098.76.
- *Nett Gain* for investor is $\$1098.76 - \$1000 = \$98.76$
- *Nett Yield or Gain %* = $(98.76/1000) \times 100 = 9.876\%$

Mutual Funds :Net Asset Value



- NAV is mutual fund's price per share and is calculated by dividing the total value of all the securities in its portfolio, by the number of fund shares outstanding.
- Net of market value of assets at the end of trading day and liabilities to number of outstanding units.
- NAV is calculated at the close of business each day using the closing market value of the individual assets held by the fund.

Example :

Day 1

Stock	Price	Quantity	Amount
ABC	\$20	100	\$2,000
CDE	\$25	100	\$2,500
DEF	\$15	100	\$1,500
Total			\$6,000
Total Units			300
NAV			\$20

Day 2

Stock	Price	Quantity	Amount
ABC	\$22	100	\$2,200
CDE	\$23	100	\$2,300
DEF	\$12	100	\$1,200
Total			\$5,700
Total Units			300
NAV			\$19

Mutual Funds : Ordinary Dividend and Capital Gain Distributions

When funds pass dividend and capital gains distributions on to shareholders, the nav drops by the amount distributed. although the nav drops, the value of investment does not change.

dividend and cg distribution by mf can be

- Reinvested
- Withdrawn.

Example :

Investor A buys 50 units of a fund for \$500; each unit has a NAV of \$10. The mutual fund later makes a capital gain distribution of \$1 per unit and an ordinary dividend distribution of \$1 per unit; the total distribution is \$2 per unit. A then receive a dividend of \$100, and the NAV would drop to \$8 per unit.

The total value of 50 units would then be \$400; however, will still total \$500 (\$400 unit value plus \$100 dividend). A can reinvest the dividend and buy 12.5 addition units at \$8 a unit. The value of your units would return to \$500, and you would have 62½ units.

If A does not reinvest, he will still have 50 units worth \$400, plus \$100 in cash.

Mutual Funds : Regulation Share Pricing

- NAV determination at the end of a given business day based on closing prices of underlying securities.
- Transmitted after Exchange closes.
- Mutual fund Unit Share prices are determined by assessing the fund's net asset value (NAV).
- The NAV reflects the current market values for all the securities in the fund's portfolio
- Unit Price based on FE loads

Section 2

Exchange Traded Funds (ETFs)

Exchange Traded Funds (ETFs)

- A type of security that tracks an index, a commodity or a basket of assets
- Listed and Traded on Stock exchanges
- Provides diversity of a fund along with features of a stock like the ability to short and trade on margin

BENEFITS:

- Low costs as they are passively managed
- Flexibility to buy and sell unlike Mutual Funds or Unit Trusts

CAVEATS:

- Passive management
- Credibility of the underlying assets

Exchange Traded Funds (ETFs) - Types

MAJOR TYPES OF ETFS,

- **Index ETF**

ETF that follows a specified benchmark index. Ex: Spider (SPDR) track S&P 500

- **Currency ETF**

ETF based on a single currency or a basket of currencies. Ex: Euro ETF, Yen ETF

- **Commodity ETF**

ETF based on the value of an underlying commodity. Ex: Gold ETF

- **Bond ETFs:**

ETF based on bonds

- **Actively managed ETFs (AMETFs):**

Quite recent in nature. The very first AMETF was offered in March 2008

Section 3

Unit Investment Trusts

3. Unit Investment Trusts

CHARACTERISTICS:

- An exchange-traded mutual fund offering a fixed (unmanaged) portfolio of securities having a definite life.
- UITs are assembled by a sponsor and sold through brokers to investors

FIXED :

- Investment in Portfolio of Financial Instruments
- Fixed no. of Units
- Portfolio composition is maintained till the end.
- Passive Management of the fund and hence less Management fees.
- Portfolio dissolved on maturity date and paid in proportion to unit holders

CAVEATS:

- Under extra-ordinary circumstances portfolio is re-visited and changed.
- Investors can redeem to sponsors close to NAV's

Section 4

Hedge Funds

Hedge Funds

- **Investment fund** that can undertake a wider range of investment and trading activities than other funds, but which is only open for investment from particular types of investors specified by regulators.
- Investors are typically institutions, such as pension funds, university endowments and foundations, or high net worth individuals.
- Invest in a diverse range of assets, but they most commonly trade liquid securities on public markets.
- Employ a wide variety of investment strategies, and make use of techniques such as short selling and leverage.
- Fund managers invest their own money in the fund they manage, which serves to align their interests with investors in the fund.
- Less regulation as they deal with institutional investors or High Net worth Individual investors.
- Regulations passed in the United States and Europe after the 2008 credit crisis are intended to increase government oversight of hedge funds and eliminate certain regulatory gaps.

Hedge Funds (Cont'd)

EXCEPTIONS FOR HEDGE FUNDS

- Need not register with SEC
- Need not be liquid on a daily basis
- No daily pricing of funds
- Need not disclose asset allocation on a periodic basis

Risks with Hedge Funds

- Systemic risk refers to the risk of instability across the entire financial system,
- Transparency : As private, lightly regulated entities, hedge funds are not obliged to disclose their activities to third parties.
- Performance statistics for individual hedge funds are difficult to obtain, as the funds have historically not been required to report their performance to a central repository and restrictions against public offerings and advertisement have led many managers to refuse to provide performance information publicly

Mutual Funds v/s Hedge Funds

Mutual Funds	Hedge Funds
Try to achieve steady return in line with an index	Try to achieve high returns even market downtimes
Comprised of traditional stocks or bonds	Comprised of more complex securities
Defined/Limited Strategies	Varied strategies (change change from one to the other)
Regulated by the SEC (registration)	Registration with the SEC may not be required
Limited Borrowing capability	Greater Borrowing capacity
Smaller minimum investments are acceptable	Large minimum investments are almost always required
More Liquid	Less Liquid, could have lock up periods
Fund managers compensated by salary and bonus or a straight fee based on assets	Manager compensation is usually based on performance of the hedge fund and assets
Fund manager usually does not invest their own money in the fund	Fund manager typically invests their own money in the fund.
Less Risky for investors	More Risk-Higher Return for investors
Investment Restrictions	Less Investment Restrictions

Section 5

Depository Receipts (DRs)

Depository Receipts (DRs)

- Financial instrument issued by a bank representing a foreign company's publicly traded shares
- Trades on the local stock exchange
- Makes it easier to buy shares in foreign companies
- The shares don't leave their home state

BENEFITS:

- Access to foreign markets for investors
- Access to global capital for firms

CAVEATS:

- Subject to Currency and Political risk

Depository Receipts (DRs) - (Cont'd)

TWO MAJOR TYPES OF DEPOSITARY RECEIPTS

American Depositary Receipts (ADRs)

- Issued by a US bank
- Represents a specified number of shares of a foreign company that is traded on US stock exchange
- The capital gains and dividends are realized in dollars

Global Depositary Receipts (GDRs)

- Issued by a number of banks globally (more than one country)
- Represents a specified number of shares of foreign company
- An international bank uses its branches in various countries to achieve this

Section 6

Real Estate Investment Trust (REITs)

Real Estate Investment Trust (REITs)

- Funds with real estate properties or mortgages as underlying securities
- Traded on stock exchanges
- Distributes 90% of its income (rent from real estate) to shareholders

BENEFITS:

- Easy liquidation of real estate assets
- Tax benefits in most of the countries
- Historically produced high yields

CAVEATS:

- Subject to the volatility of interest rates (mortgage loans)
- Less income reinvestment scope

Real Estate Investment Trust (REITs)

MAJOR REIT TYPES,

- Equity REITs
 - Invest and own properties. Own an equity in the property
 - Revenues are from properties' rents and capital appreciation of the property
- Mortgage REITs
 - Invest and own property mortgages. Loan money for mortgages to property owners
 - Revenues are from the interest from mortgage loans
- Hybrid REITs:
 - Combine the strategies of both Equity and Mortgage REITs

Section 7

Annuities

Annuities

- A financial product sold by financial institutions that is designed to accept and grow funds from an individual and then, upon annuitization, pay out a stream of payments to the individual at a later point in time.
- Suitable for investors with low risk tolerance
- Primarily used as a means of securing a steady cash flow for an individual during their retirement years.
- **Fixed Annuities:** Provide fixed Periodic Payments to the annuitant . Investment of the Annuity is largely into fixed income securities.
- **Variable payments:** The intent of variable annuities is to allow the annuitant to receive greater payments if investments of the annuity fund do well and smaller payments if its investments do poorly. Portfolio can comprise of combination of bonds and equity.

Annuities (Cont'd)

Immediate Annuity

- Investor contributes a lump sum to the annuity account and immediately begin receiving regular payments, which can be a specified, fixed amount or variable depending upon your choice of annuity package and usually last for the rest of investors life.
- Chosen when investor has experienced a one-time payment of a large amount of capital, such as lottery winnings or inheritance.
- Convert a cash pool into a lifelong income stream, providing a guaranteed monthly allowance for your old age.

Annuities (Cont'd)

Deferred annuities

- Structured to meet a different type of investor need - to contribute and accumulate capital over working life to build a sizable income stream for retirement.
- The regular contributions made to the annuity account grow tax sheltered until you choose to draw an income from the account. This period of regular contributions and tax-sheltered growth is called the accumulation phase.
- E.g.: Pension plan , Child education plan etc..

SECTION 8

FOREIGN EXCHANGE & TREASURY

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

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

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

Terms Associated with a Foreign Exchange Transaction

SPOT RATE- Currency pair in which one is USD (Direct or Indirect)

Example : USD/INR and AUD/USD

CROSS RATE- Currency pair in which neither is USD

Example : EUR/GBP and GBP/INR

FX SPOT - Example

A foreign exchange spot transaction, also known as FX spot, is an agreement between two parties to buy one currency against selling another currency at an agreed price for settlement on the spot date.

The exchange rate at which the transaction is done is called the spot exchange rate.

FX spot transactions increased by 38% to 2.0 trillion USD from April 2010 to April 2013.

The standard settlement timeframe for foreign exchange spot transactions is T + 2 days; i.e., two business days from the trade date. A notable exception is the USD/CAD currency pair, which settles at T + 1.

FX- SPOT trade example

FX spot prices have a bid price and an offer price, for example:

	Bid	Offer
EUR/USD	1.3045	1.3047

The bid price is where the bank is willing to buy CCY1 and the offer price is where the bank is willing to sell CCY1. In this case, the bank is willing to buy EUR against USD at 1.3045 and is willing to sell EUR against USD at 1.3047.

The difference between the bid and the offer is called the spread. It is market convention always to talk about what you are doing with CCY1. For example, if someone is "buying USD/JPY", they are buying USD and selling JPY.

Market participants are generally expected to know what the first part of the rate will be (in this case 1.30..), and this part is known as the **"big figure"** because the current big figure does not usually vary from one minute to the next, traders normally quote only the last 2 digits of the rate (3 digits for some currency pairs), and these digits are known as the **"pips"**. A trader would therefore quote the bid and offer in this example as "45 47". When trading over the phone, it is common to quote only the pips, whereas e-commerce systems generally display the entire rate, although the pips may be given more prominence.

If on Wednesday, the FX dealer at bank A in Frankfurt agrees to sell spot US dollar to bank B's dealer in New York, in exchange for Euro.

When and how will the trade gets settled ? which accounts will get credit and debit entries

On _____, Bank A's _____ account in _____ is credited

Trade Page

Trade Entry: **Spot/Forward** ^{1-from Main Menu}





TRADE DATE	USER	LOGIN
05/10/01	pkantel	TEST

Customer

Value Date Variable Delivery Date

2 (2 options)

Buy  EUR **3**
EURO

Sell  USD
US Dollar

Rate **0.8821**
USD/EUR

- Back
- Menu
- Refresh
- Help
- Logout

3b-optional

Deal Details

4a
Get Rate

4b
Trade at Market

Accept applies only
to 4a, Get Rate —

Accept

FX- Forward trade example

The FX forward market is an interest rate market. It is not about the value of one currency against another, but about the interest rate of one currency in comparison to another over a period. Forward traders are therefore interest rate traders, and as such, some banks include FX forward traders under their interest rate division rather than their FX division.

Forward traders do not trade FX rates, but FX forward points. Forward points represent the interest rate differential between two currencies from one value date to another value date.

Forward points are equivalent to pips in the spot market. Rather than being part of the spot rate, forward points are an adjustment to the spot rate to reflect the interest rate differential. Because forward points represent a difference in rate as opposed to being a rate, there is no big figure. For example, to represent a difference in EUR/USD between 1.3023 and 1.30275, the forward points would be 4.50, because one pip or point is worth 0.0001 in EUR/USD.

Forward points may be positive or negative, if they are positive, then the interest rate of CCY1 is lower than that of CCY2. If they are negative, then the interest rate of CCY1 is higher than that of CCY2. Unlike spot prices, the two sides of a forward price are not usually called “bid and offer”, but “left-hand-side” (LHS) and “right-hand-side” (RHS). The LHS is always less than the RHS, even if the forward points are negative.

EITHER I RECEIVE PREMIUM OR I PAY PREMIUM – NOTHING BUT INTEREST RATE DIFFERENTIAL

Forward trade continued..

The rate for an FX forward trade (also known as a “forward outright”, “outright forward” or simply an “outright”) is calculated by adding the spot rate and the forward points together.

Therefore, an outright is a combination of spot risk and forward risk, and such a trade needs to be priced by both the spot and the forward desks. Outrights are not traded interbank but are very popular with corporate customers who have a business need to settle an FX trade on an exact value date in the future

Screen for Forward trade

Trade Entry: Spot/Forward

TRADE DATE 02/08/01	USER pkantel	LOGIN TEST	
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Customer	TEST	
Value Date	02/19/01	Variable Delivery Date 02/09/01

This date marks the start of the Forward Variable date range.

Back

Menu

Variable Delivery Date and type the begin date of the period within which to complete the transaction. Use MMDDYY.

Value Date and type the end date, by which the transaction must be completed.

FX- Swap trade example

An FX swap is so-named because it swaps one currency for another over a given period. The market risk is the interest rate differential over that period. A swap is two legs in one trade in that there are two value dates and two sets of cash flows. The two legs of a swap are based on the same spot rate, but differ by the forward points. Therefore, there is no spot risk (except for swap differential).

It is possible to trade “mismatched”, “uneven” or “non-round” swaps whereby the amounts vary on each leg of the swap. These types of swaps may carry spot risk. The leg of a swap with the first value date is known as the near leg, whereas the leg of a swap with the second value date is known as the far leg. Unlike a spot or outright trade, a swap trade is either a “buy and sell” or a “sell and buy”.

A US manufacturer imports machinery from Germany and has to pay the bill in EURO in 9 months. How is he going to use Swap trade to hedge is exposure to currency rate fluctuation ?

Foreign Exchange Market Participants

BANKS AS MARKET MAKERS

PRICE TAKERS

- Investment Managers
- Central Banks
- Corporations
- Individual Investors
- Other Financial Institutions
- Other supra nationals

Market Makers

➤ MARKET MAKING BANKS

- Quote buy & sell prices, without necessarily knowing what price taker will do
- Inter-temporally long or short of a currency
- Success driven by:
 - Risk Management & Control
 - Position in Market
 - Ability to draw offsetting buyers & sellers

➤ BID-OFFER SPREAD IS REWARD FOR PROVIDING LIQUIDITY TO MARKETS

- Buy at bid
- Sell at offer (ask)

Methods of Trading Currencies

- Telephone
- Reuters Dealing System
- Via Brokers
 - Electronic (EBS & Reuters)
 - Voice (traditional)
- Via Electronic Network
 - FXAll
 - Currenex
 - Bank Proprietary Systems

Treasury

- A treasury department is responsible for managing risks and liquidity for an organization
- It deals with cash flow projections and invests the surplus money to generate additional return on equity
- It is basically profit centre of an organization
- The person heading the Treasury operations is called the Treasurer
- A treasury can deal with FX, Money & Debt Market Instruments, Equity, Bond, Commodities, Derivatives or a combination of all these financial instruments
- For a bank it is a very important place for additional cash generation and managing interest rate and currency risks

Primary Role of a Treasury

- Cash Forecasting
- Working Capital Management
- Cash Management
- Investment Management
- Treasury Risk Management
- Management Advice
- Credit Rating Agency Relations
- Bank Relationships
- Fund Raising
- Credit Granting
- Other activities like systems integration in M&As

Thank You