ANALYSIS METHODS

- **Fundamental** – assesses the short, medium and long-term prospects of different industries and companies… *most* important factor: actual and/or expected profitability of the issuer

- **Technical** – historical stock prices and stock market behaviour, identifying past trends and projecting them forward

MARKET THEORIES

- Definition of an "efficient market" – a market where the stock's price is the best estimate of its true value

- **Efficient Market Hypothesis** – profit-seeking investors react quickly to the release of new information. Key conclusion: A stock's price represents the best estimate of its true value

- **Random Walk Theory** – new information concerning a stock is disseminated randomly, therefore price changes are random and bear no relation to previous changes. Key conclusion: Past price changes contain no useful information on which to base decisions

- **Rational Expectations Hypothesis** – people are rational and make decisions after weighing all available information. Key conclusion: Past mistakes can be avoided by using information to anticipate change

- General criticisms of these theories: New information is *not* available to everyone at the same time; all investors do *not* react to all information in the same way; and all investors do *not* make accurate forecasts and correct decisions

MACROECONOMIC ANALYSIS

- Fiscal Policy – tax changes, government spending and government debt

- Monetary Policy – debt levels and the bond market
    1. Tilting Yield Curve – leads to sizeable rallies in the stock market
    2. Inverted Yield Curve – frequently a harbinger of recessions

- Flow of funds – where is the money going?

- Inflation impact – inverse relationship between inflation and prices of securities or P/E levels

FUNDAMENTAL INDUSTRY ANALYSIS

- Industries are classified by the good or service that they produce

- Growth: How does industry growth rate compare to GDP growth? How does the rate of change in real GDP compare with the rate of change in unit volumes? How does the industry's price index compare with inflation?

- Laws of Survivorship
    1. Economies of scale – decline of unit costs
    2. Low-cost producer – can withstand price competition
    3. Niche player – can avoid price competition

- Classifying industries by their stage of growth
    1. Emerging growth industries: may *not* be accessible to equity investors… large start-up investments may mean negative cash flows… difficult to predict which companies will survive

    2. Growth industries: sales and earnings are expanding faster than *most* other industries… high return on capital, but cash flow may be negative… finance expansion with retained earnings – don't pay dividends

    3. Mature industries: growth rate matches general economy… earnings and cash flow are positive… profit margins fall due to competition

    4. Declining industries: cash flow may be large, even while profits are low, because no need to reinvest in new equipment

PORTER'S FIVE COMPETITIVE FORCES

- Ease of entry for new competitors… if we're investors, we want it difficult for new competitors to enter the space

- Degree of competition between existing firms… if we're investors, we favour low competition

- Potential for substitute products… if we're investors, we don't want there to be close substitutes

- Extent to which buyers can pressure company… if we're investors, we don't want buyers to be powerful

- Extent to which suppliers can pressure company… if we're investors, we don't want suppliers to be powerful

INDUSTRY CLASSIFICATION

- Cyclical versus Defensive

- Cyclical
    1. Commodity basic – forest and mining companies
    2. Industrial cyclical – steel and building materials
    3. Consumer cyclical – retail and automobiles

- Defensive
    1. Blue-chip – maintain earnings and dividends throughout the business cycle

- Speculative

- To compare cyclical and defensive companies, look at ROE. Defensive industries outperform cyclical companies during recessions; however during expansions cyclical companies outperform defensive companies. Sector rotation means going back and forth between these industries, depending on where we are in the business cycle

DIVIDEND DISCOUNT MODEL

- Theoretical model which bases the price of a corporate security on three factors: Its expected dividend *next* year, the projected growth rate of that dividend, and the investor's required return

EXAMPLE: Coca-Cola (KO on the NYSE) is currently trading at $43 per share and last year's dividend was $1.32 per share. If Coke's dividends are expected to grow at 6% compounded annually and an investor requires a 10% return, then what is the fair market value?

- P = (Dollar amount of dividend)/(required return – growth rate)

- = $1.32 x 1.06/(10% – 6%) = $34.98. Therefore, according to the DDM, KO's shares are *overvalued*

- DDM re-formulated… $P/E = \frac{Div_1/E}{(r - g)}$

Note: Dividend/Earnings is the Payout Ratio

TECHNICAL ANALYSIS

- Assumptions:
    1. All influences on market action are automatically accounted for or discounted (reflected) in market prices
    2. Prices move in trends and those trends last for long periods of time
    3. The future repeats the past

- The main difference between technical analysts and fundamental analysts: The technician studies the effects of supply and demand (price movements) while the fundamental analyst studies the causes of price movements

TOOLS OF TECHNICAL ANALYSIS

- Chart Analysis – the use of graphic representations of relevant data

    1. **Support and resistance**. Support is where demand exceeds supply and prices rise. Resistance is where supply exceeds demand and prices fall

    2. **Reversal patterns**… **head-and-shoulders** (prices fall) or **bottom head and shoulders** (prices increase)

    3. **Continuation patterns**… pauses where trading narrows, before breaking out one way or the other – such as a symmetrical triangle

MOVING AVERAGES

- A device for smoothing out fluctuating values… if a stock closed at $20.00, then $20.50, then $20.30, then $20.60, then $20.75… its three day moving averages would be $20.27, $20.47 & $20.55

- BUY SIGNAL: If the price breaks the moving average line from below on heavy volume (volume is a confirmation)

- SELL SIGNAL: If the price breaks the moving average line from above on heavy volume (volume is a confirmation)

OTHER TOOLS OF TECHNICAL ANALYSIS

- **Oscillators** – used when a stock's chart is *not* showing a definite pattern

- **Moving average convergence-divergence (MACD)** – the most popular indicator for tracking momentum and conducting divergence analysis

- **Sentiment Indicators** – focus on investor expectations

- **Contrarian Investing** – move in the opposite direction from the crowd

- Cycle Analysis – **Elliott Wave Theory**

- Other indicators:
    1. **Volume changes** – volume is used as confirmation
    2. **Breadth of market** – monitors extent of trends
    3. **Advance-decline line** – most popular way to measure market breadth
    4. **New highs, new lows** – market is strong when new 52 week highs are increasing and weak when new 52 week lows are increasing

The number of new lows reaches unprecedented peaks at the end of a bear market.

The number of new highs begins to increase very early in a bull market.

The number of new highs begins to decline long before the advance-decline line of the Dow Jones Industrial Average tops out.

COMPANY ANALYSIS

- Revenue growth is an important indicator of a company's investment quality…. the analyst must know *why* sales are growing
    - Price increases?
    - Price cuts?
    - Marketing initiatives?
    - Volume increases?
    - New products?
    - Geographic expansion?
    - Gain in market share?
    - Temporary increase – competitor's strike?
    - Change in the business cycle?

- Operating costs:
    - Include Cost of Goods Sold
    - + Selling, General & Administrative Expense
    - Does *not* include interest charges, amortization, or taxes
    - Analysts are looking for a positive trend – which means falling operating costs, relative to sales

- Dividend Record
    - Good reasons for lower payout – expansion, share buy-backs… Bad reasons for high payout – declining earnings, cyclical reasons

STATEMENT OF FINANCIAL POSITION ANALYSIS

- The Capital Structure – and leverage
- Leverage means either debt and/or preferred shares
- Impact of leverage: Magnifies earnings and ROE in good years and has the effect of greatly reducing earnings and ROE in bad years

OTHER FEATURES OF ANALYSIS

- **Qualitative analysis** is used to assess management effectiveness and other intangibles

- **Liquidity of common shares** measures how easy it is to buy or sell with causing a significant change in price… this is important if you are moving large blocs

- **Continuous monitoring** is possible through regular review of quarterly reports and other publications

INTERPRETING FINANCIAL STATEMENTS

- Caution *must* be used when analyzing and interpreting financial statements. IFRS conventions provide flexibility to companies with respect to issues like revenue recognition, inventory valuation methods, and amortization periods. The notes to the financial statements provide important information as well

- Trend Analysis – expresses EPS compared to a base year to facilitate easy comparison… Table 14.3, Page 14 – 10: Year 1 is the base year and to determine how much more profitable Year 3 is compared to Year 1, we divide Year 3's earnings, $1.73 by $1.18 and get the trend number of 147… which tells us that profits have increased by 47%. NOTE: The trend number is 147 rather than 1.47!

FINANCIAL RATIO ANALYSIS

- **Liquidity ratios** – used to judge the company's ability to meet its short-term commitments

- **Risk analysis ratios** – show how well the company deals with its debt obligations

- **Operating performance ratios** – illustrate how well management makes use of the company's resources

- **Value ratios** – tell investors what the company's shares are worth, or the return for owning them

LIQUIDITY RATIOS (2)

- **Working capital or current ratio**:
  Current Assets/Current Liabilities

- **Quick or acid test ratio**:
  (Current Assets – Inventories)/Current Liabilities

- Key points: The quick ratio is a *more* stringent liquidity test because it may be difficult to sell inventory quickly. These ratios are of interest to both shareholders and bondholders – and everything else being equal, the higher, the better

RISK ANALYSIS RATIOS (4)

- **Asset coverage ratio**:
  What are the net tangible assets for each $1,000 of total debt outstanding?

- **Debt-equity ratio**:
  What is the debt relative to equity? Imagine a company has $4 million in debt and $8 million in shareholders' equity: Its debt-equity ratio would be $4/$8 or 50%

- **Cash flow/total debt outstanding ratio**:
  What is the company's cash flow relative to its total debt?

- **Interest coverage ratio**:
  What are the company's operating earnings relative to its total interest expense?

- Key points: With *most* of these ratios, the higher the better – with the exception of debt-equity ratio. Large amounts of debt imply greater financial risk for the company, because interest payments are a legal obligation and *must* be made in good times or bad ones

OPERATING PERFORMANCE RATIOS (4)

- **Gross profit margin**:
  (Net Sales – Cost of goods sold)/Net Sales

- **Net profit margin**:
  Net earnings/Net Sales

- **Net (or after-tax) return on common equity:**
  (Net earnings – preferred dividends)/Shareholders' equity

- **Inventory turnover**:
  Cost of goods sold/inventory

- Key points: gross profit margin is an indication of management's efficiency in turning over the company's goods at a profit. Net profit margin factors in everything. Investors look for ROE that at worst is stable or better increases over time. Everything else being equal, a high inventory turnover is considered good

VALUE RATIOS (5)

- **Percentage dividend payout ratios**:
  Total dividends (preferred & common)/Net earnings

- **Earnings per common share**:
  (Net earnings – preferred dividends)/# of common shares outstanding

EPS EXAMPLE: A company had net earnings of $20,000,000. In its capital structure it had 1,000,000 $25 Par Value Preferred Shares with an indicated dividend yield of 5%. The Preferred Shares are currently trading at $30. The company has 10,000,000 million authorized shares and there are currently 8,000,000 issued and outstanding. What is earnings per share (EPS)?

- Earnings available for common shareholders:
  $20,000,000 – (1,000,000 x $25 x 5%) = $18,750,000
  Number of shares outstanding: 8,000,000
  EPS = $2.34

- **Dividend yield**:
  Annual dividend/Current market price

- **Price-earnings ratio or P/E multiple**:
  Current market price/Earnings per share (last 12 months)

- **Equity value or book value per share**:
  Common share capital/Common shares outstanding

ASSESSING PREFERRED SHARES

- Investment quality of preferred shares hinges on three questions:
  Do the company's earnings provide ample coverage?
  How many years has the company paid dividends continuously?
  Is there an adequate cushion of equity behind each preferred share?

- Four key tests:
  Preferred dividend coverage
  Equity per preferred share
  Record of continuous payments
  Independent credit assessment

- There are two independent services that assign ratings to preferred shares: DBRS and Standard and Poor's. Upgrades are positive for preferred shares while downgrades are negative.

- Specific questions to preferreds:
  What are the features and protective provisions?
  How does the yield compare to other preferreds?

- Specific questions for convertible preferreds:
  What is the outlook for the common stock?
  Is the life of the conversion privilege long enough?

RISK AND RETURN

- "Given a choice between investments with the same amount of risk, a rational investor would always take the security with the higher return. Given a choice between two investments with the same expected return, the investor would always choose the security with the lowest risk"

- The promise of portfolio theory – average return and below average risk… Imagine two securities. One has an expected return of 10% and risk of 15%. The other has an expected return of 8% and risk of 12%

- An equally divided portfolio between the two securities would have an expected return of 9%… 50% of 10% + 50% of 8% = 9%. But the risk would *not* be the weighted average of the risk (13.5%) unless the two securities were perfectly correlated

RATE OF RETURN FORMULA

- **Ending value + Cash flow – Beginning value**
  Beginning value

- A stock was purchased for $20. Its dividend yield was 3%. If it were sold at $22 after one years, its return would be…

- $\frac{\$22 + \$20 \times .03 - \$20}{\$20} = 13.0\%$

- A 6% bond with one year to maturity was purchased at 101.50. Its return would be…

- $\frac{\$100 + \$6 - \$101.50}{\$101.50} = 4.43\%$

- **Ex-ante returns** are projected returns. **Ex-post returns** are historical returns. Investors purchase securities on the basis of their **ex-ante return** projections and judge their decisions on an **ex-post** basis

RISK – RETURN RELATIONSHIP

- Treasury bills are the *least* risky class of securities and their return is understood as the "risk-free rate"

- Bonds (secured debt) is next *least* risky

- Debentures (unsecured debt) follows

- Preferred Shares

- Common Shares

- Derivatives

- **REAL RETURN = NOMINAL RETURN – INFLATION**
  This is an equation and calculation for which you are 100% responsible for the CSC Volume Two Exam!

- T-bills pay the "risk-free rate of return". All other securities must pay at *least* this, plus a premium for different risks assumed with the particular security

TYPES OF RISK

- **Inflation rate risk** – inflation reduces the real purchasing power and return on investments

- **Business risk** – associated with the variability of company's earnings. Both corporate stocks and bonds are subject to business risk

- **Political risk** – associated with unfavourable changes in government policy, such as tax changes

- **Liquidity risk** – risk that an asset cannot be bought or sold at a fair price and converted into cash

- **Interest rate risk** – fixed income securities and interest rates have an inverse relationship… if interest rates increase, fixed income securities decline in value – even if the coupon and principal payments are safe

- **Foreign exchange risk** – risk of losses from unfavourable changes in exchange rates

- **Default risk** – pertains to corporate debt

SYSTEMATIC & NON-SYSTEMATIC RISK

- **Systematic risk (market risk)** cannot be eliminated or diversified away. This is the risk associated with a particular asset class

- **Non-systematic risk (specific risk)** is the risk that the price of a security in a given market will decline more than the market itself. Non-systematic risk can be diversified away and eliminated by replicating the market

- Risk can be measured by **variance**, **standard deviation** and **beta**. **Variance** and **standard deviation** are statistical measures that relate actual returns relative to their expected or average return

- **Beta** measures the risk of an individual equity to the market as a whole. The market has a **beta** of 1.0. Securities that have a **beta** greater than 1.0 are riskier than the market as a whole and securities that have a **beta** less than 1.0 are less risky than the market as a whole

RATE OF RETURN ON A PORTFOLIO

- This is a weighted average calculation – as depicted on Page 15 – 13

- Assuming that equities return 10%, fixed-income 6% and cash 3%, calculate the return of two investors, one of whom has a 70% equity, 25% bond and 5% cash allocation, while the other has a 30% equity, 60% bond and 10% cash allocation

- #1: 70% x .10 + 25% x .06 + 5% x .03 = 8.65%

- #2: 30% x .10 + 60% x .06 + 10% x .03 = 6.9.%

COMBINING SECURITIES

- **Correlation** looks at how securities relate to each other when added to a portfolio

- Correlation must range between –1 to +1

- –1: means that if the existing portfolio goes up, the security will go down – and vice-versa

- +1: means that if the existing portfolio goes up, the security will go up – and vice-versa

- For maximum diversification benefits, select the security with the highest negative correlation to the existing portfolio. –1 is better than –.5 which is better than 0 which is better than .5 which is better than 1.0. With a correlation of 1.0, there is no diversification benefit enjoyed by adding the security to the portfolio

PORTFOLIO BETA AND ALPHA

- Beta or the beta coefficient relates the volatility of a single equity or equity portfolio to the market as a whole. The market has a beta of 1.0. Any security/portfolio that is *more* volatile than the market, has a beta greater than 1.0. Any security/portfolio that is *less* volatile than the market, has a beta less than 1.0

- Imagine three securities: One has a beta of .75, the other has a beta of 1.0, and the third has a beta of 1.4. If the market fell by 10%, we would expect the first security to fall by 7.5%, the second by 10%, and the third by 14%

- Most portfolios have a beta which ranges between .75 and 1.40

- Alpha is the excess return a portfolio makes compared to what its beta predicts. A portfolio has a beta of 1.2 and the market goes up 10%. If the portfolio went up 14%, we would understand that 12% of its performance was due to "beta" and that 2% was due to "alpha"

OVERVIEW PORTFOLIO MGMT PROCESS

- Six steps to the portfolio management process:
    1. Determine investment objectives and constraints
    2. Design an investment policy statement
    3. Formulate an asset allocation strategy
    4. Implement the Asset Allocation
    5. Monitor the economy, market, portfolio and client
    6. Evaluate portfolio performance

- Investment objectives – Three primary investment objectives
    1. Safety of principal or preservation of capital
    2. Income
    3. Growth of capital

  Two secondary investment objectives
    4. Liquidity (or marketability)
    5. Tax Minimization

- Investment constraints:
    1. Time horizon
    2. Liquidity requirements
    3. Tax requirements
    4. Legal and regulatory
    5. Unique circumstances

INVESTMENT POLICY STATEMENT

- **The Investment Policy Statement (IPS)** contains the operating rules, guidelines, investment objectives and asset mix agreed to by the client and investment manager

- The **IPS** can be a lengthy stand-alone document or it can be derived from the **New Account Application Form (NAAF)** in accordance with the Know Your Client Rule

DEVELOPING AN ASSET MIX

- **Cash**: currency, money market securities, Canada Savings Bonds, T-bills, bonds with a maturity of one year or less, redeemable GICs

- **Fixed-income**: bonds due in more than one year, strip bonds, mortgages, fixed-income private placements, preferred shares

- **Equities**: common shares, warrants, rights, options, i60's, LEAPs, convertible bonds and convertible preferred shares

- Other asset classes: hedge funds, real estate, precious metals, commodities (gold is considered a good hedge against inflation)

EQUITY CYCLE & BUSINESS CYCLE

- The Equity Cycle leads the Business Cycle

- End of expansion phase of business cycle means the contraction phase of the equity cycle: Recession conditions are apparent, therefore strategy is to buy long-term bonds and avoid or reduce exposure to stocks

- End of contraction phase of business cycle means the stock market trough of the equity cycle: Interest rates are falling, but recovery has *not* taken hold, therefore strategy is to sell long-term bonds and purchase cyclical stocks

- Expansion phase of business cycle means the expansion phase of the equity cycle: Sustained economic growth means rising corporate profits and a strong stock market

- Late expansion into peak of business cycle means the equity cycle has peaked: Strong economic growth has led to higher interest rates, which are bad for both stocks and bonds, therefore strategy is to hold cash

PORTFOLIO MANAGER STYLES

- An active management style seeks to outperform a benchmark portfolio on a risk-adjusted basis

- **Bottom-up** analysis begins with a focus on individual stocks

- **Top-down** begins with a study of broad macroeconomic factors before the analysis narrows to individual stocks

- **Passive management** is consistent with the view that markets are efficient; passive managers use a buy-and-hold style

- **Indexing** involves buying and holding a portfolio of securities that matches the composition of a benchmark index

EQUITY MANAGER STYLES

- **Growth managers** – in the **bottom-up** approach, growth managers focus on current and future earnings of individual companies

- Valuation metrics: High P/E multiplies, High Price/Book Value, High Price/Cash Flow and low dividend yields

- Risk features: faltering EPS can lead to large percentage declines. Heavily reliant on meeting analysts' EPS estimates. Growth securities are vulnerable to market cycles

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- **Value managers** – bottom-up stock pickers with a research-intensive approach

- Valuation metrics: Low P/E multiples, Low Price/Book Value, Low Price/Cash Flow and high dividend yields

- Risk features: lower standard deviation, lower betas, less downside

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- **Sector rotation** – **top-down approach** focusing on prospects for entire economy and emerging trends

- Favour large cap stocks for liquidity

- Risk features: higher volatility caused by industry concentration

FIXED INCOME MANAGER STYLES

- **Term to maturity** – focus on length of maturity, specializing in short-term bonds (5 years or less), medium terms bonds (5 – 10 years) or long term bonds (10 years or longer)

- **Credit quality** – managers make decisions on the credit quality of issuer and whether there is opportunity in riskier corporate bonds or safer government issues

- **Interest rate anticipator** – managers will either extend the maturity (duration) of the portfolio if they believe interest rates will decline or shorten maturities (duration) if it's expected that interest rates will increase

ASSET ALLOCATION

- Asset allocation involves determining the optimal division of an investor's portfolio among the different asset classes

- All portfolios should be balanced between the three major asset classes: Cash, fixed-income and equities. A good rule-of-thumb is that the average investor should have an equity allocation that is determined by: 100 – Age… therefore, if you are thirty years old, your equity allocation should be 70%. If you are 50 years old, you should be 50% in equities. Every portfolio needs some cash – generally 5% to 10%. The remainder will be put into fixed income products

- **Strategic asset allocation** – this is the base policy mix that each investor has… the "ideal" allocation, everything else being equal. Under the strategic asset allocation methodology of **dynamic asset allocation**, the portfolio is always returned to its base policy mix at each re-balancing date

- **Tactical asset allocation** – allows the asset manager to deviate slightly from the base policy, in order to take advantage of perceived opportunities in the marketplace

- **Integrated asset allocation –** an all-encompassing strategy that takes into account capital market expectations, changes in capital markets and changes in client risk tolerance

PORTFOLIO REBALANCING

- "An investor's base policy mix is 60% equities, 30% bonds and 10% cash. She begins the period with a $250,000 portfolio. Over the year, equities appreciate by 12%, bonds decline in value by 5%, and the cash component appreciates by 4%. What will the portfolio manager have to do to properly re-balance the portfolio to the base policy?"

STEP ONE: Determine the original dollar value invested in each asset class: $150,000 equities, $75,000 bonds & $25,000 cash

STEP TWO: Determine the end-of-period weightings by asset class – and end-of-period portfolio value:

Equities:	$150,000	x 1.12	=	$168,000
Bonds:	$ 75,000	x .95	=	$ 71,250
Cash:	$ 25,000	x 1.04	=	$ 26,000
PORTFOLIO VALUE:				$265,250

STEP THREE: Determine the new weightings as per the base policy mix as a function of the ending portfolio value:

Equities:	$265,250	x 60%	=	$159,150
Bond:	$265,250	x 30%	=	$ 79,575
Cash:	$265,250	x 10%	=	$ 26,525

STEP FOUR: Determine necessary adjustments by asset class:

Sell ($168,000 – $159,150) worth of equities
Buy ($ 71,250 – $ 79,575) worth of bonds
Buy ($ 26,000 – $ 26,525) worth of cash

This means selling $8,850 worth of equities and buying $8,325 worth of bonds and $525 worth of cash

PORTFOLIO MONITORING

- Monitoring the Markets and the Client – client profiles must be updated on a regular basis and New Account Application Forms amended as necessary. Capital markets constantly change as well – and new assumptions about GDP, interest rates, etc. *must* be incorporated into the portfolio

- Monitoring the Economy – involves taking expected capital gains/losses per Asset Class and adding these to expected cash flows to achieve a Total Return Forecast. For example: If bonds have a coupon of 5%, duration of 4 and interest rates are expected to increase by 50 basis points, the bonds will return 5% + (2%) = 3%

EVALUATING PORTFOLIO PERFORMANCE

- The basic calculation is:

$$\frac{\text{Increase in market value}}{\text{Beginning value}} \times 100$$

- When there are cash flows, a portion of the change comes from the contribution/withdrawals. The return on a portfolio is affected by both the amount and timing of the cash flows

- **Sharpe Ratio** – used by mutual fund companies and portfolio managers, it measures the risk-adjusted return of a portfolio:

$$\textbf{Sharpe Ratio} = \frac{\text{Portfolio Return} - \text{Risk-free Rate}}{\text{Standard Deviation of Portfolio}}$$

FACTORS DRIVING GROWTH OF MANAGED AND STRUCTURED PRODUCTS

- **Search for yield** – retirees and institutional investors need yield even through interest rates are low

- **Growth in passive investing** – consistent with view that markets are efficient

- **Demographics** – baby boomers supply the market with lots of capital, therefore need for product

- **End of Bull Market for Bonds** – low interest rates mean that investors are looking for alternatives

- **Product innovations** – ability to invest in *more* product classes with *less* capital than before

- **Falling commissions and faster computers** – discount brokerages have made investing possible for people

MANAGED PRODUCT

- A **managed product** is a pool of capital gathered to buy securities according to a specific investment mandate. The pool is managed by an investment professional who receives a management fee for carrying out the mandate

- Active managers make decisions based on their outlook for the markets and securities in which they invest. Active managers look to outperform the return on a specific benchmark

- Passive managers do *not* make security selections. The manager assumes only the systematic risk associated with investing in a particular asset class. The *most* common type of passively managed fund is one that attempts to replicate the returns on a market index

- Examples of managed products include mutual funds, hedge funds, segregated funds, ETFs, private equity funds, closed end funds and LSVCCs

- In a **pooled account structure**, investors' funds are gathered into a legal structure, usually a trust or corporation, and the investor's claim to the pool's returns is proportionate to their investment in it. Pooled accounts are often open-ended

- In a **separately managed account** structure, individual accounts are created for each investor

STRUCTURED PRODUCTS

- A **structured product** is a passive investment vehicle financially engineered to provide a specific risk and return characteristic. The value of the structured product tracks the returns off a reference security known as the underlying asset. That reference security can be a single security, a basket of securities, currencies, commodities, or an index

- Examples of underlying assets include mortgage loans, credit card receivables, car loans, equity indexes, and home equity loans

- A structured product is designed to have less risk than its constituent underlying asset(s), yet provide higher risk-adjusted returns than conventional investments

- The issuer of a structured product takes advantage of its economies of scale and market reach to package underlying assets that individuals couldn't assemble on their own – for example, a mortgage-backed security

- There is no active management of the underlying assets and the structured product is closed-ended in nature

COMPARISON:
MANAGED & STRUCTURED PRODUCTS

	MANAGED PRODUCTS	STRUCTURED PRODUCTS
Structure	Open ended	Closed ended
Maturity Date	Mostly none	Finite life
Holdings	Liquid & illiquid holdings	Illiquid holdings
Secondary Mkt.	Excellent to poor	Very Poor
Management	Active or passive	Passive
Performance Goal	Absolute returns or risk reduction	Risk reduction

ADVANTAGES OF MANAGED PRODUCTS

- Experience of professional management
- Economies of scale from pooled investment funds
- Diversification – both among products and within the products themselves
- Liquidity and flexibility – managed products such as mutual funds can be bought and sold daily at their NAV
- Tax benefits – LSVCCs provide investors with tax credits that may total 30% of the purchase price
- Low cost investment options – ETFs have among the lowest management expense ratios among all funds

ADVANTAGES OF STRUCTURED PRODUCTS

- Experience of professional management
- Economies of scale from pooled investment funds
- Diversification
- Higher yield – securitization allows products to combine high risk, illiquid securities into one lower risk, high yield security
- High probability of return of principal

DISADVANTAGES OF MANAGED PRODUCTS

- Lack of transparency – hedge funds rarely disclose their holdings on a timely basis

- Liquidity constraints – products like hedge funds and private equity only offer liquidity on a delayed basis

- High fees – active fixed income and foreign equity mutual funds can charge up to 5% in fees, and private equity and hedge funds typical charge a 20% performance fee

- Volatility of returns – increased due to the use of leverage

DISADVANTAGES OF STRUCTURED PRODUCTS

- Complexity – those that make extensive use of derivatives (such as CDOs) are complex instruments

- High cost – there may be several fees involved in some products such as principal protected notes (PPNs)

- Illiquidity of secondary market – *most* structured products lack an active secondary market

RISKS INVOLVED WITH MANAGED AND STRUCTURED PRODUCTS

- Credit risk – different levels include consumer default on loans and failure of corporate borrowers

- Inflation risk – *most* structured products are hybrid fixed income securities; therefore will suffer a loss of real purchasing power if inflation is higher than anticipated

- Currency risk

- Prepayment risk – some mortgages in an MBS might pay off earlier than expected, leaving the investor a lower return than originally anticipated

- Manager risk

EVOLVING MARKET FOR MANAGED AND STRUCTURED PRODUCTS

- Outcome based investment solutions are increasingly popular

- Investors face different risks including: Health care risk; longevity risk; inflation risk; and pension shortfall risk

- Investment solutions require: Greater certainty of returns; security of assets; and flexibility. This has led to products with: Principal protection; target retirement dates; tax minimization; and income generation

- Specific products include: Principal protected notes; annuities; target-date funds; guaranteed minimum withdrawal benefits (GMWBs); and inflation indexed investments

CHANGING COMPENSATION MODELS

- The growth in managed and structured product has changed compensation models for advisors

- Fee-based business models (charged as a percent of assets under management) are replacing the commission-based (or transaction) model

- Advisors have been trying to add more value by acting as “fund-of-fund” managers, that is, gathering assets and then selecting the right combination of investment managers and products, rather than doing the selection themselves

MUTUAL FUNDS

- A mutual fund is an investment vehicle operated by an investment company. In a mutual fund structure, investors pool their capital and professional money managers take care of the on-going investment decision-making… investors have proportional ownership depending on their contributions relative to the total pool of capital when those contributions were made

- An investor contributes $2,000 when a mutual fund commences operations. If $1,000,000 altogether were raised, she owns .2% of the mutual fund. Assume that a year later, the assets have appreciated to $1,500,000 and she contributes another $2,000. Now her additional ownership share is $2,000/$1,502,000 or .13% of the mutual fund

- Mutual fund units or shares are redeemable on demand at the fund's current price or **net asset value per share (NAVPS)**. The NAV is determined by summing the mutual fund's total assets and then deducting its total liabilities and dividing by the total number of units outstanding

- A mutual fund has $25 million in Assets and $250,000 in Liabilities and there are 5.8 million units outstanding. The NAV is ($25,000,000 – $250,000)/5,800,000 = 4.267 per unit

ADVANTAGES OF MUTUAL FUNDS

- Low-cost professional management – a highly trained fund manager analyzes the financial markets to select the best investments possible

- Diversification – a typical large fund has a portfolio of 60 to 100 securities in 15 to 20 different industries

- Variety of funds and transferability – many fund families have numerous different funds and allow investors to switch between funds at little or no added fees

- Variety of purchase and redemption plans – anything from lump-sum purchases to periodic accumulation plans (**pre-authorized contribution plans** or **PACs**)

- Liquidity – mutual fund shareholders have the continuing right to redeem their shares at the NAVPS

- Ease of estate planning – funds are actively managed through probate

- Loan collateral and eligible for margin – margin loan value is typically 50%

- Other special options – on-going customer service and financial information available through the **System for Electronic Document Analysis and Retrieval (SEDAR)**

DISADVANTAGES OF MUTUAL FUNDS

- Costs – perceived steepness of sales and management costs
- Unsuitable as an emergency reserve – the exception to this is money market funds
- Professional managers are *not* infallible – market volatility is difficult to predict
- Tax complications – buying and selling by the manager within the fund causes a taxable event for unitholders

STRUCTURE AND ORGANIZATION

- Most common structure in Canada – **open-end trust.** Open-end implies that investors can add more capital. Trust implies that the fund itself does *not* incur any tax liabilities, but passes them through to investors

- The **trust deed** sets out the fund's principal investment objectives, its investment policy, restrictions on investments, identity of fund manager, distributor and custodian, and which fund's units are sold to the public

- Directors and trustees – ultimately responsibility for the fund – similar to the Directors of any publicly traded corporation

- Fund manager – provides day-to-day supervision of the fund's investment portfolio. The fund manager *must* calculate the fund's NAV, prepare the fund's prospectus and reports, supervise shareholder or unitholder record-keeping, and provide custodian with documentation for the release of cash and securities

- Custodian – collects money received from fund's buyers and arranges for cash distributions through dividend payments, portfolio purchases, and share redemptions. Sometimes the custodian acts as the registrar and transfer agent, maintaining records of who owns the shares

- Distributors – group that actually sells the mutual fund units to the investing public

CHARGES WITH MUTUAL FUNDS

- Sales commissions – also known as **loads**. These can be **back-end** or **front-end**. *Most* mutual funds allow the investor to choose between paying **front-end** or **back-end loads**

- Front-end loads – added to NAV… the offering or purchase price for a mutual fund sold with a front-end load of 3% when the NAVPS of the fund is $25 would be as follows:

  $$\frac{\$25}{100\% - 3\%} = \$25.77$$

  Therefore, the units would cost the investor $25.77 and the load/commission would be $.77

- Back-end loads – levy a fee on redemption, based on a sliding scale, depending on how many years investors own the fund. Typically, it begins at 6% or 7% in Year One declining to 0% after six or seven years. Loads can be based on either the original purchase price or market value of units at time of redemption

- **Trailer fees** or **service fees** are annual fees paid to the distributor for ongoing services… they also provide an incentive to the distributor to keep clients in that particular mutual fund

- Other fees – include switching fees between mutual funds of the same family

MANAGEMENT FEES AND THE MER

- The **management expense ratio (MER)** represents all the management fees and other expenses charged to a fund, expressed as a percentage of the fund's average net asset value for the year

- MER CALCULATION:

$$\frac{\text{Aggregate Fees and Expenses Payable During Year}}{\text{Average Net Asset Value for the Year}} \times 100$$

- Trading and brokerage costs are excluded from the MER because they are included in the cost of buying and selling the securities themselves. Operating expenses like interest charges, all taxes, audit and legal are included in the MER

- **Management fees** compensate the fund manager and are generally expressed as a straight percentage of assets under management

- **F-class funds** – the "F" stands for fee-based. These funds are designed for fee-based accounts and charge a lower MER than traditional mutual funds

LABOUR SPONSORED VENTURE CAPITAL CORPORATIONS (LSVCCs)

- Labour-sponsored venture capital corporations (LSVCCs) are investment funds sponsored by labour organizations to provide capital to small to medium-sized and emerging companies

- The main attraction of LSVCCs is their federal and provincial tax credits. The federal tax credit is 15% to a maximum of $750 (implying a purchase of $5,000) and *most* provinces have matching credits

EXAMPLE: John invests $3,000 in LSVCCs. His federal and provincial combined tax credit is $900. Mary invests $5,000 in LSVCCs. Her combined tax credit is $1,500. Jane invests $8,000 in LSVCCs. Her combined tax credit is $1,500.

EXAMPLE: An investor in a 40% marginal tax bracket purchased $5,000 worth of LSVCCs and contributed them to her RRSP. Assuming that they were subject to the full federal and matching provincial tax credit, what is the effective after-tax cost of the investment?

Contributing them to the RRSP reduces taxable income by $5,000. which means paying $2,000 less in tax. The tax credits are $1,500. Therefore, the after-tax cost is:

$5,000 – $2,000 – $1,500 = $1,500

LABOUR SPONSORED VENTURE CAPITAL CORPORATIONS (LSVCCs)

- The Income Tax Act requires that LSVCCs *must* be held for eight years in order to avoid recapture of federal tax credits

- LSVCCs are considered a speculative investment only suitable for investors with a high risk tolerance

MUTUAL FUND REGULATION

- The **MFDA** is the mutual fund industry's SRO for the distribution side of the mutual fund industry. It does *not* regulate the funds themselves – that responsibility falls to the Securities Commissions

- Most mutual funds must annually file a full or simplified prospectus. Disclosure documents include: a funds fact document, a simplified prospectus, the annual information form, the annual audited statements or interim unaudited financial statements, and other information required by the province or territory where the fund is distributed

- Regulators have introduced a modified point of sale disclosure agreement – **Fund Facts**. It is designed to give investors key information about a mutual fund in an easily understood format. Delivery is mandatory within two days of purchase of a mutual fund, and the investor is provided the same right of withdrawal associated with any other initial public offering

- Disclosure components of fund facts include an introduction; quick facts (including the MER); Investment of the Fund; Risks (5 ratings from Low to High); Past Performance; Suitability; and Impact of Income Taxes

- The **simplified prospectus** is still required to be made available upon request by the investor and must be filed with the securities commission annually

- The **annual information form** is also available on request. Provides information about holdings and tax status of issuer

OTHER REGULATORY REQUIREMENTS

- **Education qualifications** – mutual fund reps must have passed either the CSC or IFIC course

- **Registration requirements** – mutual fund representatives *must* be employed by the distribution company and may not carry on other forms of employment without their employer's permission

- **Notice of changes** – registrants have five days (10 in Quebec) to notify the provincial administrator if he/she changes address, there is a disciplinary action, criminal or civil charges, or personal bankruptcy is filed

- **Transfer of registration** – as soon as a mutual fund representative ceases to work for a registered dealer, registration is automatically suspended. Reinstatement *must* be approved by the Administrator

MUTUAL FUND RESTRICTIONS

- There are strict restrictions on what a mutual fund manager may and may *not* do

- Prohibited Mutual Fund Management Practices:
    1. Purchases of no more than 10% of voting stock
    2. Funds cannot buy shares in their own company
    3. Purchase of no more than 10% of the net assets in the securities of a single issuer or 20% in companies engaged in the same industry (specialty funds excepted)
    4. No purchases of the shares of other mutual funds
    5. No borrowing for leverage purposes
    6. No margin or short-selling
    7. Prohibition on commodities or commodity futures
    8. Limitations on illiquid securities and private placements

- The most prominent applications of derivatives:
    1. To hedge against risk
    2. To facilitate market entry and exit

  The use of derivatives is strictly regulated by National Instrument 81 – 102, but the general rule is that they can be used for hedging purposes, *not* speculative purposes

PROHIBITED SELLING PRACTICES

- Quoting a future price – this means salespeople cannot guarantee prices or back-date orders

- Offer to repurchase – fund units can only be sold back to the fund itself

- Selling without a license – implies that the salesperson is *not* properly trained

- Advertising the registration – implies regulatory authorities sanction the salesperson's conduct or quality of funds

- Promising a future price – this effectively guarantees a return

- Sales made from one province to another – salespeople *must* be registered on a province by province basis

- Sale of unqualified securities – funds *must* be approved by the provincial regulators

KNOW YOUR CLIENT & SUITABILITY

- KYC means: Learn the essential facts relative to a client (age, net worth, investment knowledge and investment objectives); learn the facts relevant to every order; learn the circumstances behind each transaction; ensure that recommendations are appropriate

- Orders cannot be processed unless all know-your-client data is provided

- **Unsolicited orders** are client-directed orders. Where an unsolicited order is determined to be unsuitable for the client, the record of the order must include evidence that: the transaction was unsolicited; a suitability review was performed; and the client was advised

REQUIREMENTS WHEN OPENING ACCOUNTS

- Relationship disclosure *must* explain the relationship between the registrant and client

- Relationship disclosure information *must* include a description of the nature and type of account; a description of the products/services offered; a description of procedures involving cash; a description of reporting; a description of compensation that may be paid to the dealer

- A New Account Application Form is completed for each new client account. It will typically include the necessary KYC information

DISTRIBUTION OF MUTUAL FUNDS BY FINANCIAL INSTITUTIONS

There are rules that apply specifically to the distribution of mutual funds by financial institutions (FI) such as banks, trust companies, insurance companies and loan companies.

- **Control of Registrant** – can only sell mutual fund securities in its branches through a corporation ("dealer") which it controls directly or indirectly

- **Registration of employees** – only registered mutual fund representatives can sell mutual funds

- **Dual employment** – employees of an FI may become registered if permitted by legislation

- **Conflicts of interest** – dealers *must* have supervisory rules in place to prevent conflicts of interest that arise out of dual employment. Potential conflicts of interest: There may be multiple lines of business through the same employee, leading to practices which do *not* serve the clients' best interests

- **In-house funds** – requirements are based on the assumption that the only mutual fund securities traded by the dealer will be issued by a mutual fund sponsored by the FI

- **Proficiency** – officers, directors, and representatives of the dealer must satisfy normal proficiency requirements

- **<u>Premises and disclosure</u>** – the dealer *must* carry on business in such a way to make clear to clients that the business of the dealer and FI are separate and distinct

TYPES OF MUTUAL FUNDS

- There are six categories of mutual funds:
    1. Money Market funds
    2. Fixed Income funds
    3. Balanced funds
    4. Equity funds
    5. Specialty funds
    6. Target-date funds

- **Money Market funds** – include Canadian money market and U. S. money market. These funds add liquidity to a portfolio and provide safety of principal. They keep their NAV at a constant $10 per share and earned interest is credited with additional shares

- **Fixed-income funds** – include Canadian short-term fixed-income; Canadian fixed-income; Canadian long-term fixed income; Canadian inflation-protected fixed-income; Global fixed income; and High-yield fixed income

- **Balanced Funds** – a balanced fund invests in both stocks and bonds to provide a mix of income and capital growth. Different types include Canadian equity balanced; Canadian neutral balanced; Canadian fixed-income balanced; Global equity balanced; Global neutral balanced; Global fixed-income balanced; and Tactical balanced

TYPES OF MUTUAL FUNDS (continued)

- **Equity funds** – there are as many as 22 different categories, but the *most* important ones are: Canadian, U. S. and global equity; Canadian dividend; Canadian and U. S. small- and mid-cap equity; International, European and Emerging Markets equity; Asia Pacific and Japanese equity; and Health care, precious metals, natural resources, and real estate equity

  Equity funds are the *most* popular type of fund and are purchased by investor whose primary investment objective is growth of capital.

- **Specialty funds** – examples include Retail venture capital; Alternative strategies; and Miscellaneous funds that are leveraged or focus on commodities or specific areas or sectors

- **Index funds** – track the performance of an underlying index. **Indexing** is understood as a passive strategy

- **Target date funds** – have two characteristics: a maturity date and a **glide path**. The glide path refers to the change in the asset allocation over time – taking on less risk as the target date approaches

COMPARING FUNDS

- In the continuum from *least* risky to *most* risky…
    1. Money Market Funds
    2. Fixed Income Funds
    3. Balanced Funds
    4. Equity Funds
    5. Specialty Funds

MANAGEMENT STYLES

- Two broad styles are active and passive
- Active management seeks to outperform the market
- Passive management seeks to mirror the market. Indexing represents passive management. **Closet indexing** sticks close to the market, but attempts to outperform it slightly

TAX CONSEQUENCES OF MUTUAL FUNDS

- Mutual funds generate taxable income in two ways:
    1. Through the distribution of interest income, dividends and capital gains
    2. Through capital gains realized when the fund is sold

- During any year, a mutual fund will generate capital gains and losses when it sells securities held in the fund. These gains must be distributed to unit holders, just as interest income and dividend income is also distributed

- Distributions are made near the end of the calendar year. Each unit holder receives an equal amount of the distribution, notwithstanding how long they have owned the units

- Distributions to a mutual fund will increase the number of units and decrease the price per unit by an equal proportion, such that the total value of the investment is *not* affected

- Most funds automatically reinvest distributions in the form of new shares at the prevailing NAV without a sales charge. These distributions increase the **adjusted cost base (ACB)** of the original purchase

- An investor purchased $10,000 worth of mutual funds in 2008. By the end of 2014, she had received $3,500 in distributions and she sold the units for $18,000. Therefore, the adjusted cost base of the units is $13,500 and her capital gain is $4,500

WITHDRAWAL PLANS

- Many mutual funds offer systematic withdrawal plans, with the withdrawals occurring at predetermined intervals. There are four types of withdrawal plans: Ratio withdrawal plan, fixed-dollar withdrawal plan, fixed-period withdrawal plan, and life expectancy-adjusted withdrawal plan

- **Ratio withdrawal plan** – a constant percent (or ratio) of assets is withdrawn in successive years. This tends to result in reduced payments as the years go by. Payments will only increase if the return enjoyed exceeds the percent withdrawn

- **Fixed-dollar withdrawal plan** – a specified dollar amount is withdrawn in successive years, resulting in identical payments. When withdrawals are greater than increases in the portfolio, the principal is encroached upon and will run down

- **Fixed-period withdrawal plan** – a specified amount is withdrawn over a pre-determined period with the intent to collapse the plan at the end. It tends to result in increased payments until the terminal year of the plan

- **Life-expectancy adjusted withdrawal plan** – a variation of the fixed-period withdrawal plan, adjusted to reflect higher life expectancy as time goes by

MUTUAL FUND PERFORMANCE

- Mutual fund quotes, much like stock quotes, show a year's high and low NAV. In addition, they provide information about the last day's close and its change compared to the previous day, weekly data, and percentage return data

- The preferred methodology for judging mutual fund performance is by a **time-weighted rate of return (TWRR)**. Methods include the **daily valuation** method and **Modified Dietz** methods

- Mutual funds tend to be judged on a comparative performance basis, relative to a relevant benchmark or by comparison with a **peer group** of mutual funds

- Risk measures include: standard deviation of returns, beta, number of years it has lost money, best and worst 12 month periods, worst annual, quarterly and monthly losses

- Pitfalls to avoid in mutual fund performance:
  1. Past performance is *not* an indicator of the future
  2. Historical performance should be discounted if the fund has changed managers
  3. Average mutual fund returns are upwardly skewed by "survivorship bias" – the bad funds go out of business, leaving only the top performing ones
  4. Evaluation should take into account both the type of fund and its objectives
  5. There is no single appropriate time horizon for rating risks and returns – but the longer (5 – 10 years), the better
  6. Selective reporting of performance periods

SEGREGATED FUNDS – AN OVERVIEW

- **Segregated funds** (or seg funds for short) are strictly speaking, insurance products; however they are *most* similar to investment products, mutual funds, that you are already quite familiar with. They are also known as **individual variable insurance contracts (IVICs)**

- A seg fund contract covers three parties:
    1. **Contract holder** – person who bought the contract
    2. **Annuitant** – person whose life the insurance benefits are based on
    3. **Beneficiary** – person who receives the benefits upon death. There may be more than one beneficiary

EXAMPLE: "Ms. X Chromosome took out an insurance policy on the life of Mr. Y Chromosome with their two children named as beneficiaries…" Therefore, Ms. X is the contract holder and Mr. Y is the annuitant and the two children are the beneficiaries

- Beneficiaries can be either **revocable** or **irrevocable.**
  A **revocable designation** allows the contract holder to change the beneficiary without the beneficiary's consent, offering greater flexibility. An **irrevocable designation** means that the contract holder cannot change the beneficiary unless the beneficiary agrees

MATURITY GUARANTEES

- The “key feature” of segregated fund contracts

- By law, the minimum guarantee must be 75% of the original purchase amount after a ten year holding period. By law, the maximum guarantee can be 100% of the original purchase amount after a ten year holding period. These guarantees result in seg funds having higher MERs than similar mutual funds

- If a policyholder sells a portion of his/her holdings, the protected amount will be adjusted to reflect the sale.

EXAMPLE: “An investor bought $20,000 worth of segregated funds with the minimum guaranteed value. When the units were worth $24,000, he sold $6,000 worth.”

Originally, his guaranteed amount was $15,000 (75% or $20,000). When the units were $24,000, he sold $6,000 or 25% of his holdings. This means he kept 75% of his holdings… therefore, 75% of his original guaranteed amount or $11,250 would be his new guaranteed amount

- Insurance companies may place age restrictions on how old someone may be from buying their segregated funds because of the maturity guarantee feature

OTHER BENEFITS OF SEG FUNDS

- **Reset dates** allow investors to "reset" the guaranteed amount and maturity date of their funds.

EXAMPLE: Mr. Singh purchased $20,000 worth of segregated funds in 2008 with a 100% guaranteed amount. They appreciated rapidly and were worth $32,000 in 2011. Mr. Singh can reset the guaranteed value to $32,000 – to enjoy that guarantee he would have to hold them until 2021

- **Death benefits** ensure that beneficiaries receive the guaranteed amount immediately upon the death of the contract holder. Death benefits will "top up" the market value of the assets to the original amounts invested

EXAMPLE: Ms. Johnson purchased $32,000 worth of segregated funds. When she died, they were worth $28,000. The death benefit would be $4,000

- **Creditor protection** means that if the contract holder dies, the segregated funds will pass directly to the beneficiaries, without creditors having a claim on those assets. Moreover, segregated funds bypass **probate**, the proving of the will

EXAMPLE: When Mr. Jones died, he owned $100,000 worth of mutual funds and $125,000 worth of segregated funds, and owed $175,000 in business related debts. His creditors could seize the $100,000 worth of mutual funds; however the $125,000 worth of segregated funds would go directly to the beneficiaries

COMPARING SEG & MUTUAL FUNDS

- Pages 20 – 10 & 20 – 11 summarize the differences very nicely in chart form… familiarize yourself with the information – it is very straightforward

TAXATION OF SEG FUNDS

- Similar to mutual funds, a seg fund's net income is allocated to unitholders – seg funds are a "flow-through" vehicle

- Unlike mutual funds, the gains in seg funds flow through to the unit price without an adjustment being made to add the number of units. When gains occur in mutual funds, the unitholder has more units at the same price; when gains occur in seg funds, the unitholder has the same number of units at a higher price

- Unlike mutual funds, the gains in seg funds are allocated to unitholders throughout the year. Therefore, a unitholder who bought her units late in the year would only be subject to those gains which occurred while she was holding them. Had she purchased a mutual fund, she would have been allocated the same gains as someone who held the units throughout the entire year

- Resetting the value of seg funds does *not* trigger a taxable event. Money received from maturity guarantees or death benefits is taxable as a capital gain

TAX TREATMENT OF GUARANTEES AND DEATH BENEFITS

- If an investor deposits $100,000 into a seg fund contract and it grows to $130,000, he/she would be responsible for paying taxes on those gains. If he/she deposits $100,000 into a seg fund contract and it is sold after ten year for $95,000, the $5,000 is a taxable gain, offsetting the $5,000 capital loss. If the investor deposited $100,000, and then locked in a gain of $130,000 and the fund were sold when it was $110,000, there would be a $30,000 taxable gain

- When the insured person dies, the contract is terminated and beneficiaries receive the market value of the segregated fund plus death benefits. This is a deemed disposition and will normally trigger a capital gain or loss; however the contract holder may name his or her spouse as the successor owner and then the contract is transferred at its adjusted cost base, deferring any capital gains liability.

EXAMPLE: A client purchases a segregated fund contract for $100,000. The contract provides for a 100% guarantee. If the contract is worth $90,000, there is a $10,000 death benefit. However, the client would not have to report a gain of $10,000 because it was offset by the capital loss.

REGULATION

- Each province and territory has accepted the **Canadian Life and Health Insurance Association Inc. (CLHIA)** guidelines as the primary regulatory requirement. Federal regulations do *not* regulate the sale of segregated funds

- The Office of the Superintendent of Financial Institutions (OSFI) ensures that federally regulated insurance companies are adequately capitalized. OSFI's key requirements for segregated fund contracts include: the maturity guarantee payable at the end of the term cannot exceed 100%; the initial term may *not* be less than 10 years; and there can be no guarantee of any amounts payable on redemption of the contract before the annuitant's death of the maturity date

- **Assuris** is the insurance industry's self-financing provider of protection against the loss of policy benefits because of the insolvency of a member company. This is the insurance industry's equivalent to CIPF. Maximum compensation under Assuris is $60,000 per policy holder per type of plan

OTHER INSURANCE PRODUCTS

- **Guaranteed Minimum Withdrawal Benefit plans** are similar to variable annuities. With a GMWB, the planholder has the right to withdraw a certain fixed percentage until the entire principal is returned, no matter how the fund performs. At a minimum, clients receive their principal. Alternatively, GMWB plans can be purchased in advance of withdrawals, allowing the plan to appreciate by 5% each year until withdrawal begins

- **Portfolio funds** invest in other seg funds, allowing investors to hold a diversified portfolio of seg funds through a single investment

OVERVIEW OF HEDGE FUNDS

- Hedge funds are lightly regulated pools of capital

- Similar to mutual funds, hedge funds:
    1. Are pooled investment products
    2. Charge management fees
    3. Can be bought and sold through an investment dealer

Pages 21 – 5/6 contrast mutual funds and hedge funds

Common hedge fund structures include:

1. Commodity pools – a special type of mutual fund that can employ leverage and short selling using derivatives. These *must* be sold under a long-form prospectus
2. Closed-end funds – often listed on the TSX which allows investors to access the fund through the secondary market
3. Principal protected notes (PPNs) – provide investors with the exposure to one or more hedge funds with a return of principal on maturity that is guaranteed by a bank or other higher rated issuer

- Hedge funds are usually structured as **limited partnerships** and qualified to select investors with an **offering memorandum**

- Investors must be **sophisticated** or **accredited** which implies certain minimum requirements of knowledge, income and net worth. For example, net financial assets must be a minimum of $1,000,000 and annual income (single) of $200,000 or $300,000 combined with spouse

HISTORY AND SIZE OF HEDGE FUNDS

- Alfred Jones is recognized as the "father" of hedge funds

- Used two speculative strategies:
    1. Short selling
    2. Leverage

- Jones believed that you could take risky strategies and use them to reduce systematic or market risk by:
    1. In a rising market, buying or going long securities that will rise *more* than the market and selling or going short securities that will rise *less* than the market

    2. In a falling market, selling or going short securities that will decline *more* than the market and buying or going long securities that will fall *less* than the market

- There has been explosive growth in the Hedge Fund industry. Estimates are that there are about 10,000 hedge funds worldwide with combined assets in excess of $2.0 trillion

- There are several hedge fund indexes used to track performance. One of the best known is the Credit Suisse/Tremont Hedge Fund Index. It breaks down hedge fund performance into nine sub-indexes

BENEFITS OF HEDGE FUNDS

- Low correlation with traditional asset classes – the lower the better for portfolio purposes
- Risk minimization – hedge funds may have lower standard deviation than equities
- Absolute returns – this is what hedge funds manager seek to achieve
- Potentially lower volatility and higher returns

RISKS OF HEDGE FUNDS

- Light regulatory oversight – lack of transparency may lead to fraud

- Manager and market risk – hedge funds may take on excessive risk to achieve high returns

- Investment strategies – may be difficult for investors to understand

- Liquidity constraints – many hedge funds have a **lockup**, a period of time where investors may *not* redeem their units

- Incentive fees – these are expensive, typically a base management fee and 20% of total profits. This structure may lead hedge fund managers to take on excessive risk to earn their fees. A **high-water mark** ensures that fund managers are only paid incentive fees on new profits. A **hurdle rate** is the rate the hedge fund must earn before its manager is paid an incentive fee

- Tax implications – some hedge funds are subject to tax annually, whether or *not* the investor sees cash flow from them

- Short selling and leverage – magnifies risk

- Business risk – one of the biggest and *most* over-looked risks to investors, the hedge fund structure itself may *not* be able to operate as a viable business, even if its manager is capable at selecting securities

HEDGE FUND STRATEGIES

There are three major categories of hedge fund strategies:

- **Relative value strategies** – profit by exploiting inefficiencies or arbitrage opportunities in the pricing of securities

- **Event-driven strategies** – profit from unique events such as mergers, acquisitions, stock splits and buybacks

- **Directional strategies** – bet on anticipated movements in the market prices of equities, debt instruments, currencies and commodities

RELATIVE VALUE STRATEGIES

- **Equity market neutral** – designed to exploit equity market inefficiencies by simultaneously going long and short equity portfolios of the same size

  Concept behind equity market neutral: Whether the market goes up or down, the hedge fund profits – as long as the securities which the manager is long outperform relative to the securities which the manager shorts.

EXAMPLE: Hedge fund manager goes long $1,000 google and short $1,000 Facebook. If the market is up 10% and google is up 15% and Facebook rises 5%, the manager makes a profit of $150 on her google shares and suffers a loss of $50 on her Facebook shares… as a result, is up $100. If the market is down 12% and google shares fall 4% and Facebook shares fall 14%, the manager makes $140 on Facebook and loses $40 on google… and as a result is up $100.

- **Convertible arbitrage** – strategy involves buying undervalued convertible securities and hedging the risk by selling short an equivalent number of common shares – or vice-versa. However, the typical convertible arbitrage strategy is to be long the convertible bond and short the common stock of the same company

- **Fixed-income arbitrage** – attempts to profit from mispricings between related interest rate securities and derivatives, including government and non-government bonds, mortgage-backed securities, options, swaps. High leverage is generally employed

EVENT-DRIVEN STRATEGIES

- **Merger or risk arbitrage** – invests simultaneously in long and short positions in the common stock of companies involved in a merger or acquisition. This strategy generally involves taking a long position in the target company and a short position in the acquiring company

- **Distressed securities** – invests in the equity or debt of companies that face bankruptcy or reorganization. These securities generally trade at deep discounts and because some institutional investors are *not* allowed to take positions in them, there may be relative value

- **High-yield bonds** – invests in junk bonds of companies where the manager anticipates an upgrade from a rating agency or where the company is a potential takeover target

DIRECTIONAL STRATEGIES

- **Long/short equity** – *most* popular type of hedge fund strategy. These funds are classified as directional because the manager will have a net long or short exposure, calculated as follows:

$$\frac{\text{Long exposure} - \text{Short exposure}}{\text{Total capital}}$$

EXAMPLE: An investor is long $1,000 worth of Microsoft and short $800 worth of Google… the net exposure is:

$$\frac{\$1{,}000 - \$800}{\$1{,}000} = 20\%$$

As well, its leverage could be expressed as follows:

$$\frac{\text{Long exposure} + \text{Short exposure}}{\text{Long exposure}}$$

$$\frac{\$1{,}000 + \$800}{\$1{,}000} = 1.8$$

DIRECTIONAL STRATEGIES (continued)

- **Global macro** – takes bets on major events affecting entire economies, such as shifts in government policies that affect interest rates – impacting currency, bond and stock markets. Use leverage to magnify the moves

- **Emerging markets** – primary difference between an emerging market's hedge fund and emerging markets mutual fund is the hedge fund's ability to use leverage, derivatives and short selling to achieve higher returns

- **Dedicated short bias** – to be classified as such, the fund's net position must always be short

- **Managed futures fund** – in Canada, these are often established as commodity pools. These funds usually apply a systematic approach to trading, using technical and statistical analysis

FUNDS OF HEDGE FUNDS (FoHF)

Two main types:

- Single-strategy, multi-manager funds invest in several funds that employ a similar strategy, such as long/short or convertible arbitrage

- Multi-strategy, multi-manager funds diversify across strategies and managers

FoHF – ADVANTAGES & DISADVANTAGES

Advantages:

- Due diligence – FoHF manager selects the best managers
- Reduced volatility – provided by diversification
- Professional management – risk reduction by effective correlation
- Access to hedge funds – many funds are capped or difficult to access for individual investors
- Ability to diversify with a smaller investment – some hedge funds have minimum investments in excess of $1 million
- Manager and business risk control – FoHF manager monitors managers and their strategies

Disadvantages:

- Additional costs – FoHF managers will also charge base fees and incentive fees
- No guarantee of positive returns – FoHF managers cannot guarantee results
- Low or no strategy diversification – this is relevant for strategy-specific hedge funds
- Insufficient or excessive diversification – there could be too many hedge funds or too few
- Additional sources of leverage – FoHF managers may add a second degree of leverage

EXCHANGE-LISTED MANAGED PRODUCTS

- **Closed-end funds** – pooled investments that trade on a stock exchange. Closed-end funds issue a limited number of shares. Canadian closed-end funds usually trade a discount to their NAV. They are bought and sold like any other stock

- Closed-end fund advantages (compared to mutual funds):

    1. They can be short-sold
    2. Intra-day liquidity
    3. More fully invested than open-end funds (leading to higher returns)
    4. Capital gains, dividends and interest are paid directly to investors rather than reinvested in additional units. This makes tracking the cost base easier
    5. Lower MERs than open-end funds

- Closed-end fund disadvantages (compared to mutual funds):

    1. Less liquid
    2. Commissions due at purchase and sale
    3. Investor responsible for re-investing capital gains, dividends and interest

INCOME TRUSTS

- **Income trusts** – exchange-traded securities that have been created to purchase and hold interests in the operating assets of a company

- Primary category of income trusts:
    1. **Real estate investment trusts** (REITs)
    2. **Business trusts** – a company engaged in retail, manufacturing or a service industry

- REITs allow investors to pool capital and invest in a large, diversified pool of real estate assets. REITs generally pay a high percentage of their income, typically 95%. Risks of REITs are similar to other real estate investment – as well, REITs *tend* to be highly leveraged. Liquidity is a major benefit of REIT ownership compared to traditional real estate. REITs offer a good hedge against inflation as well

- Business trusts operate in a wide variety of businesses, therefore are subject to the risks of equities. Prior to 2007, there was a corporate tax advantage to being organized as a business trust (compared to a corporation); however this benefit has been eliminated

EXCHANGE-TRADED FUNDS

- Open-end mutual fund trusts that hold the same stocks in the same proportion as those included in a specific stock index. ETFs can be purchased through the exchange or new units can be purchased from the distributor of the trust

- ETFs represent a passive investment style because they track index performance. ETFs provide intra-day liquidity and trade at or near their NAV

- Key features of ETFs:
    1. Lower cost (compared to mutual funds) and there are no loads, only commissions on purchases and sales
    2. Transparency – holdings disclosed daily
    3. Tax efficiency – because of low portfolio turnover
    4. Liquidity – intra-day
    5. Diversification – at low cost
    6. Targeted exposure – to sectors, regions,

TYPES OF EXCHANGE-TRADED FUNDS

- Standard (index-based): The index can either be exactly replicated or approximately constructed through sampling, or replicated through the use of derivative products. **Tracking error** refers to the ETF's performance relative to the underlying index or asset

- Rules-based exchange traded funds: Do *not* follow an index, but are constructed to achieve a specific objective

- Synthetic exchange-traded funds: Constructed with derivative products such as swaps, these are less transparent and subject to counterparty risk

- Leveraged and inverse exchange-traded funds: Leveraged ETFs allow investors to make a leveraged return (usually 2:1) while taking on leveraged risk. In inverse ETF moves in the opposite direction of the index, showing a gain when the index falls and a loss when the index goes up

- Inverse-leveraged exchange traded funds: Take a leveraged opposite position to the index

- Active-exchanged traded funds: Operate similarly to actively managed mutual funds, except the manager is generally restricted to making changes only at the end of a day or a week

TYPES OF ETFs (cont'd)

- Commodity exchange-traded funds can be either physical-based (buying the actual commodities); futures-based (buying futures contracts on actual commodities); or equity-based (buying companies associated with a commodity)

- Covered call exchange-traded funds: The ETFs execute covered call strategies for investors. Considerations when choosing a particular type of covered call ETF include what is the degree of management applied, are payments from the fund to the investor fixed or variable, what are the tax considerations, and how high are the MERs

CREATION AND REDEMPTION PROCESS

- If an ETF is designed to track a composite such as the S&P/TSX 60, the market maker will buy shares in all the stocks in the same weights. The ETF issuer gives the market maker a block of ETF shares which is called the creation unit. This is known as an “in-kind” creation. The “in-kind” units then trade on the exchange

- The ETFs then trade through the day at a tight spread. If the units are undervalued, the market maker will buy those and sell the underlying and vice-versa, which ensures the ETF always trades at its NAV

- Creation and redemption of inverse ETFs is similar, except cash, rather than securities, is exchanged because the market maker is taking a short position in the underlying securities

RISKS INVESTING IN ETFs

- Market risk – if the market goes down, so does the ETF
- Index Construction and Tracking Error – an investor hopes to minimize **tracking error**, which is defined as the simple difference between the return on the underlying index/reference asset and the return of the ETF
- Not understanding the composition of the ETF
- Foreign exchange risk
- Roll yield loss – this pertains to futures contracts that must be rolled over as they near expiration
- Volatility and leverage factors

COMPARING ETFs & MUTUAL FUNDS

	ETFs	Index Mutual Funds
Pricing	Close to NAV at any time during the day	Once a day using the fund's NAV
Mgmt. Fees	Very low MERs Commissions to buy and sell	Low MERs May have front or rear loads
Portfolio Turnover	Low – lower taxable capital gains distributions lead to tax efficiency	Low – lower taxable capital gains distributions lead to tax efficiency
Short Selling	Yes	No
Use of Leverage	Yes	No
Ease of Trading	Yes	No

- Trading costs are additional expenses *not* included in the MER. They tend to be higher for actively managed mutual funds (compared to ETFs) because of more frequent trading, and the necessity to meet investor redemptions with the mutual fund structure

- Mutual funds offer more flexibility with respect to advisor compensation; however some ETFs do provide the option of a trailer fee, resulting in higher MERs

RECENT TRENDS IN ETFs

- Country-based ETFs – provide geographical diversification
- Segmentation of the broad markets into sectors
- Mutual funds of ETFs

EXCHANGE-TRADED NOTES (ETNs)

- ETNs are debt obligations issued by a bank that promise to pay investors a return on their investment based on the performance of a specific reference asset that could be an index or another benchmark. In exchange for the guarantee, ETNs charge an annual fee

- ETNs do not have tracking error risk; however this is not a guarantee of investment performance

- A major difference between ETFs and ETNs is that ETNs face credit risk. Another difference is that ETNs can face call or early redemption risk and this is not true of ETFs

LISTED PRIVATE EQUITY

- A listed private equity company is an investment company that uses its capital to purchase or invest in a wide range of other companies

- There are several means by which private equity finances firms:
    1. Leveraged buyout – the acquisition of a company, financed with equity and debt
    2. Growth capital – to finance acquisitions of expanding firms
    3. Turnaround – for underperforming or out of favour businesses
    4. Early stage – earliest stages of development
    5. Late stage – established firms that are still not profitable
    6. Distressed debt – purchase of debt securities trading below par
    7. Infrastructure – finances the construction or improvement of utility networks

ADVANTAGES OF LISTED PRIVATE EQUITY

- **Access to legitimate inside information** – there is a greater depth of information because of the structure of private equity

- **Influence over management and flexibility** – private equity managers often have active participation in the strategic direction of the company

DISADVANTAGES LISTED PRIVATE EQUITY

- **Illiquid investments** – often the holding period is at least three to seven years

- **Dependence on key personnel** – private equity funds rely on the general partners and relatively small staff for all key investment decisions

FEE-BASED ACCOUNTS

- There are several key reasons why fee-based accounts are growing:

    1. Advisors are focussed on trading in the traditional commission-based model. This comes at the expense of time spent on financial planning and wealth management needs

    2. Affluent clients approve of having a portion of the advisor's fee linked to the performance of the portfolio. This does *not* occur with a transaction-based model

    3. Affluent clients appreciate the disclosure that comes with a fee-based account. Fees are very transparent

    4. The fee-based model provides the client with more confidence in the advisor – particularly with respect to the timing of trading decisions and which products to buy

MANAGED ACCOUNTS

Typically have the following features:

- Professional investment management
- Assets within the account held exclusively for the client (*not* pooled)
- Additional services like wealth management and financial planning
- An Investment Policy Statement allowing the client input into how the assets are managed
- A package of services including rebalancing, custody of assets, and specialized reporting
- Greater transparency

MANAGED ACCOUNTS (continued)

There are several key differences in fees (compared to mutual funds):

- Fees are tax deductible for non-registered accounts
- Fees tend to be lower (depending on account size)
- Fee is *not* standardized – clients have the ability to negotiate
- There is transparency in fees

The fee depends on the dollar size of the account, the estimated number of trades, and type of investment (i.e., equities vs. bonds)

FEE-BASED NON-MANAGED ACCOUNTS

These are full-service brokerage accounts that provide clients with financial planning services combined with a fixed on unlimited number of trades, all bundled into a fee, which generally ranges from 1% to 2.5% of asset under management. Fees are generally paid quarterly. Fees depend on:

- Dollar size of account
- Estimated number of trades
- Type of investment (equity, bond, money market)

ADVANTAGES & DISADVANTAGES

- Potentially more expensive
- Limited number of trades
- Neglect by investment advisor is possible
- Extra fees may be charged
- Trading and research time requirement

MANAGED VS. DISCRETIONARY ACCOUNTS

- Managed accounts are accounts where the clients' portfolios are managed on a continuing basis, usually for a management fee. Simple discretionary accounts are usually operated for a short period of time, as a matter of convenience for clients

- Rules for discretionary and managed accounts include:

    1. Discretionary authority *must* be given in writing

    2. Managed accounts may be solicited; discretionary accounts may *not* be solicited

    3. IAs other than partners or directors may *not* accept authorization for a simple discretionary account

TYPES OF MANAGED ACCOUNTS

The three major types of managed accounts are **single-manager**, **multi-manager**, and **private family office**

- Single-manager: directed by a single portfolio manager who selects all securities. An **ETF wrap** allows the manager to create a portfolio, pursuing either a **passive** or **active** approach to investing

- Multi-manager accounts offer clients and their advisors more choice in terms of product and services. The **overlay manager** conducts on-going due diligence reviews of each of the portfolio managers (the sub-advisors). **Mutual fund wraps** are established with a selection of individual funds managed within a client's account

- A private family office is an extension of the advisor's client servicing approach, handling all client needs from one central location

STRUCTURED PRODUCTS

PRINCIPAL-PROTECTED NOTES:

- These are debt-like instruments with maturity dates

- The issuer agrees to pay the amount originally invested (principal) plus interest. The interest rate is tied to the performance of an underlying asset, such as a portfolio of mutual funds or common stocks, a market index, or a hedge fund or portfolio of hedge funds

- PPNs are *not* protected by CDIC even though they are issued by chartered banks

- There are three entities involved in bringing a PPN to the market:
    1. Guarantor or issuer is the entity that guarantees the principal and return at maturity.
    2. Manufacturer helps design the issue and market them to investors and distributors
    3. Distributors are investment dealers and mutual funds which employ advisors to sell PPNs

THE STRUCTURE OF PPNs

- PPNs issued in Canada in recent years use zero-coupond bonds plus call options

- In the zero-coupon bond plus call option structure, the investor puts *most* of his/her money in a zero-coupon bond that has the same maturity as the PPN. This guarantees principal. The remainder is invested in a call option on an underlying asset, providing the potential return

- Index-linked PPNs come with a participation rate or performance cap. A participation rate of 75% means that if the index increases by 30%, the investor will receive 75% of that, or 22.5%. A performance cap of 30% means that if the index increases by 30% or less, the investor receives all of that appreciation; however if the index increases by 50%, the investor only gets 30%

- Stock-basket linked PPNs consist of 10 to 15 securities and the investor receives a return equal to the average return on the individual common shares in the basket. In some cases, a participation rate is applied to the average return

RISKS ASSOCIATED WITH PPNs

- Liquidity risk – the PPN is constructed with illiquid securities

- Performance risk – the performance of the PPN may *not* mirror the performance of the underlying assets, particularly in the early years

- Credit risk – the issuer may be unable to return the investor's principal at maturity

- Currency risk – many PPNs track returns from a foreign currency

PPNs are *not* appropriate for investors who rely on a regular and predictable investment income to fund their lifestyle. For diversified investors with lengthy time horizons, a small allocation to cash may be warranted – and PPNs may be appropriate for them.

- When PPNs are held to maturity, the return is taxed as interest income. If a PPN is sold prior to maturity, the gain is taxed either as interest income or capital gains

MARKET-LINKED GUARANTEED INVESTMENT CERTIFICATES

- Linked GICs are hybrid investments that combine the safety of a deposit instrument with some of the growth potential of an equity instrument

- They are CDIC insured and typically offered in terms of 3 to 5 years. They are usually non-redeemable until maturity

- The main variables used to determine the overall return include: The initial index level, the ending index level, index growth over the term, and any maximum cap on returns of participation rate

- Table 24.2 demonstrates the return calculation: The index returned 39.53% over the five years. This is multiplied by the 60% participation rate to arrive at a return of 23.72%. The principal is multiplied to get the dollar value of the return, in this case: $10,000 x 23.72% = $2,372

- The main risk associated with linked GICs is that the underlying index will *not* appreciate in value. In this case, the principal will be returned. Many of these products may not be redeemed prior to the maturity date. The return on a linked GIC is classified as interest income

SPLIT SHARES

- Split shares are securities that have been divided to create the investment objectives of growth and income. The split share corporation takes the proceeds from the sale of the split share units and purchases the equivalent amount of common shares of one or more common stock issuers. Then two types of shares are issued: Preferred and capital. The preferred share receives the majority of dividends from the common share; the capital share receives the majority of the capital gains. Leverage is frequently employed

- Split shares are issued for a specific term stated in the prospectus. At the end of the term, the split-share company will redeem the shares. Once the preferred shareholders get back their principal, the capital shares receive the remaining value

RISKS WITH SPLIT SHARES

- There are several risks associated with the capital shares:

    1. Inherent leverage – investors can lose their entire investment if the common shares decline sufficiently
    2. Volatility – they are *more* volatile because of the leverage
    3. Dividend cuts – even the capital shares are susceptible to dividend cuts, especially if the corresponding preferred has a guaranteed dividend

- There are risks associated with the preferred shares:

    1. Early closing – a split-share corporation often reserves the right to wind up early and redeem the shares
    2. Early redemption
    3. Credit risk – a reduction in the credit rating will lower its price
    4. Decline in value of underlying portfolio
    5. Reinvestment risk
    6. Taxation risk – rules around dividends could change
    7. Dividend cuts

- Canadian originated preferred securities (COPRS) were introduced in Canada in 1999. These are long-term subordinated debt instruments. Quarterly distributions are treated as interest income; however similar to preferred shares, the issuer has the right to defer payment for up to 20 consecutive quarterly periods

ASSET-BACKED SECURITIES

- Asset securitization is a process that aggregates and transforms financial assets such as mortgages. In its most basic form, securitization is a two-step process:
    1. The originator pools these assets and sells them to a separate legal entity, called a **special purpose vehicle (SPV)**.
    2. The issuer finances the purchases of the assets by selling marketable securities, called **asset-backed securities (ABS)** to (largely) institutional investors

- The SPV can either issue one class of securities or different **tranches** – each of which would have different levels of risk and return associated with it. The standard securitization scheme assumes a 3-tier tranche hierarchy with senior, mezzanine, and junior tranches

ASSET-BACKED COMMERCIAL PAPER (ABCP)

- ABCP has a maturity date of one year or less. ABCP was initially designed to match short-lived assets with short term funding to minimize **roll-over risk**

MORTAGE-BACKED SECURITIES (MBS)

- MBS are bonds that claim ownership to a portfolio of the cash flows from a group or pool of mortgages. They are also known as **mortgage pass-through securities**. Every month, holders receive a proportionate share of the interest and principal payments associated with those mortgages. The possibility of higher than anticipated prepayments exposes investors in MBSs to **prepayment risk**

- Advantages of MBS: fully guaranteed by the government of Canada, the CHMC guarantee does *not* limit the holding's size; monthly payments are guaranteed; yields are higher than equivalent GOC bonds; liquid; low minimum investment (usually $5,000) and RRSP/RRIF eligible

- Disadvantages of MBS: prepayment possibility introduces prepayment risk; in default investors receive principal payments only; legal risk if properties are damaged; a capital loss is possible if an MBS is sold prior to maturity

TAXATION

- Tax evasion is against the law. Tax avoidance is legitimate, assuming any of the following tactics:
    1. Full utilization of allowable deductions
    2. Conversion of non-deductible expenses into deductible expenses
    3. Postponing the receipt of income
    4. Income splitting with family members
    5. Selecting investments with a better after-tax yield

- The taxation year for all individuals and personal service corporations is the calendar year, ending December 31st. A corporation can choose any **fiscal year** as long as it remains consistent

- Income tax is calculated as per these steps:
    1. Calculating all sources of income
    2. Making allowable deductions
    3. Calculating the gross or basic tax payable
    4. Claiming various tax credits and arriving at net tax payable

- Types of income:
    1. Employment income – taxed on a gross receipt basis
    2. Capital property income – dividends and interest
    3. Business income – taxed on a net income basis
    4. Capital gains and losses

CALCULATING INCOME TAX PAYABLE

Federal Income Tax Rates for 2015:

Taxable Income	Tax
up to $44,701	15%
over $44,701 – $89,401	22%
over $89,401 – $138,586	26%
above $138,586	29%

EXAMPLE: "Mr. Sharma earned $105,000 in 2015. What is his Federal Tax Payable?"

On the first $44,701, he will be responsible for $6,705 in taxes.
On the next $44,700, he will be responsible for $9,834 in taxes.
On the last $15,599, he will be responsible for $4,056 in taxes.
In total, he will owe federal taxes of $20,595.

His **average tax rate** is 19.6% ($20,595/$105,000) while his **marginal** tax rate is 26%.

TAXATION OF INVESTMENT INCOME

- Interest is taxed at an inclusion rate of 100%, also referred to as regular income. This means that every dollar of interest earned is added to taxable income

- Capital gains are taxed at an inclusion rate of 50%. Every dollar of capital gains means that the investor receives $.50 tax free, and must include $.50 in taxable income

- Dividends from taxable Canadian corporations receive the following treatment:
    1. $1.00 in dividend income received
    2. Dividend income "grossed-up" by 38%
    3. Gross up is $.38 and taxable income is $1.38
    4. 15.02% tax credit applied to taxable income, or $.2073
    5. $1.38 is taxed at the investor's marginal rate and the tax credit of $.2073 is applied to that amount to reduce the taxes payable

- Dividends from foreign corporations are taxed as regular income – identically to interest income

TAX-DEDUCTIBLE ITEMS

- Tax rules permit individuals to deduct certain carrying charges for tax purposes. Acceptable examples:
    1. Interest paid on funds borrowed to earn investment income
    2. Fees for certain investment advice
    3. Fees paid for management, administration or safe custody of investments
    4. Accounting fees paid for the recording of investment income

- These charges may *not* be deducted:
    1. Interest paid on funds to buy investments that generate capital gains only
    2. Brokerage fees or commissions paid to buy or sell investments (included in cost base)
    3. Interest paid on funds borrowed to contribute to a registered retirement savings plan, registered education savings plan, or tax-free savings account
    4. Administration or counseling fees for registered retirement savings accounts
    5. Fees paid for advice such as financial planning
    6. Safety deposit box charges

- An investor may deduct the interest paid on funds borrowed to purchase securities if:
    1. The taxpayer has a legal obligation to pay the interest
    2. The purpose of borrowing the funds is to earn income
    3. The income produced from the securities is *not* tax-exempt

INVESTMENT GAINS AND LOSSES

- Generally the CRA treats share dispositions as being capital in nature. However, if the taxpayer's actions show that by intention the taxpayer is in the business of trading securities to earn a speculative profit, the gains may be fully taxable. Factors considered include:
    1. Short periods of ownership
    2. A history of extensive buying and selling
    3. Special knowledge of securities markets
    4. Substantial time spent studying the markets
    5. Financing share purchases through margin
    6. Nature of the shares themselves (speculative)

- When shares are sold, the difference between the (sale price minus commission) and the (purchase price plus commission) is the capital gain. 50% of that is the taxable capital gain

EXAMPLE: "An investor purchased 1,000 shares of XYZ Security at $5.00, paying a $25 commission. When they were $7.00, she sold them and the commission was 1% of the sale. What was her taxable capital gain?"

($7,000 – $70) – ($5,000 + $25) = $1,905 x .5 = $952.50

- When an investor purchases identical shares, the adjusted cost base (ACB) is the weighted average of those purchases, including commissions

EXAMPLE: "An investor purchased 200 shares of DEF Security at $10.00 and there was a $100 commission. A year later, she bought an additional 300 shares at $12.00 and the commission was $125. What is the ACB?"

(200 x $10 + $100 + 300 x $12 + $125)/500 = $11.65

INVESTMENT GAINS AND LOSSES (cont'd)

- When an investor purchases a convertible security, the conversion is *not* deemed to be a disposition. Rather, the ACB of the shares received is based on the original purchase price of the convertible security

EXAMPLE: "An investor purchased a $1,000 face value convertible bond, convertible into 20 common shares, at 95 plus accrued interest. Her ACB for the shares would be…"

950/20 = $47.50

- If warrants or rights are employed:
  1. If direct purchase, the tax treatment is similar to that for convertible securities
  2. If received from direct share ownership, the cost base of the original shares purchased *must* be adjusted
  3. If warrants and rights are *not* exercised, the deemed sale price is zero

- When an investor purchases a debt security, the ACB is the principal amount <u>less</u> accrued interest

EXAMPLE: "An investor purchases $1,000 face value of a 6% bond at 101 with accrued interest of $10. What is the ACB of the bonds?"

He would have paid $1,020 altogether - $1,010 principal amount plus $10 of accrued interest; however the ACB is the $1,010 only.

CAPITAL LOSSES AND TAX LOSS SELLING

- **Capital losses** are calculated in the same way as capital gains. They are deducted from capital gains to arrive at taxes payable

- When a security becomes worthless due to bankruptcy of the underlying company, there is a deemed disposition for proceeds of nil. This allows the investor to capture the loss even though the security is *not* formally sold to anyone

- A **superficial loss** occurs when securities sold at a loss are repurchased within 30 calendar days before or after the sale and are still held at the end of 30 days after the sale. This prevents the investor from claiming the loss for tax purposes

- Tax loss selling occurs when investors decide to sell shares prior to year end to capture the capital loss for that calendar year. Trades *must* settle in that year; therefore the trade date must be three business days before the end of the year

TAX DEFERRAL PLANS

- **Registered Pension Plans (RPPs)** are workplace sponsored trusts to provide for the retirement needs of workers. A **pension adjustment (PA)** is applied which reduces the amount that workers can put into their RRSP plans

- Two types of RPPs
    1. **Money purchase plan** or **defined contribution plan**
    2. **Defined benefit plans**

- In a money purchase plan, the contributions are known but the benefit is *not* known. The annuitant assumes the investment risk. The combined employer/employee contributions cannot exceed the lesser of 18% of employee's current year compensation or MPP (same as RRSP) contribution limit

- In a defined benefit plan, the contributions are *not* known but the benefit is known. The employer assumes the investment risk, responsible for making up shortfalls in the plan. The contributions are determined by a qualified actuary

- **Registered retirement savings plans (RRSPs)** defer tax and facilitate savings for retirement. Annual contributions are tax deductible to specified limits and the growth in the plan accumulates tax free in the plan. There are two types of RRSPs – **single vendor** and **self-directed**
    1. Single vendor – the holder invests in a variety of different securities, but no day-to-day investment decisions are made by the holder
    2. Self-directed – the holder actively manages the portfolio, making the day-to-day decisions

CONTRIBUTIONS

- There are no limits to the number of RRSPs an investor may hold. There are maximum allowable annual tax deductible contributions based on 18% of earned income to the RRSP dollar limit for that year

- Unused contribution room may be carried forward indefinitely. Over-contributions of up to $2,000 may be made without penalty; anything over that is subject to a penalty tax of 1% per month

- Earned income for RRSP contribution purposes include:
    1. Total employment income
    2. Net rental income and net income from self-employment
    3. Royalties from a published work
    4. Research grants
    5. Some alimony or maintenance payments
    6. Disability payments from CPP and QPP
    7. Supplementary Employment Insurance Benefits

NOTE: Anything deemed investment income (which means interest, dividends and capital gains) is *not* included for RRSP contribution limit purposes!

EXAMPLE: "Sarah Li made $50,000 in salary and received $12,000 in commissions. In addition, she had gross rental income of $10,000 and net rental income of $5,000, and received interest payments in the amount of $2,000. Her RRSP contribution limit for that year would be…"

(50,000 + $12,000 + $5,000) x .18 = $12,060

SPOUSAL RRSPs

- A taxpayer may make RRSP contributions to an RRSP registered in the name of a spouse or common-law spouse and still claim a deduction. The amount of money that the spouse who owns the plan makes is irrelevant in determining how much the other spouse may contribute

EXAMPLE: "Mr. X is married to Ms. Y. Both of them make $100,000. Ms. Y has made the maximum allowable contribution of $20,000 to her own plan. Mr. X has contributed $5,000 into his own plan. How much could he contribute to Ms. Y's spousal plan?"

Because he has already contributed $5,000 to his own plan, he could only contribute $15,000 more into her plan. In total, their combined contributions could not exceed $40,000

- If a spouse de-registers money from a spousal plan, the contributing spouse *must* pay tax on those withdrawals if contributions were made in the previous two years

TERMINATION OF RRSPs

- Mandatory de-registration occurs in the calendar year when an RRSP plan holder reaches age 71

- The following options are available:
    1. Withdraw the proceeds as a lump sum
    2. Purchase a life annuity
    3. Purchase a fixed-term annuity to a specified age
    4. Transfer the proceeds to a RRIF
    5. Any combination of the above

- The major advantages of RRSPs include:
    1. A reduction in annual taxable income during high-taxation years
    2. Shelter of certain lump-sum types of income from taxation through tax-free transfer
    3. Accumulation of funds for retirement, with the funds compounding on a tax-free basis until withdrawal
    4. Deferral of income taxes until money is withdrawn from the plan
    5. Opportunity to split retirement income (using spousal RRSPs)

- RRIFs require holders to make minimum annual withdrawals as per a prescribed schedule

- **Annuities** are investment contracts where the holder deposits money to be invested in an interest-bearing vehicle that will return interest and a portion of principal. They can be **immediate** (payments start right away) or **deferred** (payments start later). Deferred annuities are available only through life insurance companies

TAX-FREE SAVINGS ACCOUNTS

- TFSAs have been in existence since 2009. Any Canadian resident aged 18 or older can open a TFSA. The contribution limit in 2014 was $5,500 per year, raised to $10,000 in 2015, then reduced to $5,500 for 2016

- All gains within a TSFA accumulate tax free

- Money contributed into the TFSA is *not* tax-deductible

- Qualified investments include stocks, bonds, GICs and mutual funds – the same products an investor can put into an RRSP

- The contribution room for each year consists of the TFSA dollar limit for that year plus any withdrawals made in the preceding year

REGISTERED EDUCATION SAVINGS PLANS

- Tax-deferred savings plans intended to help pay for post-secondary education of a child or grandchild

- Contributions to the plan are *not* tax-deductible; however growth in the plan is *not* subject to tax until withdrawals are made. Those withdrawals are taxed at the child's marginal tax rate

- There is no single maximum amount that can be contributed in a calendar year. However, the lifetime maximum is $50,000 per beneficiary. Contributions can be made for up to 31 years, but the plan *must* be collapsed within 35 years of its starting time

- The **Canada Education Savings Grants (CESGs)** means that the Federal Government makes a matching grant of 20% of the first $2,500 contributed each year to the RRSP of a child under 18. Depending on family income, there may be additional enhancements

POOLED REGISTERED PENSION PLANS (PRPPs)

- New retirement savings plan offered by the federal government. They hold pooled assets from multiple participating employers, allowing workers to take advantage of lower investment management costs

- PRPPs are administered by eligible financial institutions such as banks and insurance companies. This design reduces the risk and cost that employers would normally bare when offering a retirement plan for employees

- Like an RRSP, contributions to PRPPs are limited to available contribution room based on earned income, and contributions are tax deductible

TAX PLANNING STRATEGIES

- **Income splitting** is a tax savings strategy that involves transferring income from a family member in a higher tax bracket to a spouse or children or parents in a lower tax bracket. Allowable under limited circumstances only

- **Attribution rules** mean that if property or income-producing assets are transferred to other family members "improperly", the tax consequences are passed back to the taxpayer

- **Other Planning Opportunities**
    1. Paying expenses – when both spouses have earnings, the higher income spouse should always pay all personal family expenses while the lower earning spouse invests because gains will be taxed at a lower marginal rate
    2. Making loans – attribution rules do *not* apply when money is loaned and charged at an "arm's-length rate" as specified by the CRA
    3. Discharging debts – attribution rules do *not* apply if a taxpayer discharges directly the debt of his or her spouse
    4. Canada Pension Plan splitting – legislation permits spouses to split CPP benefits
    5. Gifting to children or parents – investments may be transferred by way of gift, but such dispositions are deemed to have been made at fair market value

WORKING WITH THE RETAIL CLIENT

- There are four characteristics of any Financial Plan:
    1. *Must* be achievable
    2. *Must* accommodate small changes
    3. Should *not* be intimidating
    4. Should provide for necessities and some luxuries/rewards

- The steps in the financial planning process:
    1. Establishing the Client-Advisor relationship
    2. Collecting data and information
    3. Analyzing data and information
    4. Recommending strategies to meet goals
    5. Implementing recommendations
    6. Conducting a periodic review or follow-up

LIFE CYCLE HYPOTHESIS

This is based on the premise that the risk-return relationship of a portfolio changes over time because investors have different needs at different stages of their lives

- **Early earning years, to age 35** – investors are starting their careers. *Most* frequent priorities are to have a savings plan and near-cash investments for emergencies. If funds are available, growth is the primary investment objective

- **Mid earning years, to age 55** – expenses decline and income and savings usually increase. Investment objectives *tend* to focus on growth and tax minimization

- **Peak earning years, to retirement** – preservation of capital becomes increasingly important. Average term to maturity of fixed-income investments should be shortened and the quantity of high-risk common shares reduced

- **Retirement years** – primary investment objectives are income and preservation of capital, the relative importance of each determined by individual circumstance

FINANCIAL PLANNING PYRAMID

- This is a visual aid to help planners (and investors) determine goals and objectives and review strategy

- At the base of the financial planning pyramid is Security, represented by insurance and a will

- From there, a hierarchy of needs is represented:
    1. Security – Insurance and a will
    2. Independence – Debt elimination
    3. Investments – Conservative to moderate to aggressive to very aggressive

ETHICS AND THE FINANCIAL ADVISOR

Ethics can be defined as a set of moral values that guide behaviour, enduring beliefs that reflect standards of what is right and what is wrong.

- The securities industry has a Code of Ethics based upon the principles of trust, integrity, justice, fairness, honesty, responsibility and reliability

- The Code encompasses five primary ethical values:

    1. Standard A: Duty of Care

    2. Standard B: Trustworthiness, Honesty and Fairness

    3. Standard C: Professionalism

    4. Standard D: Conduct in Accordance with Securities Acts

    5. Standard E: Confidentiality

STANDARD A – DUTY OF CARE

- There are three major components of Duty of Care

    1. **Know your client.** This rule is paramount in the industry. Registrants *must* make a diligent effort to learn essential facts and properly document this knowledge

    2. **Due diligence.** Recommendations *must* be based on both the client and investment characteristics of the security

    3. **Unsolicited orders.** Even if orders are unsolicited, the registrant *must* be aware of the objectives and strategies behind each order

- Full service brokers now have the opportunity to accept non-recommended trades without a suitability obligation; however clients are required to sign a disclosure agreement document in advance

STANDARD B – TRUSTWORTHINESS, etc.

- **Priority of client's interests** – if the registrant's interest competes with the client's, the client's interests come first

- **Respect for client's assets** – registrants shall *not* utilize clients' assets in any way

- **Complete and accurate information relayed to client** – this covers confirmation slips, monthly statements, and any review materials prepared

- **Disclosure** – registrants *must* disclose all real and potential conflicts of interest

STANDARD C – PROFESSIONALISM

- **Client business** – all methods of soliciting business *must* be above-board

- **Client orders** – every client order *must* be cleared in advance with the client unless the account is designated as Managed or Discretionary

- **Trades by registered and approved individuals** – *must* be properly registered with the appropriate SROs

- **Approved securities** – only approved securities may be distributed

- **Personal business** – all personal affairs *must* be conducted in a professional and responsible manner

- **Personal financial dealings with clients** – registrants should avoid personal financial dealings, including the loaning or borrowing of money, paying client losses with personal funds

- **Personal trading activity** – should be limited and *not* get in the way of registrant's primary duty and that is to represent the client's interest

- **Other personal endeavours** – all public activities should present a favourable image

- **Continuous education** – registrants *must* continually upgrade their technical and general knowledge

STANDARD D – CONDUCT IN ACCORDANCE

- **Compliance with securities acts and SRO rules** – the requirements of all SROs of which a registrant's firm is a member *must* be observed

- **Inside information** – a registrant shall *not* trade or cause others to trade on material, non-public information

STANDARD E – CONFIDENTIALITY

- **Client information** – registrants *must* maintain the confidentiality of identities and personal and financial circumstances of their clients

- **Use of confidential information** – this extends to *not* using client orders as a basis to trade in the registrant's personal account or to base investment recommendations for other clients

SELL SIDE AND BUY SIDE

- **Sell side** refers to dealers in the business of selling securities and other services to investors. **Buy side** refers to investors, both institutional and retail

- The term, sell side, stems from the role that dealers play in selling trading/investing/ideas/research; advice; trade execution; corporate finance services; and securities

- The term, buy side, is usually used to describe institutional clients (mutual funds and pension funds)

INVESTMENT DEALERS

- There are three types:
    1. Full-service dealers are involved in almost every aspect of the securities markets and offer their services to both retail and institutional investors

    2. Investment banking boutiques focus on a combination of debt and equity security underwriting, sales and secondary market trading, and M&A advisory services. They generally cater to institutional clients only

    3. Discount dealers focus primarily on offering secondary equity trading services for retail investors for small to medium-sized account who prefer to manage their own portfolios

INSTITUTIONAL CLIENTS

- Corporate treasury departments are responsible for managing the firm's assets in support of the company's business activities. This includes hedging currency risk and accessing capital as cheaply as possible by selling equity or debt

- Insurance companies accept premiums from policyholders, then *must* invest those premiums until claims are made. The investment dealer buys and sells securities and supplies research to support trading activity

- Pension funds represent the interests of employees. They have long investment horizons and require brokerage services

- Mutual funds hire the investment dealer to buy and sell on their behalf and hedge currency risk

- Hedge funds may have long or short time horizons and require brokerage services

INSTITUTIONS (continued)

- Endowments are created by gifts and donations to support organizations to achieve their goals – such as education, health care funding, etc.

- Trusts are pools of assets, created by a settlor, whereby another party is the beneficiary

DIRECT ELECTRONIC ACCESS

- Investment dealers now provide **direct electronic access (DEA)** to their institutional investment clients. Under this arrangement, the institutional investment management firm uses the dealer's participating organization number for the purpose of electronically sending orders directly to a marketplace without the dealer's trader being involved

- Investment dealers must establish appropriate standards and controls prior to offering DEA to a client that includes ensuring that the client has: Sufficient resources to meet their trading obligations; knowledge in using the order entry systems provided; and knowledge and ability to comply with all applicable marketplace and regulatory requirements

BUY SIDE PMs and TRADERS

- **Buy-side portfolio managers** have the following roles and responsibilities:
    1. Creating the investment mandate, goals and guidelines
    2. Developing and executing portfolio strategy
    3. Providing pertinent and timely information
    4. Supervising portfolio management staff
    5. Providing information to the firm's marketing departments
    6. Representing the firm at marketing meetings

- **Buy-side traders** roles and responsibilities:
    1. Providing the most effective trade execution
    2. Remaining informed at all times of the PM's strategy
    3. Informing the PM about market conditions and trends
    4. Being aware of trade opportunities
    5. Maintaining good relationships with sales and trading staff

CRITERIA FOR SELECTING A SELL-SIDE BROKER

- The buy-side portfolio manager or trader will look to obtain the best price for their order from a broker. The PM or trader typically deals with multiple sell-side firms that meet a variety of criteria, including:
    1. Strong existing relationship with a trader or sales rep
    2. Brokers trade execution speed and efficiency
    3. Whether the broker can supply the desired product
    4. The quality of the broker's research
    5. Broker's access to industry experts
    6. Daily market commentary

ORGANIZATIONAL STRUCTURE OF A SELL-SIDE TRADING FIRM

- Back office includes: operations and information technology
- Middle office includes: risk management; legal and compliance; and corporate treasury
- Front office includes: sales and trading; corporate finance; government finance; mergers and acquisitions/divestitures; corporate banking; merchant banking; securities services; and research
- Depending on the size of the firm, sales and trading can include equities, fixed income, foreign exchange, commodities, and related structured products

EQUITY SALES AND TRADING

- Primary activities include:
    1. Equity trading services – relationship manager
    2. Program trading – uses computers to execute complicated stock and derivatives orders
    3. Structured finance – involves creation of derivatives or structured products that offer a unique combination of risk and reward
    4. Futures and options – specific expertise required

- **Prime brokerage** is a bundling of equity trading-related services used primarily by hedge funds. Services offered include: Pre-trade compliance testing; security lending (for settlement of short sales); margin and portfolio financing; security settlement; portfolio accounting; and capital introductions (source of funding for hedge funds)

- **Research** is *not* formally a large part of the equity sales and trading department; however it forms a large component of its success

REVENUE SOURCES FOR SELL-SIDE TRADING FIRMS

- Sell side firms have an important obligation to their clients. The **Universal Market Integrity Rules (UMIR)** create the framework for the integrity of trading activity on the marketplace. Best execution requirements are set out and agreed-upon key elements include price, speed, certainty, and total cost

- Business opportunities for a sell-side trading desk include equity underwriting and mergers and acquisitions; second equity market making and agency trading; and prime brokerage

- Sell-side revenue streams are grouped into:
    1. Trading – making money on the **price spread**, the difference between the bid and ask. Revenue depends on skill of traders and volume, or **order flow**
    2. Commissions – earned when acting in an agency manner
    3. Fees – equity underwriting
    4. Interest – based on margin account balances

REVENUE SOURCES OF A SELL-SIDE FIXED-INCOME TRADING DESK

- The three areas of operations that bring in revenue are trading, sales and investment banking

- Trading revenue is generated by the moment-to-moment market movements and their daily effect on inventory values. The trader's inventory is valued by using the observed or estimated bid-side price in the OTC market. Activities that affect traders' daily P&L include: Charges for capital used; earn or incur costs from repurchase or reverse repurchase agreements; and earning the coupon on long bond positions

- Sales revenue is generated through transactions with clients

- **Origination** or Debt Capital Markets or underwriting is the process of bringing new debt issues to market. The dealer buys the debt from the issuer, then sells at a slightly higher price to its clients

- **Soft dollar arrangements** occur when an institutional client purchases services via commission dollars rather than an invoice. They can only be used for order execution and research services and the institutional client must ensure that the arrangement benefits the client and that this is disclosed to the client

CLEARING AND SETTLEMENT

- **Clearing** is the process of confirming and matching security trade details

- **Settling** is the process of exchanging cash and securities

- The typical institutional trade involves three parties: the investment manager, the dealer, and the custodian. After receiving a trade execution notice from a dealer, the investment manager must provide the dealer and custodian with trade and account details, known as **trade-matching elements**

- Three areas in the clearing and settlement process could cause errors and delays: Inadequate technology; timing of activities; and data integrity and accounting issues

- **Straight-through processing (STP)** is a continuous real-time investment management database that tracks all security transactions and investments, and links the various operating departments of the firm. The STP system is designed to avoid human errors associated with security trading, settlement and record-keeping activities

SUITABILITY REQUIREMENTS

- Suitability requirements are generally *less* strict for institutional clients than for retail clients, because institutional clients are larger and *more* sophisticated

- The key responsibility for a dealer member is to determine if the institutional client is sophisticated enough to make its own investment decisions

ROLES AND RESPONSIBILITIES IN THE INSTITUTIONAL MARKETPLACE

- **Research associates** are the entry-level position for other jobs in the equity and fixed income markets. Associates report to a senior analyst and mainly builds financial or planning models

- **Analysts** are also known as sell side and they are experts in respect to a specific company or sector

- **Institutional sales** is the relationship manager between the dealer and client

- **Institutional traders** execute orders on behalf of clients or on behalf of the dealer (liability traders)

- **Investment bankers** are responsible for building the following areas of business: Corporate finance (raising debt and equity for corporations); public finance (raise capital for government and its agencies); and mergers and acquisitions. Analysts and associates are responsible for the analytical work, the vice-presidents or associate directors are responsible for day-to-day management, and managing directors are responsible for strategic direction

INSTITUTIONAL SALESPEOPLE

To succeed in his/her career, the institutional salesperson *must*:

- Build and maintain strong relationships with clients
- Work at a dealer with good research and/or investment banking services
- Develop deep knowledge about the dealer member's products and the market factors that impact their pricing

Accounts among salespeople are typically divided geographically, by account type, and by relationship.

INSTITUTIONAL TRADERS

- **Agency traders** manage trades for institutional clients. Their responsibility is to fill orders with minimal market impact, making the transaction as inexpensive as possible for the client. Agency traders also provide clients with ideas

- **Liability traders** manage the dealer's trading capital to encourage market flows and facilitate client orders that go to market. Liability traders walk a fine line between market share and profitability

  Liability traders can trade reactively or proactively.

  A reactive trade occurs when the trader has a client who wants to sell shares and the trader buys those shares.

  A proactive trade occurs when the trader makes a market in a security that is deemed favourable by one of the dealer's analysts. By accumulating inventory, the dealer is ready to fill orders by the time that institutional clients are solicited by the dealer's salespeople

- **Market makers** perform a valuable function for the exchange by improving liquidity and increasing trading volume. Their primary role and responsibility is to provide a constant, two-sided (bid/ask) market for equities under their responsibility. The exchange will approve a dealer as the **responsible designated trader (RDT)** for each security

INVESTMENT STYLES, GUIDELINES AND RESTRICTIONS

- Fixed-income styles include: buy-and-hold; indexing; and immunization (protecting the bond portfolio from losing value)

- Active bond management styles include: interest rate anticipation and bond swaps

- Equity styles include: buy-and-hold and indexing

- Active equity styles include: sector rotation, market timing, value-oriented, growth-oriented, and market capitalization

ALGORITHMIC TRADING

- **Algorithmic trading** involves the use of sophisticated mathematical algorithms to execute equity trades over electronic trading systems. It is used extensively by buy-side institutional investors and its goal is to optimize the execution of individual large sized trades by reducing market impact

- **High frequency trading (HFT)** is a sub-set of algorithmic trading and is characterized by a very large number of orders for individual trades of very small size that are done at extremely high speed. HFT attempts to profit from small price imbalances

- Proponents of HFT suggest that its advantages include lower bid/ask spreads, volatility, and trading costs as well as higher liquidity and execution speed. Detractors argue that its impacts include unfair trading advantages and greater systematic risk

- A **dark pool** is a specific equity marketplace that does *not* offer pre-trade transparency. In Canada, dark pools are generally regulated as alternative trading systems (ATSs). Dark pools allow institutional investors to trade large blocks of equities without affecting the market price. Detractors of dark pools believe that they are detrimental to the process of price discovery, and reduce market fairness and market integrity