

Preparation topic for Foreigner examinee

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Each exam will contain all or some of these three following modules:

1. Module 1 fundamental
2. Module 2 Core Rules and Regulations and Investment Suitability
3. Module 3 Products Knowledge and Rules and Regulations for Dealing in Securities (Excluding Derivatives)

From the textbook “Financial Market and Securities Investment” for Single License examination 13<sup>th</sup> edition (Thai version)

Content for Paper 1, Paper 3 , Paper 4, Paper 5, Paper 7, paper 8, Paper 9, Paper 10, Paper 11, Paper 12, Paper 13 or Paper 18

Exam: Module 1

1. Financial System and Structure of Financial Markets
  - 1.1 Financial system
    - 1.1.1 Invested capital and characteristics of invested capital
      - Tangible Assets / Intangible Assets
      - Characteristics (Mobility, Sensitivity, Scarce)
    - 1.1.2 An importance of invested capital
    - 1.1.3 Transfers of capital (from savers to borrower)]
    - 1.1.4 Source of funds (Supply side)
      - Individual saving
      - Corporate surplus funds
      - Institutional funds
      - Government surplus funds
      - Foreign funds
    - 1.1.5 Uses of capital (Demand side)
      - Agent vs Principal
    - 1.1.6 Transfer of fund
      - Direct transfer of fund through private arrangements / placements
      - Indirect transfer of fund through financial institute
      - Indirect transfer of fund through financial market
    - 1.1.7 Functions of financial system

- Saving function
- Liquidity function
- Wealth function
- Payment function
- Credit function
- Risk function
- Policy function

## 1.2 Regulatory agencies in Thai financial market

1.2.1 Roles of government in financial market

1.2.2 Roles of Ministry of finance

1.2.3 Roles of Bank of Thailand

1.2.4 Roles of SEC

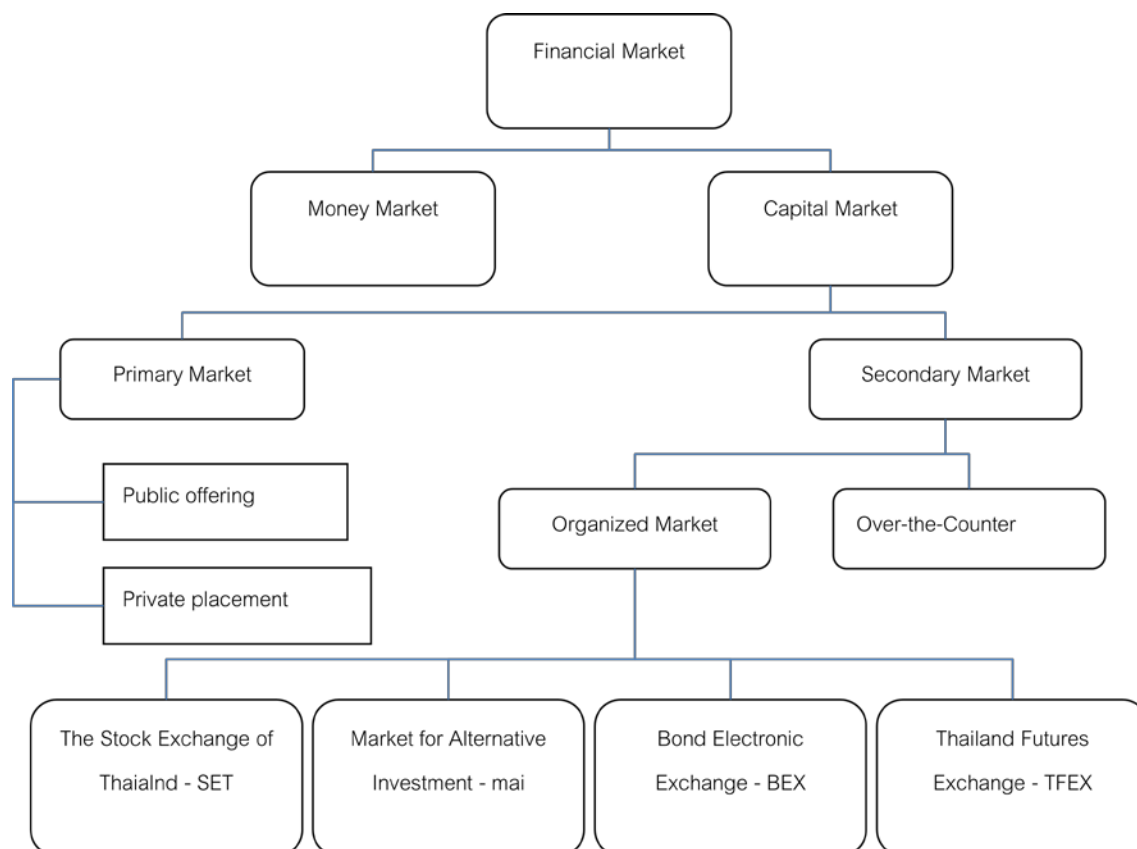
1.2.5 Roles of SET

## 1.3 Financial market structure

1.3.1 Classification of financial markets

- Debt Markets vs Equity Markets
- Organized Exchange vs OTC
- Money Markets vs Capital Markets
- Primary Market vs Secondary Market

1.3.2 Overview of Thai Financial Market



#### 1.4 Concepts about the financial market

1.4.1 Equilibrium and disequilibrium

1.4.2 Funding obligations-useful life-income stream

#### 1.5 Investors in financial market

1.5.1 Type of investors

- Institutional Investors: according to Notification of the Securities and Exchange Commission

No. KorChor. 32/2549

Clause3 (3)

- (a) commercial banks;
- (b) finance companies;
- (c) securities companies for the purpose of acquiring asset for their own account, or for the purpose of managing investment schemes established under the law governing the undertaking of finance business, securities business and credit foncier business;
- (d) credit foncier companies;
- (e) insurance companies;
- (f) government agencies or state enterprises established under the law on budgetary procedures or other juristic persons established under specific laws;

- (g) Bank of Thailand;
- (h) international financial institutions;
- (i) Financial Institution Development Funds;
- (j) government pension fund;
- (k) provident funds;
- (l) mutual funds;
- (m) foreign investors having the same characteristics as investors under (a) to (l)

mutatis mutandis.

- Individual investors

1.5.2 Concepts of investment for institutional investors and individual investors

1.5.3 Psychographic investor models

- Barnewall Two-way Model (Passive investors and Active Investors)
- Bailard, Biehl & Kaiser Five-Way Model (Adventure, Individualist, Celebrity, Guardian and Straight Arrow)
- Demographic analysis of investors (income and wealth, and life cycle analysis – Accumulation phase, Consolidation phase, Spending Phase and Gifting Phase)

1.5.4 Setting investment objectives

- Capital Appreciation
- Current Income
- Capital Protection
- Total Return

1.5.5 Setting goals

- Near-Term High Priority Goal: Down payment, education fund for kid
- Long-Term High Priority Goal: Retirement
- Short-Term Low Priority Goal: travel
- Entrepreneurial/ Money Making Goal

1.5.6 What investors should know before invest?

- Capital
- Age and Health
- Personal Obligation
- Education and Experience
- Time
- Risk Tolerance
- Government Regulation

- Taxation of investment income

#### 1.5.7 What investment advisor should know before give advice?

- Liquidity needs
- Tax Issues
- Goal Integration

### 1.6 Financial Assets

#### 1.6.1 Definition:

- Financial Asset – Intangible Asset
- Financial Asset – Liquidity

#### 1.6.2 Types of financial assets

- Money
- Equities (common stocks, preferred stocks)
- Debt Instruments (Negotiable Debt Instruments, Non-Negotiable Debt Instruments)
- Derivative Instruments

#### 1.6.3 Financial Asset and Financial Market (pricing, liquidity, and reduce search cost)

## Exam Module 3

### 2 Equity Markets

#### 2.1 Overview

##### 2.1.1 Roles and importance of equity markets

##### 2.1.2 Primary market: methods of issuing securities in a primary market

- Private Placement (PP)
- Public Offering (PO)

#### 2.2 Secondary market: Thai secondary equity markets

##### 2.2.1 The Stock Exchange of Thailand (SET)

- Listing criteria of the SET
- Trading system
- Investor protection (listed company information disclosure – and market surveillance)
- Members supervision
- Information service
- Education

##### 2.2.2 Market for Alternative Investment: mai

- Listing criteria of the mai
- Benefits for the mai listed companies

## 2.3 Trading Principles and Procedures

- 2.3.1 Trading system (SET CONNECT)
- 2.3.2 Trading hours
- 2.3.3 Matching method
  - Automatic Order Matching: price then time priority
  - Put-Through (Two-firm and One-firm)
- 2.3.4 Methods and procedures for opening a trading account, trading and settlement
- 2.3.5 Types of orders and their limitations
  - ATO and ATC
  - MP
  - IOC
  - FOK
  - Publish Volume
  - Basket Order
- 2.3.6 Trading size (Board lot)
- 2.3.7 Trading Boards
  - Main Board : AOM
  - Foreign Board : AOM & PT
  - Big Lot Board : PT
  - Odd Lot Board : AOM
- 2.3.8 Ceiling and floor limits and spread
- 2.3.9 Trading Account
  - Cash Account (Normal Cash and Cash Balance)
  - Margin Account (Risk Protection, Margin call, Interest Charges, Force Sell)
- 2.3.10 Prohibited trading behaviors

### REGULATIONS OF THE STOCK EXCHANGE OF THAILAND

Re : Trading, Clearing and Settlement of Securities in the Exchange (No. 2), 1999

Chapter 5 Performance of Members Concerning Securities Trading

## 2.4 Clearing and Settlement

## 2.5 Indices

- 2.5.1 Types of Indices
  - Market Capitalization Weighted Index
  - Price Weighted Index
  - Equally Weighted Index
- 2.5.2 SET index

- 2.5.3 Sector Index and Industry groups
- 2.5.4 SET50 Index
- 2.5.5 SET100 Index
- 2.6 SET roles and measures used in trading supervision
  - 2.6.1 Trading administration
  - 2.6.2 Sign (XD, XI, XR, XW, XS, XT, XA, NP, NR, H, SP)
  - 2.6.3 Circuit Breaker
  - 2.6.4 Contingency plan for computer malfunction

### Exam Module 3

#### 3 Bond Markets

- 3.1 Roles and importance of bond markets
  - 3.1.1 Roles of bond markets
  - 3.1.2 Benefits: to economy, to issuers, to investors
- 3.2 Primary and Secondary Market
  - 3.2.1 Primary market
    - Issuance of government and state enterprise bond: Auction by BOT (Competitive / Multiple Price Auction or American Auction)
    - Issuance of corporate bonds: Public Offering or Private Placement
  - 3.2.2 Secondary market
    - Thai BDC
    - BEX
  - 3.2.3 Bond markets' participants
    - Ministry of Finance
    - Bank of Thailand
    - SEC
    - Bondholder representative
    - Credit Rating Agency
    - Registrar
    - Thailand Securities Depository (TSD) and Thailand Clearing House (TCH)
    - Financial Advisor
    - Underwriter
    - Primary Dealer
    - Bond trader
    - Investor
- 3.3 Bond investment

- 3.3.1 Investment in primary market
- 3.3.2 Investment in secondary market
- 3.3.3 Indirect investment (mutual fund)
- 3.4 Trading principles and procedures
  - 3.4.1 Thai BMA system and methods for debt instrument trading (OTC)
    - Indicative bid and offer
    - Market convention: Actual/365
  - 3.4.2 BEX's trading procedures, account opening, ordering, settlement, and delivery
    - Methods and rules
    - symbols indicating the names of instruments traded on BEX
    - Signs indicating situations or conditions applicable to particular security
    - Settlement

### Exam Module 1

#### 4 International Financial Markets

- 4.1 International market
  - Trade
  - Invest
- 4.2 International financial market
  - 4.2.1 Roles
  - 4.2.2 Functions
    - Transfer of purchasing power
    - Provision of credit
    - Minimizing foreign exchange risk
  - 4.2.3 International Financial Center
- 4.3 Invest in international financial market
  - 4.3.1 Direct Investment and Indirect Investment
  - 4.3.2 Foreign Direct Investment
  - 4.3.3 Indirect Investment
    - Eurobond Market
    - Types of Eurobond (the Straight Fixed-rate Issue / the Floating Rate Note / the Equity-linked Issue)
    - Foreignbond Market
    - Asia Bond Market
    - International capital market investment (invest in stock directly / Depository Receipts / invest in global fund)



#### 4.4 International financial markets impact domestic financial markets and economic systems

##### 4.4.1 impact to Balance of Payments

- Current Account
- Income and current transfer account
- Capital and Financial Account
- International Reserve Account

##### 4.4.2 Impact to domestic economic system

### Exam Module 1

#### 5 Return and risk from Single Asset Investment

##### 5.1 Calculating Returns (Total return, Net return)

##### 5.1.1 Types of return (Equity and Debt Instrument) (capital gain, interest income, dividend income, discount, reinvestment)

- HPR
- Return from treasury bills
- Return from Corporate bonds ( $HPR_{\text{bond}}$  1 year)
- Return from stock ( $HPR_{\text{stock}}$  1 year): when receive dividends, rights for current shareholders from dividend reinvestment plans, and stock splits
- Expected Rate of Return
- Average Historical Rate of Return: Arithmetic Average and Geometric Average
- Calculate rate of return from margin calls
- Calculate rate of return from short sales
- Calculate compounded rate of return

##### 5.1.2 After-tax return

##### 5.1.3 Required Rate of Return

- Security Market Line (SML)
- Risk free rate and Real risk free rate
- Risk premium

##### 5.2 Risk of investing in securities

##### 5.2.1 Types of risk from investment

- Macro Factors (Pervasive risk: Purchasing power risk, political risk, currency risk/ Systematic risk: interest rate risk, market risk)
- Micro factors or Unsystematic risk (counter-party risk or default risk, business risk)

##### 5.2.2 How to measure risk

- From expected rate of return
  - From historical return
  - standard deviation and variance
- 5.2.3 Unsystematic and Systematic risk
- Unsystematic Risk (business risk, financial risk)
  - Measuring systematic risk using the beta
  - Calculate beta  $E(R_A) = R_f + [E(R_m) - R_f] \beta_A$

### Exam Module 1

## 6 Information for Decision-making in Financial Markets

### 6.1 Definition and Importance of information related to investment decisions

- 6.1.1 Definition
- 6.1.2 Importance of information

### 6.2 Efficient Information Dissemination

- 6.2.1 Efficient market
- 6.2.2 Efficient market hypothesis
  - Weak-form
  - Semi Strong – form
  - Stron-form
- 6.2.3 Efficient market and cost of information development
- 6.2.4 Asymmetric information

### 6.3 Importance of disclosed information

### 6.4 Inside information and Market manipulation

### 6.5 How to collect, categorize and process information in financial statement analysis

- 6.5.1 How to collect information
- 6.5.2 How to categorize information
  - For the purpose of fundamental analysis
  - For the purpose of technical analysis
- 6.5.3 Fundamental analysis information

### Exam Module 1

## 7 Security Analyses

### 7.1 Definition and Types

- 7.1.1 Definition
- 7.1.2 Types
  - Fundamental analysis

- Technical Analysis

## 7.2 Fundamental analysis

### 7.2.1 Overview

### 7.2.2 Processes of fundamental analysis

- Economic analysis
- Industry analysis
- Company analysis

### 7.2.3 Economic analysis

- Macro-economic (GDP, Industrial production, CPI, PPI, unemployment rate, Private consumption index, etc.)
- economic life cycle (Peak, Contraction, Recession, Recovery or expansion)
- Fiscal policy and monetary policy
- Globay economy

### 7.2.4 Industry analysis

- Economic life cycle and industry analysis
- Macroeconomic factors and industry analysis
- Industry lifecycle stages (Initial Development Stage, Growth, Expansion, Maturity or Decline)
- Competitiveness in industries (Five Force Model)

### 7.2.5 Company analysis

- Growth company and growth stock
- Defensive company and defensive stock
- Cyclical company and cyclical stock
- Speculative company and speculative stock
- Qualitative information
  - SWOT
- Quantitative information (financial statement)
  - Balance Sheet (assets: current assets, non-current assets, depreciation / Liabilities / Equity)
  - Profit and Loss statement or Income statement (Revenue / Expenses)
  - Statement of Cash Flows
  - Statement of changes in equity
  - Retained Earnings statement
  - Notes to financial statement

- Auditors'Report
- Financial Ratio
  - ♦ Profitability Analysis (ROA, Sales Margin, Asset Turnover, Accounts receivable turnover, Inventory turnover, fixed assets turnover, DuPont System, ROE, EPS)
  - ♦ Risk Analysis (current ratio, Quick ratio, cash flow from operations to current liabilities, Long-term debt ratio, debt to equity ratio, cash flow from operations to total liabilities ratio, times interest earned)
  - ♦ Limitation in using financial ratio

### 7.3 Technical Analysis

- 7.3.1 Definitions and principles
- 7.3.2 Hypotheses
- 7.3.3 Dow Theory
- 7.3.4 Trend analysis
- 7.3.5 limitations in using technical analysis

## Exam Module 1

### 8 Portfolio Management

#### 8.1 Fundamental of portfolio management

- 8.1.1 Required rate of return and risk
- 8.1.2 portfolio investment and the concept of diversifying asset classes
- 8.1.3 factors and limitations that could influence or impact changes in investment behavior and the impact on diversification of such changes

#### 8.2 Allocating invested capital

- 8.2.1 Life-cycle Hypothesis of consumption and investment
- 8.2.2 Processes in managing portfolio investment
  - Know your customer
  - Data analysis
  - Develop portfolio
  - Monitor and update
- 8.2.3 necessity of disclosing portfolio investment policy
- 8.2.4 information used for setting investment policy
  - investment objectives in terms of return
  - investment objectives in terms of risk
  - limitations

- preference
- 8.2.5 Importance of allocating invested capital
- 8.3 Principles of portfolio management
  - 8.3.1 Risk and Risk Averse
  - 8.3.2 Concepts of return and risk of portfolios
    - Portfolio of two assets (calculate return and risk)
    - calculating variance, standard deviation, and coefficient of variation
  - 8.3.3 The optimal risky portfolio with a risk-free asset
  - 8.3.4 Markowitz portfolio theory
    - Efficient Frontier
- 8.4 Capital Asset Pricing Model
  - 8.4.1 Capital Market Theory
    - Capital Market Line
  - 8.4.2 CAPM
    - concept and hypothesis
    - SML
    - estimate beta using a characteristic line and be able to explain its definition
  - 8.4.3 Arbitrage Pricing Theory
  - 8.4.4 Applying APT for investment decisions
- 8.5 Passive and active portfolio management
- 8.6 Portfolio performance measurement
  - Risk premium
  - 8.6.2 Sharpe Model
  - 8.6.3 Treynor Model
  - 8.6.4 Jensen Model

## Exam Module 2

- 9 Investment Planning
  - 9.1 Concepts about investment planning
    - 9.1.1 Why do we need investment planning?
    - 9.1.2 Know your customer
      - Investment objectives (capital appreciation, current income, capital protection)
      - Risk tolerance level
      - Types of investment (active investor or passive investor)

- Personal information (wealth , income level, life cycle)
- Limitation and preference

## 9.2 Craft the investment plan

### 9.2.1 Identify investment goals and objectives

- Analyse personal constraints
- Life cycle

### 9.2.2 Collect data

- Analys personal financial statements (Personal B/S)

### 9.2.3 Develop the investment plan

- Asset allocation
- Asset selection
- Investment Pyramid

### 9.2.4 Monitor and readjust the plan

## Exam Module 3

### 10 Equity

#### 10.1 Types ,characteristics advantages and disadvantages of equity instrument

##### 10.1.1 Common stock

##### 10.1.2 Preferred stock

- Cumulative preferred stock
- Non-cumulative preferred stock
- Participating Preferred stock

##### 10.1.3 Unit trusts

- Closed-end fund
- Open-end fund

##### 10.1.4 Warrants

- Detachable Warrant
- Non-Detachable Warrant
- The right to purchase (or sell) : (American Style / European Style / Pseudo-American Style)

##### 10.1.5 Derivative warrants

##### 10.1.6 NVDR

#### 10.2 Risk and return of investments

##### 10.2.1 Risks

- Macro factors

- Micro factors

#### 10.2.2 Returns

- Capital gain
- Dividend (dividend payout ratio, dividend yield)
- Stock split
- Right issue or subscription right
- Stock dividend
- Risk & return from invest in unit trust, warrant, NVDR

#### 10.2.3 relationship between risk and return of investments

### 10.3 common stock valuation

#### 10.3.1 Meaning of Value

- Book value
- Replacement value
- Liquidation value
- Intrinsic value

#### 10.3.2 variables affecting the value of common stock

- net asset value
- profitability of the firm
- discount rate

#### 10.3.3 General concept about stock valuation

- Asset based approach (Net Asset Valuation)
- Income based approach (Dividend Discount Model)
  - Zero growth dividend
  - Constant growth dividend
  - Non-Constant growth dividend
- Relative approach (Price Earning Ratio (P/E))

#### 10.3.4 General concept about warrant valuation

- Factors affecting warrant price
  - underlying price
  - exercise price
  - time to expire
  - volatility
  - dividend
  - interest
  - the number of warrants

- Warrant price analysis
  - Intrinsic value
  - Time value
  - Using various ratios (Premium, Gearing Ratio, Delta, Leverage0)

#### 10.4 Tax related in investing in the Stock Exchange of Thailand

### Exam Module 3

#### 11 Debt Instruments

##### 11.1 Components of debt instruments

- Par value
- Coupon rate (coupon bond, floating rate bond, zero coupon bond)
- Coupon frequency
- Coupon date
- Issuer name
- Embedded option (convertible bond, callable bond, puttable bond)
- Covenants

##### 11.2 Characteristics of debt instrument

###### 11.2.1 Classified by issuer

- Government bond
  - Treasury bond
  - Treasury bill
  - State enterprise bond
  - BOT bond and bill (BOT and FIDF)
- Corporate bond

###### 11.2.2 Classified as to how ownership is determined

- Bearer bond
- Registered bond
- Inscribed bond

###### 11.2.3 Classified as different options of interest payment

- Zero coupon bond
- Zero coupon, Compound-interest and multiplier bond (i.e Capital Appreciation Bond)
- Coupon bond
- Amortizing bond

###### 11.2.4 Classified as the right to be paid back

- Subordinated bond



- Senior bond

#### 11.2.5 Classified as the collateral

- Secured bond
- Unsecured bond

#### 11.2.6 Classified as different type of interest paid

- Fixed rate bond
- Floating rate bond

#### 11.2.7 Classified by the embedded features and rights

- Convertible bond
- Callable bond
- Puttable bond
- Asset-Backed securities

### 11.3 Debt instrument valuation

#### 11.3.1 Return from invest in debt instrument

- Interest income
- Discount
- Reinvestment or interest on interest
- Capital gain

#### 11.3.2 Bond valuation

- Bond value = Present value of coupons + Present value of face value
- Zero coupon bond pricing
- Duration
- Convexity

#### 11.3.3 Required rate of return and bond yield curve

- Current yield
- Yield to maturity
- Yield to call
- Yield curve (Normal yield curve, downward sloping yield curve, humped yield curve, flat yield curve)

#### 11.3.4 Factors influencing bond value and bond yield

- Time to maturity
- Coupon rate
- Interest rate
- Credit rating

#### 11.3.5 price-yield relationships

- inverse or negative relationship
- *Coupon rate effect* (A low coupon rate increases the price volatility of a bond.)
- Maturity effect (The longer the maturity, the greater the price volatility of a bond.)
- The price change that results from an equal sized increase/decrease in a bond's YTM is asymmetrical
- From an equal sized increase/decrease (the lower YTM, the greater the price volatility of a bond)

#### 11.4 Risks associated with investing in debt instruments

##### 11.4.1 interest rate risk

- price risk
- reinvestment rate risk

##### 11.4.2 Credit risk

##### 11.4.3 Other risk

- Liquidity risk
- Even risk
- Inflation risk
- Legal risk
- Embedded option risk
- Exchange rate risk
- Black-box risk

#### 11.5 Credit rating

##### 11.5.1 ratios for issue rating

- a company's ability to honor its debt payments
  - Interest coverage ratio =  $\text{EBIT} / \text{Annual interest expense}$
- Liquidity ratio
  - Current ratio =  $\text{current assets} / \text{current liabilities}$
  - Quick ratio =  $[\text{current assets} - (\text{inventories} + \text{prepayments})] / \text{current liabilities}$
  - Cash flow to long-term debt =  $\text{Cash flow} / \text{long term debt}$
  - Working capital to long-term debt ratio =  $\text{working capital} / \text{long term debt}$
- Financial leverage ratio
  - Total debt to equity ratio =  $\text{total debt} / \text{equity}$

- Long-term debt to capitalization ratio = long term debt / (long term debt + preferred stock + common stock)

#### 11.5.2 Credit rating agencies in Thailand

- TRIS
- FITCH
- rating symbols

#### 11.6 taxation of investing in debt instruments

### Exam Module 3

#### 12 Mutual funds and investment units

##### 12.1 Mutual funds

##### 12.1.1 Definition

##### 12.1.2 Mutual funds and business operation

- Process of establishing the funds
- The funds operations

##### 12.1.3 Pros and cons of investment in mutual funds

##### 12.1.4 roles and importance of people involved in mutual funds management

- management company
- distributor
- unit holder
- SEC
- Custodian
- Fund registrar
- Auditor
- Fund liquidator
- The Stock Exchange of Thailand
- Association of Investment Management Companies (AIMC)

##### 12.1.5 rules, constraints, and limitations of investment in different types of mutual funds

- Rules constraints and limitation about Assets the fund can invest
- Company limit and Product limit
- Fair allocation
- Conflict of interest

##### 12.1.6 Characteristic of fund policy

- Asset class
- Concentration of portfolio
- Sector

- Regional

#### 12.1.7 expenses of mutual fund investment

- management fee
- distributor fee
- trustee fee
- audit fee
- custodian fee
- other fee

#### 12.1.8 types of mutual funds based on

- expenses incurred in purchasing investment units (load fund, no-load fund)
- procedures in selling investment units (closed-end fund, open-end fund)
- investment policies
  - general (equity fund, general fixed income fund, long-term fixed income fund, short-term fixed income fund, balanced fund)
  - special (property fund, gold fund, Hedge fund, RMF, LTF, index fund, fund of funds, feeder fund, umbrella fund)
  - special with low risk and have some investor protection feature
    - ♦ Money market fund
    - ♦ Guaranteed fund
    - ♦ Capital protected fund
- sources of capital and investment
  - ♦ Local fund or domestic fund
  - ♦ Onshore fund or country fund
  - ♦ Offshore fund or international fund

#### 12.1.9 Returns

- Dividend
- Capital gain
- concepts of determining net asset value (NAV)

#### 12.1.10 tax deduction benefits of mutual funds

#### 12.1.11 mutual fund investment strategies

- conservative fund
- income fund
- growth-income fund
- growth fund

- Aggressive growth fund

#### 12.2 Retirement Mutual Fund (RMF)

- Investment policies (low, midium and high risk)
- Conditions and tax benefits
- Pros and cons and cautions for each investor type
- Terms and conditions
- Tax benefits

#### 12.3 Lont-term Equity Fund (LTF)

- Investment policies (low, midium and high risk)
- Conditions and tax benefits
- Pros and cons and cautions for each investor type
- Terms and conditions
- Tax benefits
- Comparison between investing in RMF and LTF

#### 12.4 Provident fund

##### 12.4.1 Definition

##### 12.4.2 Structure of provident fund

- Employee contributions range from 2% to 15% on the condition that employer contributions must be equal to or higher than those of the employees.

##### 12.4.3 Status of the fund (A fund which has been registered shall become a juristic person.)

##### 12.4.4 The articles of the fund (from PROVIDENT FUND ACT B.E. 2530)

**Section 9.** The articles of the fund shall consist of at least the following particulars:

- (1) the name of the fund, which shall be preceded by the words, "Provident Fund" and followed by the words, "Which Has Been Registered";
- (2) the location of the office;
- (3) the objectives;
- (4) the procedures for admission of members and termination of memberships;
- (5) the provisions regarding the number of the committee members, the procedures for election and appointment, the term of office, the termination of office, and the meetings of the fund committee;
- (6) the provisions regarding the employees' savings and the employer's contribution payable to the fund;

- (7) the provisions regarding the rules and procedures for the computation of benefits entitled to the employees;
- (8) the provisions regarding the rules, procedures and period of time thereby the payment upon termination of employee's membership or dissolution of the fund pursuant to Section 25 shall be prescribed, without unreasonable grounds for eliminating the employee's rights;
- (9) the provisions regarding the expenses for the fund's operation;
- (10) the provisions regarding the general meeting or member meetings classified by investment policies or employers in cases where the fund is established with multiple investment policies or as a pooled fund, as the case may be;
- (11) other particulars as prescribed by ministerial regulations.

12.4.5 Return of provident funds

12.4.6 Tax benefits

- To employee
- To employer
- To the fund

12.4.7 Investment policies

12.4.8 Employee's choice

12.4.9 Pros and cons

12.5 Private fund

12.5.1 Definition

12.5.2 people involved in mutual funds management

- management company
- Investor
- Custodian
- Auditor
- SEC
- Investor contact or investment advisor

12.5.3 agreement with a person or a group of persons who has authorized the securities company to manage the private fund

12.5.4 Return and tax benefit

12.5.5 Pros and cons

12.6 Hedge fund

- Characteristics of hedge fund
- difference between hedge and mutual funds
- investment strategies of hedge fund

- risks

#### 12.7 Exchange-Traded Fund: ETF

- types and structures
- characteristics of risk and return of ETFs
- processes of create and redeem ETF

#### 12.8 measurements

12.8.1 an important of fund measurement

12.8.2 measurement processes (Total return, accrual basis, Net investment return, Geometric link)

12.8.3 benchmark of measurements from AIMC

12.8.4 Risk – Adjusted Return (Sharpe, Treynor, Jensen, Information Ratio)

#### 12.9 Investing in mutual fund

12.9.1 Decision factors for analysing the fund

- economic
- Management company (policy, style, prospectus, fees)
  - Expense ratio
- Previous performance
- Individual factors
  - Financial goals
  - Risk tolerance
  - Life stage
  - Financial literacy level

12.9.2 Steps to invest in fund

- Open account
- Order (bid / offer)

12.9.3 Strategies

- Dollar cost averaging
- Share cost averaging
- Market Timing

12.9.4 Channels to follow fund performance

- Fund fact sheet
- Lipper

#### Appendix

- characteristics and formats of property fund
- policies, types and constraints of property funds

- characteristics of risk and return of investment in property funds
- types of clients for whom investing in property funds
- characteristics and formats of gold fund investment
- characteristics of risk and return of gold funds
- investment analysis approaches in gold funds

## Exam Module 2

### Core Rules and Regulations

1. Rules governing conducting securities business and operations of officers
  - 1.1 Roles and objectives SEC regulates and supervises securities companies
  - 1.2 Rules conducting securities business
    - 1.2.1 protecting against conflicts of interest and be able to identify procedures to prevent such conflicts between securities
    - 1.2.2 protecting against insider information (watch lists and restricted lists)
    - 1.2.3 principles involved in taking care of client assets
    - 1.2.4 roles and importance of the compliance unit in a securities company
    - 1.2.5 practices and regulations governing operations of officers of a securities firm
    - 1.2.6 regulations governing the taking of client complaints
  - 1.3 rules and duties of securities officers
    - 1.3.1 contacting, persuading , and advising customers
      - Churning
      - Front running
      - Confidentiality of client profile
      - Misconduct of trading under clients account
      - Subjectivity on investment consulting to client



- Do Not guarantee return
- General advise vs specific advise
- Disclosure when conflict of interest may occur
- PO, IPO
- Cold calling

1.3.2 purpose of customer database preparation and be able to implement such preparation

1.3.3 investor manuals and their components

1.3.4 code of ethics

- fundamental (under law)
- to profession
- to employer
- to customer
- to public

1.3.5 characteristics that would prohibit a person from becoming a securities officer

1.3.6 penalties for securities officers

1.4 arbitration (ARBITRATION ACT B.E.2545 (2002))

1.4.1 benefit of arbitration

1.4.2 disputes

1.4.3 arbitration procedures and arrival of verdicts

2. Regulations relating to unfair actions in securities trading and protection against money laundering

2.1 Unfair actions according to the Securities and Exchange Act

2.1.1 spreading false news

2.1.2 illegally using internal information

2.1.3 trading securities with intent to defraud

2.2 Anti-Money Laundering Act of B.E. 2542

2.2.1 criteria and procedures in transaction reporting for financial institutions (2M cash, 5M any asset, suspicious transaction)

2.2.2 criteria and procedures in filing a report and identification

3. Rules and regulations on issuing and offering securities

3.1 rules and procedures on offering securities (filing or not)

3.2 rules, conditions and procedures for distributing securities

- firm commitment underwriter

- best effort
- 3.3 rules and procedures for tender offer
- Trigger point (25%, 50%,75%)
- 3.4 rules and criteria for setting up mutual funds and offering security units
- setting up mutual funds (retail fund, non-retail fund)
  - procedures of offering security units
  - purposes of determining investment ratios
  - components that must be stated in project description
  - purpose of preparing prospectus
  - objectives of NAV calculation and the NAV calculation formula for disclosure to investors

## Derivatives Content For Paper 2, Paper 14 or Paper 19

Please check with the LOS announced on the [www.tsi-thailand.org](http://www.tsi-thailand.org) at the link [http://www.tsi-thailand.org/Mambo\\_2012/MainPage\\_Prof/ExamEng\\_Outline.html](http://www.tsi-thailand.org/Mambo_2012/MainPage_Prof/ExamEng_Outline.html)

Each exam will contain all or some of these three following modules:

1. Module 1 fundamental
2. Module 2 Core Rules and Regulations and Investment Suitability
3. Module 3 Products Knowledge and Rules and Regulations for Dealing in Securities (Excluding Derivatives)

## Content from DR1 and DR2 textbook (Thai version)

### Module 3

DR 1 content

1. Overview
  - 1.1 Definition
  - 1.2 Benefit
    - 1.2.1 Price discovery
    - 1.2.2 Hedging
    - 1.2.3 Speculation

- 1.3 Financial Derivatives
  - 1.3.1 Futures and Forward
  - 1.3.2 Options
  - 1.3.3 Swap
- 1.4 Historical of derivatives market
- 1.5 Market
  - 1.5.1 Mechanism of trading derivatives (OTC and Organized exchange)
  - 1.5.2 Differentiate between OTC and Organized exchange
- 1.6 Player in the market
  - 1.6.1 Hedger
  - 1.6.2 Speculator
  - 1.6.3 Arbitragour

### **Module 3**

- 2 Futures
  - 2.1 Characteristic of futures
    - 2.1.1 Futures vs forwards
    - 2.1.2 Trading futures
    - 2.1.3 Risks and returns
  - 2.2 Types of futures
    - 2.2.1 Interes rate futures
    - 2.2.2 Currency futures
    - 2.2.3 Index futures
    - 2.2.4 Commodity futures
  - 2.3 Mechanism of trading future
    - 2.3.1 Market
      - 2.3.1.1 Exchange (TFEX , TFET)
      - 2.3.1.2 TCH
      - 2.3.1.3 Regulators of TFET & TFEX
    - 2.3.2 Margins and mark to market
    - 2.3.3 Settlement and delivery
  - 2.4 Applying futures
  - 2.5 Pricing futures concepts
    - 2.5.1 Future price and spot price
    - 2.5.2 Pricing (commodities)

## 2.5.2.1 Convenience yield

**Module 3**

## 3 Options

## 3.1 Characteristic and types

3.1.1 By right- call option and put option

3.1.2 By exercise style- European, American, Pseudo-American/ Bermudan

3.1.3 Moneyness – ITM, ATM, OTM

3.1.4 By underlying – stock, index, interest rate, currency, futures options

## 3.2 Market (OTC and Exchange)

## 3.3 Position and return

3.3.1 Long call –  $P/L = \text{Max}(0, \text{spot-strike}) - \text{premium}$ 3.3.2 Long put –  $P/L = \dots$ 3.3.3 Short call –  $P/L = \dots$ 3.3.4 Short put –  $P/L = \dots$ 

## 3.4 Rights and obligations

## 3.5 Applying options

3.5.1 Hedging

3.5.2 Leverage

3.5.3 Delaying time to sell asset

## 3.6 Risks

3.6.1 Price risk

3.6.2 Counterparty risk

## 3.7 Price options concepts

3.7.1 Fundamental of factors of options price

3.7.1.1 Intrinsic value

3.7.1.2 Time value

3.7.2 Factor affect options price

3.7.2.1 Spot price

3.7.2.2 Exercise price

3.7.2.3 Time to maturity

3.7.2.4 Volatility

3.7.2.5 Risk-free interest rate

3.7.2.6 Dividend yield

### Module 3

#### 4 Swap

##### 4.1 Type and characteristic

4.1.1 Interest rate swap

4.1.2 Currency swap

4.1.3 Equity swap

4.1.4 Swaption

##### 4.2 Swap pricing concept

##### 4.3 Applying swap

##### 4.4 Cap and floor

##### 4.5 Exotic option

### Module 3

#### 5 Derivatives market development in Thailand

##### 5.1 AFET

##### 5.2 TFEX

#### 6 Summary

#### 7 Appendix

##### 7.1 Pricing and valuation

##### 7.2 Interest rate swap

##### 7.3 Currency swap

##### 7.4 Equity swap

DR2

### Module 3

#### 1 Derivatives Analysis Concept

##### 1.1 Arbitrage and the law of one price

##### 1.2 Perfect market

### Module 3

#### 2 Future Analysis concept

##### 2.1 Valuation

2.1.1 Price convergence

2.1.2 Cost of carry model

2.1.3 Valuation of financial instrument futures

- 2.1.4 Commodity futures
- 2.1.5 Normal backwardation / contango
- 2.1.6 Cost of carry and basis
- 2.2 Trading strategies of futures
  - 2.2.1 Hedging
    - 2.2.1.1 Hedgin long position
    - 2.2.1.2 Hedgin short position
    - 2.2.1.3 Cross hedging
  - 2.2.2 Speculating
    - 2.2.2.1 Directional trading
    - 2.2.2.2 Spread trading
  - 2.2.3 Arbitraging

### **Module 3**

#### **3 Option analysis**

- 3.1 Characteristic of option price
  - 3.1.1 Ceiling and floor
    - 3.1.1.1 Call and put options
    - 3.1.1.2 Put-call parity
- 3.2 Binomial model
  - 3.2.1 One-period binomial model
  - 3.2.2 Multi - period binomial model
  - 3.2.3 binomial model for put option
- 3.3 black-shcoles model
  - 3.3.1 assumption of model
    - 3.3.1.1 assumptions
    - 3.3.1.2 volatility
    - 3.3.1.3 equation
  - 3.3.2 option price valuation for dividend stock
  - 3.3.3 option price valuation for stock index
  - 3.3.4 option price valuation for currency options
  - 3.3.5 implied volatility calculation
- 3.4 Price risk analysis
  - 3.4.1 Delta
  - 3.4.2 Gamma

3.4.3 Theta

3.4.4 Vega

3.4.5 Rho

### 3.5 Option trading strategies

- Unlimited risk/ unlimited reward
- Unlimited risk/limited reward
- Limited risk/unlimited reward
- Limited risk/limited reward

#### 3.5.1 Fundamental strategy

3.5.1.1 Long call option

3.5.1.2 Short call option

3.5.1.3 Long put option

3.5.1.4 Short put option

#### 3.5.2 Stock-option combination

3.5.2.1 Covered call

3.5.2.2 Protective put

3.5.2.3 Synthetic long put /short call

#### 3.5.3 Spread strategies

3.5.3.1 Bull spread

3.5.3.2 Bear spread

3.5.3.3 Butterfly spread

3.5.3.4 Calendar spread

#### 3.5.4 Put-call combination strategies

3.5.4.1 Straddle

3.5.4.2 Strip and strap

3.5.4.3 strangle

#### 3.5.5 Volatility trading

3.5.5.1 Long volatility

3.5.5.2 Short volatility

#### 3.5.6 Portfolio insurance

## **Module 3**

### 4 Risk management

#### 4.1 Concept

#### 4.2 Risk management on derivatives investment

- 4.2.1 Market risk management
- 4.2.2 Credit risk management
- 4.2.3 Other risk management

## Practice guide on Derivatives

### Summary for LOS for Module 3

1. **Thailand Futures Exchange (TFEX) Rules and Regulations**
  - 1.1 To explain the characteristics of SET 50 Index Futures;
  - 1.2 To calculate multiplier, tick size and position limit;
  - 1.3 To explain trading and settlement procedures for derivatives.
2. **Thailand Clearing House (TCH): Settlement and Clearing Rules**
  - 2.1 To explain the roles of TCH;
  - 2.2 To explain the risk management measures of TCH, including the qualifications of TCH members, margin requirements, margin management, financial resources, and default procedures.
3. **Derivatives Act and Related Laws**
  - 3.1 To explain the scope of futures contracts according to the Derivatives Act;
  - 3.2 To explain the objectives and supervision mechanisms of the Derivatives Act.
4. **Rules for Derivatives Business Operators**
  - 4.1 To explain the rules for various derivatives business operators;
  - 4.2 To explain the types of derivatives business operators, licensing, and rules for derivatives business operators in accordance with the Derivatives Act.



5. Standard Practices of Derivatives Investor Contacts

5.1 To explain standard practices of derivatives investor contacts in the derivatives business and unfair practices relevant to such contracts.

6. Unfair Derivatives Trading Practices

6.1 To explain how to prevent undesirable behavior affecting stability and reliability of capital markets, and abstain from fraudulent activities in capital markets.

**Summary of examination:**

No.	Examinations	No. Questions	Time (mins)	Price THB
<b>Group 1: Investment Consultant Examination</b>				
1	Paper 1: Securities Investment Consultant Examination	120	180	2,800
2	Paper 2: Derivatives Investment Consultant Examination	120	180	2,800
3	Paper 3: Debt Instrument Investment Consultant Examination	80	120	2,000
4	Paper 4: Fund Investment Consultant Examination	80	120	2,000
5	Paper 5: Equity Investment Consultant Examination	80	120	2,000
<b>Group 2: Additional Product Examination</b>				
6	Paper 7: Examination for Additional Product: Debt Instruments	40	60	1,200
7	Paper 8: Examination for Additional Product: Funds	40	60	1,200
8	Paper 9: Examination for Additional Product: Equities	40	60	1,200
9	Paper 10: Examination for Additional Product: Funds and	40	60	1,200

	Equities			
10	Paper 11: Examination for Additional Product: Equities and Debt Instruments	40	60	1,200
11	Paper 12: Examination for Additional Product: Funds and Debt Instruments	40	60	1,200
12	Paper 13: Examination for Additional Product: Debt Instruments, Funds, and Equities	60	90	1,600
13	Paper 14: Examination for Additional Product: Derivatives	60	90	1,600
<b>Group 3: Rules and Regulations Examination</b>				
14	Paper 17: Examination on Dealing Rules and Regulations: Securities (including Derivatives)	55	90	1,500
15	Paper 18: Examination on Dealing Rules and Regulations: Securities (Excluding Derivatives)	40	60	1,200
16	Paper 19: Examination on Dealing Rules and Regulations: Derivatives	40	60	1,200

Information as of 17/10/2012