

**Module Outline**  
**Certified Banker (CB Stage)**  
**Treasury Markets and Operations**

<b>Benchmarked HKQF Level:</b>	6
<b>No. of Credits:</b>	30
<b>Total Notional Learning Hours:</b>	300
<b>a) Class contact hours:</b>	<i>30 hours (3-hour per session x 10)</i>
<b>b) Self-study hours:</b>	<i>267 hours</i>
<b>c) Assessment hours:</b>	<i>3 hours</i>
<b>Pre-requisite:</b>	NA

**Module Objective**

This module contributes to the achievement of the knowledge and skills embedded in the Programme Intended Outcomes by providing the learners an essential blend of professional and practical learning opportunity on the technical treasury operations. Learners would consolidate their previous knowledge and extend critical applications of accounting and financial knowledge in the sophisticated areas of treasury functions. Through participation and discussions, the learners would manifest tactical skills and exercise careful considerations on how and when to use what tools available for which markets.

**Module Intended Outcomes (MIOs) and Units of Competencies (UoCs)**

Upon completion of the Module, candidates should be able to:

<b>MIOs</b>	<b>Intended Outcomes / Competence</b>	<b>*Unit of Competencies (UoCs)</b>
MIO-1	Undertake critical analysis on the roles and functions of treasury operations in banks and demonstrate how the operations provide check-and-balance internal controls.	107404L6 107452L6 109299L6
MIO-2	Deal with the day-to-day management of a wide range of treasury activities by market segments to fulfill the asset and liability management objectives of the bank.	109305L6 109306L6 109302L5
MIO-3	Identify the types and assess the magnitude of risks and decide on the deployment of resources and tools to implement effective risk measures and control.	109307L5 109308L5

MIO-4	Perform an investigation on market practices and operation procedures to evaluate the effectiveness of risk control.	
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*\*Note: For the details of the UoCs, please refer to the Specification of Competency Standards (SCS) of [Retail Banking](#) and [Corporate & Commercial Banking](#) which were developed by HKCAAVQ.*

## Assessment

<b>Examination duration:</b>	3 hours
<b>Examination format:</b>	Part I – Practical Operation: 2 out of 3 essay questions Part II – Calculations and Knowledge: 2 out of 3 essay questions
<b>Pass mark:</b>	50%

## Syllabus

<b>Chapter 1: Treasury Management of Financial Institutions</b>	
<b>1.1</b>	<b>Role of Treasury's functions</b>
1.1.1	- Balance sheet management
1.1.2	- Liquidity risk management
1.1.3	- Interest rate risk and foreign exchange exposure management
1.1.4	- Management of settlement / pre-settlement credit risk
<b>1.2</b>	<b>Internal control as a protection against overexposures, errors and frauds</b>
1.2.1	- Organization structure and segregation of duties
1.2.2	- Position limits and VaR limits for dealers
1.2.3	- Monitoring and control of the dealing operation
1.2.4	- Internal audit functions
1.2.5	- Compliance issues
1.2.6	- Ethical issues - The Code of Conduct & Practice of TMA
<b>Chapter 2: Foreign Exchange Market</b>	
<b>2.1</b>	<b>Spot market: spot rate, value date, direct and indirect quotations, reciprocal rate. One-way and two-way quotations, and cross rate</b>
<b>Chapter 3: Money and Capital Markets</b>	
<b>3.1</b>	<b>The Hong Kong Dollar market</b>
3.1.1	- Market structure and participants
3.1.2	- The Linked Exchange Rate system and Exchange Fund operation

3.1.3	- Interbank placement and money rate (HIBOR) fixing mechanism
3.1.4	- HKMA discount window, repo between CMU member banks of USD CHATS, repo of Exchange Fund Bills and notes for intraday overdraft
3.1.5	- Certificate of Deposit, RMB corporate bond HKD Government Bond issuance programme
<b>3.2</b>	<b>International Market</b>
3.2.1	- Eurodollar bond, Eurozone bond, floating rate note, government securities
3.2.2	- Eurodollar Interbank Money rate (LIBOR) fixing mechanism
3.2.3	- Central bank bond repurchase programs and implication on market liquidity
<b>3.3</b>	<b>Credit</b>
3.3.1	- Managing credit spread risk and default risk
3.3.2	- Credit rating and role of credit rating agencies
<b>Chapter 4: Bond Market</b>	
<b>4.1</b>	<b>Bond market</b>
4.1.1	- Yield curve and interest rate risk management
4.1.2	- Bond issuance for long term funding and capital management (MTN, Cocos e.g. contingent convertible bond)
<b>4.2</b>	<b>Offshore RMB money and capital market development</b>
4.2.1	- Benchmark yield curve
4.2.2	- CNH–HIBOR fixing
<b>4.3</b>	<b>Shanghai FTZ and Qianhai SEZ</b>
<b>Chapter 5: Derivatives</b>	
<b>5.1</b>	<b>Derivatives for hedging</b>
5.1.1	- Interest rate swap (IRS) and currency swap, forward rate agreement, non-deliverable forward (NDF), options, financial futures
5.1.2	- Credit derivatives: credit default swaps (CDS)
5.1.3	- Other aspects: options pricing modeling, dealing convention (ISDA documentation), accounting principles and valuation, hedging techniques, risk consideration (distinguish hedging and speculation)
<b>5.2</b>	<b>Option trading strategies</b>
<b>Chapter 6: Treasury Operation</b>	
<b>6.1</b>	<b>Operations in front office</b>
6.1.1	- Interbank trading, proprietary trading, corporate treasury
<b>6.2</b>	<b>Operations in middle office</b>

6.2.1	- Treasury accounting (International Financial Reporting Standard 9), risk management, regulatory compliance, internal audit
<b>6.3</b>	<b>Operations in back office</b>
6.3.1	- Cash management, payment and settlement processing
6.3.2	- Trades / position/ cash account reconcilement
6.3.3	- Operations process control - access right, setting levels of authorization, amendments and cancellation
<b>6.4</b>	<b>Treasury Markets Association Code of Conduct and Practice</b>
6.4.1	- General Standards
6.4.2	- General Controls
6.4.3	- Dealing Principles
6.4.4	- Risk Management Principles
6.4.5	- Back-Office Practices
6.4.6	- Market Specific Dealing Practices and Conventions
<b>Chapter 7: Market Risk and Other Risk Measures</b>	
<b>7.1</b>	<b>Risk consideration and control: country risk, counter-party risk, market risk, operations risk and settlement credit risk</b>
<b>7.2</b>	<b>Mark to market, calculation of VaR (Value at Risk), tools to manage financial risk, monitoring and compliance</b>
7.2.1	- Exposures limit considerations, assessment and review process
<b>Chapter 8: Payment and settlement systems Risk Management</b>	
<b>8.1</b>	<b>Payment and Settlement systems</b>
8.1.1	- RTGS clearing and settlement system – major currencies and RMB, linkage of CHATS to international settlement systems including securities clearing and custody (EuroClear)
8.1.2	- Cross border collateral management
<b>8.2</b>	<b>RMB Payments and Settlement</b>
<b>8.3</b>	<b>OTC Derivatives counterparty risk management</b>
8.3.1	- Standardized OTC derivative transactions
8.3.2	- Non-centrally cleared OTC derivative transactions
<b>8.4</b>	<b>Credit Valuation Adjustment (CVA)</b>
<b>Chapter 9: Case Studies</b>	
<b>9.1</b>	<b>Risk Management &amp; Control illustration</b>
9.1.1	- Operations risk on segregation of duties
9.1.2	- Settlement risk



9.1.3	- Liquidity risk
<b>9.2</b>	<b>Case studies on treasury fraud and/or control flaws</b>

## Recommended Readings

### ***Essential Readings:***

1. HKIB Study Guide of CB Stage – TMO: Treasury Markets and Operations. (2024).
2. HKIB Supplementary pack – TMO: Treasury Markets and Operations.

### ***Supplementary Readings***

1. Chisholm, A. (2009). An Introduction to International Capital Markets: Products, Strategies, Participants (2nd ed.). Wiley.
2. Choudhry, M. (2007). Bank Asset and Liability Management – Strategy, Trading, Analysis. Wiley.
3. Rieh, H. (1999). Managing Risk in Foreign Exchange, Money and Derivative Markets. McGraw Hill.

### ***Further Readings***

1. Benninga, S. (2014). Financial Modeling (4th ed.). MIT.
2. Hull, J. (2014). Options, Futures and Other Derivatives (9th ed.). Prentice Hall.
3. Robert, S. (2012). Mastering Financial Calculations: A Step-By-Step Guide to the mathematics of Financial Market Instruments. Pearson.
4. Sinkey, J. (2002). Commercial Bank Financial Management (6th ed.). Prentice Hall.
5. Tuckman, B and Serrat, A. (2011). Fixed Income Securities: Tools for Today's Markets (3rd ed.). Wiley.