ACT LEADING TREASURY PROFESSIONALS

BUILDING FUTURES

# CERTIFICATE

## in International Cash Management

SYLLABUS

# CERTIFICATE
## in International Cash Management

**This course is intended for treasury staff and bankers who wish to demonstrate their mastery of international cash management through a rigorous certification programme.**

"It is designed to provide an understanding of international cash management techniques and best practice"

It is designed to provide both corporate treasury staff and bankers with an understanding of international cash management techniques and best practice, and to provide an insight into the banking and systems infrastructure that lies behind the services and products sold and used. The course is focused on the practical application of cash management techniques in corporate treasuries. Historically, banks and companies have approached the area from different perspectives, using different terminology and jargon. This course provides an opportunity to bring both sides of the business together with a common understanding of each other's views and interpretations.

The Certificate in International Cash Management consists of seven units:

### Unit 1: Cash management – the essentials

1. Introduction to treasury and cash management
2. Important cash management concepts
3. Introduction to banking
4. Basic banking services

### Unit 2: Working capital management

5. Understanding financial statements
6. Optimising working capital

### Unit 3: Making and receiving international payments

7. Clearing and settlement systems
8. International payments
9. Opening foreign currency accounts
10. International trade vehicles

## Unit 4: The international cash management function

11. Cash flow forecasting
12. Short-term investing
13. Short-term borrowing

## Unit 5: Managing the international treasury function

14. Treasury structures
15. Bank relationship management
16. Treasury systems and technology
17. Policy, tax and regulatory issues for treasury

## Unit 6: Managing cross-border liquidity and risk

18. Netting
19. Cash pooling
20. Foreign exchange
21. Risk management

## Unit 7: Creating efficient international account structures

22. Efficient account structures
23. Spotlight on the US and Europe
24. Regional case studies

You must successfully complete all seven units to complete the Certificate.

The course is supported by online study resources and a five day tuition school. Each unit takes between 15–50 hours to complete, with 300 hours required to complete the whole Certificate. We estimate you should be able to complete the course in 6 months alongside your full time work.

You can study for this qualification through the ACT. Successful completion of the course leads to the award of the Certificate in International Cash Management. Further information about all our qualifications can be found at treasurers.org/qualifications.

## Assessment

The Certificate in International Cash Management will be assessed online. There are two assessments. A multiple choice assessment to cover units 1 and 2, and a three hour written exam to cover units 3 - 7.

You will be provided with information and instructions on the individual assessments at the time of booking with the ACT. However, you will be able to take practice assessments as part of your learning programme to assist in the preparation and familiarise yourself with the types of assessment questions you can expect.

## GLOSSARY OF QUALIFICATION TERMS

| | |
|---|---|
| **Award** | For the purpose of this qualification, upon passing your assessment, you will be awarded the Certificate in International Cash Management. The award is therefore the outcome of your studies and assessments and represents your achievement. |
| **Unit** | A unit represents a segment of learning within the Certificate of International Cash Management. Each individual unit has its own rationale, introduction and content. Each unit also has a number of learning outcomes and supporting indicative content. |
| **Overarching learning outcomes** | The learning outcomes within a unit lay down the expectations of the learner and define the level of knowledge and understanding required in order to be fully prepared to take the ACT assessment. |
| **Micro learning outcomes** | These appear within each of the sections in the units and, like the overarching learning outcomes, act as the basis to determine knowledge and understanding which shape your learning and assessment. |
| **Indicative content** | The indicative content is an indication of the knowledge required in order to fulfil the assessment requirements and achieve the learning outcomes and details the level of technical content of the programme. |

# CASH MANAGEMENT – THE ESSENTIALS

## Unit one


- Rationale for unit one
- Introduction to unit one
- Overarching learning outcomes
- Unit one content


### RATIONALE FOR UNIT ONE

**For companies engaged in international business there are many roles played by treasury and many partners who facilitate the business of managing cash and liquidity.**

This unit seeks to bring about a better understanding of those involved in international cash management, and an appreciation of their respective contexts, issues and challenges.

For the corporate treasurer who uses banking products, we review the role played by banks, the basic banking services and the challenges faced by the financial services industry in managing their credit risk and balance sheets in the light of Basel III. Then to provide financial institutions with an insight into the world of their clients, to whom they offer international cash management solutions, we discuss the role of treasury within the organisation, and the importance of cash and liquidity management.

## INTRODUCTION TO UNIT ONE

**This unit is designed as an overview of both the corporate and banking worlds and provides insights into their respective contexts.**

Firstly, the role of the treasurer is examined and where cash management fits within that role. Most importantly it offers a working definition of good cash management and the resulting benefits to the company. Fundamental cash management concepts are described including the operating cycle, the cash flow cycle, the nature of cash flows, the importance of liquidity, finality, availability and float, where it arises, what causes it and how to reduce it.

Secondly, this unit explores the basics of banking. Topics include the role of the central bank, different roles a financial institution can play, types of account and the documentation required to open them, as well as how banks make their money and ways in which companies can seek to reduce their overall banking costs. The impact of Basel III on how banks manage their credit risk and balance sheet is also examined.

Lastly this unit reviews the various instruments that are used for making payments and their respective impact on cash flow.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Describe the role of treasury and cash management including the factors that influence how those functions are performed within a company.
2. Define cash management from both the bank and corporate perspectives and explain why it is important to companies.
3. Explain the significance of liquidity to a company and the sources, uses and cost of maintaining liquidity.
4. Comprehend important cash management concepts such as the cash flow cycle, float, finality, availability and the time value of money and describe how these concepts are used by cash managers.
5. Recognise where float arises in the supply chain process and recommend what can be done to reduce float
6. List the main duties of a bank and describe the differences between types of bank account.
7. Calculate interest on a bank account.
8. Describe the different types of charges levied for bank services and the techniques that can be used to reduce bank fees.
9. Evaluate the advantages and disadvantages of different payment types (electronic and paper-based) and recommend appropriate payment vehicles for different transactions and situations.
10. Be aware of regional preferences and know which payment instruments are favoured in which countries.
11. Explain the impact of Basel III on the banking sector and treasurers.

# 1 INTRODUCTION TO TREASURY AND CASH MANAGEMENT

## 1.1 Evolution of the treasury function

**LO1 Examine what factors have influenced the evolution of the treasury function into a strategic partner in the business.**

Indicative content which outlines the scope of learning expected:

- Evolution of the treasury function:
  - changing economy
  - changing technology
  - focus on liquidity and working capital
  - regulatory environment
  - standardisation
  - professional development

## 1.2 The role of treasury

**LO2 Explain the broader role of treasury, its relationship to cash management and why that role may vary at different companies.**

Indicative content which outlines the scope of learning expected:

- The role of treasury
  - core tasks performed by treasury
    - currency management
    - funding management
    - investment management
    - bank relationship management
    - risk management
    - cash management
  - relationship of treasury and cash management
  - why the treasury role varies by company

## 1.3 Corporate definition of cash management

**LO3 From the corporate perspective, define the role of cash management and the range of functions cash managers may be expected to undertake.**

Indicative content which outlines the scope of learning expected:

- Corporate definition of cash management
  - usual functions performed by the cash manager
    - day-to-day cash control
    - bank account structure
    - collections
    - payments
    - short-term investment
    - short-term borrowing
  - additional functions that may be performed by the cash manager
    - short-term foreign exchange and hedging
    - medium and short-term cash flow forecasting
    - monitoring and assisting with risk management
    - managing cash management bank relationships
    - intercompany multilateral netting
    - cross-border liquidity management
    - trade finance
    - account reconciliation
    - receivables management
    - payables management
    - selecting and implementing cash management systems and interfacing with internal systems such as ERP systems
  - relationship between cash management and liquidity management

## 1.4 Bank definition of cash management

**LO4 Compare how the bank definition of cash management differs from the corporate definition.**

Indicative content which outlines the scope of learning expected:

- Bank definition of cash management
  - products and services banks sell to cash managers
  - comparison of the corporate and bank definitions of cash management

## 1.5 Benefits of good cash management

**LO5 Explain how good cash management can benefit companies.**

Indicative content which outlines the scope of learning expected:

- Benefits of good cash management
  - better control of financial risk
  - opportunity for profit
  - strengthened balance sheet
  - increased stakeholder confidence in the company
  - improved operational efficiencies

## 1.6 The role of cash management at different companies

**LO6 Discuss the factors that influence the role of cash management in different companies.**

Indicative content which outlines the scope of learning expected:

- The role of cash management at different companies
  - major factors that influence the structure of the cash management function
    - size of the company
    - industry
    - nature of the business
    - domicile
    - extent of globalisation
    - legal structure
    - account ownership
    - corporate culture
    - deployment of technology
    - treasury structure
    - existing banking relationships
    - personal style of the treasurer

# 2 IMPORTANT CASH MANAGEMENT CONCEPTS

## 2.1 The nature of cash flows

**LO7 Discuss the nature of cash flows and how they are viewed by different areas of the business.**

Indicative content which outlines the scope of learning expected:

- The nature of cash flows
  - the operating accounting and cash flow cycles

## 2.2 The importance of liquidity

**LO8 Explain why liquidity is vital to the survival of a business and what are the uses and sources of liquidity for a company.**

Indicative content which outlines the scope of learning expected:

- The importance of liquidity
  - sources and uses of liquidity
    - internal sources
    - external sources
    - activities that use a company's liquidity
  - the cost of maintaining liquid assets

## 2.3 Important cash management concepts

**LO9 Discuss the relevance to cash managers of certain important cash management concepts.**

Indicative content which outlines the scope of learning expected:

- Important cash management concepts
  - value
  - availability
  - finality
  - security of principal
  - opportunity cost of funds
  - time value of money

## 2.4 The cash manager's role in managing float

**LO10 Recommend ways in which float can be managed to improve the cash manager's liquidity position.**

Indicative content which outlines the scope of learning expected:

- The cash manager's role in managing float
  - cash management float
    - disbursement float
    - collection float
  - float throughout the supply chain
  - calculating the cost of float
  - why float arises
  - how to reduce float

# 3 INTRODUCTION TO BANKING

## 3.1 The role of the bank

**LO11 Compare the roles and responsibilities of different types of bank.**

Indicative content which outlines the scope of learning expected:

- The role of the bank
  - the role of the central bank
  - central bank reporting
  - types of bank
  - main duties of a bank
    - handle customers' business in a safe and professional manner
    - honour customers' cheques
    - comply with any express instruction from the customer
    - maintain customers' confidentiality
    - give reasonable notice if it wishes to close an account
    - provide a balance of account on request and send statements
    - receive customers' money and cheques
    - repay money on demand
    - advise customers immediately of any improper event affecting the account
    - exercise proper care and skill when performing all its duties
  - commercial bank services

## 3.2 Documentation required to open a bank account

**LO12 Describe how account ownership can affect the documentation required to open an account.**

Indicative content which outlines the scope of learning expected:

- Documentation required to open a bank account
  - personal customers
  - joint accounts
  - sole traders
  - partnership accounts
  - limited liability companies
  - trustee accounts
  - resident and non-resident accounts

## 3.3 Factors that influence bank charges and fees

**LO13 Review the factors that influence the fees a bank charges its customers.**

Indicative content which outlines the scope of learning expected:

- Factors that influence bank charges and fees
  - balances maintained
  - volumes
  - additional services
  - relationship

## 3.4 How banks calculate interest

**LO14 Perform interest calculations from the bank's perspective.**

Indicative content which outlines the scope of learning expected:

- How banks calculate interest
  - understanding value dates
  - the interest calculation
  - tiered interest rates
    - stepped and banded interest calculations

## 3.5 Reducing bank charges

**LO15 Recommend ways in which banking fees can be reduced.**

Indicative content which outlines the scope of learning expected:

- Reducing bank charges
  - understand the charging methods
  - review types of payment and method of submission
  - use better cash management techniques
  - review existing arrangements
  - bank fees checklist

## 3.6 Managing bank risk

**LO16 Describe how banks manage their credit risk and balance sheet and how Basel III impacts not just banks but companies also.**

Indicative content which outlines the scope of learning expected:

- Managing bank risk
  - bank credit risk and balance sheet management
  - impact of the Basel accords on both banks and treasurers

# 4 BASIC BANKING SERVICES

## 4.1 Payment instruments

**LO17 Recommend appropriate vehicles for various payment or collection scenarios based on the characteristics, advantages and disadvantages of different payment instruments.**

Indicative content which outlines the scope of learning expected:

- Payment instruments
  - physical instruments
    - cash
    - cheques
    - paper giros
    - bills of exchange
    - promissory notes
    - bankers' drafts
  - electronic payment instruments
    - wire transfer
    - automated clearing house (ACH)
    - direct debit
    - electronic bills of exchange
    - electronic bill payment
    - mobile payments
  - cards
    - charge
    - credit
    - debit
    - payment
    - smart
    - using cards
  - comparison of payment types
- Regional preferences
- Impact of payment and collection instruments on cash flow

# WORKING CAPITAL MANAGEMENT

## Unit two


- Rationale for unit two
- Introduction to unit two
- Overarching learning outcomes
- Unit two content


## RATIONALE FOR UNIT TWO

**Since the financial crisis of 2008, managing working capital has never been more important to the survival of a business.**

Working capital is managed through the current accounts (short-term assets and liabilities) of a company's financial statements. The financial statements can provide an insight, both internally and externally, as to how efficiently a company is being managed and to a lesser extent, how it will perform in the future. Senior management uses the information to fine tune strategic decisions, cash managers use the financials to better manage working capital and financial institutions rely on published accounts to provide insights into a company's liquidity and ability to repay debt. As not everyone has the benefit of an accounting background this unit seeks to provide a high level definition and explanation of the relevance to treasury of the most important financial statements and ratios before analysing how treasurers use the current accounts to better manage liquidity and, more specifically, working capital. The unit also reviews other sources for improving working capital such as trade financing vehicles and specialised bank products for reducing float.

## INTRODUCTION TO UNIT TWO

### This unit explains how the financial statements are used by different parties to better understand and manage the company.

It reviews and defines the components of the balance sheet, income statement, statement of changes in equity and statement of cash flows. It also describes the important ratios used by cash managers and financial institutions in assessing a company's liquidity and cost of capital.

The current accounts (current assets and current liabilities) are also the key to managing working capital, i.e. freeing up liquidity to fund current operations. This unit discusses how the cash manager can improve these balance sheet items by ensuring that monies due in (receivables or debtors) are received as quickly as possible, and that monies due out (payables or creditors) are timed to be paid only when due. While not strictly responsible for inventory, the cash manager can also influence business practices to accelerate the conversion of inventory into receivables and cash. Analysing certain balance sheet items provides valuable insights into the cash conversion cycle and how efficiently a company is using its liquidity. Nonetheless, these aspects have to be managed within a broader business context, taking into account:

- Commercial relationships
- The economic environment
- The business environment (whether domestic or international)
- The banking environment
- The company's own corporate culture and organisation

Lastly, this unit reviews the trade financing vehicles that can be used to release cash back into the operating cycle and the specialised bank services designed to help a company manage float.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Analyse how a company is being managed through the interpretation of a company's financial statements.
2. Perform simple financial analysis by computing important financial ratios, such as liquidity, gearing and performance ratios.
3. Critically assess accounts receivable and accounts payable in order to recommend how the organisation can optimise working capital.
4. Recommend improvements to the cash conversion cycle through the calculation of the cash conversion cycle and the value of trade discounts.
5. Identify the ways in which cash can be released back into the operating cycle using trade financing vehicles.
6. Evaluate the benefits of banking services designed to manage float, and quantify the benefits of using a lockbox.

# 1 UNDERSTANDING THE FINANCIAL STATEMENTS

## 1.1 Financial statements and key accounting concepts

**LO1 Describe the primary financial statements and key accounting concepts.**

Indicative content which outlines the scope of learning expected:

- Financial statements and key accounting concepts
  - primary financial statements
    - statement of financial position (balance sheet)
    - statement of profit or loss and other comprehensive income
    - statement of changes in equity
    - statement of cash flows
  - GAAP versus IFRS
  - published accounts versus management accounts
  - key accounting concepts

## 1.2 Balance sheet/statement of financial position

**LO2 Explain the key terminology used in the balance sheet and how it is constructed.**

Indicative content which outlines the scope of learning expected:

- Balance sheet/statement of financial position
  - definition of the balance sheet
  - balance sheet terminology
    - assets
    - liabilities
    - equity
    - capital
    - working capital
  - example of a balance sheet

## 1.3 Income statement/statement of profit or loss and other comprehensive income

**LO3 Explain the key terminology used in the income statement and how it is constructed.**

Indicative content which outlines the scope of learning expected:

- Income statement/statement of profit or loss and other comprehensive income
  - definition of the income statement
  - income statement terminology
    - revenue
    - cost of sales
    - gross profit
    - depreciation and amortisation
    - distribution costs and administrative expenses
    - operating profit
    - earnings before interest and tax (EBIT)
    - earnings before interest, tax, depreciation and amortisation (EBITDA)
    - other income
    - finance costs
    - profit before taxation
    - taxation
    - profit for the year
    - other comprehensive income
    - dividends
    - retained earnings
  - example of an income statement

## 1.4 Statement of changes in equity

**LO4 Explain the key accounts used in the statement of changes in equity and how it is constructed.**

Indicative content which outlines the scope of learning expected:

- Statement of changes in equity
  - definition of statement of changes in equity
  - example of a statement of changes in equity

## 1.5 Statement of cash flows

**LO5 Explain the key components used in the statement of cash flows and how it is constructed.**

Indicative content which outlines the scope of learning expected:

- Statement of cash flows
  - definition of statement of cash flows
  - example of a statement of cash flows
  - components of a statement of cash flows
    - cash flows from operating activities
    - cash flows from investing activities
    - cash flows from financing activities

## 1.6 Important ratios for cash managers

**LO6 Assess the purpose of important financial ratios and how they are used by cash managers.**

Indicative content which outlines the scope of learning expected:

- Important ratios for cash managers
  - liquidity ratios
    - debt/EBITDA
    - current ratio
    - quick ratio (Acid test)
  - gearing and leverage ratios
    - gearing
    - leverage
    - interest cover (Times interest earned TIE)
  - performance measures
    - return on equity (ROE)
    - earnings per share (EPS)

## 1.7 Calculating ratios

**LO7 Compute basic ratios, such as liquidity, gearing and performance measures.**

Indicative content which outlines the scope of learning expected:

- Calculating ratios
  - liquidity ratios
    - debt/EBITDA
    - current ratio
    - quick ratio (Acid test)
  - gearing and leverage ratios
    - gearing
    - leverage
    - interest cover (Times interest earned TIE)
  - performance measures
    - return on equity (ROE)
    - earnings per share (EPS)

# 2 OPTIMISING WORKING CAPITAL

## 2.1 Introduction to working capital management

**LO8 Discuss the components of working capital and how they impact sources and uses of liquidity within a company.**

Indicative content which outlines the scope of learning expected:

- Working capital
  - definition of working capital
  - the working capital cycle
  - net working capital

## 2.2 The Cash Conversion Cycle

**LO9 Explain how the cash conversion cycle can be used to analyse how a company is managing its working capital.**

Indicative content which outlines the scope of learning expected:

- The cash conversion cycle (CCC)
  - definition of the cash conversion cycle
  - interpreting the information

## 2.3 Calculating the Cash Conversion Cycle

**LO10 Compute the cash conversion cycle.**

Indicative content which outlines the scope of learning expected:

- Calculating the CCC

## 2.4 Receivables management

**LO11 Evaluate the different ways in which the cash manager can manage and improve receivables management at a company.**

Indicative content which outlines the scope of learning expected:

- Receivables management
  - responsibility for the receivables function
  - the cost of outstanding receivables
  - cross-border collections management
  - improving receivables
  - trade discounts
  - the calculating the cost/value of trade discounts

## 2.5 Payables management

**LO12 Evaluate the different ways in which the cash manager can manage and improve payables management at a company.**

Indicative content which outlines the scope of learning expected:

- Payables management
  - achieving a commercial balance
  - method of payment
  - improving payables

## 2.6 Trade financing vehicles

**LO13 Identify the ways in which cash can be released back into the operating cycle using trade financing vehicles.**

Indicative content which outlines the scope of learning expected:

- Trade financing vehicles
  - acceptance financing
  - banker's acceptance
  - acceptance credit
  - factoring and invoice discounting
  - forfaiting
  - supply chain financing (SCF)
  - trade credit
  - trade bills of exchange
  - inventory financing
  - e-invoicing

## 2.5 Bank services for managing float

**LO14 Evaluate the benefit of using banking services designed to manage both collection and disbursement float.**

Indicative content which outlines the scope of learning expected:

- Bank services for managing float
  - lockboxes
    - retail lockbox
    - wholesale lockbox
    - hybrid lockbox
    - electronic lockbox
    - lockbox benefits for giro credits
  - calculating cost/benefit of a lockbox
  - intervention accounts
  - remote disbursement
  - direct collections

# MAKING AND RECEIVING INTERNATIONAL PAYMENTS

## Unit three


- **Rationale for unit three**
- **Introduction to unit three**
- **Overarching learning outcomes**
- **Unit three content**


## RATIONALE FOR UNIT THREE

**Doing business internationally creates a number of additional complications for the cash manager, particularly when making cross-border payments and receiving funds from overseas.**

It is a frequent source of frustration when these transactions do not go smoothly or efficiently, involving time delays, additional costs and lengthy follow-up. This unit aims to bring an understanding of the process, the players and the available tools in order to help the cash manager improve the process of making and receiving international payments, not just in terms of making the process more efficient but also in mitigating risk.

## INTRODUCTION TO UNIT THREE

**Each country has its own clearing and settlement systems to handle both paper and electronic payments, and with the exception of the Single Euro Payments Area (SEPA), these systems are usually not compatible.**

When payments are made between different countries, therefore, it is necessary to use intermediaries to facilitate the transfer of funds and the handover from one system to another.

In this unit we examine and illustrate the primary types of clearing and settlement systems found worldwide, many of which follow the same basic format and principles. We then discuss the process of moving money from one system to another, describing the international banking infrastructure, the major players, their roles and the different ways in which international funds transfers are effected, both electronic and non-electronic. The only thing of which the cash manager can be certain is that cross-border payments involve additional expense and processing time.

As most cash managers discover, there comes a point where the value and/or volume of cross-border transactions is such that it becomes more efficient and cost effective to maintain foreign currency (FCY) accounts to make and receive payments. We explore the options available for the location of such accounts as well as discussing the advantages and disadvantages of each option.

Finally, we examine the role played by trade vehicles in mitigating the risk inherent in international transactions.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Explain the challenges and issues in making international payments and collections.
2. Differentiate between the various types of clearing and settlement systems.
3. Determine the most appropriate payment method for making international payments.
4. Illustrate the role of the key players in making electronic and non-electronic cross-border payments.
5. Determine how international payments and collections can be made more efficiently.
6. Evaluate the optimal location for a foreign currency account.
7. Evaluate the options available to the cash manager in using trade vehicles to mitigate risk in international transactions.

# 1 CLEARING AND SETTLEMENT SYSTEMS

## 1.1 Clearing versus settlement

**LO1 Differentiate between the respective purposes of clearing and settlement systems.**

Indicative content which outlines the scope of learning expected:

- Clearing versus settlement
  - definition of clearing
  - definition of settlement
  - types of settlement system
  - why these systems are necessary

## 1.2 Net Settlement systems

**LO2 Explain, with examples, the net settlement process.**

Indicative content which outlines the scope of learning expected:

- Net settlement systems (NSS)
  - definition of net settlement systems
  - example of an NSS system – cheque clearing in the UK

## 1.3 Developments in cheque clearing and processing

**LO3 Analyse the impact of recent developments in cheque clearing and processing.**

Indicative content which outlines the scope of learning expected:

- Developments in cheque clearing and processing
  - cheque truncation
  - the impact of imaging
  - remote deposit capture

## 1.4 Real-time gross settlement systems

**LO4 Describe, with examples, the real-time gross settlement system.**

Indicative content which outlines the scope of learning expected:

- Real-time gross settlement systems (RTGS)
  - definition of real-time gross settlement systems
  - example of an RTGS system – Clearing House Automated Transfer System (CHATS), Hong Kong

## 1.5 Hybrid settlement systems

**LO5 Describe, with examples, hybrid settlement systems.**

Indicative content which outlines the scope of learning expected:

- Hybrid settlement systems
  - definition of hybrid settlement systems
  - example of a hybrid system – Faster Payments Service (FPS), UK

## 1.6 Currency settlement outside the currency centre

**LO6 Explain, with examples, currency settlement outside of the currency centre.**

Indicative content which outlines the scope of learning expected:

- Currency settlement outside of the currency centre
  - currency clearing in the UK
  - Euro clearing
  - Hong Kong foreign currency clearing

## 1.7 Credit card clearing and processing

**LO7 Explain the credit card clearing process.**

Indicative content which outlines the scope of learning expected:

- Credit card clearing and processing

# 2 INTERNATIONAL PAYMENTS

## 2.1 The complexities of doing business internationally

**LO8 Discuss the issues and challenges companies face when doing business internationally, especially with regard to making and receiving cross-border payments.**

Indicative content which outlines the scope of learning expected:

- Issues and challenges in conducting business internationally
  - country environment
  - cultural differences
  - economic and monetary environment
  - legal and regulatory context
  - banking environment
  - communications infrastructure
  - tax implications
- Considerations when making and receiving international payments

## 2.2 Correspondent banking

**LO9 Explain the role of intermediaries in making international payments using correspondent banks and the terms 'nostro' and 'vostro' accounts.**

Indicative content which outlines the scope of learning expected:

- Correspondent banking
  - the role of the correspondent bank
  - nostro and vostro accounts

## 2.3 International payments and collections – Non-electronic

**LO10 Evaluate the different ways in which cheques are cleared and settled internationally.**

Indicative content which outlines the scope of learning expected:

- International payments and collections – cheques
  - using foreign currency cheques
  - collection method
  - direct collection method
  - negotiation method
  - foreign currency bank cheque /draft payments

## 2.4 Making international cheque collections more efficient

**LO11 Recommend ways in which the international cheque collection process can be made more efficient.**

Indicative content which outlines the scope of learning expected:

- Making international cheque collections more efficient
  - cut out intermediaries
  - use faster transit methods
  - reduce collection times
  - evaluate costs
  - reduce foreign exchange commissions

## 2.5 International payments and collections – Electronic

**LO12 Determine the most appropriate option for making international payments electronically.**

Indicative content which outlines the scope of learning expected:

- International payments and collections – electronic
  - international wire transfers
  - international ACH
  - international collections using credit / debit / charge cards
  - outsourcing international payments

## 2.6 Banking options for making international payments

**LO13 Select the optimal routing for banks to make international payments.**

Indicative content which outlines the scope of learning expected:

- Banking options for making international payments
- Routing options for international wire transfers
  - using the local payment systems
  - using a correspondent bank
  - using a network bank
  - using a banking alliance or banking club
- Selecting the best option for international payments

## 2.7 SWIFT

**LO14 Assess the role played by SWIFT in international payments and cash management.**

Indicative content which outlines the scope of learning expected:

- SWIFT
  - characteristics of the SWIFT system
  - SWIFTNet messaging services
  - SWIFT message standards
    - message type (MT)
    - customer payments
    - bank-to-bank applications
    - balance and transaction reporting
    - XML messages (MX)
  - SWIFT currency codes
  - standardisation of international bank account numbers

## 2.8 International payments using SWIFT

**LO15 Determine the most appropriate routing for making international payments using the SWIFT network.**

Indicative content which outlines the scope of learning expected:

- International payments using SWIFT
  - serial method
  - cover method
  - third party payments using the MT101

## 2.9 SWIFT Services for Corporates

**LO16 Evaluate the services offered by SWIFT for corporates and their impact on cash management.**

Indicative content which outlines the scope of learning expected:

- SWIFT services for corporates
  - multi-bank reporting via SWIFT
  - corporate access to SWIFTNet
    - customer-owned, in-house private infrastructure
    - outsourced, shared infrastructure (Service Bureau)
    - outsourced, Alliance Lite2
  - benefits of SWIFT for corporates
  - other corporate solutions from SWIFT
    - cash management
    - treasury payments
    - bulk payments
    - treasury deal confirmation
    - bank account management
    - trade finance and supply chain finance
    - personal digital identify verification

# 3 OPENING FOREIGN CURRENCY ACCOUNTS

## 3.1 When to open a FCY account

**LO17 Determine when it is appropriate to open a foreign currency account in order to manage international payments and receipts more efficiently.**

Indicative content which outlines the scope of learning expected:

- When to open a foreign currency (FCY) account
  - questions to ask when opening a FCY account
    - what are the charges/costs incurred by not having a currency account?
    - what additional charges/costs are incurred in opening a currency account?
    - what are the liquidity, foreign exchange and interest rate risks?
    - what are the tax and regulatory issues?
    - what are the business implications?
  - knowing when to close a FCY account
  - sample scenarios
    - company in Singapore
    - company in the United States of America
    - company in Hong Kong
    - company in Germany

## 3.2 Where to hold a FCY account

**LO18 Determine the optimal location in which to open a FCY account to suit the business purposes.**

Indicative content which outlines the scope of learning expected:

- Where to hold a FCY account
  - available locations
    - multi-currency accounts with local bank
    - accounts that are domestically domiciled in the currency centre
    - multi-currency account with an international treasury centre
  - considerations in currency account location
  - making payments from a currency account
  - the multi-currency account

## 3.3 Assessing the costs of a FCY account

**LO19 Assess the total costs and considerations in maintaining a FCY account.**

Indicative content which outlines the scope of learning expected:

- The cost/benefit analysis
  - terms and conditions for a FCY account
  - bank fees and charges
    - value dating
    - commission charges
    - commissions in lieu of exchange (CILE)
    - transaction charges
    - turnover charges
    - lifting fees
    - account maintenance fees
    - cable or telex charges
    - correspondent bank charges
  - billing/account analysis statement

## 3.4 Regulatory and ownership issues

**LO20 Identify the tax, legal and ownership issues of maintaining a FCY account.**

Indicative content which outlines the scope of learning expected:

- Regulatory and ownership issues
  - differentiation between resident and non-resident accounts
  - interest on bank accounts
  - withholding taxes on interest paid and earned
  - stamp duties on loans
  - notional pooling and cash concentration issues
  - central bank reporting
  - account ownership issues

# 4 INTERNATIONAL TRADE VEHICLES

## 4.1 Cash management concerns with international trade

**LO21 Evaluate the concerns of both the buyer and the seller when conducting international trade.**

Indicative content which outlines the scope of learning expected:

- Cash management concerns with international trade
  - purchase to payment cycle
    - mitigating delivery risk
    - extending cash outflows
  - order to cash cycle
    - mitigating payment risk
    - accelerating cash inflows

## 4.2 International trade terms

**LO22 Define the most commonly used terms in international trade.**

Indicative content which outlines the scope of learning expected:

- International trade terms
  - acceptance
  - advising bank
  - avalisation
  - banker's acceptance (BA)
  - bank payment obligation (BPO)
  - bill of exchange
  - bill of lading
  - cash in advance
  - cash against documents
  - clean draft
  - clean letter of credit
  - collecting bank
  - confirmed letter of credit
  - confirming bank
  - documentary collection
  - documents against acceptance
  - documents against payment
  - draft
  - irrevocable letter of credit
  - issuing bank
  - letter of credit (L/C)
  - negotiating bank
  - open account
  - remitting bank
  - revocable letter of credit
  - seasonal dating
  - sight draft
  - standby letter of credit
  - time draft
  - trade acceptance
  - unconfirmed letter of credit

## 4.3 Mitigating international risk

**LO23 Identify the risks associated with different terms of trade and trade vehicles used for international transactions.**

Indicative content which outlines the scope of learning expected:

- Mitigating international risk
  - payment terms used in international trade
  - documentary collections
  - avalisation
  - letters of credit
    - features of letters of credit
  - bank payment obligations (BPO)

# THE INTERNATIONAL CASH MANAGEMENT FUNCTION

## Unit four


- Rationale for unit four
- Introduction to unit four
- Overarching learning outcomes
- Unit four content


## RATIONALE FOR UNIT FOUR

### Cash flow forecasting is at the very heart of good cash management.

The forecast allows the cash manager to ensure that in the short– term cash is managed efficiently and that there is sufficient money to pay the bills in a timely fashion, and in the medium term that liquidity is managed in order to optimise working capital and keep the business in operation. The sooner a shortfall can be predicted the better the terms at which the company will be able to cover the expected deficit. The earlier treasury can foresee an excess of cash, the better use to which that the surplus can be applied. Forecasting also plays a significant role in helping treasury assess and manage risk. Ironically, traditionally it has been one of the functions that treasurers admit they do most poorly, for a number of different reasons. This unit highlights the importance of forecasting to cash management and its impact on short-term borrowing and investing. The forecast then allows the cash manager to make investment and/or financing decisions that are also discussed in this unit.

## INTRODUCTION TO UNIT FOUR

**This unit highlights the importance of forecasting and examines the more common methods used by cash managers.**

A good forecast is an essential tool in managing a company's liquidity, not just for short-term day-to-day cash management but also for medium-term investment and borrowing. It is also instrumental in managing risks, enhancing returns and maintaining financial controls. Cash forecasting tools range from the simple spreadsheet to sophisticated computer models integrated into a company's enterprise-wide resource planning (ERP) system. What is most important, however, is that the technique selected is fit for the purpose, reliable and accurate.

As a next step, this unit discusses the investment process and reviews the most commonly used short-term investment instruments used by cash managers in managing liquidity. It also explains some of the essential calculations used for computing yields and differentiates between conventions used for different instruments. Due to the intertwined nature of the borrowing and investment topics (one company's debt is another's investment) many instruments that are covered here as also referred to in the short-term borrowing topic albeit from a different context.

The last topic covered is short-term borrowing, with a focus on external sources of financing. This complements the information provided in Unit 2 where the trade financing vehicles were discussed. In addition to explaining the process and calculations used in determining the all-in cost of borrowing, it also addresses the issues of loan documentation.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Assess the different purposes for which treasury uses the major cash flow forecasting techniques.
2. Construct a forecast using the information provided.
3. Recommend any possible future courses of action having reviewed the implications of cash forecasts.
4. Recommend an appropriate investment strategy based on the assessment of the characteristics of short-term investment vehicles.
5. Determine the optimal investment strategy by comparing interest rates on investment instruments.
6. Recommend a financing strategy based on the characteristics of short-term financing instruments available to the treasurer.
7. Determine the all-in-cost of financing and the implications of loan documentation.

# 1 CASH FLOW FORECASTING

### 1.1 The importance of cash flow forecasting to treasury

**LO1 Explain why cash flow forecasting is important to treasury, the components of a good forecast and why it is often a difficult function to perform.**

Indicative content which outlines the scope of learning expected:

- Importance of cash flow forecasting to treasury
  - liquidity management
  - minimising cost of funds
  - optimising use of surplus balances
  - foreign exchange risk management
  - working capital management
  - optimising core and ancillary borrowing facilities
  - setting and monitoring longer-term investment and financing strategies
  - preparing budgets for capital expenditure
  - monitoring and setting strategic objectives
  - financial control
- Benefits of cash forecasting
- Components of a 'good' cash forecast
- Why cash forecasting is difficult

### 1.2 Selecting an appropriate time horizon for the forecast

**LO2 Explain how cash managers use cash flow forecasts with different time horizons.**

Indicative content which outlines the scope of learning expected:

- Selecting an appropriate time horizon for the forecast
  - short-term forecasts
  - medium-term forecasts
  - long-term forecasts

### 1.3 Developing a cash forecast

**LO3 Describe the process of developing a cash forecast and the factors that are important to take into consideration.**

Indicative content which outlines the scope of learning expected:

- Developing a cash forecast
  - the process
  - considerations when developing a forecast
    - timing
    - accuracy
    - validation
    - sensitivity analysis

### 1.4 Cash forecasting techniques

**LO4 Construct an appropriate cash forecast.**

Indicative content which outlines the scope of learning expected:

- Cash forecasting techniques
  - short and medium-term forecasting techniques
    - receipts and disbursements model
    - moving average
    - exponential smoothing
    - regression analysis
    - distribution model
  - long-term forecasting techniques
    - Pro forma statement forecast

### 1.5 How to use a cash forecast

**LO5 Analyse the possible courses of action and further considerations for a cash manager after constructing a cash forecast.**

Indicative content which outlines the scope of learning expected:

- How to use a cash forecast

## 1.6 Cash forecasting systems

**LO6 Identify where treasury can find systems for cash flow forecasting.**

Indicative content which outlines the scope of learning expected:

- Cash flow forecasting systems
  - treasury management systems
  - enterprise resource planning vendors
  - banks

# 2 SHORT–TERM INVESTING

## 2.1 Investment policy guidelines

**LO7 Determine what should be included in an investment policy for treasury.**

Indicative content which outlines the scope of learning expected:

- Investment policy guidelines
  - treasury objectives
  - risks to mitigate
    - credit risk
    - interest rate risk
    - liquidity risk
  - policy guidelines
    - policy name
    - policy objective
    - policy direction
    - risk measurement
    - benchmarking
    - responsibility/oversight
    - procedures
    - decision making
    - policy key performance indicators (KPIs)
    - reporting/feedback
    - continuous improvement
  - investment criteria

## 2.2 Investment decision process

**LO8 Discuss how a cash manager might approach the investment decision process.**

Indicative content which outlines the scope of learning expected:

- Investment decision process
  - how much to invest?
  - In which currency?
  - for how long will the funds be available?
  - where are the funds located?

## 2.3 Developing an investment Strategy

**LO9 Recommend an appropriate investment strategy.**

Indicative content which outlines the scope of learning expected:

- Developing an investment strategy
  - the yield curve
  - investment strategies
    - passive
    - active
    - hybrid
    - outsourcing
    - tax–driven
  - selecting an investment
    - the SLY principle
    - assessing credit risk
    - assessing liquidity
    - assessing return

## 2.4 Overview of the money markets

**LO10 Identify the factors that influence the return on different investment instruments.**

Indicative content which outlines the scope of learning expected:

- Overview of the money market
  - the primary and secondary markets
  - reading money market rates
  - factors influencing yield on investment instruments
    - maturity date
    - creditworthiness of borrower
    - liquidity
    - interest basis
    - day and year basis
    - taxable status

## 2.5 Comparing yields on different instruments

**LO11 Determine the optimal investment instrument based on a comparison of yield or return.**

Indicative content which outlines the scope of learning expected:

- Comparing yields on different instruments
  - rate basis
  - investment instrument characteristics
  - comparing yields
    - coupon or simple interest rate
    - discount rate
    - compound interest rate
    - investing in the secondary market
    - comparing instruments on a different year basis

## 2.6 Short-term investment options

**LO12 Recommend an investment strategy based on the cash manager's investment policy objectives and the characteristics of available investment instruments.**

Indicative content which outlines the scope of learning expected:

- Short-term investment options
  - government issuers
  - banks and other financial institutions
  - corporate instruments
  - money market funds
  - comparison of investment instruments
  - how short-term funds are being invested

## 2.7 Linking investment strategy to the cash forecast

**LO13 Determine the optimal investment strategy based on the cash forecast.**

Indicative content which outlines the scope of learning expected:

- Linking investment strategy to the cash forecast
  - illustrative calculation
  - further considerations

# 3 SHORT–TERM BORROWING

## 3.1 The financing process

**LO14 Describe a typical financing process.**

Indicative content which outlines the scope of learning expected:

- The financing process
  - the role of forecasting
  - the financing decision process

## 3.2 Sources of short-term financing

**LO15 Discuss the implications of different borrowing options when selecting financing.**

Indicative content which outlines the scope of learning expected:

- Sources of short-term financing
  - internal sources of financing
  - external sources of financing
  - other considerations when selecting a financing option

## 3.3 Short-term financing instruments

**LO16 Recommend a borrowing strategy based on the characteristics of the different short-term financing instruments available to the treasurer.**

Indicative content which outlines the scope of learning expected:

- Short-term financing instruments
  - short-term bank financing
    - overdrafts
    - money market advances
    - revolving credit facility (RCF)
  - borrowing from the financial markets
    - commercial paper (CP)
    - repurchase agreement (repo)

## 3.4 Comparing financing options

**LO17 Select the financing vehicle that is most beneficial in terms of costs and conditions.**

Indicative content which outlines the scope of learning expected:

- Comparing financing options
  - factors that influence the cost of borrowing
  - calculating the all-in cost of borrowing using commercial paper
  - calculating the all-in cost of borrowing using a committed line of credit

## 3.5 Loan documentation

**LO18 Assess how loan documentation might influence your recommendation of a financing strategy.**

Indicative content which outlines the scope of learning expected:

- Loan documentation
  - terms of the agreement
    - conditions precedent
    - representations and warranties
    - conditions of utilisation
    - specific terms
    - security
    - interest rates
    - other costs
    - covenants
    - material adverse changes
  - covenants, restrictions and requirements
    - affirmative covenants
    - negative covenants
    - financial covenants

# MANAGING THE INTERNATIONAL TREASURY FUNCTION

Unit five


- Rationale for unit five
- Introduction to unit five
- Overarching learning outcomes
- Unit five content


## RATIONALE FOR UNIT FIVE

**In order to manage its cash efficiently treasury needs to decide on an internal structure that will best serve treasury's objectives.**

It will then seek to develop banking relationships and select technology and systems to support the function. In today's environment, it is also especially important to be mindful of the governance, regulatory and tax consequences of any cross-border liquidity management structures that are implemented. This unit examines the advantages and disadvantages of different treasury structures, how to manage and select banking relationships and how technology is used to enhance cash and liquidity management. It also provides an overview of the important policy, governance, regulatory and tax issues as they specifically impact treasury and the cash management functions.

## INTRODUCTION TO UNIT FIVE

### There are many factors that influence how a treasury is organised and supported.

This unit takes a broad look at the issues, both financial and non–financial, internal and external, that determine the optimal structure for a company and how that is supported through the financial institutions and technology.

Initially we review the advantages and disadvantages of a centralised treasury and the many specialised vehicles treasury can use to gain economies of scale, outsourcing functions and optimise tax efficiencies. We then examine the many roles a bank can play and the process a company goes through in selecting its cash management banking partners.

As companies manage increasingly geographically dispersed organisations and multiple banking relationships, technology plays an important role in facilitating the communications and processes. This unit discusses the cash management systems that are currently available, implementation challenges and system security issues.

Finally, treasury is subject to both internal and external constraints. No discussion of the treasury organisation would be complete without reviewing the policy, regulatory and tax issues. Although, as a general rule, cash management is not the driving factor behind tax planning, any and all cash management activities and structures will have tax consequences, positive or negative. These need to be taken into account when deciding on an appropriate cash management structure.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Evaluate the advantages and disadvantages of different treasury structures, from centralised to decentralised.
2. Recommend appropriate treasury structures for different scenarios.
3. Recognise the importance of bank relationship management, and the various roles that banks fulfil for treasury.
4. Understand the bank selection process and how the request for proposal (RFP) is used to select a banking relationship.
5. Critically analyse the role that technology plays in supporting treasury.
6. Evaluate the functionality offered by different treasury systems.
7. Assess the issues when implementing new technology, reviewing performance and ensuring system security.
8. Explain the importance of treasury policies and procedures and how they can be used to develop key performance indicators to measure treasury performance.
9. Evaluate the regulatory and taxation issues that particularly impact cash management decisions and structures.

# 1 TREASURY STRUCTURES

## 1.1 Factors influencing treasury structure

**LO1 Recommend the optimal way for a treasury to be structured based on the circumstances presented.**

Indicative content which outlines the scope of learning expected:

- The treasury structure
  - factors that influence treasury structure
  - cost centre versus profit centre
  - the case for centralisation
  - centralised versus decentralised treasury
  - the regional treasury organisation
  - the road to centralisation

## 1.2 Specialised treasury vehicles – economies of scale

**LO2 Compare the benefits of different treasury vehicles that produce economies of scale.**

Indicative content which outlines the scope of learning expected:

- Specialised treasury vehicles – economies of scale
  - payment factory
  - collection factory
  - in-house bank (IHB)
  - shared services centre (SSC)

## 1.3 Specialised treasury vehicles – outsourcing

**LO3 Assess the vehicles that can be used to outsource technology or specific functions and their future impact on treasury.**

Indicative content which outlines the scope of learning expected:

- Specialised treasury vehicles – outsourcing
  - software as a service (SaaS)
  - business service provider (BSP)
  - future impact of outsourcing treasury

## 1.4 Specialised treasury vehicles – tax efficiencies

**LO4 Make a business case for implementing a treasury centre and its selected location.**

Indicative content which outlines the scope of learning expected:

- Specialised treasury vehicles – tax efficiencies
  - definition of an international treasury centre (ITC)
  - the business case for an ITC
  - operating the ITC
  - selecting an ITC location
  - ITC tax implications
  - examples of ITC vehicles
    - Europe
    - Asia-Pacific
    - The Americas

# 2 BANK RELATIONSHIP MANAGEMENT

## 2.1 The objectives of bank relationship management

**LO5 Explain the importance of bank relationship management to treasury.**

Indicative content which outlines the scope of learning expected:

- The objectives of bank relationship management
  - credit
  - non-credit services
  - diversification of risk
  - footprint
  - electronic banking capabilities
  - investment products
  - service level
  - future needs
  - pricing
  - contingency plans

## 2.2 Selecting banking relationships

**LO6 Discuss the criteria a cash manager would use to select banks for various different roles.**

Indicative content which outlines the scope of learning expected:

- Selecting banking relationships
  - types of banking relationship
  - selecting a global/regional cash management bank
    - relationship with the group
    - branch network
    - payment cut-off times
    - pricing
    - cash management culture
    - operational quality and customer service
    - credit and related risks
    - delivery systems
    - cash management products and services
  - selecting a local bank
    - branch network
    - local clearing capabilities and cut-off times
    - scalability
    - service quality
    - electronic/internet banking capabilities
    - price

## 2.3 The bank selection process

**LO7 Explain the process and considerations when putting cash management business out for tender.**

Indicative content which outlines the scope of learning expected:

- The bank selection process
  - identify key objectives
  - review existing operations
  - request for information (RFI)
  - request for proposal (RFP)
  - analysing the proposals and selecting a vendor
- Considerations when tendering
  - the right bank staff
  - customisation of the RFP
  - evaluating pricing
  - when to use a consultant

## 2.4 Managing the relationship

**LO8 Review the issues involved in measuring bank performance and ongoing relationship management.**

Indicative content which outlines the scope of learning expected:

- Managing the relationship
  - service level agreement (SLA)
  - the account analysis
  - electronic bank account management (eBAM)

# 3 TREASURY SYSTEMS AND TECHNOLOGY

### 3.1 The role of technology in treasury

**LO9 Assess the different treasury functions which technology facilitates.**

Indicative content which outlines the scope of learning expected:

- The role of technology in treasury
  - transaction management
  - cash management and cash forecasting
    - daily cash position worksheet
    - cash forecasting
    - short and medium-term forecasts
  - risk management
    - identification of risk
    - management of risk
  - communication
  - security and control
    - segregation of duties and process security
    - information flows and straight-through processing (STP)
  - business continuity
  - in-house dealing

### 3.2 Systems used by treasury

**LO10 Review the different IT systems available to treasury.**

Indicative content which outlines the scope of learning expected:

- Systems used by treasury
  - treasury management systems (TMS)
    - TMS functionality
  - ERP systems
  - portals
    - bank portals
    - multi-bank dealing portals
    - foreign exchange dealing portals
    - money market fund portals
  - special purpose systems
    - multilateral netting
    - payment factory
    - confirmation matching
    - market information systems
    - risk management systems
    - electronic bank account management (eBAM)
    - trade finance
  - e-Invoicing
  - spreadsheets

## 3.3 Important treasury considerations when implementing technology

**LO11 Identify the specialist functionality and important issues that treasury must consider when selecting and implementing new technology.**

Indicative content which outlines the scope of learning expected:

- Important treasury considerations when implementing technology
  - specialist treasury functionality
    - cash positioning and forecasting
    - risk management
    - accounting support
  - corporate governance and control
  - reporting tools
  - connectivity
  - other considerations

## 3.4 Options for technology implementation

**LO12 Evaluate the options the treasurer has in selecting how technology is implemented.**

Indicative content which outlines the scope of learning expected:

- Options for technology implementation
  - in-house build
  - vendor software installed at company site
  - hosted installation
  - mobile applications

## 3.5 System security

**LO13 Evaluate what is required to ensure system security.**

Indicative content which outlines the scope of learning expected:

- Systems security
  - internet security
  - encryption
    - private key (symmetric) encryption
    - public key (asymmetric) infrastructure (PKI)
    - transport layer security (TLS)
    - hypertext transfer protocol secure (HTTPS)
  - digital signatures
  - certificate authorities (CA)
  - SWIFT 3SKey
  - future direction

# 4 POLICY, TAX AND REGULATORY ISSUES FOR TREASURY

## 4.1 Treasury policy and procedures

**LO14 Discuss why treasury policies are important and the elements that should be included in the policy.**

Indicative content which outlines the scope of learning expected:

- Treasury policy and procedures
  - the importance of treasury policies
  - elements of a treasury policy
    - objectives
    - scope
    - guidelines
    - roles and responsibilities
    - key performance indicators (KPIs)
    - reporting
    - controls

## 4.2 Measuring treasury performance

**LO15 Analyse how treasury policy can be used to develop KPIs to measure treasury performance.**

Indicative content which outlines the scope of learning expected:

- Measuring treasury performance
  - why measuring treasury performance is important
  - sample KPI measures
    - quantitative measures of treasury performance
    - qualitative measures of treasury performance

## 4.3 Corporate governance and control

**LO16 Review the major provisions for corporate governance and control around the world and assess their impact on treasury.**

Indicative content which outlines the scope of learning expected:

- Corporate governance and control
  - developments in corporate governance
  - corporate governance around the world
  - Sarbanes-Oxley (SOX)
    - main provisions of SOX
    - main effects of SOX
    - the role and authority of independent directors
    - the role of independent auditors
    - SOX and its impact on business
    - SOX and its impact on treasury
  - Professional conduct for treasury
    - the ACT's Ethical Code
  - Controlling the treasury environment

## 4.4 The impact of anti-money laundering/anti-terrorism legislation

**LO17 Analyse the impact anti-money laundering and anti-terrorism legislation has had on the treasury and cash management functions.**

Indicative content which outlines the scope of learning expected:

- The impact of anti-money laundering/anti-terrorism legislation
  - legislation – anti-money laundering (AML)
  - legislation – anti-terrorism
  - impact of the legislation
  - other major AML/ anti-terrorism legislation

## 4.5 Tax issues that impact treasury

**LO18 Evaluate how global tax issues can impact treasury activities.**

Indicative content which outlines the scope of learning expected:

- Tax issues that impact treasury
  - the impact of tax on treasury activities
  - tax treaties – double tax relief
  - permanent establishment (PE)
  - controlled foreign corporation (CFC)
  - thin capitalisation (Thin Cap)
  - deemed dividends
  - transfer pricing
  - withholding taxes
  - value-added taxes (VAT)
  - stamp duties
  - tax on foreign exchange gains and losses
  - new initiatives

# MANAGING CROSS-BORDER LIQUIDITY AND RISK

Unit six

- **Rationale for unit six**
- **Introduction to unit six**
- **Overarching learning outcomes**
- **Unit six content**

## RATIONALE FOR UNIT SIX

**Once the cash management function is running smoothly managing surpluses and deficits on a day-to-day basis, treasury can turn its attention to managing cross-border liquidity.**

This includes:

- Ensuring that internal transactions are as efficient as possible
- Minimising cross-border flows
- Reducing foreign exchange commissions
- Offsetting group-wide surpluses and deficits
- Managing group-wide risk.

This unit examines the tools for managing global liquidity and risk, using inter-company lending techniques such as cash pooling, multilateral netting and foreign exchange swaps. It also looks at the broader issues in managing international risks, especially foreign exchange risk.

# INTRODUCTION TO UNIT SIX

## The netting concept was introduced in an earlier unit as the basis for one of the settlement system types, net settlement systems (NSSs).

In this unit we examine how netting techniques are used internally for managing cross-border liquidity companywide and making inter-company transactions more efficient. Although a very simple concept, multilateral netting can be quite complex to perform. It is one of the major tools used by companies with a centralised treasury or an in-house bank. Although the emphasis in this unit is on inter-company netting, it is also a technique that is used to realise considerable cost savings in industries where there are frequent two-way flows between participants.

The next step is to apply the netting concept to inter-company lending as internal sources of funds are usually more cost-effective than external borrowing. Offsetting deficit cash pools against surplus cash pools can be very cost effective as it reduces negative balances and eliminates the spread taken by banks on borrowing and investing. In this unit we examine the most used techniques for inter-company lending, including notional pooling and cash concentration, and how these essential cash management techniques are used by companies for cross-border liquidity management. In addition to the general information provided in Unit 4, the specific regulatory, tax and practical challenges surrounding the successful implementation of notional pooling and cash concentration are considered in more detail.

No discussion of international cash management would be complete without a review of foreign exchange (FX). This unit reviews what a cash manager needs to understand about foreign exchange; the terminology and the basic techniques and conventions used by traders. It also explains the calculations cash managers are most likely to use; the spot, forward and swap transactions.

Doing business internationally inevitably brings new risks and exposures that the cash manager has to measure, monitor and manage. This unit identifies those risks and provides an introduction to some of the techniques and tools used for managing risk, with particular emphasis on managing foreign exchange risk. Note: The accounting aspects of hedging are beyond the scope of this syllabus.

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Perform a cost-benefit analysis to justify the case, qualitatively and quantitatively, for implementing a multilateral netting system.
2. Evaluate how a netting centre can be used as a platform for further liquidity management efficiencies.
3. Recommend appropriate cross-border liquidity management vehicles.
4. Discuss the advantages and disadvantages of a proposed structure for managing global liquidity.
5. Evaluate the tax, legal and regulatory issues associated with cash pooling.
6. Use spot, forward and spot calculations showing when it is appropriate to use each of them.
7. Formulate a strategy for managing the risks involved in doing business internationally.
8. Recommend vehicles to mitigate different types of risk, especially foreign exchange risk.

# 1 NETTING

## 1.1 Types of netting

**LO1 Differentiate between different types of netting.**

Indicative content which outlines the scope of learning expected:

- Types of netting
  - bilateral netting
  - multilateral netting

## 1.2 The benefits of multilateral netting

**LO2 Analyse the quantitative and qualitative benefits of implementing a multilateral netting system and the incremental benefit achieved by including other types of transaction in the netting.**

Indicative content which outlines the scope of learning expected:

- The benefits of multilateral netting
  - quantitative benefits
  - qualitative benefits
  - netting drivers
    - inter-company transactions
    - third party trade payables
    - third party trade receivables
    - financial flows

## 1.3 Calculating the benefit of multilateral netting

**LO3 Calculate the potential savings from implementing a netting system.**

Indicative content which outlines the scope of learning expected:

- Calculating the benefit of multilateral netting
  - example of a netting calculation

## 1.4 Implementing a multilateral netting system

**LO4 Evaluate the issues and considerations involved when implementing a multilateral netting system.**

Indicative content which outlines the scope of learning expected:

- Implementing a multilateral netting system
  - structural issues
    - country-level netting
    - regional or global netting
    - netting with an in-house bank
  - netting policies
    - currencies
    - credit period
    - settlement dates
    - exchange rates
    - conflict resolution
  - the netting cycle
  - netting service options
    - bank-managed services
    - company-managed options
    - internet-based netting
    - selecting an appropriate netting system

## 1.5 Beyond netting

**LO5 Recommend other appropriate liquidity management techniques that can be managed through a netting centre.**

Indicative content which outlines the scope of learning expected:

- Beyond netting
  - foreign exchange matching
  - leading and lagging

# 2 CASH POOLING

## 2.1 Introduction to cash pooling

**LO6 Compare the principal tools used by treasury in managing global liquidity.**

Indicative content which outlines the scope of learning expected:

- Cash pooling
  - cash pool
  - notional pooling
  - cash concentration
  - interest enhancement

## 2.2 Notional pooling

**LO7 Critique notional pooling as a tool for liquidity management and the purposes for which it can be used.**

Indicative content which outlines the scope of learning expected:

- Notional pooling
  - benefits of notional pooling
  - disadvantages of notional pooling
  - notional pooling for minimising overdraft charges
  - notional pooling for optimising interest earnings
  - interest apportionment
  - using a master account to optimise pool balances

## 2.3 Calculating the benefit of notional pooling

**LO8 Determine the benefit of implementing a notional pool.**

Indicative content which outlines the scope of learning expected:

- Calculating the benefit of a notional cash pool
  - example of calculating the notional pooling benefit
    - stepped basis
    - banded basis

## 2.4 Notional pooling structures

**LO9 Assess the different notional pooling structures and their applicability to various situations.**

Indicative content which outlines the scope of learning expected:

- Notional pooling structures
  - single currency, one-country pooling
  - single currency, cross-border pooling
  - multi-currency, one country pooling
  - multi-currency, cross-border pooling
  - requirements for multi-currency pooling

### 2.5 Implementing a notional cash pool

**LO10 Evaluate the issues and considerations associated with setting up a notional pool.**

Indicative content which outlines the scope of learning expected:

- Implementing a notional cash pool
  - internal considerations
  - bank operational issues
  - bank documentation – the pooling agreement
  - additional requirements for cross-border pooling
  - bank fees and charges
  - regulatory issues
  - tax considerations

### 2.6 Variations on notional pooling

**LO11 Assess the latest techniques developed to approximate the benefits of notional pooling, when notional pooling is not viable.**

Indicative content which outlines the scope of learning expected:

- variations on notional pooling

### 2.7 Cash concentration

**LO12 Evaluate the advantages and disadvantages of cash concentration and its role in a liquidity management structure.**

Indicative content which outlines the scope of learning expected:

- Cash concentration
  - when to use cash concentration
  - advantages of cash concentration
  - disadvantages of cash concentration

### 2.8 Cash concentration structures

**LO13 Assess the different cash concentration models and their applicability in various situations.**

Indicative content which outlines the scope of learning expected:

- Cash concentration structures
  - zero balance accounts
  - target balance accounts
  - threshold accounts
  - combining target and threshold accounts
  - overnight sweeps
  - using reference accounts
  - Nordic cash pooling

### 2.9 Implementing a cash concentration cash pool

**LO14 Evaluate the considerations associated with implementing a cross-border cash concentration pool.**

Indicative content which outlines the scope of learning expected:

- Implementing a cash concentration cash pool
  - cash concentration considerations
    - multi-bank cash concentration
    - single bank cash concentration
    - regulatory issues
    - tax implications of cash concentration

### 2.10 Selecting an appropriate cash pooling technique

**LO15 Recommend an appropriate cash pooling structure.**

Indicative content which outlines the scope of learning expected:

- Selecting an appropriate cash pooling technique
  - location of the cash pool
  - impact of Basel III

# 3 FOREIGN EXCHANGE

## 3.1 Players in the foreign exchange (FX) market

**LO16 Discuss the roles of the various players in the foreign exchange market.**

Indicative content which outlines the scope of learning expected:

- Players in the foreign exchange (FX) market
  - the foreign exchange market
  - market participants

## 3.2 The importance of foreign exchange to international cash management

**LO17 Explain the importance of the foreign exchange market to international cash management.**

Indicative content which outlines the scope of learning expected:

- The importance of foreign exchange to international cash management
  - when cash managers use the foreign exchange markets
    - when a payment is due in a foreign currency
    - when a receivable is made in a foreign currency
    - to manage cross-border liquidity
    - to manage foreign exchange exposure

## 3.3 Foreign exchange spot transactions

**LO18 Perform foreign exchange spot calculations demonstrating the ability to read the rates and select the correct side of the spread.**

Indicative content which outlines the scope of learning expected:

- Foreign exchange spot transactions
  - reading FX spot rates
  - FX bid-ask spread
  - tips on performing spot calculations
  - examples of spot calculations
  - how FX rates are quoted

## 3.4 Foreign exchange forward transactions

**LO19 Perform forward calculations.**

Indicative content which outlines the scope of learning expected:

- Foreign exchange forward transactions
  - understanding FX forward rates
  - determining the outright forward rate
  - determining whether a currency is at a premium, par or discount in the forward market
  - examples of FX forward calculations
  - notes concerning points

## 3.5 Calculating the benefit of a foreign exchange swap

**LO20 Calculate if there is a benefit to using a swap to manage liquidity or improve returns on cash pools.**

Indicative content which outlines the scope of learning expected:

- Calculating the benefit of a foreign exchange swap
  - the FX swap
  - when to use a FX swap
  - pricing the swap
  - methodology for the swap calculation
    - using a swap for inter-company funding
    - using a swap to optimise returns on surplus balances
  - effective cost of borrowing
  - effective yield on investment

## 3.6 Considerations when using foreign exchange swaps

**LO21 Articulate any considerations the cash manager should take into account before performing such a transaction.**

Indicative content which outlines the scope of learning expected:

- Considerations when using foreign exchange swaps
  - are the numbers big enough?
  - how accurate is the forecast?
  - are there any other costs?
  - how easy or complex is the transaction?
  - what other options are available?

# 4 RISK MANAGEMENT



## 4.1 Risks to the business

**LO22 Assess the risks to which a company operating internationally may be exposed and their potential impact on the business.**

Indicative content which outlines the scope of learning expected:

- Risks to the business
  - financial risks
    - foreign exchange risk
    - interest rate risk
    - liquidity risk
    - commodity risk
    - country risk
    - commercial risk
    - counterparty or credit risk
    - settlement risk
    - systemic risk
  - Other risks
    - operational risk
      - operations risk
      - systems risk
      - legal risk
      - weather risk
    - contemporaneous risks
      - impact of the credit crisis
      - regulatory requirements

## 4.2 Risk management framework

**LO23 Recommend a risk management framework that will identify, monitor and manage the recognised risks to a business.**

Indicative content which outlines the scope of learning expected:

- Risk management framework
  - risk identification
  - risk assessment
  - risk evaluation
  - risk response
  - hedging versus speculation
  - risk reporting

## 4.3 Managing foreign exchange risk – at the corporate level

**LO24 Recommend the most appropriate tools for hedging different types of foreign exchange risk.**

Indicative content which outlines the scope of learning expected:

- Managing foreign exchange risk – at the corporate level
  - foreign exchange risk
    - transaction
    - translation
    - economic
  - mitigating FX risk
  - foreign exchange risk management tools
    - spot contracts
    - forward contracts
    - futures contracts
    - currency options
    - currency swaps
    - FX swaps
    - natural hedges
    - balance sheet hedging
    - non-deliverable forwards (NDFs)

## 4.4 Managing foreign exchange risk – at the industry level

**LO25 Assess the steps the industry has taken to mitigate risk in the foreign exchange markets.**

Indicative content which outlines the scope of learning expected:

- Managing foreign exchange risk – at the industry level
  - Herstatt risk
  - Continuous linked settlement (CLS)
    - CLS participants
    - CLS processing cycle
    - implications for banks
    - implications for non-bank financial institutions and corporations

# CREATING EFFICIENT INTERNATIONAL ACCOUNT STRUCTURES

## Unit seven

- Rationale for unit seven
- Introduction to unit seven
- Overarching learning outcomes
- Unit seven content

## RATIONALE FOR UNIT SEVEN

**This is the practical application of all the preceding material to develop, create and design an efficient account structure that, under the circumstances and conditions, allows for efficient, cost effective cross-border cash and liquidity management.**

It requires a knowledge of how cash management is practised in other parts of the world and how to use this information in designing account structures that are appropriate for the company. We provide detailed information on cash management practices on two regions of the world, the US and the Single Euro Payments Area (SEPA) region, that are significant players in world trade, each with very unique cash management practices.

Then a series of case studies illustrates how companies in different countries manage their cash in light of the local environment, regulations and company profile. Each case is designed to bring out the particular challenges and solutions for that region.

# INTRODUCTION TO UNIT SEVEN

## Designing an efficient account structure for the purposes of liquidity management and visibility brings together many of the elements discussed in previous units:

- How to organise the treasury function
- When and where to hold foreign currency accounts
- Which liquidity management techniques and vehicles to use
- Determining which banks are most suited to which roles
- The impact of tax, regulatory and legal issues and constraints.

This unit examines some of the most prevalent structures that have evolved over time, both traditional and new, to satisfy the operational, governance and liquidity management needs of organisations. There are no universal solutions, however, and the challenge to the treasurer is to put in place one that achieves the company's primary cash management objectives, is appropriate for the countries in which the company does business and does not create adverse tax or regulatory issues.

The final element is to provide the international context and while it is beyond the scope of this manual to cover the entire world, this unit focuses on areas that are of primary importance to the majority of companies. By illustrating how cash is managed in these local environments, the treasurer gains insights into appropriate structures when dealing with those regions. The US and SEPA have been highlighted, being two of the major trading partners for the rest of the world. They are also important to cover due to the unique characteristics of the specialised cash management vehicles in these areas.

Lastly, this unit also provides a series of case studies providing insights into how companies manage their cash and liquidity in different parts of the world and with a specific focus that is appropriate to companies in that region. The case studies cover the following areas:

- Dubai and the Middle East
- Hong Kong and China
- SEPA region
- Singapore and regional treasuries in Asia
- South Africa and Africa
- United Kingdom and global companies

## OVERARCHING LEARNING OUTCOMES

At the end of this unit you should be able to:

1. Evaluate how factors such as treasury organisation, legal structure and regulatory constraints influence account structures.
2. Assess how in-country footprint impacts cash and liquidity management options.
3. Recommend a banking structure that will support the treasury objectives.
4. Design an optimal account structure that allows for efficient, cost effective cross-border cash and liquidity management, showing your justifications and taking into consideration many variables such as:
   - treasury organisation
   - legal and regulatory constraints
   - treasury objectives
   - corporate culture.
5. Construct an account structure that is appropriate for different regions of the world.

# 1 EFFICIENT ACCOUNT STRUCTURES

## 1.1 Considerations when selecting an account structure

**LO1 Assess the factors that influence a company's choice of account structure.**

Indicative content which outlines the scope of learning expected:

- Issues to consider
  - degree of centralisation
  - regulatory issues
  - banking systems used/required
  - local unit requirements
  - appropriate banking structure
- Account structure objectives
- Factors that influence the design of an account structure
  - systems considerations
  - tax and regulatory issues

## 1.2 Foreign currency (FCY) account banking structures

**LO2 Recommend an appropriate banking structure for holding foreign currency accounts.**

Indicative content which outlines the scope of learning expected:

- Local bank, local currency account
- Domestically domiciled FCY accounts
- FCY accounts in the currency centre
- FCY accounts managed by an international treasury centre
- FCY accounts in a decentralised organisation

## 1.3 Liquidity management structures

**LO3 Recommend an appropriate structure to optimise liquidity management across the company.**

Indicative content which outlines the scope of learning expected:

- Objectives of a liquidity management structure
- Notional pooling structures
  - single currency, one country
  - single currency, cross-border
  - multi-currency, one country
  - multi-currency, cross-border
  - the impact of Basel III on notional pooling
- Cash concentration structures
- Pragmatic account structures
  - advantages of the pragmatic structure
  - issues to be considered
  - use of FX swaps

## 1.4 Traditional account structures

**LO4 Evaluate the benefits and drawbacks of traditional account structures.**

Indicative content which outlines the scope of learning expected:

- In-house bank structure
- The overlay structure
- The USA account structure
- Liquidity management structures in China
- Variations on account structures
  - cash pooling without co-mingling balances
  - cross-border notional pooling with a network bank

## 1.5 Newer account structures

**LO5 Assess the benefits and drawbacks of the newer account structures.**

Indicative content which outlines the scope of learning expected:

- The MT-101 structure
- Cross-border notional pooling with a non-network bank

## 1.6 Matching the bank to the structure

**LO6 Justify the choice of appropriate bank(s) to support a chosen account structure.**

Indicative content which outlines the scope of learning expected:

- Core competencies and account structures supported
  - local banks
  - large local banks in financial centres
  - pan regional banks
  - global (network) banks

# 2 SPOTLIGHT ON THE USA AND EUROPE

## 2.1 USA payment and collection systems

**LO7 Construct a USA account structure that takes into account the cash management vehicles that are unique to the US and how they are accessed from overseas locations.**

Indicative content which outlines the scope of learning expected:

- Overview of the financial market in the USA
- The regulatory environment
- Cheques
  - why cheques are used in the USA
  - cheque collection process
  - controlled disbursement accounts
  - Using USD cheques from outside the US
    - disbursements
    - collections
- The Automated Clearing house (ACH)
- Access to the ACH from outside the USA
- Fedwire system
- Clearing House Interbank Payments System (CHIPS)
- Access to CHIPS and Fedwire from outside the USA
- Comparison of USA payment systems

## 2.2 Euro payment systems

**LO8 Construct a pan-European account structure that takes into account the evolving payment and collection schemes that are unique to the euro and SEPA region.**

Indicative content which outlines the scope of learning expected:

- Glossary of payment terms, schemes and players
- SEPA payment schemes
- Trans-European Automated Real-time Gross Settlement Express Transfer System 2 (TARGET2)
- The Euro Banking Association/EBA Clearing
  - EURO1
  - STEP2
  - Euro Priority Payments Scheme
- The future of payments in the Eurozone
  - national payment systems
  - SEPA payments

# 3 REGIONAL CASE STUDIES

## 3.1 United Arab Emirates

**LO9 Assess which aspects of how companies are managing their cash and liquidity in the United Arab Emirates are unique to the area.**

Indicative content which outlines the scope of learning expected:

- United Arab Emirates case study
  - regulatory and banking environment
    - lack of cash-management related regulation
    - great variances in state of banking systems
  - what is unique about cash and liquidity management in the region
    - Islamic and Western style banking
    - position as a bridge between Eastern and Western time zones
  - case study – UAE Company
    - company background
    - cash management objectives
    - how the company manages cash across the Middle East region.

## 3.2 Hong Kong and China

**LO10 Determine how companies are managing their cash and liquidity in Hong Kong and using the evolving liquidity management options now available through the Free Trade Zones (FTZ) in China.**

Indicative content which outlines the scope of learning expected:

- Hong Kong and China case study
  - regulatory and banking environment
    - Hong Kong is one of the most liberal banking regions
    - China is still heavily regulated but changing rapidly
  - what is unique about cash and liquidity management in the region
    - Hong Kong's position as an offshore treasury centre for China
    - FTZs bringing China into cross-border liquidity management
  - case study – Hong Kong Company
    - company background
    - cash management objectives
    - how the company manages cash across the HK – China region.

## 3.3 The SEPA region

**LO11 Evaluate how companies can take advantage of the new cross–border euro payment schemes to manage their cash and liquidity in the SEPA region.**

Indicative content which outlines the scope of learning expected:

- SEPA region case study.
  - regulatory and banking environment
    - move toward standardisation and harmonisation
    - PSDII initiatives
  - what is unique about cash and liquidity management in the region
    - SEPA payment instruments
    - rationalisation of banking structures
  - Case study – SEPA Company
    - company background
    - cash management objectives
    - how the company manages cash across the SEPA region.

## 3.4 Singapore

**LO12 Assess how and why companies are using Singapore as a treasury centre to manage their cash and liquidity in Asia.**

Indicative content which outlines the scope of learning expected:

- Singapore case study
  - regulatory and banking environment
    - very liberal regulatory and banking environment
    - strong presence of international banks
  - what is unique about cash and liquidity management in the region
    - favoured regional treasury centre location for Asia (ex–China)
    - cross–border, multi–currency structures are standard
  - Case study – Singapore Company
    - company background
    - cash management objectives
    - how the company manages cash as regional treasury centre for Asia.

## 3.5 South Africa

**LO13 Assess the challenges and issues facing treasury in managing their cash and liquidity in South Africa.**

Indicative content which outlines the scope of learning expected:

- South Africa case study
  - regulatory and banking environment
    - heavily regulated
    - weak banking infrastructure
  - what is unique about cash and liquidity management in the region
    - cross–border movements of cash largely prohibited or strongly regulated
    - proliferation of mobile banking
  - case study – South African Company
    - company background
    - cash management objectives
    - how the company manages cash in a heavily regulated region.

## 3.6 United Kingdom

**LO14 Evaluate how a UK company optimises it's cash and liquidity in a multi-continent operation.**

Indicative content which outlines the scope of learning expected:

- United Kingdom global company case study
  - regulatory and banking environment
    - deepest of the FX markets
    - active multicurrency environment
    - member of SEPA but not the euro
  - what is unique about cash and liquidity management
    - attractive to international companies as a treasury centre
    - benign tax environment for global companies
  - Case study – UK Company
    - company background
    - cash management objectives
    - how the company manages cash on a global scale.

ACT

Competency Framework

GLOBAL TREASURY STANDARDS

# ACT COMPETENCY FRAMEWORK

The result of consultation with senior treasurers, banks and learning and development teams, the framework defines the competencies treasurers need to operate successfully in global business today. The skills a treasurer needs over their career varies according to seniority. The competencies have been benchmarked and mapped to four job levels; tactical, operational, managerial and strategic.

**The content of this syllabus introduces the skills required to operate at a tactical level.**

Strategic Level
**Managerial Level**
**Operational Level**
Tactical Level

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