

# Bank Lending – Theory and Practice 2e



Tom Cronje and Apriani Atahau  
For: Curtin University

**Course:**

Bank Lending – Theory and Practice 2e

**Authors and Editors:**

Tom Cronje and Apriani Atahau

Curtin University



Copyright © 2017 by McGraw-Hill Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without prior written permission of the publisher.

**Reproduction and communication for education purposes**

The Australian *Copyright Act 1968* (the Act) allows a maximum of one chapter or 10% of the pages of this work, whichever is the greater, to be reproduced and/or communicated by any educational institution for its educational purposes provided that the educational institution (or the body that administers it) has given a remuneration notice to Copyright Agency Limited (CAL) under the Act. For details of the CAL Licence for Educational Institutions, contact Copyright Agency Limited, Level 19, 157 Liverpool Street, Sydney, NSW, 2000. Telephone: (02) 9394 7600. Facsimile: (02) 9394 7601. Email: [info@copyright.com.au](mailto:info@copyright.com.au)

**Reproduction and communication for other purposes**

Except as permitted under the Act (for example a fair dealing for the purposes of study, research, criticism or review) no part of this book may be reproduced, stored in a retrieval system, communicated or transmitted in any form or by any means without prior written permission. All enquiries should be made to the publisher at the address below.

This text may include materials submitted to McGraw-Hill Education for publication by the instructor of this course. The instructor is solely responsible for the editorial content of those materials.

ISBN-10 1-76-042156-1  
ISBN-13 978-1-76-042156-4

Printed in Australia by Griffin Digital on 80gsm fine offset



The paper this book is printed on is certified against the Forest Stewardship Council® Standards. Griffin Press holds FSC chain of custody certification SGS COC 005088. FSC promotes environmentally responsible, socially beneficial and economically viable management of the world's forests

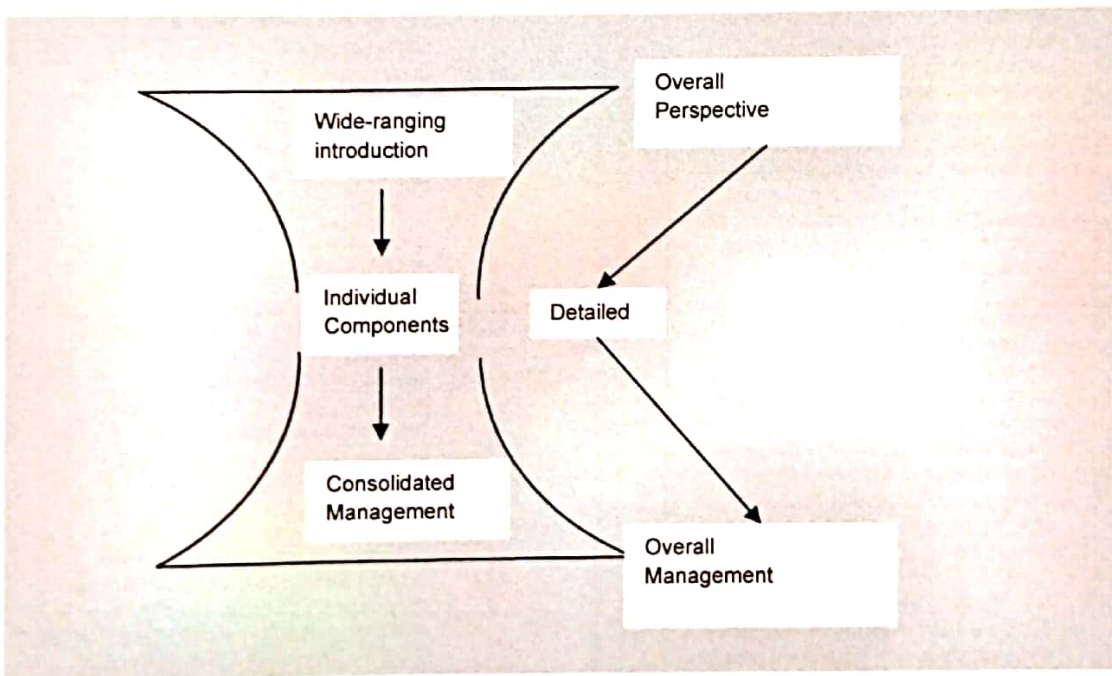
# PREFACE

The context of this text material is to provide learners, practitioners and other readers with a holistic understanding of lending in banks, how it should be applied at transactional level and an uncomplicated explanation of loan portfolio management.

The content structure and sequence of the text material (refer to the figure below) firstly provides learners with an overall understanding of banking and risk management in general to enable them to grasp where and how the individual components of loan risk management fit into bank operations and why the professional management thereof is extremely important. Thereafter, all the individual components are covered and finally pooled in loan portfolio management that represents the consolidated management of all individual components.

The whole thrust of the text material is to blend the theory of disbursing loans with the practicality of the real world. Neither is exclusive nor complete without the other.

## Structure and sequence of bank lending teaching content



The content of the textbook is reflected in table 1. It is aimed at filling-up major knowledge gaps and to expose students to practical bank lending situations to provide them with a concrete understanding and application ability.

The overall perspective (wide ranging introduction) itself has a funnel flow of information since it starts off with banking and risk management in part 1A followed with credit risk management as inherent part of it in part 1B. The learning outcomes for part 1 are very cognitive (analysis, synthesis and evaluation based) since the intention is to provide learners with a comprehensive understanding of the environment in which lending takes place, risk management in general, the different risks that bank face and specific credit risks.

The situated learning exposure of learners is from scenarios and case studies based on the actual learning objectives that have been compiled and consist of simulated situations and issues that may require decision making in practice.

**Table 1: Part 1 - Overview of banks and risk management and introduction to credit risk management**

Part 1A		Part 1B	
Knowledge and information	Learning outcomes	Knowledge and information	Learning outcomes
The role of banks, main activities and organizational structures	<p>After completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>• Explain the three key functions that banks perform in the complicated economic macro-environment and compare different types of banks and different countries in this regard.</li> <li>• Debate the advantages of the key functions of banks considering the start of the global financial turmoil in 2007 considering different types of banks and economic systems.</li> <li>• Explain the major market segments that banks can focus on and compare these market segments in terms of profitability and risk in general. Determine the market segments of existing banks to interpret and compare their focal points and to verify the existence and sizes of these market segments in banking operations.</li> <li>• Explain the main organisational functions that support the main bank operational divisions and argue their importance with regard to different types and sizes of banks.</li> </ul>	Major bank risks and essential components of credit risk management	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>• Assess risk scenarios and correctly allot the scenario risks to the correct major bank risk category.</li> <li>• Analyse credit risk scenarios and explain the interrelationship of the specific credit risks with other major risks.</li> <li>• Analyse major risk scenarios and explain the interrelationship thereof with credit risk.</li> <li>• Analyse credit risk scenarios and explain what components of the credit risk management process are meant to manage the risk and whether it can be regarded as risk evaluation or control methods.</li> <li>• Construct a flow chart that indicates the sequence according to which the different credit risk management process components should be applied in a bank.</li> </ul>
What is risk, the classification of risk, and the generic risk management process	<p>On completion of this section students should be able to:</p> <ul style="list-style-type: none"> <li>• Analyse and interpret risk in terms in predicting of outcomes for different levels of uncertainty.</li> <li>• Classify risks correctly for different types of organizations/industries.</li> <li>• Interpret and judge the effect/importance of different risk categories on different organizations.</li> <li>• Identify risks for different organizations/industries.</li> <li>• Evaluate risks in terms of frequency and loss sizes and determine potential losses.</li> <li>• Categorise risks according to the classification matrix for potential losses.</li> <li>• Determine the most appropriate alternative for the management of different risks.</li> </ul>	Credit objectives, strategies and controlling measures	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>• Assess and change bank loan portfolio objectives considering the prevailing credit risk exposure of a bank as well as other micro and macro environment variables.</li> <li>• Evaluate credit policies and procedures within the context of a bank's credit objectives and make recommendations on how to improve the policies with regard to alignment with credit objectives, the topics that it should address, and the clarity of procedures and underwriting guidelines.</li> </ul>

Part 2 of the text material is focussed on stand-alone credit transactions that represent the micro-side of credit risk management. This part is subdivided into three subgroups namely key elements of all stand-alone credit transactions (part 2A), consumer and business credit assessment (part 2B) and the management of existing advances/loan transactions (part 2C).

The situated learning in this part exposes learners to the actual operational lending environment with scenarios and case studies that require them to perform all activities that they may encounter at bank branch level and in certain specialised credit risk departments (refer to table 2).

**Table 2: Part 2 – Stand-alone credit transactions**

Part 2A		Parts 2B and 2C	
Knowledge and information	Learning outcomes	Knowledge and information	Learning outcomes
Loan pricing	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>Calculate a hurdle rate that loans of a bank should comply with by using risk adjusted return on capital (RAROC).</li> <li>Calculate interest rates for specific customers/groups of customers based on the hurdle rate of the bank, prevailing loan portfolio defaults and future default expectations.</li> </ul>	Consumer credit risk assessment	<p>On completion of this section learners should be able to conduct the proficient assessment of consumer loan applications.</p>
Regular forms of finance provided by banks	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>Match the needs of a customer with the most applicable form/s of finance and substantiate the reason for the match.</li> <li>Calculate repayments for mortgages; loans and installment credit; leases; and factoring;</li> <li>Calculate the discounted value of a bank bill</li> <li>Calculate the cost of factoring and compare the cost thereof with other forms of finance</li> </ul>	Understanding and interpreting financial statements of businesses	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>Apply ratio analysis and interpret the ratio analysis results correctly.</li> <li>Construct historical cash flow statements and cash flow budgets and apply sensitivity analysis to cash flow budgets.</li> <li>Identify creative accounting and overtrading from information contained in the financial statements and cash flow budgets of businesses.</li> <li>Compare businesses in terms of financial and business risk.</li> <li>Identify off-balance sheet items that may affect the repayment ability of businesses and substantiate the effect of it.</li> </ul>
Different forms of collateral	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>Compile a checklist of practical aspects that must be considered when taking collateral for loans/advances.</li> <li>Apply criteria to rate any type of collateral as "acceptable" or non-acceptable".</li> <li>Identify different forms of collateral available from customers by scrutinizing financial information and considering other general information.</li> <li>Provide estimated actual values to different types of collateral based on actual customer information.</li> </ul>	Business credit risk assessment	<p>On completion of this section learners should be able to conduct the proficient assessment of business credit applications.</p>
Principles that bank apply when dealing with credit applications	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>Recall all the principles applicable to dealing with credit applications and forms of information pertaining to it.</li> <li>Determine the forms of information required for different credit applications and specify where it will be obtained from to assess the credit risk of a transaction.</li> <li>Analyse information obtained about customers applying for credit, comment on the credit risk effect of it, and recommend actions/ decisions that the bank should take.</li> </ul>	Existing loan account management	<p>On completion of this section learners should be able to assess the risk of existing loan accounts and decide on ways to manage the accounts to minimise the risk exposure of the bank.</p>

The third and last part of the text material focuses on the management of loan portfolios and also provides an overview of Islamic Bank lending. To comprehend the management of loan portfolios properly, it is required that learners have a good overall perspective (part 1) as well as good

knowledge regarding the risk posed by each stand-alone loan transaction (part 2) as it combines all the knowledge attained in those parts with additional knowledge about how to measure and manage loan portfolios. A more integrated perspective is also created since loan portfolio management and its interrelationship with other bank risks that have been addressed in part 1 is restated in this part. The final section of part 3 provides an overview of Islamic Bank lending that has grown extensively over time and has become an important banking practice in many countries.

**Table 3: Part 3 – An overview of Islamic bank lending and loan portfolio risk management**

Part 3	
Knowledge and information	Learning outcomes
Analyzing of loan portfolio information	<p>On completion of this section learners should be able to:</p> <ul style="list-style-type: none"> <li>• Construct and apply a logical methodology for the gathering and analysis of loan portfolio information.</li> <li>• Identify intrinsic and concentration risk and propose less doubtful portfolio exposures based on the comparative exposure of peer banks and credit risk variable correlation.</li> <li>• Apply basic credit risk stress testing.</li> <li>• Apply the Actuarial Credit Risk Accounting provisioning method.</li> </ul>
Loan portfolio risk transfer methods	<p>On completion of this section learners should be able to apply and do cost and benefit calculations for each of the loan portfolio risk transfer methods discussed in this section.</p>
Islamic Banking	<p>On completion of this section learners should show a good understanding and knowledge of:</p> <ul style="list-style-type: none"> <li>• Different types of Islamic loans/finance provided to consumers and businesses</li> <li>• The Islamic consumer and business loan application assessment processes</li> </ul>

## AUTHORS

The first twelve chapters of this book have originally been constructed by **Dr. Tom Cronje** from the School of Economics and Finance at Curtin University. In 2016 all these chapters have been reviewed, enhanced and updated in association with **Dr. (Ass Prof) ADR Atahau**, Vice-Dean of the Economics and Business Faculty at Satya Wacana Christian University in Salatiga, Indonesia.

**Dr. (Ass Prof) CA Sparta**, Vice-Dean of the Indonesian Banking School is the author of Chapter 13 about Islamic Banking.

## ACKNOWLEDGEMENTS TO REVIEWERS

The relevance of the text material to actual real world application in the banking industry is that it should contain present-day realities and experience of industry practitioners. In addition to the real world application of the text material, it should also academically conform to up-to-date principles and theory underlying the subject area of the text material. To assist in this regard the following persons conducted the formal review process of the text material:

**Alan Ong**, Mortgage Broker and Property Consultant, Chapters 6 and 7.

**Charles Marais**, Independent Bank Consultant, Chapters 1, 2, 8 and 9.

**Daniel Meilech**, Practicing Loan Broker and Credit Specialist – Australian Firm, Chapters 3 and 4.

**Eugene Hartmann**, Director, Private Banking – Major Australian Bank, Chapters 5 and 10.

**Dr. Jason Park**, with PhD in Finance, Chapters 11 and 12.



# TABLE OF CONTENTS

	<i>Preface</i>	iii
	<i>Authors</i>	vii
	<i>Acknowledgements to Reviewers</i>	vii
	<i>Table of Contents</i>	viii
Chapter 1	The Role, Main Activities and Organizational Structures of Banks	1
Chapter 2	Major Bank Risks and Essential Components of Credit Risk Management	43
Chapter 3	Loan Pricing	81
Chapter 4	Regular Forms of Finance Provided by Branks	103
Chapter 5	Different Forms of Collateral	129
Chapter 6	Principles that Banks Apply When Dealing With Credit Applications	157
Chapter 7	Assessment of Consumer Credit Applications	179
Chapter 8	Understanding and Interpreting Financial Statements of Businesses	199
Chapter 9	Assessment of Business Credit Applications	259
Chapter 10	Loan Account Management	309
Chapter 11	Analyzing Loan Portfolio Information	325
Chapter 12	Loan Portfolio Risk Transfer Methods	355
Chapter 13	Islamic Bank Lending — An Introductory Overview with Focus on Indonesian <i>Sharia</i> Banks	377

## CHAPTER 1

# THE ROLE, MAIN ACTIVITIES AND ORGANIZATIONAL STRUCTURES OF BANKS

### AIM

To provide learners with a clear understanding of:

- The important role that banks perform in the economic environment.
- The different types of banks.
- The different main activities that banks could focus on to generate income.
- Important organizational functions that support the main bank operational divisions.

### KEY CONCEPTS

Retail banks  
Commercial banks  
Investment banks  
Universal banks  
Savings banks  
Co-operative banks  
Credit unions  
Building Societies  
Finance houses

Small business banking  
Corporate and investment banking  
Private banking  
Public sector banking insurance  
Specialised finance  
Technological services  
Risk management department  
Human resources department  
Operating divisions

Logistics and property department  
Group marketing department  
Expert product development department  
Technology department  
Legal department  
Finance department  
Treasury department  
Retail banking  
Islamic Banking

### LEARNING OUTCOMES

After completion of this chapter learners should be able to:

- Explain the three key functions that banks perform in the complicated economic macro-environment and compare different types of banks and different countries in this regard.
- Debate the advantages of the key functions of banks considering the start of the global financial turmoil in 2007 considering different types of banks and economic systems.
- Explain the major market segments that banks can focus on and compare these market segments in terms of profitability and risk in general.
- Determine the market segments of existing banks to interpret and compare their focal points and verify the existence and sizes of these market segments in banking operations.
- Explain the main organizational functions that support the main bank operational divisions and argue their importance with regard to different types and sizes of banks.

## CHAPTER 13

# ISLAMIC BANK LENDING – AN INTRODUCTORY OVERVIEW WITH FOCUS ON INDONESIAN SHARIA BANKS

## AIM

The aim of this chapter is to provide learners with an overall understanding of the principles of Islamic banking, the different forms of finance provided, and how Islamic banking differs from conventional Western type banking practices.

## KEY CONCEPTS

Usury

Sharia banking

al-Qur'an

Mudharabah principle

Rent principle

Salam principle

Istishna principle

Ijarah principle

Ijarah muntahiyah bittamlik principle

Mudharabah muthlaqah financing

Mudharabah musytarakah financing

Yield sharing

Wadiah principle

Wadiah al amanah agreement

Wadiah yadhamanah agreement

Trading principle

Mudharabah mukayadah principle

Musyarakah principle

Shaib al Maal

Shahibul maal

Mudharib

## LEARNING OUTCOMES

On completion of this chapter learners should be able to:

- Provide reasons for the existence of Islamic banking;
- Explain how the returns on deposits of Sharia bank customers differ from that of Conventional bank depositors;
- Explain the different forms of finance that Sharia banks provide to customers.
- Do yield sharing calculations for different types yield sharing finance scenarios.
- Explain the differences between Sharia banks and Conventional banks

## 13.1. INTRODUCTION

Different factors led to the development of Islamic banking (Saeed, 2003). First, in the nineteenth century, Western countries started to establish conventional banks in Islamic countries. Islamic clerics in these countries disagreed with the activities of conventional banks. According to their opinion, interest charged by Conventional banks is highly prohibited in the *al-Qur'an* and it triggers poverty for the Moslems. As such, a movement named *Ikhwanul Muslimin* was started in Egypt in the early 1930s. This movement was also known as a *neo-revivalist* group. As a result, different Islamic banks that do not charge interest were established, like Islamic Bank in Malaysia in the middle of 1940s, *Jam'iyat Islamiyah* in India in 1969 (Khan, 1987), Bank of Mit Ghamr Egypt (1963-1967) and Social Nasser Bank (1971).

Secondly, the abundance of oil products in Saudi Arabia, Kuwait, United Arab Emirate, Qatar, and Bahrain became an important factor in the development of Islamic banks. Almost all Islamic banks established in the Middle East during the 1970's were financed by oil welfare. Examples are: Dubai Islamic Bank; Kuwait Financial Ministry; Faisal Islamic Bank in Bahrain, Nigeria, and Senegal; Banks of Al-Baaraka; Groups of Shaykh Saleh Kamil and Dar Al-Mal al-Islami (DMI); and Prince of Saudi Arabia Muhammad Faisal.

The third factor that enhanced the growth of Islamic banking is the political decisions taken in Moslem countries. It consisted of the prohibition of interest by some Islamic countries; a decision to form the International Islamic Bank; and the participation of Moslem governments in setting up Islamic banks in their countries.

In Indonesia, the country with the largest number of Moslems in the world, Islamic banks are called *Sharia* banks. The first *Sharia* bank - Muamalat Indonesia Bank (MIB) - was established in 1991. It was initiated by the Indonesian Council of Clerics (ICC) and Government, with the support of The Association of Indonesian Moslem Scholars and some Moslem business people ([http://id.wikipedia.org/wiki/Perbankan\\_syariah](http://id.wikipedia.org/wiki/Perbankan_syariah)). Seven years after the establishment of MIB, the government and the House of Representatives announced Banking Act No 10/1998. According to this Banking Act, there are two banking operational systems in Indonesia. They are the conventional banking system and the *Sharia* banking system. The Conventional banking system is a banking system that is based on interest and *Sharia* banking system is based on yield sharing.

The assets of general *Sharia* banks amounted to only Rp 26.7 trillion in 2005 but increased to Rp 212.42 trillion at the end of 2015. This represents a 796% growth over ten years. (Financial Services Authority 2016). Even, by the end of June 2016 the assets of *Sharia* banking have reached 306.23 trillion (Sindo, September 6<sup>th</sup>, 2016).

The development of *Sharia* banking in Indonesia is also illustrated by the increase in the number of *Sharia* banks. In 2006 there were only 3 *Sharia* banks whilst by the end of 2015 it increased to 12 *Sharia* banks. (Financial Services Authority 2016).

The high growth of *Sharia* banking in Indonesia encouraged many banks from ASEAN countries to open their *Sharia* bank branches in Indonesia and to acquire some Conventional banks in Indonesia and transform them into *Sharia* banks.

## 13.2. BASIC ISLAMIC BANK PRINCIPLES

### 13.2.1. Background

Sharia banks do not use interest as a means to generate income. Activities of Sharia banks are conducted through fund collection and fund distribution by applying yield sharing and trading principles. For fund collection, Sharia banks use *wadiah* and *mudharabah* principles and also other Sharia principles. Meanwhile for fund distribution, Sharia banks use *mudharabah* and/or *musyarakah* principles for investment or financing; *murabahah*, *salam* and/or *istishna* principles for trading; *ijarah* and/or *ijarah muntahiyah bittamlik* principles for leasing; and other principles that are Sharia appropriate. The application of these principles will be explained in context in the ensuing sections of this chapter.

Activities of Sharia banks are performed according to the Islamic Sharia principle. A transaction complies with the Islamic Sharia principle if it has met the following conditions: the transaction does not contain harassment; it is not usury; it is not damaging to the bank itself or to other parties; there is no fraud; it does not relate to illegitimate goods or actions; and it does not have gambling elements.

### 13.2.2. Prohibition of Usury

Usury, as reflected by interest rates charged by Conventional Banks, is prohibited in terms of Islamic banking.

#### Usury Concept in Islam

The term usury (*nba*) is derived from word root r-b-w, which is used 20 times in the *al-Qur'an* (Q.S. 2:265, 275, 276, 278; 3:130; 4:161; 13:17; 16:92; 17:24; 22:5; 23:50; 26:18; 30:39; 41:39; 69:10). In the *al-Qur'an*, the term usury have seven meanings, namely: growing (Q.S. 2:275, 276, 278, 3:130, 4:161; 30:39); increasing (Q.S. 22:5); swelling (Q.S. 2:276, 30:39); rising (Q.S. 13:17); being big (Q.S. 17:24, 26:18); great (Q.S. 16:92); and hillock (Q.S. 2:265, 23:50). Although the term usury seems to have several meanings, the general meaning is an increase, either in quality or in quantity (Saeed, 1996). Other Islamic clerics see usury as an addition of costs in a trading transaction that is to the advantage of the lender and to the disadvantage of the borrower (as it is expressed by Muhammad Ibnu Abdullah Ibnu al-Arabi al-Maliki in *al-Quran* book of Ahkam; Badr ad-Dien al-Al-Ayni in the book *Umdatul Qari*; and Imam Sarakhsi in the book *al-Mabsul* (Wiyono, 2006). From the last general meaning, it is concluded by Islamics that bank interest is usury.

Usury is forbidden in the *al-Qur'an*, based on the meanings assigned to it. The following parts of the *al-Quran* are quoted in this regard: Letter of Ali Imran: 130; Letter of Al-Baqarah: 278-270; Letter of Al-Baqarah: 275; Letter of Ar-Ruum: 39; and Letter of An-Nisaa: 160-161.

### 13.3. FORMS OF SHARIA BANK CUSTOMER DEPOSITS (COMMUNITY FUND COLLECTIONS)

*Sharia* banking entails the practice of fund collection and fund distribution similar to the financial intermediation role of conventional banks. However, the difference is that *Sharia* banking is conducted in accordance with the requirements of the *al-Qur'an* and *hadith*. This requires the *Sharia* banks to conduct the financial intermediation by way of yield sharing (which is similar to profit sharing) between fund providers (depositors), the *Sharia* banks and entities to which finance has been granted (borrowers).

The total capital (liability side of the balance sheets of banks) of *Sharia* banks is generally very similar to that of Conventional Banks since it consists of equity and borrowed funds from different sources. The major difference is that the interest rate cost of the borrowed funds is replaced by yield sharing and in certain cases with bonus payments to customer depositors.

The ensuing sections will focus on the different principles that *Sharia* banks apply in terms of customer deposits (community fund collections).

The practice of fund collection from the community or its customers (*Shaib al Maal*) in *Sharia* banking is based on the *wadiah* and *mudharabah* *Sharia* principles.

The funds that are collected by *Sharia* banks from the community are in the form of current accounts, saving accounts, deposits and investments. For current accounts the *Sharia* principle *wadiah yaddhamanah* applies; for saving accounts the principle *wadiah yaddhamanah* dan *mudharabah*; for deposit products the principle *mudharabah*; and for investment products the principle *mudharabah muqayyahdah*. Each of these *wadiah* and *mudharabah* principles are explained below.

#### 13.3.1. Fund collection based on the entrusted concept principle

The *Wadiah* principle means the funds or goods provided by the customer/depositor represent entrusted funds or goods that should be kept by the recipient (the *Sharia* bank) and be returned at any time that the owner (customer / depositor) wants it back. *Wadiah* can be divided into two different agreements: *wadiahyad al amanah* and *wadiah yaddhamanah*.

In the case of *Wadiahyad al amanah* a contract exists between the owner and the recipient (the *Sharia* bank). The contract specifies that the *Sharia* bank has to keep the funds or goods, but is not allowed to use it. By the time it is being returned to the owner, it should be in good condition and the *Sharia* bank should not have conducted any damage to it. As compensation, the owner of the funds or goods can be charged a fee by the *Sharia* bank. For example: A *wadiahyad al amanah* agreement may be applicable where a customer provides the *Sharia* bank with goods or a safe monetary deposit for credit collateral purposes.

*Wadiah yaddhamanah* applies when the recipient (*Sharia* bank) of the entrusted funds or goods is allowed to use it for its own benefit. All profits from the usage of those entrusted goods become the right of the entrusted funds or goods recipient (*Sharia* bank), but the value of the entrusted funds or goods can also decrease when the recipient bank has used it. In such case, the bank will take the responsibility for the decreasing value. The *Sharia* bank compensates the owners of the funds or goods in the form of a bonus. Fund collection of *Sharia* banks by way of *wadiah yaddhamanah* agreements is in the form of current accounts and saving accounts that the banks offer to customers.

Customers can have the accounts in local or foreign currencies. In practice, the permission that the customer provides to the *Sharia* bank for the use of the funds in the account can be bound (limited) or not. Bound means that the entrusted goods recipients can use that goods (funds of current accounts and saving accounts) for certain purposes only. Meanwhile, if it is not bound it means the recipient (*Sharia* bank) is free to use it for any purpose in compliance with basic *Sharia* principles.

### 13.3.2 Fund collection based on the yield sharing principle

The collection of funds from customers by way of the yield sharing principle is conducted through a *mudharabah* agreement in the form of saving accounts or different types of money deposits that they make with the *Sharia* banks. The banks are trusted to manage the funds of customers with the yield sharing system. The customers receive a yield sharing ratio of around 55-56 percent from the investments that the banks conduct with the funds. However, if there are losses then the owners of the funds do not get yield sharing. The owners of the funds bear the losses based on their proportional contribution to the investments. This *mudharabah* agreement is also entered into with the entities to which the funds are distributed (the borrowers who are financed by the bank). This will be explained in the next section of this text.

In the case of *mudharabah mukayadah* agreements, the fund owners define certain requirements with regard to the distribution (use) of their funds by the bank. Meanwhile, in the case of *mudharabah multakah* agreements the recipient (*Sharia* bank) is free to use it for any purpose in compliance with basic *Sharia* principles.

## 13.4 FORMS OF SHARIA BANK LENDING (FUND DISTRIBUTION)

Fund distribution (lending) is conducted in three different ways. Firstly, fund distribution is conducted with *Mudharabah* and *Musyarakah* agreements. Yield sharing applies to these types of agreements and they are basically focused on businesses. The second type of fund distribution is based on trading principles where the *Sharia* bank acts as the buyer of goods and also seller of the goods to the borrower at a higher price than what the bank paid for the goods. The borrower has to repay it over a specific period of time. The third type of fund distribution is the renting (leasing) of goods to borrowers for a certain period of time. Both businesses and individuals can use the second and third types of fund distribution as forms of finance.

### 13.4.1 Yield sharing fund distribution

The yield sharing agreements can be either *mudharabah* or *musyarakah*. Each of this fund distribution agreements will be explained in the following sections.

#### 13.4.1.1 Fund distribution (lending) with *Mudharabah* agreements

Funds distributed to customers (borrowers) by way of *mudharabah* agreements are generally used for short term trading or working capital financing of businesses. A *Mudharabah* agreement involves two groups; those are the investors (depositors) and *Sharia* banks (*shahibul maal*) who entrust their capital to the borrowing entity (*mudharib*) to use it for operational business activities.

The Mudharib receives the funds from the bank, then applies the funds to gain profit. The yield sharing system allows the fund providers to share in the profit. If there is a loss, all the investors will bear it, however, if the loss is caused by the negligence of the *mudharib* then the loss will be suffered by the *mudharib* alone.

#### Types of *mudharabah* financing agreements

Three types of *mudharabah* agreements exist: *mudharabah muthlaqah* (not bound); *mudharabah muqayyadah* (bound); and *mudharabah musytarakah*.

- With *Mudharabah muthlaqah* financing the *Sharia* banks are the 100% owners of the funds (bank funds and yield sharing funds of depositors) provided to the *mudharib* (borrower) and provides the *mudharib* the freedom to use the funds in any way to gain a profit. This freedom is appropriate with the *Sharia* principles and not forbidden by Islam. The *mudharib* is responsible for the profit or losses emanating from the use of the funds. Whenever there is loss that is not caused by the negligence of the *mudharib*, then it will be the loss of the *Sharia* bank (and its depositors who agreed to yield sharing). If the losses are caused by the negligence of the fund manager, the losses are that of the fund manager (*mudharib*), not the Islamic bank (*shahibul maal*) and depositors who agreed to yield sharing. There is no time limit on these agreements. They are perpetual. Therefore, *Sharia* banks rarely use this kind of *mudharabah* agreement.
- With *mudharabah muqayyadah* (bound) agreements the *Sharia* banks are the 100% owners of the funds (bank funds and yield sharing funds of depositors) provided to the *mudharib* but put limitations on the use of the funds in terms of aspects like physical location of use, methods of use, investment objectives and business sectors. In general, for this type of *mudharabah* agreement, only the funds from the *Sharia* bank may be used for the project that is financed and funds used from other finance providers should not be combined with the funds provided by the *Sharia* bank for the project; the funds should not be used to repay other installment sales repayments owed to other finance providers; and the *mudharib* should do direct investments with the funds and not do it through third parties. This *mudharabah* agreements are generally used for short term trading or working capital financing of businesses.
- A *mudharabah musytarakah* agreement exists where the *Sharia* bank provides 100% (bank funds and yield sharing funds of depositors) or less of the funds required by a *mudharib* at the start of the financing. The *mudharib* initially makes a nil or certain percentage contribution. During the period of the financing the *mudharib* contributes more capital to the investment, and the capital proportion of the *Sharia* bank (and its yield sharing depositors) in the project decreases. The yield percentage also changes based on the capital participation of the *Sharia* bank and the *mudharib* over the period of the financing period. However, when there is a loss then the bank does not receive yield sharing but the amount of capital provided by the bank does not decrease because of the loss. Thus, the bank requires the *mudharib* to repay the total amount of capital lent to it, irrespective of whether the *mudharib* made profits or losses. The *mudharib* pays off all the bank capital gradually by increasing its own capital portion or pays all capital at the end of the financing period.



### Example of yield sharing with *mudharabah muthlaqah* financing

When there is profit or loss (that is not caused by a mistake by the *mudharib*) then the yield sharing system based on the agreed ratio is used. For example, customer Mr. A does a fund request for his business project from Aman *Sharia* Bank. The initial required investment is Rp 10 000 000. It is 100% financed by Aman *Sharia* Bank. In the first year this financed project achieves total sales for Rp 2.000.000; cost of goods sold is Rp 1.300.000, and other expenses are Rp 500 000. The net profit is Rp 200.000. The profit sharing ratio that they agreed to is 30:70, that is 30 for the bank (funds owner) and 70 for the *mudharib*. The yield sharing with profit sharing method can be calculated as follows. Yield sharing for the fund owner (AB *Sharia* bank and yield sharing depositors) is  $30\% \times \text{Rp } 200\,000$  or Rp 60.000 and yield sharing for the *mudharib* (customer Mr. A) is  $70\% \times \text{Rp } 200\,000$  or Rp 140.000.

### Examples of yield sharing with *mudharabah musytarakah* financing

Example 1: The investment yield is divided between the *mudharib* and the *Sharia* bank (and its yield sharing depositors) according to the agreed ratio, after the part of the *mudharib's* contribution has been considered. The *mudharib* is regarded as the fund manager (*musytarik*). After the return for the *musytarik* contribution has been deducted, the remaining yield is divided between the *musytarik* and the *Sharia* bank (and its yield sharing depositors) according to the agreed yield ratio and based on their capital portions.

- Scenario 1: AB *Sharia* Bank agrees to finance the business of CV KAN with Rp 4.000.000. AB *Sharia* bank provides 100% of the funds. The business is managed by Mr. B. They agree to a yield sharing ratio of 1:3. In other words, the part of profit/loss for the fund owner (bank) is 1 (or  $\frac{1}{4}$ ) part of the total profit that is divided and the part for the fund management is 3 (or  $\frac{3}{4}$ ) part of total profit. If the net profit for the first operational year is Rp 2.000.000, then the part of AB Bank is  $\frac{1}{4} \times \text{Rp } 2.000.000 = \text{Rp } 500.000$ , and the part of profit for Mr. B is  $\frac{3}{4} \times \text{Rp } 2.000.000 = \text{Rp } 1.500.000$ .
- Scenario 2: AB *Sharia* Bank agrees to finance the business of CV KAN with Rp 4.000.000. AB *Sharia* bank provides 100% of the fund. The business is managed by Mr. B. They agree to a yield sharing ratio of 1:3. In other words, the part of profit/loss for the fund owner (bank) is 1 (or  $\frac{1}{4}$ ) part of the total profit that is divided and the part for the fund management is 3 (or  $\frac{3}{4}$ ) part of total profit. At the end of the first year, Mr. B invests an additional Rp 1.000.000 into CV KAN at the end of year 1. The net profit for the second year is Rp 2.000.000. The capital portion of Mr. B is Rp 1.000.000/Rp 5.000.000 in year 2. It is similar with 20% and the capital portion of the bank is Rp 4.000.000/Rp 5.000.000 or similar to 80%. The yield sharing for year 2 is:  $\frac{3}{4}$  for Mr B = Rp 4.000.000/Rp 5.000.000 or similar to 80%. The yield sharing for year 2 is:  $\frac{3}{4}$  for Mr B = Rp 2000.000  $\times \frac{3}{4} = \text{Rp } 1500.000 + ((\text{Rp } 2000.000 - \text{Rp } 1.500.000) \times 20\%) = \text{Rp } 1600.000$ . The total net profit = Rp 2000.000. Mr B receives Rp1600.000 therefore AB Bank receives the remaining Rp 400.000 in year 2. Please note that this Rp 400.000 is the equivalent of  $\frac{1}{4}$  after Mr B received the yield sharing of  $\frac{3}{4}$  of the total profit for the second year as well as total net profit  $\times 20\%$  (portion of additional investment by Mr B).
- Scenario 3: AB *Sharia* Bank agrees to finance the business of CV KAN with Rp 4.000.000. AB *Sharia* bank provides 80% of the funds. The business is managed by Mr. B. who put in Rp1000.000. Therefore, the total capital put in at the start of the finance = Rp 5000.000 They agree to a yield

sharing ratio of 1:3. In other words, the part of profit/loss for the fund owner (bank) is 1 (or  $\frac{1}{4}$ ) part of the total profit that is divided and the part for the fund management is 3 (or  $\frac{3}{4}$ ) part of total profit. The net profit for the first year is Rp 2 000 000. The capital portion of Mr. B is Rp 1 000 000/Rp 5 000 000 in year 1. It is similar with 20% and the capital portion of the bank is Rp 4 000 000/Rp 5 000 000 or similar to 80%. The yield sharing for year 1 is:  $\frac{1}{4}$  for Mr B =  $Rp\ 2\ 000\ 000 \times \frac{1}{4} = Rp1500\ 000 + ((Rp2\ 000\ 000 - Rp1\ 500\ 000) \times 20\%) = Rp1600\ 000$ . The total net profit = Rp2000 000. Mr B receives Rp1600 000 therefore AB Bank receives the remaining Rp400 000 in year 2. This calculation is same as that of scenario 2 above.

- Scenario 4: AB Sharia Bank agrees to finance the business of CV KAN with Rp 4 000 000. AB Sharia bank provides 80% of the funds. The business is managed by Mr. B who puts in Rp1000 000. Therefore the total capital at the start of the finance = Rp 5000.000. They agree to a yield sharing ratio of 1:3. In other words, the part of profit/loss for the fund owner (bank) is 1 (or  $\frac{1}{4}$ ) part of the total profit that is divided and the part for the fund management is 3 (or  $\frac{3}{4}$ ) part of total profit. At the end of first year Mr B pays Rp1000.000 of the capital that AB bank provided back to AB bank. The net profit for the second year is Rp 2.000.000. The capital portion of Mr. B is Rp 1.000.000/Rp 3.000.000 in year 2. It is similar with 25% and the capital portion of the bank is Rp 3.000.000/Rp 4.000.000 or similar to 75%. The yield sharing for year 2 is:  $\frac{1}{4}$  for Mr B =  $Rp2000.000 \times \frac{1}{4} = Rp1500.000 + ((Rp2000.000 - Rp1500.000) \times 25\%) = Rp1625.000$ . The total net profit = Rp 2000.000. Mr B receives Rp1625.000. Therefore AB Bank receives the remaining Rp375.000 in year 2. Please note that this Rp 375.000 is the equivalent of  $\frac{1}{4}$  after Mr B received the yield sharing of  $\frac{1}{4}$  on the total profit for the second year as well as the remaining total profit  $\times 20\%$  (portion of additional investment by Mr B).

#### 13.4.1.2. Fund distribution (lending) with a *Musyarakah* agreement

The second form of fund distribution with yield sharing is *musyarakah*. The bank does not provide 100% of the capital required by the borrower since both partners in this finance transaction contribute capital. The capital participation of these two parties is used as the base for yield sharing in profits or losses. The bank offers the funds to the customer and also to its funds management (the entity that actively manages the funds on behalf of the borrower). The parties are called partners.

*Musyarakah* is a form of productive credit finance that can be short term or long-term, depending on the agreement between the Islamic bank and the borrower (shahibul maal and mudharib). The capital portions of the *Sharia* bank and the customer partner (borrower) can remain fixed over the total finance agreement period (permanent capital portion between bank and customer partner) or the customer partner may conduct periodic capital repayments during the finance agreement period (descending capital portion of bank). With a permanent *musyarakah*, the capital part of every partner (the bank and the partner customer) remains in the fixed proportion until the end of agreement period. If the *musyarakah* has a descending characteristic, then the capital contribution of the bank will decrease over time whilst the capital contribution of the customer partner will increase over time. Profit from this cooperation (*musyarakah*) is divided between the bank and the customer partner based on the capital proportion agreed to (fixed or descending) over the total period of the agreement. In Indonesia the *Sharia* banks use *musyarakah* agreements often, because in the case of losses the bank does not receive yield sharing but the amount of principal capital owed by the customer still has to be paid in full. The bank can take collateral to cover itself against possible capital repayment defaults from the customer partner. For example: The amount of principal capital that the customer partner owes to the bank is Rp100 billion but the bank has also taken collateral worth Rp100 billion from the customer partner.

Now assume no profits are made. The losses amount to Rp30 billion and the bank does not receive yield sharing. The customer partner is also unable to pay the principal capital back to the bank on the due date. The bank can use the collateral to recover the capital repayment losses.

## 13.4.2 Fund distribution with the trading principle

In order to avoid the charging of interest when distributing funds to the community, the Sharia banks also conduct the distribution by applying the trading principle. There are three types of trading principle agreements that are used: *murabahah*, *salam*, and *istishnah*.

### 13.4.2.1 Trading principle fund distribution with a *murabahah* agreement

The application of *Murabahah* as part of the trading principle constitutes a transaction where the bank buys goods from a supplier and then sells those goods to the buyer (customer). With *murabahah* financing, the bank conducts goods sales to the customer and the customer pays the bank with installments over a certain period of time for the goods. The installment payment agreement between the bank and the customer is also known as *Al Bai' Bisaman Ijil*. The good selling price with postponed payment is higher if it is being compared to the cash-selling price (Saeed, 2003). For example: A customer (business or individual) requires finance to purchase goods. A bank buys the goods from a supplier at a price of Rp 10 million and then sells it to the customer at a price of Rp11 million. The agreed selling price between the bank and the customer is used as the base for the customer's installment to the bank. If the installment payment has to be conducted over a period of 10 months, then the customer will pay to bank for Rp 1,1 million per month. In this case, the bank will make a profit Rp 1 million. This transaction complies with *Sharia* principles if the bank has informed to customer that the cost of goods is Rp10,0 billion; that it will generate a profit of Rp1 billion from the transaction, and the customer agreed to it.

### 13.4.2.2 Trading principle fund distribution with sales agreement

A *Salam* purchase contract exists when goods are ordered (*muslamfih*) by a buyer from a seller (*muslamilaihi*) for future delivery. Payment has to be conducted by the buyer before delivery will be conducted by the seller. The prices of the goods are fixed and do not change during the agreement period. The bank can act as buyer or seller. The role of *Sharia* banks as distributors of funds to the community requires them to be the buyers for customers (provide customers with the funds to purchase the goods). The bank therefore pays for the goods in advance. When the goods are later received by the bank, the latest prices of the goods are compared to the prices at which the bank purchased it. If prices have in the meantime increased, the bank charges the customer who wants the goods the new increased price and profit from it. If not, the same price that the bank paid for it is charged to the customer. *Sharia* banks rarely apply this type of finance.

### 13.4.2.3 Trading principle fund distribution with *Istishna* agreement

*Istishna* fund distribution is almost similar to *salam*. With *Istishna* purchase agreements, customers act as buyers of the goods (*al-mustashmi*) and the banks act as sellers (as *shani*). The sellers (*Shana* banks) enter into buying contracts with the producers of the goods or existing owners of the goods to prepare the goods that will be delivered to the buyer (bank). The banks then sell the goods to the customers at an increased price. For example, Mr. A is planning to buy a type 45-house for Rp 250 million

from the Sharia bank. Mr. A provides an initial down payment (deposit) of Rp 50 million to the bank. Based on this purchase agreement, the *Sharia* bank enters into an agreement with ABC Contractors to build the house and purchase it from ABC Contractors. Assume the price that the bank pays the contractor is Rp175 million. Mr A pays the bank Rp 250 million for it, but has already paid the initial Rp 50 million. Mr A now has to repay the bank the remaining Rp 200 million in installments over the period of time that the bank allows Mr A to repay. The bank makes a profit of Rp250 million – Rp 175 million = Rp 75 million. The house serves as collateral to the bank. If Mr A defaults with the repayment of the installments, the bank will lay claim on the house.

#### 13.4.2.4 Trading principle fund distribution with rent principle

Fund distribution through rent or *Ijarah* is a transaction where an asset is rented from a bank. Conventionally, this transaction is called leasing. In *Sharia* banking practice in Indonesia, a *ijarah* transaction is almost similar to consumer credit finance of conventional banks. For example, the *Sharia* bank buys a car and rent it to the customer for a certain period of time. The difference between the total rent cost over the agreement period and the price at which the bank purchased the car is the profit of the bank. *Ijarah muntahiya bit tamlik* (IMBT) is a type of *ijarah* agreements where the rented asset can become the property of the customer at the end of the agreement period.

## 13.5. OTHER SHARIA BANKING ACTIVITIES

Besides the fund collection and fund distribution activities explained in the preceding sections of this chapter, *Sharia* banks also provide other banking services, such as bailouts, factoring, letters of credit (L/Cs), transfers, clearing, social loans, safe deposits, foreign exchange, mortgages, and bank guarantees. These banking products are based on appropriate *Sharia* agreements, namely *Qardh*, *hawalah*, *wakalh*, *qardhulhasan*, *wadiahamanah*, *sharf,rahn*, and *khafalah*.

According to the rules of Indonesian Banks, *Al Qardh* is a loan agreement from the bank (*muqrid*) to the customer (*muqtarid*) who has the obligation to pay the principal amount of the loan back to the bank. It is applied to finance the poor to start businesses and to assist them to keep businesses operating. *Qardh* is almost the same as credit provided by Conventional banks, but *Sharia* banks do not charge interest. They only charge an administration fee on the outstanding principal amount of the loan. *Zakat*, *infaq* and *Sadaqah* can be used as sources of funds by the Islamic banks to finance the poor who want to start businesses. *Zakat* is a certain amount of assets (property) that Moslems give to groups who deserve it (generally the poor) according to the conditions set by the *Sharia*. *Sadaqah* means the worshipping of God by giving away/ spend (*infaq*) larger parts (portions) of assets (property) than what is required in terms of *Sharia*. In terms of jurisprudence it is *infaq* (a donation) or the devoting good assets (property) for worship (reward) or things that are permissible.

A *Hawalah* agreement is the factoring of debtors (receivables of customers) by *Sharia* banks. With *Hawalah* a customer's debtor/receivable (*muhāl*) is sold to the bank (*muhāl'alaih*) by a customer (*muhil*). The *muhāl'alaih* pays the *Muhil* the amount that is owed by the *muhāl* and then collects the amount from the *muhāl* at the due date. The *muhāl'alaih* will get compensation for its service for transferring and paying in advance. There are two kinds of *hawalah*. They are *hawalah ad-dain* in the case of money owed by the *muhāl* and *hawalah al haq* where the *muhāl* has to repay in other forms like objects/goods.

*Wakalah* is a power of attorney from a customer (*muwakil*) to the bank (*wakil*) to conduct certain duties (*taukil*) on behalf of the customer. It is used with *Sharia* banking products such as L/Cs, clearing, and transfers.

*Al qaradhul Hassan* is an agreement for bailout loans to customers where the lender is forbidden to receive any compensation and only the principal amount of the loan needs to be repaid by the borrower. The scheme is used only for very small credit financing like social loans for small business.

*Sharf* is foreign exchange trading. In *Sharia* banking, foreign exchange transactions are only allowed if it is conducted to protect the asset values and company debt from negative implications that emanate from the changing value of foreign currency compared to the local currency. In practice, *sharf* is cash foreign exchange trading.

*Rahn* which is a mortgage taken by one party over the assets of another party to serve as collateral when consumer finance like funds for education or health purposes are provided to customers.

*Kafalah* is a guarantee provided by the bank (*kaafil*) to a third party on behalf of a customer (*makful*). The bank is responsible to conduct the payment, should the customer not be able to do the payment, like in the case of L/Cs.

## 13.6 YIELD SHARING – CALCULATIONS

### 13.6.1 The Yield Sharing Principle

The yield that *Sharia* banks earn from financing of customers is first divided between the customers who did deposits with the banks (investors) and the remainder is kept by the bank. The forms of yield sharing that are given to the investors are: discretionary bonuses to the customers who did *wadiah* deposits and yield sharing according to the ratio (*nisbah*) agreement between the bank and the customers who made *mudharabah* deposits.

The *Sharia* bank retains the portion of the yield sharing according to the ratios (*nisbah*) that has been agreed between the bank and the *mudharabah* depositor customers. The operational expenses of the banks are paid from this retained part of the yield and discretionary bonuses are paid from it to *wadiah* depositor customers. The net amount left over after the payment of the operational expenses and bonuses goes to the bank shareholders.

### 13.6.2 Methods for conducting yield sharing calculations

Two methods exist namely, *profit sharing* and *revenue sharing*. Revenue yield sharing is based on the sharing of the earnings that the bank gets from all its productive asset investments before the operational cost of the bank is considered. For example: Yields from *Wadiah* Certificate investments with the Indonesian Bank; *Mudharabah* Certificate inter Bank investments (SIMA); yield sharing finance conducted; and receivable trading principle finance conducted. The profit yield sharing method is based on exactly the same yields, but the bank's operational expenses are deducted from the revenue before

the sharing is calculated. The calculations for both methods are always conducted according to the accrual principle normally applied in accounting and not the cash basis principle.

Elementary example of yield and profit sharing calculations. Sehat *Sharia* Bank has only one *Sharia* finance debtor, that is PT AB. The bank also has only one depositor, who has a yield sharing savings account with the bank. He is Mr. M. Iqbal. The agreement with Mr M. Iqbal is 70:30. That means Mr Iqbal gets 30% of the earnings that the bank get from the use of productive assets. Sehat *Sharia* Bank finances 100% to PT AB for Rp 1,000 million. In the first year PT AB obtains net profit of Rp 300 million from the finance of Rp 1000 million or 30% after it paid its operational expenses. The operational expenses of PT AB is Rp 200 million. The yield sharing ratio that is agreed between Sehat *Sharia* Bank and PT AB is 40:60 (40% for PT AB and 60% for Sehat *Sharia* Bank).

The profit yield sharing result on the asset side (on the finance provided by the bank) is calculated as follows:

1. Yield Sharing for PT AB = ratio PT AB x profit PT AB  
 = 40% x Rp 300  
 = Rp 120 or 12% from total bank financing
2. Yield sharing for bank = Ratio of Sehat *Sharia* Bank x profit of PT AB  
 = 60% X Rp 300  
 = Rp 180 or 18% from total bank financing

When the revenue yield sharing is calculated it is done without considering the operational cost/expenses of PT AB:

1. Yield sharing for PT AB = 40% x Rp 500  
 = Rp 200 or 20% from total bank financing
2. Yield sharing for bank = 60% x Rp 500  
 = Rp 300 or 30% from total bank financing

From the yield sharing calculation for the bank asset, the use of the revenue yield sharing calculation provides a higher yield amount because the operational expenses of the financing debtor (borrower) has not been deducted from the earnings. Banks can use profit yield sharing or revenue yield sharing in practice, however, banks prefer the use of revenue yield sharing, because it provides them with higher yields.

Assume the bank applies revenue yield sharing on both its asset and liability sides, then the calculation of the revenue yield sharing on the liability side of the bank is the following: The yield sharing ratio for customer M. Iqbal is 70:30 (See example scenario above). Thus, the revenue yield sharing for customer is 30% x Rp 300 million = Rp 90 million.

### 13.6.3 Calculation of Comprehensive Yield Sharing

Calculating the yield sharing from the asset side and from the liability side is more complex in practice than the elementary calculation conducted in the example above. In fact, *Sharia* banks have various productive assets and funding sources. The steps to calculate the comprehensive yield are illustrated below:

**Step 1:** Data preparation to construct an income table and a revenue distribution table (Assume calculations are conducted monthly):

1. Calculate the average last month balance of productive assets (example: balances of *Mudharabah* Certificate inter bank investments; yield sharing finance conducted; and receivable trading principle finance conducted. (Place in columns B1 to B3 of table 1). Calculate obtained income (cash income) from productive assets during the running month (Place in column C1 to C3 of table 1).

**Table 1 Revenue from Productive Assets**

No	Productive assets	Average balance	Accepted revenue	Equivalent rate
	A	B	C	D
1	Inter banks	B1	C1	$D1=C1/B1$
2	Financing a. <i>Mudharabah</i> b. <i>Musarakah</i>	B2	C2	$D2=C2/B2$
3	Receivable (net) a. <i>Murabaha</i> b. <i>Salam</i> c. <i>Istishna</i>	B3	C3	$D3=C3/B3$
4	<b>Total</b>			

2. Calculate the daily average balances of third party yield sharing funds (current accounts, saving accounts, and deposits) for the last month (enter these figures into column B1 until B3 of table 2).
3. Calculate the ratio of the average daily balance of productive assets to the average daily balance of third party funds. (=RAPS)

**Table 2 Distribution of revenue (profit yield sharing ratios between the bank and third party fund providers)**

No	Third party funds	Average balance of third party funds	Revenue to be distributed	Bank		Customers		
				Ratio	Rp.	Ratio	Rp.	Equivalent rate
				D	E	F	G	H
1	Current accounts	B1	C1	*)		*)		
2	Saving accounts	B2	C2	*)		*)		
3	Deposits	B3	C3	*)		*)		
4	<b>TOTAL</b>	B4	C4					

Remarks: \*) represents the ratios agreed between the bank and the customers for the different types of funds from depositors.

**Step II.** Calculate revenue distribution to each third party fund provider customer based on the ratio agreement between the customers and the bank. If the RAPS ratio calculated in the step above is more than 100%, then it means that the productive assets have been financed with the third party funds plus other sources of funds – bank funds. In this case the total amount of revenue can be divided by the RAPS ratio. Enter the result of this calculation into column C4 in the table 2 above.

If the RAPS ratio is less than 100%, then it means all revenues come from productive assets that were funded with funds of depositors (the third parties) although third party funds were not fully used for the financing of productive assets. Therefore, all received revenue can be divided between depositors based on the sharing agreement with the bank. This calculation result is entered into column C4 in table 2 above.

**Step III.** Calculate the income that can be distributed to each product of Sharia bank third party funds in table 2 above by dividing the numbers in cell C4 between cells C1, C2, and C3 in table 2 as follows:

$$\text{Cell C1} = (\text{cell B1} / \text{cell B4}) \times \text{cell C4}$$

$$\text{Cell C2} = (\text{cell B2} / \text{cell B4}) \times \text{cell C4}$$

$$\text{Cell C3} = (\text{cell B3} / \text{cell B4}) \times \text{cell C4}$$

For example: PT Sharia Indonesia Bank in 2017 records the following data related to the revenue, average productive asset balance positions and third party funding:

1. Average balance of third party funds for *Wadiah* current accounts is Rp 4.800 million and the average balance for *Mudharabah* saving accounts is Rp 3.600 million.
2. Average balance for *Mudharabah* deposit balance for 1 month is Rp 19.100 million; the average balance for 3 months is Rp 19.800 million; the average balance for 6 months is Rp 11.000 million; and the average balance for 12 months is Rp 5.000 million.
3. For productive assets the average balance for securities is Rp 5.400 million; the average balance for interbank finance is Rp 500 million; the average receivable balance (net) is Rp 17.800 million; the average *Musyarakah* balance is Rp 7.600 million; and the average *Mudharabah* financing balance is Rp 28.500 million.
4. Total revenue earned during 2017 is Rp 8.767,00 million. It consists of revenue from securities of Rp 305.64 million; revenue from inter bank accounts of Rp 5,23 million; revenue from *mudharabah* financing of Rp 5.415 million; revenue from *musarakah* financing of Rp 1.083 million; and revenue from receivables of Rp 1.958 million.
5. The bonus ratio for *wadiah* current accounts is 75:25. The ratio for a *mudharabah* saving accounts is 60:40. The ratios for deposit accounts are based on the periods of time of the deposits. The ratio for a deposit for the period of 1 month is 15:85; the ratio for a deposit for 3 months is 20:80; the ratio for a deposit for 6 months is 25:75; and the ratio for a deposit for 12 months is 26:74.

For the above example, the revenue that the Sharia bank receives from each of the groups of productive assets is contained in table 3.



Table 3 Revenue from productive assets

No	Productive assets	Average balance	Accepted revenue *)	Equivalent rate
	A	B	C	D
1	Securities	5,400.00	305.64	5.66%
2	Inter banks	500.00	5.23	1.05%
3	Financing:	36,100.00	6,498.13	18.00%
	a. Mudharabah	28,500.00	5,415.00	19.00%
	b. Musyarakah	7,600.00	1,083.00	14.25%
	Receivable (net)	17,800.00	1,958.00	11.00%
4	<b>Total</b>	<b>59,800.00</b>	<b>8,767.00</b>	<b>14.66%</b>

Revenue sharing for the bank and the yield sharing for the customers are contained in Table 4. Revenue that is generated by the bank from its productive assets is Rp 8.767,0 million. The RAPS ratio is 108.58%  $= (59.800/63.300,0) \times 100\%$ . Because the RAPS ratio is larger than 1, the ratio is applied for the dividing of the revenue between the third party fund providers. The revenue that can be divided is  $Rp\ 8.767,0/1,0858 = Rp\ 8.074,50$ .

Table 4 Revenue distribution to the customers that provide third party funds

No	Third party fund	Average balance of third party fund	Revenue to be distributed	Bank		Customer		
				Ratio	Rp.	Ratio	Rp.	Eq.Rate
				D	E	F	G	H
1	Wadiah Current Account	4,800.00	612.28	0.75	459.21	0.25	153.07	3.19%
2	Mudharabah Saving Account	3,600.00	459.21	0.75	344.41	0.25	114.80	3.19%
3	Mudharabah Deposit	54,900.00	7,003.00		5,615.80		1,387.21	2.53%
	1 month	19,100.00	2,436.38	0.85	2,070.92	0.15	365.46	1.91%
	3 months	9,800.00	2,525.67	0.80	2,020.54	0.20	505.13	2.55%
	6 months	11,000.00	1,403.15	0.75	1,052.36	0.25	350.79	3.19%
	12 months	5,000.00	637.80	0.74	471.97	0.26	165.83	3.32%
4	<b>TOTAL</b>	<b>3,300.00</b>	<b>8,074.50</b>		<b>6,419.42</b>		<b>1,655.08</b>	

The profit sharing ratios that were agreed between the bank and customers are reflected in Table 4 results in revenue that are distributed to the customers (column C) If these amounts are divided by the average balances of the third party funds (column B), then the rate of return (equivalent interest rate percentage) can be calculated (column H) For example, it is evident from the information contained in Table 4 that customers with Wadiah current accounts earn an interest rate of 3.19% on their deposits and customers who make 12 month Mudharabah deposits earn 3.32%.

## 13.6 DIFFERENCES BETWEEN SHARIA BANKING AND CONVENTIONAL BANKING IN INDONESIA

The first difference between *Sharia* banking and Conventional banking is based on the principles used in the lending agreement. In *Sharia* banking, the agreement is based on Islamic *Sharia* principles monitored by the *Sharia* Banking National Supervisory Board. Conventional banks do not base their activities on religious principles and operate according to free market principles but according to the applicable Banking legislation.

The second difference is based on the way that banks are compensated for their roles as intermediaries. Interest is the primary income of Conventional banks for lending and interest pricing is based on risk/return relationships for different loans. In *Sharia* banking, compensation from lending is based on profit sharing between the depositors who agree to yield sharing, the banks and the borrowers to obtain an equal distribution of earnings. They also apply trading principles by buying and reselling goods/assets at mark-up prices, providing them with repayment facilities over time. From a *Sharia* point of view the profit sharing of *Sharia* banks is not based on interest, but on investment yield sharing (Yaya, dkk; 2008).

The third difference is that with Conventional banks, the funds from the depositors can be utilized in any way by the banks, whilst in the case of *Sharia* banks the depositors have the option to indicate for what purpose their deposits could be used or not.

The fourth difference is that with Conventional banking the depositors know in advance what income they will derive in terms of interest and the borrowers know how much interest they will pay, provided they are quoted fixed interest rates. In the case of variable interest rates the interest rate returns of depositors and interest rate payments of borrowers may be subject to changes. The banks normally retain a margin between the interest rates that they pay to depositors and the interest rates that they charge to borrowers. Therefore, the approximation of future income is possible. When yield sharing is applied in *Sharia* banking the profits cannot be determined in advance for the depositors and bank as it depends on the success of the ventures for to which the funds have been allocated. When the *Sharia* banks apply the trading principle, then the yield can be determined.

The fifth difference is that each *Sharia* bank should have a *Sharia* Supervisory Board (SSB) in its organization structure. The duty of this SSB is to supervise the bank operations and its products to comply with *Sharia* principles. The SSB is usually on the same level as the board of commissioners and appointed on the annual General Meetings of Shareholders.

## 13.7 SUMMARY

Activities of *Sharia* banks are performed according to the Islamic *Sharia* principle. A transaction complies with the Islamic *Sharia* principle if it has met the following conditions: the transaction does not contain harassment; it is not usury; it is not damaging to the bank itself or to other parties; there is no fraud; it does not relate to illegitimate goods or actions; and it does not have gambling elements.

Funds collected from customers are either *Wadiah* principle funds or yield sharing principle funds. The *Wadiah* principle means the funds or goods provided by the customer/depositor represent entrusted funds or goods that should be kept by the recipient (the *Sharia* bank) and be returned at any time that the owner (customer / depositor) wants it back. *Wadiah* can be divided into two different agreements: *wadiah al amanah* and *wadiah yaddhamanah*. In the case of *Wadiah al amanah* a contract exists between the owner and the recipient (the *Sharia* bank). The contract specifies that the *Sharia* bank has to keep the funds or goods, but is not allowed to use it. *Wadiah yaddhamanah* applies when the recipient (*Sharia* bank) of the entrusted funds or goods is allowed to use it for its own benefit.

The collection of funds from customers by way of the yield sharing principle is conducted through a *mudharabah* agreement in the form of saving accounts or different types of money deposits that they make with the *Sharia* banks. The banks are trusted to manage the funds of customers with the yield sharing system.

Products that *Sharia* banks offer for the financing of borrowers are:

- 1) Products that are yield sharing forms of finance namely, *mudharabah* yield sharing and *musyarakah* yield sharing.
- 2) The *Sharia* banks also conduct the distribution by applying the trading principle. There are three types of trading principle agreements that are used: *murabahah*; *salam*, and *istihnah*.
- 3) Rent finance (*ijarah* assets).

*Sharia* banks also provide other products and services to customers like letters of credit, bank guarantees etc. However, the main point is, that every transaction should comply with Islamic *Sharia* criteria.

Islamic banks and Conventional banks differ substantially in terms of certain aspects like principles applied and forms of income generated.

## CHAPTER 13: TEST YOUR KNOWLEDGE - THEORY

1. Briefly provide reasons for the development of Islamic banking.
2. Explain the different forms of deposits that the community (customers) can make with *Sharia* banks.
3. Explain the different types of *mudharabah* finance agreements and use examples to clarify your answer.
4. Explain the different trading principle finance agreements and use examples to clarify your answer.
5. Give a brief description of other services/products offered by *Sharia* banks.
6. Provide at least three different reasons why *Sharia* banks differ from Conventional banks.

## CHAPTER 13: ESSAY QUESTIONS AND CASE STUDIES

### CASE STUDY 1

Murni *Sharia* Bank provides 100% finance 100% to PT AB for Rp 3.000 million. In 2017, PT AB has a net profit Rp 900 million (30%) from the total finance of Rp 3.000 million. The operational cost of PT AB is Rp 600 million. Assume that the agreed yield sharing ratio between Murni *Sharia* Bank and PT AB is 42:58 (42% for PT AB and 58% for Murni *Sharia* Bank). Bang Omar has a saving account with customer with a yield sharing ratio of 70:30.

Asked:

- Calculate 2017 **profit** yield sharing for PT AB and for the bank.
- Calculate 2017 **revenue** yield sharing for PT AB and for the bank.
- Calculate the **revenue** yield sharing for Bang Omar and the bank.
- Explain why the answers to a. and b. differ.

### CASE STUDY 2

The 2017 data of PT *Sharia* Indonesian Bank about earnings and the balance sheet positions for productive assets and third party funds are the following:

- Average balances of third party funds are: *Wadiah* current accounts - Rp 9.600 million; *Wadiah* saving accounts - Rp 7.600 million; and *Mudharabah* saving accounts - Rp 7.200 million.
- Average balances of *Mudharabah* deposits for 1 month- Rp 28.200 million; 3 months - Rp 29.600 million; 6 months - Rp 22.000 million; and 12 months - Rp 10.000 million.
- Average balances of productive assets are: securities - Rp 10.800 million; inter banks - Rp 1.000 million; receivables (net) - Rp 35.600 million; *Musarakah* financing - Rp 7.600 million, and *Mudharabah* financing - Rp 57.000 million.
- Profit earnings for 2017 total Rp 17.474,00 million from the following productive assets: securities - Rp 611, 28 million; interbank accounts - Rp 10,46 million; *mudharabah* financing - Rp 10.830 million; *musarakah* financing - Rp 2.166 million; and receivables - Rp 2.988 million.
- The bonus ratio for both *wadiah* current accounts and *wadiah* saving accounts are 75:25 and the yield sharing ratio for *mudharabah* saving accounts is 60:40. The yield sharing ratios for different deposits are: 1 month deposits - 15:85; 3 month deposits- 20:80; 6 month deposits - 25:75; and 12 month deposits - 26:74.

Asked:

- Calculate the total amount of earnings that the bank receives from the productive assets. Apply the calculation table explained in the example about yield sharing calculations in the chapter.

- b. Calculate the RAPS ratio.
- c. Complete a table that contains the earning distribution amounts for the different fund providers of the bank.
- d. Assume Mr. Hasanudin has a *wadiah* saving account with an average annual balance of Rp 225 million. Calculate the amount of yield sharing for Mr. Hasanudin as well as the percentage of return that he receives.

### CASE STUDY 3

Tenang *Sharia* Bank agrees to finance the business of 'CV Bersama' by investing Rp 12.000.000 in the business. This business is managed by Mr. Imam with an agreed yield sharing ratio of 1:3. It means profit/loss sharing for the fund owner (bank) is 1 (or  $\frac{1}{4}$ ) of the total profit that will be divided and the fund management receives 3 (or  $\frac{3}{4}$ ) from the total profit that will be divided). After the bank invested the Rp 12.000.000, Mr. B also invests Rp3.000.000 in 'CV Bersama'. The net profit for the first operational year is Rp 6.000.000.

Asked:

- a. Calculate the yield sharing amounts received by the bank and CV Bersama if the Rp 3000.000 investment of Mr Imam **is not** considered in the calculation.
- b. Calculate the yield sharing amounts received by the bank and CV Bersama if the Rp 3000.000 investment of Mr Imam **is** considered in the calculation.
- c. For what types of *mudharabah* financing will the yield calculated in a. be applicable or not? Substantiate your answer.
- d. For what types of *mudharabah* financing will the yield calculated in b. be applicable or not? Substantiate your answer.

## REFERENCES

- Otoritas Jasa Keuangan . (2016). *Laporan keuangan Perbankan Syariah Tahun 2016*. Jakarta: Bank Indonesia, melalui <http://www.ojk.go.id/en/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>
- Beik, I. S., (2006), Urgensi Standarisasi Akuntansi Perbankan Syariah, [www.tazkiaonline.com](http://www.tazkiaonline.com)
- Harahap, Sofyan Syafri (2001), *Menuju perumusan teori akuntansi Islam*, Jakarta: PT Pustaka Quantum.
- Yaya, Rizal, Ahim Abdurrahim dan Peni Nugraheni (2008), Kesenjangan Harapan Antara Nasabah dan Manajemen Terhadap Penyampaian Informasi Keuangan dan Non Keuangan Bank Syariah: Studi Empiris Bank Syariah di Yogyakarta dan Surakarta, *Artikel Disampaikan pada SNA 11 2008*, Pontianak: Universitas Samratulangi.
- Khan, Shakrukh Rofi (1987), *Profit and loss sharing: An Islamic experiment in finance*, Karachi: Oxford University Press.
- Nurhayati, Sri, dan Wasilah, (2011), *Akuntansi syariah di Indonesia, edisi 2 revisi*, Jakarta: Salemba empat
- Saeed, Abdullah (2003), *Bank Islam dan bunga-studi kritis dan interpretasi kontemporer tentang riba dan bunga*, Yogyakarta: Pustaka Pelajar.
- Sahara, Ratna dan Nunung Nurul Hidayah (2008), Analisis perbandingan kinerja keuangan Bank Muamalat Indonesia Periode 1992-1998, *Artikel Disampaikan pada SNA 11 2008*, Pontianak: Universitas Samratulangi.
- Sparta, (2008), "Mengenal Keunggulan Praktek Perbankan Syariah di Indonesia", *Jurnal Ekonomi FE-Untar* No.Tahun XIII/03/2008, Nov 2008, ISSN: 0854-9842,
- Wiyono, Slamet (2006), *Cara Mudah Memahami Akuntansi Perbankan Syariah Berdasarkan PSAK dan PAPS*, Jakarta: Grasindo.
- Wiyono, Slamet dan Taupna Maulamin, (2012), *Memahami Akuntansi Syariah di Indonesia*, Jakarta Mitra Wacana Media.