Islamic Finance Fundamentals

Financial Markets Education 2014

About this talk …

- It is not about religious instruction
- No claim to religious authority
  - we quote from various sources, the Quran, Sunnah, Islamic jurists …
- We seek to understand
  - principles and rationale of Islamic finance
  - avoidance of Riba and Gharar
  - Islamic finance contracts
  - financial risks
  - capital markets and investments
  - Sharia compliant structured products

Outline

- Introduction to Islamic Finance
  - Conventional Finance and Islamic Finance
- Riba (interest) and Gharar (excessive risks or uncertainty)
- Basic financial contracts
  - Murabaha, Ijara, Arbun
  - Mudaraba, Musharaka
- Derivatives
- Capital Markets: equity markets and fixed income markets
- Islamic Investments
  - equities, equity indices, commodities, commodity indices
  - structured products, Sukuk, currencies, real estate, Islamic Funds
- Summary
- Appendix

Section 1

Introduction to Islamic Finance

Islamic Finance: almost four decades now

- Islamic Banking has come a long way from its conception in the 1970s
- Founded on the framework of Islamic economics in the 1950s due to the works of several scholars, Muhammad Iqbal, Abu Al-A'la Al-Maududi, Baqir Al-Sadr and Sayyid Qutb
- Develop economic and financial systems that embodies the ideals espoused in the teachings of Islam
  - fair, equitable and just treatment in business transactions
  - permissible trade and finance contracts
- Conventional banking and finance contain features that are forbidden or discouraged in Islam: for instance, interest on cash
- Islamic Finance offers Muslims an alternative to conventional finance
  - Islamic Finance are open to non-Muslims too

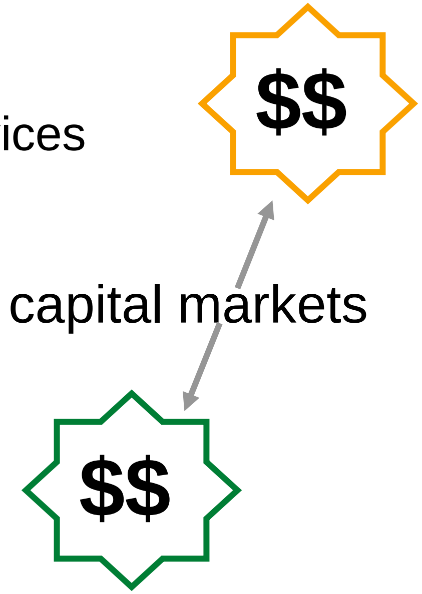
Why the interest in Islamic Finance?

- Estimate that around 23% of world population are Muslims*
- Asia have the biggest Muslim population
- Over time, Islamic Banking has developed into a viable practice
  - effort to promote Islamic Banking and Finance as an alternative to Conventional Finance
- Muslim clients are more aware of the available alternatives and have opportunities to get access to Islamic Finance
- Tremendous growth of wealth among Muslim population
  - Muslim investors are more careful and discerning in their choice of investments
  - demand for investments that comply with teachings of Islam

* estimates for the Muslim population globally have range from 1.6 billion to 1.8 billion out of a total world population of around 7 billion (Wikipedia puts it in the range 1.6 billion = 23% of the world population)

Economy: central to life and civilisation

- Three aspects
- Allocation of resources to production of goods and services
  - what to produce
- Production of goods and services
  - how to produce
- Distribution and consumption of goods and services
  - who gets the products
- Economic systems: level of government involvement
  - market economy: market system, capitalism
  - mixed economy: both private-owned and state-owned enterprises, socialism
  - centrally-planned economy: government as planner, communism



Finance: central to an economy

- Two aspects
- Companies and governments raise capital
  - acquire factors of production to produce goods and services
  - capital markets: debt capital (loans, bonds) or share capital (equity), or hybrid instruments (combination of debt and equity)
- Consumption and Savings
  - consumption: individuals, government borrow $$ to consume goods and services today or in the near term
  - savings and investments: individuals and government postpone consumption of wealth
- Banks and capital markets: bring together people with $$ and people who need $$
  - providers of $$ earn a return on their savings or investments

Conventional Finance

- Conventional finance has developed contracts, instruments or products: facilitate economic activities
  - allocate capital, distribution of goods and services
  - maximise utility or benefits
- Need capital: finance production, infrastructure development, consumption
  - loans, bonds, leases, mortgages, credit cards
- Have capital: investments in many asset classes
  - stocks and bonds issued by companies
  - bonds, asset-backed securities, commodities, FX, real estates, indices, structured notes
  - mutual funds, hedge funds
- Market for risks
  - derivatives: forwards, futures, options
  - insurance: life and property insurance

Islamic Finance

- Muslim communities have the same economic and financial needs as other communities
- Muslims abide by the teachings of Islam and the Quran (holy book).
- Among other aspects, Quran describes principles for human behaviour and business transactions
  - truthfulness, moral, fairness and justice
  - avoids interest on money (**Riba**)
  - avoids excessive risks or uncertainty (**Gharar**)
  - avoids impermissible games of chance (**Maysir**)
- Can Muslims enjoy all the benefits, opportunities and efficiencies of conventional finance while complying with all the teachings and principles of Islam?
  - Islamic Finance
- Islamic Finance complies with the Sharia laws as well as other applicable laws of the country or jurisdiction

Issues and implications

- Riba is forbidden: debt instruments and investments that involve interest payments and receipts are forbidden
  - fixed income like instruments in Islamic Finance have to avoid interest
  - Sharia-compliant deposits and bonds (Sukuk)
- Excessive risks and uncertainty (gharar) are to be avoided: trading in financial risks and contingent claims may be problematic
  - challenge in coming up with Sharia-compliant hedging instruments and derivatives
  - Takaful is a Sharia-compliant alternative to conventional insurance
  - trading of assets: speculation versus responding to new information (market efficiency)
- Financial and sale contracts, with few exceptions, must involve physical assets or commodities that are in existence at the time of the contract: valid economic reason for the transaction
  - use of forward and futures, derivatives contracts may be problematic

Islamic Jurisprudence (Fiqh)

- The Quran
  - text containing teachings from Allah
- The Sunnah
  - record of the life of the Prophet (PBUH)
  - set of practices He taught

The Sharia (شريعة)

- law as derived from these two texts
- governs conduct, obligations, way of life and economic activities

- Hadith (plural: Ahadith)
  - narration of the sayings and acts of the Prophet as observed by followers
- Ijtihad: research efforts by scholars and jurists for answers to new questions that are not explicitly addressed in the canonical texts
- Qiyas: reasoning by analogy

Schools of thought

- Sharia: Islamic law (way or path)
  - deals with issues of everyday life
  - not a uniform body of codified law
  - system of devising law: sacred texts, debates, reasoning, investigations, precedent
- Different approaches or interpretations by various schools of thought
- Some common practices or schools of thought
  - Hanafi, Maliki, Shafi'i, and Hanbali (Sunni traditions)
  - Jafari (Shia tradition)
- Differences lie mainly in how much reliance is put on the various sources of jurisprudence, especially Hadith and Qiyas
  - Quran, Sunnah, Hadith, Ijma, Qiyas carry different weights in the decision process

Conventional Finance and Islamic Finance

- Conventional Finance
- Interest on deposits and loans
  - coupons on bonds
- Hire purchase as financing tool
- Take on risks and uncertainty, and earn a profit
  - take on credit risks and earn a credit spread on bonds or loans over the Treasury benchmark
  - invest in assets and commodities
  - use of derivatives to achieve certain risk-return profile
- Conventional insurance
  - life, automobile or property insurance for protection

- Islamic Finance
- Interest is forbidden
  - Sukuk bonds
- May trade and lease physical assets
- Excessive risks and uncertainties are to be avoided
  - trading of risks or uncertainty, contractual ambiguity are discouraged
  - trading and investments in physical assets and commodities are permitted even though there are market risk and uncertainty
- Conventional insurance schemes are not permitted as “risk” to life, property is abstract and intangible. Takaful is the Islamic approach to insurance.

Competition and complement

- Sharia laws determine what products or investments are permitted (Halah) and what are forbidden (Haram)
- Need to understand the principles and rationale for the prohibition of riba and gharar
  - devise contracts or products that are Sharia compliant
- Competition from conventional finance as well as market needs have resulted in rapid pace of development and innovation in Islamic Finance
- Classical Islamic contracts for financing and trade exist, and they have been adapted to suit the present conditions
  - develop approximations of contracts in conventional finance
- Islamic Financial Engineering: Sharia-compliant versions of risk-management and investment products found in conventional finance

Sharia Advisors in financial institutions

- Sharia Advisors are Sharia scholars and religious leaders
  - helps institution comply with the Sharia laws
  - provides interpretation of Sharia law
  - gives information on latest ruling or thinking on acceptable practices
  - assess whether a transaction or product is Sharia compliant
  - advise on development of new structures or products
  - advisory role, usually do not have legal or regulatory power
- Some scholars or jurists may be Sharia Advisors of several institutions
- Give Muslim clients confidence that the products or transactions are lawful (Halal): transparency, credibility, consistency in applications of Islamic principles
- In Islamic Banks, the rulings of the Sharia advisors are binding
- For non-Islamic Banks, Sharia advisors play the role of consultants or advisors

Differences in opinion

- Sharia Advisors may differ in their opinions about what are permissible products or structures
- There is widespread agreement on many issues among most practitioners
  - differences may exist on a small number of points or issues
- Differences in interpretation of canonical texts
- Varying degrees of strictness
  - pragmatic versus dogmatic
- Compliance with the letter of the law or with the spirit of the law?
  - concern among some scholars that structures have been created that addresses the wording but not the essence of the Sharia principles

Growing reach of Islamic Finance

- Africa: Sudan
- Europe and Central Asia
  - Germany, Turkey, United Kingdom, Switzerland
- Middle East and North Africa
  - Bahrain, Egypt, Iran , Jordan, Kuwait, Qatar, Saudi Arabia, Syria, United Arab Emirates,
- North America
  - United States of America
- South Asia
  - Bangladesh, Pakistan
- South-east Asia
  - Brunei, Indonesia, Malaysia, Singapore

Section 2

Riba and Gharar

Economic systems

- Economics: how scarce resources are allocated to various productive uses and how output of goods and services get distributed: maximise utility (happiness)
- Most economies feature both private entrepreneurships and government involvement to varying degrees
- Role of finance or capital markets
  - allocate capital to productive uses
  - distribution of goods and services (consumption)
- Conventional finance: use of capital (cash) entails a charge or interest based on a fixed or floating interest rate
  - borrowers pay interest to lenders

Islamic Economics

- Incorporate teachings of slam into economic activities
- Distinguishes between basic needs and luxury goods
- Belief that Allah has provided sufficient resources to satisfy the basic needs of everyone
  - factors of production and production are not the key problems
  - how goods and services get distributed is the key problem
  - scarcity of goods and services are thus man-made
  - understanding of the role of demand and supply in the determination of prices
- In contrast, Thomas Malthus (1766 – 1834) argued that population growth (geometric growth) will outstrip available food supply (arithmetic growth): disaster or famine will check population level

Guiding principles of Islamic Economics

- Work (roving through the earth) to earn sustenance
  - equality in economic rights, obligations and opportunities
  - economic within the law
- Justice among all humans
  - prohibition of acquiring other's property through riba (interest), fraud, confiscation
- Mercy and Caring
  - alms to the poor; Zakah of 2½% of income or more to charity
- Mal (wealth and income) and its maintenance
- Balance between private and public ownership
  - minerals in the ground belong to the public or society
- Rule based system: preservation of rights and sanctity of contracts

Riba (usury or interest)

- Quran verses [2:278 – 279]
- 2:278. O ye who believe! Fear Allah, and give up what remains of your demand for usury, if ye are indeed believers.
- 2:279. If ye do not, take notice of war from Allah and His Messenger: but if ye turn back, ye shall have your capital sums; deal not unjustly, and ye shall not be dealt with unjustly.
- A translation: … you should collect your principal without inflicting or receiving injustice (without increase or decrease in the principal sum lent)
- Why the prohibition of riba? What is the issue here? Exorbitant interest rates and possible exploitation of the poor borrowers by rich lenders?

Two Ahadith on Riba

- Numerous Hadith deal with Riba. Here are two examples.
- The Prophet said (as reported by Bukhari and Muslim):
  - “Gold for gold, silver for silver, wheat for wheat, barley for barley, dates for dates, salt for salt; like for like, hand to hand, in equal amounts, and any increase is Riba. If these kinds differ, sell as you like provided it is hand to hand
- Bilal visited the Messenger of Allah with some high quality dates, and the Prophet inquired about their source. Bilal explained that he traded two volumes of lower quality dates for one volume of higher quality. The Messenger of Allah said: “this is precisely the forbidden Riba! Do not do this. Instead, sell the first type of dates, and use the proceeds to buy the other.”
- Though the first Hadith listed six goods, the meaning of Riba is extended to money in modern economies.

Amount of interest is not the issue

- Any increase or decrease in the principle sum constitutes injustice to one party or the other
- Amount of the interest or usury is not the issue
  - size of interest rate does not matter
  - any amount of interest is forbidden
- Rationale for the prohibition of interest is not solely on the basis of possible exploitation by creditors
- Borrower uses money to carry out commerce or trade: risk of losses. If lender charges an interest, this interest has to be paid regardless of profit or loss on borrower’s part.
  - seems unfair that lender is guaranteed (subject to borrower’s default) a return while borrower is subjected to business and market risks
  - lender can earn a return if he or she also shares some of the risks the borrower faces

Deferred payment versus prepayment

- In conventional finance (with positive interest rate)
  - cash-flows that are received further out in time are worth less
  - cash-flows that are received sooner are worth more
  - debt can be traded based on discounting using the appropriate discount or interest rates
- Deferred or delayed payment of debt resulting in an increase in the debt (e.g. late installment or rental payment) constitutes Riba al-jahiliyyah: strictly prohibited
  - "defer and increase"
- Prepayment or paying earlier than the scheduled dates resulting in a decrease of debt: also considered a type of Riba
  - "prepay and reduce"
  - its prohibition has been controversial throughout history
  - prohibition relaxed by some juristic bodies
  - "Islamic credit cards" where purchases are financed over a fixed period where earlier payments result in reduced charges

Trading of debt

- Sale of debt to debtor is done at face value
  - unless part of the debt is forgiven
- What about sale of debt to third party? For instance, in “asset-backed securitization”
  - mortgages are securitized and sold to investors though home-owner continues to make payments to the original finance company or bank
- Banks with accounts receivables (lease or installment payments) may securitized them as fixed income securities for investors
  - debt re-sale has been used in Malaysia
  - practice remains controversial
  - some jurists prohibit it, others permit it only under very strict conditions
  - sale of defaulted debt is permissible

Without interest: can it be viable?

- Can Muslim borrowers obtain financing if payment of interest is forbidden?
- Can Muslim investors still earn a return on their savings (money) if they cannot receive interest?
- Can a financial system without interest be viable in face of the practice of charging interest in conventional finance?
- Answer to these questions are in the affirmative
  - need to use the appropriate structure or contract

Interest is a reward for …

- Borrow a tool or buffalo to do farming or to make commercial products or to provide services
  - we pay for a fee for the use of the tool or buffalo, that's fair
- Why is it that we don't pay a fee (interest) when we borrow money?
  - moreover, money is more versatile than the tool or buffalo
- Factors of production: land, capital, labour, entrepreneurship
  - money is not considered a factor of production
- Land or natural resource – earns rent
- Capital (buildings, tools, machine) – earns interest
  - man-made tools
- Labour – earns salary
- Entrepreneur – earns profit

Loans in Islamic Finance

- Money is a medium of exchange. It does not increase if left on the table or in the drawer. If nobody wants or needs to borrow money, then the money that the lender has remains the same over time. So no interest should be levied on a loan.
- A loan by itself does not create value and hence deserves no compensation: need to turn the money into factors of production or consumption goods
  - the rationale against riba is not fully disclosed or argued in great and clear detail
  - but the injunction against riba is clear
- Qard-hasan (goodly loan): giving a loan is considered an act of charity and no interest is charged – an act that brings blessing
- Verse 57:11
  - "who is he that will lend unto Allah a goodly loan, that He may double it for him or his may be a rich reward …"

Other traditions and religions

- Throughout time, various philosophers and religions have grappled with the issue of interest
- Aristotle: money is a medium of exchange and is sterile (does not grow or do anything on its own) – so it is not appropriate to charge interest for lending
- Judaism: “Thou shalt not give him thy money upon usury, nor lend him thy victuals for increase.” (Leviticus, 25:37)
- Christianity: “He that putteth not out his money to usury, nor taketh reward against the innocent. He that doeth these things shall never be moved.” (Psalm, 15:5)
- Hindi Verdic texts and Buddhist Jatakas have also discussed interest on loans

Gharar

- Gharar may be translated as excessive risk or uncertainty
  - related to incomplete information
  - withholding of information by one party to a contract
  - lack of control over outcome of contract by either parties
  - ambiguities in the contract
  - usually associated with possible losses
- Professor Mustafa Al-Zarqa's view
  - Gharar is the sale of probable items whose existence or characteristics are not certain, due to the risky nature which makes the trade similar to gambling
- Objects of sale or transaction must be known and exist physically
  - Salam and Istisna' are exceptions

An example

- Example: selling the olives **from our farm** using a forward contract before they are ripe or ready for harvest is not permitted
  - a natural disaster or fire may destroy our crops or the olives may not ripen
- However we are permitted to sell olives forward, to be delivered at a time when it is reasonably expected that they will be available
  - olives as a generic or fungible product
  - does not specify that olives are from a particular farm
- Careful document, descriptions of products to eliminate or reduce uncertainty or ambiguities

A Hadith on Gharar

- The Prophet has forbidden the purchase of the unborn animal in the mother's womb, the sale of milk in the udder without measurement, the purchase of spoils of war prior to their distribution, the purchase of charities prior to their receipt, and the purchase of the catch of a diver
- If we pay money now to buy the next catch of a diver, we are not certain what we will be getting. We may end up with nothing if diver fails to catch anything. Such transaction is prohibited.
  - uncertain what we are buying since we do not know what the next dive brings
- However, we are permitted to pay a fixed price to hire the diver to do a dive and receive the resulting catch of the dive.
  - object of transaction is clearly the diver's labour or effort or time
  - price of doing a dive is known and fixed

Prohibition on Gharar

- Many economic or financial transactions involve some degree of uncertainty or risk
  - prohibition on Gharar is not as strict as the prohibition on Riba
  - in certain cases where it is not possible to eliminate the risk or uncertainty, the transaction may be allowed on the basis that the amount of Gharar is minimal and there is a greater benefit to be derived
- For instance, a farmer may need financing now in order to start planting and growing his crops
  - may sell the crops using a forward contract known as *Salam* (prepaid forward sale)
  - necessity and greater benefit (funding for farmer) outweighs the uncertainty of not being able to deliver the crops
  - maturity of forward contract is at a time when it is reasonable to expect the availability of the crops

Gharar in derivatives and insurance

- In conventional finance
  - derivatives are instruments that allow the trading of market or credit risks
  - life, accident and property insurance may be purchased
- Derivatives and insurance are two areas where prohibition on Gharar has to be carefully studied
- Conventional insurance is not acceptable on two counts.
  - say, when automobile insurance is sold, what is the object of the transaction? Risk of automobile accident? This “risk” is abstract and has no physical reality – the accident may or may not happen.
  - conventional insurance companies invest the premium collected in fixed income instruments that earn interest (Riba)
- Takaful is the accepted form of Islamic insurance

Section 3

Basic Financial Contracts

Sources of funds for Islamic banks

- Islamic banks cannot raise finance or capital from depositors using interest bearing deposits
- Three sources of funding
- Musharakah: share partnership or shareholders of bank
- Mudarabah: special type of sharing where one party provides all the capital (depositors) and one party provides all the management services
  - capital providers are sleeping partners
  - known as investment deposit
  - return on deposits comes from profit of the bank
- Loan (Qard): deposits in current accounts with no interest
  - considered as loans to the banks without interest
  - some conventional banks do not pay interest on checking or current accounts too

Uses of funds by Islamic banks

- Islamic banks provide financing to its customers without interest charge
- Islamic financial contracts based on one of the following structures
- Sale
- Sharing
- Leasing
- Islamic financial contracts comply both with Sharia laws and the legal requirements of the domain(s) that govern the transaction

Conditions of Islamic financial contracts

- Islamic financial contracts should satisfy the following
- Consent, aptitude, representation
  - voluntary agreement by both parties
  - parties of sound mind
- Balance
  - correct and fair representation
- Moral commitment / ethical filtering
- Sharia permissibility
- Validity or realism
  - physical assets, not “abstract” objects such as rights, risks
  - difference of opinions over use of indices

Trade and Riba

- Certain contracts that are permissible in Islamic finance look similar to those that involve interest (Riba)
- However verse [2:275] makes the distinction
  - Those who devour usury (Riba) will not stand except as stands one whom the Evil One by his touch hath driven to madness. That is because they say: "trade is like usury", but Allah hath permitted trade and forbidden usury
- Trade is encouraged in Islam
  - passages from the Quran and Hadith indicate this
- Islamic loans do not carry interest or usury
  - loans are considered charitable acts
  - money on its own does not increase

Types of contracts

Financing / Sale

- Sarf
- Murabaha
- Salam
- Istisna
- Bay' Bithaman 'Ajil
- Bay al 'Inah
- Tawarruq
- Arbun

Leasing (Sale of Usufruct)

- Ijara
- Ijara Thumma Al-Bai

Partnership

- Mudaraba
- Musharaka

Fee-based Services

- Jo'ala
- Wakala
- Kafalah
- Hiwala

Amanah and Musawamah-type contracts

Features of Contract

- Amanah-type contracts (trust and honesty)
  - honest disclosure by both parties
  - disclosure of cost price, mark-up
  - contracts implying trust
- Musawamah contracts: negotiable contracts
  - no need to disclosure cost price or mark-up profit
  - both parties must agree voluntarily to the terms and conditions

Sarf: spot trade

- Sarf: spot transaction involving currency, gold, silver or manufactured goods
- Transaction done at current market spot prices
- Mutual full delivery in “the sitting” of the contract
  - that is, delivery is now or according to spot market convention: future delivery not permitted
- If currency or gold or silver are of the same kind: exchanged quantities must be the same

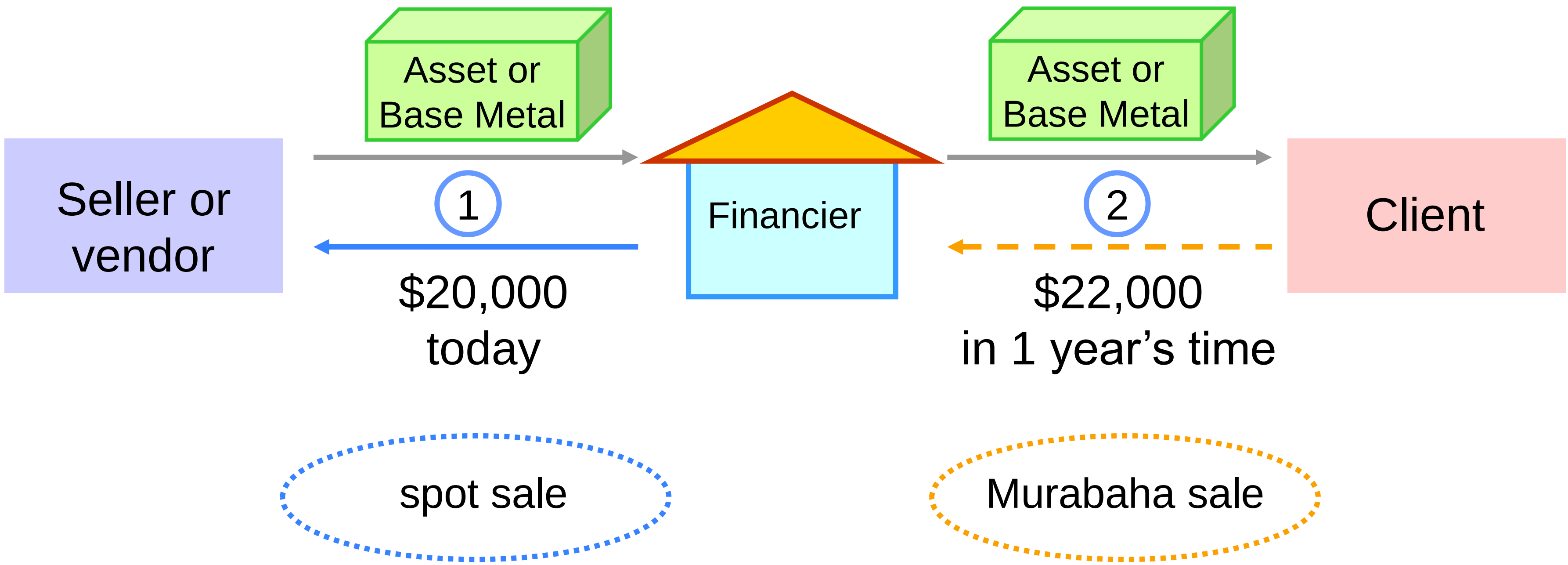
Section 3.1

Murabaha Sale (Cost-plus Sale contract)

What is Murabaha?

- An unconditional sale contract where pre-approved and pre-agreed goods are sold at a cost-price plus mark-up for which the sale date is clearly defined and agreed.
- The concept of a Murabaha involves trading in goods or commodities and making profit through their purchase and sale in a way that conforms to Islamic guidelines.
- Islamic Guidelines:
  - Unconditional contract of sale between buyer and seller
  - Clearly defined goods, cost of goods, mark-up and payment date to be pre-agreed
  - The goods must be Islamically acceptable (no pork, alcohol,…).
  - They must exist and be owned by the seller and known to the buyer before title is transferred to the buyer.
- Common contract to finance purchase of goods

The transactions

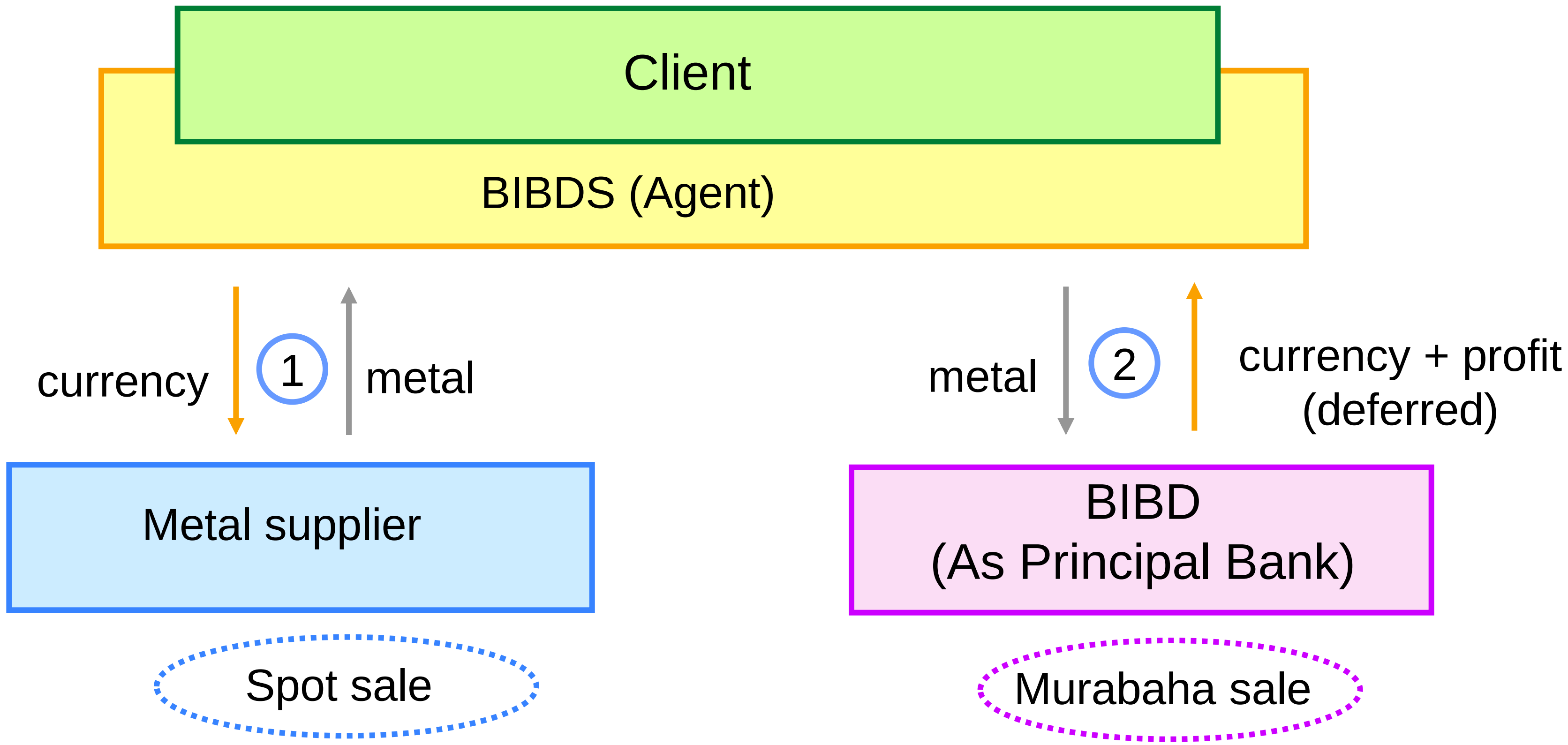


Section 3.1.1

Sharia compliant Deposit (Commodity Murabaha)

BIBD Sharia Compliant Deposit – Structure

Protection



BIBD Sharia Compliant Deposit

Protection

A Fixed Term Islamic Investment (Commodity Murabaha)

Investor Profile

- The investor is looking for a conservative investment strategy with capital protection
- The investor is interested in optimizing their liquidity management and wants to remain flexible at the same time
- The only prerequisite is that the investors have to sign a Trade Investment Agency Agreement

Product Characteristics

- A BIBD Sharia Compliant Deposit (Commodity Murabaha) is a fixed term investment involving the purchase and thereafter sale of Commodities (Base Metals). Under a BIBD Sharia Compliant Deposit you buy a certain amount of Base Metals from a Commodity Supplier and thereafter sell the same Base Metal to BIBD (the Buyer) via BIBDS (Agent). Whilst the cash price of the purchase of Base Metals is settled on spot, the sale cash price is paid on a deferred basis and incorporates an element of profit for the investor.

Benefits

- Protection of principal and profit at maturity
- Tailor-made solutions with a high degree of flexibility in choice of investment currency and maturity

Risks

- The product is fully capital protected
- upside potential is limited by the Profit Rate payment

BIBD Sharia Compliant Deposit – Parameters

Amounts

Minimum USD 500’000 countervalue

AED, AUD, BHD, CAD, CHF, CZK, DKK, EUR, GBP, HKD, HUF, JPY, KWD, MXN, NOK, NZD, PLN, SAR, SEK, SGD, SKK, THB, TRY, USD, ZAR

Tenor

Usually one to three months

Agreement

Trade Investment Agency Agreement

After Sales

Trade confirmation by email and fax

Expiry

No early redemption possible (buy and hold products)

Term Sheets

Languages:

English

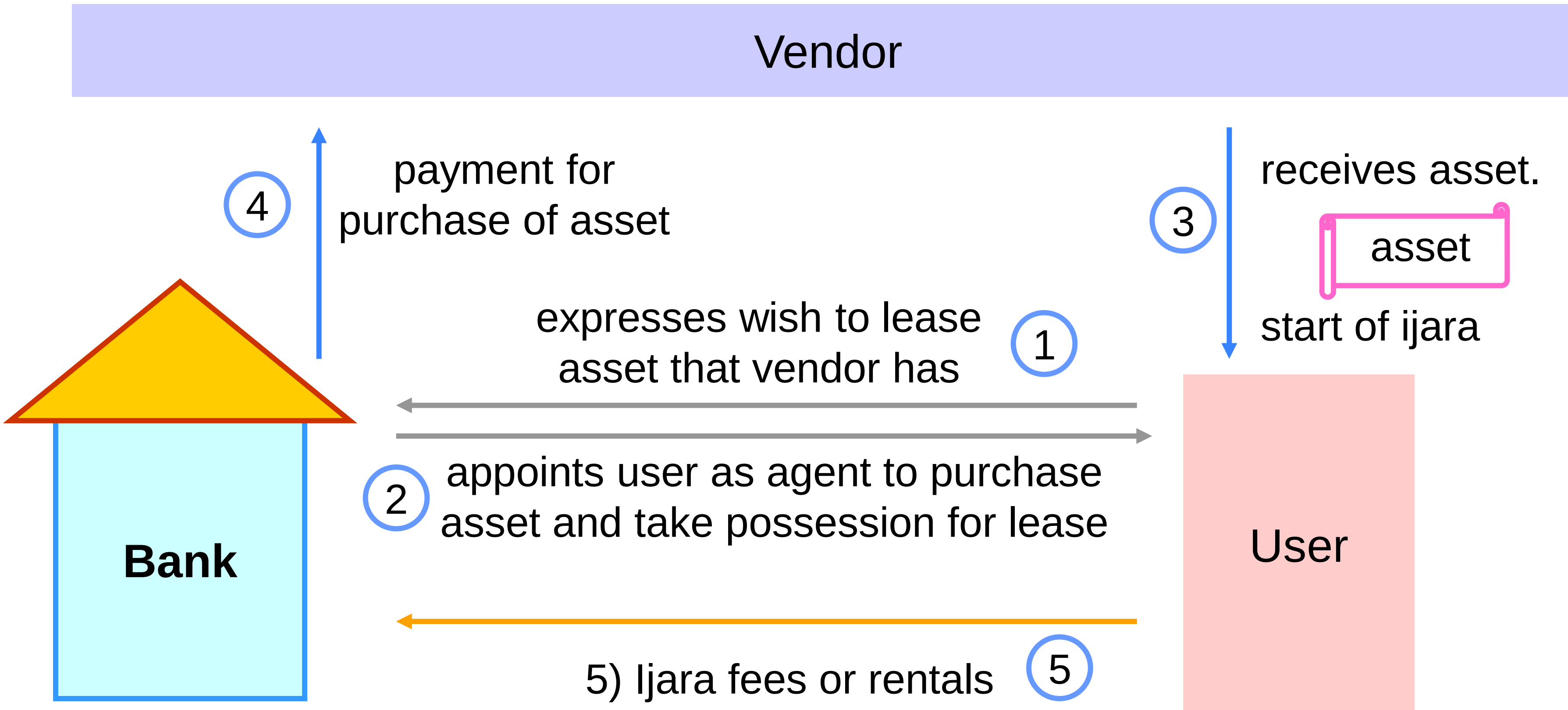
Section 3.2

Ijara (leasing): sale of usufruct

Ijara: lease of asset or product (sale of usufruct)

- Ijara: leasing of asset or product
  - sale of usufruct or right to use asset
- Bank that finances the asset or product acts as lessor also known as ajir or mujir
  - bank is the lawful owner of the asset or product
  - asset or product goes back to owner at the end of the contract
  - operating lease
- Client pays fees or rentals for the right to use asset over a given period of time (known as ijara period)
  - lesse or mustajir
  - client may transfer or sell usufruct for the ijara period to another user. this is permitted without consent from lessor
- Unlike murabaha where the cashflows and payment schedule are fixed at the time of contract, the fees or rentals in an ijara contract could vary with economic and market conditions

Ijara: activities



- Bank may have or buy asset directly and lease it out
- At the end of the ijara contract, what happens to asset?

Treatment of asset at the end of contract

- At the end of the ijara contract, asset goes back to the bank
  - operating lease
  - extension of lease by user (client)
  - may lease it to other users if asset is still in good condition
  - may sell the asset for residual value
  - may make a gift of it to the user (client)
  - may dump asset if there is little value left
- Ijara thumma al-bai: asset will be sold to user for a pre-determined price at the end of the ijara contract
  - lease-sale contract
  - financial lease
- At the end of the ijara contract, bank may make a gift of the asset to user under the ijara contract
  - residual value of asset at the end is priced into the fees or rentals
  - financial lease

asset goes to client at the end

Treatment of asset at the end of contract (cont.)

- On the previous slide, user or client takes ownership of asset at the end, either by buying from the bank or receiving it as a gift
  - both these arrangements are separate contracts from the ijara contract
  - these may be unilateral contract or obligation only on the part of the bank (must sell at a pre-determined price or make a gift of it)
  - user or client may decline to buy asset at the conclusion of the ijara contract
  - looks like user has an option to buy asset if he or she wants to

Responsibilities of parties

- Responsibility of lessor (owner of asset)
  - deliver asset or equipment in usable condition
  - maintain its usability during ijara period
  - take insurance policy against destruction or major damage or repair
  - minor repairs may be assigned to user by agreement in the contract
  - user pays for operational maintenance
- Responsibility of user
  - return asset in same condition subject to reasonable wear and tear
  - refrain from neglect or abuse of asset
  - amanah-type contract
- Any damage or destruction that is not due to neglect or abuse on the user's part is the responsibility of the owner (lessor)

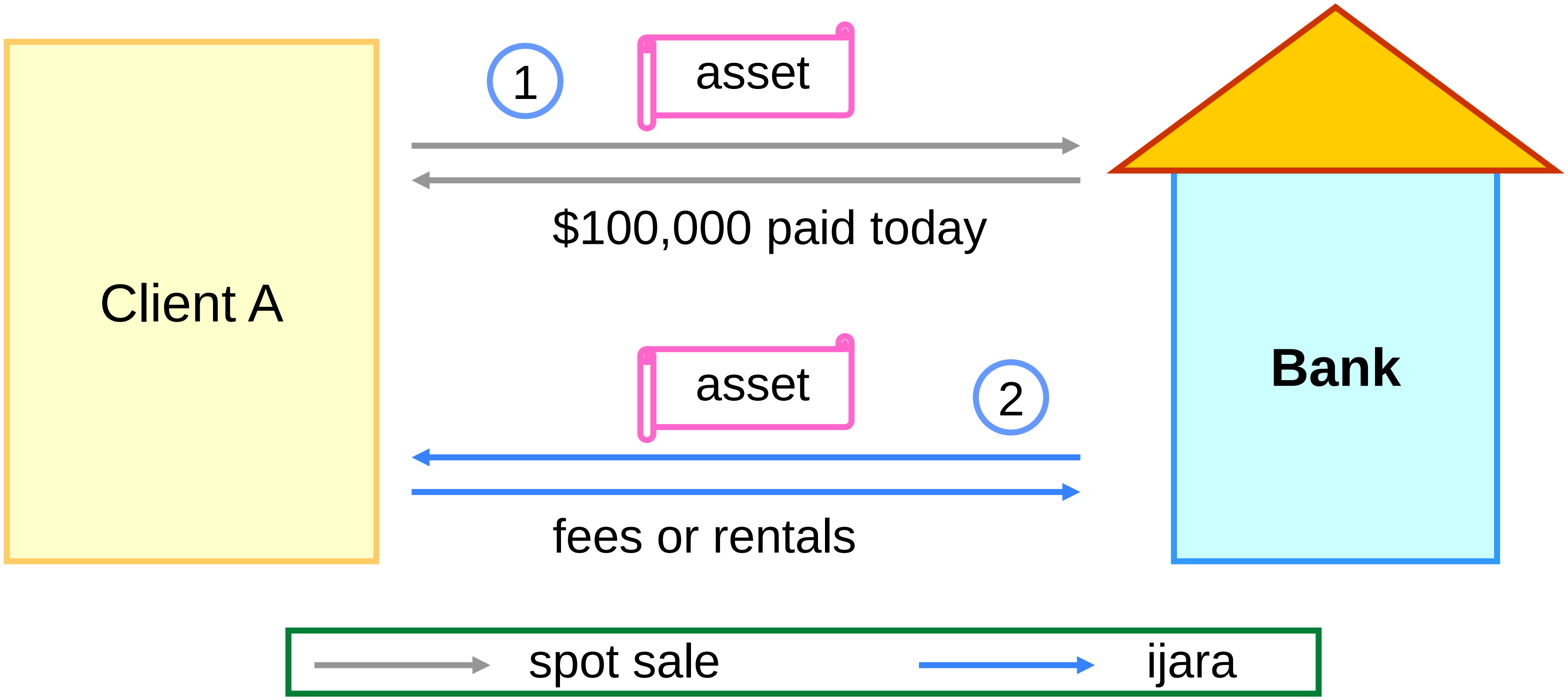
Ijara in combination with other contracts

- Ijara may be combined with a partnership arrangement through a mudaraba or musharaka contract
  - ownership of asset goes to user at the end of the ijara contract
  - partnership is specifically designed for the financing of the aset
  - common form to finance property or housing purchases
  - many variations
- Lease / Purchase contract
  - lease the part of asset or equipment or property that you don’t own
  - agreement to buy partner’s share of the asset or equipment or property with installment payments along rental payments
  - your share of asset or equipment or property grows over time

Lease / Purchase in home financing

- Bank buys house on instruction from client and leases it to client on an ijara basis
  - rentals are calculated such that client owns increasing share of asset as time passes
  - bank has diminishing or declining share of asset over time: diminishing mudaraba or musharaka
- Issues
  - accelerated payments or pre-payments
  - delinquency: bank or lessor may take back asset and claim compensation for losses or damages
  - right to sell house
- Leasing contracts may form a sizable part of an Islamic bank's portfolio. Ijara contract may form the building blocks for securitization and issuance of Islamic bonds or Sukuk.

Ijara ‘Inah: sale and lease back



- Client sells asset or equipment to bank for cash today
- Client leases the same asset or equipment from bank
  – financing arrangement to provide cash to client
- Very restricted use due to possibility of hiding riba

Ijara ‘Inah: sale and lease back

- It looks like a manner of providing credit or lending money
  - may involve riba
- Use permitted in only one instance: to replace interest-based loan
- Allowed when client moves from conventional loan to Islamic banking or financing
  - Islamic bank purchases the asset by paying the outstanding loan amount to conventional bank
  - Islamic bank leases asset to client
  - conventional loan is replaced by the ijara contract
  - conventional (interest-based) loan is more undesirable than ijara ‘inah: so the trade is permitted

Long term lease example

- Recall that the person who has the right to use the asset under a lease may in turn lease it to other uses
- Alan leases asset from Bob for 15 years
- Bob leases the asset back from Alan on a yearly basis
- Is this permissible?

Long term lease example: answer

- Alan leases asset from Bob for 15 years
- Bob leases the asset back from Alan on a yearly basis
- Is this permissible?
- Not permissible in many places. Why not?
- Alan leases asset from Bob for 15 years
  - sale of 15-year usufruct
- Bob leases the asset back from Alan on a yearly basis
  - sale of 1-year usufruct
- Sell and buy back is Bay’ al Inah
  - not acceptable in many places

Section 3.3

Arbun (Down-payment Sale)

Arbun: down payment sale

- Arbun: down-payment made by potential buyer to potential seller for an asset or product
  - buyer has right to decide whether to complete the transaction and seller has obligation to sell
  - should transaction go ahead at the discretion of buyer, the down-payment counts towards to full price for the asset or product
  - if transaction does not go ahead, the down-payment is kept by the potential seller as a gift from the potential buyer
  - time allowed for completion of transaction may be fixed (otherwise, potential seller may have to wait indefinitely …)
  - similar to a call option where buyer has the right to decide on whether to complete the transaction
  - unlike premium for call option, the down-payment counts towards the full price of the asset. This is not a problem in terms of pricing. Just define the full price as the strike price of the call option plus the call premium

Arbun: is it permissible?

- Many early jurists consider this to be forbidden due to Gharar: uncertain whether buyer will complete the purchase
  - legal rights (right to complete the purchase) are not valid objects for sale
  - if buyer chooses to buy asset, the down-payment is part of the full price and seller has no compensation except for the full price of asset
  - if buyer chooses not to buy asset, seller keeps the down-payment as a compensation for the waiting
- There are some weak Prophetic traditions that support it as well as others against it
- Fiqh Academy of the Organization of Islamic Conference ruled in 1993 that down-payment sales are permissible

Call option

- A (European-style) call option gives the holder of the option the right to buy the asset or product for a fixed price (also known as the strike price) on maturity at a fixed date in the future
  - European-style options can only be exercised on maturity
  - American-style options can be exercised anytime till maturity
- Holder of call option need not exercise the option or go through with the purchase if he or she does not want to
- Since the holder of the call option has benefits and rights, there is a premium to be paid today to buy the option
- This sounds similar to the Arbun contract

Replicating a call option

- Conventional Finance
- 1-year European-style Call Option on asset with strike price 100
  - asset is Sharia permissible
  - buyer of option has right not to exercise option
- Option premium paid today = 7
- On maturity,
  - if asset price ≥ 100, option is exercised. Buyer pays 100 for asset
  - if asset price < 100, option is not exercised and buyer loses the option premium

- Islamic Finance
- Arbun contract to buy asset in 1-year's time at the full price of 107 = 100 + 7
  - buyer has right not to complete purchase
- Down-payment today = 7
- On maturity,
  - if asset price ≥ 100, buyer completes purchase by paying 100 together with the down-payment of 7 to make up the full price of 107
  - if asset price < 100, buyer does not complete the purchase and forgoes the down-payment

Section 3.4

Mudaraba

Mudaraba

- One partner provides capital and the other provides expertise or labour or entrepreneurship
- One of the earliest form of Islamic partnership
- The Prophet (PBUH) acted as an agent (mudareb) for his wife
  - made trade expeditions on her behalf
- Capital provider gives capital or merchandise to other partner to manage or trade or produce other goods for profit
  - partner who provides capital is usually a “sleeping” partner
  - partner who provides expertise or entrepreneurship or labour: “working” partner
- Capital provider is an investor and “working” partner may be considered an agent

Responsibilities of partners

- Partnership that combines capital, labour and entrepreneurship
- Capital owner
  - right to audit or check on the venture to check for fraud, etc (can be made as a feature of contract)
  - right to specify what kind of trades or activities are permitted
    e.g. “do not enter into a valley and do not buy live animals”
- Full authority of working partner in taking daily decisions
  - how the business is run, what projects to do, how funds should be invested, etc. belong to the domain of the working partner or agent (mudareb)
  - except when they contravene the contract terms
- Various combinations possible with capital provided by both partners
- General versus restricted mudaraba
  - restricted: assets and projects are specific

Sharing of profits

- Profit is shared between the two partners as laid out in the contract. All losses are taken by the partner providing the capital unless there is negligence or abuse on the part of the working partner
  - in which case, working partner or agent may have to take part or all of the losses
- If there is no negligence or abuse, working partner loses his labour (time and effort) with no compensation
  - so both investor and agent suffer, in different ways
- Profit is shared according to percentages or proportions, and not fixed amount. Sharing formula is clear and not contingent. Profit is what is left over after the investor has taken back his capital
  - profit sharing proportions may be different from proportions of capital provision in the case of more than one capital provider

Mudaraba: bank deposits

- Mudaraba arrangement may be used by depositors who deposit money in a bank for a return
- Mudaraba partnership: depositor provides capital and bank provides labour
  - depositor is an investor and bank acts as an agent
  - bank uses money for murabaha financing, etc. and earns a profit
  - profit is shared between depositor and bank in accordance with contract
- In a mudaraba partnership, depositor as a provider of capital may suffer losses if the bank's financing business suffers a loss (even though the bank's other business are making money and bank is solvent)
  - unlike deposits in conventional bank that earns interest and is subject to credit risk of bank
- Potentially mudaraba deposit may earn more than interest-based deposit

Section 3.5

Musharaka

Musharaka partnership

- Pooling of capital and expertise or work
  - encouraged in the Sharia
- Musharaka partnership: mixing of properties (capital), management and obligations in a manner that is Sharia compliant
- Two kinds of musharaka
  - musharaka in ownership
  - contractual musharaka
- Every partner is an agent of and for the other partners
  - equal rights unless contract specifies otherwise
- Equal participation by partners
  - shareholders of a limited company may delegate this participation to professional managers or executives

Musharaka: profit sharing and exit strategy

- Share of profits specified in contract as percentages or proportion and not in fixed amount
- Loss shall be borne by partners according to the proportion of capital invested
  - partners who did not put up capital are not liable for the losses, they lose the time and effort invested in the business
- Shareholders in a joint-stock company can lose at most their invested capital and not liable for losses beyond that
  - limited liability
- Partners can withdraw anytime after discharging their liabilities as agreed in the contract
  - shareholders in a joint-stock company can exit by selling their shares to other investors

Musharaka in ownership

- Mixing of properties in which owners remain independent
  - voluntary arrangement: two persons pooling money to buy two halves of a property
  - non-voluntary or by implication: heirs owning the inherited property jointly
- When property or asset is not divisible: sharing the use of the asset according to an agreement
  - time sharing facilities

Contractual Musharaka

- Contractual mixing of capital and labour (work) by the partners for the purpose of making money
  - both partners contribute capital (funds) and management (work)
- Partners contribution of capital and labour may not be equal and their share of profits may not be equal too
  - a possible arrangement shown below

	Share of		
Partner	Capital	Labour (management)	Profit
A	70%	20%	50%
B	30%	80%	50%

- But losses are always borne in proportion to the invested capital

Section 4

Derivatives

Raison d'être

- Derivatives change the cost, benefits and risk profile of asset
- Forward and futures: payment and delivery in future
  - cost and benefit of holding underlying is changed
- Options
  - change risk exposures
- Derivatives are essential for reducing or managing risks
- Need to reduce or manage risks is also present in Islamic communities
- Can we replicate the suite of derivatives in a Sharia compliant manner?

Section 4.1

Forward contract

Forward contract

- As seen earlier, a forward contract may be synthesized using Salam and Murabaha contracts
  - the asset or product of the forward contract must be permissible
- There should be two external counter-parties in addition to the seller and buyer of the asset or product
  - avoid doing "buy and sell back" transactions with the same party which may hide riba
  - prices at which the transactions are done should reflect market prices

Forward currency contract

- More care given to contracts involving currencies
  - potential for element of riba
- Market participants may have FX exposure and need to hedge the FX risk
- Suppose an importer’s base currency is USD and she needs to pay GBP 10 million in 3 months’ time. If GBP strengthens against USD, then the burden will be higher. To hedge this risk, she is willing to lock in the current forward rate. She calls a bank to arrange a forward delivery of GBP 10 m for a fee: Jo’ala contract

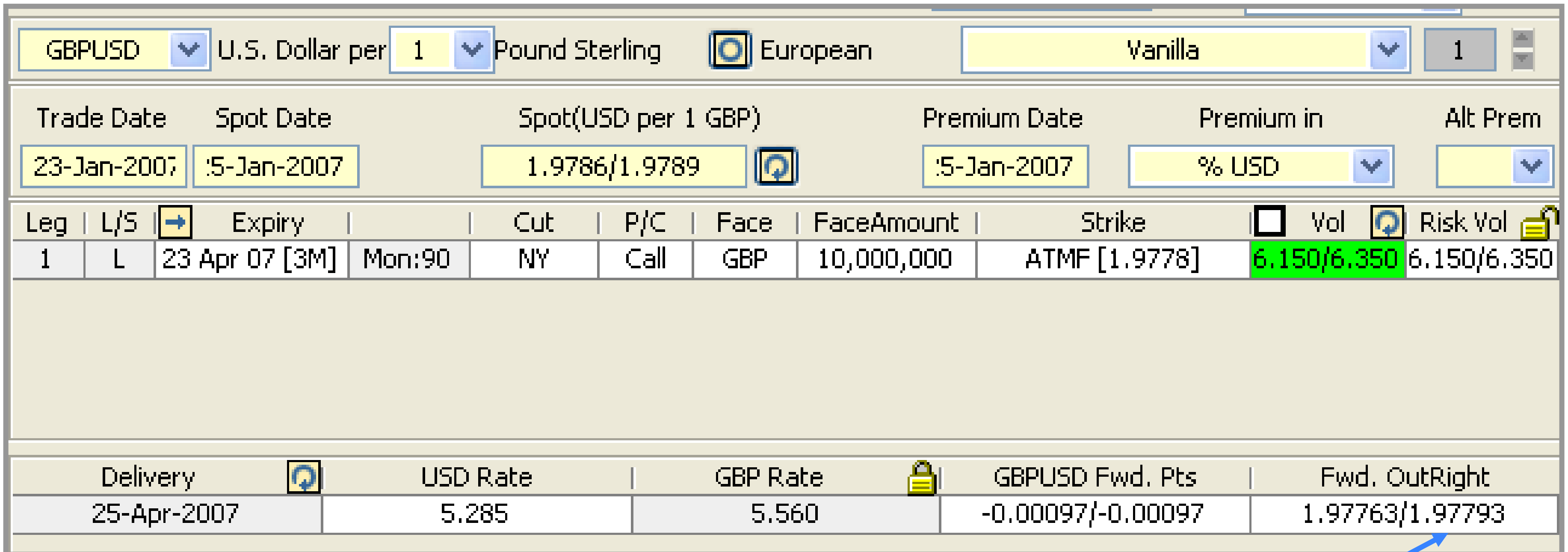
3m forward GBP / USD exchange rate

- Spot GBP / USD = 1.9789
- 3 month Murabaha profit rate on GBP, r_{GBP} = 5.560%
- 3 month Murabaha profit rate on USD, r_{USD} = 5.285%
- 3 month $\equiv$ 90 days
- 3 month forward exchange rate is

$$GBP/USD = S \times \left(\frac{1 + 0.05285 \times \frac{90}{360}}{1 + 0.0556 \times \frac{90}{365}} \right) = 1.97792961 = 1.97793$$

- Let's check …

Pricing panel



- Spot GBP / USD = 1.9789
- 3 month forward GBP / USD = 1.97792961 = 1.97793

Example: 3 month GBP / USD forward contract

- Importer wishes to receive GBP 10 million in 3 months' time at the forward price of 1 GBP = 1.97793 USD to be paid on delivery
- Calls a bank to arrange GBP 10 million delivery in 3 months' time for a fee
  - Jo'ala contract
- Bank looks for an investor who wishes to earn 3 month Murabaha profit rate of 5.285% (p.a.) on USD
  - could use a bank depositor's money for this purpose too
  - amount of USD invested today

$$\text{USD}\left(\frac{10{,}000{,}000}{1+0.0556\times\frac{90}{365}}\right)\times 1.9789 = \text{USD}19{,}521{,}370$$

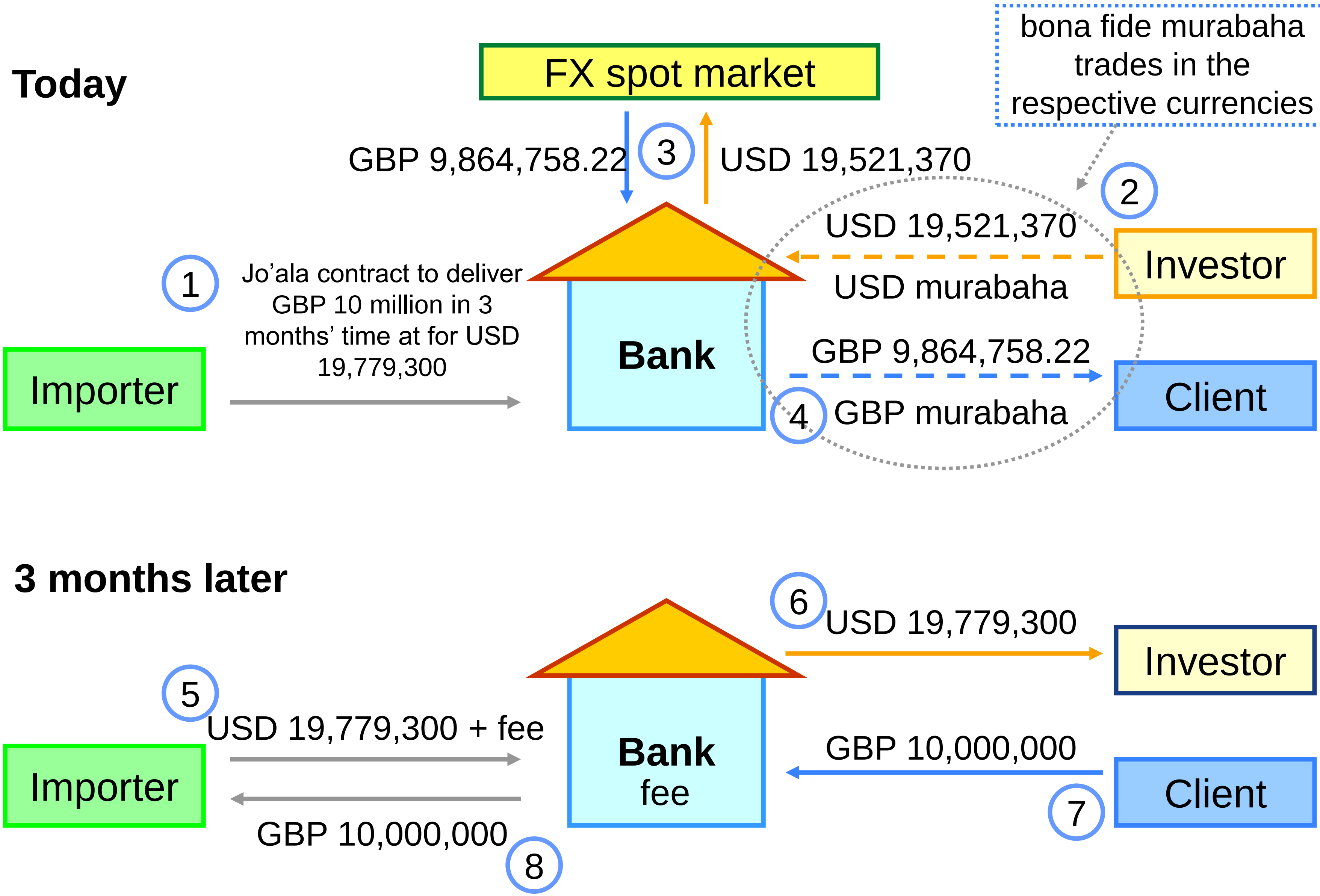
  - on maturity, investor receives

$$\text{USD}19{,}521{,}370 \times \left(1+0.05285\times\frac{90}{360}\right) = \text{USD}19{,}779{,}300$$

Example: transactions

- Bank receives USD 19,521,370 today from investor and buys GBP with it at today's spot rate of GBP / USD = 1.9789
  - receives GBP 19,521,370 / 1.9789 = GBP 9,864,758.22
- Bank deposits GBP for 3 months at a murabaha profit rate of 5.560% with another counter-party or client
- On maturity in 3 months, Bank takes in GBP 9,864,758.22 x (1 + 0.0556 x (90/365)) = GBP 10,000,000
  - delivers GBP 10,000,000 to importer and receives USD 19,779,300 plus fees as agreed in the Jo'ala contract
  - pays USD 19,779,300 to the investor as agreed in the murabaha trade
- Importer eliminates FX risk through a forward contract
  - investor earns 3 m USD murabaha profit rate
  - bank earns Jo'ala fee for arranging the transaction

Example: transactions and flows



Section 4.2

Options

Call options and Arbun contracts

- We see earlier that a call option on an asset may be replicated using the Arbun contract where a down-payment is made today by the buyer for the potential purchase of the asset or product in the future
  - buyer has the right not to complete the purchase in which case the down-payment is kept by the seller
  - seller is obliged to sell at the agreed full price should the buyer decides to complete the sale
  - on maturity of the contract, buyer pays the full price minus the down-payment that was already paid at the time of the contract
- If the premium of a call option with strike X is C. Then a Arbun contract with the same maturity, asset, quantity, etc will require a down-payment today of C and the full price of the asset is X + C
  - on maturity, Arbun buyer wishes to complete the purchase, he or she pays X only as the down-payment of C is counted towards the full price of X + C

Put options

- For risk management purposes, we may sometimes need a put option rather than a call option
  - often distinguish between cash (currency) and the physical asset
- A European-style put option gives the option holder the right to sell an asset at a given price on maturity.
- Using the Put-Call parity relationship for European options, we may synthesize a European-style put option
- Put-Call Parity for European-style options with the same strike price says that
- Long Put option is equivalent to long Call option and a short forward position

Put-Call Parity

- The Put-Call Parity relationship for European options not only tells us how to synthesize the call from the put option or vice versa, it also links the prices of the call and put options
- Suppose the European Call and Put options have the same strike X and they mature at time t (today is time 0). Suppose F is the fair forward price on the asset for delivery at time t. Let C and P denote the premium on the call and the put. Let r be the murabaha profit rate for time t.
- Since long call and short put results in a synthetic forward, we have

$$C - P = \frac{F - X}{1 + rt}$$

Other option combinations

- Call and put options are the building blocks for various option combinations
  - knowledge of how calls and puts may be synthesize will enable us to construct various combinations
- Call spreads or put spreads
- Straddles, strangles
- Butterflies
- These combinations come in useful when we create structured notes for investment and hedging purposes.

Conventional options

- Conventional call, put, binary, exotic options, etc
  - buyer or holder of option pays a premium and has the right to exercise the option and may choose not to exercise it
  - seller of option receives the premium and must fulfill the obligation as stated in the option if the buyer chooses to exercise
- Conventional options: general consensus among Islamic scholars is that they are not permissible as stand-alone or independent contracts
- Derivatives and options are important tools in risk control and management. How can this be achieve in Islamic finance if conventional options are forbidden?
- For risk-management purposes, option-like features can be built into a contract for sale, exchange or lease
  - Al-Khiyar framework

The Al-Khiyar framework

- Option in Islamic finance often takes the form of the right of either one or both parties to a contract to go through with the contract or to back out of the contract over a certain period
  - usually before the contract becomes fully effective
  - "cooling-off" period for one or both parties to think through or consider the contract more carefully and calmly
  - the rights may be established by mutual consent or else the nature of the contract gives the right to one or the other party or it could be a legal requirement
- Key concern is that contract is fair or equitable to both parties and serves a valid economic or trade function
  - terms must be clearly stated
  - financial implications understood by both parties
  - avoid excessive uncertainty or potential for disagreements

Classification of options in contracts

- Khiyar al-shart: option by stipulation or option as a condition
- Khiyar al-tayeen: option of determination or choice
- Khiyar al-ayb: option for defect
- Khiyar al-ruyat: option after inspection
- Khiyar al-majlis (option of session)
- Some minor variations in classifications by various schools of thought
- More relevant for financial risk management
  - Khiyar al-shart
  - Khiyar al-tayeen

Khiyar al-shart

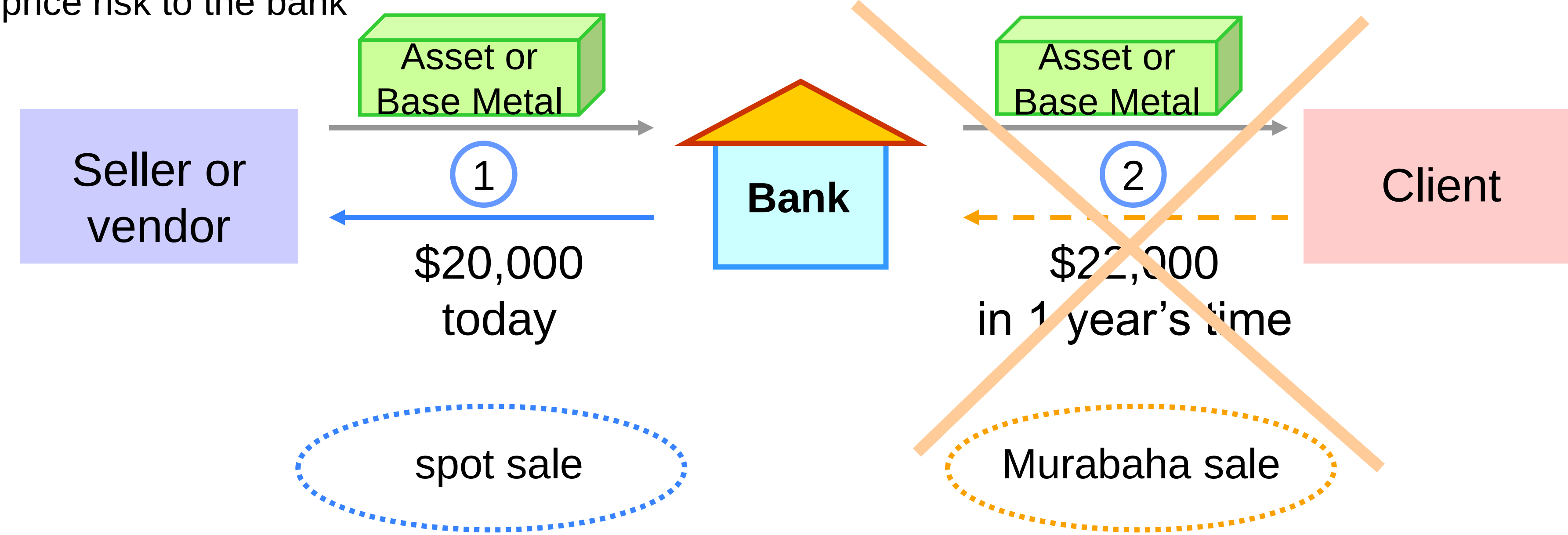
- Option built into the contract to allow one or both parties the right to either confirm or cancel the contract within a specific time period
  - sometimes a third party to the contract, say a guarantor, may be granted this right to approve or back out of the contract
  - provide time for the parties to think over the contract
  - as called Khiyar al-tarawwi: option of reflection
- General consensus among scholars: khiyar al-shart is permissible
  - as a general principle or as an exception?
- This option cannot be used in spot currency exchange (sarf) and salam
  - Maliki school allows it in salam sale if the delivery date is quite near to the contract date
- Khiyar al-shart: benefit both parties and also reduce likelihood of disagreement or litigation in future

Some features of Khiyar al-shart

- The following features are accepted by the major schools
- Maturity or length of the option: option in Khiyar al-shart may have any maturity as long as it is definite and pre-determined at the time of the contract
- Possession of asset or product by buyer and receipt of payment by seller
  - during the period of the option, the buyer may take possession of the asset or product
  - during the period of the option, the seller may receive the payment for the asset
- Final settlement price may be different from the contracted price under certain conditions
  - may hedge price risk of asset

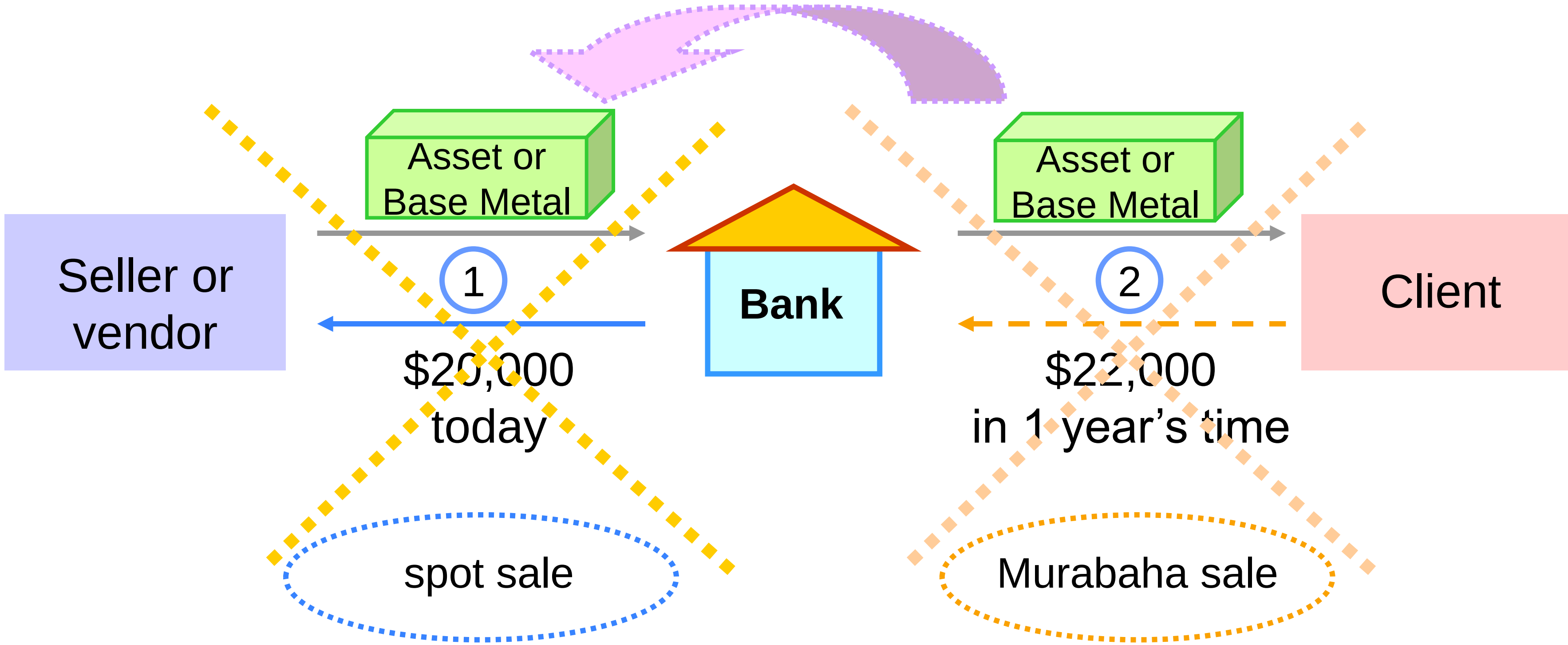
Khiyar al-shart in murabaha

- Murabaha financing:
  - client approaches bank for financing to buy asset
  - 1) bank buys asset from vendor (spot sale)
  - 2) client buys asset from bank with deferred payment (= cost + profit)
- Transaction 2) happens after 1). If client decides not to buy, bank is stuck with asset whose price may have fallen
  - client changes mind perhaps because asset is now cheaper
  - price risk to the bank



Khiyar al-shart in murabaha cont.

- To hedge this risk, the bank may retain a khiyar al-shart option to cancel the contract with the vendor when the client backs out
  - if client goes through with purchase, then option is not exercised
  - otherwise the option is exercised and the spot trade with the vendor is cancelled



- Bank may have to pay a slightly higher price to vendor for this arrangement (option) and its profit may be slightly reduced: hedging has costs

Khiyar al-shart in ijara

- Ijara is a lease contract where client pays for the use of asset owned by the bank
  - financing of asset by bank may be floating and based on current funding rates
  - fees or rental of ijara contract is fixed
  - risk to bank if funding rates go up
  - risk to client if client's income fluctuates but the fees or rental of the asset or machine is fixed
- They could specify different lease rates for different time periods in the ijara contract: this is permissible
  - but this does not solve the problem since no one knows what future funding or lease rates will be
  - the market forward rates gives some guidance but the spot rates in future usually are different than what the forward predicts

Khiyar al-shart in ijara (continued)

- Khiyar al-shart option may help both parties
  - Ijara may be such that both parties have the option to cancel the remaining lease on a periodic basis (say every 3 months) if certain conditions are met
  - if market lease rate at that time is above a certain level, say U%, bank has right to cancel contract
  - if market lease rate at that time is below a certain level, say L%, client has right to cancel contract
  - as long as current market lease rate is within L% to U%, the ijara lease continues to be in force
- When lease is cancelled
  - could re-negotiate a new contract or make new contracts with other parties at prevailing market lease rates
  - lowers risks for both parties of ijara
- Lease rate can be pegged to Libor or some other benchmarks

Khiyar al-shart for financial assets

- Suppose client would like to buy (resp. sell) an asset or (permissible) stock to a bank in 1 month's time at a pre-determined fixed price, say X
  - price to be paid at time of settlement in 1 month
  - in the purchase (resp. sale) contract there is option for client to back out of the deal if he or she so chooses under the khiyar al-shart framework
  - bank does not have option to back out and must fulfill its obligation if client decides to go ahead with the transaction in 1 month
- In 1 month's time,
  - if price of asset is higher (resp. lower) than X, client goes through with the purchase (resp. sale)
  - otherwise, client cancels the contract and no transaction takes place
- This is similar to a call (resp. put) option in conventional finance

Khiyar al-shart for financial assets (cont.)

- In this khiyar al-shart example, the client enjoys benefits of the option and the bank does not. As such, the pre-determined price may be higher (resp. lower) to reflect the economic value of the option
- Unlike the conventional call (resp. put) option where the premium is paid upfront, there is no payment by client today. The value of the option that the client has is built into the pre-determined fixed price.

Section 5

Capital Markets

Capital markets

- Capital markets bring together people who have capital (investors) and people who need capital (entrepreneurs and government)
- Conventional Finance
  - companies raise capital through debt and equity
  - governments raise capital through debt
  - securities (bonds and shares) are issued in the primary market
  - investors may trade them in secondary markets
  - cost of capital is lower as companies and government can access wider groups of investors
  - investors enjoy diversification and liquidity in the investments
- Conventional debt instruments are prohibited in Islamic Finance due to the element of riba
- Nonetheless from the investors' point of view, fixed income investments that provide steady streams of cashflows may be desirable: sukuk is the Islamic version of a fixed income instrument

Capital markets (cont.)

- In the early days of Islamic Finance, funds that were gathered were mainly invested in instruments related to trade finance or commodities
  - available fundings were usually short term
  - Sukuk based on the idea of securitization of assets allow for longer-term funding
- Partnerships and sharing of profit-and-loss are permissible in Islamic Finance
  - have some common characteristics with equity investments
  - however, the structure of equity participation and ownership of the company, and trading of shares have to be examined carefully
- Development of capital markets in Islamic Finance is crucial to the success of an economy. Capital markets satisfy the needs of both entrepreneurs and investors
  - allow efficient allocation of capital to various productive uses in an economy
  - transparency in the pricing of assets and risks
  - liquidity and opportunity for diversification

Section 5.1

Equity Markets

Equity or shareholding: limited liability

- In convention finance, shareholders buy shares of a company in the market or during IPO (issuance)
  - owners of the company
  - company is a legal entity and when its assets are less than its liabilities, shareholders may simply give up company to the creditors
  - shareholders’ liability is limited to the amount of equity paid
  - management of company are workers who receive salary and bonus (which may be related to company’s profits or performance)
- Classic Islamic finance contracts permit partnership or shareholding in a company: mudaraba, musharaka
- Issue 1: Company as legal entity and limited liability of shareholders may pose problems
  - in Islamic tradition, an obligation must be honoured unless it is forgiven by the party to whom it is owed

Equity or shareholding: form of ownership

- Issue 2: Mudaraba as a form of partnership is not so comparable with modern share-holding in equities
  - in a Mudaraba partnership, some partners provide capital while others effort and time in the management of the company, with the profits shared among these two groups of partners
  - in conventional finance, shareholders provide equity capital and the management of the company usually comprises salaried workers (these workers may have some form of profit-sharing compensation scheme but that does not make them "partners" of the company)
- Closest form to modern share-holding in equities of listed companies is the Musharaka contract
  - Musharaka Mulk: share ownership is tied to a specific asset in company
  - Musharaka Aqed: share ownership is not tied to specific assets

Equity or shareholding: ownership (continued)

- Musharaka Mulk: shareholders have their ownership rights associated with specific assets of the company
  - changes in value of assets, or sale of assets have implications
  - will two shares in the company be valued differently when their associated assets change in value?
  - buying and selling of shares linked to buying and selling of the underlying assets: rules and conditions of sale apply
- Musharaka Aqed: ownership rights not tied to specific assets but to the value of the assets in company
  - what does ownership and trading of the shares mean?
  - what are we buying or selling when we trade the shares?

Equity and shareholding: tradeability

- Issue 3: Liquidity and tradeability: attractive features of equity investment in conventional finance
  - investors trade shares on margin account
  - typically involves a loan and interest payments
- Islamic finance: trading of financial claims or interests may pose some challenge
  - sale requires physical assets
  - possible element of riba if company has a substantial amount of cash
- Speculation in share market akin to gambling which is prohibited in Islam
  - thin line between speculation and reacting to the arrival of new information
- What about short-selling of assets?

Equity investments

- General opinion of Sharia scholars: equity investments are permissible under some conditions
  - what is the framework for this to be permissible?
- Two steps: screening and filtering of companies
- Screening the company's business and activities. Company's business must involve permissible products
  - Forbidden: gaming, alcohol, pork, pornography, immoral business, etc
  - Forbidden: conventional finance companies that deal with interest or companies having substantial amounts of cash
- Filtering to ensure that company does not have too much liquid assets, cash or debt-related instruments
  - element of riba
  - trading of company's shares may pose a problem since cash or debt can only be traded at face value

Equity funds and indices

- In practice, companies that conform strictly with all the Sharia requirements are few
  - say, for example a supermarket may sell a small selection of beer while the main bulk of its business is in grocery which is permissible
  - restricted choices for investment and hard to achieve diversification
  - some comprises and adjustments are made: for example, we may estimate the amount of earnings from interest income and non-permissible activities, deduct this sum from the dividend or earnings and contribute it to charity (Zakah)
- Islamic Indices have been constructed using a group of companies that are deemed to be Sharia-compliant
- Investors may also invest in Islamic equity funds to obtain diversification

Section 5.2

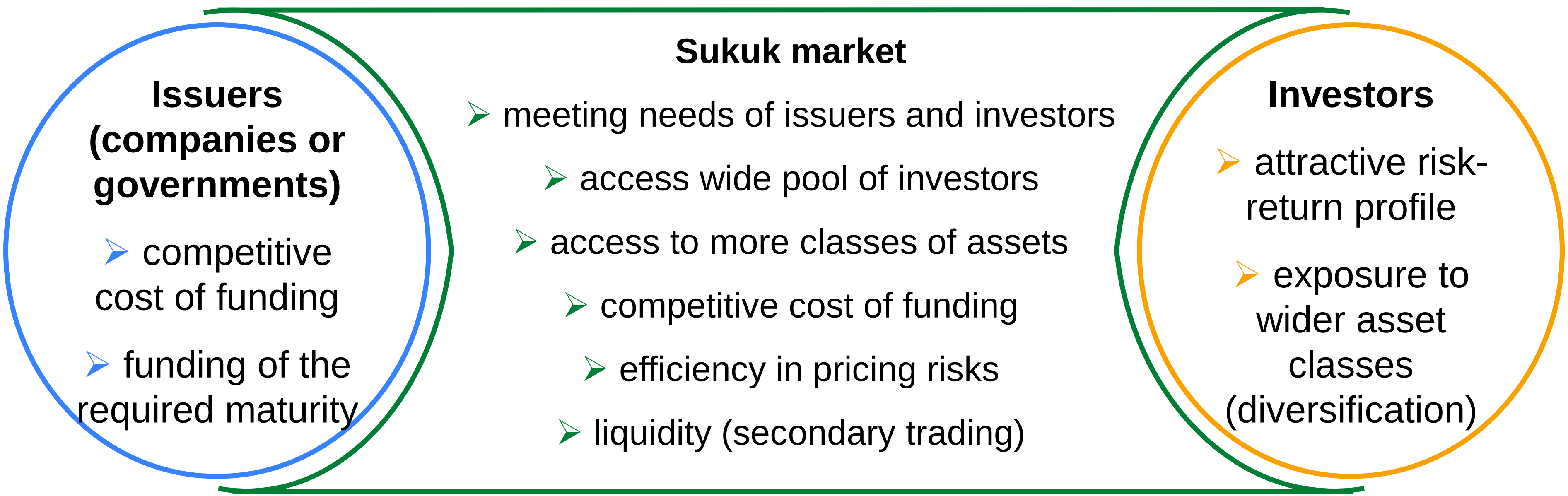
Fixed Income Markets

Islamic bond market

- Debt instruments such as coupon or zero-coupon bonds in conventional capital markets cannot be used in Islamic Finance due to the element of riba
- Fixed income instruments are desired by investors
  - exposure to different risk factors or asset classes: diversification purpose
  - liability management: stream of cash flows needed in future
  - somewhat predictable cash flows
- Early attempts to issue Islamic bonds
  - late 1970s in Jordan: Muqaradah bonds
  - Pakistan and Malaysia also attempted to develop such bonds
- Not much development till the growth of securitization in the conventional capital markets suggested a way for the Islamic markets
  - late 1990s in Bahrain and Malaysia, asset-backed bonds (securities) known as the Sukuk were developed
  - Sukuk framework avoids riba through the use of classical Islamic contracts, for example ijara (leasing) contracts

Islamic bond market: meeting the needs

- Long term funding at competitive rates for investments and infra-structure development are crucial to an economy
- For Sukuk markets to develop: meet the needs of both companies and governments who raise funds and the investors who have funds



Sukuk framework

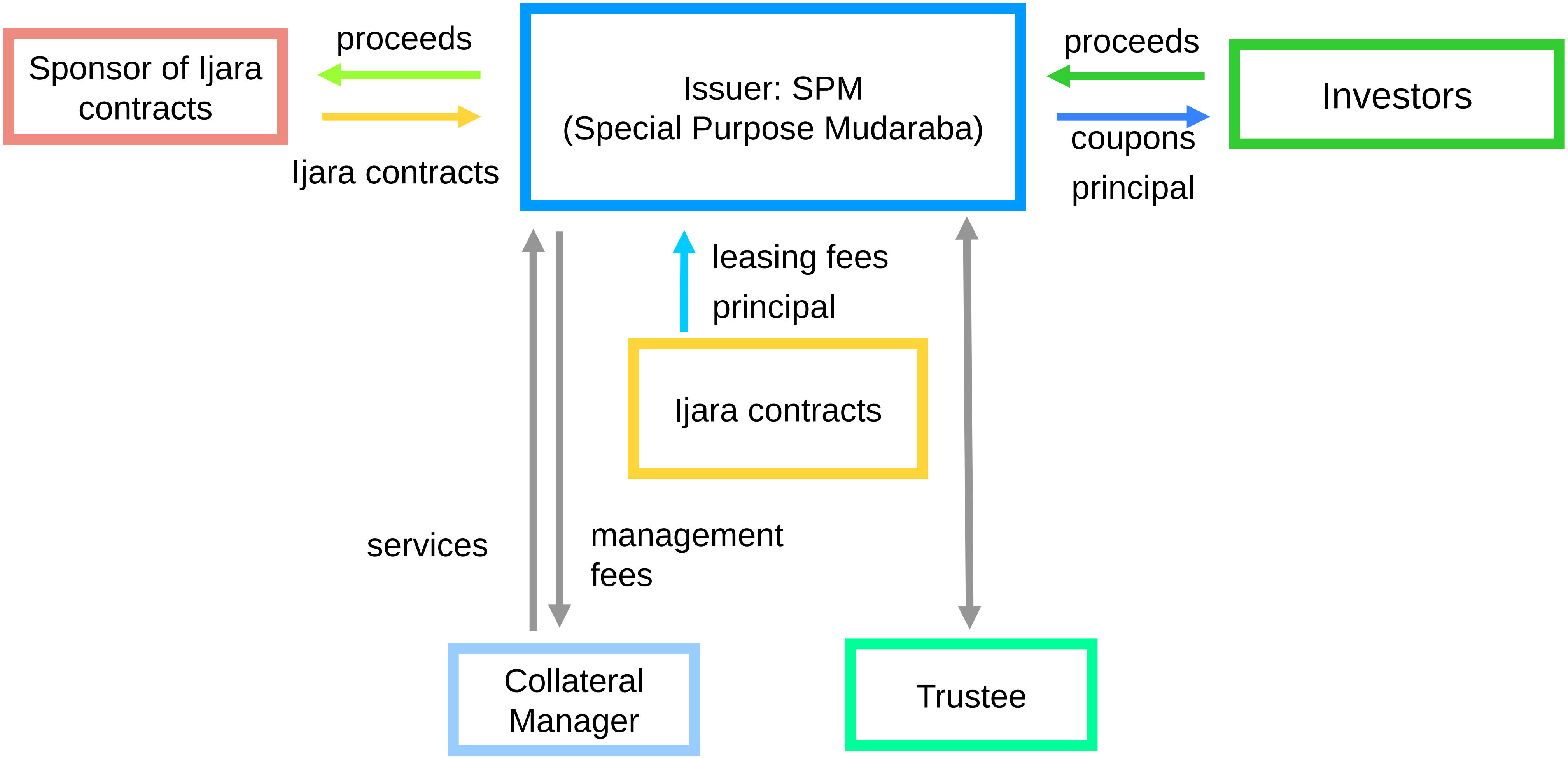
- **Sukuk** certificates issued against a pool of assets
  - similar to a securitization
  - Sukuk certificates represent ownership in the assets
  - cash flows from the assets will be used to pay investors of Sukuk certificates
  - performance as well as risks of Sukuk are tied to the asset pool

- assets are linked to underlying physical objects and are Halal
  - for example, assets may be ijara (leasing) contracts or salam contracts which have physical assets as underlyings
  - contracts related to the funding or purchase of these assets are Sharia compliant
  - assets need not be in existence at the time of securitization: for example, the sukuk issuance is used to fund the development of an infra-structure (say, bridge or school)
- Depending on the assets, different types of Sukuk may be issued.
  - for instance: Ijarah Sukuk, Salam Sukuk, Musharaka Sukuk, Istisna Sukuk, etc

Sukuk framework: Special Purpose Entity

- Securitization may involve a Special Purpose Entity (SPE) formed under a mudaraba partnership with investors
  - capital or funds provided by investors
  - management services by SPE
- Investors take on the risk and rewards associated with the underlying assets
- At the end of the investment period, the assets may be sold at a pre-determined price to the original owner (bank)
  - the proceeds from this sale will be used to pay the principal on the Sukuk

Assets and cash flows



securitization of ijara contracts

Section 6

Islamic Investments

Investments

- Provide capital for a profit: investment
  - many asset classes
- May invest directly in companies as partners or shareholders
  - permissible products and processes
- Companies with forbidden products or processes
  - conventional financial institutions and banks (interest taking)
  - gambling related businesses (stocks in gaming companies)
  - alcohol related businesses
  - pork and related products

  supermarket?
  - pornographic related business (internet sites that take advertisements from companies peddling pornography)
  - armament and weapons
- Sukuk bonds are Islamic versions of fixed income instruments. As issuance by corporates and government increases, investors would have a wider choice of exposure to different issuers as well as underlying asset classes

Hybrid instruments

- Typical company is usually financed partly by equity and partly by debt
- There are hybrids instruments having characteristics of equity and debt
  - convertible bonds
  - preferred shares
  - these are usually not permitted because of the interest-bearing debt component or its equivalent
- However hybrid instruments that are structured in a way that links the return to the performance of some physical assets may be made Sharia-compliant

Equity mutual funds

- If investment in the equity of a permissible company is permitted then investment in a carefully constructed portfolio of permissible companies is also permitted
  - investment in equity mutual fund is permitted provided the companies in the portfolio are all permissible
- Islamic equity mutual fund
  - pools money from many investors and invest them in a portfolio of permissible stocks
  - investors can buy and sell their holding in fund as they wish
  - fund managers may collect fees for managing the fund
  - may have a Sharia advisors to guide its investment decisions and other processes
  - some funds compute the correct amount of Zakah (charity) due on the investments and pay them on behalf of investors
  - sector funds: growth, value, technology, big-cap etc

Equity indices

- Conceptually Islamic stock indices may be constructed based on stock prices in permissible companies
- Several issues
  - which are the permissible companies?
  - how many are they?
  - what can we use the indices for?
- Many companies have debt which are interest bearing
  - they may deposit their short-term surplus in the money market earning interest
- Small fraction of their products may be forbidden
  - supermarket sells pork and wine but these products form only a tiny fraction of their overall sales
  - real estate company may rent a small amount of space in their big shopping malls to video shops that sell some forbidden products

Diversification and degree of strictness

- If strict rules are applied, then the number of permissible companies become too small to achieve reasonable diversification
- Appropriate application of rules and good judgement are needed
- Mutual funds as well as companies constructing Islamic stock indices have Sharia advisors to guide them on these issues
- Sharia advisors may sometimes make mistakes however sincere or diligent they are in their work
  - on some issues, opinions among scholars and jurists defer
- Individual Muslim investor should learn more the processes used by mutual funds or stock index company and decide for herself or himself what is appropriate
  - essential to seek knowledge and understanding of the issues and pitfalls

Guidelines

- To construct an Islamic stock index
- First exclude all non-permissible companies based on their products or services
- Next exclude those companies that deal excessively with interest (Riba) and risk or uncertainty (Gharar) and forbidden products
  - interest paid or earn (size of debt or surplus cash)
  - income from forbidden products (e.g. wine sales in big supermarket)
  - trading in risks (conventional insurance companies) or trading in interest-bearing debt
  - many grey areas
- What's excessive? Rules of thumb have been derived by Sharia advisors of mutual funds and stock index companies

Dow Jones Islamic Index (DJII)

- Criteria used by DJII
  http://www.djindexes.com/mdsidx/?event=showIslamic
- Exclude companies with debt to total asset ratio of 33% or more
- Exclude companies with “impure plus non-operating interest income” to total revenue of 5% or more
  - impure income (e.g. wine sales in supermarket)
- Exclude companies with accounts receivable to total assets ratio of 45% or more
- Similar rules are used by FTSE Global Islamic Index Series
  http://www.ftse.com/Indices/FTSE_Global_Islamic_Index_Series/index.jsp

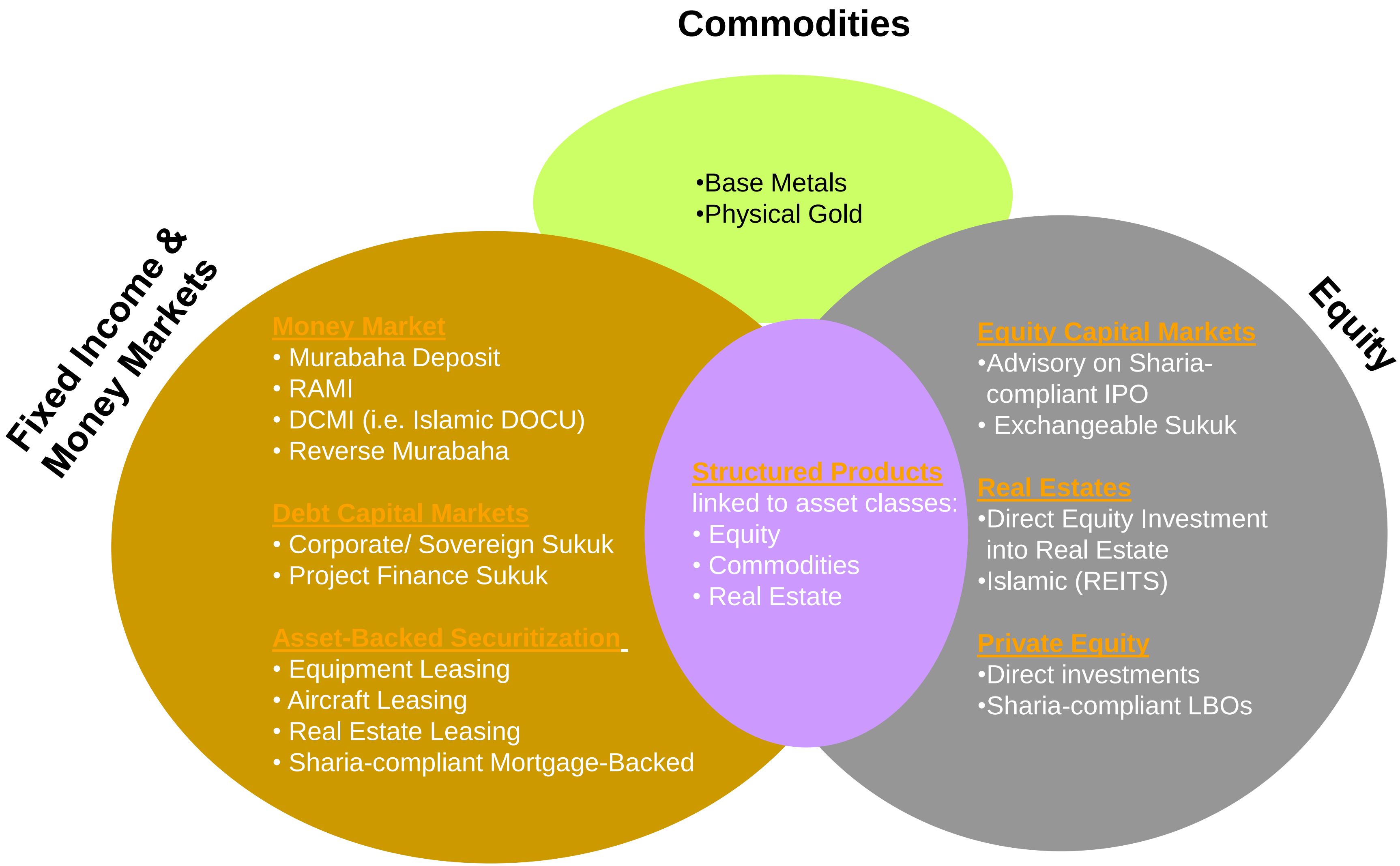
S&P Sharia Indices

- Three indices
  - S&P 500 Sharia
  - S&P Europe 350 Sharia
  - S&P Japan 500 Sharia
- Screening for compliance
  - Sector / product based screen
  - Accounting based screen
- Sector / product based screen: forbidden products and activities
- Accounting based screen
  - debt ratios, accounts receivables, cash, revenue from non-compliant activities
- Dividend Purification Ratio: part of the dividend related to non-permissible revenue is given away as charity

Besides companies, many other asset classes

- Commodities
  - copper, aluminum, zinc, lead, zinc, platinum, palladium
- Energy
  - oil, heating oil, natural gas
- Indices
  - commodity indices, metal indices, Islamic equity indices
- Basket of assets
- Real estate
- Sukuk bonds

A whole suite of potential product offerings



… more Sharia compliant products coming your way … catch them …

Section 6.1

Structured Products

Structured products

- Investors may have different needs
  - no risk on principal sum invested: capital protection
  - investment horizon or maturity
  - coupons or cash flows
  - risk appetite
  - choice of asset classes
  - views about performance of assets
  - liquidity
- Structured product: optimal investment tool to meet investors' requirement and to best express the investors' view
  - maximal profit potential for the risk taken
  - cost efficiency
  - tradeable in secondary market
- Wide choice of underlying assets: metals, commodities, energy, indices, etc

Structured notes: taking care of every need …

Capital protection
100%, 120%

Currencies
USD, EUR,
etc

Maturities
1 month to 15
years

Coupon frequency zero,
quarterly, annual

Leverage &
optimization

Assets: commodities,
energy, indices, etc

Section 6.1.1

Commodity Linked Notes: Principal Protected

Protection, leverage and optimization

- Capital protection: 95%, 100%, 110%, 120%, etc
  - higher level capital protection: lower exposure to asset or lower participation in gains on asset
- Leverage: making the capital work harder
  - greater exposure to asset's performance
  - higher potential profit
  - may risk some part of the capital (say 95% protection and not 100%)
- Optimization: striking a balance between protection of capital and exposure
  - meet the investors' desire on profitability and preservation of wealth
  - e.g. 80% or 90% capital protection in exchange for greater potential profit
  - cost-efficient and innovative structures

Matching investors and products: protection

- Principal or capital protected note
- Conservative investor
  - no or very little risk to capital or principal (depending on level of protection)
  - views on asset and wishes to profit from such views
- Meet investor's requirement on
  - maturity or tenor
  - coupons or cash flows
  - cost-efficient way to express views
- Performance is usually not spectacular as the level of exposure or risk is rather low
  - protection may be weighing down performance
  - protection via CPPI or CPPT structures may be lead to better results

Conventional capital protected note: example

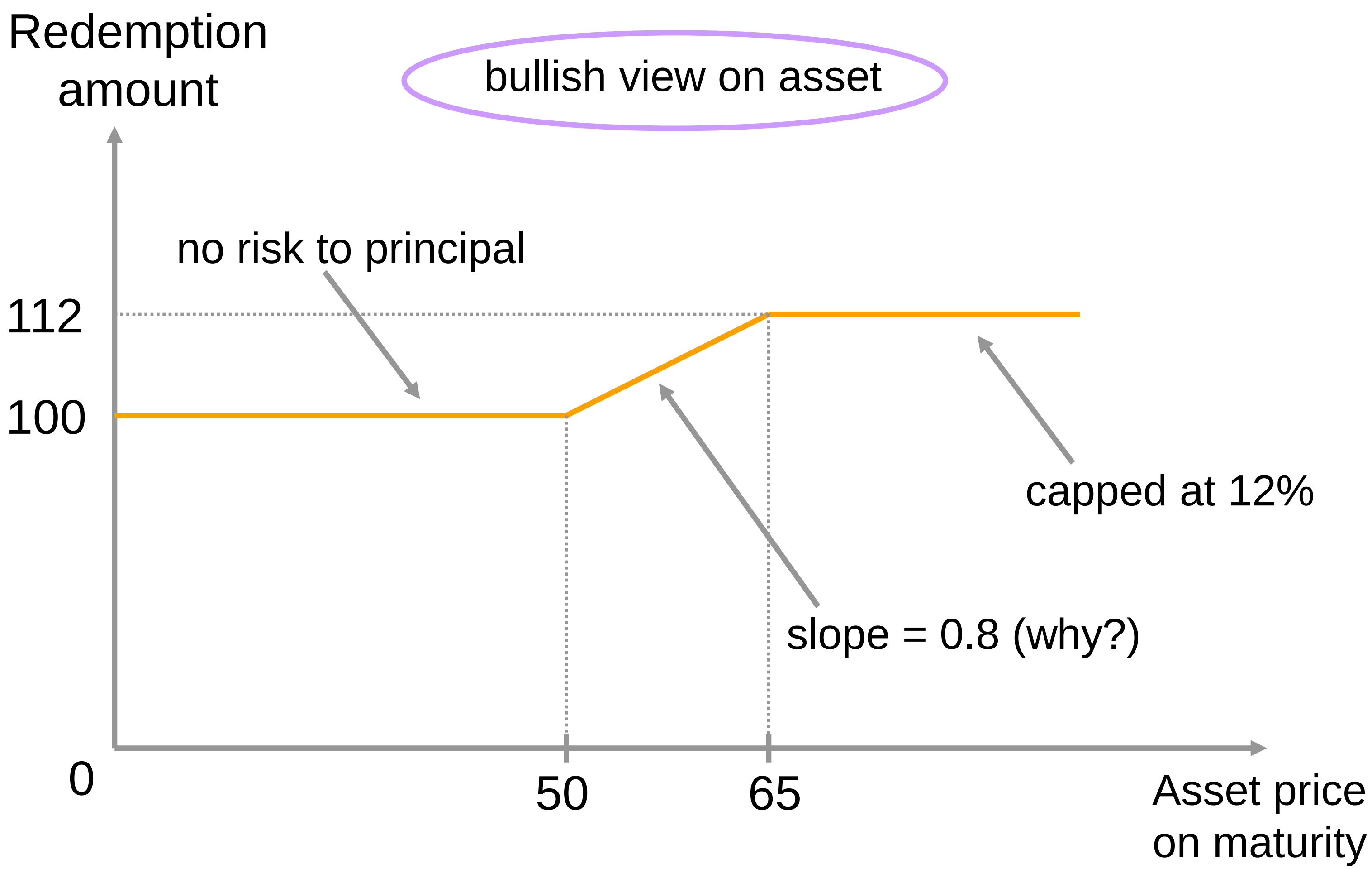
- Maturity = 2 years; price of note today = 100
- Underlying asset price today S_I = 50 (say)
- Underlying asset price on maturity = S_F
- Participation rate = 40% = 0.4
- No coupon during the investment period
- Redemption amount on maturity

return on asset

$$100 \times \left[1 + \max \left[0, \min \left(0.4 \times \left(\frac{S_F - S_I}{S_I} \right), 12\% \right) \right] \right]$$

- Minimum redemption = 100% (capital protected) Maximum redemption = 112%

Payout dependent on asset performance



- How do we make such a product? It looks like the pay-out on a 50/65 call spread on the asset

Like being long 0.8 of the asset

- The amount of exposure to the asset depends on the pay-out function

$$100 \times \left[1 + \max \left[0, \min \left(0.4 \times \left(\frac{S_F - S_I}{S_I} \right), 12\% \right) \right] \right]$$

- Note that spot price of asset $S_I = 50$ today

- Payout on note $= \left[1 + 0.4 \times \left(\frac{S_F - S_I}{S_I} \right) \right] \times 100$

$$= 100 + 0.8 \times (S_F - S_I)$$

$$= 100 + 0.8 \times \text{Gain on asset}$$

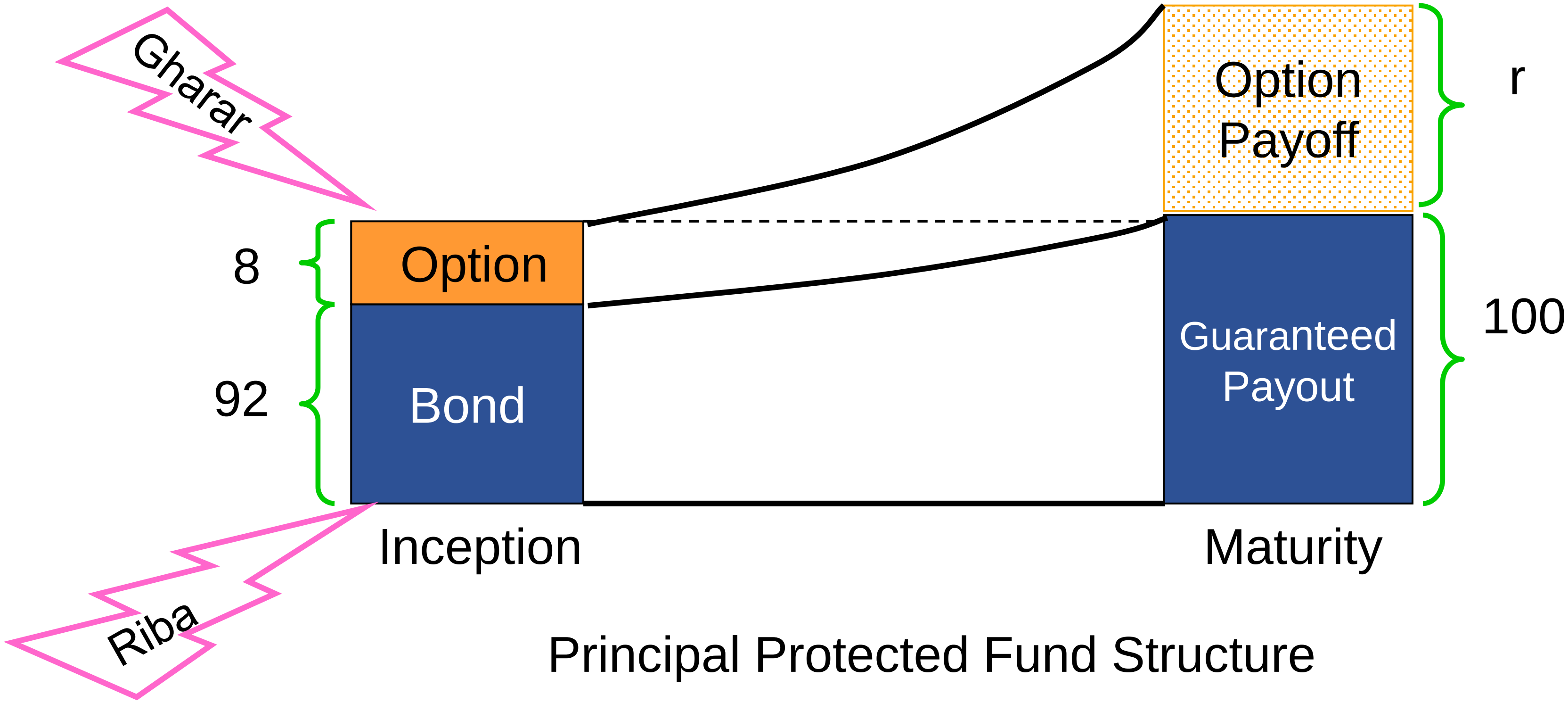
exposure to asset

- Capped at 12%: max payout on note = 112 = 100 + 0.8 x (65 – 50)

note gives up any appreciation in the asset above this level

Conventional note: how it is made

- Capital protected notes are structured from two components: fixed income portion and option portion



Principal Protected Fund Structure

- Option = 50 / 65 Call spread on underlying asset
  - $8 buys 0.8 call spreads
- Not Sharia compliant due to elements of riba and gharar

Can we make the same note Sharia compliant?

- Maturity = 2 years; price of note today = 100
- Underlying asset price today S_I = 50 (say)
- Underlying asset price on maturity = S_F
- Participation rate = 40% = 0.4
- No coupon during the investment period
- Redemption amount on maturity

return on asset

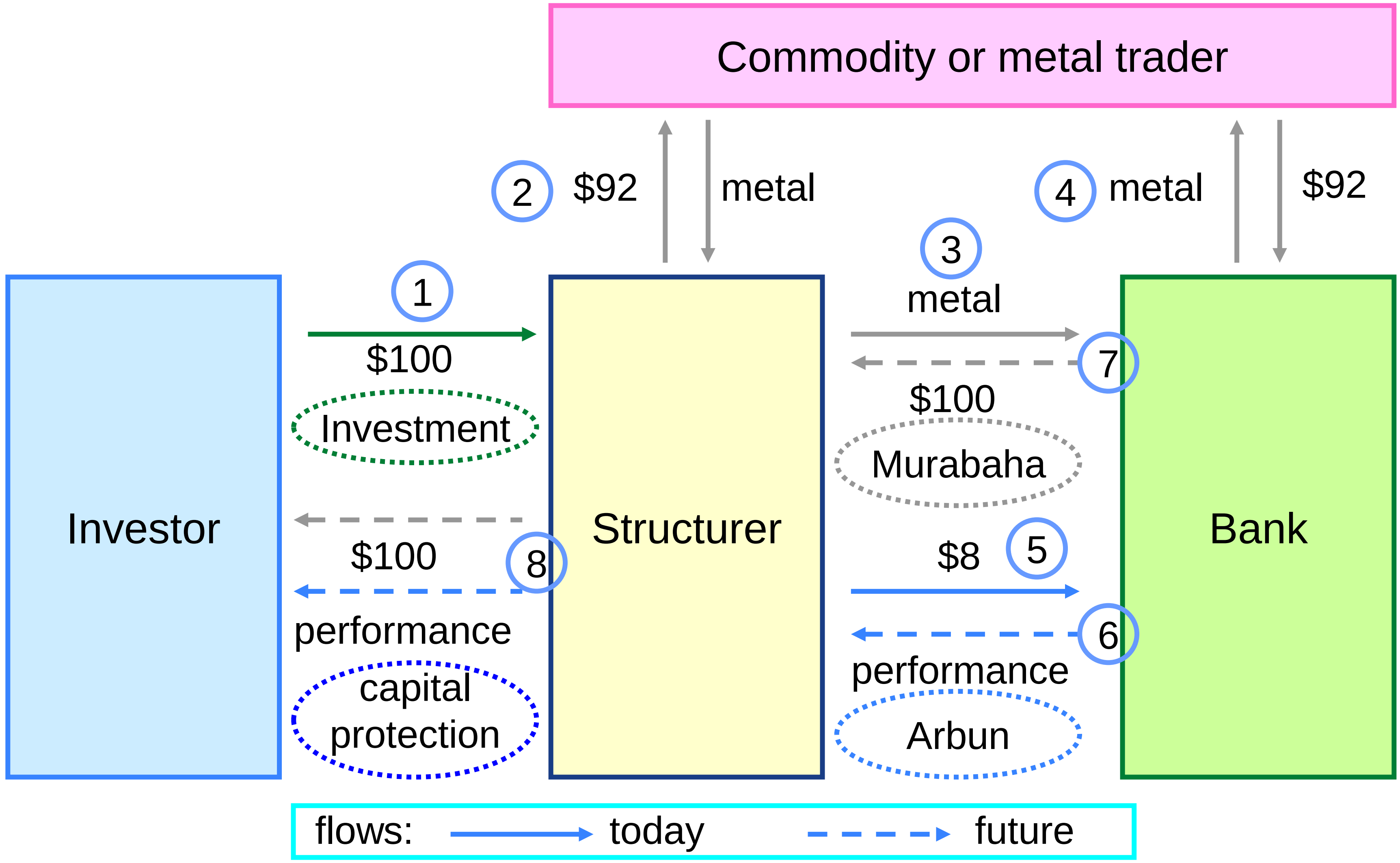
$$100 \times \left[1 + \max \left[0, \min \left(0.4 \times \left(\frac{S_F - S_I}{S_I} \right), 12\% \right) \right] \right]$$

- Minimum redemption = 100% (capital protected) Maximum redemption = 112%

Making a Sharia compliant note

- Murabaha transaction to provide protected amount on maturity
  - $92 to buy asset today and sell for deferred payment of $100 in two years
- The remaining $8 is down payment (Arbun) for potential purchase of 0.8 units of asset for a full price of $58 on maturity with the agreement that issuer gets any price appreciation above $65
  - issuer provides management services and gets any appreciation above $65 as "performance fee"
  - investor gives up any appreciation above $65 as a "gift" to issuer
  - this is similar to the 65 call option that investor sells to issuer in the conventional capital protected note
  - investor exercises right to buy asset if price on maturity > 50, which correspond to the 50 call option in the conventional note. Full price = 58 = 50 + 8 (on maturity, buyer pays 50 for asset)
- If issuer is conventional bank, it may sell the 65 call option for cash

Sharia compliant capital protected note



Spot today = 50

Performance = max [0, min {0.8 x gain on 1 unit of asset, $12}]

Maximum gain = 0.8 x (65 – 50) = $12 (i.e. 12% cap)

Underlying assets

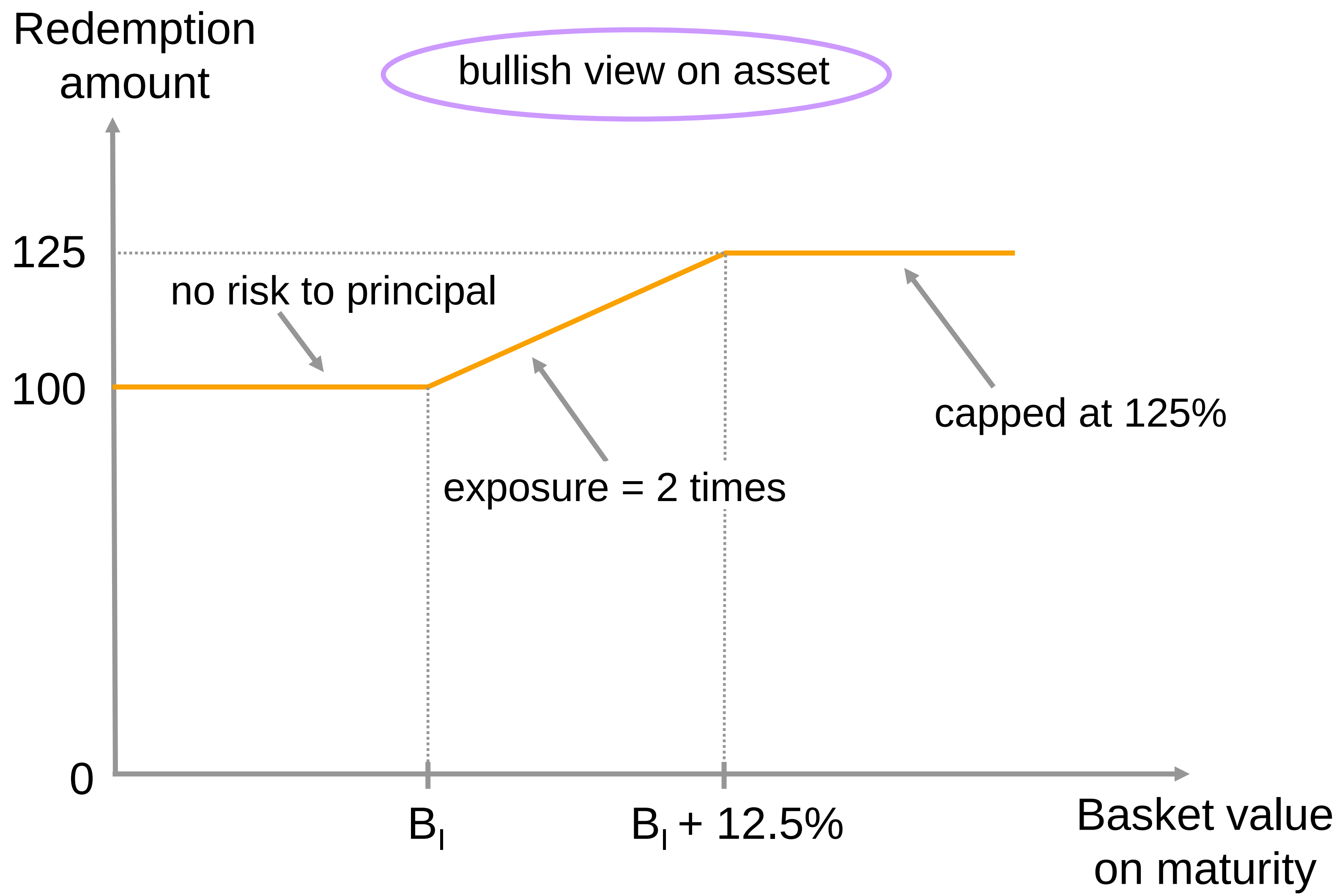
- Motivation for structured notes begins with the investor
- Investor has bullish views on certain permissible assets and would like to participate in their appreciation
  - structured note allows investors to profit from their views and to achieve capital protection at a level they need
- Given the growth forecasts in many developing economies, demand for raw materials, commodities and energy products are expected to be strong and growing
  - attractive assets for investors who subscribe to this view
  - these physical assets are Sharia compliant

Example A: Commodity Basket Note – zero coupon

2 Year Commodity Basket Certificates – Zero Coupon

- Maturity: 2 years
- Issue price: 100
- Currency: USD
- Underlying asset: equally weighted basket
  - Copper Index (Bloomberg Ticker LMAHDY)
  - Aluminum Index (Bloomberg Ticker LMCADY)
  - WTI Crude Oil Index (Bloomberg Ticker CL1)
- Zero coupon
- Redemption: Max{100% + 2 x Basket performance, 100%}
  - Maximum redemption capped at 125%
- Basket performance = $\dfrac{\text{Basket}_{\text{Final}} - \text{Basket}_{\text{Initial}}}{\text{Basket}_{\text{Initial}}} = \dfrac{B_F - B_I}{B_I}$

Example A: Payout diagram



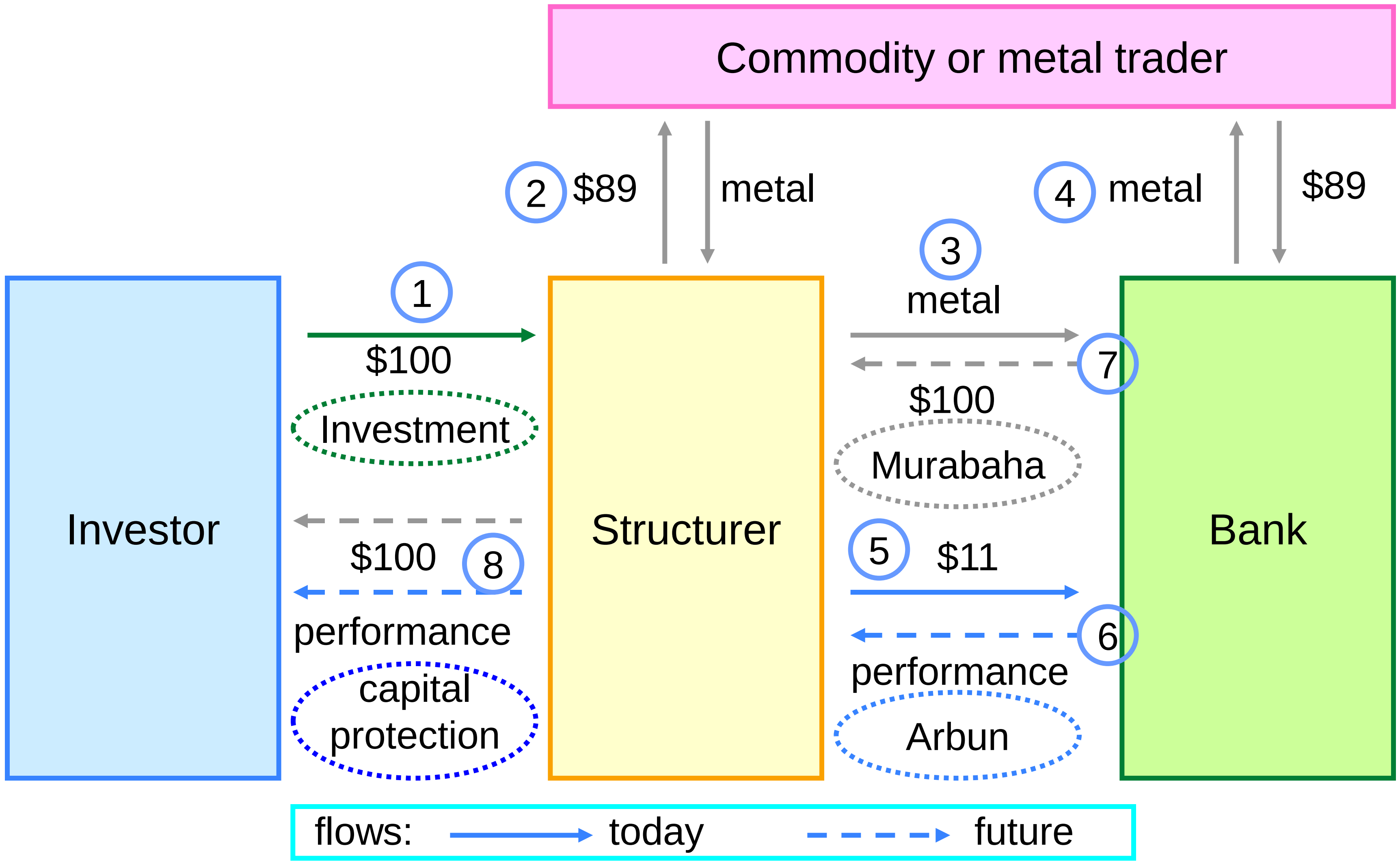
Example A: Constructing the note

- Issue price of note = 100 (invested amount today)
- Suppose the 2-year murabaha rate on USD is 6% p.a.
- To receive 100 in 2 years' time on a murabaha deposit, today we need to deposit

$$\frac{100}{(1+0.06)^2} = 88.9996 = 89.00$$

- The remaining 11 (= 100 – 89) is used as a down-payment for a potential purchase of a equally weighted basket of three commodities, copper, aluminum and crude oil: Arbun contract
  - the notional value of this basket is $200
  - the full price of the basket is 200 + 11 = 211
  - any appreciation over 12.5% (= 12.5% x 200 = 25) on the basket is given to issuer / portfolio manager as a gift for his service

Example A: Schematic view of the note



Notional value of basket = 200

Exposure is 2 x basket performance

Maximum redemption = 100% + 2 x 12.5% = 125%

Commodity Basket Note

2 Year Commodity Basket Certificates – Zero Coupon

- Maturity: 2 years
- Issue price: 100
- Currency: USD
- Underlying asset: equally weighted basket
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- Basket performance = $\dfrac{\text{Basket}_{\text{Final}} - \text{Basket}_{\text{Initial}}}{\text{Basket}_{\text{Initial}}} = \dfrac{B_F - B_I}{B_I}$

Choice of basket, maturities, exposure …

- Product tailored to suit investors' needs and views
- Some variations

	Basket					
	Copper Index Aluminium Index WTI Crude Oil Index			Copper Index Aluminium Index		
Maturity	2 years	3 years	5 years	2 years	3 years	5 years
Number of times basket performance: N	2	3	6	2.5	4	8
Capped level: M	125%	150%	175%	125%	150%	175%
Zero coupon						
Basket performance = (Basket Final Level - Basket Initial Level) / Basket Initial Level						
Redemption = min{ max{ 100% + N x basket performance, 100%}, M%}						

Capital protected notes: features

Benefits

- Principal not at risk
- Profit if view is correct
- Choice of underlying assets, maturities, coupon structure, level of protection

Risks and Disadvantages

- Some risk to capital if the level of protection is less than 100%
- Potential profit may be limited depending on the structure

Client profile

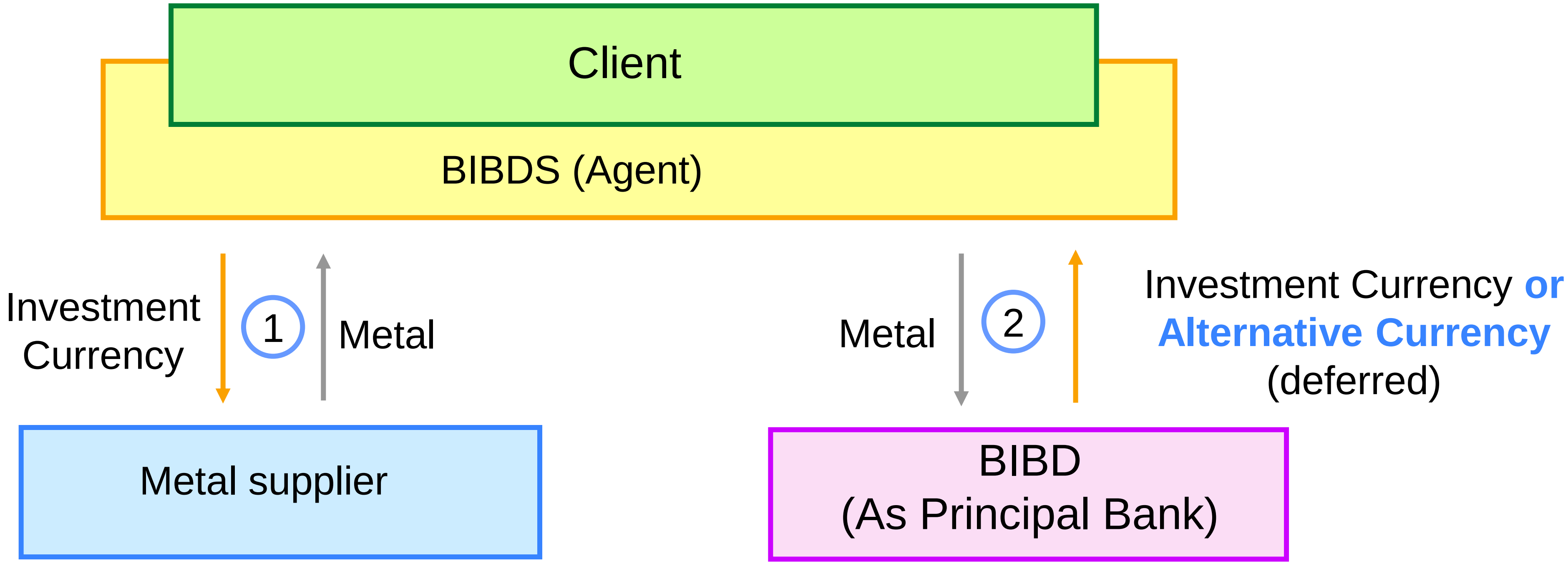
- Client wants some level of capital protection
  - conservative investment
- Has directional view on underlying asset over the investment horizon

Section 6.1.2

FX BLOC Certificates: Yield Enhancement Notes

BIBD Sharia Compliant FX BLOC – Structure

Optimisation



BIBD Sharia Compliant Standard FX BLOC

Optimisation

Investor Profile

- Investor is looking for above average profit payments
- Investor is willing to accept a repayment in an alternative currency.
- Investor is interested in optimizing their short-term liquidity management and wants to remain flexible at the same time.
- The only prerequisite is that the investors have to sign a Trade Investment Agency Agreement and Supplemental Trade Investment Agency Agreement with BIBDS.

Product Characteristics

- BIBD Sharia Compliant Standard FX BLOCs consist of two separate but simultaneous transactions involving a BIBD Sharia Compliant Deposit and a unilateral promise on the Investment Currency against the Alternative Currency.
- Depending on the underlying exchange rate on the expiration date, the initial investment is paid back to the investor with profit in the Investment Currency or in the Alternative Currency
- Promised FX rate closer to spot -> more risk -> higher profit rates

Benefits

- Higher profit rate than with a traditional BIBD Sharia Compliant Deposit
- Tailor-made solutions with a high degree of flexibility in choice of currencies, maturity and profit rate

Risks

- BLOCs have no capital protection
- Repayment in alternative currency at maturity.
- Limited profit rate potential

BIBD Sharia Compliant Standard FX BLOC

Optimisation

Amounts

Minimum USD 250'000 counter value

AUD, CAD, CHF, CZK, DKK, EUR, GBP, HKD, HUF, JPY, MXN, NOK, NZD, PLN, SEK, SGD, SKK, THB, TRY, USD, ZAR

After Sales

Trade confirmation by email and fax

Tenor

Usually one to three months

Termsheets

Languages:

English

Agreement

- Trade Investment Agency Agreement and
- Supplemental Trade Investment Agency Agreement

Expiry

No early redemption possible (buy and hold products)

Repayment 2 days after expiry (By exception 1 day e.g. USD/CAD, USD/TRY)

BIBD Sharia Compliant Standard FX BLOC

Optimisation

Example

Client's market expecation

- Expects the EUR/USD to trade sideways or to slightly rise

Benefits

- Higher profit rate than with a traditional BIBD Sharia Compliant Deposit
- Tailor-made solutions with a high degree of flexibility in choice of currencies, maturity and profit rate

Risks

- BLOCs have no capital protection
- Repayment in alternative currency at maturity.
- Limited profit rate potential

Indicative Product Terms

Principal Bank	BIBD
Tenor	1 month
Type & Grade of Metal	Copper – LME Listed Brands
Quantity	31.706
Price per ton	USD 7’885.00
Issue Price	USD 250’000.00
Underlying	EUR/USD Exchange Rate
Investment Currency	USD
Alternative Currency	EUR
Spot	1.2800
Promised FX Rate	1.2595
Profit Rate	7.00 % p.a.

Payout Scenarios at maturity

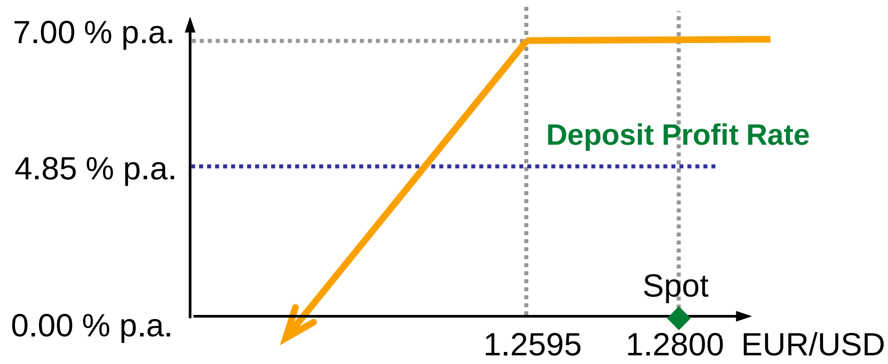
- **EUR/USD closes above the promised FX rate (1.2595)**

  7.00 % p.a. Profit Rate + initial investment in USD

- **EUR/USD closes at or below the promised FX rate (1.2595)**

  7.00 % p.a. Profit Rate + initial investment in EUR converted at 1.2595 EUR/USD

Payout Diagram



Section 7

Summary

Summary

- Rapid development of Islamic Finance since the first Islamic banks in the 1970s
- Develop efficient capital markets and to have products that meet the different needs of participants
  - those who need capital or financing
  - those who have capital to invest
  - those who need to manage risks at reasonable costs
- Many products in conventional finance serve important needs
- Can we synthesize Sharia compliant versions of these products while keeping the spirit of the Sharia law?
  - with competitive cost structure and pricing
- Much scope for future development and innovation

Section 8

Appendix A: Salam Sale (Prepayment Sale) and Istisna’

Salam: prepayment sale

- Based on Hadith, forward sale of commodities are permissible
  - product is fungible, may be quantified by weight, volume, size, homogenous units, or quality
  - full payment of the price at the time of contract and specific date of delivery
  - called Salam contract: prepayment sale for future delivery
- In general, a sale requires
  - a physical product or asset (not foodstuff or currencies)
  - seller must be in ownership of the item at the point of sale
  - sale of non-existent item is forbidden
  - Salam is an exception to this prohibition since the commodities (crops, etc) are usually not in existence at the time of the contract
- Salam is permitted because of an economic benefit
  - financing tool for farmer to buy seeds and tools for growing the crops
  - financing for trader to buy products for re-sale to other clients in another town or location

What counts as a Salam sale

- Salam sale
  - sale on description or specification of non-existent product at the time of sale for full payment at time of contract
- Suppose you buy a chair from a furniture shop and pay the price today. Furniture shop delivers the chair 1 week later. Is this a Salam sale?
  - no
  - payment is not for financing the production
  - chair is there already but it just takes some time to deliver
  - this is a normal sale. It is not sale on description since we saw and inspected the chair

Possible issues with forward sale

- Why the discomfort over forward sale?
- Price on Salam contract is usually less than the price of product in the future at the delivery date
  - possible element of interest (Riba)
- Element of Gharar
  - uncertainty over the existence or availability of product on delivery date
  - uncertain quality or characteristics
  - Salam seller gains (resp. losses) if price on delivery date is lower (resp. higher) the Salam price paid at the time of sale
- Strict conditions apply to Salam contracts

Conditions on Salam

- Complete description of product
  - what is to be delivered, quantity, quality, amount, type, format, etc
  - delivery date, time and place
- Reasonable to expect product to exist or be produced by delivery date
  - if Salam seller is unable to produce the product, the product may be bought in market to fulfill the delivery obligation: availability of product during delivery date
  - need for fungibility (not from a particular source e.g. our farm)
  - e.g. availability of fresh olives: harvesting season
- Price is determined and paid in full at the time of contract

What it entails

- Finance producer though it need not be the case
  - merchant may sell fresh olives forward using a Salam contract even though he does not grow olives
- There is indebtedness in kind (not in cash)
  - seller owes the buyer the product to be delivered in the future
- Salam Buyer cannot dispose of product before actual receipt of product
- May involve collateral or guarantees (debt in kind)
- If bank wishes to provide salam financing according to production schedule (as each stage is completed) rather than all at once upfront, then a separate salam contract must be signed at each stage of completion
  - condition for salam: payment at time of contract

Salam: an experience

- Tried in Sudan but failed
- Form of finance for farmers
- With war, there was severe inflation of 130% per annum
- Harvest was good. Farmers could not harvest because the labour cost was too high
  - payment received at the time of the contract could not cover it
- Farmers declared bankruptcy

Salam – risk to financier

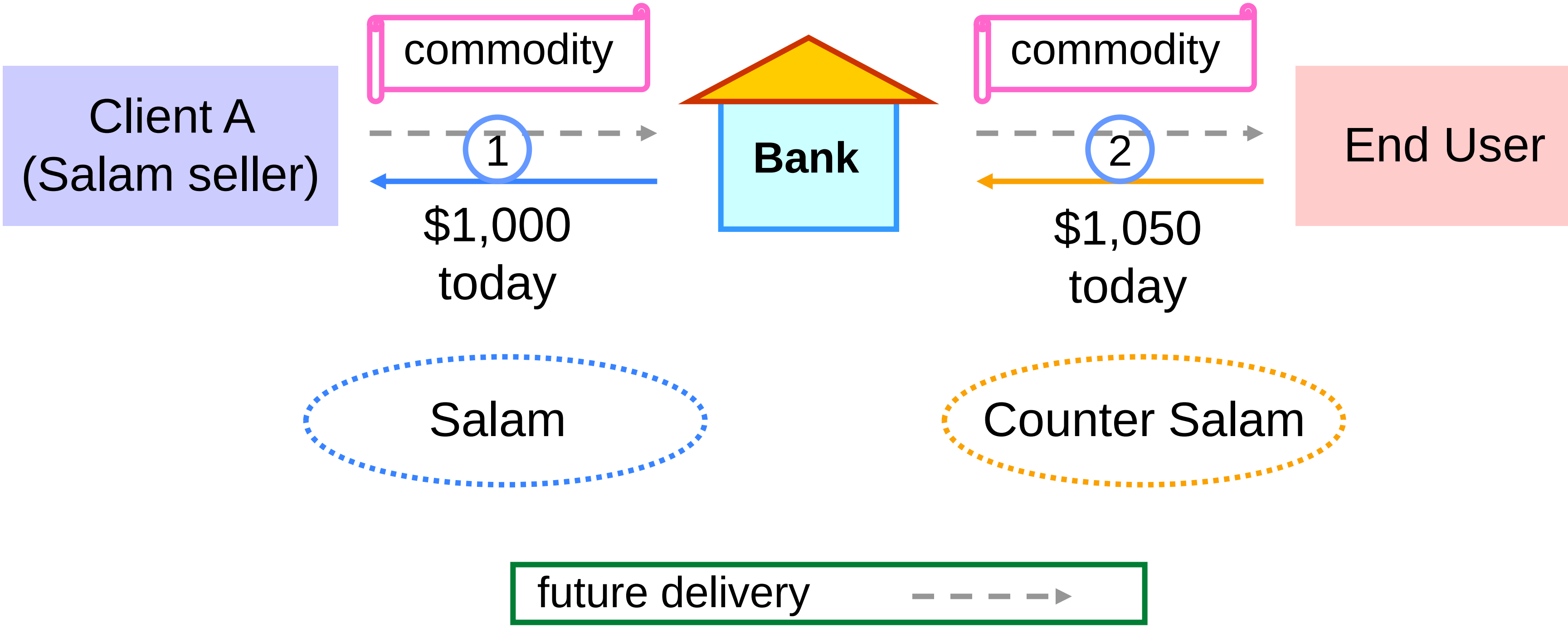
- Conceptual mechanism of salam
- Bank buys product from client using a salam contract
- Bank makes spot payment of \$S and receives product on delivery date. Bank sells product after receipt in the spot market for \$F. The profit is \$(F – S). Usually the salam price is set lower than the likely price on delivery date. However if markets are volatile, bank may suffer losses or make less than it expected
- Bank may not want product or to take price risk on product. How can bank mitigate this risk?
  - Compound (parallel or back-to-back) Salam
  - promise by another customer to buy product for an agreed price on delivery date

I) Compound (Parallel or Back-to-back) Salam

- Bank buys product from Client A using a salam contract for $1000 today
  - bank pays $1000 today and receives product in future
- Bank sells product to End User using a salam contract for $1,050
  - bank receives $1,050 from End User today and delivers product in future (when it receives product from A)
- Bank makes profit of $50 as a middleman

I) Compound Salam

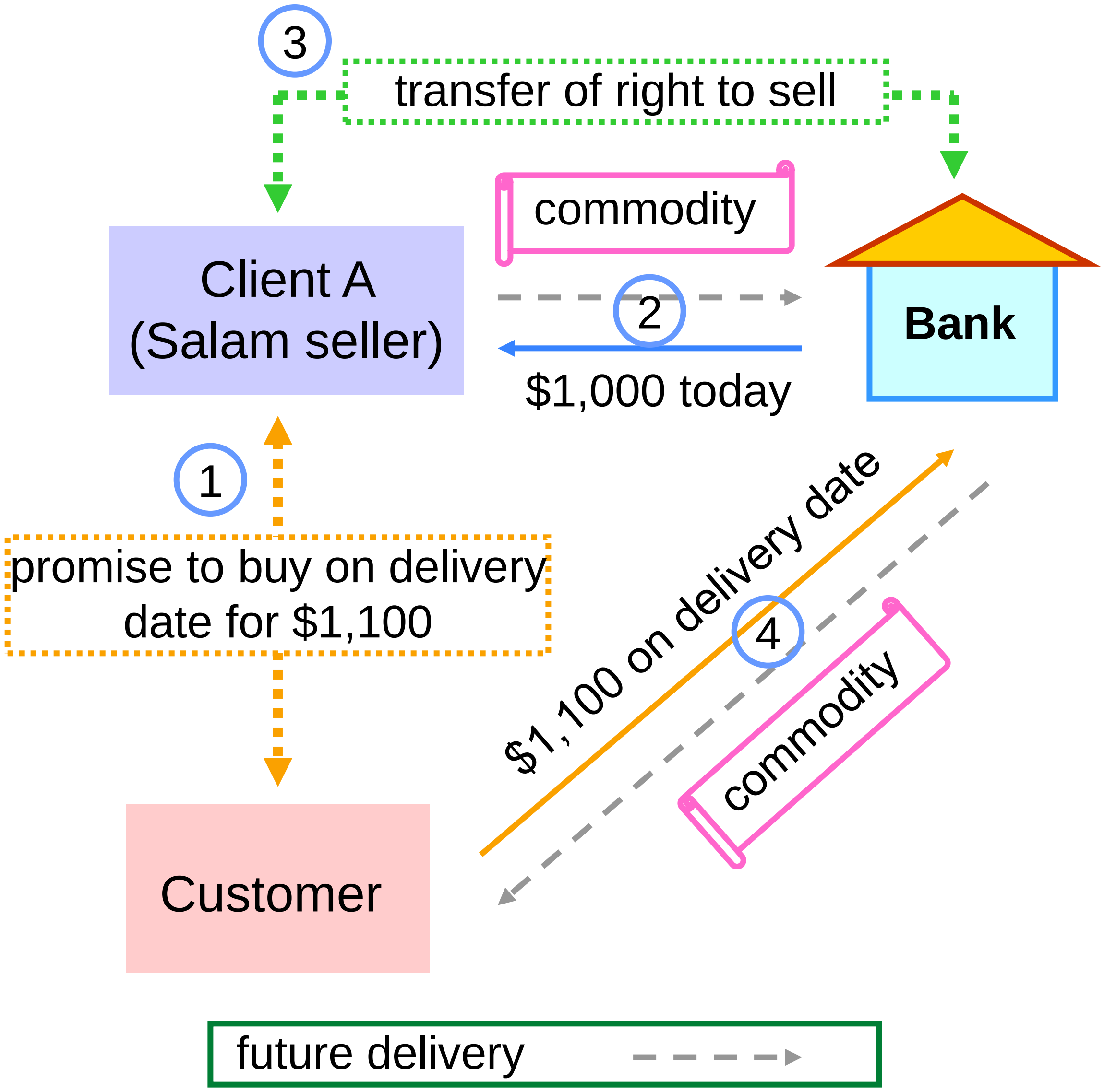
- Compound Salam: salam coupled with counter salam



- Profit = $ 50

II) Promise to purchase by Customer (end user)

- Today, Salam Seller (Client A) sells product to bank using salam contract for $1,000
- Salam Seller (Client A) has already secured a Customer for the product
  - obtains a *unilateral* promise by Customer to purchase product on delivery date at say $1,100.
  - transfer the promise and "right to sell" to the bank



Another alternative

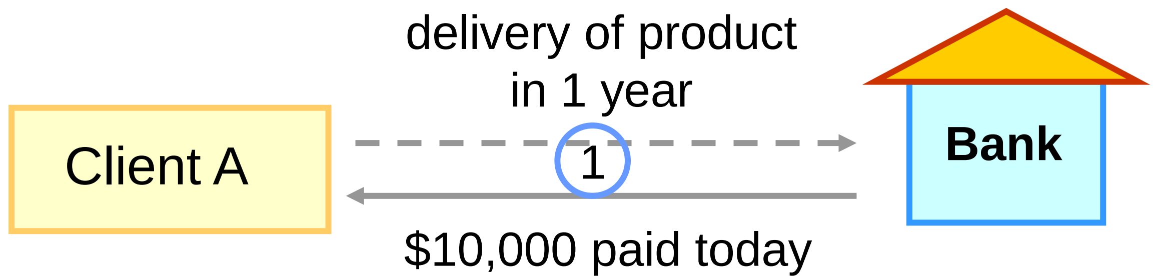
- Bank may settle with the Salam Seller on delivery date with cash or other commodities based on spot prices on delivery date or some other calculations.
  - Compound salam and the settlement method described above with Salam Seller were forbidden by many early scholars
- Some schools allow sale of Salam product by Salam Buyer (bank) to third party before receipt as long as the product is not food
  - so compound salam is permissible
- Another view of the Salam Seller's position
  - debt in terms of the fungible Salam product (debt in kind)
  - so debt can be transferred to third party in connection with mutual debt clearance (maqassa)
  - also known as Parallel Salam
  - allow Salam to be used as financing tool with fixed or variable profit rates

Extending credit using Salam

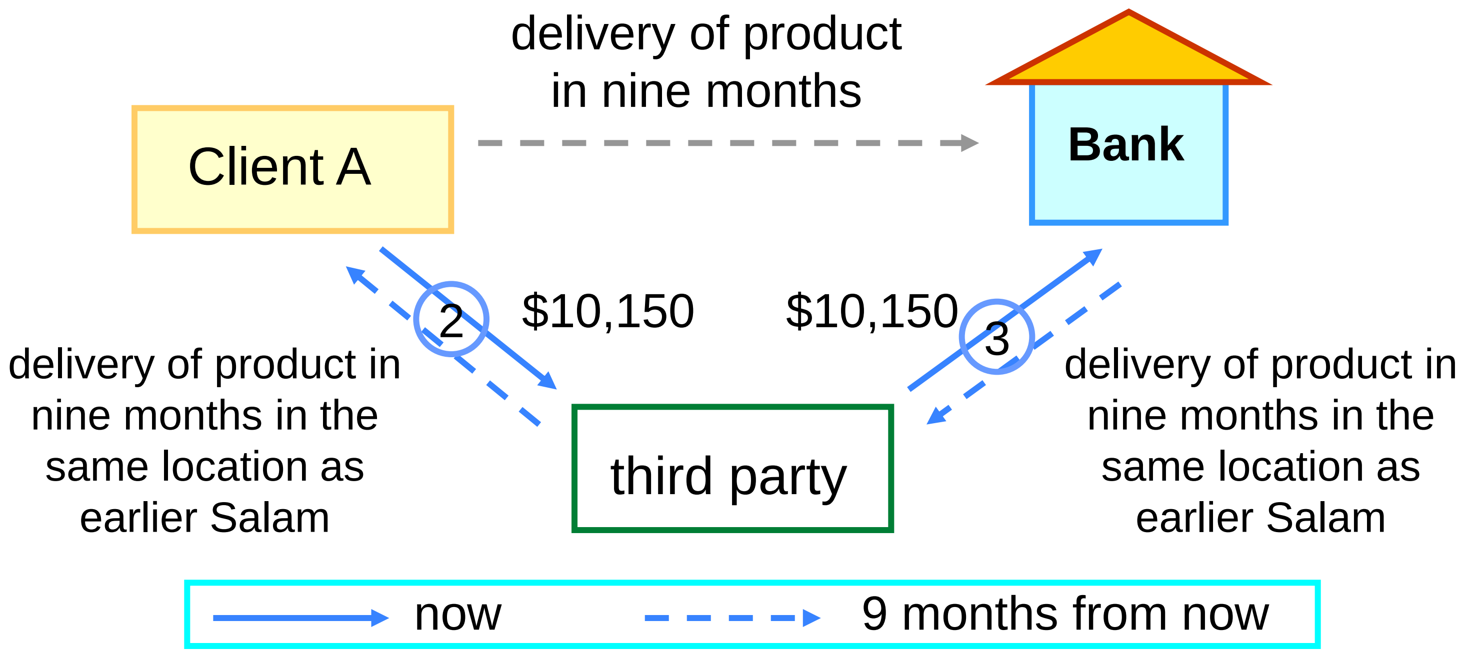
- View of Salam Seller as having a debt in kind allows the Salam contract to be used as a tool to obtain credit
- Client A needs a three-month loan of $10,000 and is willing to pay a profit rate of Libor + 120 (day count = ¼ year). Bank is willing to provide finance at that rate
  - Client A sells commodity for $10,000 to bank using a Salam contract with delivery in 1 year's time
- In three months' time, Client A and bank enters into opposite salam trades with third party (separation from initial contracts) for $10,000 x [1 + (Libor + 1.20%) x ¼] payment upfront and delivery in nine months' time
  - the delivery date and place coincide with original Salam so that all the debts in kind net out (maqassa)
  - say Libor = 4.80%, profit = 10,000 x [1 + 6% x ¼] = $10,150

Extending credit

- Today



- Three months later: two new Salam trades



- All deliveries of product may be netted off (maqassa)
  Borrower receives $10,000 today and pays $10,150 in 3 months' time

Istisna’

- Salam: to sell a product forward
  - permissible as a form of financing if certain conditions are met
- Jurists reasoned by analogy (qiyas) that Istisna’ is also permitted
- Istisna’: commission to manufacture
  - price is paid in installments as the manufacturing or construction process progresses
  - e.g. building, infrastructure, asset
  - cash paid in installments will be less than the full price of the complete project or asset
  - useful financing tool for building schools or infrastructures

Istisna' and Salam

- Istina':
  - price need not be fully paid at time of contract, payment in installments permitted
  - product may not exist if not for the Istina contract. Delivery date need not be fixed at time of contract. Some scholars requires the delivery date to be specified on a mutually agreed term
  - product is usually unique and non-fungible (school, bridge, product)

- Salam
  - price fully paid at time of contract
  - delivery date specified and seller must acquire product from market to deliver if he cannot produce it
  - product is fungible (olives)

like salam

like hiring workers

- Istisna' object: is it a product or the human effort to make it? Object that requires manufacture or building

- Due the element of Gharar, both Salam and Istisna' are to be considered as exceptions and many conditions have to be satisfied before they are permissible

Section 8.1

Sharia compliant Forward Contract

Forward contracts in conventional finance

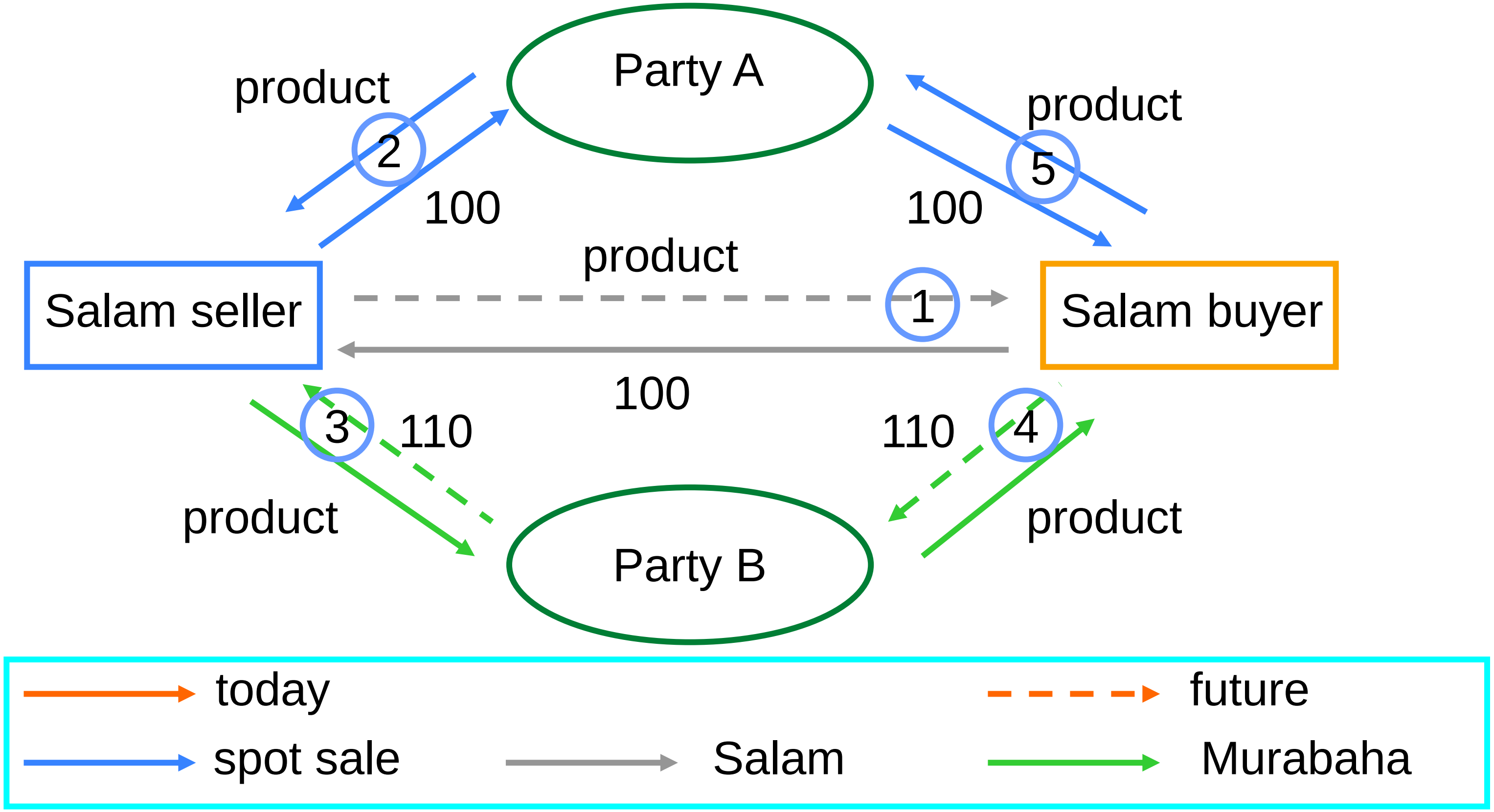
		Payment	
		Today	Future
Delivery	Today	Spot trade ✓	Murabaha ✓
	Future	Salam ✓	Forward contract ✗

- Permissible
  - Spot sale: pay today for delivery today
  - Marabaha sale: pay in the future for delivery today
  - Salam sale: pay today for delivery in the future
- Forbidden
  - Conventional forward contract: pay in the future for delivery in the future
- Can replicate a conventional forward using Salam and Murabaha contracts

Forward and Futures contracts

- Forward and Futures contracts are not permitted on the basis that the goods or commodities may not be in existence at the time of the contract
  - uncertainty regarding delivery (gharar)
- Salam sale – future delivery
  - payment by buyer at time of contract
  - product is fungible and easily available at delivery time (reduce risks of non-delivery)
- Some types of sales where payment and delivery are in the future have been permitted
  - Bai-istisna (contract to manufacture)
  - Bai-istijrar (repeated purchases from a single seller)
  - permitted on the grounds that these contracts bring much public benefits
  - risks of non-delivery is small in these contracts
  - more difficult to use the underlying products or assets for speculative purposes (compared to products in Salam sale)

Replicating the conventional forward



- Party A and B: avoid buy and sell back transactions with same counterparty for two different prices at different times
- Seller and Buyer: pay 110 in future for delivery in future
  - similar to conventional forward

Section 8.2

Appendix B: List of terms

List of terms 1

- Amanah: trust, honesty
- Arbun: down-payment sale where buyer can choose not to complete sale by giving up the down-payment
- Bay’ Bithaman ‘Ajil (BBA): sale where price of asset is paid in installments
- Bay al ‘Inah: sell and buy back contract, where sale is for cash and the purchase is through installments
- Fiqh: religious rulings on practical matters using the main sources of Islamic knowledge
- Gharar: uncertainty, ambiguity, or risk
- Hadith: narration of the sayings or acts of the Prophet
- Halal: permissible

List of term 2

- Haram: prohibited or forbidden
- Ijara': lease contract or sale of usufruct
- Ijara thumma al-bai: lease – purchase contract
- Ijima: consensus on legal opinion
- Istisna': commission or contract to manufacture a product
- Ijtihad: research efforts by scholars and jurists for answers to new questions that are not explicitly addressed in the canonical texts
- Jo'ala: contract for a specialist's service for a pre-determined fee
- Maysir: gambling

List of term 3

- Mudaraba: partnership where one provides the capital and the other the entrepreneurial expertise with the profits being shared
- Murabaha: cost-plus sale used to finance purchases
- Musawamah: negotiable contracts
- Musharaka: equity partnership
- Qard Hasan: benevolent loan
- Qiyas: reasoning through analogy
- Quran: holy book of Islam
- Riba: interest or usury or increase in a debt
- Sarf: spot trade or exchange of currencies

List of term 4

- Salam: sale with deferred delivery of underlying product or asset
- Sharia: Islamic Law, way of life
- Sukuk: Islamic bonds
- Sunnah: set of practices taught by the Prophet
- Takaful: Islamic insurance through mutual support
- Tawarruq: reverse murabaha, financing contract
- Wakalah: agency or agent acting on behalf of client