CHAPTER 3

The Rule of Commodity Indexation and the Principle of Marking to the Market

It is well known that Prophet Muhammad (pp), in addition to being God’s commissioned Prophet, had been through many life experiences. He was a shepherd, a trusted conflict resolution arbitrator, a community leader, and a trusted manager of peoples’ assets in caravan trading and investments. Business enabled him to see the world and taught him how the world works and how business is transacted. At the time he was commissioned, two major currencies were prevalent. These were the *dirham*, used by the Persian Empire and made of silver (it was also used by the Greeks and called *drachma*), and the *denarius*, used by the Roman Empire and made of gold. An important aspect of trading in caravans was transacting business in different currencies depending on where the trade was conducted. The final step of the trader’s transaction was to convert all proceeds into the local currencies of his/her clients, who entrusted him/her with the management of their money and assets.

Prophet Muhammad (pp) came with a simple but revolutionary idea to establish the principles of pricing at fair value and the free market system and to remove deceptive and fraudulent activities in such free markets. The major challenge for caravan trading was to establish standardized rules of exchange because of the variety of currencies used at the time of the Prophet. The other challenge was to determine how to exchange different products for different uses while being fair and ensuring that the principles of fair value pricing and fair free markets were preserved. Prophet Muhammad (pp) set the rules of a new and innovative system that would bring to bear the teachings of Moses (pp) and Jesus (pp) in one final system that is riba-free and would signify for the first time in history the foundation of a Judeo-Christian-Islamic system manifested by the Law (Shari’aa).
The system called for relating the price of every item to a standard commodity that was produced and/or is used in each community. The system called for pricing products and services either in terms of ounces of gold or silver (as metal commodities) or in terms of a food item that was a staple in the community, such as—at that time of the Prophet—wheat, barley, dates, or salt. He also went on to rule that if one borrowed an ounce of gold it should be returned to the owner in an equal amount (i.e., only an ounce of gold) even if the repayment was not done hand-to-hand and was made after one year. If the repayment was more than an ounce, the transaction was considered a riba transaction and was considered haram (divinely prohibited). However, one can exchange one ounce of gold into ten bushels of wheat on the spot (hand-to-hand) or fifteen bushels after one year. This transaction would be legitimate based on Shari’aa and would be considered halal (divinely allowed).

The Prophet Muhammad (pp) has ordained, according to his sayings (Hadeeth), the following rule regarding buying/selling, exchanges, trading, and bartering:

If a buy/sell agreement involves currency, then one can only exchange without increase:

- Gold for gold in same weight,
- Silver for silver in same weight

If the buy/sell agreement involved food items, then one could only use a set of staple food commodities reference/index commodity item without increase, regardless of the quality or the type of that food item. For example, exchanging ten small dates for two large dates is haram. The rule goes further to stipulate that the rule used for precious metals above is also extended to cover the following Reference Index of Food Staples Commodities:

- Wheat for wheat
- Barley for barley
- Dates with dates
- Salt for salt

To ensure and to be certain that there is no increase (riba), the exchange must be done on an on-the-spot basis (hand-to-hand).

Please also note that the items listed above were only for illustration purposes; the Prophet(s) used them because they were either the currencies used at that time (in case of the gold denarius or silver dirham) or staple foods used then. One can expand on the rule using the same concept, depending on the prevailing conditions in a certain country.
This concept is similar to using an index of reference commodities as a means of checking the stability of a certain local currency, especially in a world that is run by fiat or paper money. It is interesting to note that James Baker, III, former Secretary of Treasury of the United States, told world financial leaders in 1987 that the Reagan administration “is prepared to consider”\(^1\) using the price of gold in trying to steer its own and the world economies. Gold, Mr. Baker explained, could be used in a specially designed index along with other commodities to help governments discern inflation and then adjust their policies by raising interest rates or taxes, for example.

Further research was conducted by many scholars to expand on the concept of using the six commodities above. Imam Abu Haneefah (the pioneer of a school of jurisprudence carrying his name, the \textit{Hanafi} Law) and Imam Ahmad (another well placed scholar with his own school of jurisprudence) concluded that we could expand the list of reference commodities depending on the community in which we live, but with the condition that the commodity can be weighed or measured accurately without transformation over time (as in the case perishables or metals that are susceptible to being rusted out). Imam Shafi’ee (a scholar who has his own school of jurisprudence; the \textit{Shafi’ee} Law) ruled that these indexation items can be eatables that can preserve value or legal tender such as gold and silver (and may be other precious elements). Imam Malik (a scholar with his own school of jurisprudence, the \textit{Maliki} Law) suggested that these can be food commodities or items that can offer a lasting store of value.

The main rule goes like this\(^2\):

1. In barter exchanges, if the two items are the same in elemental form (e.g., gold for gold, silver for silver, etc.) or are used in the same way (e.g., food, in the case of wheat and barley), then for this exchange to be legal, the quantity (weight, volume, or numbers of units) should be the same, regardless of the quality of the item.
2. The exchange must be conducted on the spot (hand-to-hand).
3. If the two items differ in substance but not in use, then fadl (or increase in exchange ratio by adding a premium) can be practiced, but riba al nassee’aa (the charging of a delinquency penalty in case of not paying back in time as agreed, due to conditions that are out of control), cannot be applied. For example, if gold was sold in terms of silver (different substance, but same use as metals used as a value of tender or as an ornament) or wheat in terms of rice (wheat and rice are different substances but used for same purpose, i.e., as food), it is permissible to use a ratio that is not 1:1 as established by the free market forces of supply and demand as required when exchanging gold for gold.
4. If the two items differ in substance and in purpose of use, then it is halal (divinely permissible) to both practice fadl and defer payment over a certain period of time. For example, one can buy wheat for gold, and the payment can be deferred. There would be two prices: The on-the-spot price (hand-to-hand) can be set at 20 bushels of wheat for an ounce of gold, and the deferred price can be, say, 25 bushels of wheat for an ounce of gold after 1 year. However, it is very important to note that the rules of riba al al-nassee’aa should be implemented (i.e., there should be no late payment penalty if the lateness is justified, as in cases of job loss, crop failure due to weather conditions, an unexpected dire need, or a change in the prevailing economic situation).

Conceptually, to be fair to all people both inside a country and internationally, the price of an item—based on the Judeo-Christian-Islamic Law pioneered by the Prophet Muhammad (pp)—should always be related to the weight or volume of a commodity that either is mined from a natural resource, like precious metals, gold, copper, salt, oil, or silver, or is a food staple produced by the hard work of the farmer, using earth with its natural nutrients and water provided by rain, flowing rivers, and underground water tables, such as corn, wheat, dates, and barley. The Qur’aan reveals:

2:164 Behold! in the creation of the heavens and the earth; in the alternation of the night and the day; in the sailing of the ships through the ocean for the profit of mankind; in the rain which God Sends down from the skies, and the life which He gives therewith to an earth that is dead; in the beasts of all kinds that He scatters through the earth; in the change of the winds, and the clouds which they Trail like their slaves between the sky and the earth; —[Here] indeed are Signs for a people that are wise.

7:57 It is He Who sendeth the winds like heralds of glad tidings, going before His mercy: when they have carried the heavy-laden clouds, We drive them to a land that is dead, make rain to descend thereon, and produce every kind of harvest therewith: thus shall We raise up the dead: perchance ye may remember.

15:22 And We send the fecundating winds, then cause the rain to descend from the sky, therewith providing you with water [in abundance], though ye are not the guardians of its stores.

It is interesting to contrast the use of these basic tangible products as references to price other items in the market. It is well-known that commodities such as food, minerals, and metals are produced by the hard work of people. For minerals and metals, people explore for them and mine them
out of the earth. For food, people plant and cultivate it on farms, producing staple foods like corn, wheat, barley, soybeans, or rice which require land preparation and special climates for each type of plant. Therefore, there are various products in various locations. Through free trade, people not only make business deals with each other, but also get to know each other and to respect each others’ cultures as they trade together. Combining the hard work of the people with God’s gifts to us, like the earth, its fertility, its water resources needed for irrigation, and the specific weather conditions in each of geographic locations, would produce basic staple food products that can be used as a reference commodity index.

These products were used by the Prophet Muhammad (pp) to set references or indexes for pricing and trading. Compare this concept with the printing press that produces paper banknotes with little effort, except for the analytical minds and political currents that decide how much money to print or withdraw from the monetary system, based on economic and monetary statistics. Printing too much of these banknotes (paper money) without paying attention to local economies of production can be a major contributor to inflation; the opposite can be true, as well. The system also depends on the great minds of economists, monetarists, statisticians, mathematicians, and computer-based modeling. Such talents, techniques, and expertise are important and they may not be available in every country. In fact, most countries—except for a few developed nations led by the United States, Germany, and the United Kingdom—are not endowed with a large pool of such talented experts.

In an attempt to apply the rules above, an effort was invested to study the price history of different commodities and to apply the commodity indexation rule, introduced earlier, to our regular investment transactions. For example, in 1974 we bought a house in Plano, a suburb of Dallas, Texas for $46,000 with a down payment of $3,500. In 1977, it sold for $65,000. We were very happy to have realized a return on the house value of $19,000. That translates to a price increase of 41 percent in two years on the house in terms of U.S. dollars. The dollar return on the original out-of-pocket investment of $3,500 was $19,000, or a 543 percent return on investment. It should be noted that all of these wonderful returns were in U.S. dollars. However, if we had measured the return on investment in terms of one of the six reference commodities listed above, the result would be revealing:

- In terms of wheat, because bread is a staple food item in the United States: We bought the house for an equivalent of 9,957 bushels of wheat (wheat in 1974 was $4.62 a bushel). We sold it in 1977 for the equivalent of 29,630 bushels of wheat (wheat was $2.16 a bushel).
That is a return of 300 percent on the value of the house, in terms of wheat. As to the return on invested capital of $3,500, or the equivalent of 757 bushels of wheat, we realized a profit of $19,000, equivalent to 8,796 bushels of wheat—a return on equity in wheat terms of 11,620 percent.

In terms of gold, the picture is different. The value of the house was equivalent to 421 ounces of gold (the gold price in 1974 was $103 per ounce). We sold it in 1977 for 428.6 ounces of gold (the gold price was $149.33 per ounce). This translates to an appreciation in the price of the house of 1.8 percent in terms of gold. The return on invested capital of $19,000, or 127.23 ounces of gold, on an original investment of $3,500, or 33.97 ounces of gold, yielded a return of 374.7 percent.

Naturally, life 1,400 plus years ago was far simpler than it is today. The matrix of an average citizen’s production and demands in a country is more diversified now and is by far more complex and different between one country and another. For example, those who want to think in terms of wheat (in this case, wheat farmers) cannot live on wheat alone, because they will need to buy farm equipment, as well as fuel for heating and for operating the farm equipment. He or she will obtain credit to finance these agricultural activities. On the other hand, we cannot live on gold, because we cannot eat or drink it. It should be made clear here that in discussing the commodity indexation concept we do not imply a return to the gold standard. What is strongly recommended here is a pioneering new system that uses a reference commodity like gold or a basket of commodities peculiar to each country, depending on its production and demand matrix, similar to the concept for the basket used for measuring inflation and the concept proposed by James Baker III in 1987 to detect economic “bubbles” in a local economy. Fiat (paper) money can be used, and the U.S. dollar may continue to be the reserve currency of the world, but to complement it and to be fair, a basket of commodities based on the concept pioneered by Prophet Muhammad (pp), as described above, must be implemented to be fair to all people and all nations and to price things fairly in the market while detecting any “bubble” overpricing as is usually experienced in energy prices and as was experienced in the United States housing bubble that led to the 2008 economic meltdown. It also will help central bankers with their most important job of keeping inflation under control. It is interesting to note that this basket of commodities concept can change, not only from country to country, but also from time to time, with changes in the production mix in a certain country. This concept will prompt nations to produce and become efficient producers to improve the value of their currencies. It is hoped that
economic and monetary research centers would research this concept to come up with useful ideas and propose policies that can be useful in the future.

**DEVELOPMENT OF THE MARK-TO-THE-MARKET RULE**

Another issue came up involving barter trading during the time this Law (Shari’aa) was being developed by the Prophet (pp). The challenge was how to deal with items that could be measured using more than one method—such as, for instance, palm tree dates, as experienced during the time of the Prophet Muhammad (pp). Palm dates can be dry or fresh; they can be measured in size (large, medium, and small) or in numbers of dates, or in terms of weight. Another example, in the case of food items, is that one can exchange rice for rice but the parties may disagree because one party’s rice is inferior in quality to the other party’s rice. For dates, it might be that one party had larger dates while the other’s dates are smaller and of sweeter quality. In both these cases, using the commodity indexation rule required in RF banking and finance, one can only exchange the same weight of rice without increase regardless of size and quality. Another example is the case of dates or grapes. There are fresh dates or grapes and there are dried dates and raisins. The question was “Are they the same food items?” The answer was yes, and when they are exchanged they must be in equal amounts: that is 100 small dates for 100 large dates, because dates are dates. This issue came up when one of Prophet Muhammad’s (pp) companions (Bilal, the Ethiopian) brought him a gift of large, very high-quality dates. The Prophet (pp) knew that Bilal did not have the means to afford buying these high-quality large dates. He inquired. Bilal told him that he saved his ration of low-quality dates for some time and that he went to the market and exchanged them for a smaller number of higher-quality, larger dates. The Prophet Muhammad (pp) told him that this transaction was classified as riba and was divinely prohibited (haram). When Bilal asked what he should have done, the Prophet (pp) said that the small-sized low-quality dates should have been marked to market by selling them in terms of another commodity, such as gold, silver, rice, wheat, or barley, and that he should have used the proceeds to buy the large, higher-quality dates. This way, deception (gharar), misrepresentation, and interference in the market forces would be minimized and hopefully eliminated. This process helps to standardize and stabilize markets, allowing the efficient working of the market forces of supply and demand.
This is what is called *marking to market*. This concept has been used by LARIBA since 1988 and is the main reason for its superior portfolio performance over the years.

The marking-to-market concept is believed to be one of the most important historic developments in this RF system. It lays the foundation of fair pricing for products and services, based on real market values within an open and free market operation. Marking to market is the foundation of the analytical system used by LARIBA to operate in an RF finance mode that is unique. The RF banking brand is not based on renting money at a price (interest) but on the actual measured fair market rent of properties, businesses, and services. For example, consider buying a house. The buyer who wants to obtain RF financing and the RF finance institution should mark the house to market. The best way of doing that is to find out how much a similar house in the same neighborhood and with similar specifications would rent/lease for in terms of U.S. dollars per square foot. This mutually agreed-upon market lease rate is used to calculate the rate of return on investment of the purchase transaction, looking at it as an investment. If the rate of return on investment makes economic sense (i.e., it is equal to or higher than the expected return by our RF investors), the RF bank proceeds to finance (invest in) the property. In addition, the RF bank does its best to make the monthly payments in the RF mode of financing competitive with those offered by riba-based banks. A very low return implies that this investment would be inferior; the RF banker would advise the customer not to invest, and the RF bank would not finance (co-invest in) it.

**RIBA-FREE BUSINESS TRANSACTION MODELS**

The following is an abbreviated list of the RF finance models used to finance commercial transactions. This is not a comprehensive list. It is designed to familiarize the reader with the concepts used in the different models. It is important to note that it is preferred to call these models by the names that describe them; and the reader will notice that we have included the original Arabic name next to the English name of each model.

**Cost-Plus (Murabaha)**

The cost-plus (*murabaha*) model is mainly used for commodity and trade financing. In a cost-plus contract, the client would approach the RF finance institution to finance the purchase of a certain item, such as a cargo of soybeans, a car, a house, a commercial building, a business, or a franchise,
because the client does not have the funds to purchase it in cash. Here is a brief summary of the steps taken:

1. The customer issues an order to the RF bank or finance company to buy the items on the customer’s behalf.
2. The RF finance institution buys the item in its own name first. The title of that item transfers from the seller to the RF finance institution.
3. The RF finance institution sells the item to the customer at a mutually agreed-upon price over a period of time long enough to pay that price back on a monthly basis (for example). The sale price charged by the RF financial institution to the customer is equal to the original purchase price the RF bank paid, plus a profit element for the RF bank. As a result of this sales step, the title transfers from the RF finance company to the client. It is important to note that the profit element should be agreed upon in light of the marking-to-market principle discussed above, not to simply take the prevailing interest rate on money and call it profit!

It is important to note that the sale price agreed upon between the RF finance institution and the customer, as well as the period of time (term) to pay back, is final, as are the terms of payment. For example, if the term of payment was agreed upon to be five years and the customer had a legitimate excuse to extend it over a longer period of seven years, the agreed-upon sale price would stay the same and there would be no increase—otherwise, the transaction would be deemed riba al jahiliyah or riba al nassee’aa, which are divinely prohibited (haram).

On the other hand, if the customer wants to expedite payments so that he or she pays over a two-year period instead of a five-year period, the agreed-upon price would still be the same unless the RF finance company agrees out of its free will to reduce the price to accommodate a special request from the customer. This request can be denied, which is acceptable under Shari’aa and is deemed halal, or it can be accepted, as it is in most cases, and that is also halal.

There are a number of issues that are associated with the cost-plus (murabaha) transaction. These are:

1. The two buy/sell steps (from seller to RF finance company and then from the finance company to buyer) constitute, theoretically, two changes of title. This will trigger tax events that would call for the taxation of the transaction, making it more expensive to finance in many Western societies. The RF finance company selling to the customer at a higher price may be considered a capital gain, subject to capital gains taxes in the United States and many other countries. The tax burden in this case
may be onerous. That is why many of the cost-plus models used by “Islamic” institutions in the West include a rider or another contract that contains a condition that makes the ultimate buyer—not the RF bank—responsible for any capital gains taxes. This solution is unfair to those who want to abide by their faiths. It is also unfair that the RF Bank claims to be Islamic while throwing all the risk back to the customer.

2. Banking institutions are not allowed by the banking laws and regulations in the West to participate in direct transactions as principles or to take title of properties (unless the property is repossessed; however, such properties are handled in a special way, and banks are expected to dispose of them as soon as is practical). To get around this rule and appear to satisfy the legal aspect of Shari’aa while potentially sacrificing the spirit of Shari’aa, many attorneys resort to using structured financial tools involving a separate but expensive offshore (sometimes) Special Purpose Vehicle (SPV), which buys the property and sells it back to the customer. This approach helps the RF bank avoid the violation of the banking laws while appearing to fulfill the requirements of Shari’aa.

3. The well-known banking regulation called Regulation “Z” (Truth in Lending Act) in the United States requires disclosure of an (implied) interest rate of any operation that involves lending transactions.

4. Cost-plus transactions bear a striking similarity to regular interest-based banking transactions because of the way the profit element is figured out and calculated. This profit is usually tied to the prevailing interest rate in the market.

These issues will be further addressed in Chapters 9 and 10.

Leasing (Ijara)\textsuperscript{4}

Rules Shari’aa includes rules about renting (short-term) or leasing (long-term) of the right to use an item (usufruct). The rules that organize the act of leasing are as follows:

1. Renting or leasing is defined by Shari’aa as a contract to take advantage of renting the right to use an item. It is important to stress here that the item to be leased must have a usufruct. For example, one can rent the use of a car or a house while keeping title of ownership to the car or the house (because they are nonfungibles). However, one cannot rent the use of an apple (fungible), because once it is eaten, it will not exist and one would have infringed on its ownership.

2. The two categories of commodities indexation described in riba al-fadl, including gold or silver and food, cannot be leased or rented because they cannot be used without being consumed. For example, one cannot
rent a cow in order to collect its milk. That is because when one collects the milk, one acts as if one owns the milk. This is problematic, because the original contract was about leasing the origin (i.e., the cow), not about owning the product (i.e., the milk).

3. The usufruct—or the beneficiary use of the subject—can be the use of:
   a. An asset like a home
   b. The facility of an asset, such as the use of a car (for driving), a business like a franchise store, a medical clinic, or an X-ray machine
   c. The work or productive services of an individual, such as an engineer, a builder, a worker, or any person who can offer defined valuable work

**The Riba-Free Legal Foundation on Leasing** Leasing is allowed according to the revelations in the Qur’āan, the Sunnah (way of life and the tradition) of Prophet Muhammad⁵ (pp), and the unanimous opinion of the eminent scholars.

In the Qur’āan:

43:32 Is it they who would portion out the Mercy of thy Lord? It is We Who portion out between them their livelihood in the life of this world: and We raise some of them above others in ranks, so that some may command work from others [through renting their services]. But the Mercy of thy Lord is better than the [wealth] which they amass.

2:233 If ye decide on [renting the services of] a foster-mother for your offspring, there is no blame on you, provided ye pay [the mother] what ye offered, on equitable terms. But fear God and know that He sees well what ye do.

28:26 Said one of the [damsels]: “O my [dear] father! engage him [rent the services of Prophet Moses] on wages: truly the best of men for thee to employ is the [man] who is strong and trusty.”

28:27 He said: “I intend to wed one of these my daughters to thee, on condition that thou serve me for eight years; but if thou complete ten years, it will be [grace] from thee. But I intend not to place thee under a difficulty: thou wilt find me, indeed, if God wills, one of the righteous.”

**Process**

1. At the request of the client, the RF finance company would purchase the item and lease it back to the client for a predefined term.
2. The RF financial institution, in its capacity as a lessor, would own title to the asset and in turn would lease the right for its use to the lessee, who
would proceed to use the item according to the term of the mutually agreed-upon leasing contract. The client pays a monthly or periodic lease payment at a market rate that is marked to market and has been agreed upon between the RF finance company (lessor) and the client (lessee).

The fundamental question here is the rate at which the asset is leased. In many cases, the “Islamic” banking officer would quote the interest rate of the day as an agreed-upon lease rate. This approach presents a serious problem with Shari’aa. The lease quote used must correspond to the actual market lease rate as researched by both parties. These and other issues will be discussed in greater detail in Chapter 10.

In this context there are two types of riba-based leasing available in the market. These are:

1. Rental or Lease (ijarah): This finance method offers pure leasing of assets. The asset is leased for a specific period of time and then returned to the title holder. These leases are similar to leasing an automobile for two or three years then returning it to the owner. However, it is interesting to note that in today’s leasing practices, the monthly lease payment is based on a projected value of the item at the end of the lease term (like the projected value of a car, say, after three years). This practice is not acceptable in Judeo-Christian-Islamic Law, because no one can project the future market price of an item; only God knows the future. That is why the price at the end of the lease has to be marked to the active live market at that time.

2. Lease-To-Own (ijarah-wa-imtilak or ijarah-wa-iqtinaa): In this method of leasing, the user and title owner agree to a monthly payment that consists of two parts. One part has to do with the gradual purchase of the property by the lessee, and the other part has to do with the rental of either the money, as in the riba-based financial leases, or the rental of the actual asset at the prevailing market rate, as in RF leasing.

This model will be discussed in detail in Chapter 10, and a real case application will be presented in Chapter 14.

Joint Venture (Musharaka) Direct Investment/ Equity Ownership or Partnership

In this model, the RF financial institution or its investment subsidiary enters into a direct investment with the customer in the form of equity ownership. Profit or loss would be assigned to each joint venture according to a well-defined distribution formula.
Money Management (Mudaraba)

In this model, the RF financial institution itself can act as a money manager through its investment banking and finance company.

The RF financial institution can also delegate that function, as a trusted and appointed representative through a valid proxy, to other money managers.

The money management (mudaraba) contract would define the responsibility of the RF bank in its capacity as a money manager (mudharib) or as an agent of the client (wakeel, which means a representative with discretionary authority) to find money manager(s) who will meet the client’s defined investment objective, investment time horizon, and the risk tolerance.

Financing Future Production (Ba‘i ul Salam)

This model is used to finance the cost of future production of a manufactured product or an orchard. The customer would agree with the RF finance company to forward the cost of future production. The RF financial institution would come to an agreement to buy the production of an orchard, a farm, or a manufactured product (like equipment or automobiles) before it is produced, at an agreed-upon price. The money is paid in advance to the producer. The producer, in turn, would use the money as a working capital to purchase the basic services, pay wages, and buy raw materials necessary for the production. This way, the RF financial institution would help in the growth of the economy by providing the liquidity needed by the producing entity. An important guideline that should be guarded against is the possibility of hoarding or “cornering” of free markets by the financing entity.

The above RF financing techniques are presented to familiarize the reader with the models used. For a detailed outline and description of these techniques, please refer to an excellent book on the subject: Understanding Islamic Finance.6

NOTES

3. Please visit www.LARIBA.com for more details.

5. Prophet Muhammad (pp) was reported to have said, “Give the person you hire his/her wages before the sweat that they invested on the job dries up,” meaning to pay them as soon as possible (related by Ibn Majah).