

An Application of Islamic Banking Principles to Microfinance

Technical Note

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A study by the Regional Bureau for Arab States,
United Nations Development Programme,
in cooperation with the Middle East and North Africa Region,
World Bank

The authors are grateful to the United Nations Development Programme's Regional Bureau for Arab States for funding this study. They also thank Ahmed Abou El Yazeid, Judith Brandsma, Nemat Shafik (World Bank), Abbas Mirakhor (International Monetary Fund), Rohil Hafeez, Bassel Hamwi (International Finance Corporation), and William Tucker for invaluable comments and insights on previous drafts. This report was edited by Paul Holtz and laid out by Wendy Guyette, and the cover was designed by Laurel Morais, all with Communications Development Incorporated.

The findings and recommendations expressed in this report are entirely those of the authors and should not be attributed in any manner to the United Nations Development Programme or the World Bank.

Contents

A nexus between Islamic banking and microfinance?	1
Islamic banking—promoting equity with a range of tools	2
Different interpretations	2
Different instruments	3
Microfinance—providing credit to the entrepreneurial poor	6
Combining Islamic banking with microfinance	8
A mudaraba model	8
A murabaha model	10
Experience with mudaraba and murabaha in microfinance	11
Conclusion	13
References	14

A nexus between Islamic banking and microfinance?

Islamic banking has grown significantly over the past 20 years, with estimated deposits surpassing \$80 billion in more than 45 countries. Annual turnover is currently estimated at \$70 billion and is projected to pass \$100 billion by 2000 (O'Sullivan 1994, p. 7). More than 100 Islamic banking institutions are in operation, ranging from pure Islamic banks to smaller *sharia* banking units in conventional banks and investment houses. As one of the fastest-growing segments of the financial services market in the Islamic world—for the past five years annual growth has averaged 15 percent—these institutions have attracted a lot of attention. Moreover, the guiding principles of Islamic finance draw curiosity from Muslims and non-Muslims alike as they try to understand how a system that prohibits the receipt and payment of interest has become so widespread.

Although Islamic financial practices are founded on the core belief that money is not an earning asset in and of itself, there is more to the system's underlying tenets. Islamic religious law—that is, *sharia*—emphasizes ethical, moral, social, and religious factors to promote equality and fairness for the good

of society as a whole. Although this analysis of Islamic banking focuses on its economic aspects, the system can be fully understood only in the context of Islamic attitudes toward ethics, wealth distribution, social and economic justice, and the role of the state. Principles encouraging risk sharing, individual rights and duties, property rights, and the sanctity of contracts are all part of the Islamic code underlying the banking system.

In this light, many elements of microfinance could be considered consistent with the broader goals of Islamic banking. Both systems advocate entrepreneurship and risk sharing and believe that the poor should take part in such activities. At a very basic level, the disbursement of collateral-free loans in certain instances is an example of how Islamic banking and microfinance share common aims. Thus Islamic banking and microcredit programs may complement one another in both ideological and practical terms. This close relationship would not only provide obvious benefits for poor entrepreneurs who would otherwise be left out of credit markets, but investing in microenterprises would also give investors in Islamic banks an opportunity to diversify and earn solid returns.

Islamic banking and microcredit programs may complement one another in both ideological and practical terms

Islamic banking—promoting equity with a range of tools

Interest-free lending is a basic tenet of Islamic banking

As noted, Islamic banking is a fast-growing sector in Middle Eastern financial markets and other Islamic parts of the world (Indonesia, Malaysia). Its role is also increasing in the West. Moreover, this growth has not been limited to a particular sector of the banking industry. What are the foundations and features of Islamic banking?

Different interpretations

An important Islamic commitment is the denouncement of usury—that is, the lending of money at exorbitant interest rates. According to the literature, in the pre-Islamic era *riba*—literally translated as excess, expansion, addition, or growth—referred to the practice of lending. Debtors had to pay a fixed amount above the principal borrowed from lenders for the use of the money. This additional amount, which depended on the predetermined rate, was called *al-riba*.

Most Muslim scholars believe that *riba* is prohibited, but there are subtle differences in interpretation. Siddiqui (1995, pp. 43–44) states that “a controversy has arisen that interest paid by banks on deposits or charged on advances is not tantamount to *riba* and is hence permissible.” Ayub (1995, pp. 34–35) says that “if someone indulges in trading (undertakes risk), the profit earned on it will be permissible. But earning money by the act of loaning is *haram* [in discord with the Islamic code].” The discussion among scholars includes analyses of whether the Koran prohibits the use of interest altogether. Some scholars believe that interest should be pro-

hibited only when money is lent at exorbitant interest rates that exploit the borrower. Thus interest may be lawfully allowed under certain conditions—including loans made by governments to induce savings, as a form of punishment for debtors, to finance trade, and to finance productive investments.

Other scholars are indifferent to the purpose for which the interest is being charged and consider all forms of *riba* to be unlawful. The main arguments here are that Islam does not allow gain from a financial activity unless the financial capital is also exposed to the risk of potential loss; and that interest reinforces the tendency for wealth to accumulate in the hands of a few, thereby diminishing man’s concern for his fellow man (Lawai 1994, p. 8).

Thus it is not surprising that most Islamic banking strategies have tried to remove all forms of fixed nominal interest rates. (Muslim scholars make no distinction between nominal and real interest rates; it is assumed that all interest rates are real and therefore are considered to hamper investment and employment.) But the abolishment of fixed interest rates does not mean that no remuneration is paid on capital. Profit-making is acceptable in Islamic society as long as these profits are not unrestricted or driven by the activities of a monopoly or cartel (Lawai 1994, p. 10). Islam deems profit, rather than interest, to be closer to its sense of morality and equity because earning profits inherently involves sharing risks and rewards. Profit-making addresses the Islamic ideals of social justice because both the entrepreneur and the lender bear the risk of the investment.

One result of this attitude toward profit is that Islamic banking innately addresses the imperfect information and credit rationing problems that often exist between lenders and borrowers in conventional banks. Imperfect information occurs when one party has more and better information than the other party.¹ This inefficient distribution of information leads to credit rationing. In extreme cases, given an aggregate level of available credit and a perfectly elastic supply curve, lending institutions establish a credit hierarchy. As a result not all borrowers willing to pay a similar rate are able to receive credit. Such rationing can damage the real sector of the economy, especially when it prevents productive investments from being financed. Again, the profit- and loss-sharing schemes advocated under the Islamic principle of cooperation (*shirakat*) allow all parties—including investors, savers, and financial institutions—to play an active role in the economic process and avoid credit-rationing problems. In fact, given the increased risks from investment returns based solely on profits, an argument can sometimes be made for banks to play a more active role in project management to oversee their investments.

In Islamic finance the technical term for a transaction between an entrepreneur and the suppliers of funds is *mudaraba* (see below). Two of the conditions for a *mudaraba*-type venture show the level of partnership implicit in Islamic contracts:

- The gross or net return on capital or entrepreneurship should not be predetermined.
- Partners should share not only profits but also losses in proportion to their shares in the enterprise (Hasanuzzaman 1994, p. 7).

The bargaining terms between the two parties involved in the transaction can vary substantially and are determined by contracts. In a business based on *mudaraba*, each partner shares an agreed portion of the profits, which may or may not be predetermined, according to the contract.

Different instruments

The literature separates Islamic banking into three main activities: concessional financing, trade financing, and participatory mechanisms (figure 1; Errico and Farahbaksh 1998, p. 6). Within these activities are various contractual forms that conform fully to the tenets of profit and loss sharing. The more commonly used profit- and loss-sharing transactions are *mudaraba* (partnership), *musharaka* (equity participation), and *musaqat* and *muzar'ah* (specific counterparts in *mudaraba* contracts). All of these loan products appear to include a degree of uncertainty regarding the eventual returns due to the entrepreneur and to the Islamic bank. Other lending contracts used in Islamic banking include *qard al-hasanah* (benevolent loan), *bai'mua'jjal* and *bai'salam* (sales contracts), *ijara wa iqtina'* (leasing), *murabaha* (cost plus markup), and *jo'alah* (service charge).

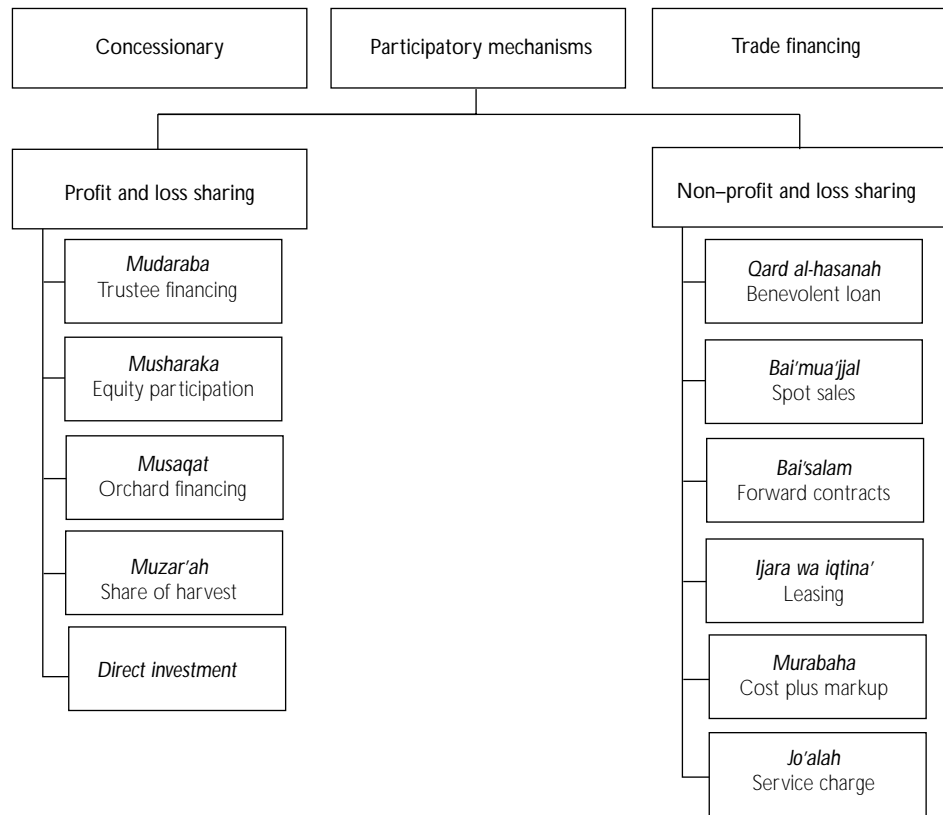
Profit- and loss-sharing schemes

Under a *mudaraba* contract the bank provides the capital needed for a project while the entrepreneur offers labor and expertise. The profits (or losses) from the project are shared between the bank and the entrepreneur at a fixed ratio. Financial losses are assumed entirely by the bank; the liability of entrepreneurs is limited to their time and effort. In cases of proven negligence or mismanagement by entrepreneurs, however, they may be held responsible for the financial losses. These types of contracts are most common in investment projects in trade and commerce that are capable of achieving full operational status in a short period. The contract between the bank and the entrepreneur is known as *restricted mudaraba* because the bank agrees to finance specific investments by specific entrepreneurs and to share relative profits according to an agreed percentage. To engage in *mudaraba* transactions a bank must meet the following legal obligations:

- The bank should not request collateral to reduce its credit risk on these transac-

Under a *mudaraba* contract the bank provides the capital needed for a project while the entrepreneur offers labor and expertise

Figure 1. Types of Islamic banking contracts



Source: Kazarian 1993; Iqbal and Mirakhor 1987.

tions, and thus bears the entire financial risk. Collateral may, however, be requested to reduce moral hazard.

- Profit-sharing rates must be determined only as a percentage of the profit, not a lump sum payment. In some cases the bank may receive part of the principal from the borrower at the end of the period if a surplus exists. In cases of loss, the entrepreneur will not be liable unless found guilty of negligence or mismanagement.
- The entrepreneur exercises full control over the business; however, supervision by the bank is permitted (Iqbal and Mirakhor 1987).

Musharaka is an equity participation contract in which the bank is not always the only provider of funds. The distinguishing features of this type of contract are the nature of the business activity and the duration of the gestation period for the business. Two or more partners contribute to the capital and expertise of an investment. Profits and

losses are shared according to the amounts of capital invested. This type of transaction has traditionally been used to finance medium- and long-term investments. Banks have the legal authority to participate in the management of the project, including sitting on the board of directors. Each investor's rights correspond to their amount of equity capital in the enterprise.

Musaqat is a specific type of musharaka contract for orchards. In this case the harvest is shared among all the equity partners according to their contributions.

Muzar'ah is essentially a mudaraba contract in farming where the bank can provide land or funds in return for a share of the harvest.

Direct investments are similar to transactions in Western banking and thus require the greatest discretion. Islamic banks cannot invest in the production of any good or service that might even appear contrary to the ethical and moral values of Islam. Banks can

vote according to their share and may join the board of directors.

Non-profit- and loss-sharing schemes

Qard al-hasanah are loans with zero return that the Koran encourages Muslims to make to “those who need them.” Banks are allowed to charge a service fee to cover the administrative and transactions costs of these loans so long as such costs are not related to the maturity or amount of the loan.

Bai’ mua’jjal are deferred payment or spot sales in which the seller of a product accepts deferred payments in installments or in a lump sum. The price is agreed on between the buyer and seller at the time of the sale, and the seller is not allowed to include any charge for deferring payments.

Bai’salam and *bai’salaf* are similar to forward contracts, with the buyer paying the seller the fully negotiated price of a product that the seller promises to deliver at a future date. The quality and quantity of the products involved in this type of transaction must be capable of being specified at the time of the contract.

Ijara wa iqtina’ involves pure leasing (*ijara*) or lease purchase (*ijara wa iqtina’*) transactions in which a party leases a specific product for a specific sum for a given period. In lease purchase arrangements a portion of each payment is applied to the final purchase of the product, at which time ownership is transferred to the leaseholder.

Murabaha is a common instrument used for short-term financing based on the conventional concept of purchase finance or cost plus markup sales. The seller reports to the buyer the cost of acquiring or producing a good, then a profit margin is negotiated between the two parties. Payment is usually made in installments.

Jo’alah are service charges that usually occur during transactions of various services. They often occur when the buyer of a service agrees to pay the provider a specified fee according to a contract.

The main difference between transactions that do not involve profit and loss sharing and those that do is that returns for the former may be calculated at the final stage as a fixed percentage of the total investment. However, none of these contracts can be legally negotiated to provide a fixed rate of return. Islamic banks may occasionally add an extra fee to compensate themselves for costs incurred by the additional transactions they must undertake. Thus these instruments appear similar to those in conventional banks, where risk aversion and risk pooling are important factors. All of the above instruments, however, conform to the Islamic code, because their rates of return are related more to the transaction than to time.

The application of religious principles to banking practices may affect the continued development of Islamic banking. At present, most banks seek approval from their religious boards and shariah advisers before marketing new financial instruments. A standardized regulatory and legal framework could help assimilate Islamic institutions into international markets. As it stands, Islamic banks occasionally experience difficulties when attempting to explain their practices in countries or systems that are not based on Islamic principles.

Note

1. Asymmetric information—a common imperfect information problem—in its simplest form creates a situation described by Akerlof’s Lemons Problem. The Lemons Problem describes how buyers and sellers in a used car market cannot clear the market because sellers of low-quality cars have an incentive to falsely advertise their cars as being of good quality (and thus demand a higher price) while, because of asymmetric information, buyers cannot know whether cars are of good or bad quality. Both buyers and sellers lose, for buyers would pay more for a better car and owners of good cars cannot sell their cars at a price that would be mutually acceptable in the presence of complete information.

None of the contracts can be legally negotiated to provide a fixed rate of return

Microfinance—providing credit to the entrepreneurial poor

Microenterprises provide jobs and help the entrepreneurial poor generate income and alleviate poverty

Microfinance institutions provide financial services—such as credit and savings services—to the entrepreneurial poor that are tailored to their needs and conditions. Good microfinance programs are characterized by:

- Small, usually short-term loans, and secure savings products.
- Streamlined, simplified borrower and investment appraisal.
- Alternative approaches to collateral.
- Quick disbursement of repeat loans after timely repayment.
- Above-market interest rates to cover the high transactions costs inherent in microfinance.
- High repayment rates.
- Convenient location and timing of services (Fruman and Goldberg 1997).

The potential of small-scale enterprises as an alternative to larger, more capital-intensive firms is receiving increasing attention in developing countries, and the focus in the development community is gradually shifting to small firms when it comes to policy and resource allocation. In this light, microfinance is seen as a powerful tool for reaching the poor, raising their living standards, creating jobs, boosting demand for other goods and services, contributing to economic growth, and alleviating poverty. Best practice experience around the world has shown that the poor are bankable and willing to pay a premium for quick, reliable, and convenient financial services (box 1). Successful microfinance institutions have also demonstrated that, when managed in a business-like manner,

banking with the poor can be profitable and sustainable.

Microenterprises provide jobs and help the entrepreneurial poor generate income and alleviate poverty. Although the industry has only recently emerged in the Middle East and North Africa, a recent World Bank survey found that more than 60 microfinance programs are active in the region, with an outstanding loan portfolio of nearly \$100 million and more than 112,000 active borrowers (Brandsma and Chaouali 1998). But more effort is needed to address the needs of the at least 4.5 million entrepreneurial poor who lack access to microfinance and who could absorb an estimated \$1.5 billion in loans. Traditional banks in most countries in the region are not adapted to meeting the needs of this group, and many poor entrepreneurs fail to meet the conventional lending standards set by these banks.

The formal financial sector has played a very small role in the development of microfinance programs. The World Bank survey found that only one commercial bank—Egypt's National Bank for Development—is active in the microfinance industry and has established a separate microfinance unit. But several recent developments should be noted: three commercial banks in the West Bank and Gaza recently initiated microfinance operations, and several other banks appear poised to do so as well, including one in Lebanon, two in Yemen, and three in Jordan.

In a conventional banking system, small manufacturers and farmers face significant

Box 1. Guiding principles of best practice microfinance

Experience in countries as varied as Bangladesh, Bolivia, Egypt, Senegal, Mali, and the West Bank and Gaza shows that the poor are bankable and that savings and credit services can be delivered to the poor on a sustainable basis. The guiding principles underlying best practice microfinance include:

- *Covering costs.* To become sustainable, microfinance institutions—regardless of their institutional setup—must cover their costs of lending. If microlending costs are not covered, the institution's capital will be depleted and continued access of microenterprises to financial services—and even the existence of the microfinance institution—will be in jeopardy.
- *Achieving a certain scale.* Successful microfinance institutions have reached a certain scale, as measured by the number of active loans. This number depends on the country setting, lending methodology used, and loan sizes and terms offered.
- *Avoiding subsidies.* Microentrepreneurs do not require subsidies or grants—but they do need rapid and continued access to financial services. Besides, microlenders cannot afford to subsidize their borrowers. Subsidies send a signal to borrowers that the government or donor funds are a form of charity, which discourages borrowers from repaying. Moreover, microfinance institutions have learned that they cannot depend on governments and donors as reliable, long-term sources of subsidized funding.
- *Promoting outreach and demand-driven service delivery.* Successful microfinance institutions increase access to financial services for growing numbers of low-income clients, offering them quick and simple savings and loan services. Loans are often short term, and new loans are based on timely repayments. Loans are based on borrowers' cash flow and character rather than their assets and documents, and alternative forms of collateral (such as peer pressure) are used to motivate repayment.
- *Maintaining a clear focus.* It takes time and commitment to build a sustainable microfinance program. Thus mixing the delivery of microfinance services with, for example, the provision of social services is inadvisable because it sends conflicting signals to clients and program staff.

Source: Brandsma and Chaouali 1998.

obstacles to obtaining the financial resources they need to develop their businesses. Lending instruments are not adapted to the conditions of small borrowers, and short-, medium-, and long-term institutional financing is usually not available to the entrepreneurial poor. A major constraint to financing the poor is their lack of tangible assets to offer as collateral—creating a vicious circle in which microentrepreneurs cannot access finance unless they offer sufficient collateral, cannot possess tangible collateral unless they build a strong productive base, and cannot

strengthen their productive base unless they get access to finance (Abdouli 1991).

Moreover, financial institutions often perceive small entrepreneurs as yielding smaller profit potential and higher lending costs and risks for the bank. In addition, dealing with a large number of widely dispersed enterprises is demanding, in terms of both time and effort. Borrowers may not be easily accessible, and bank personnel may be separated from clients by differences in language, literacy, and culture. Clients tend to be unfamiliar with the necessary documentation and accounting conventions.

Combining Islamic banking with microfinance

In a mudaraba-based transaction the microfinance program takes “equity” in the microenterprise through the loan

Three basic instruments of Islamic finance could be built into the design of a successful microfinance program: mudaraba (trustee financing), musharaka (equity participation), and murabaha (cost plus markup; Abdouli 1991).

A mudaraba model

In a mudaraba-based transaction the microfinance program and the microenterprise are partners, with the program investing the money and the microentrepreneur investing the labor.¹ (Note that in both mudaraba and musharaka the financing organization and the business work in partnership. But in mudaraba the financier invests only money and the entrepreneur invests labor, while in musharaka both the financier and the entrepreneur invest funds.) The microentrepreneur is rewarded for his or her work and shares in the profit; the program only shares in the profit. The profit-sharing rates are predetermined, but the profit is unknown. In effect, the microfinance program takes “equity” in the microenterprise through the loan. Initially, the program may own 100 percent of the shares and would hence be entitled to its predetermined share of all the profit. But as each loan installment is repaid, the microentrepreneur “buys back” shares. As a result the microfinance program earns less profit with each repayment received.

Consider, for example, a case where the microentrepreneur is a vegetable trader and makes a weekly profit of 1,000. (For sim-

licity, the units of currency in these examples will be generic.) The microcredit program provides a loan of 10,000 to be repaid in 20 weekly installments. With each loan repayment the entrepreneur buys back a share of 500. Profit per share is 50 (1,000/20). The program and the entrepreneur agree that the program will receive 10 percent of the weekly profit, and the entrepreneur will receive 90 percent.

In the first week the microfinance program owns 100 percent of the shares and is entitled to 10 percent of the weekly profit of 1,000; thus it receives 100. The entrepreneur receives 90 percent of the weekly profit, or 900. The entrepreneur uses 500 of this 900 to buy back one share.

In the second week the microfinance program is entitled to 10 percent of 19/20 of the weekly profit of 1,000, since it now owns only 19 of the 20 shares. Thus the program is entitled to 95. The entrepreneur gets the rest (1,000 – 95 = 905). Put another way, the entrepreneur receives $(0.90 \times 950) + 50$. The 950 is the profit to be shared with the program; the 50 is the profit per share. (Remember that the entrepreneur owns the share he “bought back” the previous week for 500; he does not have to share the profit made on his own share.) Again, the entrepreneur uses 500 of his profit to buy back a second share. This process would continue for the 20 weeks of the mudaraba agreement, with the program earning total income of 1,050 and the entrepreneur earning 18,950 (table 1). A conceptual visualization of this loan structure is shown in figure 2; the entrepreneur’s repayment schedule is shown in table 2.

Table 1. Program and entrepreneur profits under the mudaraba example

Week	Profit to be shared	Program income	Entrepreneur income
1	$20/20 \times 1,000 = 1,000$	$1,000 \times 10\% = 100$	$1,000 \times 90\% + 0 = 900$
2	$19/20 \times 1,000 = 950$	$950 \times 10\% = 95$	$950 \times 90\% + 50 = 905$
3	$18/20 \times 1,000 = 900$	$900 \times 10\% = 90$	$900 \times 90\% + 100 = 910$
4	$17/20 \times 1,000 = 850$	$850 \times 10\% = 85$	$850 \times 90\% + 150 = 915$
5	$16/20 \times 1,000 = 800$	$800 \times 10\% = 80$	$800 \times 90\% + 200 = 920$
6	$15/20 \times 1,000 = 750$	$750 \times 10\% = 75$	$750 \times 90\% + 250 = 925$
7	$14/20 \times 1,000 = 700$	$700 \times 10\% = 70$	$700 \times 90\% + 300 = 930$
8	$13/20 \times 1,000 = 650$	$650 \times 10\% = 65$	$650 \times 90\% + 350 = 935$
9	$12/20 \times 1,000 = 600$	$600 \times 10\% = 60$	$600 \times 90\% + 400 = 940$
10	$11/20 \times 1,000 = 550$	$550 \times 10\% = 55$	$550 \times 90\% + 450 = 945$
11	$10/20 \times 1,000 = 500$	$500 \times 10\% = 50$	$500 \times 90\% + 500 = 950$
12	$9/20 \times 1,000 = 450$	$450 \times 10\% = 45$	$450 \times 90\% + 550 = 955$
13	$8/20 \times 1,000 = 400$	$400 \times 10\% = 40$	$400 \times 90\% + 600 = 960$
14	$7/20 \times 1,000 = 350$	$350 \times 10\% = 35$	$350 \times 90\% + 650 = 965$
15	$6/20 \times 1,000 = 300$	$300 \times 10\% = 30$	$300 \times 90\% + 700 = 970$
16	$5/20 \times 1,000 = 250$	$250 \times 10\% = 25$	$250 \times 90\% + 750 = 975$
17	$4/20 \times 1,000 = 200$	$200 \times 10\% = 20$	$200 \times 90\% + 800 = 980$
18	$3/20 \times 1,000 = 150$	$150 \times 10\% = 15$	$150 \times 90\% + 850 = 985$
19	$2/20 \times 1,000 = 100$	$100 \times 10\% = 10$	$100 \times 90\% + 900 = 990$
20	$1/20 \times 1,000 = 50$	$50 \times 10\% = 5$	$50 \times 90\% + 1,000 = 995$
Total		1,050	18,950

From a microfinance perspective this model has several drawbacks. The most important is the uncertainty of the profit. An important assumption in developing this

example was a fixed weekly profit of 1,000. In reality, although microfinance programs have information on local market behavior, weekly profits fluctuate. Fluctuating profits

Figure 2. Distribution of program and entrepreneur income and ownership under the mudaraba example

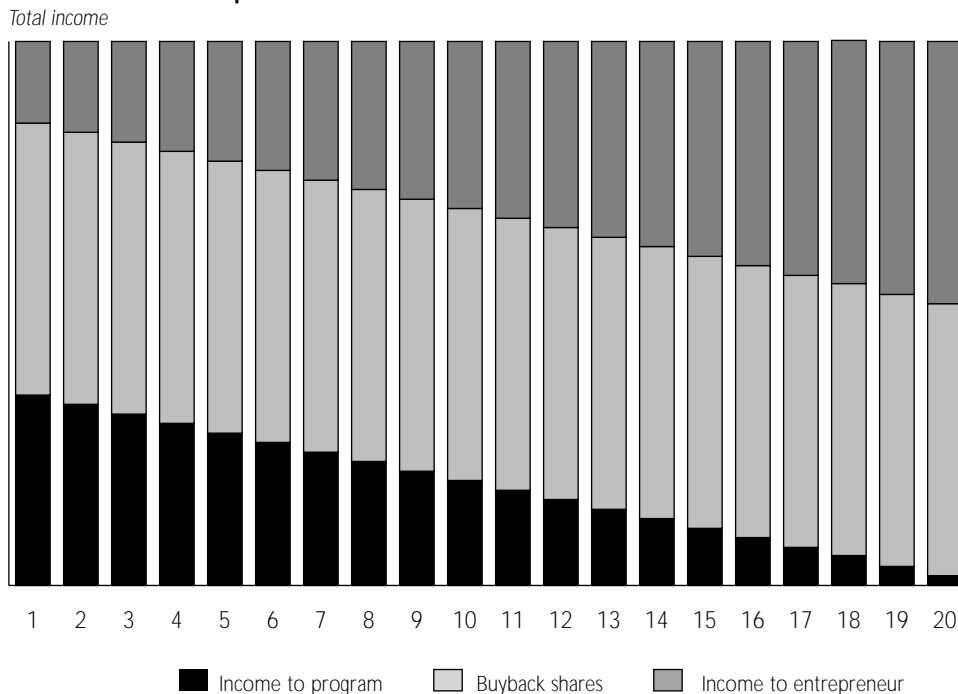


Table 2. The entrepreneur's repayment schedule under the mudaraba example

Week	Share buyback	Profit distribution	Total payment
1	500	100	600
2	500	95	595
3	500	90	590
4	500	85	585
5	500	80	580
6	500	75	575
7	500	70	570
8	500	65	565
9	500	60	560
10	500	55	555
11	500	50	550
12	500	45	545
13	500	40	540
14	500	35	535
15	500	30	530
16	500	25	525
17	500	20	520
18	500	15	515
19	500	10	510
20	500	5	505

Applying the mudaraba model might be more straightforward for businesses with a longer profit cycle

also create a challenge for microlending within Islamic banking principles. Moreover, most microentrepreneurs do not keep accurate accounts. How, then, are profits to be calculated and distributed? In addition, the model is difficult to understand for loan officers and borrowers alike.

The second drawback of the model is the burden of loan administration and monitoring. Even in the hypothetical situation that profits were known, the borrower has to repay a different amount each period (and the loan officer has to collect a different amount each period). This lack of simplicity—relative to equal repayment installments—also would confuse borrowers and loan officers. The margin for error is considerable given that a single loan officer often manages 100–200 borrowers.

The key issue in using this profit-sharing model is whether it is possible under Islamic banking principles for the lending agency and the entrepreneur to agree on the weekly (or biweekly, monthly, or some other interval) profit prior to disbursement of the loan. Different settings may allow for different

arrangements. Given that very few microentrepreneurs—no matter what country they are in—keep track of their accounts in a way that would permit the independent verification of, say, weekly profits, the acceptability of the above model depends rather heavily on whether such an agreement is in accordance with Islamic banking principles. As with other forms of Islamic banking, the lending agency would not be entitled to a distribution of its share if the entrepreneur were to suffer losses. But the lending agency could also agree that if the entrepreneur were to generate more profits, he would be entitled to retain 100 percent of the same.

Applying the mudaraba model might be more straightforward for businesses with a longer profit cycle. Say that a microenterprise takes a loan of 20,000 to raise four goats. Such an undertaking may be considered common, and people will know the profit well in advance. Normally the business will raise the goats and resell them after five to eight months for 40,000, a profit of 100 percent. The “working capital” (that is, the food eaten by the goats) is considered free because the goats live around the dwelling and eat whatever they can find.

In this case the microfinance program takes “equity” of 20,000, with 20 shares of 1,000 each. The program and the entrepreneur agree that 15 percent of profits will go to the program and 85 percent will go to the entrepreneur. After five months, when the entrepreneur has sold the goats and made a profit of 20,000, he repurchases the 20 shares at 1,000 each and pays the program its share of the profit: 15 percent of 20,000, or 3,000.

A murabaha model

The murabaha contract is similar to trade finance in the context of working capital loans and to leasing in the context of fixed capital loans. Under such a contract the microfinance program literally buys goods and resells them to the microenterprises for the cost of the goods plus a markup for administrative costs. The borrower often pays

for the goods in equal installments. This model is easier for borrowers to understand and simplifies loan administration and monitoring. The microfinance program owns the goods until the last installment is paid.

How would this Islamic model work with the group liability mechanism common to microfinance? A microfinance program introduced in Yemen in mid-1997 provides an example. Today this program has more than 1,000 active borrowers, 30 percent of them women, and \$150,000 in outstanding loans. Target clients are the entrepreneurial poor in urban slum districts. The loan turnaround is one week.

Loan application procedures are simple. Existing or startup microenterprises interested in obtaining microfinance are asked to form a five-person group. Group members then submit a loan application—which includes basic business data, personal information, and the proposed loan size—to a loan officer. Group members are also asked to sign a guarantee form indicating their agreement to vouch for one another and their willingness to pay in case of arrears or delinquency. After a simple appraisal of each group member's business by the loan officer, the loan officer forwards the group's application, business appraisal, and the guarantee form to the district supervisor and district loan committee for review and approval.

Once a loan application has been approved, the loan officer buys the chosen business items and resells them to the borrowers after adding a specific margin—a markup—to the actual purchase amount. In this example, the markup determined by the project is 2 percent a month. Finally, the borrower signs an agreement indicating the final price of the resold items, the repayment period, and the installment amount.

To administer the model, the microfinance program's financial department opens an account for each borrower indicating the number and size of each install-

ment and the due date. The loan officer issues receipts to borrowers (from a receipt book issued by the program) when collecting loan installments. In addition, the loan officer collects 30 rials a week from each group member for the insurance fund and deposits them with the financial department. The insurance fund has a separate account that indicates its income and expenses. This fund compensates borrowers who face emergencies—such as fire, flood, and death—that affect their business. Borrowers are eligible for compensation from the insurance fund if group members and the responsible loan officer approve.

To ensure proper follow-up, the district supervisor, project manager, and assistant project manager conduct random field visits to project clients to confirm the existence and sustainability of their businesses. In addition, the project management team, working with the financial department, prepares monthly progress reports indicating number of loans distributed, types of businesses, gender distribution of borrowers, loans per loan officer, repayment rate, overdue rate, delinquency rate, aging of arrears, and the like. Borrowers who manage their business wisely and efficiently and pay back their loans on time are eligible for a consecutive loan for the same or a larger amount, based on their business needs.

Experience with mudaraba and murabaha in microfinance

Borrower feedback from the field indicates an initial preference for the profit-sharing mechanism—that is, mudaraba. This preference may reflect borrowers' familiarity with this mechanism, as it is commonly used for supplier credit and other types of informal finance. But not all borrowers may understand that the profit-sharing mechanism may, under certain designs, be more expensive for them than other alternatives within Islamic banking. Moreover, some borrowers recog-

Borrower feedback indicated an initial preference for the mudaraba mechanism

nize the potential for conflict between the microfinance program and the borrower in determining profit. Other borrowers did not like the profit-sharing of *mudaraba* because they did not want to reveal their profits to the program (and their group).

Many borrowers initially expressed doubts about the appropriateness of the “buy-resell” mechanism (*murabaha*) because it appeared too similar to the forbidden practice of fixed interest rates (*riba*). But experience has shown that once the mechanism is properly explained to borrowers and local religious leaders, it is accepted. Borrowers accept that a microfinance program incurs costs and that these costs have to be recovered in order for the program to continue offering financial services. Borrowers also appreciate the simplicity and transparency of the model.

The “buy-resell” model, which allows repayments in equal installments, is easier to administer and monitor. In addition, it seems to conform to practices in regions where even the handling of money is considered *haram*—that is, in discord with the Islamic code. In such areas borrowers

would not receive the loan in the form of money, but in the form of goods that the microfinance program would purchase on their behalf and then “resell” to them. An important constraint of this model for microfinance, however, is the program’s higher administrative cost, since loan officers need to get involved in the market operation. But experience indicates that these initial higher transactions costs are offset by the lower costs of loan administration and monitoring. Moreover, an increase in lending volume suggests that these initial higher transactions costs can be lowered to acceptable levels.

A microfinance program has to make several tradeoffs when selecting an appropriate loan methodology based on Islamic banking principles (table 3). The program must account for the administrative costs and risks of a particular methodology not only to the program but also to borrowers.

Note

1. This section draws heavily from Brandsma and Abou El Yazeid (1997).

The higher initial transactions costs of the *murabaha* model are offset by the lower costs of loan administration and monitoring

Table 3. Islamic finance models and their applicability to microfinance

<i>Issue</i>	<i>Mudaraba (profit sharing)</i>	<i>Murabaha (buy-resell)</i>
Most applicable for	Fixed assets (investment capital) and potentially working capital	Working capital and investment capital
Cost to borrowers	Potentially higher because of higher profit sharing with the microfinance program as a result of higher risk	Lower
Initial acceptance by borrowers	Higher	Lower
Risk to borrowers	Lower if no predetermined minimum profit is allowed	Higher
Risk to the program	Higher if no predetermined minimum profit is allowed	Lower
Administrative costs	Administration is potentially complex, although this could be resolved by predetermining a minimum profit. Still, costs of loan administration and monitoring are high given the complexity of the repayment schedule	Initial higher transactions costs because of the large number of buy-sell transactions. Costs of loan administration and monitoring are substantially lower, however, because the repayment schedule is simple
Enforcement	Difficult if profit must be determined for each installment, because most borrowers do not keep sufficiently accurate accounts	Less difficult because the program owns the goods until the last installment is paid

Conclusion

Islamic banking, with its emphasis on risk sharing and, for certain products, collateral-free loans, is compatible with the needs of some microentrepreneurs. And because it promotes entrepreneurship, expanding Islamic banking to the poor could foster development under the right application. Islamic law allows room for financial innovation, and several Islamic contractual arrangements can be combined to design a new hybrid (Khan 1997). Bearing in mind the guiding principles for successful microfinance programs (see box 1), and with adjustments to incorporate Islamic banking principles, the Islamic financial system could offer alternatives in microfinance. Viable projects that are rejected by conventional lending institutions because of insufficient collateral might prove to be acceptable to Islamic banks on a profit-sharing basis.

Islamic banking offers loan products based on intangibles such as a businessperson's experience and character. Microfinance programs have extensive experience with character-based lending, as most microentrepreneurs lack acceptable collateral. Thus there is potential compatibility between the needs of microentrepreneurs and the practice of Islamic banking.

In certain circumstances the *mudaraba* (profit sharing) and *murabaha* (buy-resell) methodologies may be appropriate for microfinance. Although the *murabaha* (buy-resell) model generates high initial transactions costs, these can be potentially offset by low loan administrative and monitoring costs given the simplicity of the model. And while the *mudaraba* (profit sharing) model may require the frequent determination of business profits—and it is not entirely clear how such profits would be determined—this methodology is feasible, and in some form or another can be used to achieve the goals of microenterprise lending. Other types of Islamic lending—such as *qard al hasanah* (benevolent lending with a service fee)—may emerge as more practitioners implement Islamic lending principles in microfinance institutions.

Islamic banking techniques could give thousands of entrepreneurial poor access to microfinance—an option they might not consider if traditional, interest-based commercial loans were offered. More experimentation and practice in the field should contribute to more knowledge and a better understanding of effective loan delivery mechanisms using Islamic banking principles.

Islamic banking techniques could give thousands of entrepreneurial poor access to microfinance

References

- Abdouli, Abdelhamid. 1991. "Access to Finance and Collateral: Islamic versus Western Banking." *Journal of King Abdulaziz University Islamic Economics* 3: 57–64.
- Akhtar, Muhammad Ramzan. 1996. "Practice and Prospects of Musharaka Financing for Small Enterprises in Pakistan." *Journal of Islamic Banking and Finance* 1(3).
- Ayub, Muhammad. 1995. "Meaning of Riba." *Journal of Islamic Banking and Finance* 12(2).
- Brandsma, Judith, and Ahmed Abou El Yazeid. 1997. "The Design of a Micro Finance Program in the Republic of Yemen." Draft report (Step 1, Step 2, and Technical Annex). World Bank, Private and Financial Sector Development Group, Washington, D.C.
- Brandsma, Judith, and Rafika Chaouali. 1998. "Making Microfinance Work in the Middle East and North Africa." World Bank, Middle East and North Africa Region, Private and Financial Sector Development Group and Human Development Group, Washington, D.C.
- Errico, L., and M. Farahbaksh. 1998. "Islamic Banking: Issues in Prudential Regulations and Supervision." IMF Working Paper 98/30. International Monetary Fund, Washington, D.C.
- Fruman, C., and M. Goldberg. 1997. "Microfinance Practice Guide: For World Bank Staff." World Bank, Sustainable Banking with the Poor and Consultative Group to Assist the Poorest, Washington, D.C.
- Hasanuzzaman, S.M. 1994. "What Is Mudaraba?" *Journal of Islamic Banking and Finance* 11(3).
- Iqbal, Zamir. 1997. "Islamic Financial Systems." *Finance and Development* 34(June): 42–45.
- Iqbal, Zubair, and Abbas Mirakhor. 1987. *Islamic Banking*. IMF Occasional Paper 49. Washington, D.C.: International Monetary Fund.
- Kazarian, Elias. 1993. *Islamic versus Traditional Banking: Financial Innovations in Egypt*. Boulder, Colo.: Westview Press.
- Khan, Mansoor H. 1997. "Designing an Islamic Model for Project Finance." *International Finance and Law Review* 6: 13–16.
- Khan, Mohsin. 1989. "Islamic Banking: Experiences in the Islamic Republic of Iran and Pakistan." IMF Working Paper 89/12. International Monetary Fund, Washington, D.C.
- Khan, Mohsin, and Abbas Mirakhor. 1986. "The Framework and Practice of Islamic Banking." *Finance and Development* 6(March): 32–36.
- Khurshid, A. 1980. "Economic Development in an Islamic Framework." *Studies in Islamic Economics*. International Center for Research in Islamic Economics, Jeddah, Saudi Arabia.
- Lawai, Hussain. 1994. "Key Features of Islamic Banking." *Journal of Islamic Banking and Finance* 11(4).
- O'Sullivan, E. 1994. "Islamic Banking: MEED Special Report." *Middle East Business Weekly* 38(34).
- Siddiqui, Shahid. 1995. "Institute of Islamic Banking and Insurance: Objectives and Activities." *Journal of Islamic Banking and Finance* 12(2).
- UNDP (United Nations Development Programme). 1997. "MicroStart: A Guide for Planning, Starting and Managing a Microfinance Programme." Special Unit for Microfinance, New York.