

## **ISTISNA' FINANCING OF INFRASTRUCTURE PROJECTS**

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*Projects that do not generate explicit income cannot be possibly financed on a profit-sharing basis. A suitable interest-free alternative method of financing is presented here, based on istisna' sale contract (commissioned or pre-ordered productio). Various aspects of using istisna' as a financing tool for infrastructural projects are discussed, including: (a) the illiquidity of the resulting financial claims and its implications, (b) suitability for financial intermediaries, and (c) the possibility of indexation of the resulting financial claims and their use as a monetary policy tool.*

### **1. INTRODUCTION**

There are several Islamic alternatives to interest-based financing. First and foremost, there are the participatory modes such as partnership and *mudarabah*. Second there are the sale-based modes such as *salam*, and *bay' muajjal*. Third, there are the rent-based modes. Participatory modes have many desirable economic and *shari'ah* advantages and are the "first-best" Islamic alternative to interest-based financing. The scope of participatory modes, however, as is now widely appreciated, is limited to financing ventures that generate explicit income or output that can then be "shared" among the investor and the other parties to the venture. Investments that do not generate explicit income (let us call them: *mute investments*) cannot be financed on participatory basis. Examples are: social investments that generate pure public goods, such as the proverbial lighthouse on the beach, or a military airfield, or even a submarine. Further examples are investments that can generate explicit income but are restrained from doing so for social reasons, such as public schools that provide free primary education.

Many, though by no means all, social infrastructure projects are mute investments. The question is: how to finance such investment on an Islamic non-interest basis? This paper suggests a method based on *istisna'* (commissioned or pre-ordered production). My concern in this paper is to explore the feasibility of this method for financing public infrastructure projects, even though it is equally suitable to private projects.

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## 2. BRIEF REVIEW OF *FIQH* ASPECTS OF *ISTISNA'*

*Istisna'* is defined as a contract to purchase now, for a definite price, something that may be manufactured or constructed later according to agreed specifications. The object of *istisna'* is often not available now, but will be made later by the manufacturer or contractor.

### 2.1 *Istisna'* as a Financing Tool

*Istisna'* is a special type of sale contract. The three primary sale contracts in traditional Islamic *fiqh*, from the perspective of financing are:

- a) Common sale contract, whereby a good and its money price are simultaneously exchanged. No financing is involved either for the seller or the buyer.
- b) Sale for a deferred price. The seller finances the buyer, because he delivers the good now, for a price to be paid later.
- c) *Salam* sale whereby the buyer finances the seller by advancing him the full price now, for a fungible good to be delivered later.

*Istisna'* is a fourth type of sale, (according to Hanafi school of *fiqh*), that is exempted from some *fiqh* rules that apply to other sale contracts because of the special nature of economic needs it satisfies.

Notice that in both (b) and (c) either the good or the money price must be delivered now, while the other may be deferred. Muslim jurists, in general, do not approve of a sale contract where both the good and the sale price are deferred to a future date. The uniqueness of *istisna'* is that it is permissible to defer both the price and the good. This stands to reason, for the object to be manufactured or constructed is usually not available now, hence has to be deferred. If the buyer also needs financing from the seller (a need that is clearly recognized in *fiqh*) then we should permit him to defer the price. This possibility is clearly permitted by the Hanafi school of *fiqh*, and can now be put to good advantage by Islamic financial institutions.

### 2.2 *Istisna'* as a Tool for Financial Intermediation

The suitability of *istisna'* for financial intermediation is based on the *fiqh* permissibility for the contractor in *istisna'* to subcontract. Thus a financial institution may undertake the construction of a facility for a deferred price, and subcontract the actual construction to a specialized firm.

### 2.3 A Suggested Formula: *Istisna'* Financing

According to this formula the public authority first defines the specifications of a fixed investment project it wants to establish, and the number of years it requires to repay the price. Bids are invited on that basis from investors/contractors who would undertake to construct the required facilities and sell them to the public authority for a price to be paid in installments.

When the facilities are built and the *istisna'* contract consummated, the full ownership of the facilities is immediately transferred to the public authority, against the deferred sale-price that would normally cover not only the construction cost but also a profit. That profit could legitimately include, *inter alia*, the cost of tying funds for the duration of the repayment period. Legitimately that is, from the *shari'ah* point of view.<sup>1</sup>

I have intentionally referred to investors/contractors collectively. *Shari'ah* rules require that investors be *sellers* of the contracted facilities to legitimize the return they obtain. The investors could take upon themselves the legal responsibility of getting the facilities constructed, and *sub-contract* the work to manufacturers/contractors with the consent of the public authority. This subcontracting is not a mere formality, as it makes the investors assume the full *shari'ah* responsibility of a seller, such as guaranteeing the quality and quantity of the goods sold, etc. *vis-à-vis* the buyer (the public authority).

The deferred price that the public authority will pay may be in the form of interest-free DPCs (Deferred Price Certificates of indebtedness) whose total face-value exactly equals the total deferred price. These Certificates have different maturities to match the installment plan that has been agreed upon by the two parties. DPCs represent public authority's debt. *Shari'ah* prohibition of *riba* (interest) precludes sale of these debt certificates to a third party at any price other than their face value. Clearly, such certificates which may be cashed only on maturity cannot have a secondary market. For the holders of such certificates (the investors or financiers in the public project) this illiquidity is a disadvantage that would have been taken into account in the deferred sale-price they agreed upon.

From the social point of view, however, illiquidity of these certificates may be an advantage whenever it is deemed desirable to reduce liquidity in the economy. It should also be an advantage in the view of those, like the distinguished French economist and Nobel Laureate, Maurice Allais, who consider the monetisation of debts to be a contributing factor to the instability of the present monetary system.<sup>2</sup>

#### **2.4 Limited Liquidity for Deferred Price Certificates**

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<sup>1</sup> See for instance Resolution No. 1 of OIC *Fiqh* Academy, 6th Session, Jeddah, 1410H (1990), on financing home-building.

<sup>2</sup> Maurice Allais (1989), "From Depression to Prosperity", *Le Monde*, Paris, 27 & 29 June.

Nonetheless, I shall suggest now a method for imparting *some* legitimate liquidity to these certificates.

Even though a debt in *shari'ah* may not be exchanged (bought and sold) at a price different from its face value, it may be transferred (endorsed) at face value to a third party.<sup>3</sup> Suppose in our case that "B" is a holder of DPC of 5000 dirhams due after a year. No one is likely to be interested in giving "B" 5000 dirhams in cash now for this Certificate, i.e., no one is likely to extend an interest-free loan of dirhams 5000 to "B". But many merchants may be willing to sell "B" 5000 dirham worth of merchandise against this Certificate. Thus even though "B" cannot sell the Certificate for cash, he can legitimately buy against it goods or services, whose (deferred) price is equal to the face value of the Certificate.<sup>4</sup>

Likewise, an Islamic bank holding such a certificate may acquire against them property or merchandise for a deferred price. Once acquired, such property or merchandise may be disposed of in any manner.

Needless to say, the deferred price of goods acquired against such Certificates would be higher than the spot price of the same goods. This price differential is clearly tolerated by *shari'ah* as a legitimate facet of trading activities.<sup>5</sup> The Certificate holder acquiring the goods now at higher-than-spot price is in effect relinquishing to the seller of the goods some, (all, or even more) of the price differential which the Certificate holder obtained from the public authority above the construction cost of the project he financed. This is as it should be, and would mean that market forces can play a role in encouraging or curtailing the exchange of these Certificates for goods. Fortunately, for monetary policy, administrative non-market forces can also play a role, as I will shortly explain.

## 2.5 DPCs as a Monetary Policy Tool

As mentioned earlier, the process of transferring the Certificate from one holder to another is based on *hawalah* contract in *fiqh*, which generally requires the consent of

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<sup>3</sup> This is called *hawalah* in *fiqh*, and may require the consent of the creditor (endorser), the debtor and the third party (endorsee). The consent requirement can be easily met by the public authority issuing the DPCs by stating that they are endorsable.

<sup>4</sup> Strictly, "B" would buy goods whose deferred price is also due after a year, and would now endorse to the merchant a Certificate due also on that date.

<sup>5</sup> To dispel any misgiving, the *Fiqh* Academy of OIC has reaffirmed the legitimacy of this price differential. Once contracted, however, this price becomes a debt, and may *not* be increased for further deferment nor because of delinquency. (Resolution # 2, 6th Session of *Fiqh* Academy, 1410H (1990)).

the debtor,<sup>6</sup> who in our case is the public authority which issued the Certificates. The public authority may issue fully transferable (bearer form) Certificates, or go to the other extreme and issue non-transferable Certificates. It can issue time-release Certificates that are transferable only after a certain date (before maturity of course), or transferable only for purchase of certain types of goods, e.g. domestic goods rather than imported goods. The possibilities of fine tuning are many, though some are not suitable if a significant proportion of such Certificates are held by foreigners.

### 3. ROLE OF ISLAMIC BANKS

Islamic Banks (IBs) can play a leading role in facilitating *istisna'* financing as described above.

Firstly, IBs can of course employ some of their own investment funds in *istisna'*, but are unlikely to do so on a large scale because of the long-term nature of this mode of financing and the low liquidity of the interest-free certificates it generates.

Secondly and more significant in my view, is the possible role of IBs in marketing such investments among their own clients and among public authorities who have suitable projects. When a large project is identified, a consortium of IBs may float a special *murabahah* among some of their clients/depositors to bid for the project. Since such clients are usually quite particular about selecting *halal* (*shari'ah*-compatible) investments, a potential rate of return only slightly above what IBs have been distributing to such clients on their investment deposits would attract many of them.

The management efforts of IBs are largely one-shot, i.e., would be completed once the facilities are constructed, sold to the public authority, and the DPCs delivered to the clients/investors. It is conceivable, however, that some clients (particularly those non-resident in the country where the project is constructed) may want their IBs to collect for them the repayments of their Certificates.

Thirdly, *takaful* funds, which offer an Islamic alternative to commercial life insurance, may find in *istisna'* a suitable placement for some of their funds, which are compatible with long-term investment.

#### 3.1 Islamic Banks' Income From *Istisna'*

How can IBs generate income for themselves out of this mode of financing? Firstly, IB's may act as agents and charge a fee. They may alternatively act as *mudarib*, with the investors (most probably IB's investment depositors) acting as *rab al mal* (sleeping partner). This is a special purpose *mudarabah*, set up for the

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<sup>6</sup> This is the position of several schools of *fiqh*. There are other opinions that do not require the consent of the debtor.

particular *istisna'* contract under consideration. The bank as *mudarib* would be entitled to a specific share of profits, which are defined in this case as the excess of sale price to the public authority, over the total cost of subcontracting the project. That sale price, assumed in our case to be on installment basis, is actually equal to the total face-value of interest-free DPCs to be issued by the public authority. The Certificates are split into tranches of different maturities that span the years of repayment. Each investor, and the IB as *mudarib*, holds his share of the Certificates of each tranche (i.e. of each maturity).

Let us assume for simplicity that the annual repayments (installments) are equal. Each single repayment is composed of two parts from the viewpoint of *mudarabah*: one representing partial recoupment of the cost (the principal advanced by the investors), and the other representing a partial realization of profit. The bank is entitled to its share of that profit, year after year, until all Certificates are amortized.

#### 4. ENCOURAGING LONG -TERM INVESTORS

Under the simple repayment plan assumed above the time profiles of repayment to all investors are similar and extend until the maturity date of the last tranche of Certificates.

One significant disadvantage of such repayment plan is that it requires all investors of the project to be locked-in in their investment until the last tranche of Certificates matures.<sup>7</sup> So those who would have been willing to co-finance that project but only for a shorter period, would be excluded (remember that interest-free Certificates can circulate only at their face value and cannot be discounted before their maturity).

It seems desirable then to search for a way to entice some of the investors to commit themselves to the long-dated Certificates, thus allowing others to co-finance the project for a short period only. One legitimate way of doing this may be by giving a higher rate of profit to those willing to accept the longer-dated Certificates. Let me explain.

Suppose a project is being contemplated for possible financing by *istisna'*, for a long repayment period. The total financing can be split in tranches of different maturities, say short, medium and long. Potential investors can be grouped by the maturity they choose. The investors in each tranche own a *corresponding share* in the project, which they will sell to the public authority on installment basis. The terms of such sale (i.e. the maturity, and the sale price inclusive of an implicit rate of return) can be different for different tranches. The Islamic bank arranging the deal can stagger different tranches to cover the full length of the amortization period of the project. If the bank feels that not enough funds are forthcoming to cover the longer maturity

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<sup>7</sup> Unless they are able to dispose of the Certificates in the manner described earlier.

tranche, it would simply work out an alternative financing plan with lower rate of return for shorter maturities and higher rate for longer maturities. There is thus a mechanism for affecting the supply of investment funds for financing of different maturities even within a single project.

## 5. INDEXING THE DEFERRED PRICE CERTIFICATES

Since the payment of deferred sale price of infrastructural projects is likely to extend over a long period of time, the possibility of indexing needs to be considered from the *shari'ah* viewpoint.

We take it as given that indexation of loans has been rejected by most modern *shari'ah* scholars. This stand has been reaffirmed by a resolution of the *Fiqh* Academy of Organization of Islamic Conference.<sup>8</sup> It is easy to understand this rejection in the context of the prohibition of interest on loans, and the practical ease of circumventing that prohibition under the guise of indexation. However, if one looks closely at *shari'ah* rules one will discover that there are permissible forms of indexing the *deferred prices* of goods and services sold.<sup>9</sup>

Let me, on that basis, indicate one method of protecting the purchasing power of DPCs in *istisna'* financing. It is a method that achieves some of the legitimate objectives of indexing.

The starting point is to recognize that according to *shari'ah*, the sale price of goods (or services) can be anything of value (except prohibited things, which are very few). It is thus possible to make the price, whether it is cash or deferred, a single currency, or a basket of currencies such as SDRs.

It is also permissible to make the price any well-defined commodity or basket of commodities, such as barrels of a specific grade oil or bales of a specific type of jute, etc. A country may find it advantageous to pay in commodity certificates, using some of its export commodities for this purpose.

## 6. GENERALIZATIONS AND PRECAUTIONS

The non-participatory mode of financing suggested in this paper is particularly suitable for financing what I called mute infrastructural investments that generate no explicit income. The mode can of course also be applied to public investments that do generate income, as well as to private investments. But for these two types of income-generating investments, Islamic participatory modes of financing are applicable and

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<sup>8</sup> Resolution No. 4, Session 5, Kuwait, 1409H (1988).

<sup>9</sup> The reader must be cautioned that indexation has numerous other forms and applications that may be unacceptable in *shari'ah*.

are socially superior to the non-participatory modes in equity, efficiency and stability.<sup>10</sup>

Financing by *istisna'*, much like all non-participatory forms of financing, imposes on the public authority rigid debt obligations extending over the full repayment period. Some of the drawbacks of public debt apply to this debt too, even though it is interest-free.<sup>11</sup> The fact that it is permissible in *shari'ah* carries no guarantee that it will not be used to finance irrational projects.

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<sup>10</sup> Several good references are now available that demonstrate the superiority of participatory modes of financing. On efficiency see for instance: Siddiqi, M. N. (1981), "Rationale of Islamic Banking", Jeddah: Centre for Research in Islamic Economics. Haque, Nadeem ul and A. Mirakhor (1987), "Optimal Profit Sharing Contracts & Investment in an Interest-Free Economy" in Mohsin S. Khan and A. Mirakhor, eds. *Theoretical Studies in Islamic Banking and Finance*, Houston, Texas: Institute for Research and Islamic Studies, pp. 141-62; and M.A. Zarqa (1982), "Capital Allocation, Efficiency and Growth in an Interest-Free Islamic Economy", *Journal of Economics and Administration*, Jeddah: November, pp. 43-55.

On stability, see Mohsin S. Khan (1986), "Islamic Interest-Free Banking : A Theoretical Analysis", *IMF Staff Papers*, March, and M.A. Zarqa (1983), "Stability in an Interest-Free Islamic Economy" in *Pakistan Journal of Applied Economics*, Winter, pp. 181-8.

On equity, see M.U. Chapra (1986), *Towards a Just Monetary System*, Ch. 8, Leicester: The Islamic Foundation.

<sup>11</sup> I do not wish to underestimate the important differences between conventional interest-based debt, and the interest-free debt represented by the DPCs. The differences include: (a) illiquidity of the interest-free debt alluded to earlier, (b) disallowance of the roll over the interest-free debt by the debtor. Both (a) and (b) have far reaching positive implications for monetary stability and economic justice. This is a ripe topic for further research.