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THE CASE FOR AN INDEXED FINANCIAL INSTRUMENT IN AN INTEREST-FREE ECONOMY

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After reviewing the economic and religious arguments for and against financial indexation, a special indexed financial instrument has been suggested which may possibly rehabilitate the role of loans in an otherwise equity-oriented Islamic financial intermediation, without violating *shariah* requirements.

I. Introduction

With the increased complexity of the production and distribution systems, the interest rate has acquired unprecedented importance in western market economies. Assessing its role, Shackle (1965) called interest: "the pivot of the entire economic system" and that interest "seems to reign over the theories of employment, of money, of growth, of the general price level and of the balance of payments". Although, in Muslim countries its role is relatively limited, the issue of its elimination has received much attention.

The blue-print of the interest-free financial system which has been developed by the Islamic economists in the last two decades or so, primarily consists of risk-bearing investment instruments and, therefore, virtually eliminates the traditional role of loans in financial intermediation. In this scheme *Qarad-e-Hasna* (interest-free loan) is the only 'risk-free' financial instrument.[1] However, since many Islamic economists generally regard

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[1] Strictly speaking, in a *fiat* money regime, in which its purchasing power changes, even *Qarad-e-Hasna* is not risk-free because in such a regime, the money holder himself becomes an entrepreneur.

indexing *Qarad-e-Hasna* as *riba*, the role of 'loans' has been effectively eliminated in the formal credit market. The importance which loans have acquired in portfolio preferences is largely due to the legal and social acceptability of the institution of interest and this preference cannot be reversed easily in favour of risk-bearing investment instruments by simply supressing interest. Unless the role of loans is rehabilitated, the proposed interest-free financial system will remain vulnerable to abuses (*Hiyyal*). Pakistan's recent experience in eliminating interest from its financial system supports this view. It has been suggested here that loans may play an important role in financial intermediation without violating any *shariah* requirements provided the loan transactions are made through special indexed financial instruments.

Since comprehensive indexation is also a controversial issue among Islamic economists it may be mentioned at the outset that the following discussion is confined to financial indexation. Indexation of returns to other factors of production is not considered.[2]

II. Monetary System of the Early Years of Islam vis-a-vis the Monetary System of a Modern Economy

Financial indexation has been supported by some Islamic economists primarily on economic grounds [Mannan (1981); Ariff (1982); Naqvi (1980)]. Those who have rejected it, base their arguments on *Shariah* considerations [Zaman (1985); Chapra (1985); Report: CII (1980)]. The most explicit disapproval is expressed in the Report: CII, which says:

> "Under the *Shariah*, currency transactions are not treated differently from commodity transactions in so far as lending or borrowing are concerned. As such, no allowance can be made for the change in the value of money" [Report: CII (1980); p. 96].

To understand the issue of financial indexation in an Islamic economy, it will help us first to have a comparative perspective of the monetary system of the early years of Islam vis-a-vis the monetary system of a modern economy.

There was no *fiat* money in the early years of Islam. Caliph Umar intended to issue leather currency. He refrained from doing so when others opposed the idea [Zaman, (1985), p. 334].[3] All coins were full-bodied commodity money and were accepted on their weight rather than on their

[2] Although the author believes that State produced inflation is against the spirit of Islamic economic justice, there is a reason to deal with loan indexation separately [See p. 52].

[3] According to al-Baladuri, (1932), Caliph Umar intended to issue *Dirhams* made of camel skin. He was told by his companions that if he does so, all camels will extinguish and therefore he drop-

face-value.[4] There were several types of *Dinars* and *Dirhams* circulating in the market. Gold was the standard measure of exchange-value and therefore conversion ratios between different type of *Dirhams* were determined in terms of (Gold) *Dinars* [Ibn-e-Abidin (no date)]. There was no government control over money.[5] It was only in 74 A.H. that Abdul Malik Bin Marvan established a network of official mint houses, minted coins on a large scale and mandatorily replaced all the old coins with them [Yusufuddin, (1984), pp. 489–490]. A sizeable part of the economy was not monetized. The credit market closely resembled the informal credit market of today in LDCs, and was confined only to private lending. There was no organized financial intermediation. Money was independent of politics. There was no monetary policy of any kind and therefore loss, if any, in the purchasing power of money was not due to manipulations in the unemployment-inflation trade-off. Even fiscal tools were not used for price stabilization [Zamam (1980); Lane-Poole (1892)].

Today's money has a negligible production cost and, therefore, its supply is not self-regulated. It is accepted on its face-value. Since money is a semi-public good, fiscal theory justifies state intervention and hence governments' control over its supply. However, governments use this right of control as an important instrument of national and international politics. Governments are not constrained by safeguards against inflation like the goldstandard, balanced budget, etc., and have used this right of issuing money to "defraud and plunder the people" [Hayek (1978), p. 224].

It is obvious from the above discussion that in the early years of Islam, the State did not manipulate the purchasing power of money. But in a *fiat* money regime the government's manipulation of money supply is the single most important determinant of the changes in its purchasing power. Neither the institution of *fiat* money nor that of organized finaicial intermediation existed in the early years of Islam and yet some Muslim scholars assert that explicit textual law (*nass*) exists against financial indexation.

> ". . . . . *Ijtihad* is done only when *nass* does not exist. And because this problem is guided by *nass* (i.e. textual law), *Ijtihad* is out of question" [Zaman (1985), p. 48].

ped the idea [al-Baladhuri, p. 470]. Imam Malik (1978) expressed his view that had this leather currency been issued, it would have come under *riba* [Malik, pp. 90–91]. However, according to al-Kattani, Caliph Umar did use leather currency, though on a very limited basis [al-Kittani, p. 422].

[4] Since people used to cut the corners of coins, they were accepted by weight and not by counting [Yusufuddin, (1984), p. 487].

[5] During the period of the Prophet (peace be upon him) and the first Caliph, there were no state coins. Caliph Umar minted some *Dirhams* but on a very limited basis and these *Dirhams* were used alongwith other gold coins.

Since those Islamic economists who are against indexation, consider it *riba*, it is logical first to review the nature of *riba* in relation to indexation as explained in *Quran, Hadith* and *Fiqh*.

III. *Riba* in *Quran*

The first revelation of *Quran* about *riba* says:

"that which you give as interest to increase the peoples' wealth increases not with God; but that which you give in charity, seeking the goodwill of God, multiplies manifold" [30:39].

This verse explicity says that interest is paid to increase the wealth of the recipient. This theme is more explicitly described in the following verse:

"devour not *riba*, double and multiplied" [3: 130].

Does a compensation for the erosion in the purchasing power of money purely due to manipulations of money supply increase the wealth? Yes, it does, but only in nominal terms with real wealth unchanged. Although the verse does not specify real wealth, yet the spirit is obvious, i.e., interest transfers additional purchasing power from the borrower to the lender. Compensation for the loss in the purchasing power does not transfer additional purchasing power to the lender.

In the fourth revelation about *riba*, *Quran* says:

"Neither should you commit injustice nor should you be subjected to it" [2: 297].

There are two themes about *riba* which are explicitly mentioned here. First, that *riba* is unjust. The nature of injustice in *riba* is further explained in *Quran* where it says:

"they (the jews) took *riba*, though they were forbidden, and that they devoured properties of people wrongfully" [4:161].

The second interesting theme in the last phrase of verse [2: 297] is that the *Quran* protects the lender just as it protects the borrower against injustice. In the explanations of injustice in *riba*, the borrower is usually presented as a needy, poor, weak person against a cruel, powerful rich exploiter. This description may still fit the informal credit market which continues to play a significant role in Muslim countries, but conspiciously has not drawn much attention of Islamic economists. In a modern organized credit market, under a *fiat* money regime, with large financial intermediaries, the roles of exploiter and exploited are almost reversed. Even after receiving a positive nominal interest, the small saver is exploited, as a result of the decline in the purchasing power of money. Table 1, which gives a summary picture of interest rates versus the inflation rate during the last

TABLE 1

	Average annual rate of inflation (per cent)	Averag Interest rate (per cent)	
	1973–83	1970	1983
Low income economies	5.4	2.8	3.9
Lower middle income economies	17.9	5.0	8.9
Upper middle income economies	34.0	6.9	11.0

Source: World Development Report, 1985.

decade, demonstrates this.

Some Islamic economists do recognize the damage incurred by the borrower if he is denied a compensation for the loss in the purchasing power of money and yet they consider such a compensation un-Islamic.

"Inflation is a damage to the purchasing power of money and is badly suffered by the creditor and the saver" [Zaman, (1985), p. 48].

The Islamic Law of Indemnity invoked against redressing this damage is that although the borrower is the beneficiary, he is not responsible for inflicting the damage and, therefore, is not responsible for redressing. They consider it justice that the lender bears all the damage simply because he volunterred to give a loan. It is true that giving a loan is voluntary. But the damage is not because he gave a loan. This damage is because of keeping his savings in liquid assets. Although not much desirable, it is not unlawful in Islam to keep one's savings in liquid form. However, due to the monetary management system, the saver is forced to suffer the damage. It may be said that loan indexation will introduce horizontal inequity because all who hold money will suffer while it will protect only those who loaned it to someone-else. But these two groups cannot be treated at par. Firstly, because those who hold money have control on it and have all options to hedge themselves against inflation while those who loaned it, cannot hedge against inflation. According to Ibn-Qudama, if there occurred a defect in a coin (demonetization, debasement or other defect) than the borrower is held responsible to pay its price because the defect occurred when the coin was in the borrower's possession [Ibn-Qudama, Vol. 4, p. 325].

Secondly, loaned money has been used and the beneficiary of the erosion in the purchasing power of this money is identifiable whereas in the case of idle money this is not true.

A related argument against loan indexation is that it will provide protection to financial capital, and therefore, will discriminate against wage-earners and others. However, it may be noted that Islam distinguishes loan contracts from all other contracts. Any contract except a loan contract can be negotiated for changes/anticipated changes in the purchasing power of money though with some time lag. This is also true for loan contracts in an interest-based economy. But, in an Islamic economy, loan contracts are not negotiable in the sense that they have to be at zero return. Therefore, in an Islamic economy, inflation in a unique sense, discriminates against the lender. Loan indexation will eliminate this discrimination and hence promote equity rather than inequity.

Incidentally most of those Islamic economists who argue against loan indexation, support wage-indexation. If the above asymmetry argument is valid for loan-indexation, it should also be true for wage-indexation.

IV. *Riba* in *Hadith* and *Fiqh*

Riba literally means increase, addition, expansion, growth. However, in *Fiqh* terminology, *riba* is antithetical to a (just) sale [Sarakhsi (1906), p. 108]. It may be defined as any exchange/sale in which unearned increment accrues to one party without giving in return any equivalent counter-value, recompense, *iwad (Badal)*, to the other party. There is consensus among jurists and traditionists on this legal definition of *riba*.[6]

Riba has been classified into two categories: *riba-al-nasiah* and *riba-al-fadl*.

The famous *hadith* which explains the nature of *riba-al-nasiah* is from Usamah Ibn-Zayed:

> "There is no *riba* except in *nasiah* (waiting)" [Bukhari, Kitab al-Buyui].

The term *nasiah* is derived from the word *nasa'a*, the literal meaning of which is to postpone, defer or wait. Therefore, according to the above *hadith*, *riba-al-nasiah* means a reward for waiting. Neither the long-run real interest theories, developed by Bohm-Bawerk and Wicksell, nor the short-run nominal (monetary) interest theories, developed by Keynes, regard all of the nominal interest as payment for waiting. In fact, contemporary theory of interest developed by Fama (1975) unites the real and nominal theories of interest by explicitly disassociating the inflationary

[6] For instance: "Interest, in an exchange is a prespecified addition without a corresponding return" [Sarakhsi (1966), p. 109]. "Every increase which is without, or an equal counter-value is *riba*" [Al-Arabi, quoted from Chapra (1985), p. 59]. "However, in *Fiqh* terminology, *riba* means an increase in one of two homogeneous equivalents being exchanged without this increase being accompanied by a return" [Al-Jaziri, quoted from Chapra (1985), p. 240].

component of the nominal interest from the one which is payment for waiting. According to this version, the nominal rate of interest should approximately equal the real rate plus the expected rate of inflation.

Al-Jaziri explains *riba-al-nasiah* as follows:

> "First, *riba-al-nasiah* where the specified increase is in return for postponement of, or waiting for, the payment; for example, buying an *idrab* (a specific measure) of wheat in winter against an *idrab* and a half of wheat to be paid in summer. As the half *idrab* which has been added to the price was not accompanied by an equivalent value in the commodity sold and was merely in return for waiting, it is called *riba-al-nasiah*" [Emphasis added and quoted from Chapra, (1985), p. 240–241].

According to this explanation, redemption of equivalent value is required. The value of *fiat* money is measured in terms of commodities and services and therefore the equivalence in value of money requires equivalence in the purchasing power at two periods of time.

Riba-al-fadl, an extension of *riba-al-nasiah*, makes the *riba* prohibition very comprehensive. Essentially *riba-al-fadl* implies an unearned increase obtained in exchange/sale of commodities of superior value over commodities of inferior value belonging to the same species *(jins)*. *Riba-al-fadl* is prohibited on the basis of the following *hadith*:

> "Abu Sa'id al-Khudri related on his authority that the Prophet (peace be upon him) had said that gold must be exchanged or sold for gold, like for like, "*mithlun bi-mithlin*", from hand to hand, "*yadan bi-yadin*", (i.e. immediately exchanged without any delay or time interval). Any increase, *fadl*, in one commodity over the other is *riba*, "*al-fadl riba*". Silver must be exchanged for silver, like for like, from hand to hand, and any increase is *riba*. Wheat must be exchange for wheat, like for like, from hand to hand, and any increase is *riba*. Salt be exchanged for salt, like for like, from hand to hand, any increase is *riba*. Barley be exchanged for barley, like for like, from hand to hand, any increase is *riba*. Dates be exchanged for dates, like for like, from hand to hand, any increase is *riba*" [Bukhari, Kitab al-Buyui].

There is a controversy among jurists about the range of transaction which come under *riba-al-fadl*. The basis of controversy is essentially the differences in their opinions regarding the '*illa*' (reason/sense) in which *riba-al-fadl* is prohibited.[7] However, inspite of these differences there is con-

[7] These differences related to the attributes of commodities under transaction such as measure (*Kayal*), weight (*Qadr*), eatability and nutrimentality (*Iqtiyat*), storability (*iddikhar*), valuability (*Thamaniyya*) etc. [Haque (1985), pp. 157–165].

sensus that the spirit of the expression "*mithlun bi-mithlin*" in the above *Hadith* is a "just prices" transaction. Expressions like "just transactions", "just wages", "just prices", "just profits", etc., in Islamic literature are generally explained in terms of moral exhortations because of the difficulty in translating them into operational equivalents. But in case of a transaction which involves commodity of the same *jins*, the just transaction has been explicitly explained by the following *Hadith*:

> "Bilal brought to the Prophet (peace be upon him) some *barni* (good quality) dates where upon the Prophet asked him where these were from. Bilal replied, "I had some inferior dates which I exchanged for these – two *Sa'a* for a *Sa'a*. The Prophet said, "Oh no, this is exactly *riba*. Do not do so, but when you wish to buy, sell the inferior dates against something and then buy the better dates with the price you receive" [Muslim (1976)].

The justice in a transaction of a commodity of the same *jins*, requires the same quality and the same quantity. If there is a difference in quality (which causes a difference in value as is the case of exchange of dry dates with fresh dates), even if the exchange is at the same point in time, *riba* is involved. In the case of a quality differential the above *Hadith* explicitly dictates that such a transaction can be made through another commodity (in order to ensure exchange-value equivalence). Exchanging today's currency units with future inflated or deflated currency units is clearly a violation of the spirit of this *Hadith*.

V. Indirect Evidence

Indirect evidence, some of which is produced below, reinforces the view that denying a compensation for the erosion in the purchasing power of money is a violation of the basic principles of Islamic economic justice.

All the functions which money performs are permissible in *Shariah*. While being used as a medium of exchange, money necessarily serves as a store of value and standard of deferred payment. *Quran* repeatedly emphasizes the establishment of a system of measurements in which there can be no reduction.

> "So give full measure and full weight and do not reduce human beings in their goods." [7: 85].

All other measures are fixed in themselves. For instance a kilogram or a meter does not change in relation to what it measures over a period of time. However, *fiat* money as the 'standard measure' of all exchange values does change in relation to itself. Denying a compensation for the reduction in the purchasing power of money (which is a unit of measurement) is clearly against the spirit of this verse.

A basic principle of the *Shariah* is that no damage should be caused or borne and any damage should be redressed.

Denying redress for the damage caused to the lender by paying him in terms of shrunk money is a violation of this principle. In view of the inflation rates which have prevailed during the last two decades, it is difficult to deny a compensation for the loss in the purchasing power and yet call it fairness from any sense of justice, Islamic or otherwise.

Suppose, instead of inflation, there were deflation of a significant degree. This would put tremendous additional burden on the borrower. However, the face-value-equivalence logic of Islamic economists would call it fairness and *riba* free even though the borrower would have been forced to pay a lot more in real terms! Perhaps many of those who oppose loan indexation in an inflationary environment would support loan indexation in a deflationary environment.

Muslim scholars generally rationalize rent as the payment for the service rendered by the leased article [Taseen, (1985)]. Now, if rent is payment for service, regardless of depreciation of the leased article, then money should have been entitled for rent because it does perform a service. Even if depreciation is a necessary condition for charging rent, *fiat* money should have been entitled for rent because it depreciates (not in a physical sense but in value). Islamic economists, however, maintain that rent is not permissible on money even if it performs a service and even if it depreciates, because money is different from other commodities, and rent on money is *riba*. On the other hand, they would say that for loan purposes money should be treated as any other commodity:

> [Report: CII (1980), p. 12] "Under the *Shariah*, currency transactions are not treated differently from commodity trasactions in as far as lending and borrowing are concerned".

But it is not logical to treat money both at par with other commodities, and differently, depending on whether the additional payment is called interest or rent.

VI. The Argument Against Indexation

With this background, let us examine the main argument given by Islamic economists against financial indexation. A lucid statement of this is presented in the Council's report.

> "The basic principle is that the same quantity (units) should be returned as was borrowed even though the price of the commodity may have changed in the meantime. For example, if one maund of wheat has been borrowed, the borrower will have to return one

maund of wheat even though the price of one maund of wheat may have risen from Rs.30/- to Rs.50/- per maund or fallen to Rs.15/-. Similarly, if the borrowing consisted of a specified amount of money, say, Rs.1,000/- the borrower will have to repay the same amount of money even if the value of rupee in terms of other goods and services may have changed during the period". [Report: CII, (1980), pp. 12–13].

The logic is simple. A change in the price of any borrowed commodity cannot be compensated, and since money is not treated differently from other commodities, a change in the value of money cannot be compensated either.

However, this logic is not correct. There is a crucial difference between the change in the price of a commodity and the change in the value of money. If the price of wheat changes due to a change in the monetary sector, the purchasing power of wheat (or the value of wheat) in terms of other commodities does not change. The value of wheat in terms of other commodities can change only in response to a change in the real sector. Unlike other commodities, the supply of *fiat* money is not self-regulated by the production costs and selling prices. And, therefore, while full-bodied money may be treated as any other commodity for loan transaction, *fiat* money cannot be treated at par with other commodities.[8]

The Islamic justice in a loan transaction does not hold the borrower responsible for either the change in value of the borrowed commodity due to changes in the market demand and supply conditions, or due to changes in the preference structure of the creditor. Therefore, instead of preserving the use-value parity, *Shariah* preserves the exchange-value parity of the borrowed commodity, provided the parity is not disturbed due to changes in the real sector. It is against the spirit of Islamic economic justice to treat monetary and real changes alike in a *fiat* money regime. Perhaps an example may help. Suppose, according to the previous year's government grading system there had been four distinct grades of wheat, A, B, C, and D, and an individual borrowed one maund of grade C wheat. In the following year the government changes its grading scheme such that under the new scheme, the previous year's grade C has now been labelled as grade B and the previous year's grade D as grade C. According to *Shariah*, obviously the borrower has to return one maund of grade B (according to the new grading system) although he borrowed wheat of grade C. Grade

[8] The question as to whether money can be treated as any other commodity has been addressed by Abu Saud (1980). He has spelled out special characteristics which distinguish money from other commodities.

C is not acceptable because its quality is not comparable with the one which was borrowed, although through a *fiat*, its 'face-value' is the same.

VII. The Dilemma

It has been argued here that loan indexation is in the true spirit of Islamic economic justice. But Islamic scholars have reservations because it amounts to paying in 'excess' of what was borrowed although in nominal terms only. There are three possible ways to resolve this problem.

One, eliminate *fiat* money and go back to the Gold-standard type of arrangement in which the changes in the purchasing power of money are not government-produced.

Extensive literature exists on the economic/political pros and cons of the gold-standard and a managed money system. While it is certainly worth exploring this option further, especially in view of the inflationary bias in a managed money system which conflicts with the spirit of Islamic economic justice, it is beyond the scope of this study. Here it is assumed that *fiat* money will continue to exist.

The second option is to deny any compensation for the loss in the purchasing power and hence penalize the lenders/savers. This is the prescription of those who oppose loan-indexation. This option has significant short-comings:

i) As discussed above, it is not consistent with the Islamic sense of justice.
ii) Those who argue against loan-indexation assert that *Qarad-e-Hasna*, the only permissible form of loan, is a benevolent loan. It is a form of charity, the reward of which will be given by God, and, therefore, the lender should not worry about the loss in the purchasing power. This will be a very small portion of the total credit, confined primarily to consumption loans to needy persons, on a person to person basis. They further maintain that all business/investment credit requirements will be organized around Islamic investment instruments.

> "The prohibition naturally eliminates the loan market and implies that all business financing be based on various forms of equity" [Zarqa, (1983), p. 81].

Since the loan market becomes negligibly insignificant, loan indexation is not only unnecessary, but also likely to jeopardize the Islamization process if adopted.

Islamic financial instruments have a common characteristic, namely that the function of savings cannot be dissociated from investment. The role of financial intermediation is primarily to dissociate the two functions. Therefore, there is no role of conventional financial intermediation in Islamic banking. The saver has to take entrepreneurial

risk not only if he wants a positive return, but also if he wants to hedge his savings from erosion. Despite the availability of all kinds of investments with different risk characteristics, conventional financial instruments are required to accommodate liquidity/risk preferences of some savers/borrowers. Denying such a compensation will force them to keep their savings in real assets such as housing, jewellery, etc. (which also involve risk), or resort to innovations to bring the conventional financial intermediation institutions and practices in line with *Shariah*. Unless the role of loans is rehabilitated into the formal financial sector, the Islamic financial system will remain vulnerable to ruses (*Hiyyal*).

iii) Some Islamic economists argue that banks may be obliged to provide some interest-free loans. A large subsidy on such loans will create an infinite demand and near zero supply of such loans. The real poor and needy will perhaps have to turn to highly exploitative black markets' to fulfill their credit needs whereas the privileged ones will be able to fool the system. Moreover, despite negligibly small magnitudes of such interest-free loans, Pakistani banks are already grumbling over their shares in this pool. If this pool of forced interest-free loans is expanded further, it will certainly have repercussions on bank's profits and, hence, deposits.

iv) There are many economic activities which are not amenable to the profit and loss system (PLS), where Islamic economists have suggested other Islamic financing modes but generally with strong caveats, because they all have potential to be misused.

v) There are many areas of uncertainty, such as inter-government loans, where Islamic economists' suggested solutions are hardly convincing.

The third possibility is to eliminate *fiat* money from interest-free loan transactions. Instead, introduce a special financial instrument which is linked to some purchasing power index. Consumer price index or some of its variants have generally been used for indexing purposes. However, because *Shariah* does not hold the borrower responsible for changes in the purchasing power of money due to changes in the real sector, the money supply index is a better choice. It not only fulfills *Shariah* requirements, but also satisfies the requisites of a good index for this purpose. It is a reasonably accurate measure, not subject to revisions; cannot be manipulated at the discretion of individuals; easily verifiable; and there is no problem of public confidence as with the consumer price index. The price of this instrument may be tied to those changes in money supply which do not correspond to changes in the real output. This instrument (call it constant purchasing power unit, CPU, though the purchasing power is not strictly constant), can be bought and sold to a monetary authority.

There is only a semantic difference, from the point of view of an economist, whether loans are directly indexed or are affected through CPUs. But the CPU meets *Shariah* requirements in letter and spirit because they are homogenously comparable over time and any person who borrows x number of CPUs will return exactly the same x number of CPUs. Therefore, neither the *riba-al-nasiah* definition nor the *riba-al-fadl* definition is applicable because exactly the same quantity of the same quality is being returned.

Extensive literature exists on the pros and cons of indexation.[9] It seems unnecessary to review this literature here because international experience of financial indexation is of limited relevance to an Islamic economy for the following reasons. One, the countries which used financial indexation also had interest bearing instruments. Since the risk characteristics of interest bearing instruments are different from those of PLS, the impact of the introduction of CPU in an interest-free economy may be different. Two, those countries which resorted to indexation relatively more comprehensively, used it primarily as a policy instrument to enable the economy to 'live' with inflation while in an interest-free economy the prime motive is moral. However, since the characteristics of an Islamic financial system are conjectures without much empirical evidence, it needs a very cautious approach to introduce such an instrument.

VIII. Conclusion

It has been argued that loan indexation has only apparent resemblance with *riba*. Introduction of a special indexed financial instrument will be consistent with Islamic economic justice and will rehabilitate the role of financial intermediation at least partially in the Islamic financial system without violating any *Shariah* requirements, and thus make Islamic banking more viable.

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[9] Economists like Marshall, Jevons, Keynes, Machlup, Friedman, Tobin, Tsiang, support the idea of financial indexation. Their arguments are mainly based on considerations of distributional equity and/or elimination of uncertainty in long term contracts. An equally impressive list of those economists who oppose it may be cited. An excellent cross-section of diverse views on indexation is contained in [Gordon (1974)]. For an empirical evaluation of indexation in South America see [Jud (1978)]. For an overview of international experience of indexation, see, [Page, (1978)].

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