

TECHNICAL APPENDIX

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A supplement to my presentation material on the 2nd Bank Indonesia
International Seminar on Islamic Finance
Bandung, 7-8 May 2012

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- (1) Is there a REAL Difference between Islamic and conventional banking?
- (2) How does Islamic Shariah deal with the concept of inflation and purchasing power of money?

In answering the above two inseparable FAQs which has also often been raised in LinkedIn messages in this short space I try to be as brief as possible, hoping that I do not fail to do so. These two questions plus many other related ones have been raised and tried to give satisfactory answers in my book: "Islamic Money and Banking: integrating Money in Capital Theory"; published by John Wiley & Sons in 2009. Here, I am trying to summarize my findings for those who have not had a chance to read the book.

A-After several decades of research undertaken on the subject it should be admitted that we have reached the point to understand that Islamic Banking/Finance has become a separate and complicated academic discipline in economic science; however being in its embryonic stage of development.

B- Islamic Banking/Finance (IB/F) with different functions undertaken which should be recognized as a development bank is completely different from conventional banking both in philosophical foundations, worldview, instruments and outcome; the following is a summary of my findings after three decades of experience.

Conventional banking with has been made known to people and with long period of does not need any more explanations as Islamic Banking/Finance does due to it being in its early development stage. However, it does not

preclude me from repeating the negatives of the conventional system wherever appropriate and for the sake of comparison.

1= Money in conventional banking has been misplaced in an ivory tower the place where, according to Quran Allah (SWT), had originally devoted to "man" as his vice-gerent with the expectation to put his utmost effort to please the Creator of the Universe. This ultimate objective of "man" makes him to care for others as means to accomplish his mission. This is the most important point of departure from conventional banking in which "man" is both producer and consumer who tries to maximize his own utility with no concern about others. This objective function is accomplished by consuming as much as he can with his limited money income. This basic difference in philosophical foundations has the advantage to bring with it corollary compatible with Shariah in that labor has been given the option, in its entirety, to choose from among alternatives Fiqh has opened to him. He can participate in Musharakah contract and share risk and hence share part of the profit/loss (PLS), or part of the output, or be hired, or engage in one of several options made available to him to choose from in trade transactions such as hire-purchase, Murabaha, or installment sales, and so on. Remembering that justice has sometimes been defined as promoting the life of the poorest and most deprived people.

In capitalism, hired labor is the predominant method of enumeration of labor and the general rule which puts him in the same rank as other factors of production (with scanty attention, as special case, to use share contract).

As more and more people put more deposits in Islamic banks and share part of the profits earned by firms whose partial capital has been financed by such banks their incomes will increase and enjoy higher level of living standard. This will eventually and gradually reduce the gap between the rich, on the one hand and the poor and ordinary people from the other.

2=Money in the conventional system is treated as private (durable) good that can be bought and sold on installment basis whose price is interest whereas, based on its unique properties, it has been demonstrated, in my book, to possess the most attributes of public goods and therefore classified as one of the good examples of an impure "public good" and as

such not tradable. Furthermore, in an identity put forward by classical economists in which money enters and has been named "Quantity Theory of Money" its supply is always reported as the liability of its producer; i.e. the Central Bank and as one of its most important liability entries in its balance sheet. This is the liability sometimes known as the public debt which Central Banks owe to all who hold it, one way or another.

3=If # 2 is true and justifiable then Islamic Banks have to be owned by the public sector as is the case for all public goods. Administration of public Islamic banks is a separate issue.

4=Supply of money, as one of the most important functions of (Islamic) Central Banks has to be demand-determined and undoubtedly becomes an endogenous variable in a newly-defined way I have proposed which is different from those often described by some economists in a circular and unclear manner to be either endogenous or exogenous. My definition goes as follows: as long as there are unused factors of production supply of money can be increased by the Islamic Central Bank without any fear from inflation to occur. This will reduce the autonomous power artificially given to the conventional central banks to manipulate supply of money and intervene in the money market by changing rate of interest. My definition also has the implication of integrating money in capital theory in which money market disappears in the absence of interest and Islamic banks provide (part of) capital to demanders which in turn determine the supply of money being able to be converted to actual capital. In this case the dichotomy between the money market and real market disappears and the system becomes one whole integrated and coherent one in which events follow each other like a chain free of conflict and contradiction often found in capitalism.

The schematic way to show the difference between endogeneity of money in Islamic Finance based on my definition and endogeneity/exogeneity in conventional system, which is not quite clear what they mean, can be shown, respectively, as follows:

In Islamic Finance the chain of events looks like: $\Delta Q \implies \Delta M$; where unused factors of production and the desire for change in commodities

(ΔQ) are reliable measures to determine the correct change in the supply of money (ΔM); hence, constant balance between commodity and money supply.

In conventional system the chain of events looks like $\Delta M \implies \Delta Q$. This is expected to happen via interest rate and/or manipulation in the money market but their effects, evidenced by long period observations, are uncertain. The uncertainty comes basically from the emergence of money whirlpool developed by the store of value function of money. The results of some studies show that this function makes it impossible to exactly define supply of money which, in turn, makes all monetary policies ineffective; hence a mis-match between money and commodity at all times and real fear of inflation.

To partially complete the picture, the policies followed by Islamic Finance is called Financial Policy in which the profit rate of Islamic bank relative to that of the firm is the most effective financial policy. But the most powerful policies followed by the conventional banking are monetary policy tools the unknown size of the money supply and money whirlpool makes it ineffective.

In the former case the result is certain due to perfect match of money with commodity and no fear of inflation, but in the latter, the result is uncertain. Additionally, several evidences in the latter case show the mis-match of money supply with commodity and inflation is the certain outcome. The prolonged and recurrent financial crises and the ineffective monetary policies followed by different capitalistic countries prove my claim.

5=As long as money becomes an endogenous variable in its newly defined way fractional required reserve becomes a redundant issue in the sense that required reserve ratio can safely be brought down to zero provided that strict monitoring applies at all levels and at all times. Monitoring the functions of the financial sector is definitely costly but cost-benefit analysis shows that benefits overwhelm costs to a great deal as will be shown below.

6=With the elimination of interest (Riba) all money markets, including speculative activities taking place in all secondary markets, disappear and capital market takes on the crucial role in the economy. Such understanding again makes it clear and unambiguous the choice of the title of my book.

Some caveats are in order here: in implementing true Islamic banking we are in severe need of highly specialized experts to understand and identify Riba which insidiously penetrates in transactions like cancer cells which ruins the whole system. Just to name three scholars hardly anyone can challenge their arguments against interest. One would be John Maynard Keynes and the other Maurice Allais and, the last but not the least, Silvio Gesell among few others. As I understand, many misinterpretations and misunderstandings in existing literature which have become the foundation of decision making and used as the theoretical bases of the operations of the most so-called "Islamic Banking" worldwide (Iran included) exhibit "pork wrapped in Halal meat". This seems to me, is the result of our lack of knowledge about the definition, identification and outcome of Riba. One of these outcomes is instability in the zero-sum game of capitalistic system Keynes has aptly characterized it as "Casino". Another one would be inequitable distribution of income and wealth and more importantly high unemployment rate.

The legitimate question that can be raised here is why a system has to be designed and built to be unstable and too many people kept unemployed, in the first place, while we have the apparatus and the underlying conditions of making a system sound and stable and full employment assured? Why should we play games in casinos and make life hard for the majority of people and easy for absolute minority? The quick answer to such questions is that we have not, as yet, enjoyed the fruits of cooperation due to lack of legal environment and laws to protect players of such games which are capable to transform the zero-sum game of casinos to an increasing-sum game of an Islamic state in which every player gets a fair share.

Furthermore, neither Islamic banks nor Islamic capital markets are supposed to engage in any kinds of virtual wealth transactions which are

definitely Shariah incompatible. Apart from Shariah principle considerations F. Soddy has been very much concerned about the harms of such transactions in his three books even for capitalistic system. No more comments can increase the validities of his arguments.

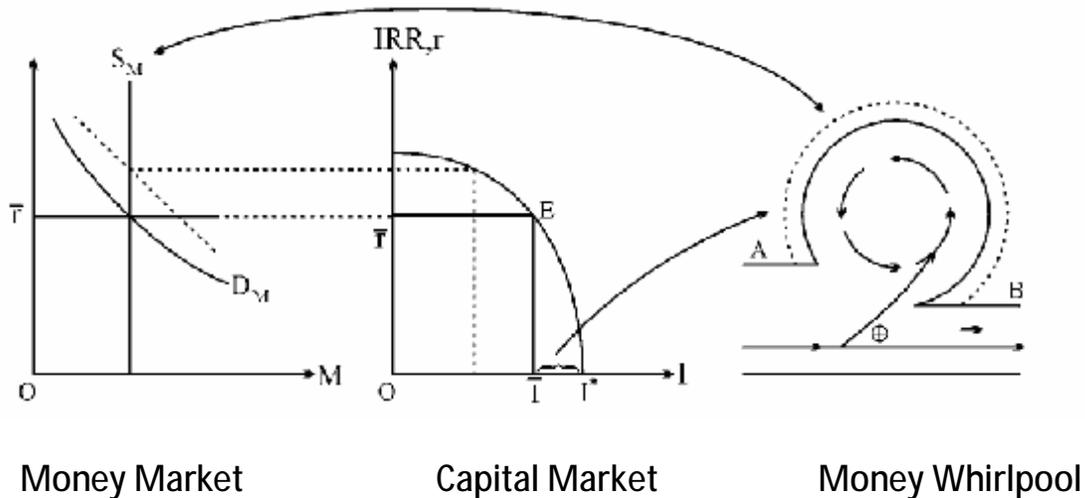
$r =$ Rate of interest artificially makes supply of capital scarce, as put by Keynes. This will eventually produce difference between potential capital available in the economy and actual capital and then leading the difference to the secondary markets which bring about money whirlpool. Speculators take advantage of this whirlpool and try to use the money to the extent that its return is higher than the going rate of interest in the banks. All such processes bring about saving gap using Wicksell's identity which concludes that saving becomes less than investment. Any device which makes such inequality, i.e. saving greater than investment, becomes the prime cause of unemployment in macroeconomics.

More importantly, the incomes received by speculators from the money whirlpool which fails to increase production (and employment), as mentioned above, brings about imbalance between money and commodity which in turn becomes the original source of inflation. This conclusion invalidates cost-push and demand-pull theories of inflation in that both of them rely on inflation as the principal cause of both theories without any explanation on why and how inflation takes place in the first place. Hence, it is unambiguously concluded that speculators' income is the main source of inflation. This is probably the reason why Keynes talks about the harms of speculative activities which bring about instability. Such activities are based on artificial risk which is not endorsed in Islam. More can be found in Keynes' General Theory about unemployment he was much concerned about. To remove the main cause of inflation requires abolishing all kinds of speculative activities which characterize the Islamic Banking/Finance.

The following figures show how money whirlpool emerges as the result of comparing rate of interest (r) with internal rates of return (IRR) of different projects. The difference between potential and actual capital constantly goes to money whirlpool. Speculation does not allow equality between investment and saving to take place. As the result, actual investment falls short of actual saving; hence unemployment. What can we say about the

harms of "interest", Riba, inflicting the economy and its redundancy? An economy with Islamic Banking/Finance and absolute zero nominal interest put in place does not suffer from such perils and is safe from them. With abolishment of the rate of interest not only equality between both potential capital investment and potential saving prevails but also internal rates of return of different projects compete with one another and the project with highest internal rate of return is chosen as the best choice of making investment decision. It becomes easy to see that full employment is another important consequence of removing artificial scarcity of capital as the result of non-existence of (nominal) interest rate; Keynes implies.

Rate of Interest



8=All speculative activities on durable goods which are, by definition, derivatives of interest shall disappear because interest is both necessary and sufficient condition of such activities to occur. To remove any misunderstanding and wrong choice for future generations Keynes was aware of warns us by saying that : "...for every durable commodity we have a rate of interest in terms of itself,--a wheat-rate of interest, a copper-rate of interest, a house-rate of interest, even a steel-plant-rate of interest".

9=Compound interest is the most powerful force of the universe, says Einstein. This can be paraphrased to read:" Compound interest is the most destructive force in human societies". It is in fact a weapon of mass destruction.

10=Zero nominal rates of interest are not only necessary but sufficient for efficient resource allocation; says Milton Friedman, et al.

11=Secondary market in an Islamic Capital Market has to be asset-based but not governed by speculation on either sides of demand and supply of securities.

12=Artificial risk which plays the central role in the conventional secondary markets are not endorsed in Islam, as said above, but real and genuine risk is endorse; as is the case in real investment activities.

13=As soon as we come to understand the harms of interest (Riba) it seems easy to construct the sound operations of Islamic Banks. It then becomes just a matter of matching needs with Islamic contracts which is not hard to do.

14=Conventional banking is a loan house and Islamic bank is a finance house. The former does not get itself directly involved in investment and employment activities and works as a parasite to the system but the latter is an integral part of the system and get directly involved in investment and employment. Classical economists as well as Keynes were on the belief that investment was a function of interest rate. But several reliable evidences show that investment is not sensitive to interest rates but just rate of expected profit which is the case of Islamic banking. In case of Islamic banking the contribution of Islamic bank in investment projects have to be demand determined. Further, Islamic banks are not supposed to enter directly in the market unless there is a demand behind it.

15=One reason that above lines concentrated more on interest, speculation, and money markets and less on Islamic banking operations shall become clear by now. It is because the problem becomes a routine job to avoid interest in all transactions. One final note is that none of the Islamic contracts involves "loan" except Qard-ul Hassan (loan absolutely without any interest) which can be used in conjunction with other Islamic contracts whenever appropriate.

16=All above taken into considerations in addition to justice with unambiguous characterization as being the ultimate goal of Islamic Economics, in conjunction with cooperation and society, the two other pillars, will bring about a Grand Cooperative Islamic Economic System which is defined as increasing-sum game in which everybody benefits a fair share from micro-cooperative enterprises to higher levels of cooperation. In a suitable legal environment as cooperation penetrates into all legal activities and cooperation bonds between and among them is strengthened a Grand Cooperative Islamic Economic System is the natural consequence.

17=The voting system in this Grand Cooperatives, from micro to macro levels, has been proposed to be knowledge-based not on the basis of "one head one vote" system which is void of any logic due to heterogeneity of labor force and breach of one of the principles of justice which says that equal treatment of unequal (labor) is injustice (Zulm).

In the system of "one head one vote" the problem of capital deficiency has become a big problem for which no solution has been proposed, as yet. On the other hand in wealth-based voting system the chances are high to aggravate the greed and one person's vote to dominate the decisions of others. Our proposal will not only moderate the likelihood of one person's decisions to dominate those of others when the combination of wealth-based and knowledge-based system are used but also solves capital deficiency in pure knowledge-based system and at the same time there is a chance for labor to promote his status in the firm and benefit from higher vote.

18=All in all, the goal of each and every entrepreneur in an Islamic state is not supposed to be profit maximization which is basically a short-term vision dominated in capitalism but long-term vision of maximizing social welfare function, because within the former the fallacy of composition is there, i.e., what is good for one person (entity) may not be good for the society. This fallacy is rarely mentioned and detected in the literature, however important.

Sometimes it is said that profit maximization is not bad but greed is bad. However, social welfare function of entrepreneurs has reliable origin in Hadith from our Prophet (PBU) who said: Those who benefit other people

(Society) the most are the best people. In this Hadith self-interest is overwhelmed with social benefit if the long vision of the economic agents is supposed to change our worldview.

19=Rest assured, the natural consequences of all above put together in a coherent and holistic manner of a system will bring about: stable prices, full employment, equitable distribution of income and wealth, counter cyclical movement, and sustained growth.

It is worth noting that capitalism has long strived to fulfill these goals but failed due to pitfalls and shortcomings some of which mentioned above.

Final note: The fundamental differences between the conventional banking system and Islamic Banking system should bow be clear. If not please go back to my above-mentioned book.

Above analysis shows that the question of inflation in Islamic Finance is more of an operational subject than it is rhetoric. We have to use appropriate tools of analysis and to keep the image of Islamic Finance as high as it deserves and consider it "the" gift given to us from Allah (SWT). We, as Muslims, also have the responsibility of strictly avoid damaging the image of Islam by all means.

My apologies for being unable to keep answering above questions shorter than this because of the complexities involved in these important enquiries.