



Market for Lemons and Cigarettes An Islamic Perspective on Market Failure and a Lesson for Eliminating Interest from Economy

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Abstract: The existence of interest and interest based institution in a market economy is in fact a market failure which remains unrecognized even by such Nobel Laureates who have been awarded Nobel Prizes on their research on capital and financial markets. Just as the market of cigarettes is a failure of market to turn away the smokers from their killers, similar it is the failure of interest based financial market to turn away the finance seekers from their killers (providers of finance on interest). This market failure needs to be recognized and the solution for this failure should be found not by intervening in the market but should be found in human behavior. As putting filters on the cigarettes does not stop smokers from being killed and something is needed to change in the consumer behavior to make them turn away from their killer, similarly, correction is needed in the interest based lending and borrowing to turn them away from their killer, the interest based financial institution.

Keywords: Market Failure, Microeconomics, Islamic Economics, Interest-free economy.

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Introduction

Market failure is not merely failure of an economic institution. It is a failure of human mind to perceive where his wellbeing lies and how to prioritize his needs and wants with respect to his wellbeing. This failure then corrupts not merely economic institutions but all institutions regulating human life on earth. It corrupts economic institutions (such as creating market failures), corrupts social institutions (such as destroying family bonds or social harmony) and corrupts moral institutions (resulting into growing incidence and intensity of crimes). The roots of



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all such failures should be looked into the changes taking place in human psyche. The root of such failures, market or non-market and economic or non-economic, lie in the human psyche that dislikes waiting and likes to procrastinate the decision that will bring higher level or higher order enduring wellbeing and instead opts for immediate gratuity no matter how temporary and short lived it is.

Self-regulation of human psyche is the only answer to how to avoid failures in human economic social and moral life. And religion (set of beliefs about life and objective of one's life) is a powerful source of such self-regulation. This paper argues that Islam provides the motivation and principles for self-regulating such human psyche by inculcating the spirit of patience to wait for delayed gratitude of higher order that would be enduring instead of succumbing to the temptation of the lures of temporary lower order immediate gratitude and hence minimizes the chances of failure of various economic, social and moral institutions and promotes human wellbeing. The paper also briefly outlines how such beliefs can be brought into practice to reflect them in all aspects of human behavior. Yamhaqullahurriba and Yurbissadaqat (يَمْحَقُ اللَّهُ الرِّبَا وَيُرْبِي الصَّدَقَاتِ) refers more to correcting the human behavior than correcting an institution.

Market Failure: The Real Question

Akerlof in his seminal work on "Market for Lemons" explained how the information asymmetry between buyer and seller can damage the quality image of good-quality goods traded in a market and hence drives them out of the market leaving only bad quality of the same goods in the market (Akerlof, 1970). In the market of used cars, good quality (used) cars are pushed out of the market because buyers, apprehensive of buying a bad quality (used) cars), discount the prices of all used cars offered in the market and this makes owners of good (used) cars pull their car out of the market and hence leaving only "lemons" behind in the market to be marketed at price higher than the price if there was no information asymmetry. The asymmetry of information thus causes not only adverse selection but also makes good used cars traded outside the competitive market. This market failure is ascribed to the asymmetry of information about the quality of used cars. The seller has more information about the car (as he/she has been driving it for some time) and buyer does not have that much information as he/she should take a decision on the spot and does not have the opportunity to drive for some time to discover all its faults to get all the information that the seller has.

The article on market for lemons became a seminal work in highlighting the issue of information asymmetry and raising the question whether substantial information asymmetry could create market failure or create inefficiency in exchange. Akerlof proved that it was indeed true. The most important implication of this analysis was realized in explaining the imperfections in capital market because of informational asymmetry. This application of the theory could go a long way in streamlining the institutional structure in the Capital markets so that economic consequences of built-in informational symmetry could minimize the failures of capital market that so regularly disturbs the national and global economies, the latest crisis taking place towards the end of last decade. The current solution of informational asymmetry (between capital seeker and capital provider) to fix a pre-determined rate of return on borrowed capital is not the correct solution of informational asymmetry or a solution to adverse selection in capital market. Some other institutional arrangement more consistent with the built-in characteristics of the capital market is needed to avoid such repeated failures in the capital market. Information from the capital seeker can be improved only up to a certain extent. Any further attempt to provide better information to capital provider would not only be futile but would also discourage or demotivate the capital provider. "Better information on selling side worsens the "buyer's curse" (Levin, 2011, p. 657). The removal of the curse of informational asymmetry in capital market does not merely lie in asking capital seeker to do more in revealing the information, but lies in the institutional reforms. The solution may lie in defining the contractual relationship between capital seekers and capital providers to make the relationship more just and fair in sharing the built-in uncertainties.

This is however not the point of this paper. The fact is that the issue of efficiency in the market for lemons may not necessarily be a result of informational asymmetry. In case of Market for Lemons, buyers generally have the same information that sellers have because used cars get so thoroughly checked with the help of professional advice and quality almost precisely so ascertained that whatever the defects in the car remain may often be unknown to both the parties. That is why used cars do not often turn out to be lemon. The point of this paper is that Akerlof's argument about market failure in case of lemons raises more serious and relevant questions than merely the question whether the informational asymmetry causes adverse selection in the market. It raises the issue about rationality of choice on part of one party or an irregularity (dishonesty) on the part of the other party.

a) There is some irrationality in the consumer (buyer) behavior rather than informational asymmetry that is not allowing market to function competitively

and the adverse selection will continue even if the informational asymmetry is minimized, or

b) There are some irregularities on the part of the seller (selling the lemon) that the market is unable to penalize and hence is elimination of adverse selection in the market unavoidable.

If we replace the market of used cars with market of cigarettes, we see the same phenomenon that we see in the market for lemons. The cigarettes happen to cause bad health (leading to lung cancer)¹, so are lemons that cause mental and physical torture. Everybody knows that cigarettes are not good for health and they most likely may cause a serious damage to health as everyone knows lemons sometimes are not good and cause serious trouble. The pain from lemon is dispensable. The lemon can be dispensed with and pain is removed. In case of cigarettes, once it is discovered that it has damaged the health, disposing of cigarettes may not necessarily mean that the pain will be disposed of too, immediately. The cigarettes are sold in the market at a price much higher than their true value as Lemons are sold at a price higher than their true value. Cigarettes drive out some good counter (healthy) things out from the market. The used cars (that contain lemons as well) are sold in the market and so are cigarettes (that contain the diseases). The market of cigarettes destroys the market of healthy counterparts in the market as lemons destroy the good used cars. It has been argued earlier that used car may not necessarily have uncertainty about the quality of the car whereas in case of cigarettes when they are offered in the market, each packet carries an unambiguous warning, "The Surgeon General Has Determined That Cigarette Smoking causes Lung Cancer, Heart Disease, Emphysema, and May Complicate Pregnancy."2.

The case of the lemons generated the theory that asymmetry of information leads to market failure, the case of cigarettes should attract the attention of economists to explain that despite absence of informational asymmetry, market fails to penalize the health damaging products and health damaging products continue to get resources allocated to production of cigarettes instead of being allocated to health promoting products. In case of cigarettes, information of course is not an issue. The seller and buyer both have same information precisely with same level of certainty. For some users of used cars, the car may turn out lemon. For others, the

¹ As not every used car is lemon, so is the fact not every smoker becomes a patient of cancer.

² This warning in 1969 was "Cigarette Smoking Is Dangerous to Your Health".

used cars are peach. So are cigarettes. Some users may get cancer, some may not. So, even on account of information there is no substantial difference between used cars and cigarettes. The question then is why market of cigarettes is not analyzed as a case of market failure while the case of used cars is analyzed as case of market failure.

The rationale of the presence of used cars in the market is objective. When a used car is offered in the market, everybody knows the car is 'used' and it may have a problem, otherwise why it will be in the market. Used cars are not regarded 'bads' in the market. The used cars are still 'goods' because they still have the capacity to benefit in the sense that they can meet certain defined needs. They are 'needs' because they contribute something materially 'good' to some aspect of our life. Used cars have capacity to carry us (and our loads) long distances with ease and time saved. Used cars are therefore 'goods', as much as the new cars are. Only lemons, among used cars are 'bads'. (Sometime new cars may also happen to be lemons). If used cars are not a 'need' then it will not be a rational choice to 'want' used cars. Used cars that happen to include lemons, therefore, get traded as 'goods' and their prices are determined in 'goods' market for a 'good' reason. Lemons are not purchased "bads". They are purchased "goods" because they enter the market as goods. Lemons may often be wanted as 'goods' even if buyer knows with certainty that it is actually a lemon. It is still wanted with the hope that it can be fixed and that benefit of getting it fixed will be higher than the cost of fixing it. If the lemons are creating adverse selection and pushing the good used cars out of the market, then this is an issue whose substance is not so obvious.

Compare the market for lemons with the market for cigarettes. Cigarettes are identified as 'bads' rather than 'goods' by smokers as well as by nonsmokers. The fundamental difference between 'bads' and 'goods' is that though they both may be claimed to be having utility for the consumer yet the former would not be considered a human 'need' while the latter would be considered human 'need' depending on whether it is damaging or beneficial to any aspect of human life. If something has utility for someone but is simultaneously damaging to any aspect of his/her life, then it needs to be identified differently from something that has utility and is unambiguously making material contribution to any aspect of human life. We may categorize such things that may have utility but are damaging to any aspect of human life as 'bads' though they may still be 'wanted' in the market. The things

³ The terms used with single quotation marks (apostrophes) indicate that the term is not being used in conventional economic jargon but signifies the layman understanding of the term.

that have utility and capable of materially contributing to any aspect of human life are to be categorized as 'goods' and they are 'needed' in the market.

This distinction between want and need raises the fundamental question whether the matter of adverse selection in the market is a matter of concern because if a want is satisfied then it means that some need has been sacrificed (as the resources are scarce). If market leads to the selection 'bads' and allows 'bads' to push 'goods' out of the market, this needs to be considered a market failure? If lemons' sale indicates market failure then, this failure is not as serious a concern as the market failure indicated by the sale of cigarettes is. The 'bads' are not bad because of asymmetry of information about their quality. Nor they are bad because of any of such economic terminologies of market failure as transaction cost or moral hazard or externality⁴. But they are bad because of something bad on the part of the consumer or on the part of producer. The failure of human behavior to act with right mind underlies such market failure. Since axioms of rational choice do not include right mind in the decision making, the Economics built on the axioms of rational choice, therefore, does not recognize this market failure. The socially irresponsible behavior of producer and the procrastinating behavior⁵ of consumer underlies this market failure. The resources allocated to these 'bads' would be at the cost of foregoing or postponing some 'goods' hence resulting into suboptimal 'real' contribution to the human life. The exchange of these "bads" may also destroy market of "goods". Hence the presence of 'bads' in the market is market failure that does not penalize socially irresponsible behavior of a producer or a morally 'irrational' behavior of a consumer. The solution of such market failures will bring in the discussion of role of Islamic principles of decision making and how to bring the application of these principles in the contemporary real economic world. This leads to the need for introducing institutions in the economy that will make producers behave in a socially responsible manner and consumers to behave in morally rational manner⁶. Principles of Islamic system of life do not imply intervention in the market to correct such failures. Principles of Islamic system believe in correcting the behavior. The correction of such market failures lies in correcting the consumer

⁴ These bads are not the result of so called externalities in the production process, like health hazard created by a steel mill that pollutes air or health hazard created by chemical factory that pollutes river.

⁵ Preferring immediate gratuity over delayed rewards, or preferring to delay need for immediate pleasure.

⁶ Islamic law has specific provisions and Islamic jurists and Islamic scholars have discussed this in detail. Further distinction on the distinction between want and need and its significance in Islamic economy can be seen in Khan (2015).

behavior and/or consumer behavior. Such corrections require an appropriate institutional framework put in place.

Some consumers can be irrational some of the time. This is reality. There can be several forms of irrational behavior. Pursuing wants while ignoring needs has already is one form. Procrastinating attitude i.e. preferring short lived immediate gratuity over long term expected pleasure is another form of irrational attitude. These are not related to information. Market for lemons therefore will not be relevant to understand market failure on such accounts. Market for cigarettes, alcohol, drugs, gambling, junk food, etc. are examples that is distorting allocation of resources and creating inefficiency in improving the wellbeing. Intervention in the market hardly can achieve any results. Institutions in the society and religion being the most powerful institution can play a better role in eliminating such forms of irrational attitudes and hence avoiding market failures.

The irregularities on the part of the seller/producer can be another source of market failure. Economic analysis assumes away dishonesty on the part of the seller because market can penalize the dishonest behavior on the part of the seller. Presence of lemons in the market for lemons implies that market is unable to penalize the dishonesty on the part of the seller. It is less obvious in case of lemons than it is in case of cigarettes where dishonesty takes a different shape. Consumer's wants are exploited by presenting them as their needs through advertising, knowing that it is not need and knowing that it creates cancer and other needs. In case of lemons, the sellers luring techniques may not be as unethical as it is in case of cigarettes. Intervention in the market to curb unethical practices does not work effectively. Here to religion provides motivation for adhering to ethical norms. Religion inculcates the sense of social responsibility which does not allow the seller and producer to ignore social responsibility.

Adverse selection in the market may also arise on account of the nature of the commodity. Used cars are not like fruits. A seller of fruits cannot afford to sell bad fruit because he will be immediately out of the market. But sellers of used cars can stay in market even after selling lemons. Reducing informational asymmetry will not throw the sellers of lemons out of the market of used cars. Sellers of lemon will continue causing adverse selection. Same is true for cigarettes. Sellers of cigarettes continue selling cigarettes even after the informed confirmation that cigarettes cause cancer. Sale of lemons thrives on exploiting the inevitable 'need' to have an affordable vehicle whereas sale of cigarettes thrives on the exploiting addiction of tobacco. Reducing asymmetry of information will not correct adverse selection.

The instinct to exploit others for the sake of the sake of self-interest is at the root of this market failure. The correction of this market failure too requires correction in the behavior of seller not to exploit the weakness others. In Islamic jargon this exploitation is called Zulm as mentioned in verse 2:275 in the context of prohibiting Riba. Riba reflects market failure because otherwise there is no economic justification for it to exist in the market. Samuelson, the Nobel Laureate in one of the old edition of his book put on the top of the chapter on Interest an anonymous quotation "how to eat cake and have it at the same time? Lend it on interest". Samuelson later on removed this quotation from his book.

The question is, if adverse selection and market failures of the type mentioned above will not be eliminated by reducing asymmetry of information then what will? The solution does not lie in the intervention in the market or in public policy.

There is huge market for cigarettes. (And this is not the only commodity of its type in the market. There are many). People pay for cigarettes and similar commodities and in return get cancer and similar harms to human life. What name we will give to the counter value that they pay for. Imagine interest carries no rational counter value but economists like to call it time value of money. What we would like to call the value of money that we claim in the form of cigarettes. Cigarettes is ...what... value of money? That is true for all 'bads' in the market such as alcohol, drugs, prostitution, etc. 'Bads' arewhat.... value of money? What explains buying temporary benefit by paying with permanent, often, irreversible sufferings? What name do we assign to this value that equates utility worth of say \$20,000 (in the form of immediate gratification) obtained from cigarettes⁷ to a disease like cancer whose pain management only (not treatment) would cost much more than \$20,000 in addition to unbearable pain, suffering and death caused by it. What human instinct makes man prefer temporary pleasure now over avoiding permanent suffering in future? Psychology would relate this attitude to human psyche and analyze it in the context of procrastinating behavior.

Let us leave this here and consider the Finance world, more specifically the banking world, and analyze a curious phenomenon like the market of Bads. Interest has no economic logic. As Samuelson once put an anonymous quotation on the top of the chapter on Interest, in an old edition of his Economics, "How to eat

⁷ According to Economics, money paid for the cigarettes represents the value of utility obtained from smoking cigarettes.

your cake and have it. Lend it on interest". I do not know he removed it later. But it does clearly express economic stupidity. Quran called this stupidity Zulm (injustice). Why people are bearing this Zulm and the banks are thriving on the people's desire to bear this Zulm that is killing them. It is just like smokers and Tobacco industry where the industry is thriving on the desire of smokers to bear the Zulm (smoking) that is killing them. Banking is their best clients and still thriving just like Tobacco industry is killing their best clients and still thriving. Banking industry is a much bigger reflection of market failure than the market failure reflected by tobacco industry, alcohol industry, drugs trade, prostitution profession and many others. This market failure cannot be corrected by intervention in the market or by imposing legal sanctions. The legal sanctions did eliminate the drugs trade or tobacco industry or prostitution profession. Similarly, interest cannot be eliminated by legal sanctions on banks to apply Sharia rules in the industry. The last 40 years' experience proves that imposing sharia in banking business did not eliminate interest even from so called Islamic banks.

As mentioned above in the case of cigarette industry, the correction is needed in the economic behavior of the producers (providing the banking the banking service) and the consumers (using the banking services. Providers of banking service need to realize that they should give a service that would not be regarded as fight with Allah and His messenger and that they will not be making Zulm on their clients in the spirit of the prohibition of Riba. Applying sharia in words and closing eyes from the side of Zulm makes them like cigarette manufactures who put a filter on the cigarettes to satisfy themselves that they are doing Zulm on their clients. On the same note, the customers of the bank needs to realize that though banking service is helping them to reap some short-term benefits in this world, yet they must make sure that the benefit does not yield them an enduring harm in the world here-after. This realization on either side cannot come through government intervention.

How to inculcate Islamic spirit in the economic behavior of those who intend to provide banking service and of those who intend to benefit from their service is not an issue that can be resolved within the industry. It is bigger problem. It is problem of correcting economic behavior of man in the society. If interest is to be eliminated and if Islamic banking and finance is to be practiced, then the first step would be to inculcated Islamic spirit in the society that would make the businessmen and the consumers to behave in the market in Islamic economic spirit. The

market failures because of human psyche need to be corrected before principles of economic finance are implemented in the economy. Instinct has particularly been highlighted and instructed to be avoided in the teachings of Islam⁸.

Human Psyche that Leads to this Failure in Human Behavior

The Quran in chapter 91 mentions, "By the Nafs and the proportion and order given to it, and its inspiration as to its wrong and its right; Truly he succeeds who purifies it, and he fails that corrupts it." NAFS, an Arabic term referring to human self, intrinsically, means the conscious state of mind that enables man to distinguish what is wrong and what is right and inspires the man to take a decision what to do or not to do. According to this chapter (ash-Shams), a soul will succeed if it keeps itself pure and it will fail if it keeps itself corrupt. In biological realities of the worldly life it can be interpreted as referring to the human brain that has faculties to understand and analyze to distinguish between bad and good, and wrong and right. The use of the faculty to see and do good (or right) leads to a state that the Quran refers to as success of human self and the use of the faculty to do bad (or wrong) refers to failure of human self. This is a positive (not normative) description of human psyche and what it means for human wellbeing.

Human psyche seeks pleasure and the pleasure is sought immediately or as early as possible. Waiting is hard and frustrating. The gratification is sought with respect to needs (such as a car for travel or transport convenience) as well as with respect to wants (such as cigarette for smoking for subjective pleasure). There is an innate desire to have what we need or what we want and we want it now than later. We want it without any delay. It is this instinct that is exploited in the advertising and marketing campaigns and it is this instinct that underlies the urge to do something now despite that it may invite severe punishment later. That it is a part of the human nature to want immediate pleasure and ignore the later consequences

⁸ The Quran says, (١٥٠٨) وَمُنْأَصَّلُّمَنَاتَّبَعَهَوَاهُبِغَيْرِ هُدُّمَنَاللَّهَإِنَّاللَّهَالِيَّهُدِيالْقُوْمَالظَّالِمِينَ (And who is more astray than one who follows his desire without guidance from Allah? Indeed, Allah does not guide the wrong-doing people. And also,

Have you seen he who has taken as his god his [own] desire, and Allah has sent him astray knowing him (as such) and has set a seal upon his hearing and his heart and put over his vision a veil? So, who will guide him after Allah? Then will you not be reminded? Also (45:23).

⁹ See the authentic translation of this chapter at the end of this paper.

as mentioned in the Quran.¹⁰ It is the human nature to get easily lured by the immediate gratification often ignoring the consequences afterwards, no matter how severe they would be.

The research in Neuro-Economics involved in imaging people's brains as they made choices between small but immediate rewards (immediate gratuity) or larger awards that they would receive later (delayed gratuity) concluded that there are different neural systems in our brain that solve different types of problems. Human behavior is dictated by the competition or cooperation between these neural systems. Neither neural science nor psychology tells us how the decision of cooperation in different neural systems is achieved or what triggers the dominance of one neural system over other.

The information on this in the Quran is, "And [by] a soul and [by] Him Who perfected it. And inspired it (Nafs) with conscience of what is wrong for it and (what is) right for it." American psycho-biologist Roger W Sperry¹¹, discovered that the human brain has two very different ways of thinking; One (the right side of brain) processes information looking first at the whole picture then the details. The other (the left brain) processes information looking first at the pieces before putting them together to get the whole. The psychologists referring to two sides of brain now say that wrong decisions are taken when left brain analysis dominates right brain's analysis and right decisions are taken when right brain's analysis dominates left brain analysis. It is competition/cooperation (or conflict/compatibility) between the two sides of brain that determines whether to prefer immediate temporary gratuity at the cost of suffering enduring pain later. This is what is referred to in the Quran (91:8) "So inspired wrong or right of it (NAFS or mind)". We have in another place in the Quran (12:53 and 75:2) that hints about NAFS AMMARA (mind's persistent inclination to NAFS LAWWAMA (mind's self-reproaching or self-accusing). "Our emotional brain has a hard time imagining the future, even though our logical brain clearly sees the future consequences of our current actions," (Laibson, an economist in Harvard's Faculty of Arts and Sciences). "Our emotional brain wants to max out the credit card, order dessert, and smoke a cigarette. Our logical brain knows we should save for retirement, go for a jog, and quit smoking.... To understand why we feel internally conflicted, it will help to

[&]quot;Man is created of haste" (The Quran 21:37). "And Man is ever hasty" (The Quran 17:11). The line 72 of Chapter 33 refers to man taking decision while being unjust to himself and ignoring (the consequences).

¹¹ Sperry was awarded Nobel Prize in 1981.

know how myopic and forward-looking brain systems value rewards and how these systems talk to one another,"¹². For the explanation of why failure in market or in life occur, Economists therefore should consider human psyche and in the psychological factors rather than in mathematical axioms of rationality. The goal should be to better understand how the emotion-related side of brain (left side of brain or NAFS AMMARAH) and calculating systems of brain (right side of brain or NAFS LAWWAMAH) interact and to understand how the brain governs which system comes out victorious.

Concluding this discussion that human psyche to procrastinate and environment that makes one sustain the procrastinating behavior is behind human failure to take 'right' decision. This leads to different failures whether it is market failure or social failure or moral failure. How to correct market failure or any socio-economic failure in the society, in fact, implies how to reform human psyche. In other words, the question is how to build in human behavior, a preference for higher delayed gratification over lower order immediate gratification.

What Can Reform Human Psyche

If it is all in brain, then what can be done to reform the human psyche? What can be done for left brain analysis not to dominate the right brain analysis or how to make different systems in brains to cooperate for the overall wellbeing of man rather than trying to conflict and dominate resulting into lower level of wellbeing of man? What controls the brain and lets left or right part side of brain to dominate? In short, the question is, "Is brain responsible for all what we do? If yes, why and how?"

Science has no answer to this question. Neither biology nor psychology nor economics has answer to this question. If we do not have answer to this question, we then have no solution to what we do in market and elsewhere in our life. The failures of market and failures of life therefore must be accepted as a fact of life. Temporary incomplete solutions or second best solutions may be found in terms of interventions from government or other institutions but failure will still exist waiting for the opportunity to re-appear again in one form of the other.

12 Why Immediate gratification takes over delayed gratification (http://news.harvard.edu/gazette/2004/10.21/07-brainbattle.html)

The religion however does have an answer. Religion says it is heart that can solve the problem. The problem of failure of human mind, hence the problem of the failure of socio-economic institutions built for the human wellbeing. But language of science does not recognize the role of heart in decision making. Are tears that come into eyes from losing a loved one generated in heart or in brain? All scientific investigation on understanding human behavior concentrate on the brain rather than on heart to find explanation of human behavior. The science has yet to confirm the role of heart in shaping human behavior. But religion has clear indication that it is heart that leads the human behavior to do good or bad. Before we see what Islam says about heart let us recapitulate what common sense believes with respect to heart. Common sense believes that It is the heart where lies faith, love, beauty, kindness appreciation etc. And it is heart where hate, ugliness, prejudices, etc. lie. The so-called peace of mind is usually believed to come through heart. The feelings of sympathy, happiness, anger, likes and dislikes are believed to be initiated in the heart before they are reflected in actions and reactions. The religion, the beliefs and customs first appear in heart before coming to brain.

Religion refers explicitly to heart when referring to good or bad behavior. Religion fixes responsibility on heart for all good and bad reactions of man. Islam is very specific in describing the role of heart in decision making, particularly when referring to the decision that refer to taking good actions now or postponing them or opting for immediate pleasure while ignoring its delayed consequences.

The Quran referred directly to QALB (heart) when emphasizing the faculty of Fiqh (deep understanding or full comprehension). The faculty of comprehension and understanding has been mentioned about heart and never about brain. Note the following verses in the Quran.

"We have assigned to hell many jinn and humans: they have **hearts** but they **do not understand**...." (7: 179).

"That is because they (the hypocrites) believed then disbelieved; therefore, a seal has been set on their hearts, so they **do not understand**" (63:3).

"We have laid veils on their **hearts** lest they understand it" (18:57).

The line 46 in chapter 22 of the Quran says "Verily, it is not the eyes that grow blind, but it is the hearts which are in the breasts that grow blind".

It is the blindness of heart, not of eyes, that does not allow man to see clearly the delayed gratitude that lies in the future in return for foregoing an immediate gratitude. While warning about what will benefit on the Day of Judgment (when good deeds will be rewarded and bad deeds will be punished), the Quran says:

"The Day when neither money nor sons will profit (anyone), Except for him who comes up to Allah (God) with a sound heart. (26:88-89). According to these lines, it is heart not brain that is responsible for the human behavior. The Prophet said, "In the human body, there is a small organ. If this organ is 'healthy', i.e. if this organ is a good, then the whole body would be in a good condition. If not, then the whole body would be in a bad condition; Beware, this is the heart. "13

The phrase "sealed hearts" or "hearts covered and rapped up" or "hardened hearts" has been used to describe the insistence of man not to understand the clear analysis of costs and benefits, or of good and bad, or of short-lived temporary pleasure and permanent or continuing delayed gratuity or enduring severe pain. In other words, when there is failure to correctly understand and weigh the analysis of left side of brain relative to the analysis of right side brain, then the blame goes to heart. Some of the lines in the Quran that convey this role of heart are reproduced below:

- 1. "Indeed, those who disbelieve it is all the same for them whether you warn them or do not warn them they will not believe. Allah has set a **seal** upon their hearts ..." (2:6-7). The disbelief is a matter of heart. (There is no reference to brain).
- 2. Is it that whenever there came to you a Messenger with what you yourselves desired not, you grew arrogant? Some, you disbelieved and some, you killed. And they said, "Our hearts are **wrapped**." (2:87-88)

Also, see 4:155, 6:25. 7:100, 7:101, 7:179, 9:87,

If belief lies in heart then it means it can always rule or overrule the analysis of brain in either of its part, left or right.

Why heart would do that? Because it is where emotions and feelings develop that accommodate such deviations as perversity (seeking badness), saying and doing what is not right (batil), succumbing to instinctive desires (Ahwa), influenced by demonstration of Mutrafeen (the rich). It is heart where lie beliefs, as mentioned in the Quran. Fear, (23:60), (33;10), hypocrisy (9:77), Piety (22:32), Purity (33:53), Anger (9:15), Doubt (9:45), Denial (16:22), Intent (33:5) are also mentioned to lie in the heart.

The good or bad actions have been attributed to heart. And it is heart that will be made accountable for good and bad deeds. "....but (all this was) that Allah might test **what is in** your breasts and purge **what is in** your hearts...And Allah is Knowing of that within the breasts." (3:154).

The Quran has not referred to brain directly. Indirect reference to brain functions can be found when mentioning FIKR (thinking, reason and processing of information relating to various human actions). For the science to understand how heart can do all this job, one Hadith may give a clue to investigate this scientifically. The Hadith says Satan enters blood stream to misguide human beings. The blood is pumped by heart and provides oxygen to mind where the left side brain and right side brain are operating. That is how Satan reaches the left side of brain to force the left side brain to dominate right side brain's analysis. Heart controls the blood flow. That is why it makes sense to work on correcting the heart so that it sends blood to allow right side brain to make right decisions.

How to train or change hearts in Muslim society so that it does not lead to failure of human mind to go astray and cause failure of socio-economic institutions in the society, like markets, marriages, family lives, social harmony, care for neighbor, amarbilmaaroof and nahi 'anilmunkir ? (يَأْمُرُونَ بِاللّعروفِ وَيَنهَونَ عَنِ النّكرِ). This takes us out from the realm of Economics. It brings us to psychology, sociology and religion that shape human psyche. Islam aims at correcting human psyche and saving human mind getting corrupted by the worldly lures. I will point only two sources identified in teachings of the Quran and Sunnah that will correct heart. And that is Salah (Prayers) and Sadaqaat together which has been mentioned about 30 times in the Quran. I leave this to elaborate to those who have expertise analyzing the effect of religious injunctions on human psyche.

Lesson for the Elimination of Interest for Economy and for the Current Practice of Islamic Banking and Finance

Coming to the subject of elimination of interest from the economy, the strategy to introduce Islamic banking in contemporary socio-economic setup will lead to a market failure of the type observed in the market of lemons and market of cigarettes. Like market of lemons, the sellers of Islamic banking services (Used car) will only be interested in making their product look like an Islamic product (peach). They have no economic reason to make it a true peach. The problem for the consumers (buyers) of Islamic banking products is that a lemon (a product that carries element of Zulm, as defined in the Quran regarding Interest) can cause them an

enduring suffering caused Akhirah. This thought may be keeping several genuine buyers (of Islamic finance) away the current Islamic financial market. Those who are compelled to use the products currently available in the market end up paying more than the genuine price (as in the case of buyers of lemons). It is probably this reason that Islamic banking in Muslim dominant areas have not been able to capture more than 15-20 percent market from the potential Islamic financial market. Islamic financial market therefore will remain inefficient as the market of used cars remains inefficient.

Considering from another angle, banking industry is like cigarettes industry. It lures the Muslims and sells them products based on interest despite their belief that this will earn them an enduring punishment in Hereafter. Islamic banks offer the same product but putting a sharia filter on it and hence giving the product an Islamic image. (There is general impression that Islamic banking is not doing 'Islamic' banking and that they are only doing 'heela'). But still the needy are compelled to buy the product, knowing that it may prove harmful (opting for immediate gratuity despite delayed but enduring punishment). Banking industry is exploiting the 'need' of people like Tobacco industry exploits the 'want' of the people. It is a failure of market that allows the sellers to sell what people do not need and allows to sell it at higher price than their genuine.

The conclusion is that existence of interest based banking is a market failure because Economics does not justify it. Making it Islamic by applying sharia rules in the documents of these institutions is a futile exercise from the point of view of market efficiency because it does not correct the underlying market failure. Islamic principles of economics and finance can develop an efficient financial market provided the interest based financial market is uprooted from the economy from its roots as the Quran says, "(2:276)

(Allah destroys interest).

If this is not possible and Islamic financial products must be provided within the existing institutional set up of financial transactions (which is an outcome of market failure), then this can be materialized only if there are large numbers of sellers and buyers (financial products) that have right 'heart' enter the market to supply and demand right Islamic financial products in the market. These sellers of financial products will make their products not merely in form but also in spirit as well and the potential buyers of such products will be willing to sacrifice their needs rather than buy a doubtful or openly harmful products. Interest therefore cannot be eliminated from the economy unless the hearts of people are changed that makes them not to prefer temporary worldly gains that would cause them to

bear enduring severe pains in the Hereafter. Islamic banking will not come into existence in its true spirit unless there are sellers willing to sell financial products only in true spirit and there are enough buyers in the market who would be willing to pay the true price of the product even if it means paying higher price from the worldly point of view to avoid the enduring cost in the Hereafter. To eliminate interest from economy and to introduce Islamic finance in its true spirit we need to work on the hearts of the people to make them fully conscious of the Islamic spirit rather applying sharia on the papers of the banking industry.

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Translation of Surha Ash-Shams

- 91.1 By the sun and its brightness
- 91.2 By the Moon as she follows him
- 91.3 By the Day as it shows up (the Sun's) glory
- 91.4 By the night when it covers it
- 91.5 By the Sky and its structure
- 91.6 By the Earth and its expanse
- 91.7 By the Earth and its (wide) expanse
- 91.8 And its enlightenment as to its wrong and its right
- 91.9 Truly he succeeds that purifies it
- 91.10 And he fails that corrupts it!
- 91.11The Thamud (people) rejected (their prophet) through their inordinate wrong-doing,

to top

- 91.12Behold, the most wicked man among them was deputed (for impiety)
- 91.13But the Messenger of Allah said to them: "It is a She-camel of Allah! And (bar her not from) having her drink!"
- 91.14Then they rejected him (as a false prophet), and they hamstrung her. So their Lord, on account of their crime, obliterated their traces and made them equal (in destruction, high and low)!
- 91.15And for Him is no fear of its consequences.