

## The Stock-Exchange from an Islamic Perspective

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Abstract. The normative rules governing exchange in an Islamic stock market are discussed and the free enterprise capitals model of stock market is evaluated from the Islamic and economic points of view. Exchange of financial claims is found more vulnerable to hazard and to lack of information, both contrary to Islamic rules of exchange. The efficiency criteria of capitalist stock markets are critically examined in the light of the theories of P. Cootner, P.A. Samuelson and J.M. Keynes. The dominance of speculative motives (vs. that of real investment) and the nature of interaction among "professional" and "non-professional" market players, deprive the capitalist stock market of internal stabilizers and undermine its efficiency. Efficiency in the financial market cannot be ensured by leaving it free and ungoverned. It is necessary to reinforce Islamic rules. Some regulatory measures are indicated.

### I. Introduction

This paper examines the general principles and the special constraints which characterize the normative Islamic stock exchange (NISE). We set forth to provide a *Shariah*-oriented appraisal to the contemporary stock exchange (CSE) together with an appraisal of its efficiency hypothesis. We portray the NISE as one which abides by *Shariah*, bearing in mind that *Shariah* rules are focused on the targeting of maximum possible social merits at the least possible demerits, thus requesting both informational and operational efficiency. We are mainly concerned with the basic forces underlying the stock exchange rather than its routine operational and managerial aspects, a matter which we may address only casually. Of course, it could have been a vital issue to address the alternative topic of critically evaluating the newly growing stock exchange markets in Arab and Muslim countries to help re-direct them more closely towards their developmental targets. However, we believe priority must be given at this stage to the theoretical statement of basic norms that must be adhered to in the process of setting up an Islamic stock exchange.

The paper consists of three main sections. In the first section we demonstrate the *Shariah* aspects which characterize what we call the Normative Islamic stock exchange (NISE), as opposed to the contemporary one (CSE). The second section questions the pertinence of the efficient market hypothesis to the CSE, with special reference to some fundamental *Shariah restraints*. In the third section we highlight the consequence of violating *Shariah* restraints by the CSE. We conclude the paper by deriving suitable criteria determining the NISE while offering possible directives to show how it can be projected in real life.

## II. The Modern Corporation in the Jurists' View

The stock exchange is the market place where various forms of financial securities are bought and sold. Since modern stock markets are mainly dominated by corporate shares, and bonds to a lesser extent, it is only natural to start examining the Islamic stand as regards the acceptability or otherwise of the modern corporation as a form of business organisation.

The corporate sector, indeed, is the spearhead of economic growth in the developed world, as it has facilitated the mobilization of massive capital investments, to finance ambitiously large scale projects. The emergence of the limited liability concept, as stated by Hicks (1982), has historically been associated by the construction of the British railway system. In the contemporary Muslim nations this idea has been widely advocated and encouraged by governments to face harsh developmental challenges. Most notably, the pioneering Islamic entrepreneurs have quickly picked up the corporate idea, to the effect that incorporation is presently a distinctive organizational feature for most Islamic banks. The concomitant provisions of independent legal entity and limited liability provision have already been established, not only through a strong social convention in the Muslim world, but more directly through the explicit approval by contemporary Muslim jurists. The critical element that remains of utmost concern to Muslim jurists is to ensure that corporate bonds and other interest-based tools of financing are categorically banned. Otherwise, acquisition of corporate shares is allowed provided that they represent companies that are engaged in permissible real economic activities, hence excluding banks and financial institutions that operate in money markets, as well as dealers in gold and silver, together with producers of alcoholic products, pigs meat, gambling activities, weapons, and other non-ethical products<sup>(1)</sup>.

Given the latter provision, we set forth to discuss the fundamental principles which characterize the Islamic stock exchange model (NISE) as opposed to the contemporary model (CSE).

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(1) This juristic view is supported by various fatawa issued by notable contemporary scholars like Sheikh Mohammed bin Salih bin Othaimin, Sheikh Abdullah bin Manee', Sheikh Mustafa Alzarqa, *Shariah* Board of AlRajhi Banking and Investment Corporation, and the Fiqh Academy of the Organisation of the Islamic Conference (OIC).

### ***The Juristic Concept of ‘Company’***

As a background for our present inquiry it is worthwhile providing a brief note on how the concept of *company*, (*sharikah*) as it is known in the received Islamic jurisprudence differs from the modern concept of a corporation. The latter was never known in earlier Islamic history, thus justifying the initial debate among contemporary Islamic jurists about the acceptability (or otherwise) of company as an independent legal entity with a limited liability provision - a matter which remained for sometime a controversial issue. Perhaps, that was the second most crucial issue to be faced by contemporary Islamic jurists ranking next in importance after the issue of interest-rate prohibition, though it is now settled through explicit consensus that the modern corporation, in general, does not violate *Shariah*. Still, it is interesting to draw some useful insight from the special nature of company contracts that had been recognized by the received *Shariah* jurisprudence. In general, jurists classify company contracts into three main classes as follows<sup>(2)</sup>.

#### *a - Financial (or Properties ) company*

It is formed when two or more partners come together in a joint contract to contribute specific shares of capital for trade purposes. Such companies are classified further into equal shares companies (*Mufawada*) and unequal shares companies (*‘Anan*). In *Mufawada* contracts partners authorize each other to act on behalf of each other during both the presence or absence of the other partner, and are held committed to each other’s actions. Every partner enjoys the status of being both ‘agent’ and ‘guarantor’ in the *Mufawada* company. But in *‘Anan* company the actions of partners are restricted such that every partner enjoys the status of ‘agent’ subject to approval for his actions, but not that of ‘guarantor’. The *Mufawada* company turns into a *‘Anan* company whenever the condition of equality of partners capital or debts is violated.

Unlike *‘Anan* company which is generally accepted by the main schools of jurisprudence, the *Mufawada* company is rejected by Shafi’i, Hanbali, Zahiri, and Ja’afari schools while accepted only by Hanafi and Maliki schools.

#### *b- Works Company*

It arises when the partners are skilled workers possessing similar or different skills, combining their efforts in a single company to offer their services at market price to the public. The works company is also classified into *Mufawada* and *‘Anan* but it is rejected by Shafi’i, Zahiri, and Ja’afari schools while being accepted by Hanafi, Maliki, and Hanbali schools.

#### *c- Credit Company*

It arises when partners do not possess more than popular names in trade and they simply carry out trade using the capital of an inactive partner. This type of company is highly controversial in Islamic jurisprudence and it is only accepted by Hanafis and Hanbalis.

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(2) See **Alkhatat, Izzat A.**, Vol. 2, pp. 7-12

*d- the Mudaraba Company*

It arises when one party (*Rabbulmal*) puts up capital to another party (*Mudarib*) in order to carry on trade on profit-sharing basis. If profit is realized it would be distributed between the two parties in accordance with an agreed upon profit sharing ratio. Whereas if loss is incurred the *Mudharib* loses any reward for his effort and the whole financial loss would be born by *Rabbulmal*. The *mudaraba* company is fundamentally accepted by all schools of Islamic jurisprudence and it is presently advocated by Muslim economists as the main alternative to interest-based finance.

In the light of the above brief review we may notice sharp similarities between *Mudaraba* company and the modern financial trust, and also between financial company and the modern partnership. It clearly appears that the juristic concept of company falls in line with the modern class of personal companies, that is, the class of companies initiated through the conclusion of mutual agreement between two or more individual partners to carry out business for profit and bear the consequences of their actions on the basis of full personal responsibility. However, the concept of financial (as opposed to personal) company in modern terminology differs significantly from the corresponding juristic concept in the sense that the latter is specifically based on the contracting partners who have deliberately combined both money and physical effort in the running of their company. As a result the company's contract shall automatically be liquidated if any one partner decides to discontinue in the company. Even if someone else offers to take his position, the remaining partners may legitimately liquidate the company and refuse the new offer. In contrast, the contemporary concept of a financial corporation ignores the personal element completely. Partners need not know each other and the company's contract is insensitive to exit of old partners or entry of new partners. Partners are related to the modern financial corporation only through their financial shares which define both their financial liabilities and the number of votes they may exercise annually in the general assembly's meeting.

Obviously, earlier jurists did not look at 'company' and 'its partners' as two distinct entities like the case of modern financial corporation which possesses its own legal entity independently of its partners (i.e. shareholders). This point explains why it was difficult for some contemporary jurists to justify the modern corporation in terms of the received rules of Islamic jurisprudence. It was particularly so because of the rules related to mutual consent and ascertainment of personal qualification and due to lack of explicit 'offer/acceptance' mechanism (as in the juristic concept). As against this in the corporate form the matter relies wholly on individual's initiative to join the company simply through purchase of a share. *Khayat* reported contemporary jurists' views, including those of Sheikh Mohammed Abdu, Sheikh Mohammed Shaltute, Mohammed Yousuf Musa, Sheikh Abdulwahab Khallaf and Sheikh AlKhalsi who have justified the modern corporation, the modern financial trust and the joint-stock limited liability company on the basis of the received rules of Islamic jurisprudence. These scholars have appealed to the juristic principle of mutual consent on a matter of preponderant merit devoid of harm or injustice. Also, that the modern financial corporation may fall under special forms of *Mudaraba* company, or 'Anan company'.<sup>(3)</sup>

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(3) *Ibid*, pp. 208-221

As it appears the same juristic tradition of ‘preponderant merit’ that has justified the modern corporation, should also be observed in our appraisal of the concomitant stock exchange.

### *Exchange of Shares from Shariah Perspective*

Corporate share carries the same meaning as a partner’s share in the juristic *financial* company. It is the document which testifies a partner’s ownership of a portion of the company’s paid up capital, in terms of assets and retained profit. We are concerned here with ordinary shares ( also referred to as common stocks ), since their acquisition is permitted by Islamic jurists to the exclusion of non-permitted interest-bearing bonds, debentures and preferred shares.

Juristic consensus also seems to approve of the current practice which allows free market exchange of ordinary corporate share, through appeal to the juristic tradition that: *accepted convention is like an explicit condition*. But the crux of the issue is that the act of purchasing a share cannot be visualized like the act of purchasing any ordinary commodity intended to satisfy an individual’s consumption or investment motive. Khayat has expressly pinpointed that the act of joining a corporation must fulfill the condition of *niyya* (deliberate intention ) by the individual.<sup>(4)</sup> This is because a traditional juristic corporation cannot be based on a purely casual decision. Rather, the individual who joins a traditional juristic company must be satisfied by its goals and possess a sense of active belonging both financially and personally to the family of its partners. If such a pre-requisite is applied to the modern corporation, the shareholder should be keen on the success of the company in the attainment of its economic as well as social targets, rather than quickly parting with its shares in the face of any negative hot rumor circulated by market brokers.

Taking the example of the juristic company, Khayat has argued that a clause of ‘pre-emptive right’ can be adopted in the modern corporation chart as it may prove useful for its success. The pre-emptive right is an established property in *Shariah*, giving existing shareholders priority over potential shareholders whenever new shares are issued, or existing shareholdings are negotiated. More formally it can be defined as “entitlement of a partner to claim his partner’s share if it has passed to a third party’s hands”.<sup>(5)</sup> The pre-emptive right (*shuf’a*) is supported by various reports of the Prophet’s Tradition, most notably the report by Jabir bin ‘Abdillah stating that : “The Apostle (PBUH) has imposed *shuf’a* on the undivided plots but when borders are drawn and paths are cut out, there will be no *shuf’a*”.<sup>(6)</sup>

No doubt, the option of adopting pre-emptive right introduces a significant restraint in the velocity of shares circulation, thus deviating from the pure model of free exchange on which the modern stock exchange is based. But in any case shareholders are free to adopt the pre-emptive clause or to waive it, depending on what they consider most fit for their objectives. It is reported in the Prophet’s tradition that: “people are governed by the conditions they have agreed upon”. Hence, judging on the Islamic advisability or otherwise of restrained shares’

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(4) *Ibid*, p. 127.

(5) **Ibn Qudama**, (Al-Mughni), Vol. 5, p. 459.

(6) It is an authenticated report but we only translate the sense.

circulation depends on the underlying considerations of market efficiency, which is firmly tied up with the attainment of socio-economic goals. We now turn to investigate a fundamental share's peculiarity that must give room to a policy of restrained circulation.

### ***Share is unlike other Economic Goods***

*Gharar* is a central concept in Islamic jurisprudence, which means uncertainty about any one of the objects of exchange : either amount of *price* to be paid for a specific commodity, or nature of *commodity* to be bought at a given price. Avoidance of *gharar* is a fundamental *Shariah* restraint which renders a corporate share unlike other economic goods that are freely tradable as consumer's or producer' goods ; for unless buyer of shares knows precisely what they really stand for he would be committing serious *gharar*. In the absence of accurate and reliable information about what the 'share' stands for, its mere purchase turns out like playing any gambling game. Serious *gharar* is indistinguishable from prohibited gambling. Thus, avoidance of serious *gharar* marks the main point of departure between the normative Islamic stock exchange model (NISE) and the contemporary one (CSE) which takes too little guards against *gharar* or gambling motives. In actual practice the CSE provides a fertile soil for the satisfaction of professional gamblers, quite apart from the *gharar*-prone speculative motive which accounts for the bulk of turnover rates. A large amount of scarce resources seem to be devoted to the handling of purely speculative 'short sales'.

To avoid *gharar*, *Shariah* lays special emphasis on the provision that a purchasing party must be sufficiently informed about the object of purchase, both quantitatively and qualitatively. And since 'share' is a composite non-tangible good combining heterogeneous forms of corporate assets (including cash and receivable debt), it is not at all easy for any purchaser of a share to analyze the company's balance sheet and its income statement, and to assess the contribution of other diverse information ( like changes in dividend policy ) in the valuation of the company's share.

In theory, it is known that the current 'true' market exchange value of a stock is equal to the present value of the future expected stream of dividend income discounted at the firm's cost of capital - no matter whether the share is kept for earning dividend income or sold shortly to reap a quick capital gain. That is, short-term capital gains are themselves defined in terms of the future expected dividend income stream .<sup>(7)</sup> Thus, unless participants in the stock exchange are well-equipped to carefully analyze all such financial indicators, the mere interaction of supply and demand may not yield any sensible prices. We can safely conclude avoidance of serious *gharar* is possible through two main conditions:

*FIRST: Making accessible all relevant information and financial indicators for the use of participants in the stock exchange.*

*SECOND: Participants must acquire (or somehow seek the service of ) the analytical ability to carefully process such information to obtain consistent estimates for the true expected exchange values of the shares.*

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(7) See **Kolb** and **Rodriguez** (1992), pp. 148-150.

If the above two *Shariah restraints* are satisfied, then the free supply/demand mechanism is bound to yield consistent prices based on true expectations of a share's future dividend income stream, in sharp contrast with the current practices in the CSE which appears to satisfy the *First* restraint but not the *Second* one. Indeed, the daily market operations of the CSE may not differ significantly from the supply/demand determination of a fair gamble's price under different waves of optimism and pessimism. This shortcoming of the CSE yields an instability that was rightly noted by Keynes as:

“.. there is the instability due to the characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than on mathematical expectation.....Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits - of a spontaneous urge to action rather than inaction and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities” (Keynes, 1970, p 161 ).

Therefore, careful enforcement of both *Shariah restraints* should ensure maintaining the real exchange values of corporate shares at all times, but of course at the cost of negatively affecting the shares' velocity of circulation. We would have to address the popular counter argument that market efficiency and its liquidity would be sacrificed due to restricting exchange and lowering the circulation velocity. This leads us to the following section.

### III. The Efficiency Hypothesis of the CSE

Economists have addressed the difficult issue of how to ascertain and measure market efficiency using various statistical formulas, e.g. weak form, semi-strong, and strong form tests. Using such measures, financial economists have attained the conclusion that modern stock markets (CSE) seem to satisfy the semi-strong test and hence they are operating fairly efficiently<sup>(8)</sup>.

Market efficiency is generally defined as the speed at which stocks' prices respond to changing information such that no participant can outwit the market, i.e. take an informational advantage that is not yet publicized. An efficient stock market is defined as one which quickly and accurately mobilizes liquid capital to where it gets highest returns. More particularly, we may have to distinguish between the two complementary concepts of internal efficiency (operational efficiency) and external efficiency (informational efficiency). The former relates to accessibility of information to all participants in time and at least cost, whereas the latter refers to transaction costs and speed of concluding and finalizing financial deals and transactions, thus involving the role of brokers and the size of commissions they charge. Naturally, we are mainly concerned here with the critical appraisal of the hypothesis of informational efficiency and how it really applies to the CSE as it is held in mainstream financial economics. We shall seek to answer this question in the light of the *Shariah restraint* that has already been introduced.

Although empirical evidence on the CSE has supported the hypothesis of informational efficiency, mainly at the semi-strong level, this issue has always remained a controversial one.

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(8) *Ibid*, pp. 513-515.

The main critical charge against those earlier empirical tests has been a methodological one. It is that there is a circular argument involved in the hypothesis testing procedure, since empirical tests are formulated on the basis of an equilibrium capital asset pricing model (the CAPM) whereas the CAPM itself is based on the assumption of informational efficiency. On the other hand, the CAPM itself has ever remained a target for severe criticism. Roll's well-known critique (Roll, 1977, 1978) has discredited the CAPM due to the impossibility of verifying it empirically. Recently we have attacked a new standard mathematical assertion due to Tobin, that risk/return indifference curves for normally distributed returns must be convex from below, which is a necessary condition for equilibrium pricing in the CAPM - making the counter assertion that risk-averse investors would more likely possess linear indifference curves (Tag el-Din, 1991). More recently, the CAPM theoretical framework has come under new attack as market anomalies, which made it possible to outwit the market, have been discovered in a way that raises doubts against the hypothesis of informational efficiency in the CSE<sup>(9)</sup>.

However, rather than being quickly carried away by the technical details on the issue of market efficiency it is worthwhile asserting the normative Islamic concept of market efficiency which does not rely exclusively on the pure profit motive as it is the case in the CSE. The importance of a socio-ethical element in the Islamic concept of efficiency cannot be ignored particularly in a genuine Muslim society where investment motives by funds' owners do not exclude a sense of ethical responsibility towards the attainment of social goals. Hence, the criterion of market efficiency in a genuine Islamic perspective does not rely on the speed of liquid capital's flow from *less* profitable projects to *more* profitable ones. In practice, most socially desirable projects are of the former type since they are often high cost in the short run and low -return yielding, though in the long run they are capable of generating a continuous and stable streams of income. On the other hand the purely profit-oriented concept of market efficiency cannot be defended on social grounds due to the adverse consequences it may have on the real investment motive over the long term, and the strong temptation it provides for making high profit in the short run - or indeed the very short run. If we add an additional force to the previously stated *Shariah restraints*, namely that of socio-ethical investment motives, it would undoubtedly control the velocity of shares' circulation still further.

The question, however, remains even under the CSE's pure profit motive, whether unrestrained velocity does achieve efficiency.

### ***External Efficiency***

In general, it is believed that individual share prices follow a random walk when plotted on weekly basis, implying that successive returns are independent i.e. for any week there is an equal chance that the share's price may go either up or down by the same magnitude<sup>(10)</sup>. This pattern of random variation is a double-edged weapon when looked at from a market efficiency perspective :

i. On one hand it violates the stability-oriented efficiency criterion which requires actual market prices must coincide with 'true' exchange values at all times, in line with the theory of

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(9) *Ibid*, pp. 536-539.

(10) *Ibid*, pp. 523-526.



shares' prices efficient fluctuations (see Elton and Gruber, 1981). This efficiency criterion seems to satisfy the above-stated *Shariah restraints* most directly.

ii. On the other hand, random variations can be taken as a technical proof of external efficiency so long as they represent the fact that all relevant information is already absorbed in share's equilibrium market price, apart from the random fluctuations caused by the erratic unpredictable behavior of the naive masses who often over-react to rumors.

The latter criterion is the one which is currently adopted in mainstream financial theory as the basis for the empirical proof of market efficiency, being also testified by the so-called *dart-board theory of stock selection* due to Alfred Cowles which holds that: "You can throw a dart at the Wall Street Journal as a way of selecting stocks"<sup>(11)</sup>. However, brokers' have vested interest to spread exciting rumors (hot tips) among investors to encourage as much speculative trading as possible for the accounts of their clients, being motivated by the commissions they get in return. This phenomenon of excessive trading is well recognized in the literature as 'churning', and it is forbidden by the law but in most cases it is difficult to prove.

Cootner (1965) depicts this random walk as one with reflecting barriers placed on either side of a central line representing the true price of the share, see the figure (a).

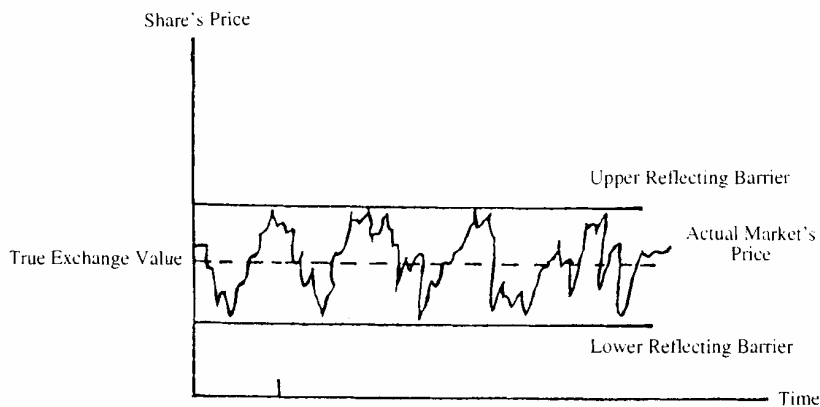


Figure (a)

In this pattern Cootner's theory goes to explain the existence of reflecting barriers in terms of the directive role played by professional experts whose constant intervention mitigates the erratic effects caused by the misguided speculative behavior of masses, and hence controls the ups and downs in the share's price to remain within reasonable bounds of the *true* exchange value.

According to this theory the naive masses play a crucial role in producing the observed unexplainable ups and downs of share prices, not due to careful processing of relevant information (as required by the second *Shariah restraint*) but due to an over-reaction to

(11) Samuelson, and Nordhaus (1992), p. 520.

mostly irrelevant information. This point has been clearly explained by Keynes in terms of the ‘mass psychology’, remarking that :

"A conventional valuation which is established as the outcome of the mass psychology of a large number of ignorant individuals is liable to change violently as a result of a sudden fluctuation of opinion due to factors which do not really make much difference to the prospective yield "(Keynes, 1970, p 154 ).

Hence, in order to minimize such fluctuations and restore greater stability in the stock exchange, the otherwise active, ill-advised speculative influence of the masses, must be replaced by discrete, better-advised participation along the previously stated *Shariah restraints*. This would, of course, result in reducing the shares’ circulation velocity. In other words, the normative NISE is bound to be more stable with a relatively smaller circulation velocity and hence less shock-prone as compared with the CSE. It is rather ironic that while the CSE is judged as re-assuring in terms of efficiency measures, it has nonetheless remained threatened by catastrophic shocks exemplified by that of the black Monday, 1987.

Unfortunately, however, the standard statistical measures do not introduce a measure of stability to qualify their informational efficiency claims, which is itself a serious drawback of the tests. Had such a stability qualification been explicitly embodied by tests, they may not provide their present reassuring implications. They would rather detect ‘abnormal’ fluctuations and hence serve to indicate earlier warnings deeming immediate regulatory measures. The recent history of stock exchange regulation in the developed world has learned a lot from the experience of past catastrophic shocks to which the system was taken by surprise. It is interesting to see how *Shariah* has already pinpointed the relevant regulatory principles of stock exchange, though they have only been recognized recently in the developed world . In the Prophet’s (PBUH) traditions free exchange is governed by basic ethical values to guard against illegitimate external influences on the true market price - e.g. *najash*, which means any mock interference by a third party with the intention to influence the pricing of a good in favour of the seller. A *najash*-like practice flourished openly in the American system before the great depression of 1929 when large profits were made out of *najash* practices until it was abolished by law in 1934. But before its legal abolishment, investors used to recruit large capital and expertise to organize a so called ‘pool’ which used to work actively and secretly in a tactical way within the stock exchange to misguide the ignorant participants, and hence re-direct the shares’ price movement towards some desired target. It appears that the American system is still unable to limit the influence of such illegal pools.

To sum up, it is doubtful whether the claim of informational efficiency is sustainable by the CSE given the destabilizing speculative behavior of naive masses and the undetectable non-ethical practices which account for an unnecessarily high circulation velocity.

### ***Internal Efficiency***

Turning now to the other dimension of market efficiency, we encounter the active role of brokers at various levels within the stock exchange, ranging from the relatively small-size hall brokers to the large-size specialists who enjoy membership rights, investing large amounts of capital in their brokerage activities. It is generally held that among the main historical reasons

for the establishment of Third and Fourth markets in U.S.A. as alternatives to the New York Stock Exchange (NYSE) are the high and rising commissions imposed by the NYSE brokers. The new markets were established to offer cheaper brokerage particularly to large packages.

No doubt, the need to generate sufficient returns for such highly sophisticated and specialized brokerage and investment advisory systems, must encourage brokers and analysts to fuel up the exchange velocity through undetectable churning which normally victimizes naive investors. Indeed, if the economists' belief that 'the stock exchange is informationally efficient' is truly and honestly conveyed to the participants, we wouldn't have encountered such hectic engagement by brokers and investment analysts aiming to persuade participants of a looming opportunity to make money. Obviously it does not pay brokers and analysts to promote the belief that the market cannot be outguessed. High exchange velocity is, therefore, both the cause and effect of a well-entrenched brokerage structure.

It appears clearly that the complex build-up of ancillary services around a typical CSE, is both cause and effect of unduly intense speculative activity measurable in the order of millions of dollars per second. Yet, according to the *dart-board theory*, the claim of external (informational) efficiency renders the advice by a broker or an investment analyst as worthless as reading luck from tree leaves. That is, efficiency cannot come about as a result of excessively high velocity, reflected by the large scatter around the true expected value of the share. To my best knowledge, no one as yet has attempted to estimate the amount of capital wastage resulting from large and consistent discrepancies away from the otherwise stable and true exchange value of the shares.

#### ***The Speculative Motive and Sacrifice of Managerial Efficiency***

The inefficiency problem, reflected by large and consistent discrepancies away from the share's true value, is a direct result of misguided speculative activity of the naive masses. The great bulk of dealers in the CSE tend to skip the registration stage of their shareholdings with the issuing corporations. They would rather register their shareholdings with a broker who would immediately sell the shares at a time of temporary price rise and then re-purchase them when price falls. This is only one possible form of purely speculative transactions, called 'short sales' as commonly practiced by well-established investment companies (e.g. hedge funds), which employ highly specialized techniques to maximize income through choice of optimal combination of both short and long positions.

Widespread short sales' practices, therefore, account for the high circulation velocity which characterize the CSE. It is not surprising that modern investment theory is formulated with the assumption that the rational investor is indeed a busy speculator, figuring out the optimal re-allocation of his savings between the various income earning securities in an ever-changing environment. With accelerated speculative tendencies, as it is the case in the present economic order, the corporate sector becomes very much like a moving train where passengers exchange seats randomly for short trips with too little concern with whoever drives. Apart from signing a proxy statement, which automatically approves of existing corporate managers, the shareholder does nothing else to distinguish him from a bondholder. In this fashion, shareholders of a given corporate no longer exercise their legal right of closely cross-checking the performance of inefficient managements, a problem which would reflect negatively on the

overall productivity index of the corporate sector. Hence, efficiency losses are caused either directly through the large random discrepancies or indirectly through perpetuation of inefficient managements. Although the expansionist phenomenon of mergers and acquisitions acts as a clear external threat for inefficient managements, this has resulted in the emergence of special defensive strategies by inefficient managements to ward off such a threat, like the so-called 'poison pill'<sup>(12)</sup>.

### ***Speculative Activity and the Claim for Liquidity***

The most appealing argument in support of speculative activity is the argument that it generates liquidity in the stock exchange. In the first place, the very existence of a stock-exchange is justifiable by the liquidity potential it provides for shareholders, who may otherwise refrain from holding corporate shares even though they may be willing to take long positions. The need for a secondary market where shares are freely traded is dictated by the fact that once issued corporate shares are non-redeemable.

Of course the ideal way to satisfy liquidity needs of a long-positioned shareholder, is to find a potential shareholder who is willing to buy his shares also at a long position, hence avoiding the wasteful speculative practices. But obviously such ideal matching of two long-positioned shareholders is too hard to find in actual practice, and if enforced by law it would minimize the market's liquidity potential, making corporate shares far less attractive. A long-positioned shareholder will be more gratified to be ensured of immediate liquidity whenever he needs it even where it can only be secured by the free entry of speculative-motivated participants.

Hence, to the extent of providing liquidity potential to satisfy the immediate needs of existing shareholders, there is a maximum level of harmless speculative activity that must be maintained at all times; for as Keynes (1970, p. 159) puts it "Speculators may do no harm as bubbles on a steady stream of enterprise". But the argument of liquidity assurance, is often taken too far by the advocates of unrestrained speculative activity, a point that is indicated by Keynes while making his historical strong remarks against speculations "Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity ..... It forgets that there is no such thing as liquidity of investment for the community as a whole" (Keynes, 1970, p. 155). It should be obvious that exchange in the secondary market does not produce any new liquidity to the economy.

Therefore, the real challenge is how to decide on that critical level of speculative activity beyond which efficiency losses may dominate. To answer this question we have to investigate into an alternative role that can be played by professional analysts who are currently aggravating the problem of excessive speculations.

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(12) 'Poison pill' is defined in financial management as "strategic move by a take-over target company to make its stock less attractive. For instance, a firm may issue a new series of preferred stock that gives share holders the right to redeem it at a premium price after a take-over. **Downes, John** and **Goodman, Jordan Elliot** (1991), *Dictionary of finance and Investment Terms*, Barron's Educational Series Inc.

### ***Unpredictable Fluctuations***

The criterion on which current standard measures of stock-market efficiency are based, as we already observed, do not take explicitly into consideration the large random short term deviations of market prices from their respective *true* market values. This point which violates the two *Shariah restraints* is nonetheless taken as an empirical proof of market efficiency in the sense that no participant may outwit the market. We have also explained in terms of Cootner's model the role of professional investors whose effective participation imposes reflective barriers on either side of the true market value of a share as a means to mitigate the otherwise wild fluctuations caused by the behavior of the naive masses. It remains now to show whether professionals do perform that corrective role. Yet, we have to distinguish between two situations:

i. The case of unchanging expectation about *true* exchange value of a share, i.e. where the market opinion about the expected dividends' stream and the associated risk is given. This is precisely the case represented by Cootner's random walk model where actual market prices tend to scatter around a given expected share value. Using probability theory, we may describe this situation as that the market is drawing its actual prices from one and the same distribution, having fixed mean as *measure of location*, and fixed variance as *measure of risk*.

ii. The case of changing expectation about the true exchange value, i.e. where market participants continuously revise their opinions about the expected income stream to be earned from holding a corporate share and the risk associated with it.

Clearly, the second situation describes real life more accurately than the first one. Hence, we may safely describe the daily operation of real life stock market as drawing its actual share prices from an inventively large family of probability distributions having different means and variances. Cootner's model appears to be highly optimistic in its representation of the naive masses behavior since in actual practice the naive masses are vainly scoring at a randomly moving target, rather than a stable one. This idea of randomly moving target is the essence of the efficient fluctuation theory which implies that a 'true' share value fluctuates randomly in response to changing business conditions. Hence the actual price of a share in an efficient market must also fluctuate around such a random path.

No doubt if we still cling to the idea of random walk around a true value, the challenge becomes much more difficult than in Cootner's model, not only for the existence of naive masses who are already unable to score a stable target, but also for professionals whose effective participation is assumed to place reflecting barriers around the true market value. This time the 'reflecting barriers' must also be moving randomly if we still maintain Cootner's assumption that professionals are indeed keen to streamline the actual market price fluctuations with the true market values- a point which we shall shortly re-consider in the light of the Keynesian view. No doubt the resultant deviations of actual share prices away from the *efficiently fluctuating target* would be (absolutely) much larger than the case where a *stable target* was assumed, hence showing a much larger scatter around the true market values than was already shown in Cootner's random walk model. Such a situation is best described in terms of figure (b):

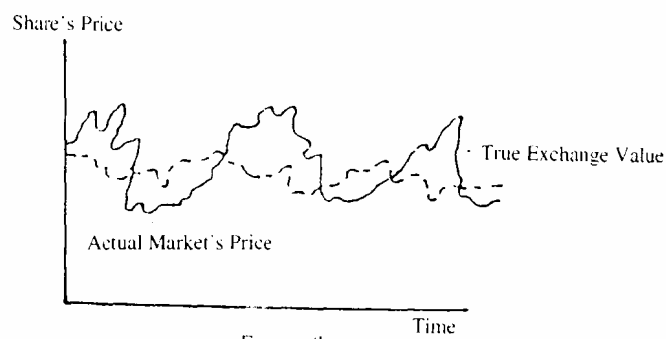


Figure (b)

The thin line in the figure represents the theory of efficient fluctuations of a market share's true value, whereas the bold line shows the real life fluctuations of the actual market prices around the thin line. We may compare this situation with a hypothetical case of figure (c) where the thin line of true share's value fluctuates in an almost predictable manner as it may be the case for the share prices reflecting seasonality in certain agricultural activities.

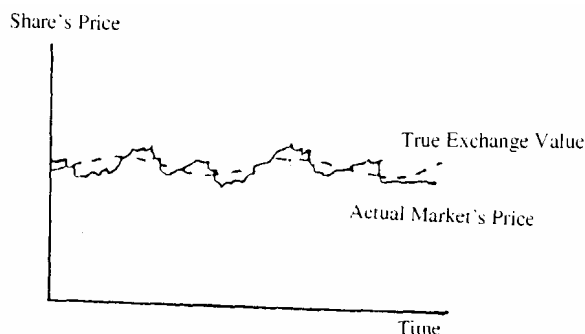


Figure (c)

Note that the bold line which shows the magnitude of actual price fluctuations around the true values is less erratic than the case shown by figure (b) above. The obvious reason is the unpredictability of true share values pattern in figure (b). In certain studies it was shown that the general level of yesterday's prices in the stock exchange does not explain more than 1.5% of today's price level, i.e. 98.5% of today's price level is an unpredictable event<sup>(13)</sup>.

Keynes introduced the term "mass psychology" to describe the force which accounts for such erratic and unpredictable changes in shares' prices. Hence, it is worthwhile re-considering Cootner's assumption about the directive role of 'professionals' under the Keynesian psychologically-driven force.

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(13) Elton and Gruber (1981), p. 366.

#### IV. Failure to Meet *Shari'ah*-Restrains

Effective participation of professionals in the stock exchange under Cootner's random walk model was assumed to produce upper and lower reflecting barriers to counteract the otherwise erratic reactions of naive participants, and hence control the extent of random fluctuations around the stable true share's value. However, when the broader perspective of the theory of efficient fluctuations was introduced it proved an even much harder task for professionals to mitigate the explosive variations around the randomly changing true values. But in the first place, as Keynes puts it, the real question is whether professionals' role is a corrective one. The answer to this question provides an even more pessimistic characterization of the CSE than that of the efficient fluctuations theory. Indeed, it is the mass psychology which governs the professional analysts' valuation of share prices and not the reverse - thus nullifying the assumed corrective role of stock exchange professionals. It exposes the efficient fluctuations theory to question so long as the actually fluctuating share's prices determined by mass psychology are themselves considered the true shares' values? Keynes has accurately described the job of professional analysts in the stock exchange as "*to guess better than the crowd how the crowd will behave*" (Keynes, 1970, p 157), implying that the skill of the analyst is reflected in his ability to foresee the direction of mass psychology and make profit, rather than to re-direct it. This is not a surprising result if we appreciate that in the final analysis the professional participant is an income-maximizing speculator, and that he is by no means responsible for ensuring the economic consistency of actual market prices with their corresponding true share values. It is, rather, the responsibility of the issuing corporation to convince people of its sound financial position, hence substantiating the conclusion that the assessment of the effect of various economic and administrative changes on shares' prices is effectively carried out by naive people rather than professional analysts.

Therefore, the theoretical claim of market efficiency is hardly attainable. The admitted effective participation of naive masses who are easily victimized by hot tips and undetectable churning, and the absence of an exogenously neutral built-in stabilizer to re-direct the mass psychology towards the true shares' values makes it almost infeasible to make an objective assessment of market efficiency. In fact Keynes was pointing out to this problematic situation when he warned economists of the dwindling role of real economic information acquired by the productive investors and the increasing influence of financial shareholders who have too little real economic knowledge. He concludes his view rather dramatically by stating :

"The spectacle of modern investment markets has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like marriage, except by reason of death or other grave cause, might be a useful remedy for our contemporary evils" (1970, p. 160).

#### **Why *Shari'ah* Restraints?**

The two previously stated *Shariah Restraints* are deliberately formalized to guard against serious *gharar* in the stock-exchange, and hence affect closer convergence of actual shares' market prices with their real economic values. We believe, the stock-exchange would work with higher efficiency if these restraints are closely observed, bearing in mind that these *Shariah restraints* do not forbid short-sales that are driven by the capital gain motive so long as the issuing corporate shares fall within the accepted class as previously defined. People are

free to buy and sell corporate shares of such a class at any time so long as serious *gharar* and gambling tendencies are well-guarded against. In this way the shares' circulation velocity is bound to be much lower and the rate of speculative-driven exchange would be substantially reduced, perhaps at no larger rate than the bare one needed to produce the necessary liquidity in the market.

A clear evidence that circulation is considered part of a broader process of production is found in the Prophet's tradition which prevents sale of a commodity before its physical acquisition. According to M. al-Baqir al-Sadr<sup>(14)</sup> this tradition implies that any specific good must be sold to the final consumers either directly by its original producer or indirectly through a middleman who physically moves the good to the place of final consumers. In the latter case the middleman has completed the production process and hence such a circulation of the good is encouraged by *Shariah*. But the mere documentary circulation of legal title to a specific good without actually being moved from its place is only a means through which profits can be generated to successive owners of a good who exchange its legal title for money without creating any added value to the good - apart from encumbering it with high cost.

Similarly, shares' circulation that does not add any real value to the social community apart from the gambling-like speculative gains, must be kept down to the possible minimum. Most particularly, in the less developed countries with relatively small imperfect markets and poor capital bases, both quantitatively and qualitatively, greater care must be taken to discourage the catastrophe-prone speculative tendencies and encourage a more productive and development-oriented role for the stock-exchange. In less developed countries where real productive enterprise activity is relatively small it may turn out to be no larger than a bubble on a whirlpool of speculation.

## V- Conclusions

Now, on the basis of the preceding discussion we may conclude this paper by deriving the major characteristic norms of the NISE ( Normative Islamic Stock-Exchange). We have already seen that buying a corporate share is unlike buying a tangible good with directly visible properties, a point which makes corporate shares more *gharar*-prone. Avoidance of *gharar* is simply re-assurance of the standard text-book economic rationality assumption that a buyer is fully aware of the utility that he may generate from the price he offers for buying the good in question. We derived two *Shariah restraints* : calling for the provision of relevant information on one hand, and the analytical ability to estimate true exchange values on the other. These two main restraints are intended to attack the problem of *gharar*, or to put it differently, they are intended to account for closer convergence of the actual share's price with its true expected economic value. Using Keynes' critical description of the contemporary stock-exchange, the problem of divergence from true economic values is the direct consequence of real economic knowledge having a dwindling role in the valuation of real economic activity whereas the community of inexperienced shareholders continues to play greater role in the valuation process.

The paper has focused mainly on *gharar*-related inefficiencies which are seldom reported in the literature, but the following points provide s fuller description of the Normative Islamic Stock-Exchange ( NISE) :

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(14) Al-Sadr, Mohammed Al-Baqir (1981), *Iqtisaduna*, Beirut, Dar al-Ma'arif, , pp. 680-683.



1. The NISE is a secondary market only for equities of companies that are engaged in the production of goods and services that are permitted by *Shariah*. This point carries two main implications. It implies that corporate bonds, debentures, preferred shares or similar assets which carry promised returns on an interest-rate basis cannot be exchanged in the NISE. It also implies that equities of companies producing impermissible goods like : pig meat, alcoholic products, gambling returns or devices,...etc cannot be exchanged.

2. The NISE is administered in such a way as to subordinate the financial market movements to the real goods and services market movements, and hence make the former transparent to the latter. Thus, real economic knowledge must dominate..

3. Control of purely speculative transactions to the critical level which is just necessary to generate needed liquidity without sacrificing market efficiency or corporate management efficiency.

4. Propagation of behavioral norms among shareholders to encourage them to hold longer positions in order to exercise their voting rights to choose more efficient managements, to effectively participate in the policy-making process of corporate managements, and to ensure the attainment of the stated social and economic goals.

### ***What About The Appropriate Organizational Set-Up?***

Finally, we shall touch briefly on the issue of how to institutionalize an NISE, an issue which needs more specialized effort than the current paper which focused mainly on normative principles. No doubt any suggested organizational set-up cannot do without deliberate government involvement to take care of the above-stated policy norms. We have argued that the needed control on the velocity of shares' circulation is only to the extent of minimizing widespread *gharar* in the stock-exchange. However, it is worth-emphasizing that little *gharar* (unlike little *riba* ) is tolerable by *Shariah* since in practice it is almost impossible to completely eliminate *gharar*. In the Prophet's tradition sale of food stuff without proper weight scaling is permitted whenever such scales are unavailable - but to ascertain tolerable levels of *gharar* is not at all an easy matter. The juristic general consensus as regards avoidance of *gharar* is to strike a balance between the two extremes of total control and total negligence, both of which are harmful to the operation of the stock-exchange. Within this broad range we may propose two possible alternative organizational frameworks as follows:

#### ***(A) The Conservative Organizational Model***

This model utilizes a growing trend in the developed financial sectors, namely the rising demand for professional rating service of various financial products (e.g. the S&P ratings), in order to inform potential investors about the products' quality. Through experience, sophisticated investors have developed the feel of what difference it makes to them in terms of potential yield to acquire a security rated 'AAa' when compared with an alternative 'Aaa' security. Our idea is to extend the scope of this trust-worthy professional service of risk-rating further to the provide, on daily basis, computerized estimates for all the registered individual share prices, directly on the basis of the mathematical formula which defines the price of a share in terms of prospective yield adjusted for the company's risk. Further, to qualify as a registered company in the stock exchange the company must hire such a professional service to make such information accessible to shareholders.

Then, participation in the stock-exchange is to be restricted exclusively to two main categories :

1. large number of individual shareholders.
2. Intermediary institutional investors : mutual funds, unit trusts and investment companies.

In this set-up dealing directly with the stock exchange is confined exclusively to the well-versed shareholders who seem to possess the necessary economic knowledge and have positive role and presence in the setting of corporate policy. The professionally estimated prices are intended to act as guiding bench marks, not as legally binding prices. Actual prices must be bargained between the participants in a normal supply/demand mechanism with due consideration to the trust-worthy estimates. On the other hand the large mass of ignorant household-sector investors (i.e. small shareholders where 'small' is used in a relative sense) can only deal in corporate shares through the easy entry and exit from an open-ended intermediary. Offer and bid pricing of redeemable investment units are, as usual, related directly to the original stock prices; but mass-psychology will no longer be operative since the large ignorant masses are already held back from the valuation prices in the stock-exchange.

In this set-up informative trust-worthy professionalism would dominate over mass psychology, while actual prices may fluctuate fairly slightly around the professional estimates. Also greater operational efficiency could be granted through cost reduction and elimination of the distorting roles of internalized brokers and vested-interest professional analysts.

*(B) The liberal Model*

The above organizational model may be considered too restrictive by those who prefer an open mass-dominated stock-exchange with minimum regulatory interference. In this case the current open system can be permitted to operate but with the provision that all registered companies must hire the service of trust-worthy professionals to produce and publicize computerized estimates of the company's share value. This is perhaps the minimum level of necessary control for the operation of the NISE, though the matter still seems to be handled more critically by future research.

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## سوق الأسهم في إطار إسلامي

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مستشار اقتصادي رئيسي

المركز الوطني للاستشارات الإدارية

جدة - المملكة العربية السعودية

**المستخلص.** يناقش البحث المبادئ العامة التي تكيف طبيعة التداول في سوق إسلامية للأسهم، ويقوم من الناحيتين الشرعية والاقتصادية نموذج سوق الأسهم الرأسمالية الحرة. ويؤكد البحث أن السهم المالي يختلف عن سائر السلع العينية في أن تداوله أكثر عرضة للغرر والجهالة ممنوعين شرعاً، ثم يناقش دعوى ومعايير كفاءة الأسواق المالية الرأسمالية، مستعرضاً في ذلك نظريات كوتنر P. Cootner وسامولسون P. A. Samuelson وكنيز J. M. Keynes في الموضوع، ويخلص إلى أن سيطرة دافع المضاربة على الأسعار بين المحترفين وغير المحترفين، وطبيعة العلاقة بين هاتين الفئتين تجعل السوق بدون منظم داخلي يحد من الجهالة والغرر ويحقق الكفاءة.

ويستنتج الباحث أن الكفاءة لا تتحقق في السوق المالية بترك عملياتها حرة دون انضباط، بل تتحقق بدعم السوق بالضوابط الشرعية للتداول، ثم يشير بإيجاز إلى بعض الصيغ التنظيمية التي قد تحقق ذلك.