Lomonosov Moscow State University

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Credit in The Structure Of The Market Quotation of Financial Assets in Relation To The Islamic Financial Laws

Magomet Yandiev[1], Renat Bekkin[2]

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Abstract

The authors analyze the structure of the market quotation of financial assets and come to the conclusion that one of its components is a financial asset identical with a commercial credit. Hence, in terms of the Islamic financial system any financial asset is inappropriate for investment because its quotation contains elements of danism. The authors demonstrate a new approach to the structure of the Islamic infrastructure of exchange trading by financial assets, which would allow excluding elements unacceptable from the point of view of Sharia.

1. Preface

The global economic recession and liquidity problems faced by Western banks aroused financial analysts' interest to Islamic financial institutes and instruments. Russia was not an exception. The appearance on the Russian market in January 2008 of *Halal* Unit Investment Fund, the first foundation formally structured in accordance with Sharia requirements, gave rise to polemics on whether it is possible at all to play according to Sharia rules in the environment of a non-Islamic financial market (A. Jabiev, A. Bodrova).

The general point of view universally acknowledged in the contemporary Muslim legal literary sources is that participation in a joint-stock capital is allowed as long as at least the core business of the company whose shares are acquired is in line with Sharia. Muslim legal scholars are arguing if it can be regarded appropriate to acquire shares of a company if only a non-core activity is not in conflict

[1] Faculty of Economics, Lomonosov Moscow State University mag2097@mail.ru

[2] Mardjani Foundation, Moscow State Institute of International Relations (University) www.bekkin.ru

with Sharia. For example, air carriage: the primary purpose of this business is to transport passengers from one point to another, but together with soft drinks passengers on board a plane are offered alcoholic beverages, too. Does it mean that air carriage must be considered as an unacceptable business? According to the majority of Muslim legal scholars, sale of alcoholic beverages on board a plane is not the core line of the air carriage business, hence, it is not in conflict with Sharia.

At the same time, the majority of Muslim legal scholars hold that conditions of the issue of particular types of shares break the Islamic taboo on danism. For example, preferred shares vesting their holders with the right to capital, part of profit or with a priority right to get a share in case of the company's liquidation and distribution of its profit. Shares that do not vest their holders with additional property rights are allowed.

Whereas ordinary shares, regardless of whether they are registered or bearer ones, do not contradict the taboo on danism because they are part of the company's authorized capital. As a result, each shareholder assumes the company's business risks, therefore, participates in the profit sharing.

Another prohibition is sale of borrowed shares. Shares must remain in the possession of the seller because according to requirements set by the Muslim law to contract texts the seller has no right to sell goods the seller does not possess.

All this allows Muslim investors either to acquire allowed shares on their own or engage agents – specialized funds or management companies offering investing in securities compliant with Sharia requirements. In this way the investor shifts the responsibility for compliance of his investments with Sharia to a fund or a management company, which, in their turn, refer to a decision of their own Sharia board.

And it is somehow forgotten that, as a rule, Muslim legal scholars take their verdict on the basis of an analysis of the given transaction, neglecting in most cases the environment in which the transaction is closed. Many analysts and scientists make a mistake to consider particular elements of the financial system for their compliance with Sharia without taking into account the entire system on the whole. In our opinion, it is impossible to draw an objective conclusion on the admissibility of a transaction in terms of Sharia without understanding how the market operates.

Therefore, this article aims to determine to what extent investing in shares in the modern environment of the formation of the market quotation of financial assets is compliant with Sharia. The working assumption of the article: the current infrastructure of the organization of exchange trading at stock exchanges in Islamic countries runs counter to Sharia principles and needs reforming.

2. Speculations and assumptions

Studying the nature of the asset market quotation is fundamental not only for a comprehensive understanding of the problem in question in the context of the Muslim law. Once the problem is solved, it will help overcome financial crises, resulting economic recessions and other problems, which are the topical issues both for the government and business structures and private individuals, regardless of confession.

An extremely complex object (and quotation is undoubtedly a composite object whose complexity depends on a vast number of quotation-influencing factors; moreover, certain factors, such as, for instance, information, are so far beyond the scope of formalization) can be analyzed only by trivializing the object under analysis. So, the first step to make is to set restrictions to financial markets so as to enable the authors to make logical conclusions about quotation behaviour patterns.

In order to formulate such restrictions, it is necessary to identity who forms quotations. The answer to this question is simple and well known. There are two categories of traders: brokers and dealers. Hence, we must set assumptions so as to exclude unformalizable influence of numerous factors on traders (brokers and dealers) and find a basic situation, which by analogy with physics, could be defined as an "elementary particle" of the trading process, in which behaviour of professional participants is predictable and, consequently, can be put to qualitative study.

Based on the aforesaid, the following assumptions have been formulated. In the period during which the author observes the company's quotations:

- No information comes to the market;
- Brokers receive neither buy nor sell orders;
- Brokers have no unexecuted orders, either buy or sell ones;
- There is neither inflow nor outflow of investments on the securities market;
- Dealers are of more or less equal professional qualification and, on the whole, similarly assess asset risks;
- Trade is carried out by lots equal in volume (quantity of securities);
- Of all financial markets there exists only one – the equity market on which shares of only one issuer are traded.

In other words:

- Newslines are empty and traders have no newsbreaks to review quotations (macroeconomic, microeconomic, political, image, etc.);
- There are no orders from clients, neither unexecuted ones, so brokers do not take part in trading and are absolutely unable to influence quotations;
- Only dealers remain on the market but they have no reasons to review quotations.

3. Dealer basic motivation

Let us imagine a normal, physically healthy man deep in a warm bath, at 36.6%, with the light off and sound-proof bathroom walls. What will the man think about? About everything he has in mind. But all his thoughts will be what he prefers to think about right now and right here, without any outside influence. Similarly, in the context of the set assumptions, the dealer will find himself in the same situation. So, we must find out what the dealer will think about when there are no objective reasons to review quotations, what will be the dealer's motivation.

Naturally, professional participants are alive people and even when working they take their minds off their work talking with colleagues, making personal correspondence via Internet, or praying if we speak about believers. Still, the basic motivation of the dealer is the duty to manage financial resources entrusted to him. The "duty to manage" implies the need to make more money, increase the capital value. This is the basic motivation, which will remain domineering over the dealer, regardless of whatever factors.

4. Dealer basic tools

Now, bearing this motivation in mind, let us analyze how the dealer behaves in the conditions of "full vacuum" we have created by putting forward our assumptions. It is important to remember that dealers are left on their own devices. They are all of more or less equal qualification and are more or less similarly motivated to receive profit. There are no professional investors "around" them and no information; hence, there are no reasons to review forecasts of the company's cash flows. Now the only way for the dealer to earn is to find a way to re-distribute other dealers' cash resources to his own benefit. There is only one tool to do this – to change the offered buy or sell orders.

Logically, at the moment described a professional participant has absolutely no reasons to review quotations. However, neighbouring transactions on marketable securities almost never have identical quotations. To see that the statement is true it is enough to look at quotations of marketable (liquid) securities (by the way, trading within a second is quite close to trading in an environment similar to that created by assumptions of the authors). 20-30 transactions are registered within a second on the Russian market, with a much greater number of transactions registered on foreign markets.

In other words, despite that there are no objective reasons to change prices, the dealer's motivation (the need to increase the capital) urges him to conduct operations at different prices. From the intuitive point of view, the situation appears illogical: the trading process continues though there are no reasons to review quotations. It seems a kind of a hit-or-miss game rather than trading (which is a process implying determination of fair prices).

5. Two-component structure of the market quotation of financial assets

Naturally, here arises the question: if there are no reasons to review quotations but quotations change during trading all the same, what is this magic stuff traded by the professional participant? According to the contemporary financial science, one of the quotation components is the present value of the company's future cash flows so the quotation is the present value and something else. This "something else" can be only some other financial asset and nothing else (not spices, oil or bricks). Consequently, the quotation is the total of two (and, theoretically more, but from now on we are not considering this speculation) financial assets, each of which can be presented as the present value of its cash flows. The first cash flow comes from a specific company whose name is borne by the traded security, the second cash flow comes from a (yet) unknown object.

To fully grasp the situation let us analyze the "first" asset, i.e. the present value of the company's future cash flows to see if it can be traded on the exchange (i.e. if it is attractive enough for traders to become for them an object of regular purchase and sale). Looking ahead, we can answer this question right now – no, due to its characteristics, the present value cannot be an object of the regular trading at all.

Let us validate this statement. First, let us take a standard, homogenous product, say, a table. Can the table be of any value in standard economic conditions from the point of view of its multiple purchase/sale? Suppose, the table costs 100 rubles and this is the price at which the table is bought by the first buyer. Then the first buyer wants to sell the table. Will he be able to sell the table at a price higher than the original one and make more money? Yes, he will, in case of changes in some fundamental business conditions, but if conditions are not changed (and this is what is implied by our assumptions), the buyer won't be able to make money. The buyer won't be able to sell the table even at 100 rubles because the new buyer will understand that the price of this product is constant and will never grow. Besides, there are transaction expenses inevitable for each transaction. Then, the desire to make a tradable product out of the table will split the market price into the buying price and the selling prices, as, for example, happens in the case with retail foreign exchange trading.

Now let us proceed from the price of the table to the present value of the company's forecast cash flows. The situation will be similar. The present value (which, let us remind ourselves, is constant in our conditions because there are no reasons to review it, for example, information about changes in the company's future profit) will remain fixed and traders will only lose and never gain by trying to buy or sell it. Once the owner is changed, the asset will become undemanded.

So, we may state that the first of the two assets composing the quotation has nothing to do with the formation of its volatility, which means that we must explore characteristics of the second asset for the reasons for this objective volatility.

As the "second" asset is in any case a financial asset and various types of assets are differentiated only by the cash flow structure, it is important to understand the structure of cash flows of the "second asset". Let us remember that when classified by the cash flow structure financial assets can be divided only into three categories:

- Simple credit: repayment of the principal credit amount with accrued interest by a lump sum at the end of the credit term;
- Bond: payment of interest during the loan term and repayment of the principal amount at the end of the maturity period;
- Share: payment of dividends during an unlimited period of time.

The share and the bond cannot be the "second asset" because by their structure they imply payment of interest or dividends whereas in case of trading no interest payments are made during intervals between transactions closed on the market. Then, by exclusion, there is only one variant left – the "second asset" by the structure of its cash flows is the simple credit.

Since this is the key point of the concept, let us put it forward once again in other words. Proceeding from our speculations and assumptions, implying that there is no new information and, consequently, the amount of the present value (as well as of any financial asset) is constant, the quotation size may vary only due to a regular change of the "second asset", its replacement with a new similar asset but with a different price. This, in particular, implies that the life time of the "second asset" must be highly limited: from one transaction until another one. The only reasonable explanation of what is meant by the "change in the asset" is retirement of the "old" asset and issue of a new one. Moreover, as the second asset has a life time, i.e. a period of time for which it is issued, it cannot be a share a priori. Hence, the quotation varies because of the regular change in the "second" component of the asset price, under which no interest payments are provided. Consequently, it can be only the cash flow form of a simple credit.

Eventually, we can conclude that the market quotation of financial assets is made up of the present value of cash flows forecast from the issuer and a credit, which is in fact forced by professional participants on one another (a reverse situation – with loans – is possible, too). But for this credit and this disguised, indirect pressure to obtain/issue this credit, the asset quotation would lose it volatility and would be formed of two simple components: the buying price and the selling price.

Then, the market quotation of the financial asset is calculated according to the following formula:

$$S = S_{PV} + S_L \qquad [1]$$

S — the market quotation of the financial asset

S_{PV} — the present value of the issuer's future cash flows

S_L — the present value of the financial instrument, a simple credit analogue

6. Two-component structure of the market quotation from the point of view of Sharia: maisir (gambling)

Sharia is known to have taboos on gambling, danism and excessive risk.

In Arabic gambling is *maisir* and is explicitly prohibited in the text of Koran (2:219, 5:90-91). This taboo implies rejection of particular elements of the contemporary secular economics. For example, transboundary movement of large investments for purposes of own expanded re-production without production of physical products is regarded to be similar to the gambling process and the financial system prevailing worldwide is concluded as non-acceptable for Islam (A. Zhuravlev, 2004).

The same concerns our case: the quotation system a priori contains an element of gambling and any discussions about acceptability of particular products on stock markets from the point of view of Sharia are pointless. We believe that acting on the market as a roulette player, the professional participant will sell and buy hoping to gain only on a hit-or-miss basis. The only restraint is inevitable loss and transaction expenses. The rules of the game are as follows: to issue (force) a credit to (on) an unknown partner in an amount - "as one can", for a term determined by the professional participant on his own, and with an amount to be repaid - "as much as you are lucky to get". In simple words, it is a game with and for money.

7. Two-component structure of the market quotation from the point of view of Sharia: riba (danism)

The existing mechanisms of the quotation formation contain another element, more menacing from the point of view of Shariah – danism (*riba*). This element exists because a credit is repaid in an amount bigger than the borrowed one.

Let us analyze the mechanism of the credit origin during formation of quotations. Contrary to the idealistic opinion of a certain group of Muslim legal scholars and economists, who have constructed an ideal market participant known as *homo islamicus*, we think that the credit origin mechanism is a derivative of the collective unconscious, characteristic of any human being, regardless of the attitude and relation to religion. As an illustration of how this collective phenomenon is born, we would like to give our own observation of a crowd of people at the metro escalator, swaying (right and left), with everybody waiting for their turn to step on the moving stairs. These people are not organized or commanded by anyone. It is just that everybody understands that moving in the crowd they have to make small steps swinging right and left (due to the motion mechanics) because if they walk their own pace they will feel inconvenient pushing their neighbours on all sides, who have the same choice (to swing right and left). So, being rational (and elbowing and shouldering their way in the metro everybody becomes rational) people tend to harmonize their swing motion with the motion of those walking beside them. As a result, there is a wave effect.

Similarly, we can suppose that when put in inconvenient conditions (impossibility to make money by trading the present value of forecast cash flows of the issuer) and faced with the risk of losses, professional participants will start looking for a way to accord their activities, regardless of their attitude to religion. Of course, there is no direct analogy with the above illustration because available tools and purposes are different, but it is intuition that drives professional participants to find and accept, without pre-arrangements or agreements, the only possible way to create volatility on the stock market, i.e. to trade short-term credits with one another.

8. Two-component structure of the market quotation from the point of view of Sharia: gharar (excessive risk)

The authors have derived a rule applicable under the set assumptions, when, let us remind ourselves, there are no objective reasons to change the credit amount (and, at the same time, there is no taboo): the average return on credit for a trading period must equal zero.

Here are the arguments. The credit amount can vary depending on the professional participant's motivation; but every professional participant will understand that the current variation from the fair value of the credit will be artificial and ungrounded. Hence, the professional participant will always aim to return to the original credit value and then the average return on the credit during a trading period will equal or be very close to zero. In this case the financial asset will always have a certain risk expressed by the standard deviation from its return, and the return on the asset will be always zero. But then it appears that our credit (i.e. the second quotation component) is a financial asset, which by its characteristics is directly contrary to a risk-free security. In other words it is an asset with a return-free risk: whatever risk is assumed by the dealer, it will not affect the dealer's remuneration. In this connection an important conclusion can be made: **the risk and return of the second quotation component are not inter-related**.

Then we may assert that there is another element unacceptable from the point of view of Sharia: excessive and unjustified risk. In the context of the Muslim law any risk not backed by something else, for example, return, is excessive (*al-gharar al-kasir*).

Gharar also means informational asymmetry, in the result of which one party may profit on account of another party. In case of the quotation formation and the stock market on the whole it is evident that professional participants a priori possess more information than unprofessional participants, thanks to which even at the time of crises the first have minimum losses - on the account of inexperienced market players. Is it acceptable from the point of view of Sharia? Obviously not. Any participant that has no professional knowledge and skills to operate on the stock market is doomed to be used by professional participants to derive profit.

9. Conclusions

So, we can assert that the structure of the market quotation contains elements of danism, gambling and excessive risk. **It means that any financial asset traded on the exchange is unacceptable for investing, regardless of whether or not the company operates in accordance with Shaira requirements.**

The main conclusion that can be drawn after analysis of the two-factor structure of the market quotation is that the modern financial asset trade system is incorrect. Indeed, this two-factor structure gives rise to asset speculation. Is it a positive phenomenon? It is said to be because it is assumed to create the market liquidity. But this is not an argument because the possibility to sell an asset does not depend on the number of transactions at all, it is connected with the investment demand and investment supply ratio. Speculation creates artificial uncertainty in the market environment because it creates artificial demand and artificial supply and as a result the asset value is distorted.

Hence, we may ascertain that in the modern conditions financial products structured in accordance with Sharia requirements will be, nevertheless, the same objects of speculative transactions and, just as conventional products, will imply *gharar* (unjustified risk), *maisir* (gambling) and *riba* (danism). In our opinion, without changing the exchange trade process, the most part of Islamic financial products present on the market will be just a fiction, a result of an unfair compromise between financial analytics and Muslim legal scholars – members of Sharia boards.

According to the authors the problem can be solved by creating conditions, which will render exchange speculation impossible and, consequently, the “second quotation component” – credit – will disappear. In practical terms, it may look as a two-level system of exchange trading by securities:

- The first level: wholesale, conventional exchange trading by securities, but only by a limited number of authorized dealers;
- The second level: retail trade by financial assets targeted at a wide range of investors: dealers will act as market makers and will buy and sell financial assets at a certain price lag.

Over-the-counter trading may remain in this case unchanged, as an alternative. The more so that it is impossible to prohibit it.

An analogue of this system has behaved well on the currency market: currency trading by authorized dealers and a chain of exchange offices.

The main consequences of such two-level exchange trade system will be a significant decrease in the stock market volatility and a significant increase in the market dependence on the economic performance of the issuer, which fully complies with Sharia requirements. In addition, it will allow reducing to a great extent the chance of the market quotation manipulation by using such a controversial factor as PR meant for shareholders. Money authorities will be also able to provide for operational regulation of financial markets by means of exchange interventions by analogy with the regulation of the currency market by the Central Bank.

We suppose that only in such conditions we will be able to speak about a market with financial products really compliant with Sharia requirements.

10. References

1. Bodrov. A. Reefs of Islamic mutual funds / / Moskovsky Komsomolets. - 2008. – January, 22
2. Jabiyev A. Halal be implemented in practice // http://www.islam.ru/pressclub/vslux/adjah/;
3. Holy Koran.
4. Zhuravlev A. The conceptual beginning of the Islamic economy / / Islamic finance in the modern world: economic and legal aspects / ed. R. Bekkin. - M., 2004