INVESTMENT IN STOCKS: A CRITICAL REVIEW OF DOW JONES SHARI[AH SCREENING NORMS

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ABSTRACT

Investment in stocks is permitted by shari[ah *scholars; however the investors have to ensure that the invested company's activities and structuring are not repugnant to* shari[ah. *Due to exigencies of modern business and particularly the pervasiveness of interest transactions, fully* shari[ah-*compliant equities are extremely rare. Therefore,* shari[ah *scholars have arrived at minimum compliance criteria.*

The authors have reviewed the norms set by Dow Jones Islamic Market Index. A critical and analytical assessment of the criteria follows. Empirical data of the five hundred companies included in the BSE500 index of the Bombay Stock Exchange is used to assess the impact of the norms.

1. INTRODUCTION

When investing in any avenue, Islamic investors need to take into account the structure of the transaction and the nature of the counter party. An investor in the share capital of a company becomes technically a part-owner of the company and therefore responsible for its internal structuring as well.

In case of investment in equities traded on the stock exchanges, the investor needs to consider issues such as the company's involvement in shari[ah non-compliant activities. Due to high prevalence of shari[ah non-compliant practices, initially shari[ah scholars tended to completely, rule out investment in stocks. Over time however, realisation has seeped in that a more balanced view needs to be taken with an aim to remove the hardship caused to investors. Hence, the consensus has now veered towards accepting a certain degree of compromise. The shari[ah boards of various organisations, official regulators and market intelligence providers have put forth various criteria to define the maximum degree of compromise which could be considered acceptable under shari[ah, given the current business environment.

In this paper, the shari[ah norms set by Dow Jones, USA for shari[ah screening purposes have been assessed critically in an objective fashion.

The published data of the companies included in the BSE-500 Index of the Bombay Stock Exchange for the years ended March 31st 2002 to March 31st 2006 has been used to provide an empirical back-drop to the discussion and to assess the relevance and degree of stringency implied in the parameters.

In the study it is found that considering the objective (i.e. shari[ah compliance) the pervasive use of market capitalization in the screen ratios is not apt. Also in the screens for level of debt and level of liquid assets, it has been argued as well as proved from the statistics cited, that the defined levels of acceptability tend to be on the liberal side and thus need to be tightened. The screen used to assess the level of receivables is shown to have little relevance to the actual objective sought.

2. DATA BASE AND RESEARCH METHODOLOGY

The basic rationale behind formulating screening norms is to provide Islamic investors a reasonably wide choice of selection of shari[ah compliant equities.

Share trading in India is dominated by the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE). The three bellwether indices for the Indian stock market are the BSE Sensex, the BSE 500 index and the S&P CNX Nifty. The first of these tracks a mere 30 scrips listed on the BSE and the last, the S&PCNX Nifty 50 scrips quoted on the NSE, whereas the BSE500 index, which we have chosen, is based on a sufficiently large yet manageable 500 companies from the BSE.

In terms of trading volumes and number of listed scrips the Bombay Stock Exchange (BSE) has a pre-eminent position in the world.

Data for companies included in BSE500 Index is used for studying the Dow Jones shari[ah screening norms. The overall period selected is April 1, 2001 to March 31, 2006. Data for the selected period was obtained from the database of the Centre for Monitoring Indian Economy (CMIE), a prestigious private sector data provider which counts India’s top corporates as well as the country’s central bank, the Reserve Bank of India (RBI) among its clients.

The data provided covered accounting (balance sheet and income & expenditure) data as well as average market capitalization for each of the companies included in BSE500 index over each of the twelve-months periods included in the overall period. As banks and other financial institutions such as non-banking finance companies, housing finance companies etc. are heavily involved in interest based transactions, 49 such companies have been excluded from the 500 index scrips to arrive at a list of “eligible” companies which could prove to be shari[ah compliant. Also excluded from the list of “eligible” companies are 26 companies involved in potable alcohol production, entertainments, hotels and tobacco. Further, certain accounting figures appear as denominators either in the screening norms or in the ratios used in the analysis. Hence some scrips from the BSE 500 index have been excluded as one or more of such accounting figures for them in one or more of the years covered were less than zero or unavailable. This has mainly been either on account of listing in later years or negative income or net worth in some years.

After the above eliminations, the total number of eligible companies to be studied for compliance on the basis of screening on financial ratios varies from 331-389, as given in the Table number 1.

Table: 1 Sample Size

Year ending 31st March	No. of Cos. in Sample
2002	331
2003	337
2004	342
2005	364
2006	389

Apart from the exclusion as above, no other companies have been excluded from the BSE 500 population. All data used was designated by CMIE in million US$ using the relevant INR/USD conversion rates as per the RBI norms.

3. SCREENING NORMS FOR SHARI[AH COMPLIANCE

In assessing whether a specific investment proposal is compliant with shari[ah stipulations, it needs to be examined from two angles, i.e. the nature of the instrument / transaction itself and the nature of the contracting (counter) party. For instance a trading transaction can be considered from two aspects:

a) whether there is any *riba*, *gharar*, *maysir*, etc. involved in the structuring of the transaction, and

b) the nature of the counter-party (business).

Norms for screening equities are used by different sets of users. These could include portfolio managers, providers of market intelligence and regulators. Different users have different objectives and hence the screening norms they use reflect their objectives. Thus the primary concern of portfolio managers is likely to be to select a portfolio of shares that provides a good return on their assets.

Similarly, organisations which provide index information will have their own norms. Their concern is primarily to provide a feedback about the overall state of the market. Hence their selection criteria and weightages are likely to be in favour of the more intensely traded and higher market cap stocks. Their intention is to provide investors a measure to judge the current state of the market as against that prevailing on an earlier day or that likely to prevail in the future. Their indices also enable investors to assess how a particular stock is doing in relation to the overall market. Hence the primary measure for them is the market price of the share and therefore the market capitalisation. The higher the market capitalisation of a share, the greater its importance to them. Then, if the idea is to provide an Islamic Index, they need to add some shari[ah-compliance criteria to weed out those companies which deal in non-shari[ah compliant products/services or function in non-shari[ah compliant ways.

Market regulators, on the other hand seek to ensure a healthy and steady development of the market without sudden and wild swings and to enable it to grow in terms of depth as well as number and diversity of scrips offered. At times national policy may also dictate promotion or curtailment of certain industry segments or holdings by certain type of investors. In such a situation, the market regulator may monitor those industry segments or investor types and provide appropriate regulatory concessions or safeguards to promote the policy objectives.

On the other hand, when we consider defining screening norms to identify shari[ah-compliant equities, our concern has to be to select those stocks from the share market universe which function within the minimum realistically acceptable deviations from shari[ah stipulations, keeping in mind the nature of the environment. Thus the focus of such screening norms has to be on selecting shares which meet the above objective.

4. SOME ISSUES IN SHARI[AH COMPLIANCE

In judging the shari[ah compliance of the counter-party (the company invested in) one has normally to consider the nature of the business it is engaged in. However, when the transaction is one of investment in equity, the investor is also responsible for the way the business is structured.

4.1 Business of the Enterprise

The shari[ah categorizes certain commercial activities as impermissible or *haram* for Muslims. Hence investment in the shares of any company engaged in such *haram* activities as its main business, is clearly impermissible under the shari[ah.

Besides, there would be instances of business firms which are not primarily engaged in *haram* activities but a part of their operations may involve participation in activities that are not permissible according to shari[ah.[1] Alternatively, a firm involved in a permissible activity may have a subsidiary or have an investment in

[1] Instances of such companies are hotels, or airlines which may sell or serve alcoholic drinks as part of their operations though their main activity is providing accommodation and transportation respectively, to travellers.

another company, which may be involved in non-shari[ah compliant businesses.

The most conservative shari[ah scholars (*ulama*') do not permit investment in the equity of a company which is invested in *haram* business to any extent.[2] Others allow investment in equities of companies which derive a minor part of their income from *haram* activities, provided such activities are not their main area of interest.[3] Yet other *ulama'* agree to such relaxation only if the same can be justified on grounds of *masalahah* i.e. public interest. Yet others make an exception if the *haram* activities are so pervasive in the society as to be a commonly prevalent evil, difficult to avoid.[4] An instance of the former may be the serving of alcoholic drinks in planes of a national carrier, whereas earning interest through treasury management is an instance of the latter.

4.2 Structure of the Enterprise

While studying the structure of the business from a shari[ah viewpoint the three aspects that are generally considered are:

a) debt availed by the company;

b) interest and other suspect earnings of the company;

c) extent of cash and receivables with the company.

4.2.1 Indebtedness of the enterprise

In the modern world, most organized businesses rely on banks to part finance their activities. Partly this is due to the need for fluctuating working capital and ready availability of bank capital for financing and maintaining ongoing trade and its expansion in the face of unforeseen exigencies of business. Apart from working capital needs, banks also finance acquisition of fixed assets in case of major expansion and diversification of business.

Due to fluctuating conditions it becomes almost inevitable for even a moderately-sized enterprise to access bank capital, at least for working capital purposes. This is accentuated by the fact that with Islamic banking still in its infancy, there is often no viable Islamic alternative to bank capital. But bank finance is interest-based and therefore, *haram*. Hence, while investing in these equities and becoming part-owner of such a company may be, strictly speaking, against Islamic norms, the principle of *maslahah* may permit some degree of flexibility and allow investment in equities of companies in which debt is below a certain level.

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[2] For more details on this issue please see, Yaquby, Nizam, *Participation and Trading in Equities of Companies whose Main Business is Primarily Lawful but Fraught with some Prohibited Transactions*, Paper presented to the Fourth Harvard Islamic Finance Forum, October 2000.

[3] *Ibid.*

[4] See for example, SEC Malaysia criteria which is devised by its *Shariah* Advisory Council.

The measure conventionally used to assess the level of indebtedness of a company is the debt: equity ratio. There is no reason the same ratio should not also be used to assess the indebtedness of the company in terms of its compliance with the shari[ah. And indeed many institutions do use it in such a context. Alternatively, one can use the related ratio, debt: total capitalization. The Dow Jones uses the ratio, debt: market capitalization.

4.2.2 Earnings from impermissible (*haram*) activities

Banks play a major role in facilitating transactions in modern times. All cash flows of the enterprise are routed through banks. As a result all businesses have to maintain accounts with banks. These accounts attract some nominal interest. In addition, at times enterprises have to keep security deposits with banks and others to cover performance-guarantees and assurances. These accounts too fetch the enterprise some interest.

The enterprise may also, at times when it is flush with funds, deploy excess short-term liquidity in bank deposits and securities as a measure of treasury management. For an outsider investing in the equity of an enterprise, it is difficult to judge, whether, and to what extent interest accruing to a company is inadvertent and involuntary and to what extent planned and deliberate. It is not feasible to expect the investor to investigate this aspect.

At the same time, to ensure that the interest-earnings of a company do not substantially contribute to its revenue, it is essential to set certain limits to the proportion of interest- earnings to the total revenue of the company. For this purpose, the measure used is interest (and other *haram* income) earned as a percentage of total revenue (income). Various shari[ah boards fix this percentage at different levels, generally between 5% and 15%.[5]

4.2.3 Cash and receivables/payables of the enterprise

Finally, there is the shari[ah stipulation that cash and debts cannot be traded except at par value. It appears that in applying this ruling to the valuation put on a company's shares, the shari[ah scholars have considered a company as the bundle of assets and liabilities (reported on its balance sheet), including fixed assets, investments, cash, inventory, receivables, payables and debts. The traded price of its equity can hence be considered as representing value paid for the underlying assets and liabilities. If the fixed assets and investments of a company are negligible (as happens for trading companies), then the remaining assets and liabilities mainly comprise of debts, deposits and stocks. In equity trading, the price of scrips traded is driven by future expectations of prices and not by the book value of the company. Hence, if stocks (inventories) are valued at market prices, one can end up with a residual value for the cash and debts of the company which can be way out of line with their par values.

The measure or parameter most commonly used to judge compliance on this score is percentage of current assets or receivables or net current assets to total assets (or total market capitalisation) of the company. Alternatively, the numerator

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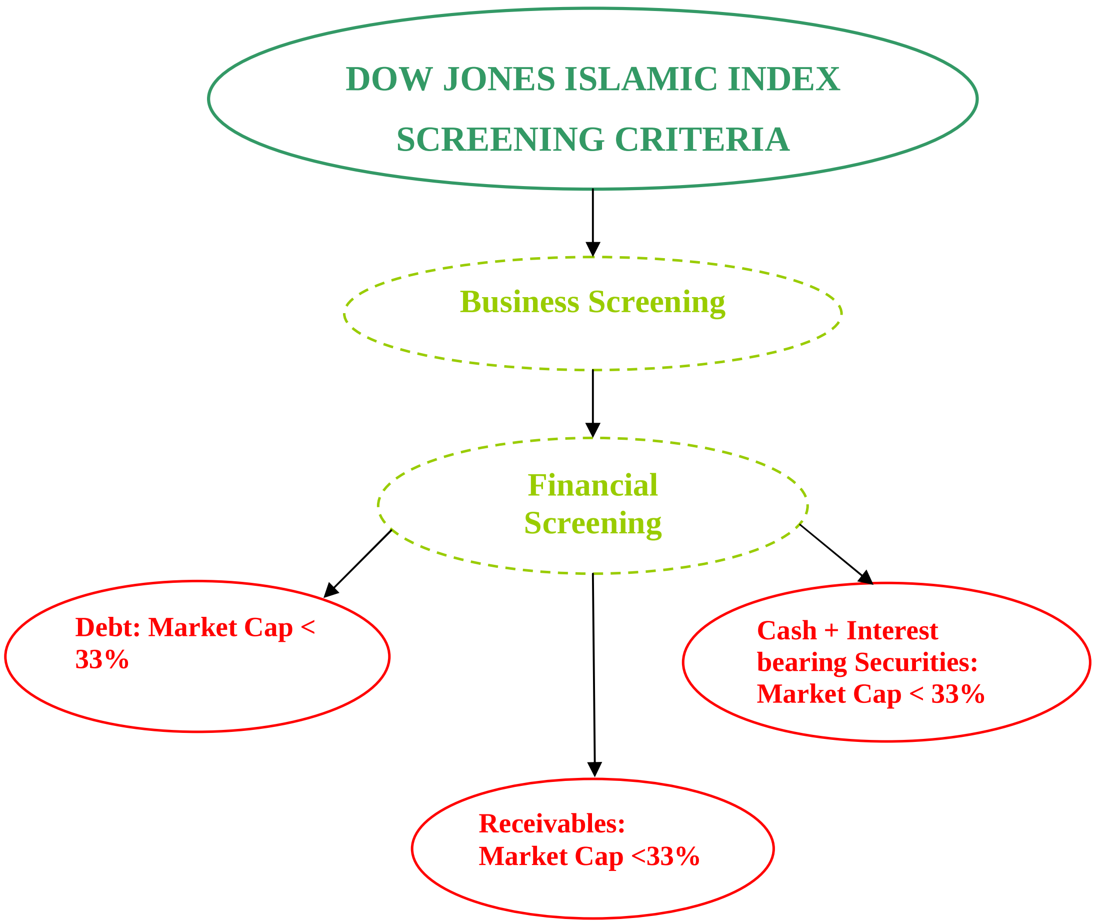
[5] Op. cit. Yaqubi, Nizam, 2000.

can be net receivables instead of net current assets. The cut-off value of the parameter is usually set in the range of 40 % to 50 %.

5. DOW JONES ISLAMIC MARKET INDEX CRITERIA

The criteria used by Dow Jones are described in the section below.



5.1 Screens for Acceptable Business Activities

Activities of the companies should not be inconsistent with shari[ah precepts. Therefore, based on revenue allocation, if any company has business activities in the shari[ah inconsistent group or sub-group of industries it is excluded from the Islamic index universe. The DJIMI Shari[ah Supervisory Board established the following broad categories of industries as inconsistent with shari[ah precepts: alcohol, pork related products, conventional financial services (banking, insurance, etc.), hotels, entertainment (casinos/gambling, cinema, pornography, music, etc.), tobacco, and weapons and defense industries.

5.2 Screens for Acceptable Financial Ratios

After removing companies with unacceptable primary business activities, it removes companies with unacceptable levels of debt, liquid assets and receivables by applying the following screens:

5.2.1 Debt to market cap

Exclude companies for which Total Debt divided by Trailing Twelve Month Average Market Capitalization (TTMAMC) is greater than or equal to 33%. (Note: Total Debt = Short-Term Debt + Current Portion of Long-Term Debt + Long-Term Debt).

5.2.2 Liquid assets to market cap

Exclude companies for which the sum of Cash and Interest-Bearing Securities divided by TTMAMC is greater than or equal to 33%.

5.2.3 Receivables to market cap

Exclude companies if Accounts Receivables divided by TTMAMC is greater than or equal to 33%. (Note: Accounts Receivables = Current Receivables + Long-Term Receivables).

Companies passing the above screens are qualified to be included as components of the Dow Jones Islamic Market Index.

6. ASSESEMENT OF DOW JONES SHARI[AH SCREENING NORMS

There would probably be a consensus among scholars that the primary screen for identifying shari[ah-compliant businesses has to be about the nature of the business. No extent of compliance with shari[ah otherwise can substitute or compensate for a falling off from compliance on this issue. Hence the norm in this regard has to be sufficiently stringent.

6.1 Screening of Business Activities

The non-permitted areas documented in the Dow Jones is very exhaustive and may be considered quite comprehensive.[6]

Among the industries included in the list, the rationale for excluding real estate holding and development is not readily apparent; probably it is due to the generally high levels of leverage prevalent in the industry.

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[6] The non-compliant sectors (after consolidating similar ones) in the given list are: weapons and defense, distilleries & vintners, food products, food retailers & whole sellers, bars & restaurants, hotels, tobacco, recreation products & services, gambling, media agencies, broadcasting and entertainment, banks, various types of finance and investments services, providers of various kinds of insurance and insurance brokers, real estate holding and development.

It appears that the Dow Jones criteria has resorted to extra caution resulting in not letting through even some shari[ah-compliant units in an industry if most units in that industry may not be compliant. Hotels and media and broadcasting for instance, do not have anything intrinsically objectionable about their activities. However, as a prevalent practice hotels do serve non-*halal* foods and alcoholic beverages. Similarly, media coverage and broadcasting may include material with nudity or obscene images. Not all food wholesalers and retailers too may trade in non-*halal* food items. However, for a provider of market information it may not be easy or feasible to obtain and keep abreast of such details about operations of specific units in such industries where most units tend to be shari[ah non-compliant.

Probably the better solution would be to have a secondary list of industries from the excluded list, from which specific units could be included in the permitted (shari[ah-compliant) list if specific information from time to time indicates that they do not indulge in objectionable practices. The onus for providing such regular updates could be placed on the reporting units themselves and the same could be periodically or randomly audited by the screening and certification organizations for a suitable fee.

There are also some important omissions in the Dow Jones list, going by the apparent logic of their selection. These are air and sea passenger transportation. Most units in these sectors serve alcoholic drinks and non-*halal* foods to their patrons. If hotels are on the excluded list, it is difficult to understand why air and sea passenger transportation are not excluded as well. Further, these industries usually operate with exceptionally high leverage too.

On the whole, from the above it can be deduced that Dow Jones is very conservative in excluding non-compliant business activities.

6.2 Screening on the Basis of Financial Ratios

Apart from the business screens Dow Jones has laid down screens relating to financial ratios. These are the level of indebtedness of the unit, the level of liquid assets and the level of receivables.

6.2.1 Norm for level of debt financing

The acceptable level of indebtedness is set at less than 33% of market capitalisation. Dow Jones uses debt: market capitalization as its measure. Whereas, the ratio of debt: total assets would have been a more rational approach which Dow Jones was using earlier. It gives a measure of how much of the operations of the company are being financed by the shari[ah non-compliant debt component. Such a ratio therefore clearly follows from the objective sought.

While selecting Islamic screening norms, we need to set the tolerance levels on the basis of how much debt could be unavoidable. The ideal ratio is 0:1. Because of the conventional financial wisdom that requires companies to consciously rely on moderate debt levels to leverage profitability, Shari[ah scholars tend to plumb for a debt: equity ratio of 30:70 or 33:67 (equivalent to a debt: total assets ratio of 30% to 33%) on some tenuous argument that the Prophet (pbuh) is reported to have said in certain context: "one-third and one –third is too much". We must not forget that here we are making concessions and that the actual ratio should be zero.[7] The concession should be mainly based on working capital requirements (i.e. for financing net current assets).

Considering the BSE 500 aggregate data for 5 years, we find on the basis of an earlier study (presented at the Seventh Harvard University Forum on Islamic Finance, April 2006) that the aggregate net current assets: total assets ratio for different years works out to an average of 12.8% (varying between 16.9% and 11.1%). The aggregate Debt: Total Assets ratio in the present study works out to an average of 24.8% (as against an average of 26.2% in the earlier study) varying between 29.0% and 22.7%). This implies that the investment requirement for net current assets is about 13% only whereas the actual borrowing is about twice of that. The balance of the borrowing is being used to finance a part of the fixed assets or investments of the companies. It is to be noted that the percentages quoted are based on the aggregates of a sample of companies operating in a conventional manner with no inclination of avoiding debt. For those looking for companies operating close to Islamic norms, the ratios should be far more stringent.

At the same time we must accept that companies differ in their capital structuring, depending on the sector in which they operate. There may be a case for setting differential ratios for the debt: total assets ratio depending on the industry segment. If this is not feasible, a debt: total assets ratio of <20% or <25% appears a realistic tolerance limit to be set.

Considering the BSE 500 index data and applying the Dow Jones screens to the data we find that:

a) The aggregate debt varies between US$ 39.08 billion in 2002 to US$ 66.34 billion in 2006, aggregate total assets correspondingly vary between US$ 134.57 billion in 2002 to US$ 292.11 billion in 2006 and the aggregate market capitalisation varies between US$ 80.84 billion in 2002 to US$ 386.63 billion in 2006.

b) The mean deviation of total assets values is lower than that of the market cap values. As a result even in 2006, though the aggregate of total assets at US$ 292.11 billion is lower than that of market cap at US$ 386.63 billion, still the number of companies individually qualifying on a screen of 33% of market cap (at 389) is much lower than those (268) qualifying on a screen 33% of total assets..

c) Consequently the number of companies qualifying on the Dow Jones criteria are 101 to 389 (30.5% to 100%) of the sample.

6.2.2 Level of liquid assets

Currently the Dow Jones index sets the acceptability limit for the ratio of

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[7] It is interesting to note that the same "one third" rule is not applied in the case of the other screening ratio (for interest income). In fact the tolerance limits in that case is very different. Why? One needs a rational basis rather than cosmetic justifications.

receivables to market capitalisation at 33%. Earlier its limit was 45% and the denominator was total assets instead of market capitalisation. It also stipulates another ratio, i.e. of cash and interest-earning securities to market cap with a ceiling of 33%, presumably to put a cap on the level of liquid assets.

The Dow Jones screen does not stipulate a separate screen for interest income. Rather its screen is based on the ratio of cash and investments in interest bearing securities to Trailing Twelve Month Average Market cap. This screen is really for screening liquid asset and therefore not suitable for screening out companies on the level of interest income (or for that matter, level of interest earning assets). Interest can accrue on assets which are not necessarily securities. Hence overall, we think the absence of a separate screen for interest income in the Dow Jones set is a grave omission.

Classification of data with CMIE does not give a clear breakdown of investments into interest bearing and non-interest bearing investments, as well as into liquid and illiquid investments. Instead the available classification of data gives the breakdown of investments into other categories. The different categories and the percentage of investments in each category over the period of study is given below.

Table: 2 Category-Wise Breakdown on Investments

Investment Category	**As Percentage of Investments**
Investments in group companies	45% to 58%
Investments in mutual funds	11% to 21%
Investments in government securities	25% to Negligible
Investments in approved securities	Negligible
Investments in assisted companies (by banks)	Not applicable
Investments in debentures/PSU bonds	4% to 6%
Investments in shares (by banks)	Not applicable
Other investments	6% to 25%

From table 2 it can be seen that the categories drawing the bulk of the investments are “group companies” and other “other investments”. It is not clear what part of these investments is interest-earning and what part is liquid. Investments in group companies could be in the form of shares or loans, similarly mutual funds invested in may be growth funds (equity based) or income funds (securities based). This latter category of investments will however, be liquid.

Apart from the “investments” head, the other account head which gives the quantum of liquid and/or interest –earning funds is “cash and bank balances”. The bulk of these comprise fixed (time) deposits with banks which earn interest but can be withdrawn at short notice, albeit with some loss of interest. However, the ratio of “cash and bank balances” to “investments” varies from 0.47 to 0.69, i.e the quantum of “cash and bank balances” is only about half of that of “investments”. The ratio of “cash and bank balance” plus “investments” (liquid as well as illiquid) to receivables is consitently lower than 1.0 (varying between 0.6 and 0.9). Hence it can only be presumed that if a company qualifies on the receivable criteria it is most likely that it will also qualify on the “cash plus interest” bearing investment criteria too (as the denominator for the ratio in both cases is the same).

Separate figures for interest-earning investments are not available in the database. Making allowance for non-interest earning investments, such as equities of associate companies and subsidiaries, growth oriented mutual funds and strategic and portfolio investments, it appears reasonable to assume that the aggregate investment in interest-earning asset is likely to be a minor (25% to 40% say 33%) part of the aggregate total investments. Adding to this, the amount of cash and bank deposits, the ratio for interest earning investments to total market capitalization is found to vary from 14.4% in 2002 to 10.0 % in 2006.

As the proportion of cash in the “cash and bank balances” aggregate figures is also quite minor (varying between 4% and 12% say 10%), the ratio for the Dow Jones criteria of “cash plus interest earning securities” as percentage of market cap does not even cross the 7% level. On the basis of the Dow Jones parameters, (assuming interest-based investments as 33% of total investments), 85% to 92% of the companies qualify. Hence it may be concluded that this screen is too liberal as also superfluous.

6.2.3 Level of receivables

Dow Jones stipulates certain maximum ratios of receivables or liquid assets as one of the screens for checking shari[ah compliance. However it is wrong to treat a company in the modern world whose equity is publicly traded as simply a bundle of accounting assets and liabilities, defined on its balance sheet. For a start, some very vital and valuable assets of the company may not figure on its balance sheet at all. Marketing assets such as brands, distribution networks and logistical arrangements, as well as licenses, quotas, permits, access to lucrative but protected markets, etc. do not normally appear on balance sheets. Even intellectual property such as patents, formulae, source codes of software, etc. are assets, which even if assigned a book value in terms of research costs are sometimes actually worth thousands of times more. Even fixed assets either appear at historical costs or are revalued only at infrequent intervals.

Then there are other intangibles such as the company’s public image, the value of key individuals in the company’s top management, marketing, production and research teams. Similarly access to markets, raw materials, power and other utilities in times of shortages can impinge on the value of a company’s share price. Since here the argument concerns the value paid for a company’s share in relation to the composition of its assets and the value paid for a publicly traded equity is driven by market expectations of the future, there is no connection between the assets of non-negotiable value (as per shari[ah) and the market price. The market price movements do not, even in a minute way mirror the price assigned by the market to the company’s receivables, payables and cash balances.

Hence it can really be futile to place a figure on the share of a company only or mainly on the basis of its balance sheet assets. A company such as a trading company can have negligible assets other than receivables and payables, and some inventory and yet due to its intangible strengths it could command a huge premium in the market on its breakup value. This is not because it is able to sell its receivables and cash at a premium or liquidate its debts at a discount (as the reasoning of the shari[ah scholars implies). It is because of its inherent or intangible strengths.

Conversely, a company may own valuable real estate assets. As a result in the event of liquidation of its assets, the break-up value of its share could be several times its traded value, if it is not performing well. This is because the normal market players have a short-term investment horizon and know that the company management does not have an immediate intention of closing shop. Hence they view the company as a going concern and not as spoils to be shared out.

Hence the very basis for the stipulation regarding limiting the level of receivables appears to be misconceived and invalid. In addition to it, the Dow Jones stipulations being based on the market capitalization and therefore suffering the additional weakness inherent in using TTMAMC as a measuring quantity, is even more unsuitable.

Analysis of the Dow Jones norms for receivables through the BSE500 data, gives the following empirical findings:

a) The aggregate value for receivables vary between US$ 33.97 billion to US$ 70.07 billion.

b) The ratio of receivables to market cap works out to an average of 30.8 % over the study period (varying from a low of 18.1% to 2006 to high of 42.6% for 2003). From the list of “eligible” companies, an average of 43% (155 nos.) of the companies (varying from 23.3% in 2002 to 70.7% in 2006) qualify on the Dow Jones criteria pertaining to receivables.

6.2.5 Suitability of market capitalisation for use in screening ratios

In the Dow Jones screens one of the financial measures used to assess the value of ownership of a company and used in some screens is market capitalization.

Dow Jones uses market capitalization as a denominator in all the ratios it uses for screening. Which financial terms and what kind of ratios are to be used should follow from the objectives sought to be gained. But does market capitalization fit the bill.

It is claimed that market capitalization gives the true worth of a company and hence it needs to be used as a basis for the financial ratios. While such a contention is far from the truth, even if that was the case, its use in all the ratios is not relevant or appropriate for some of them have nothing to do with the worth of the company. It needs reiteration that use of a specific term or ratio depends on the objective for which that term or ratio is being used.[8] Then again, fundamentally, screening norms need to focus on the company itself and its activities and assess them on objective criteria. How the market perceives a company is not relevant to the Islamicity of its activities. The market price of the share is not the amount invested in the company's assets; it is the price settled for the share of the company by buyers and sellers, independent of the company.

Also, it is almost impossible to sell or buy all the shares of a company, on the stock exchanges in a few days or even a month. The final price (even average price) of the shares being sold or bought over the period of purchase or sale could be vastly different from that prevailing when the exercise was initiated.

There is also often no definite rationale behind the way share prices fluctuate. The only definite statement that can be made about price movements on the equities market is that they are largely driven by sentiments about future earnings and movements. What creates those sentiments on a particular day is a different matter. It could be past performance, news of current performance, expectations of future results, market manipulations, a result of demand-supply imbalances, government policies, political developments, international price movements, even the state of health of a national leader or finance minister or even the holding of a major match of a sport the nation is fanatical about.

Thus, often in the span of a few weeks or a couple of months, the share price of an equity share can skyrocket or nosedive. The IT boom and bust of a few years ago is a case in point. In a wild jacking up of share prices, new IT start-ups with no revenue stream to talk about (leave alone a profit stream) reached astronomical heights only to plummet back to the price of scrap paper. Even ignoring such extreme scenarios, it is not unusual to find over a year's interval share prices rising to more than double or sinking to les than half their original values, when there is no apparent change in their underlying fundamentals.

A practical problem of using market capitalization also is that with sudden market movements, a company which was considered shari[ah-compliant one day, has to be considered shari[ah non-compliant the next day, if there is a downward price fluctuation. As a result Islamic investors would have to compulsorily exit, leading to further downward pressure on its price, thus destabilizing its price. Similarly an opposite movement could lead to a corresponding (though more muted) upward move too. And all this with no change in the company's operations. Such market destabilization would also be an unhealthy and wholly avoidable consequence of involving market capitalization in the screening norms.

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[8] For instance, while calculating *zakah* on one's holding in listed equities, one does need to use the market value of the shares. This is because the market value of the shares as on a given day is the best approximation to the worth of the holdings of an ordinary investor with limited holdings (the same may not be necessarily true for an investor with a substantial holding). The ordinary investor can in most cases if he wants, get for his holdings about the same value as the market price indicates and he is also potentially able to realize the worth of most of his shares in a single day's trading. It is not just a theoretical figure. Hence his *zakah* calculation would have to be based on the market value of his shares.

Another practical problem in using market capitalization as the denominator in the screening norms for selecting companies for investing in their equity, is that such screening ratios cannot be used to screen unlisted companies. A similar argument would apply (to a lower extent) to infrequently traded companies or companies with low floating stocks. Often, due to the low liquidity associated with such scrips, even fundamentally strong companies of this group quote very low, sometimes even below their book values.

A final argument against the use of TTMAMC by Dow Jones is that, if the market price is the true measure of value of the company, then why use TTMAMC and not the market price itself. A random calculation shows that on average on any day, the market price shows a 33 percent variation from TTMAMC. This only shows the fallacy of using TTMAMC as a measure in the screening ratios. It should not however be construed as advocating the use of the daily market price as the denominator.

7. CONCLUSION & SUGGESTIONS

We find that of the BSE 500 scrips an average of 86.3% make it to the list of eligible companies whose nature of business is *shariah* compliant on the basis of the Dow Jones criteria. As the database does not give complete information to enable applying the screen for level of liquid assets, companies on the eligible list have not been screened on this criterion. However it has been shown that this criteria is very liberal and probably those companies which will make it on the basis of level of debt and particularly, on level of receivables, will turn out to be compliant on level of liquid assets too.

Applying the screens for level of debt and level of receivables, we find that an average of 32.6% of the companies from the eligible list and 28.1% of all companies (for which complete data was available) in the BSE 500, qualify as *shariah* compliant on the Dow Jones criteria.

A suggestion has been made that organisations undertaking screening on the basis of shari[ah-compliance norms should put in place a system requiring compliant companies in industries such as hotels, shipping, etc, which generally tend to fail on one of the criteria for compliance, to regularly report their results and activities to the screening organisation for a fee so that investors could gain a wider choice and the reporting companies not get automatically excluded from the list of shari[ah-compliant companies communicated to potential investors.

The use of market capitalisation in the screening ratios is inappropriate and should be replaced by other relevant balance sheet items, notably total assets.

The value of the ratio normally set for compliance regarding level of debt should be scaled down to at least 20%.

Screening norm for controlling the level of cash and receivables (or net receivables) is based on the rationale that these can only be traded at par. A higher proportion of these assets in the total assets, could lead to an infringement of this shari[ah requirement. It has been shown in the paper that the entire reasoning behind this screen is flawed. Such a screen does not serve any purpose at all as the level of market price of a share is not due to a corresponding value for the company's cash hoard or receivables and payables.

The absence of direct measures for controlling the level of interest earnings as well as interest bearing investments is a grave omission in the Dow Jones criteria and needs to rectified.

Finally, to put our approach in this paper in the proper perspective, it needs to be stressed that the entire exercise of screening companies is essentially to arrive at a list of companies which are "shariah-tolerant", rather than "shariah-compliant". As has been stressed in the relevant sections and is borne out from a chronological study of the decisions of various shariah boards, the evolution of the screening criteria has been to facilitate investments in equities by expanding the universe of permitted scrips from those which are fully shariah compliant (implying zero debt and zero interest or other income from haram activities) to those which are within "acceptable" limits of non-compliance, i.e. "shariah-tolerant" in other words. This is an important distinction and needs to be borne in mind so that we do not treat a temporary exemption (hopefully short-term) as a norm.

REFERENCES

AAOIFI (2003), *Shari[ah Standards,* The Accounting & Auditing Organization for Islamic Financial Institutions: Manama, Bahrain.

Ali, Salman Syed (2005), *Islamic Capital Market Products - Developments & Challenges*, Islamic Research and Training Institute, Islamic Development Bank, Jeddah, Saudi Arabia, pp.93.

Cox, Stella (2004), "The Development of the Islamic Capital Market", 3rd Annual Finance Sumit, Euromoney Seminar: London, UK.

DeLorenzo, Yusuf Talal (2000), *Shari[ah Supervision of Islamic Mutual Funds*, 4th Annual Harvard Forum on Islamic Finance.

Hussein, Khalid (2004), "Ethical Investment: Empirical Evidence from FTSE Islamic Index", *Islamic Economic Studies,* Vol.12, no.1 (August), pp. 21-40.

Obaidullah, M. (2001), "Regulation of Stock Market in an Islamic Economy" in: *Islamic Banking and Finance: Current Developments in Theory and Practice*, Munawar Iqbal (ed.) Leicester, UK: Islamic Foundation.

Obaidullah, M. (2005), *Islamic Financial Services*, Islamic Economics Research Centre, King Abdul Aziz University, Jeddah, Saudi Arabia, Chapter 16.

OICU-IOSCO (2004), *Islamic Capital Market Fact Finding Report,* Report of the Islamic Capital Market Task Force of the International Organization of Securities Commissions, July.

Securities Commission Malaysia (2003) *Regulations of the Securities Commission Syariah Advisory Council,* Securities Commission: Kuala Lumpur, Malaysia.

Siddiqi, M.N. (2004), *Riba, Bank Interest and the Rational of its Prohibition*, Islamic Research and Training Institute, Islamic Development Bank, Jeddah, Saudi Arabia, pp.164.

Siddiqui, Rushdi (2003) "Rationale for Applying DJIMI Screens to KLSE: A Proposal", a presentation made in the Conference on Future Trends in Islamic Equity Bond Market. Kuala Lumpur. June 25, 2003.

Tariq Al Rifai, (2000), "Monitoring the Performance of Islamic Equity Funds", *New Horizon,* No. 103, October.

Usmani, Muhammad Imran Ashraf (2002), "Meezan Bank's Guide to Islamic Banking", Meezan Bank, Pakistan. Chapter 29.

Usmani, Taqi ( ), "Principles of Shari[ah Governing Islamic Investment Funds" accountancy.com.pk, also see, http://www.islamic-finance.net/islamic-equity/taqi2.html

Wilson, Rodney (unpublished), *Screening Criteria for Islamic Equity Funds*. Received through mail to the author.

www.http://islamic-finance.net/islamic-equity/screen.html

Yaquby, Nizam, *Participation and Trading in Equities of Companies whose Main Business is Primarily Lawful but Fraught with some Prohibited Transactions*, Paper presented to the Fourth Harvard Islamic Finance Forum, October 2000.