International Journal of
Emerging Research in Management &Technology
ISSN: 2278-9359

Research Article | **December 2012**

A Study of the Movement of BSE-TASIS Shariah 50 Index in accordance with Sensex

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Abstract:

Shariah (Islamic Law) does not permit Muslims to invest in companies that derive significant benefits from interest since usury is considered sinful under Islamic faith. Companies should not derive benefits from sale of products deemed harmful like alcohol, tobacco and weapons. This is the underlying principle why a separate index of equities called the Shariah Index was formed to tap the ever increasing Islamic investors in businesses across the world. The aim is to enable the Islamic financial world to invest in Shariah-friendly businesses across the world. The authors have reviewed the set norms. Historical data of the Bombay Stock Exchange is used to compare the movement of Shariah Index with Sensex. Based on the empirical results and analytical arguments the study suggests the ethical investor to invest in the companies of Shariah Index to earn the equivalent gain like others.

Keywords: Sensex; Shariah Index; Investor; Closing of Index; Opening of Index

I Introduction

The preferred Islamic investment format is equity. However equity comes along with ownership. Hence Islamic investors have to ensure that the selected company's business and financial activities are not repugnant to Shariah norms. Due to the exigencies of modern business and particularly the pervasiveness of interest based transactions, Shariah scholars have arrived at minimum compliance criteria which, while excluding companies in gross violation, also provide investors with a reasonably wide choice of Shariah-compliant equities. These minimum guidelines, however, are not uniformly applied by all Shariah advisors. Investors seeking strict adherence to Islamic canonical law should therefore seek to use financial products that utilize an advisor with as thorough and conservative an approach as possible. Owing to the strong economic growth achieved by India in recent years there is an increasing interest from investors, especially those from countries with large Islamic population, in Shariah compliant investment options in India. To help such investors track listed Shariah compliant companies and their performance, BSE & TASIS have joined hands to launch BSE-TASIS Shariah 50 Index on Dec 27, 2010. The Bombay Stock Exchange has launched India's first index of companies compliant with Islamic law, or shariah, in an effort to bring more of the country's 175millions Muslims into mainstream finance, and to attract investment from foreign shariah-abiding funds.

II TASIS (Taqwaa Advisory and Shariah Investment Solutions)

TASIS is India's premier Shariah Advisory institution associated with the vast majority of Shariah compliant products available in the country today. It was founded by a group of finance and investment professionals who realized the need for a credible organization for providing guidance and support to individuals and corporations having an interest in the nascent but rapidly growing Islamic finance industry in India. TASIS specializes in Shariah advisory, product structuring, monitoring and Shariah certification. Currently it advises Indian companies, including government owned enterprises and those from the private corporate sector, in matters related to the application of Shariah law in business matters. Scholars on TASIS's Shariah Board are based in North America, Europe and India, and are public figures who are highly reputed in their respective fields of specialization. The criteria employed by TASIS, in most cases, is more conservative than other Shariah advisory bodies.

III Description of Index

The BSE-TASIS Shariah 50 Index ("Index") includes the top 50 companies in India that have passed TASIS's stringent Shariah compliance norms. The Index is a Cap Weighted Free Float Market Capitalization weighted Index comprised of BSE listed Shariah compliant Companies which are part of the BSE-500 Index. The Index has been back-tested from 1st January 2008 (Base Date) with the base index value of 1000. The Index is rebalanced on a quarterly basis i.e. end of March, June, September and December quarters. There shall not be any intra-review inclusion to the Index. However, if an existing constituent becomes non-Shariah compliant due to changes in financials or any corporate action, it may trigger exclusion of the constituent from the Index immediately. Companies are reviewed for Shariah compliance by TASIS on a monthly basis.

IV BSE SENSEX

The **BSE SENSEX** (Bombay Stock Exchange Sensitive Index), also called the **BSE 30** (BOMBAY STOCK EXCHANGE)or simply the **SENSEX**, is a free-float market capitalization-weighted stock market index of 30 well-established and financially sound companies listed on Bombay Stock Exchange (BSE). The 30 component companies which are some of the largest and most actively traded stocks, are representative of various industrial sectors of the Indian economy. Published since January 1, 1986, the SENSEX is regarded as the pulse of the domestic stock markets in India.

BSE listed Shariah Compliant Companies			
1	A B B Ltd.	26	Hindustan Copper Ltd.
2	A C C Ltd.	27	Hindustan Unilever Ltd.
3	Alstom Projects India Ltd.	28	Indraprashtha Gas Ltd.
4	Ambuja Cements Ltd.	29	Jindal Saw Ltd.
5	Apollo Hospitals Enterprises Ltd.,	30	Lupin Ltd.
6	Areva T & D India Ltd.	31	M R F Ltd.
7	Asian Paints Ltd.	32	Mangalore Refinery & Petrochemicals Ltd.
8	B E M L Ltd.	33	Maruti Suzuki India Ltd.
9	Bajaj Auto Ltd.	34	Mcleod Russel India Ltd.
10	Bharat Heavy Electricals Ltd.	35	Motherson Sumi Systems Ltd.,
11	Bharti Airtel Ltd.	36	Mphasis Ltd.
12	Cadila Healthcare Ltd.	37	Nestle India Ltd.
13	Castrol India Ltd.	38	Oil & Natural Gas Corpn. Ltd.
14	Cipla Ltd.	39	Opto Circuits (India) Ltd.
15	Colgate-Palmolive (India) Ltd.	40	Reliance Industries Ltd.
16	Crompton Greaves Ltd.	41	Siemens Ltd.
17	Cummins India Ltd.	42	Sterling International Enterprises Ltd.
18	Dabur India Ltd.	43	Tata Consultancy Services Ltd.
19	Dr. Reddy'S Laboratories Ltd.	44	Tata Global Beverages Ltd.
20	G A I L (India) Ltd.	45	Tech Mahindra Ltd.
21	Glaxosmithkline Consumer Healthcare Ltd.	46	Thermax Ltd.
22	Godrej Consumer Products Ltd.	47	Titan Industries Ltd.
23	Grasim Industries Ltd.	48	Ultratech Cement Ltd.
24	Hero Honda Motors Ltd.	49	Voltas Ltd.
25	Hindalco Industries Ltd.	50	Wipro Ltd.

List of BSE SENSEX Companies			
1	Bajaj Auto	16	Jindal Steel
2	Bharti Airtel	17	Larsen

3	BHEL	18	Mah and Mah
4	Cipla	19	Maruti Suzuki
5	Coal India	20	NTPC
6	Dr Reddys Labs	21	ONGC
7	GAIL	22	Reliance
8	HDFC	23	SBI
9	HDFC Bank	24	Sterlite Ind
10	Hero Motocorp	25	Sun Pharma
11	Hindalco	26	Tata Motors
12	HUL	27	Tata Power
13	ICICI Bank	28	Tata Steel
14	Infosys	29	TCS
15	ITC	30	Wipro

V Review Of Earlier Studies

The research studies on Islamic investment are minimum. Mostly, they may be the carried out in developed country like UK, USA. The studies such as **Abdullah and Bacha (2001)** examined the impact of inclusion and detection of the stocks in the Shariah index on return and trading volume of the Shariah stocks in Malaysia. They employed event study methodology for daily closing prices and trading volume of the Shariah stocks during 1997 to 1999. The study found that inclusion of the stocks in the Shariah index increased the returns and trading volume and exclusion of the stocks reduced the returns and trading volume of the Shariah stocks in the Malaysia.

Ahamad and Ibrahim (2002) compared the risk and return performance of Kuala Lumpur Shariah Index (KLSI) with Kuala Lumpur Composite index (KLCI) during the period 1999 to 2002. The sample period of the study is divided into growing period, decline period and overall period. They have employed relative return technique, Standard deviation, risk adjusted performance measurement and two sample t - test to measure the performance of both indices. The study found that KLSI underperforms during overall period and decline period but it overperform in growing period. Finally they find that there is no significant difference in performance of both indices during three sample period.

Hakim and Rashidian (2004a) investigated the risk and return of Dow Jones Islamic Stock Market Indices (DJIM) from 1999 to 2002. The study found that the three month T bill returns dominate both the Islamic Index and the Wilshire 5000 stock market index. However, return and risk of the Islamic index is less than the Wilshire 5000. The study also examined the long run and short run relationship existing among the variables using unit root test, co integration and causality test. The study found that T bill returns, Islamic index returns and Wilshire 5000 returns are not co- integrated.

Hakim and Rashidian (2004b) analysis the risk and return of the Dow Jones Islamic World Index, Dow Jones World index and Dow Jones Sustainability (DJS) World index by using weekly closing value of the indices and LIBOR, a proxy of the risk-free rate during period January 5, 2000 to August 30, 2004. By employing CAPM, the results of the study reveals that the most popular index is market competitive but has underperformed in relation to another morally restricted but non-Islamic index.The study concludes that investors in the Muslim index are not suffering a discernible cost for complying with the Shariah restriction.

Hussein (2004) evaluated the performance of ethical investment with their unscreened benchmarks. The study empirically tested whether returns of FTSE Global Islamic Index are significantly different from their index counterpart (FTSE All- World Index). The sample period has been divided into two sub-periods, bull period (July 1996 – March 2000) and bear period (April 2000 - August 2003). Both indices were performed in similar manner during entire sample period. On the other hand, the Islamic index yields statistically significant positive abnormal returns in the bull market period, whereas it underperformed in the bear market period. In general, the results show that the application of ethical screening does not have an adverse effect on the FTSE Global Islamic Index performance.

Hussein (2005) made an effort to test whether monthly returns of Financial Time Stock
Exchange (FTSE) Global Islamic index and Dow Jone Islamic Market Index are significantly different from their common index for the period January 1996 to December 2004. The sample period is divided into bull market and bear market. The study employs Capital Asset pricing model, Risk adjusted performance measurement, t–test, Wilcoxon Signed test, buy and hold return method and cumulative return method for examining long run and short run relationship between indices. In short run period, Islamic indices statistically overperfom during whole period and second bull market period. In long run, Islamic indices overperfomed during entire period and second bull market period. Finally the study finds that there is a similar performance between indices.

Hussein and Omran (2005) examine the impact of ethical screening on the performance of the Dow- Jones Islamic indexes during December 1995 to June 2003 by using monthly closing value of the DJIWI and its 13 sub indexes. The sample period is divided into two sub periods, January 1996-March2000 and April 2000-July 2003, in order to track the behavior of Islamic indexes under bull and bear market conditions. By employing CAPM, Sharpe ratio, treynor ratio, the study finds that Islamic indexes provide positive abnormal returns over the entire period and the bull market period, but they underperform their index counterparts over the bear market period.

Ahmad (2005) made an attempt to examine the relationship among the daily closing price of the
Bursa Malaysia Shariah index, EMAS index and the daily Malaysian three months T-bills rate during the period April 1999 to December 2004 in Malaysia. The study employs the unit root test, Johansen- Juselius cointegration test, Granger Causality test and Vector Error Correction Model (VECM) to find the relationship among the variables. The results of the study reveal that the Bursa Malaysia Shariah index, EMAS index and three months T-bills share a long run relationship. In the short run, only changes in EMAS index tent to raise the value of BMSI and t-bills do not significantly affect both indices in Malaysia.

Albaity and Ahamad (2008) investigated the performance and relationship between KLSI and KLCE over the period of April 1999 to December 2005 in Malaysia. The study applied risk adjusted performance measurement, causality and Johansen co integration test. They found that there is an insignificant return difference and long run bidirectional relationship between both indices.

Sadegi (2008) investigated the impact of the introduction of Bursa Malaysia Islamic index on the financial performance and liquidity of the screening securities involved in the Islamic index in Malaysia. The study employed event study methodology to estimate mean cumulative returns of the Shariah compliant stocks in the days surrounding the event and also investigate the changes in liquidity using trade volume and bid ask spread surrounding the event days as liquidity proxies. The study found that the introduction of the Shariah index has positive and strong impact on the financial performance of the Shariah compliant stocks.

Dharani and Natarajan (2011a) compared the risk and return of the S&P CNX Nifty Shariah index and S&P CNX Nifty index at day wise, moth wise and quarter wise during 2nd January 2007 to 31st December 2010. The study finds that there is a significance return difference between both indices during third quarter in India. Finally, the study found that Ramalan effect prevailed in the Shariah index during third quarter of the study period.

Dharani and Natarajan (2011b) empirically examined the risk and return of the Nifty Shariah index and Nifty index during the period 2nd January 2007 to 31st December 2010. The sample period is further divided into bull market period and bear market period based on the movement of the both indices during the study period. The objective of the study is to analyse the performance of the Islamic index and common index and to test whether any significant difference between both indices in India.They employ Risk adjusted measurement such as Sharpe index, Treynor Index and Jensen alpha. The t- test is used to test the mean returns difference between both indices. The study concluded that Nifty Shariah and Nifty indices in India are performing in a similar manner.

Dharani and Natarajan (2012) empirically examined the risk and return behavior of the Shariah Compliant Stocks and benchmark indices during the period from 2nd January 2007 to 29th July 2011. The study reveals that the average returns of the Shariah Compliant Stocks and benchmark indices were almost similar. In the same line, average return of the Shariah index and Common index in India during the study period were also highly resembled each other. With all Shariah principles, the Shariah index provides same return as common index provide. Hence, the study reveals that the equity based Shariah Compliant investment is a viable and ethical investment avenue.

VI Objectives Of The Study

The specific objectives of the study are:
1. To review the Shariah norms for Investment.
2. To estimate the existence of association among the selected Shariah Index and Sensex.
3. To study the relationship between Shariah and benchmark index.

VII Research Methodology

The study exclusively based on secondary data. The data set comprises of monthly Closing Prices, high and low of the selected Shariah Index and the Sensex.The data of the Shariah Index and Sensex were collected from the historical data base available at BSE official website from January 2011 to June 2012.

Direct statistical analysis of financial data is difficult, because consecutive figures are highly correlated and the variances of figures increase with time. Financial figures are not 'stationary'. Consequently, it is more convenient to analyzing the pattern of the collected information by using the graphs.

The concern data of both the superset data is converted into percentage change by using the following formula:

Percentage Change = (Figure of current month – Figure of previous month) / Figure of current month * 100

VIII The Basic Conditions For Investment In Securities

The main principles of Islamic Finance include:

1. The prohibition or taking or receiving interest at exorbitant rates (Riba), but this does not preclude a rate of return on investment.
2. Risk in any transaction must be shared between at least two parties so that the provider of capital and the entrepreneur share the business risk in return for a share in profit.
3. The Prohibition of speculative behavior (Gharar) is not allowed, meaning that gambling (Maysir) and extreme uncertainty or risk prohibited and thus contractual obligations and disclosure of information are a sacred duty. This also restricts traditional derivatives.
4. Money is seen as potential capital and thus only takes the form of actual capital when it is used in a productive capacity. Other investment guidelines restrict the following.

a) Investment in companies whose total debt divided by trailing 12 month average market capital is greater than 33%.
b) Investment in the companies whose sum of cash and interest – bearing activities divided by trailing 12 month average market capital is greater than 33%.
c) Investment in companies whose account receivables divided by total assets are greater than 33% (sometimes 45%).
d) Investments that violate the rules of Shariah, advised against by Shariah boards, and are generally non – ethical meaning that investment in businesses related to alcohol, pork related products, conventional financial service, entertainment (gambling and casinos, hotels, cinema, pornography, music).

IX Observed Results

The final price at which a security is traded on a given trading day. The closing price represents the most up-to-date valuation of a security until trading commences again on the next trading day.

Most financial instruments are traded after hours (although with markedly smaller volume and liquidity levels), so the closing price of a security may not match its after-hours price. Still, closing prices provide a useful marker for investors to assess changes in stock prices over time - the closing price of one day can be compared to the previous closing price in order to measure market sentiment for a given security over a trading day.

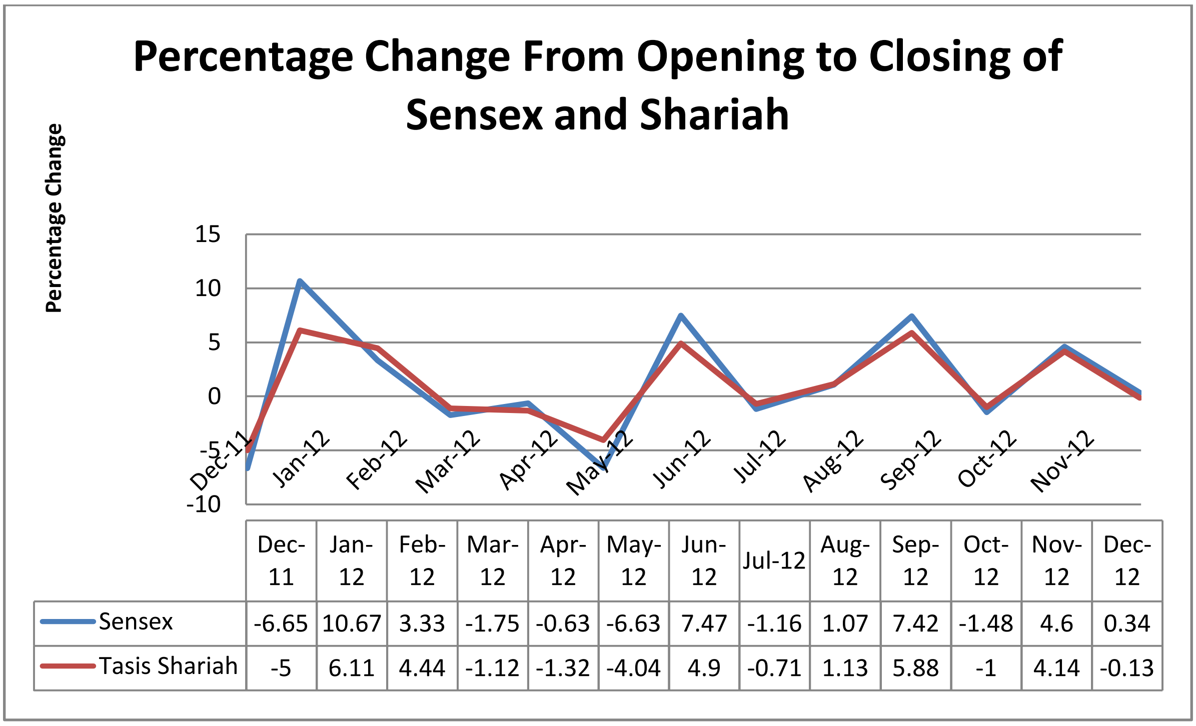
The price at which a security first trades upon the opening of an exchange on a given trading day. A security's opening price is an important marker for that day's trading activity, especially for those interested in measuring short-term results, such as day traders. Additionally, securities, which experience very large intra-day gains and losses, will have those swings measured relative to their opening price for the day.

Quite commonly, a security's opening price will not be identical to its closing price. This is due to after-hours trading and to changes in investor valuations or expectations of the security occurring outside of trading hours.

Percentage Change From Opening to Closing of Sensex and Shariah

Months	Sensex	Tasis Shariah
Dec-11	-6.65	-5
Jan-12	10.67	6.11
Feb-12	3.33	4.44

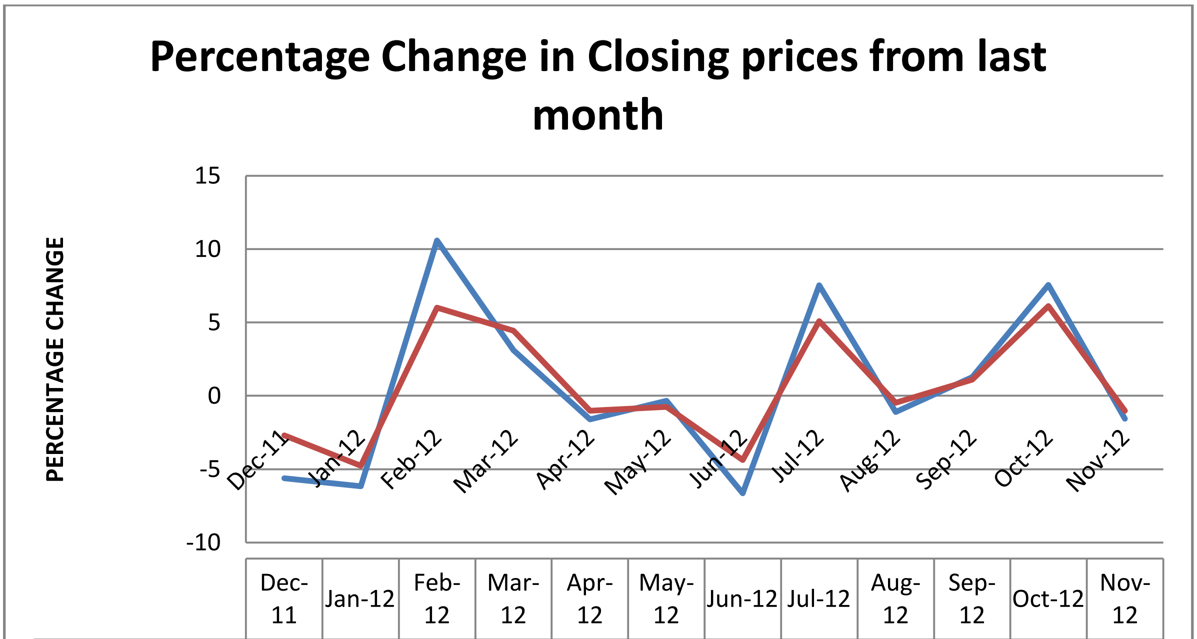
Mar-12	-1.75	-1.12
Apr-12	-0.63	-1.32
May-12	-6.63	-4.04
Jun-12	7.47	4.9
Jul-12	-1.16	-0.71
Aug-12	1.07	1.13
Sep-12	7.42	5.88
Oct-12	-1.48	-1
Nov-12	4.6	4.14
Dec-12	0.34	-0.13



Interpretation: The above table and graph show the percentage change in the indices opening to their closing. In December 2011 both the indices Sensex and Tasis Shariah shows the negative change in their closing from their opening, i.e. -6.65 and -5 respectively. Then in first month of 2012 both the indices shows the remarkable positive change. From the month of February 2012 the indices start going down slowing the trend is continue till May 2012. Again the positive change can be notice in the month of June. In July 2012 there is negative change, but this change do not continue and the indices take positive turn in August and September 2012 and the noticed change is Sensex: 1.07 in August and 7.42 in September, Tasis Shariah: 1.13 in August and 5.88 in September. October 2012 shows the negative change and November 2012 shows the change of 4.6 and 4.14 respectively.

Percentage Change in Closing Prices from last month (Sensex and Tasis Shariah)

Month	Sensex	Tasis Shariah
Dec-11	-5.61	-2.69
Jan-12	-6.16	-4.77
Feb-12	10.58	6.01
Mar-12	3.11	4.45
Apr-12	-1.6	-1.01
May-12	-0.33	-0.76
Jun-12	-6.64	-4.38
Jul-12	7.53	5.09
Aug-12	-1.11	-0.48
Sep-12	1.28	1.09
Oct-12	7.55	6.12
Nov-12	-1.57	-1.01



	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
Sensex	-5.61	-6.16	10.58	3.11	-1.6	-0.33	-6.64	7.53	-1.11	1.28	7.55	-1.57
Tasis Shariah	-2.69	-4.77	6.01	4.45	-1.01	-0.76	-4.38	5.09	-0.48	1.09	6.12	-1.01

Interpretation: The above table and the graph show the Percentage change in the monthly closing of indices from the closing of last month. There is lots of ups and down can be notice. In December 2011 Sensex shows -5.61 as the percentage change in its closing from its last month, on the other hand Tasis shariah depict -2.69. The down flow increases in January 2012.But the following month shows the highest percentage change ie. 10.58 and 6.01 respectively but again in the month of march both the indices go down slowly and the trend continue till june 2012. We shows -6.64 and -4.38 respectively. In the month of july indices goes up and the noticed percentage change is 7.53 and 5.09 respectively then in august 2012 sensex again shows the negative change ie. -1.11 and tasis shariah shows -0.48.

September and October 2012 shows the positive percentage change in both the indices. Again the negative change can be noticed in both the indices .

X Conclusion

The present study analyzed the movement of the selected Tasis Shariah and Sensex during the period from December 2011 to November 2012. The closing values of the selected Shariah and Sensex are collected from BSE websites. The study employed table and graph analysis to examine the study objectives. It found that Tasis Shariah and sensex move almost in the same direction in a particular month. Hence, the study infers that the equity based ethical investors can gain more or less the same by investing in the Shariah companies' shares as other are gaining from Sensex. To summarise, the paper has shown that the screens commonly used to assess shariah compliance of companies for the purpose of including them in the list of acceptablecompanies, need to be modified.

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