Investigation Stock Exchange in Iran

1Alireza Hasani and 2Azam Shahamati Zou

1Department of International Trade, Damghan branch, Islamic Azad University, Damghan, Iran.
2Master of International Trade, Damghan branch, Islamic Azad University, Damghan, Iran.

ARTICLE INFO

Article history:
Received 15 April 2014
Received in revised form 22 May 2014
Accepted 25 May 2014
Available online 15 June 2014

Key words:
Stock, bourse, Iran, Stock Exchanger

ABSTRACT

Decision-making and investors' behaviours are affected by various factors in Tehran Stock Exchange. Based on theoretical perspective, investors collect the key information of decision-making by the study of macro- and micro-levels of investment environments. To analyse the research data, path analysis and Linear Structural Relationships (LSREL) software are used. The results indicate that political factors with 62%, psychological factors with 53%, economic factors with 47% and internal factors with 31% are the most important factors that affect the stocks trading in Tehran Stock Exchange. Political and psychological factors not only have direct effect but also affect the investors' financial decision-making indirectly (through intended interest rate) 16% and 11%, respectively. The total effect of political and psychological factors on investors' financial decision-making is 79% and 64%, respectively.

©2014 AENSI Publisher All rights reserved.


INTRODUCTION

The concept of stock industrialization dates to 1936, when Bank Melli, together with Belgian experts, issued a report detailing a plan for an operational stock exchange in Iran. However, the plan was not implemented prior to the outbreak of World War II, and did not gain traction until 1967, when the Government revisited the issue and ratified the "Stock Exchange Act". Initially limited in size and scope, the Tehran Stock Exchange (the "TSE") began operations in 1967, trading only in corporate and government bonds. Iran's rapid economic expansion in the 1970s, coupled with a popular desire to participate in the country's economic growth through the financial markets, led to a demand for equity. The Government became actively engaged in the process, by granting shares to employees of large state-owned and family-owned enterprises. Market activity increased substantially, as both companies and high net worth individuals participated in the new-found wealth associated with the TSE.

Everything came to a standstill after the Islamic Revolution leading in a prohibition against interest-based activities and nationalization of major banks and industrial giants. Mobilization of all resources towards the war effort during the 8-year Iran-Iraq war did not help matters. Following the end of the war, the 1988 Budget Act re-established activity on the TSE, and within eight years the exchange saw its numbers rise to 249 companies listed. The Government fully embraced economic reforms and a privatization initiative in 1989 with a surge of activity in share activity of many state-owned companies through the defined targets in the first "Five-Year Economic Reform" where the Government together with the Parliament defined the economic prospects of the country for the coming five years. Attention to promotion of the private sector and new interest in the TSE brought life back to the market. However, lack of regulation and out-of-date legal framework led to crisis in the market leading to certain "meltdowns". Over the 1996 to 2000 period an automated trading system was introduced, and a number of important regulatory mechanisms were strengthened. The market has experienced its share of highs and lows in the past years including topping the World Federation of Exchanges' list in terms of performance in 2004 to tumbling down to last place in 2007 due to political uncertainties in the region [1].

A stock exchange is a form of exchange which provides services for stock brokers and traders to trade stocks, bonds, and other securities. Stock exchanges also provide facilities for issue and redemption of securities and other financial instruments, and capital events including the payment of income and dividends. Securities traded on a stock exchange include stock issued by companies, unit trusts, derivatives, pooled investment products and bonds. Stock exchanges often function as "continuous auction" markets, with buyers and sellers consummating transactions at a central location, such as the floor of the exchange.
To be able to trade a security on a certain stock exchange, it must be listed there. Usually, there is a central location at least for record keeping, but trade is increasingly less linked to such a physical place, as modern markets are electronic networks, which gives them advantages of increased speed and reduced cost of transactions. Trade on an exchange is by members only.

The initial offering of stocks and bonds to investors is by definition done in the primary market and subsequent trading is done in the secondary market. A stock exchange is often the most important component of a stock market. Supply and demand in stock markets are driven by various factors that, as in all free markets, affect the price of stocks.

There is usually no compulsion to issue stock via the stock exchange itself, nor must stock be subsequently traded on the exchange. Such trading is said to be off exchange or over-the-counter. This is the usual way that derivatives and bonds are traded. Increasingly, stock exchanges are part of a global market for securities. In recent years, various other trading venues, such as electronic communications networks, alternative trading systems and “dark pools” have taken much of the trading activity away from traditional stock exchanges.[2]

Other complementary markets have also been established alongside the equities market. In 2003, the Tehran Metal Exchange (now called the Iran Mercantile Exchange after its merger with the Agricultural Exchange in 2006) was launched. The Oil Bourse and the over-the-counter Farabourse were launched in 2008 followed in 2012 by the Energy/Electricity Bourse and the FOREX bourse.

<table>
<thead>
<tr>
<th>Main Indicators for TSE*</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Listed Companies</td>
<td>417</td>
<td>415</td>
<td>346</td>
<td>337</td>
</tr>
<tr>
<td>Market Capitalization (USD Millions)</td>
<td>43,794</td>
<td>45,574</td>
<td>49,040</td>
<td>58,698</td>
</tr>
<tr>
<td>Total Value of Share Trading (USD Millions)</td>
<td>6,230</td>
<td>7,872</td>
<td>15,252</td>
<td>16,875</td>
</tr>
<tr>
<td>Daily Average Trading Value (USD Millions)</td>
<td>26.1</td>
<td>32.5</td>
<td>63.8</td>
<td>65.4</td>
</tr>
<tr>
<td>Total Number of Trade in Share (Millions)</td>
<td>15,839</td>
<td>23,401</td>
<td>37,975</td>
<td>82,479</td>
</tr>
<tr>
<td>No. of Transactions (in thousands)</td>
<td>1866</td>
<td>2107</td>
<td>1978</td>
<td>2646</td>
</tr>
<tr>
<td>No. of Trading Days</td>
<td>239</td>
<td>242</td>
<td>239</td>
<td>258</td>
</tr>
<tr>
<td>Share Turnover Velocity (%)</td>
<td>15.6</td>
<td>16.37</td>
<td>26.5</td>
<td>28.74</td>
</tr>
<tr>
<td>P/E ratio</td>
<td>5.4</td>
<td>5.2</td>
<td>4.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Dividend yield (%)</td>
<td>10.44</td>
<td>14.5</td>
<td>12.3</td>
<td>15.8</td>
</tr>
<tr>
<td>Market Capitalization/GDP (%)</td>
<td>17.9</td>
<td>15.4</td>
<td>14.1</td>
<td>15.2</td>
</tr>
</tbody>
</table>

*Tehran Stock Exchange Services Company (TSESC):*

The TSE is open for trading five days a week from Saturday to Wednesday, excluding public holidays. Trading takes place through the Automated Trade Execution System from 9am to 12 noon, which is integrated with a clearing, settlement, depository and registry system. Settlement is T+3. The TSE is solely an order-driven market and all transactions are executed in the manner and under the principles of open auction.

**Trading platform:**

The Tehran Stock Exchange (TSE) has started an ambitious modernization program aimed at increasing market transparency and attracting more domestic and foreign investors. Concrete measures that have been taken in the planning and operations of the stock exchange such as the settlement system, geographical expansion, new exchange laws in order to attract local and foreign capital. The TSE has installed the new trading system which has been purchased from Atos Euronext Market Solutions (AEMS) in 2007.

The new system makes it possible to purchase and sell stocks on the same day. The system has also made it possible for 2,000 brokerage stations to work simultaneously, while the number was just about 480 in the past. The rise in electronic dealing, non-stop input and updated data on orders, transactions and indices are among other features of the new system. The new system has made it possible to link the stock market to the international bourses. The bourse can now handle 700 transactions per second and 150,000 transactions per day [3].

The trading system is an order driven system, which matches buying and selling orders of the investors. Investors can place their orders with TSE accredited brokers, who enter these orders into the trading system. Then, the system automatically matches buy and sell orders of a particular security based on the price and quantity requirements. The mechanism for which the price of equities is determined is as follows:

- **The best price (price priority)**
- **Time of order priority**

Under the price priority rule, a selling (buying) order with the lowest (highest) price takes precedence. Under the time priority rule, an earlier order takes precedence over others at the same price. Thus, when the lowest sell and the highest buy orders match in price, the transaction is executed at the price. In short, the TSE market is a pure order-driven Market.
The trading system also generates and displays details of current and historical trading activity, including prices, volumes traded and outstanding buy and sell orders. This ensures that investors have the required information to be able to take informed investment decisions.

The range of price movements is typically restricted to 3% daily either way from last closing. Restriction on Rights is 6%. This can be changed in specific situation by the Board of the TSE in case of unusual price movements resulting in an extremely high or low P/E ratio. Short selling is not permitted. There are no minimum trading lots. According to the Iranian Commercial Law, companies are prohibited from share repurchases. TSE Services Company (TSESC), who is in charge of the site, supplies computer services. TSESC is a member of Association of National Numbering Agencies (ANNA)\[4]\.

A Brief Introduction to the Tehran Stock Exchange:

The Tehran Stock Exchange (TSE) began operation in February 1967. It experienced robust growth in its first decade of operation. The number of listed companies increased from six in 1967 to 105 in 1978. Similarly, TSE’s market capitalization increased from USD 885 million to USD 3.4 billion during the same time period. A number of factors contributed to the rapid growth of the TSE during this period. In particular, relative political stability, the land reform(also known as the White Revolution), a push towards the development of manufacturing sector, rapid rise in crude oil prices, and tax exemption status of listed companies are among the most important contributing factors.

The Islamic revolution of 1978 and Iraq’s invasion of 1981 reduced exchange activities significantly. By 1982, market capitalization fell to about USD 149 million. Following the cease_re of August 20, 1988 in the Iraq-Iran war, the TSE gained prominence as a mechanism for channeling savings into investment, and fostering Iran’s 12 m_orts towards economic recon- struction and development.2 As a result, the number of listed companies increased from 56 in 1982 to 306 in 2000. Since 2000, the performance of the TSE has followed two distinctive patterns Hakim and Rashidian (2009). The 2000-2004 period witnessed brisk performance in the TSE, with its market capitalization growing from USD 34 billion to USD 411.5 billion, and the Tehran Price Index (TEPIX) reaching an all time high of 13,882 on August 4, 2004. However, a severe market correction brought the index down 35% to 9069 on July 26, 2006.[5]

By 2007, the market capitalization rose above its level in 2004. However the number of listed companies was still below its 2004 values due to merger and acquisition activities. The post-2000 Iranian economy has been subject to several internal and external shocks which may have influenced the TSE’s performance. First, the economy has been subject to numerous external sanctions imposed by the United States and/or the United Nations. We discuss these sanctions in Section 7. Hakim and Rashidian (2009) provide a detailed discussion of punitive sanctions on Iranian companies and entities. Second, a number of other external events may have also potentially affected the performance of the TSE, including (a) the sharp rise and the subsequent fall in crude oil prices in 2000-2008 period; (b) the September 11, 2001 terrorist attacks in the U.S. and (c) the subsequent U.S. war on terror in two of Iran's neighboring countries { Iraq and Afghanistan [6].

**Iranian oil bourse:**

The Iranian Oil Bourse, International Oil Bourse, Iran Petroleum Exchange Kish Exchange or Oil Bourse in Kish (IOB; the official English language name is unclear) a.k.a Iran Crude Oil Exchange, is a commodity exchange, which opened its first phase on 17 February 2008. It was created by cooperation between Iranian ministries, the Iran Mercantile Exchange and other state and private institutions in 2005. The history of Iran Mercantile Exchange and its links with the “international trading floor of crude oil and petrochemical products in the Kish Island” (IOB) have been published.

The IOB is intended as an oil bourse for petroleum, petrochemicals and gas in various currencies other than the United States dollar, primarily the euro and Iranian rial and a basket of other major (non-US) currencies. The geographical location is at the Persian Gulf island of Kish which is designated by Iran as a free trade zone.

During 2007, Iran asked its petroleum customers to pay in non US dollar currencies. By December 8, 2007, Iran reported to have converted all of its oil export payments to non-dollar currencies. The Kish Bourse was officially opened in a videoconference ceremony on 17 February 2008, despite last minute disruptions to the internet services to the Persian Gulf regions. Currently the Kish Bourse is only trading in oil-derived products, generally those used as feedstock for the plastics and pharmaceutical industries. However, officially published statements by Iranian oil minister Gholamhossein Nozari indicate that the second phase, to establish trading in crude oil directly, which has been suggested might one day perhaps create a "Caspian Crude" benchmark price analogous to Brent Crude or WTI will only be started after the Bourse has demonstrated a reasonable period of trouble-free running [6].

**Performance in iran:**

As of December 2010, TSE had a market capitalization of $84 billion. TEPIX, TSE's Price and Dividend Index, became the world’s second-best performing equity index in 2010. 2000–2004: The performance of the TSE has had no correlation with major exchanges or emerging stock markets over the past few years and not
even with the oil price. While the overall indices of the world’s five major exchanges – New York, London, aries, Frankfurt and Tokyo plunged by 40 to 70% between March 2001 and April 2003, the TSE index (Tepix) bucked the trend by going up nearly 80%.

2005–2006: In December, 2005, 419 companies with a market capitalization of IRR 32,741.7 million were listed in TSE. The TSE has had an exceptional performance over the past 5 years. In general, the stock market in 2005/06 shed value as it is manifested by the decline of its major stock price indices. The TSE price index (TSPIX) at the end of 2005/06, declined by 21.9%, while the Financial Sector Index, and the Industrial Index, declined by, 38.8%, 19.4% respectively, and the Dividend Index gained 11.8%, mostly due to a reported 100 billion USD capital flight from the country because of the international dispute surrounding the Iranian nuclear programme.

2007: The market bottomed in June 2007 mainly because of the renewed privatization drive in the Iranian economy.

2008: The TSE was not directly affected by the international financial turmoil in 2008, but following the global reduction in prices of copper and steel, the bourse index dropped by 12.5 percent, as most of the companies listed on the exchange are producers of such commodities. TSE experienced an 11% growth at the end of 2008 and ranked second in the world in terms of increase in the volume of trade after Luxembourg’s Bourse.

2009: The TSE sank about 40% in value between August 2008 and March 2009, influenced by falling oil prices and declining markets in other parts of the world. As of August 1, 2009 it has recovered by more than 10%. During Iranian year 2009/10, the value of capital market was around $20 billion. Some 3 million trade exchanges were made, pushing up the index to 12,500 units from the previous 8,000 units.

2010: In the first month of Iranian 2010 (March 20 – April 21, 2010), the index hit the 14,000 unit mark, up from the previous 12,500, showing 12 percent growth. The value of one month's trading transactions exceeded $1 billion against the previous year’s corresponding period of $95 million. Tehran Stock Exchange bourse index from June 2009 to 2010 grew 55 percent and the value of TSE's total market capitalization went up about 33 percent, to over $71 billion.

On August 2, 2010, the TSE main index (TEPIX) reached a record level of 16,056 points, despite US-sponsored sanctions against Iran. Thus, TEDPIX became the world’s second-best performing equity index. Factors such as the global spike in oil and metal prices, government support for industries and oil sectors as well as the growth of stock market liquidity flow contributed to the boom. Experts commented that the growth was also partly due to a government decision to sell off 20 percent of its equity in two major automakers. Given the relative low market valuation of TSE stocks in 2010, the upward trend was expected to continue over the long run, rather than being a bubble. TEPIX reached a new record on September 18, 2010, when it hit 18,658, up from 11,295 at the start of the year. As of December 2010, the TSE index rose about 64 percent since the start of 2010. The Tehran Stock Exchange has been ranked as the best bourse index in Europe, Africa and Middle East in 2010 in terms of performance of the main index.

2011: On February 1, 2011, TEPIX and total market value reached an all-time high of 21,349 and USD 100 billion respectively. An alleged $200 million investments by Iranian expats also contributed to this increase.

On April 9, 2011, TSE’s main index (TEPIX) hit a new all-time record high at 26,222 over a boost from the stocks of metal and shipping industries. According to the World Federation of Exchanges (WFE), TSE had the best performance among WFE member exchanges from May 2010 to May 2011. With a staggering 79% growth rate in its main index, the TSE ranked 1st in WFE’s “Broad Stock Index Performance” category followed by the Colombo and Lima Stock Exchanges with 75.1% and 48.9% rates respectively.
Overall, Tehran stock exchange posted the second highest gains in global markets in 2011 (TEPIX up 29.6%). Meanwhile the German’s DAX (DAX INDEX) lost 16.5% due and the FTSE 100 (UKX INDEX) performed poorly, down 6.7%. Stock markets of emerging economies, like Brazil’s Brazil Bovespa Index (IBOV INDEX), shed 18.4%. Equally, MENA stock markets had a poor year in 2011, reflecting both the political turbulence across the region and the battering suffered by most global markets as a result of the euro zone crisis and the increasingly bearish outlook for the global economy.

2012: TSE’s overall index hit a new record high in October 2012 surpassing 31,000 points. Export-oriented companies have been favoured because of the imposition of an oil embargo by the international community and the consequent sharp decline in the value of the Iranian rial over 2012.

2013: Following Iranian rial’s strong devaluation between 2012 and 2013 and presidential elections, TEPIX hit 68,461 on October 9 (soaring over 50,000 points). TEPIX reached 71,471 on October 14, 2013. Consequently, TSE’s main index grew 130% in 2013. [8]

Conclusions:
We conduct a study to better understand the basic efficiency, returns, and volatility properties of the Tehran Stock Exchange returns. We find supporting evidence in favor of international CAPM efficiency at the monthly frequency. This characteristic is lost once we increase the sampling frequency to daily. Empirically, we could not improve the performance of the ICAPM model through inclusion of factors such as exchange rates and oil price fluctuations or inter-national macroeconomic factors, such as increased risk of an economic downturn reected in term spreads. Our ndings corroborate those of Foster and Kharazi (2008), and point to an interesting aspect of TSE. That is, our study shows that a market dominated by naive traders can still be efficient, in a classical textbook sense. The TSE is an efficient market, even in the presence of insider trading, collusion, price fixing, and considerable informational asymmetry. Another issue that we did not formally address in this study is the reaction to new information in the Tehran stock exchange. Based on the work by Hong and Stein (1996), several empirical studies have investigated the possibility of delayed reactions to new information. Carrying out a similar exercise for TSE returns may provide a potential solution to the observed anomaly of CAPM-efficient monthly excess returns, but inefficiency at the daily frequency.

REFERENCES