Market anomalies essay

Business, Strategy

Due to the timely actions of investors prices of stocks quickly adjust to the new information, and reflect all the available information. So no investor can beat the market by generating abnormal returns. But it is found in many stock exchanges of the world that these markets are not following the rules of MME. The functioning of these stock markets deviate from the rules of MME. These deviations are called anomalies.

Anomalies could occur once and disappear, or could occur repeatedly. This literature survey is of its own type that discusses the occurrence of different type of calendar anomalies, technical anomalies and monumental anomalies with their evidences in different stock markets around the world. The paper also discusses the opinion of different researchers about the possible causes of anomalies, how anomalies should be dealt, and what ere the behavioral aspects of anomalies. This issue is still a grey area for research. Key Words: MME, CAMP, Calendar Anomalies, Technical Anomalies, Fundamental Anomalies.

1. Introduction: According to efficient market hypothesis markets are rational and prices of stocks fully reflect all available information. The securities prices quickly adjust to new information as readily that information is available.

But according to behavioral finance this kind of efficient market cannot explain the observed anomalies in Market anomalies are the unusual occurrence or abnormality in smooth pattern of stock market. Different researchers like Augural & Tendon (1994), Guillotine & Guillotine (1983), and Ariel (1984) exhibited the existence of observed anomalies with their

evidences in different stock exchanges of world. But yet the evidences on anomalies are debatable. This review paper explains the market anomalies in both aspects: with aspect to market efficiencies and as well as behavioral aspect. The 2nd section of paper will explain market efficiency, forms of market efficiency, fundamental and technical analysis.

3rd section defines market anomalies with three major types of anomalies. For the sake of convenience we divide the anomalies into three types I. E. Fundamental anomalies, technical anomalies and calendar anomalies. Section 4th will explain existence, evidences and possible causes of all of these types of anomalies.

While section 5th includes possible explanation of anomalies with the help of different models of finance. And the final section concludes the whole discussion. 2. Efficient Market Hypothesis Efficient market hypothesis is one of the important paradigms of traditional finance theories. Fame (1970) defined efficient market as a market as a market with large numbers of rational profit maximizing individuals actively competing with each the and doing attempts to predict future market values of individual securities, and where all important relevant information is almost freely available to all investors.

Fig. L Market reaction to surprising favorable event. Fig. 2 Market reaction to eradicable favorable event The Above figures shows the situation of market, in case of unpredictable event, if the market is efficient, stock prices immediately reflect effect of new event, but it will take some time for the prices to adjust new information, if the market is not efficient. While in the

case of predictable event, before the happening of event, prices of stocks will rise, and quickly adjust at the event date, if the market is efficient. Chivalric, 2009) 2. 1 .

Forms of market Efficiency Relevant information includes past information, publicly available information and riveter information. On the basis of relevant information efficient market is divided into three stages, weak form, semi strong form and strong form. In weak form of ME all the past information including past prices and returns is already reflected in the current prices of stocks (Bodied et al. 2007).

The assumption of weak form is consistent with random walk hypothesis I. E. Tock prices move randomly, and price changes AR independent of each other. So if the weak form holds, no one can predict the future on the basis of past information. And no one can beat the market by earning abnormal returns. Therefore, the technical (trend) analysis, in which analysts make the chart of past price movements of stocks to accurately predict future price changes, is of no use (Bodied et al. 2007).

However, one can beat the market and get abnormal returns on the basis of fundamental analysis or on the basis of private information (insider trading). In the semi strong form, current stock prices reflect all publicly available information as well as past information. So no one can make extra profit on the basis of fundamental analysis (Bodied et al. 2007).

However, one can beat the market by insider riding. In the strong form of market efficiency, all relevant information including past, public and private

information is reflected in the current stock prices. So if the strong form persists, then no one can beat the market in any way, not even by insider trading (Bradley et al. 1999). 3. Financial Market Anomalies.

Literary meaning of an anomaly is a strange or unusual occurrence. The word anomaly refers to scientific and technological matters. It has been defined by George & Elton (2001) as irregularity or a deviation from common or natural order or an exceptional condition. Anomaly is a term that is generic in nature and it applies to any fundamental novelty of fact, new and unexpected phenomenon or a surprise with regard to any theory, model or hypothesis (George & Elton 2001). Anomalies are the indicator of inefficient markets, some anomalies happen only once and vanish, while others happen frequently, or continuously (Adverts & Keenan 1986) defined market anomalies as " an anomaly is a deviation from the presently accepted paradigms that is too widespread to be ignored, too systematic to be dismissed as random error, and too fundamental to be accommodated by relaxing he normative system". While in standard finance theory, financial market anomaly means a situation in which a performance of stock or a group of stocks deviate from the assumptions of efficient market hypotheses. Such movements or events which cannot be explained by using efficient market hypothesis are called financial market anomalies (Silver 2011).

For the sake of convenience, Anomalies can be divided into three basic types. , 1 . Fundamental anomalies. Technical anomalies .

3. Calendar or seasonal anomalies. 3. 1.

Calendar Anomalies. Calendar anomalies are related with particular time period I. E. Event in stock prices from day to day, month to month, year to year etc . These include weekend effect, turn of the month effect, year-end effect etc (Kara 2011). Calendar anomalies Description Study conducted and article Weekend Effect: The stock prices are likely to fall on Monday. Means the closing price of Monday is less than the closing price of previous Friday.

Controls & Starks (1986) Turn-of-the-Month Effect: Turn-of-the-Year Effect January Effect: The prices of stocks are likely to increase in the last trading day of the following month, and the first three days of next month. Noshed et al. 2007) This anomaly describes the increase in the prices of stocks and trading volume of stock exchange in the last week of December and the first half month of January. Augural & Tendon (1994) The phenomenon nude an small-company stocks to generate more return than other asset classes and market in the first two 3 Ken-ins (1983) Chatterer & Mantra (1997) to three weeks of January is called January effect. Fundamental anomaly Value anomaly Author Value anomaly occurs due to false prediction of investors. They overly estimate the future earnings and returns of growth companies and underestimate he future returns and earnings of value companies Graham & Dodd (1934) Low Price to Book The stocks with low price to book ratio generate more return than the stocks having high book to market ratio.

Fame (1991) High Dividend Yield Stocks with high dividend yield outperform the market and generate more return. If the yield is high, then the stock generates more return. Fame & French (1988) Low Price to Earnings (PIE) The stocks with low price to earnings ratio are likely generate more returns

and outperform the market, while the stocks with high price to earnings ratios tend to underperformed than the index. Goodman & Peeve (1983) Neglected Stocks The prior neglected stocks generate more return subsequently over a period of time. While the prior best performers consequently underperformed than the index.

De bond & taller (1985) 3. 2. Fundamental Anomalies: Fundamental anomalies include Value anomalies and small cap effect, Low Price to Book, high dividend yield, Low Price to Sales (P/Oxbows Price to Earnings (PIE) (Kara 2011). 3. 3.

Technical Anomalies " Technical Analysis" includes no. Of analyzing techniques use to forecast future prices of stocks on the basis of past prices and relevant past information. Commonly chemical analysis use techniques including strategies like resistance support, as well as moving averages. Many researchers like Bodied et al.

2007) have found that when the market holds weak form efficiency, then prices already reflected the past information and technical analysis is of no use. So the investor cannot beat the market by earning abnormal returns on the basis of technical analysis and past information. But here are some anomalies that deviate 4 from the findings of these studies. Technical anomaly Article Moving Averages An important technique of technical analysis in which buying and selling signals of tock are generated by long period averages and short period averages. In this strategy buying stocks when short period averages raises over long period averages and selling the stocks when short period averages falls below the long period averages.

Brock(1992) This technique of technical analysis is based upon resistance and support level. A buy signal is created when the prices reaches at resistance level, which is local maximum. As investor wants to sell at peak, this selling pressure causes the resistance level to breakout than previous level.

This breaks out causes a buy signal. A selling signal is created when prices reaches the support level which is minimum price level. Thus technical analysis recommends buying when the prices raises above last peak and selling when prices falls below last trough. But this strategy is difficult to implement. Trading Range Break Josef (1992) Allocation teal. (1992) Allocation teal.

4. Evidences of different types of anomalies. 4.

1 calendar anomalies Calendar and time anomalies contradict the weak form efficiency because weak form efficiency postulates that markets are efficient in past prices and cannot predict future on theses bases. But existence of seasonality and monthly effects contradict market efficiency and in this case investors can earn abnormal return (Bodyguard 1995). Augural & Tendon (1994) examine the presence of calendar anomalies in eighteen countries and compared it with the USA. The Calendar anomalies that they considered in their studies are weekend effect, turn-of-the-month effect, the Friday- the thirteen effect, January effect and end-of-December effect Seasonal effect Seasonal influence is found in international markets, in Australian market (Officer , 1975) in Italian Tokyo stock exchange (Zombie 1991).

According to Yak et al. (2005) there were seasonality effects in ten Asian pacific countries for period of January 2000 to march 2005. They founded that this period was ideal period for examine this effect because of stability and is not influenced by financial crisis of late nineties. Doreen et al.

(2008) found high volatility in Chinese stock market and that Chinese stocks outperform during the season of new year but not in January. Monday effect Many evidences are present that ensure the presence of weekend effect in United States. Mondays average returns are found to be negative (Starks 1986). Days-of-week effect This effect entails the difference in return of days in week.

The findings have been lowest returns on Monday and exceptionally high return on Friday than other days of week (Hess 1981) . Largest variance on 5 Monday and lowest is on Friday. There is mixed findings on it.

Dubious & louver (1995) found that in European countries, Hong Kong and Canada lower return for beginning of week but not necessarily on Monday. Augural & Tendon (1994) found that out of 19 countries there are negative Monday returns in nine countries and negative Tuesday return in eight countries. Also the Tuesday returns are lower than Monday returns in those countries. Negative Monday and positive Friday effects are not observed in Indian market (kumara). Alt was founded that Tuesday returns are negative in Indian markets, while the Monday returns were significantly greater than other days. It was because of settlement period in India I.

E. 14 days period that starts on Monday and ends at Friday. Augural & Tendon (1994) concluded in the findings that weekend effect is present in the half of the countries. While in the other countries the lowest return are on the Tuesday.

Cause: Trading timing-on study on weekend effects shows that negative return on Monday is due to non-trading period from Friday to Monday and that Monday returns are actually positive (Rosalie 1984). Month of the year effect -January effect This effect reflect variation in return of different months in a year (Guillotine & Guillotine 1983). This January effect is related to the size of firms small capitalization firms outperform than large capitalization. Causes: January returns are greatest due to yearned tax loss selling of shares disproportionably (Branch 1977).

Logon (1997) found that January effect is due to large liquidity in this month. There are higher January volume and lower interest rates correlates with greater returns in January. According to watched (1942) there are higher returns on Monday than other months in year. Rezone & Kinney (1976) found that in New York exchange average return is 3. 5% than other months 0. % in period 1904 to 1974. The general argument is that January effect is due to tax-loss hypothesis investors sell in December and buy back in January. Kong (2010) concluded that most of the Asian markets exhibit positive December expect Hong Kong, Japan, Korea and china.

Few countries also exhibit positive January, April and may effect and only Indonesia exhibit negative august effect. January effect is due to tax loss saving at the end of the tax year, portfolio refinancing and inventory

adjustment of different traders and the role of exchange specialist (Augural & Tendon 1994). Year end effect According to Augural & Tendon (1994) the possible reason of the year end effect is attributed to window-dressing and inventory adjustment by institutions and pension fund managers.

Intra -monthly anomaly Ariel (2002) observed monthly return in United States stock index return. It was found hat stocks earn positive average return in beginning and first half of month and zero average return in second half of month. Weak monthly effects have been observed in foreign countries Gaffe & Westfield 1989). Australia, United Kingdom and Canada showed same pattern as Oriels found in United States while Japan had opposite effect. Australia and Canada had positive monthly effects while Japan market had negative monthly effects (Bothered, 1995). Bothered (1995) extended Gaffe & Westfield (1989) results and observed monthly effects in Denmark, France, Germany , Norway, Switzerland and negative effect is founded in Asian pacific basis arrest of Singapore/Malaysia. According to Hansel (2011) cause of occurrence of higher short-term equity return anomalies I.

E. Cash flow increased Just after and before specific period causes anomalous return, Behavioral constraints as investors feeling and emotions that leads towards sale and purchase of specific equities, Timing constraints like delay in unfavorable reporting, and Slow react of market towards new information Turn of the month effect According to this calendar anomaly the mean returns in early days of the month AR higher than other days 6 of the month (Noshed et al. 2007). Caddis & Ratter (1992) studied turn of the moon effect for USA, Canada, Switzerland, Germany, I-J and Australia while no such

effect they found in Japan, Hong Kong, Italy and France. Noshed et al. (2007) reported Turn of the month effect in SSE of Pakistan and stated that turn of the month effect and time of the month effect is almost same.

While turn-of- the- month effect which is t large returns on the last trading day of the month is found in fourteen countries (Augural & Tendon 1994). Causes. Noshed et al. (2007) the reason behind the turn of the month effect is du to the mental behavior of the investors that they sell their shares at the end of the onto and expect the positive change for the next month and release of new information at the end and start of the new month.