SPECULATIVE INFLUENCES IN THE STOCK MARKET: A CASE STUDY OF KUALA LUMPUR STOCK EXCHANGE

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ABSTRACT

This paper examines speculative influences in the Malaysian stock market utilizing quarterly time series data from the first quarter of 1990 until fourth quarter of 1999. Models are developed to test the extent of excess volatility in stock prices in KLSE, to determine the relationship between stock market and the real economy and to examine whether the prices of the stocks are based on their intrinsic values. The findings of the study indicate that there exists excess volatility in the actual prices of the stock. It is observed that the prices are one to two times more volatile than the ex post rational price. It is shown that the weak form of rational expectation hypothesis is satisfied in the Malaysian stock market. Regression of stock returns on measures of real economic activity over the period from 1990 to 1999 show that production and GDP growth are not significant in explaining variations in stock returns. With regards to testing the existence of intrinsic bubbles, the results indicate that the intrinsic bubbles occur in the Malaysian stock market.

INTRODUCTION

Stock market[1] represents the well being of the economy, a leading economic indicator and predictor of the performance of aggregate economy due to its ability to fall before recession and rise before the economic recovery. Theoretically, the functions of a stock market are several; to encourage the accumulation of capital; to allocate existing supplies of capital to their most profitable uses; to facilitate and encouraging capital accumulation by channelling short-term

[1] Stock market is a place where securities (such as shares, debt instruments, derivatives, and other financial instruments) are bought and sold by investors. Today stock market traded using the computerize trading and make the world moving toward a capital-driven economic system.

savings into long-term investments; and to allocate the limitation supplies of capital to the mo valued social uses. Participation in the stock market will receive profit either in terms of divide or capital gain. When the stock market is efficient, prices of stock provide an accurate sig for optimal resource allocation.

Problem occurs when stock market is being influenced by a speculative trading[2]. These trad create true mania, producing price bubbles that ultimately burst the stock prices and bring mar prices crashing down unexpectedly. Their main objective is to maximise capital gain by speculat on the company earnings and economic conditions. These made the stock market very volati and sensitive towards any changes in the environment. The collapse of a stock market w downturn the economy and create bubble burst, sending an additional shock to the weak econom

By maximising capital gain as a motivated motive, today's trend of speculators (buying at a v high volume of stocks at a high price and sell them out in the market unexpectedly at very l volume) used every single method and technology to make speculation more interesting, profita and safe. Our concern is whether that speculative activity gives impact on the economic stabi and volatility in the stock market.

From the previous experienced of financial crisis of 1997/98, speculative activities have b identified as one of the major factors that contributes towards the slow down of the econo Kuala Lumpur Composite Index (KLCI) dropped from 1100 points in June 1997 to 262 po in July 1998, the lowest point in Kuala Lumpur Stock Exchange (KLSE) history. Thus, th is a need to study the influence of speculative activities towards stock market empirically the outcome is positive then speculative activities should be monitored and steps should be ta to overcome uninvited panic into the economy. If not, then speculative activities would h been viewed negatively, and correction should have been made.

In general, the objective of the present paper is to examine whether speculative influences h any impact on KLSE. The existence of such influence makes our stock market volatile a sensitive towards any changes in the economic environments. Financial crisis of 1997/98 pr

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[2] Individuals trading stocks by buying stock only because prices are expected to rise in the near future wi intention of selling before the prices fall.

[3] Volatile occurs when the price of a share or a market moves in a highly active way, displaying rapid adva sudden decline. There is a number of factors contribute to this event: Changes in company earnings, intere changes in economic fundamental or low liquidity for specific share.

[4] A number of factors contribute to the instability of stock market such as the *inability of market mechanism to a huge volume of selling that bring sharp plunge in prices and rout to investors, a mass movement out from m funds to equity funds in short notice followed by a ready-form of crowds*, and *the practice of speculative, manipu and psychological phemomenon*.

market is very sensitive towards any changes in the economic environments and we evidence to support this stand. Specifically, the objectives of this study are to whether there is speculative activity in the Malaysian stock market; to examine the volatility in stock prices in KLSE; to examine whether stock fundamental the Malaysian stock prices; and to examine whether the prices of the stocks are based intrinsic values.

the paper is organized as follows: Section two reviews the related literature on the market views and on the experiences of volatility in the stock markets in some countries. three presents the models used in testing the various research hypotheses and describes data employed. This will then be followed by a discussion on the empirical results and analysis. The final section concludes with a summary of the main findings.

OF RELATED LITERATURE

raise a desired amount of funds through stock markets. The higher the price of stocks market, the lower will be the cost of capital borne by the firms. Firms manage to minimise risk through equity portfolio diversification, either in their home countries or across countries. Although firms have to face a number of unavoidable problems such as the information, the lemon problem and the participant-agent problem, the stock market offers the best solution to fill capital deficiency. Thus, the stock market provides a near forecast of the business capital spending plans.

economists view the stock market in two ways: the rational market view and the market view. The rational market view[5] constitutes the conventional view, emerged the neo-classical theory of market as an institution arrangements that serve the function valuation and allocation of scarce resources. Thus, the market price[6] reflects accurately and the value of capital goods. The stock market serve as a social calculating machine that to the firms what the market thinks of their future purposes and help to govern their investments efficiently. The stock market trading provides useful information for decisions on the use of capital and incentive to induce firms to make efficient use of (Raines and Leather 2000; Taylor 1998).

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among the economists that contribute to this view were Walras, Marshall and Wicksteed.

Stock prices being formed thought a process of market actions based on rational expectations and the role of those prices acts as a requisite to the rational behavior of market participants.

The most important contribution from this view is the efficient market hypothesis (EMH). T EMH[7] states that the expectations of future prices are formed from the past experience. Th in rational expectation, the current price of stock is identical to optimal price of forecasting ba on all available information in the market. Since the prices are always correct, investors can u these prices as a perfect proxy for the market fundamental.

In reality, according to Bodie et al. (1996), prices of stocks are unpredictable and volatile. (S also Raines and Leather 2000 and Mishkin and Eakins 2000). It is also found that this hypothe is questionable since it fails to explain the events of crashes that occur. Researchers found t anomalies of EMH such as the small-size effect, market overreaction on news, excess volati in stock market and the mean reversion of stock returns. Thus, a number of economists pres a new theory of stock volatility, the rational bubble theory.

Supported by historical records, the irrational market view also known as the speculative mar view[8] states that speculative trading influences stock market. This view doubts on both ratio expectation and EMH. The main objective of investment is to maximize capital gain. If pri are not rational, then stock market cannot allocate capital and investment in a socially opti manner. Speculative influences can be in several forms such as stock prices increase may derivative of speculative expectation of increase of company earning[9], speculation as a psycholog phenomenon[10], and speculation in term of speculative manipulation[11].

A study on the UK stock market excess volatility (Bulkley and Tonks 1989) found that altho the conventional variance bound is violated, the bound appropriate to a test of the weak fo rational expectation hypothesis is satisfied. The study indicates that the UK stock market pri do appear to be sufficiently volatile, allowing investors to exploit a simple buy-low sell-h trading rule. Barsky and De Long (1993), for instance, analysed the stock price fluctuation rational-expectation framework while Basci Ozyildirim and Aydogan (1996) did a study on Turkish stock market. The study reveals a positive linear relationship between the price le and the trading volume.

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[7] There are three versions of EMH: The weak form of EMH (states that stock prices reflect all information i market), the semistrong-form (states that stock prices reflect all public information that are available regardin prospect of the stocks) and the strong form of EMH (states that stock prices reflect all information that is ma to the firm).

[8] The economists such as Cantillon, Galbraith, Shiller, Hume, Ricardo, Keynes and Marx were among the econo who contributed to this idea.

[9] For example, the increase of corporate profits will increase the speculative profit and this leads to an increa the speculative boom in stock prices in the market.

[10] Investors who buy stocks based on the expectation of behavior of other market participants, another name for "an spirit'.

[11] Speculative manipulation depents on the government regulations. This practice involves manipulation pri towards market.

(1999) examine the various explanations for the difference in volatility between the Korea stock exchange, to determine whether prices fluctuate more in Taiwan, the fundamental that determine cash flow is more uncertain in Taiwan than in Korea. The point to any evidence of mean-reversion in the stock market index in both countries. market is more correlated with the earnings than the Korean returns, both over section. Increased volatility is not related to fundamental.

and Merges (2001) looked at the rational economic factors to explain stock market Under the uncertainty of the economic condition, there are four determinants of stock volatility: the uncertainty of price level, the risk-less rate of interest, the risk premium and the ratio of expected profits to expected revenues. The results of the study that for the time period from 1929 to 1989, there exists 50 percent of variation in volatility and the four factors explained over 90 percent of the variation in market This explained the past behavior of stock market volatility and forecast future volatility.

is a situation in which the price of an asset differs from its fundamental market value. that funds are allocated optimally in the market, we need to ensure that bubbles in are in control. In the study conducted by Froot and Obstfeld (1991), they specified as "intrinsic bubbles" because they derive all of their variability from exogenous fundamentals and none from extraneous factors. Intrinsic bubbles provide a more empirical account of deviations from present-value pricing. As Dwyer and Hafer (1990) the notion of price behavior can be explained by bubbles suggests that stock prices from the level implied by their underlying fundamental value. In a study (West 1987), that the fluctuation of stock prices results in actual price movement. Since the tests and not very powerful, empirical tests are not able to detect bubbles.

METHODOLOGY

research hypotheses are tested in this study. These are: (1) there is excessive volatility in Malaysian stock market prices, (2) Economic fundamental determines the Malaysian stock the price of the stock is based on its intrinsic values and (4) there are bubbles in the Malaysian stock market.

and Tonks's model (1989) was used to test the first hypothesis, that is, to examine the of excessive volatility in the Malaysian stock market prices. There are two steps involved in this test; (i) to examine the volatility between the actual prices and the perfect prices, and (ii) to test the stationary of data.

In a perfect world, under EMH, perfect foresight exists in each period which is defined as:

$$p_t^* = \sum_{\tau=1}^{\infty} \delta^{\tau} d_{t+\tau}$$

Where δ denotes the constant discount rate, d_t denotes the dividend yield in period t and p^* denotes the terminal price. Under the weak form rational expectation of (1) given the information set (I_t) at time t, the price of the perfect foresight price based on EMH model for each period is written as:

$$p_t^* = E_{\theta}(p_t^* | I_t) + V_t$$

where p^*_t denotes the perfect foresight price, $E_{\theta}(p^*_t | I_t)$ denotes the random variable as the expectation based on true model and v_t denotes the error term. E_{θ} represents the expectation of p^*_t and θ is the coefficient to be estimated using data that are available at time t, and I_t denotes the information set gained from the true model. Under EMH, the actual price, P_t, under weak form is given as:

$$p_t^* = E_{\hat{\theta}}(p_t^* | I_t)$$

By assuming unbiased estimation techniques, we have this equation:

$$E_{\hat{\theta}}(p_t^* | I_t) = E_{\theta}(p_t^* | I_t) + m_t$$

Where m_t denotes the forecast error, by substituting (3) into (2), the following equation is obtained:

$$p_t^* = E_{\hat{\theta},t}(p_t^* | I_t) - m_t + v_t$$

Using equation (5), the inequality equation is as follows:

$$\left\{ \left[p_t^* - E_{\hat{\theta},t}(p_t^* | I_t) \right]^2 \right\} > \left\{ \left[p_t^* - E(\hat{\theta}_{,t})(p_t^* | I_t) \right]^2 \right\}$$

Equation (6) states that the actual price, p_t, should be closer to the predicted value, p^*_t, in time period, under the weak form of EMH, the appropriate test that needs to be compared in order to obtain the conventional variance bound test is shown below:

$$1/T\Sigma_t \left\{ \left[p_t^* - E_{\hat{\theta},t}(p_t^* | I_t) \right]^2 \right\} - 1/T\Sigma_t \left\{ \left[p_t - E_{\hat{\theta},t}(p_t^* | I_t) \right]^2 \right\}$$

...second step, to examine whether the actual price is equal to the perfect foresight, a two-...procedure is utilised. Following these procedures, we estimate both a log-linear regression ...growth of exponential trend to dividend and a log-linear regression of prices against time ...estimated the time coefficient relevant to the dividend growth coefficient of the previous ...regression. The equations are:

$$\log d_t = \hat{a}t + \hat{g}_s^{\,t} + e_t \qquad \textit{(a long-linear regression for dividend)} \quad (8)$$

$$\log p_t = \hat{c}t + \hat{g}_s^{\,t} + e_t \qquad \textit{(a long-linear regression for price)} \quad (9)$$

...the second hypothesis, that is, to examine the relationship between the stock market ...the real economy, Binswanger's model (2000) was used. Three variables were employed to ...examine the above relationship, the stock returns, the production rates and the Gross Domestic ...Product (GDP) growth. The augmented Dickey-Fuller (ADF) test was conducted on the variables ...examine the stationary of the data. The Granger causality tests were also conducted to examine ...the causal relationship between stock return and economic growth. The OLS regression was then ...conducted for the growths on past returns.

...the third and fourth hypotheses, the role of intrinsic values and the existence of intrinsic ...bubbles in the Malaysian stock market were examined. If dividends are persistence, so do the ...prices and stock prices will exhibit persistence deviations from the fundamental value. This ...means that we need to look at the existence of the intrinsic bubbles in Malaysian stock prices. ...Flood and Obstfeld (1991) model was applied in this study as in the case of Malaysia.

...to describe the existence of rational bubbles in intrinsic value, a nonlinear solution was ...for the linear asset-pricing model. Thus, the prices used are defined as follows:

...condition for the actual real price of a share in the market, at the beginning of the period

$$p^f = e^{-r} Et\left(Dt + Pt + 1\right) \qquad (10)$$

... P_t denotes the real price at the beginning of period t, r denotes the constant real rate of ... $E_t(.)$ denotes the market's expectation conditional on information known at period t, ... denotes the real dividend per share paid at period t.

...the essential stochastic version of Myron Gordon's model of stock prices, the price of ...under the present-value model is calculated as:

$$p_t^{PV} = \kappa D_t \qquad (11)$$

where P^{PV}_t denotes the present-value price and κ denotes the coefficient of actual price o dividend, a simple regression OLS was obtained by assuming that the price and the divide at the period t is known.

In order to insert the bubbles into this test, the following formula is used,

$$B\ (D_t) = cD_t^{\lambda}$$

where λ is the positive root of the quadratic equation. Thus, after the definition of the pric the basic stock-price equation is:

$$P\ (D_t) = P_t^{PV} + B\ (D_t) = \kappa D_t + cD_t^{\lambda}$$

The OLS regression was performed on the prices and dividends data in order to identify t cointegration regression and the cointegration coefficient (β). Then, the stock prices were calcula using the present value model; regressed it against dividend and compare the coefficient betwe the two in order to measure the sensitivity of prices to changes in dividends. The coeffici of present value stock prices obtained by the regression should be around the OLS coeffici value. The unit root test was done for the stationary of data, and the maximum likeli regression to compare with the OLS results.

Description of Data

The stock prices (p_t) as mentioned in the study refer to the stock price per share in Kuala Lum Composite Index. They are calculated by dividing the volume of ringgit traded in this board w the number of volume in unit in this board. The gross dividend yield (d_t) is the return in eq in term of percentage in the Composite Board. The constant discount rate data were obta by dividing the mean of the dividend against the detrended actual prices for each quarter. Gross Domestic Product is used to measure the growth of the economy, and the production in measures the production growth in this country.

The secondary data were collected from a few sources such as the Investors Digest (1990-2 and the Economic Reports. Data on GDP were collected from the International Financial Stat produced by the IMF. The data are in quarterly time series starting from the first quarter of (1990:1) until fourth quarter of 1999 (1999:4) giving a total of 40 observations. All of the were used, except for the production index which was detrended using the natural logarith each variable toward time. The study focused on the volatility in Composite Board rather

KLSE. Thus, data were gathered only from the Composite Board, excluding the Main Board and Second Board.

RESULTS AND DISCUSSION

other stock markets in this world, the aggregate real stock prices in Malaysia are correlated over time with the real dividends. The trend between these two variables Figure 1. It indicates the relationship between the actual stock prices and the dividend yields in KLCI quarterly from the first quarter of 1990 until the fourth of 1999.

correlation coefficient between the real prices (Pt) and dividend yields (Dt) in this sample and the prices follow the random walk behavior. Although the correlation coefficient P and D is high, the real prices are more volatile than the real dividends for the whole

Figure 1: Real Stock Prices and Real Dividend Yields for KLCI, 1990:1-1999:4

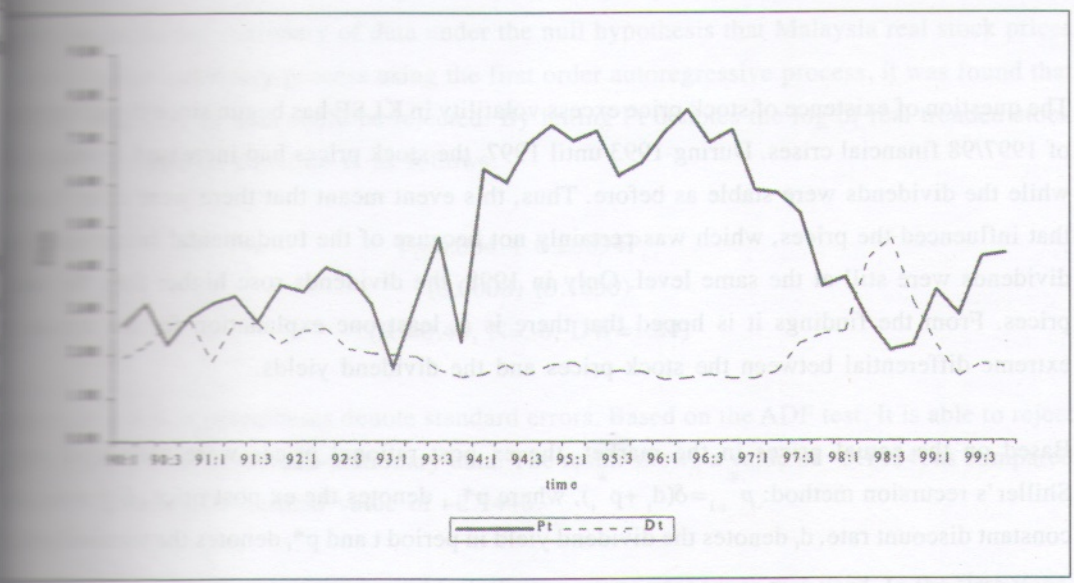
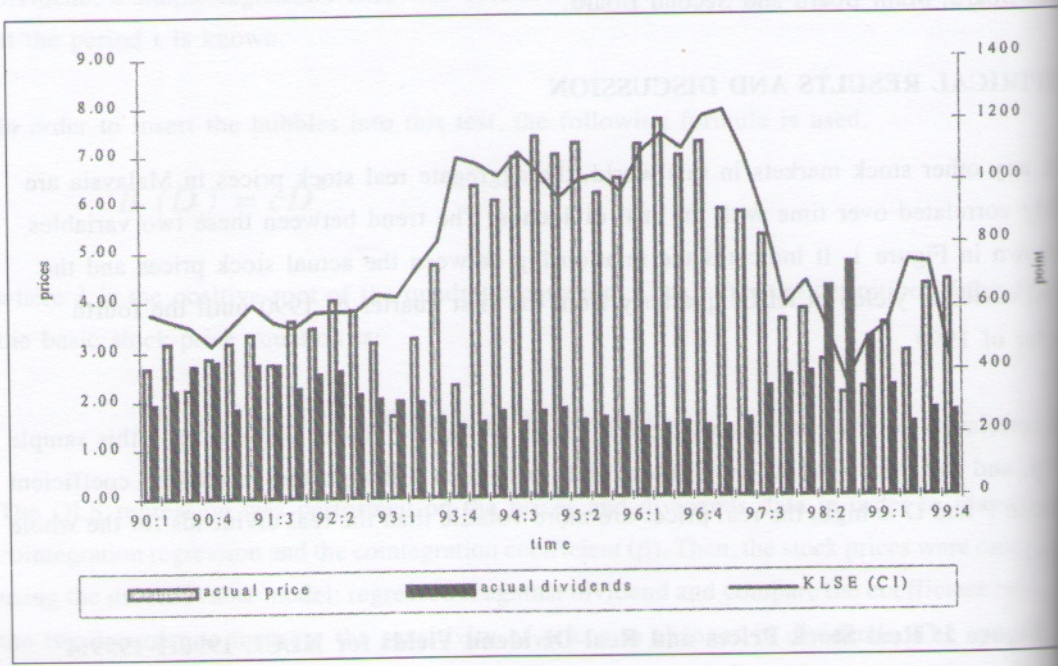


figure shows that in early 1990 (from 1990:1 until 1992:4) the stock price and dividend moved in the same path. But since 1993:1, the prices have drastically blown upwards while the dividends remain stable. The differences between prices and dividends are quite high especially during the boom period of the Malaysian economic growth. Figure 2 below shows the moving trend of KLSE, prices and dividends during 1990:1 to 1999:4.

Figure 2: The Trends of KLSE, Stock Prices and Dividend Yields, 1990:1-1999:4

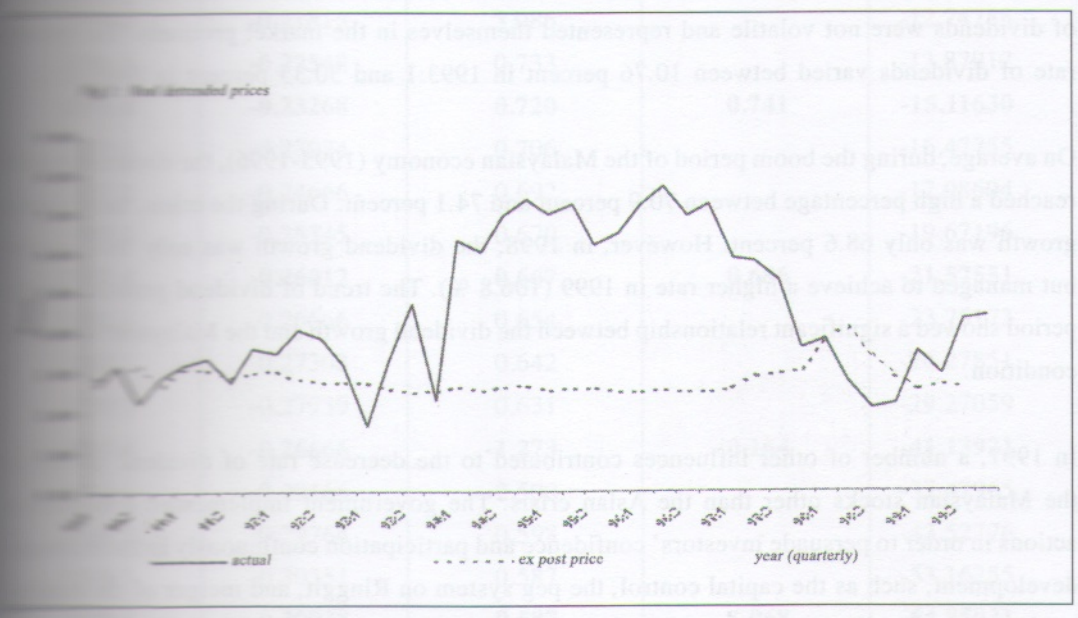


The question of existence of stock price excess volatility in KLSE has begun since the occurr of 1997/98 financial crises. During 1993 until 1997, the stock prices had increased dramati while the dividends were stable as before. Thus, this event meant that there were other fa that influenced the prices, which was certainly not because of the fundamental factor sinc dividends were still at the same level. Only in 1998, the dividends rose higher than the s prices. From the findings it is hoped that there is at least one explanation for the reas extreme differential between the stock prices and the dividend yields.

Based on the actual prices in the market, the ex post rational prices were calculated u Shiller's recursion method: $p^*_{t-1}=\delta(d_t+p^*_t)$, where p^*_{t-1} denotes the ex post price, δ denote constant discount rate, d_t denotes the dividend yield in period t and p^*_t denotes the terminal p

Figure 3 plots actual real detrended prices and the ex post rational real detrended prices. T figure shows the excess volatility of actual prices. It can be observed that the actual price one to two times more volatile than the ex post rational prices.

...Real Detrended Prices of the Actual and the Ex post Rational Prices



...tested the stationary of data under the null hypothesis that Malaysia real stock prices ...a non-stationary process using the first order autoregressive process, it was found that ...-stationary of data could be rejected. By letting Pt denotes the log of real trended stock ..., the estimated equation is as follows:

$$P_t = 0.004 + 0.28894P_{t-1}$$
$$(0.0008)\ (0.1650)$$
$$(R^2=0.48,\ N=36,\ DW=1.84)$$

...the terms in parentheses denote standard errors. Based on the ADF test, It is able to reject ...null hypothesis of the non-stationary data. The result shows a value of –5.1424, as compared ...the 5 percent ADF critical value of –2.9446.

...to compute the variance bound test, the two-stage procedure was used. In the first stage, ...growth parameter of dividends was estimated by fitting an exponential trend to dividends ...using the data set from year 1990:1 to the year the parameter was estimated. This procedure ...was repeated using this equation:

$$\log d_t = \hat{a}_s + {}_s\, t + e_t$$
$$(t = 1990{:}1,\ldots\ldots,\ s \text{ and } s = 1993{:}1,\ldots\ldots\ldots\ldots,1999{:}4)$$

Table 1 reports the estimated coefficients of the time trend. All the coefficients are significa at the critical level of 5 percent. The results indicated that the estimated short-run growth ra of dividends were not volatile and represented themselves in the market precisely. The gro rate of dividends varied between 10.76 percent in 1993:1 and 30.35 percent in 1999:4.

On average, during the boom period of the Malaysian economy (1993-1996), the dividend gro reached a high percentage between 70.9 percent and 74.1 percent. During the crisis, the divid growth was only 68.6 percent. However, in 1998, the dividend growth was only 16.4 perc but managed to achieve a higher rate in 1999 (106.8 %). The trend of dividend growth, for t period showed a significant relationship between the dividend growth and the Malaysian econo condition.

In 1997, a number of other influences contributed to the decrease rate of dividend growth the Malaysian stocks other than the Asian crisis. The government implemented a numbe actions in order to persuade investors' confidence and participation continuously in the econo development, such as the capital control, the peg system on Ringgit, and merger of the bank institutions. The effect was evident in 1998, by the low rate of the dividend growth. But t success of actions could be seen in 1999, by the increased rate of growth at 106.8 perce rate that was higher than before the crisis began.

Table 1: Coefficients of the Estimated Exponential Growth Process of Real Divide

Year	g	% Change in g	% g (yearly)	t-value
1993:1	-0.10756	—	0	-3.54529
1993:2	-0.11726	0.970		-4.02398
1993:3	-0.12697	0.971		-4.52732
1993:4	**-0.13592**	**0.895**	**0.709**	**-5.05991**
1994:1	-0.14495	0.903		-5.62415
1994:2	-0.15378	0.883		-6.22275
1994:3	-0.16242	0.864		-6.85880
1994:4	**-0.17088**	**0.846**	**0.874**	**-7.53589**
1995:1	-0.17917	0.829		-8.25811
1995:2	-0.18729	0.812		-9.03027
1995:3	-0.19538	0.809		-9.85799
1995:4	**-0.20303**	**0.765**	**0.804**	**-10.74780**
1996:1	-0.18729	-1.574		-10.79324

Year	g	% Change in g	% g (yearly)	t-value
	-0.21815	3.086		-12.74785
	-0.22548	0.733		-13.87912
	-0.23268	**0.720**	**0.741**	**-15.11630**
	-0.23974	0.706		-16.47755
	-0.24666	0.692		-17.98604
	-0.25345	0.679		-19.67196
	-0.26012	**0.667**	**0.686**	**-21.57551**
	-0.26666	0.654		-23.75173
	-0.27308	0.642		-26.27851
	-0.27939	0.631		-29.27059
	-0.26666	**-1.273**	**0.164**	**-41.13921**
	-0.29166	2.500		-37.47965
	-0.29764	0.598		-43.52776
	-0.30351	0.587		-53.16255
	-0.30938	**0.587**	**1.068**	**-64.85831**

...values are significant at 5% critical level

...second stage, a log-linear regression of price against time was estimated, for the period ... to 1999:4, but constrained the time coefficient to the dividends growth coefficient from ...

$$\log p_t = \hat{c}_s + \hat{g}_s t + e_t$$

(t = 1990:1,....., s and s = 1993:1,.....,1999:4)

...estimation was to show the relationship between the price and dividend in the same ... Through this the fitted value that represented the perfect foresight was attained which ... assumption that the price contained all the information available up to and including ... The fitted value estimation was used to forecast the future price of stocks in the market. ... in order to obtain the forecast price of the stock the OLS was done. The fitted value was ... using the equation below:

$$\log d^p_t = \hat{c}_s + \hat{g}_s s$$

(s = 1993:1,....., 1999:4)

... result was,

$$\log p^*_t = 1.068734_s - 0.175025_s s$$

(s = 1993:1,....., 1999:4)

The reason for using the two-stage procedure was that the deviation of price from the trend w relatively large and exhibited substantially more serial correlation than deviation of the divide from trend. Thus, as a solution this procedure and the exponential trends were applied. Ba on the tests above, it is concluded that the weak form of rational expectation hypothesis satisfied in the Malaysian stock market.

The second hypothesis is to examine the relationship between GDP or industrial production Malaysia stock market. First, ADF test is conducted to ensure the stationary of data. The resu of the tests are shown in Table 2.

Table 2: Unit Root Test, Quarterly Data, 1990:1-1999:4

	ADF test statistics (lags), 1990:1-1999:4
Stock return	-5.356223
Production growth rate	-7.331261
GDP growth rate	-7.231302

Note: There is an intercept (but no trend) included in this test equation. The inclusion of time trend did not l significant coefficient in case of all variables. The maximum lag was only 1 and the significant of the results was by using the first differences, with critical values from MacKinnon (1991) was 1%.

A Granger causality test was used to find whether the past stock returns significantly imp the prediction of production growth rates and the GDP growth rates. The null hypothesis is stock returns do not Granger caused production growth can be strongly rejected for the w periods. The results are shown in Table 3. The Granger causality results for GDP growth is sh in Table 4.

Table 3: Granger Causality Tests

(Ho: Stock returns do not Granger cause production growth)

		Obs	F-stat	Prob
Quarterly data Sample 1990:1 1999:4	lags: 2	38	8.49263	0.001
	lags: 4	36	8.61362	0.000

Table 4: Granger causality tests

(Ho: Stock returns do not Granger cause GDP)

		Obs	F-stat	Prob
Quarterly data				
Sample 1990:1 1999:4	lags: 2	38	2.81611	0.07427
	lags: 4	36	1.63607	0.19405

...both Tables, it can be concluded that stock returns do not Granger caused production ...can be strongly rejected for the whole period from 1990:1 until 1999:4. However, we ...reject the null hypothesis on GDP growth for the four lag. The causality tests indicated ...relationship between the stock return and the future of the production growth during ... apply to GDP growth with lags 2 only. A regression was also performed to test for ...planatory power for both growths. The results are shown in Table 5 and Table 6.

Table 5: Regression of Quarterly Production Growth Rates on Stock Returns, 1990: 1-1999:4

Quarterly Production Growth Rates Included Observations: 28		
Variable	**Coefficient**	**Std. Error**
C	5.024161	0.505255
LDT	0.330224	0.352297
LDT(-3)	0.098407	0.461844
LDT(-6)	-0.21843	0.730642
LDT(-9)	-0.13308	0.92494
LDT(-12)	-0.54662	0.692654
R-squared	0.241142	
Adjusted R-squared	0.068675	
S.E. of regression	0.461334	
F-statistic	1.398189	
Durbin-Watson stat	2.465289	

...results from Table 5 and Table 6 indicated that both growths did not possess a good ...planatory power for the whole sample periods. The R^2 was only 0.24 for production growth ...0.27 for GDP growth. The relationship between stock returns and economic growth was weak ...suggested that stock market growth have not been driven by the real activity in the

economy. Future production growth and GDP growth were not significant in explaining variation in stock returns.

Table 6: Regression of Quarterly GDP Growth Rates on Stock Returns, 1990:1-1999:4

Quarterly GDP Growth Rates Included Observations: 28		
Variable	**Coefficient**	**Std. Error**
C	2.632484	0.869046
LDT	-1.12122	0.605956
LDT(-3)	-0.71975	0.794379
LDT(-6)	0.916629	1.256715
LDT(-9)	-1.96568	1.590911
LDT(-12)	0.886019	1.191375
R-squared	0.277268	
Adjusted R-squared	0.11301	
S.E. of regression	0.793501	
F-statistic	1.688007	
Durbin-Watson stat	1.966286	

A test was conducted to examine the price-dividend relation, that is, the cointegration between price and dividend both in actual values and in log values. The results are shown in Table

Table 7: Cointegrating Regressions of Quarterly Real Stock Prices and Dividends

Row	Regression Equation	Co-integrating Coefficient (β)	R^2	DW	d.f.
1	$P_t = \alpha + \beta D_t + V_t$	-1.534272	0.364482	0.690086	40
2	$D_t = \alpha + \beta P_t + V_t$	-0.237560	0.364482	0.848738	40
3	$p_t = \alpha + \beta d_t + V_t$	-0.952484	0.428465	1.083922	40
4	$d_t = \alpha + \beta p_t + V_t$	-0.449840	0.428465	1.004550	40

Notes: Cointegrating regressions were estimated using OLS for the whole period, 1990:1-1999:4

...the equation $P^{PV}_t = \kappa Dt$, we obtained the value of κ=1.54. We found that the coefficient ...from OLS regression is less than the value of the present value (1.53 < 1.54). In order ...the cointegrating coefficient, a reverse regression (row 2) was carried out and obtained ...coefficient values as κ: 1/0.2376 = 4.21. It is larger than the other two estimate values. This ...that the required rate of return on stocks was less than the expected growth rate of ...at an implausibly low as 1/1.53 = 0.654 percent per quarter.

...and row 4 perform the analogous regression in logs, and we found that the cointegrating ...are bounds higher (between 1.0504 and 2.2222) than the coefficient of present value ...This result suggested that the present value model can not explain why the price:dividend ...are so high given the historical stock return and price:dividend ratios. Thus, a unit root ...was run in order to identify whether these estimates were statistically incompatible with the ...present value model. Various measure of price:dividend ratios were applied. The results ...shown in Table 8.

Table 8: Unit Root Test for Quarterly Price:Dividend Ratios

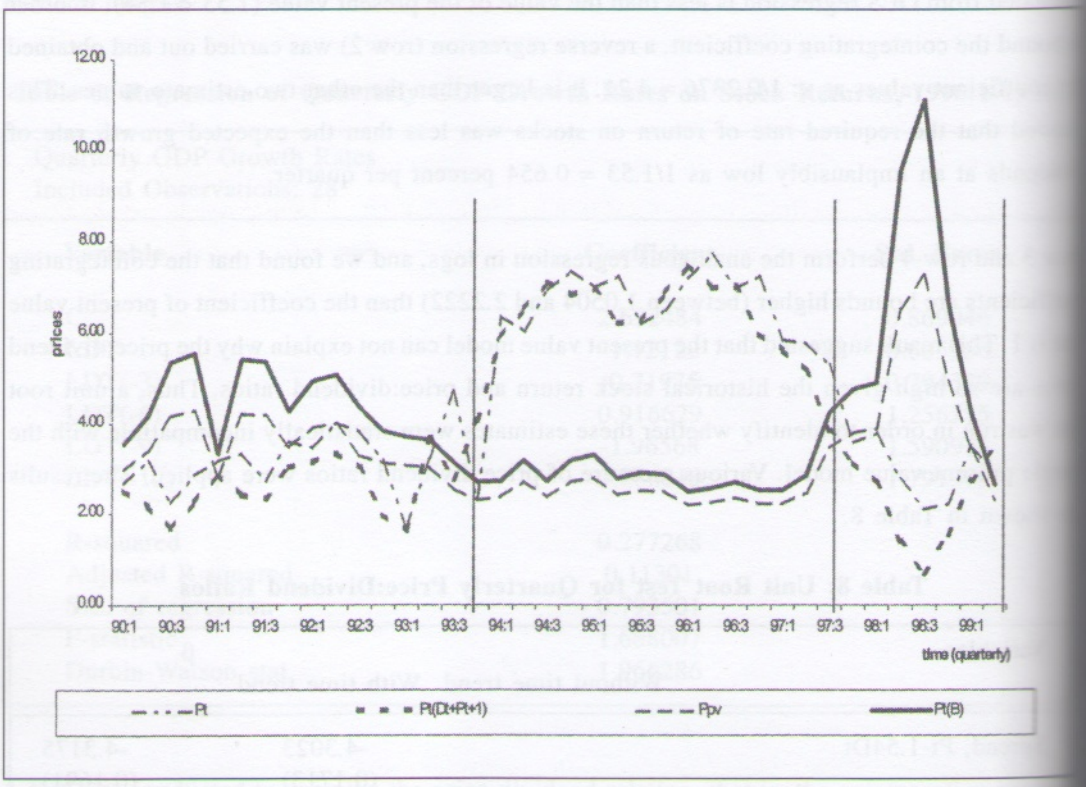
Variables	Without time trend	With time trend	β
Spread, Pt-1.54Dt		-4.3023 (0.1713)	-4.3175 (0.1691)
price:dividend ratio, Pt/Dt		-3.9972 (0.1713)	-3.9796 (0.1685)
Log price:dividend ratio, pt-d	-4.4889 (0.1720)		-4.4964 (0.1700)

...first differentiates, all results are significant at critical level of 5%.

...on the findings, it is concluded that the stock prices in Malaysia are too sensitive to current ...dividends to be consistent with the present value model. This is because the portion of stock ...prices unexplained must be highly correlated with dividends. Thus, this overreaction in the stock ...market is not able to be explained by other variables that have been incorporated into stock prices ...and does not help in forecasting future dividends. Specification such as equation (12), might ...gives us at least some potential to explain the failure of the present value model.

...Figure 4 helps us to explore the movement of prices (The actual price, the price based on the ...present value model and the predicted prices that contained the intrinsic bubbles). From the ...figure, we observed that the actual prices moved closely with the price of the present value.

Figure 4: The Actual and Predicted Prices



Note: the actual price is the real price in market for period 1990:1 till 1999:4,the Pb is the price that contain bubble obtained from equation $P_t=D^t(\hat{c}o + \hat{c}D_t^{\lambda-1})$ and Ppv is the present value model, obtained from equation Ppv = D/k

The findings of the study suggest that investors' decision to participate in the stock market is not based on the fundamental market value, but rather based on the non fundamental values such as changes in the economic environment conditions so as to maximise their capital gain. This this explained the existence of many investors who would prefer short term returns. This might be the reason for the large outflow of short term capital during the financial crisis of 1997/98.

CONCLUSION

The existence of speculative influences on any market in this world, including stock market, is a common phenomenon. Driven by a motive of greed in maximising the profit rather than by a long-term investment motive, the presence of speculators and the increasing number of them make this group a danger to companies and the country as a whole.

the boom period of the Malaysian economic growth, all markets in the economy contributed high percentage of return to the economy. The stock market, the financial market, the market and the capital market, for instance, contributed the highest to the economic growth. Naturally, some economists may question on this overgrowth.

paper examines speculative influences in the Malaysian stock market utilizing quarterly time series data from the first quarter of 1990 until fourth quarter of 1999. Models are developed to test the extent of excess volatility in stock prices in KLSE, to determine the relationship between stock market and the real economy; and to examine whether the prices of the stocks are based on their intrinsic values.

findings of the study indicate that there exists excess volatility in the actual prices of the stock. It is observed that the prices are one to two times more volatile than the ex post rational price. It is shown that the weak form of rational expectation hypothesis is satisfied in the Malaysian stock market. Regression of stock returns on measures of real economic activity over the period from 1990 to 1999 show that there is no evidence that stock return could have been driven by expectation of real activity in the economy during the whole periods. The relationship is weak, which suggests that production and GDP growth are not significant in explaining variations in stock returns. With regards to testing the existence of intrinsic bubbles, the results indicated that the intrinsic bubbles occur in the Malaysian stock market.

Regarding the allocation of resources, the Malaysian stock market has succeeded in allocating the funds efficiently, but, these funds are largely short-term funds. This might be the reason for the huge outflow of short-term capital faced by the Malaysian stock market during the financial crisis of 1997/98. In order to ensure the stability and efficiency in the stock market, speculative activities should be viewed more seriously. From the findings, it is hoped that we can at least see the impact of speculative activities on our economy since a stable stock market means a more stable economy.

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