

Nasir Ganikhodjaev  
Farrukh Mukhamedov  
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VOLUME 1

$$x' = 2xy$$

$$y' = 2xz$$

# INVESTIGATIONS ON PURE MATHEMATICS, FINANCE MATHEMATICS AND OPTICS

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$$\varphi_1(x, y, z) = z$$

$$\pi_1 = \begin{pmatrix} x & y & z \\ y & z & x \end{pmatrix}$$

$$z' = x^2 + y^2 + z^2 + 2yz$$

$$\pi_1 \nu_1 \pi_1 = \nu_{17}$$



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يُونَيْتِي سَلَامًا اِنْتَارَا اِنْعَسَابًا مَلَيْسِيَا

# **Investigations on Pure Mathematics, Finance Mathematics and Optics**

Nasir Ganikhodjaev  
Farrukh Mukhamedov  
Pah Chin Hee



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# STOCK PERFORMANCE ANALYSIS BETWEEN MALAYSIAN AIRLINES SYSTEM BERHAD AND AIRASIA BERHAD

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Assist. Prof. Dr. Mohd Aminul Islam

**Abstract.** *This study analyses the stock performance of Malaysia Airlines System Berhad (MAS) and AirAsia Berhad (AirAsia) for three financial period from 2006 until 2008. Both airlines are the main competitors in the Malaysia's sky. This study employs two types of analyses which are fundamental analysis and technical analysis. Data used in this study are collected from annual reports and online database to get the daily historical stock price. The findings from both analyses are combined and compared. The results show that MAS has more profitable trend of stock price. Thus, investing on MAS is recommended.*

## 1 Introduction

This study uses the daily data on the proportions of stocks advancing, declining or remaining constant in the KLSE over a period of 3 years from 2006 to 2008. This study uses data samples of both MAS and Airasia which are collected from annual reports of these three consecutive years. Relevant data are taken from financial statements with specific reference to the balance sheet and income statement.

### 1.1 Technical Evaluation: Chart Analysis

#### 1.1.1 Trend

The first step is to identify the trend. This can be accomplished with trend lines and moving averages (MA). An average is the sum of the closing prices of stock for a number of instances divided by the number of the instances. The moving part of moving average means that one recalculates the average for each additional instance. In this study, a five-day simple moving average is used. The five-day simple moving average is calculated by adding the closing prices for five days and dividing by five. For example, the MA is calculated starting from the fifth day. Note that,  $t$  and  $i$  are the number of day,  $S_i$  is closing price at day  $i$ , and  $MA_t$  is the moving average of day  $t$  where  $i = 1, 2, 3, \dots$  and  $t = i = 5, 6, 7, \dots$ . Thus, the moving average of day five,  $MA_5$  is calculated as follows:

$$MA_5 = (S_1 + S_2 + S_3 + S_4 + S_5) / 5$$

In general,

$$MA_t = (S_{t-4} + S_{t-3} + S_{t-2} + S_{t-1} + S_t) / t$$

As a rule of thumb, as long as the price remains above its uptrend line and selected moving averages, the trend will be considered bullish. On the other hand, when it falls below its five-day simple moving average, it is a bearish sign.

#### 1.1.2 Volatility

Volatility is a measure of dispersion around the mean or average return of a stock price. One way to measure volatility is by using the standard deviation, which tells how tightly the price