UNIVERSITI TEKNOLOGI MARA

TICK SIZE, SPREAD, TRADING VOLUME AND VOLATILITY: APPLICATION IN CONTEXT OF MALAYSIAN STOCK MARKET

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Thesis submitted in fulfilment
of the requirement for the degree of
Master of Science
(Business Management)

Faculty of Business Management

May 2018

ABSTRACT

This study attempts to assess the implementation consequences of small tick size in the context of Malaysian stock market, which take place on 3rd August 2009. Numerous of researchers examine the impact reduction of tick size towards market liquidity, which can be found from around the world, unfortunately, in Malaysia, it is hardly to discover researcher or academician endeavour to examine the consequences of using smaller tick size. Moreover, to make this more complex, proxies to market liquidity used to re-estimate the volatility after the implementation of tick size take place. One of the main connection between tick size and liquidity, it is a tool to improve the market liquidity. This study use daily data, started from the implementation of new tick size from 3rd August 2009 until the end of trading day 31st December 2014 by using components of FTSE-BMKLCI. Using Ordinary Least Square method to analyse the result, this study found that, although often-cited researcher mentioned smaller tick size generally lead to increase or improve the liquidity, this result is not universal. Stocks with higher large tick size experience the greatest improvement in liquidity, yet stocks with small tick size facing wider spread and low trading volume, which experienced reduce in liquidity. This indicates that, the improvement of liquidity applies to the stock that actively traded and improves the liquidity. Whereas, for estimation volatility of spread and trading volume, the evidence suggest TGARCH is better in estimating the volatility of spread, whereas for trading volume EGARCH has better fit the data series into model. The findings also suggest that, the volatility of trading volume using EGARCH able to captures the existence of leverage effect.

ACKNOWLEDGEMENT

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CHAPTER ONE

INTRODUCTION

1.1   Background of Study

In this modern era, revolution becomes one of the vital processes to keep up with the new trend especially in the financial market which one of the crucial changes made by market regulator is the improvement of the market liquidity. Definition of liquidity is universal, ubiquitous and varies across different points of view.[1] Therefore, liquidity has a vital stance in financial sector whereby its growing importance will influence pricing, market productivity and trading bustle. Harris (2002) defined liquidity as the ability to hastily trade large size of trading volume at cheaper cost as it bespeaks the well-being of the market or the liquid condition of the market. In this sense, market liquidity comprises three characteristics which are low cost, large trading volume, and fast trading.

Investors have always strived to improve market liquidity. Kadan (2006) highlighted the use of tick size as one of the policy tools that can be used by financial market to improve the market liquidity. Lessening the tick size could enhance the liquidity and improve the gains traded in the market (Kadan, 2006). This indicates that smaller tick size could enhance the market liquidity, particularly stock exchange around the world. Therefore, definition of tick size may vary among different researchers. For example, Bursa Malaysia (2009) defined tick size or minimum bid as the minimum price variation between the buy and sell price for a stock. In other words, tick size or the minimum amount that allows the price of the market changes between the buy and sell price for a stock.[2] With the current structure of tick size, it allows the investor to buy or sell with lower tick size such as post price of tick size ranging from RM3.10 plus or minus with 1 cent, so the next tick up (+1cent) will be RM3.11 and the next tick down (−1cent) is RM3.09. Table 1.1 summarises the

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[1] Harris (2002) scribble that liquidity derive from different perspective such as traders need liquidity to concede them implement inexpensively trading strategies, exchanges need liquidity to fascinate traders to commerce with them, and regulators fancy liquidity due to liquid market will produce less volatility level.
[2] Harris (1997) delineates tick size as minimum price increment at what prices traders use. Meanwhile Pavabutr and Prangwattananon (2010) define tick size as minimum price changes allowed for stock quotations.

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