

Does Restricted Short Selling Bring Benefit to Stocks Listed in Islamic Capital Market? New Evidence from Malaysia based on Dynamic Panel Heterogeneous Techniques

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Does Restricted Short Selling Bring Benefit to Stocks Listed in Islamic Capital Market? New Evidence from Malaysia based on Dynamic Panel Heterogeneous Techniques

Putri Swastika¹, Ginanjar Dewandaru² and Mansur Masih³

Abstract

This research studies the benefit of the practice of Restricted Short Selling (RSS) on the Islamic stocks. Benefit is defined as the influence of the application of RSS on the stock returns and ultimately, on the market. Malaysia is used as a case study. Using dynamic heterogeneous panel techniques, it is found that RSS brings long-term positive influence on the stocks. However, panel Granger causality analysis implied that it is indeed stock return which causes RSS, not the other way around. Henceforth, our findings tend to suggest to the policy makers, to revisit the permissibility of RSS in the Malaysian Islamic capital market (ICM). Moving forward, instead of having restricted short selling, a vibrant Islamic capital market should promote risk sharing instruments coupled with strengthened information dissemination.

Key Words: Restricted Short Selling, Stock Returns, Islamic Capital Market, Pooled-Mean Group, Johansen Fisher Panel Cointegration, Panel Granger Causality.

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1.0. Introduction

Short selling is one of stock trading strategies that is used to yield profit from "sell high – buy low" position. Throughout the history of market crashes, many blamed short selling and thus short sellers become the culprits of the crash. As a result, short selling was banned (and re-opened) many times in various stock markets of many countries, such as the U.S., Dutch, French, Chinese, and also the Malaysian stock market. This love-hate relationship happens as market acknowledges that, although potentially harmful to the market, short selling does bring benefits, especially for markets to achieve its efficiency. Further, short selling can advance important economic goals since it brings about greater liquidity, more capital formation, and efficient risk allocation (Paredes, 2009). History also proves to us that the prohibition of short selling was never permanent, as the stock markets are always reopened for short selling –although it comes with more stringent and uptick conditions. The latter is known as Restricted Short-Selling (henceforth, RSS).

Shari'ah position had been clear within the ambit of Naked Short Selling, that the practice is strictly not permitted. However, for RSS, the *fuqaha* have different opinions regarding its permissibility. Some of the scholars allow such instrument, provided that it satisfies all *shari'ah* requirement. Some have been requesting SAC of Bursa Malaysia to revisit the permissibility of RSS, a re-introduction of "a type of short-selling" after the long banned from 1997-2007, due to some *Shari'ah*-related concerns. Taking sample of 29 *Shari'ah*-compliant stocks of Malaysian capital market, this research subsequently attempts to suggest whether RSS brins benefit to the stock returns of *Shari'ah*-compliant stocks and hence suggest recommendations to investors and regulators.

1.1. Research Questions

It is known that SAC at its 13th meeting on March 19, 1998 has approved Regulated Short Selling with the inclusion of Securities Borrowing and Lending in its mechanism. However, we are interested in assessing the permissibility of short selling from both *Shari'ah* and economic implication perspectives. Therefore, the research question is as follows: does RSS bring benefits to the stock return?

2. Evolution of Short Selling in Malaysian (Islamic) Capital Market

The development of the stock market in Malaysia is exalting. After the independence with Stock Exchange of Singapore in 1973, Bursa Malaysia berhad (before was Kuala Lumpur Stock Exchange Berhad) has become one of the largest bourses in Asia with just under 1,000 listed companies with vast range of investment products to investors. It is recorded that the overall volume of trading in Bursa Malaysia has surged to 2.6 billion units in 2011 (The Edge, 2011) and today is believed to have more than that. On top of that, in alliances to the aspiration of the Central Bank to be the hub of Islamic finance, Bursa has also widen its service to provide one of the most complete Islamic capital market products and services. It was also Malaysia that is indeed the first country who has successfully issued the Government Investment Issue (GII) in 1983 –or formerly known as the Government Investment Certificate- which was based on *Qard-ul-hassan* contract, which the main objective of the instrument was to facilitate the management of assets in the Islamic banking system (Mannan, 2008;103). Despite Malaysian market is

still an emerging market, it could be said that this market has developed so greatly in terms of instruments offered, as for our focus is short selling instrument in particular.

It is known that Malaysian market have experienced in three amendments in the permissibility of short selling. The first phase was signed by the removal of short selling restriction in relatively short period, between August 27, 1996 to August 28, 1997. It was remarked by the amendments of Securities Industry Act 1993 to allow short sales. From August 28, 1997 to January 3, 2007 (the announcement date was December 22, 2006), short selling practice was banned by the Malaysian government. It was taken as the effect of 1997 Asia financial crisis which hit Malaysian market severely. Again, short selling was accused to be the culprit for the falling prices of stocks and ringgit Malaysia. Indeed, Prime Minister of Malaysia at that time outlawed the practice and considered the short sellers as they were "racist and ignoring Malaysia strong economics fundamentalⁱ". This marked the end of first phase and beginning of the second phase of short-selling restriction.

Nonetheless, on December 22, 2006, short selling was announced to re-open -in more regulated-sphere. This time, the name implies heavy restrictions imposed in the activity, that is RSS. It is an instrument for short seller investors to adhere the uptick rules of Bursa Malaysia. This was indeed stated in circular number R/R 16 OF 2006 of the amendments to the Rules of Bursa Malaysia Securities pertaining to reintroduction of securities borrowing and lending and regulated short selling. Among the new rules that are introduced, some of them are stated as follows;

- a) Short selling is allowed only for *institutional* short sellers (henceforth participating organization) which hold permission from Clearing House Requirements to carry out borrowing/lending activities;
- b) Participating organization shall not commence with borrowing and/or lending activities until the: 1. Inspection and/or audit by the Exchange has been completed, 2. The corrective and/or preventive measures and actions have been duly carried out and completed by participating organization, and 3. The submission of the confirmation and the declaration have been made by participating organization;
- c) Participating organization shall ensure written agreement for borrowing and/or lending the eligible securities entered into with its client is executed prior the activities took place. This includes passing absolute entitlement of the legal and beneficial ownership that is lent, requirement to put collateral; the fees to be paid for the borrowing and/or lending, and the rights and remedies in the event by default by other party;
- d) Collateral value shall be at least 105% of the value of borrowed securities and subject to haircut with the rate prescribed by the Clearing House, and shall be marked to market based on intraday basis. Would the collateral value went below 102%, participating organization shall notice the client (the borrower) to return their securities within 3 market days from date of notice. This notice shall be submitted to the Exchange on weekly basis. In event of default, lender can liquidate the collateral to purchase relevant securities for the purpose of returning the securities borrowed to Clearing House;
- e) Margin account is regulated in details on rule 608.8, amongst them are: written agreement, the purpose of securities borrowing and lending, entitlement of portion of fees, limited utilization of client's margin account, and monthly disclosure on details of transactions (including the quantity and fees earned) to margin account clients.

These rules, however, do not constitute all elements in the amendment, since the lists of rules are still exhaustive. Nonetheless, this is to give an illustration on how controlled and regulated environment for short selling is now being imposed by Bursa Malaysia to the market.

3. Background Theory

Before proceeding, a revision to an ideal Islamic capital market is deemed to be pertinent. It is such because one is ought to be able to understand and grasp the objectives of- and distinguish the essential features of a capital market where Islamic values and principles are endorsed. This market, for nomenclature, thus called as Islamic capital market. Analogically, not all instruments in conventional capital market (which is aspired by a different worldview) is compatible with the sphere of Islamic capital market. Thus, the concept of short selling is also reviewed. Worth noting that under this section, only conceptual framework is visited and exclusive of the practice.

3.1. The Ideal Islamic Capital Market: Conceptual Framework

It is understood that Islamic capital market shares the similar objective with the conventional. Its objective is to connect entrepreneurs who are seeking for capital and investors who are seeking for profitable investment. Hence, capital market is aspired to mobilize savings for investment in productive assets with the view to enhancing a long term economy growth of a country. Indeed, Fama (1970) noted that the primary role of the capital market is allocation of ownership of the economy's capital stock. In addition to resource allocation benefit, conventional and Islamic capital market does recognize the risk management benefits for both investors and managers. Risk management benefits can be attained through diversification of risk in the economy via innovative products and structures that are offered in the conventional capital market. However, Muslim scholars concern on speculative behavior which often hides under the cover of risk management is recognized. Henceforth, the benefit of risk management products and structure is restrictive for hedging purposes solely in Islamic capital market (Dusuki, 2012).

The spirit of risk sharing comes into the picture of an ideal framework for Islamic capital market. Arguably, it is the reason behinds the prohibition and condemnation of *riba* by Allah SWT. Mirakhor (2010) explained that Islam proposes two sets of risk-sharing instruments: (i) *mua'malat* risk-sharing instruments in the financial sector, and (ii) redistributive risk-sharing instruments through which the economically more able segment of the society utilize in order to share the risks facing the less economically able segment of the population –where the second are instruments of redemption of rights and repayment of obligations. Indeed, Islamic capital market shall conduit the first proposal in order to support Islamic financial system. Henceforth, Iqbal and Tsubota (n.a.) mentioned that exclusion of interest from transaction is not the only doctrine, but also the principle of risk sharing, promoting entrepreneurship, discouragement of speculative behavior, preservation of property rights, transparency, and the sanctity of contractual obligations shall all be preserved in the operation of Islamic system. Else, the question is how?

Creation of comprehensive stock markets might be the visionary solution (Mirakhor, 2010). Comprehensive stock markets signifies that the market does not only work for allocation of ownership of the economy's capital stock, but also to raise venture and provide viable investment alternative to investors, which all of these entail risk-sharing element. In other words, venture capital, angel funds, and other vehicles which support the similar spirit are warmly welcome and endorsed in the ideal system of an Islamic capital market. Investors behavior are also shaped towards the risk-sharing attributes, as they ought to manage and adjust their portfolio actively. Active management of portfolio signifies that the investors

adjust their portfolios based on the firm's project related information instead of adjustments to a mere signal that a firm transmit to the market. As such, in conceptual level, information hoarding by entrepreneurs would not -at all- bring benefit thus diminish, if not eliminate, the information asymmetric problem. It is also envisioned that a vibrant stock market would allow risk diversification to manage the aggregate and idiosyncratic risks of the firm (Iqbal *et al.*, 2012), hence abandon the speculators from the market.

Would this be into existence, this "comprehensive stock market" would be the alternative for stock market at contemporary worlds which speculators and real investors are hardly distinguishable. For that cause, Keynes accused that today's stock market to be a mere "casino". Foreseeing this, and ideal comprehensive Islamic capital market might not work in favor for speculators which are automatically ineligible to enter the market.

3.2. Short-Selling Concept

Short Selling (or short sales) is a trading strategy where the seller sells the assets that are borrowed from another party who agrees to lend the assets for a certain period. Often, short sale is defined as the sale of an asset that the seller does not have (or does not borrow nor deliverable). There are various reasons to engage in this activity. First is to maintain constant profit generation during the bearish market. Investors who are well-versed on the market may read the volatility of the bearish market, and as such short selling allows them to exploit the volatility of the pricesⁱⁱⁱ. Secondly, it is motivated by the expectation that the price of a stock is overvalued, thereby short selling provides the mechanism for price discovery which helps in achieving market efficiency. The investors have information that justifies the overvaluation of the company (as such they are dubious on the "good" news announcement) in the stock market, as such short selling is exercised to correct (i.e. lower) the market price. Since theoretically stock prices reflect the performance of companies, short seller denotes pessimistic investors of the company; as such it balances the price of the stock which was driven by optimist investors. Miller (1977) in Berkman et al (2009) and in Pinheiro (2009) hypothesized that in equilibrium, stock prices will be overvalued when there is inadequate short position towards the stocks. Therefore, it is argued that having short sellers in the market would bring "balanced" perspective of stock performance. These two arguments are fall under the assumption that short sellers are informed (Diamond and Verrecchia, 1987) as such they can predict future downward price movements and negative news in earnings announcements (Christophe et al, 2004).

Thirdly, many hedge fund managers utilize it to offset the loss from long position of declining stock prices. In other words, fund managers can be become short sellers in order to hedge a portfolio and allow for less volatility returns in an overall portfolio (Tauli, 2004;10). It is common to see fund managers in long position while managing their portfolio. Thus, they need to net-off their position against the volatility of the stock price. As such, it is also not unusual for fund managers to be in short position in order to maintain their portfolio safe and steady.

And *fourthly*, it is because the short sellers are speculators who bet (and manipulate) on the stock prices. The later is the argument of most people to put short selling in prohibition –or at least uptick rules on short selling^{iv}. Furthermore, still under this argument, short sellers often tried to manipulate the stock price through creating false rumors about the company and sell stock short in bulk volume, as such it creates a sudden panic in the market which the end result shall be in the favor of the short sellers. In addition to that, Blau and Wade (2012) found that short selling activity prior to analyst recommendations more likely to be motivated by speculation than by information.

Basically in short selling, short sellers sell the stocks that they do not own. In traditional short selling (called covered short selling), stocks are borrowed from other investors or broker. There was a time where short sellers arranged the borrow-lending transaction with private investors that short sellers might have known who had the stocks at the volume that is wanted by short sellers. The contract between them is simple, short sellers wrote a contract of borrowing and agreement to deliver the stock at the maturity date in the future. However the main challenge in this arrangement is to find the exact match of supplier. Since it is difficult to find a private investor who possesses the exact volume as it is wanted by the short sellers and is willing to lend the shares; as such this practice is quite uncommon. To enhance and smooth the process, contemporary application of short selling allows the short seller to borrow the stocks to a brokerage firm. Brokerage firm, through its loan department from which its clients could borrow deposited stock, provides the shares at the requested volumes to the short seller. As a return to the brokerage firm, the short seller opens a cash account and a margin account in the brokerage firm. This is to cover short position of the short seller when he or she is unable to deliver the shares back at the maturity date. Instead of keeping the collateral in cash storage, the brokerage firms enjoy the benefit from the interest yield of the collateral cash which is considered as nice profit by the firm (Tauli, 2003:20).

4. Literature Reviews

From the prior section, one may infer briefly that short-selling instrument is deployed as an excess of information asymmetry. In an efficient market where all participants posses the equal information, price provides accurate signal for resource allocation. Fama (1970) mentioned that a market in which firms can make production-investment decisions and investors can choose among the securities that represent ownership of firms' activities under the assumption that security prices at any time "fully reflect" all available information is called "efficient". Furthermore, Fama (1970) put three *potential* sources upon which market efficiency is obtained; (1) there are no transactions costs in trading securities, (2) all available information is costless available to all market participants, and (3) all agree on the implications of current information for the current price and distributions of future prices of each security. In short, market is called efficient when the price adjustment of any asset is fully reflected as the outcome of rational assessment of investors towards information related to the firm, hence no marginal effect would be experienced from hoarding the information.

Investors care about price since they do care about returns. At all times, returns has been always the main motivator for an investment commitment, hence one may relinquish her/his desire to saves. Assumed that one person who owns 3 houses (two of which are gained, let's say from inheritance) and is interested to keep only one house, would enjoy more benefit from the increasing price of the house would he sold the houses, rather than the rental fees would he rented the houses. Therefore, the house owner would like to know how to determine (or what is the determinant) of the house price. The same analogy is applicable for stock market, since an investor is keen to know what factors determine stock prices. Notwithstanding, following subsections are dedicated to explain market conditions, such as macroeconomic variables and restrictions, which has been vastly discovered to have influence on the stock returns.

4.2.1. Macroeconomic Variables

Plethora of studies examine the effects of macroeconomic variables on stock returns. It is dated back to the late 70s where Fama and Schwert(1977), using U.S. data empirically showed that stock returns are negatively affected by both expected and unexpected inflation. It inferred that high inflation rates

would likely to result in lower stock returns as business would be less performing during high inflation period, hence reflected in lower stock returns. Asprem (1989) examined the relationship between macroeconomic variables and stock indices, asset portfolios in European countries and finds a positive relation amongst Industrial production, money supply, and stock prices and an inverse relation between inflation, interest rate and stock prices. Industrial production is a pro-cyclical index which reflects the economic situation. A rise in industrial production signifies an economic expansion, while a falls means a recession. Froot and Klemperer (1989) studied the effects of exchange rate changes on international market shares pricing of U.S. firms and found that market share pricing is sensitive to the expected future exchange rate.

Balduzzi (1994) found that inflation itself is responsible for most of the "dynamic interaction with stock returns", hence strengthen the previous finding by Fama and Schwert that there is indeed strong negative correlation between inflation and stock returns. Additionally, Balduzzi also discovered that interest rate accounts for "a substantial share of the negative correlation between stock returns and inflation". However, focusing on the U.S. firms, a more recent study by Griffin and Stulz (2001) utilized a unique dataset of industry indices from the U.S., Canada, U.K., France, Germany, and Japan from 1975 to 1997 and examined the importance of exchange rate movements for stock returns. They found the importance of exchange rates to the stock market yet their impact is irrationally ignored by the market.

From Singapore experience, Maysami *et al* (2004) concluded that the Singapore's stock market "form cointegrating relationship" with the interest rates, industrial production, price levels, exchange rate, as well as money supply. Intriguingly, their finding is in contrast with the previous studies which found negative relation between stock returns and inflation. They suggested that Singapore's stock returns has positive relationship with inflation, which means increases in expected inflation may also signal a potential increase in real activity, production and hence higher stock returns. Additionally, their study also evidenced that stock returns are positively and significantly related to industrial production, money supply, exchange rate and short-term interest rates. An inverse relationship is expected between long-term interest rates and Singapore's stock return.

Menike (2006) also posited a negative effect of interest rate, inflation rate and exchange rate on Colombo stocks prices, yet further advanced the model for Sri Lankan stock market through the introduction of money supply. Menike found out that money supply does not appear to have a strong prediction of movements of stock prices. In a different set of data and environment, Richards and Simpson (2009) examined Australian stock price movements on the Australian dollar exchange rate between January 2003 and June 2006, and found that there is positive co-integrating relationship between the stock price and exchange rate. In a more recent research, Hsing (2011) analyzed the relationship between South Africa's stock market and macroeconomic variables such as growth rate of real GDP, money supply, interest rate, exchange rate, inflation rate, and U.S. bond yield. Hsing asserted that growth rate of real GDP, money supply, and U.S. stock market index positively influenced South African stock price, yet related negatively by the domestic interest rate, the exchange rate, the inflation rate, and the bond yield.

Table 1. Summary

Name (Year)	Findings	Scope of Study
		(Market of Study, Data, and
		Methodology)
Fama and Schwert(1977)	Negative relationship between	U.S. Stock Market and CPI from
	stock returns and inflation	January 1953 to July 1971,
		monthly data.

Asprem (1989) Froot and Klemperer (1989)	Positive relationship amongst Industrial production, money supply and stock prices; An inverse relation between inflation, interest rate and stock prices. Share price is sensitive to the expected future exchange rate	10 E.U. Countries (France, Germany, Italy, Switzerland, the U.K., Denmark, Finland, Netherland, Norway, and Sweden), quarterly data from 1968 to 1984. U.S. Stock Market and Exchange rates from 1976-1986
Balduzzi (1994)	Negative and significant relationship between inflation and interest rates, and stock returns.	U.S. macroeconomic variables and stock returns from NYSE, from 1954:1 - 1976:4 and 1977:1 - 1990:4
Griffin and Stulz (2001)	Despite its importance, the impact of exchange rate to stock market is irrationally ignored.	The U.S., Canada, the U.K., France, Germany, and Japan from January 8, 1975 to June 23, 1997.
Maysami et al (2004)	Positive and significant relationship amongst Singapore's stock market returns, inflation, short-term interest rates, industrial production, price levels, money supply, and exchange rates. Negative relationship between long-term interest rates and stock return.	Singapore macroeconomic variables and stock returns of monthly observation, from January 1989 to December 2001.
Menike (2006)	Negative relationship amongst stock prices, interest rate, inflation rate, exchange rate, and Colombo stocks prices. Correlation between stock prices and money supply could not be concluded.	Sri Lankan stock market and macroeconomic variables, observation of monthly data from the period of September 1991 to December 2002.
Richards and Simpson (2009)	Positive co-integrating relationship between the stock price and exchange rate.	Australian stock prices and exchange rate, daily observation from period of January 2003 to June 30, 2006.
Hsing (2011)	Positive relationship amongst growth rate of real GDP, money supply, U.S. stock market index, and South African stock price. Negative relationship amongst domestic interest rate, the exchange rate, the inflation rate, and the stock price variables.	South Africa stock market and macroeconomic variables, quarterly data ranging from 1980Q2-2010Q3.

4.2.2. Market Conditions and Restrictions

Investors assessment (as well as perception) towards the performance of the firm is essential rules which influence pricing mechanism. It was Miller in 1977 that studied the underlying behavior of investors to stock pricing. According to his hypothesis, stock prices at the market are overvalued (or inflated). This hypothesis aroused from the assumption that stock market is failed to disseminate perfect information of

the projects/companies which seek for financing in the market. Therefore, market is fulfilled by optimist investors who decide the price for the stock of a project or a company based on the positive projection (or earnings announcement) with less information of negative projection of the project or company. Therefore, the optimist investors drive up the stock price further up to the point where it is overvalued, i.e. more than stock's intrinsic value.

Furthermore, Miller believed that overvaluation of stock could be eliminated by short selling mechanism. From here, the argument goes that stock prices will be inflated in a market where short selling is restricted. A year later, Harrison and Kreps (1978) showed in their model that restrictions on short sell indeed drive upward the stock prices due to optimist investors. Another implication from Harrison and Kreps (1978) model is that would short sales is allowed, it would drive upward the volume of trading (thus decrease the stock price) as such generates "rational" portfolio management strategy for investors. However, Miller's and Harrison and Kreps's works are conceptual works without having real data analyzed.

In line with two previous works which against short selling restrictions, Diamond and Verrecchia (1986) has mathematically proven that short selling restrictions will reduce the adjustment speed of prices to private information, in particular bad news. On top of that, Diamond and Verrecchia (1986) mentioned the short selling restrictions reduce informational efficiency in the stock market. In another words, short selling does increase the distributional of perfect information on the projects/companies to investors, thus correcting the overvalued price. Price is deemed to be important factor to judge whether the market is efficient or reverse. Thus, overvaluation of the stock indicates that market is inefficient and vice versa.

Embark from this point, exhaustive list of empirical studies have suggested that short selling allows price discovery, thus efficient market is achieved. They argue that short selling "correct" the overvalued or inflated stock prices due to heard behavior of other traders (i.e. "real investors") on the information transmitted by pessimistic investors (i.e. short sellers) about bearishness (or misevaluation) of the stocks. Among the studies which support the view are; Blau et al (2012) found that short sellers target ADRs (stands for American Depository Receipt) of home market with short sale constraints. ADRs of home market with short sale constraints are believed to be overvalued because the underlying is subject to misevaluation.

Furthermore, Bohl and Klein (2011) found that in Malaysian, Hongkong, and South Korea market, short selling restrictions lead to an increase in extreme shocks thus destabilized the respective stock markets. Using a sophisticated time series techniques and a significant portion of the sample period, Bohl and Klein showed that short sale constrains entail a higher kurtosis of error terms, i.e. increasing extreme pricing errors. In addition to that, Bohl and Klein showed that in Hong Kong, this effect is particularly high. The findings from Bohl and Klein supports Miller's hypothesis. Similarly, Boulton and Braga-Alves (2010) found consistency with Miller's hypothesis and Berkman et al (2009) that during the ban of naked short selling of 19 firms in NYSE market, market experienced from: (1) positive (negative) reaction to the announcement (expiration) of short-sale restrictions, as the short sellers are eliminated during the ban, and (2) restrictions do have negative impact on various measures of liquidity, bid-ask spreads, and trading volume.

Still in the same tone, Berkman et al (2009) found supporting evidence for Miller's hypothesis that in NY Stock Exchange (NYSE), Nasdaq, and American Stock Exchange (AMEX), stocks' prices with high differences of opinion are inflated prior to earnings announcements and sharp decline after the announcements. Marsh and Niemer (2008) observerd FTSE 350 (UK), 144 stocks in S&P1500 (US), 10 stocks of CAC All Share Index (France), 11 stocks in CDAX (Germany), 18 stocks in OMX index

(Sweden), and 20 stocks in Topix 150 index (Japan). Studying this industrial countries thoroughly, Marsh and Niemer found out that: (1) the fall in kurtosis (the peakness) is observed with stronger restrictions (US), weaker restrictions (France and Germany), or no restrictions at all (Sweeden and Japan), whereas kurtosis rises for the UK; (2) the response of skewness (asymmetry of the probability distribution of returns) to the introduction of restrictions is mixed; (3) increases in the magnitudes of autocorrelation coefficients are from countries without restrictions imposed. In addition to that, Lamba and Ariff (2006) examined KLCI (Malaysian market) behavior during the removal of restrictions and during the reimposing of restrictions. It is found that removal of short selling restrictions helps complete markets and is valued by market participants, particularly for actively traded stocks.

However, different insight is given by Bris et al (2005). Employing market efficiency measure analysis, Bris et al (2003) found 2 things from his data samples, that: (1) no evidence that short-sales restrictions are associated with less negative stock skewed returns, and (2) short sales in less developed countries resulted in more positively skewed returns. Thus, they provide recommendation for less developed countries to not disallow short selling, since the restrictions are also weakly associated with less negative skewness (probability distribution) of stock returns. Surprisingly, recent research finding from Blau and Wade (2012) shows that by short selling is more likely a speculative behavior rather than informed behavior. Blau and Wade analyzed this through observing abnormal shorting prior to downgrades by the analyst.

5.. Research Methodology

This research employs empirical investigation using dynamic heterogeneous panel data techniques. Dynamic heterogeneous panel techniques, i.e. mean-group (MG) and pooled mean-group (PMG), are deemed to be the most appropriate techniques to help in answering the research questions due to three reasons. First, MG and PMG allow intercept, slope, and error variances differ across the groups. Secondly, MG and PMG allow the slope parameters to be heterogeneous. And thirdly, MG and PMG enable the researcher to work with large cross-sectional observations (N) and large number of time-series observations (T) (Pesaran, Shin, and Smith, 1997; Blackburne III and Frank, 2007; Asteriou and Hall, 2012).

The sample used is 29 *Shari'ah*-compliant stocks listed in Bursa Malaysia. In addition, the data used is monthly data (obtained from *datastream* version 5) from period of September 18, 2000 to December 18, 2012 (148 weeks). Data taken captures two different periods, which are; 1) during the short selling restriction (from September 18, 2000 to January 18, 2007), and 2) when the RSS introduced (February 18, 2007 up to date). Overall, there are 4292 observation points.

In terms of model specification, there are 6 control variables introduced. They are namely: 1. Inflation, 2. Gross Domestic Product (GDP), 3. Interest Rate, 4. Exchange Rate, 5. Money Supply and 6. US financial crisis. Meanwhile the focus variable is the effect of RSS on the volatility of Shari'ah Compliant stock returns ("sr"). Consumer Price Index ("cpi") as the best proxy for Inflation, Industrial Production ("ip") as the best proxy for GDP, Overnight Policy Rate ("ir") published by Central Bank of Malaysia as the best proxy for Interest rate, Exchange rates ("exrt") by Central Bank of Malaysia as the best proxy for exchange rate, and M1 ("ms") by Central Bank of Malaysia as for money supply. And for the U.S. financial crisis, dummy variable is used as to control the spill-over effects from the collapse of Wall-Street since it is believed that Malaysian stock market is cointegrated with the U.S. market (Karim et al, 2009; Kamaralzaman, 2011).

5.1. The Model

After reviewing previous studies, the following is an expression of the model of research:

$$SR_{i,t} = \theta_{0,t} + \theta_{1t}CPI_{i,t} + \theta_{2t}IP_{i,t} + \theta_{3t}IR_{i,t} + \theta_{4t}Exrt_{i,t} + \theta_{5t}MS_{i,t} + \theta_{6t}DummyUSCrisis_{i,t} + \theta_{7t}DummyRSS_{i,t} + \mu_i + \epsilon_{i,t}$$

$$(1)$$

where, "i" is the number of stocks; "t" is the number of periods; $CPI_{i,t}$ is the log of Consumer Price Index; $IP_{i,t}$ is the log of industrial production; $IR_{i,t}$ is the Overnight interest rates; $Exrt_{i,t}$ is the exchange rates; $MS_{i,t}$ is the log of money supply "M1".

As for dummy variables, $DummyUSCrisis_{i,t}$ is the qualitative variable whereas 0=when no financial crisis in the U.S., and 1=when there is financial crisis, started in 18/08/2007 when Lehman Brothers went bust; and $DummyRSS_{i,t}$ is the qualitative variable which is the focus in this research. When short-selling is banned denotes with "0", and when it is re-introduced with such heavy regulations (RSS) is denoted with "1" from 18/02/2007 up to date.

It is understood that if the variables are I(1) and co-integrated, then the error term is I(0) for all i (Blackburne III and Frank, 2007). Imposing a lag of one on all terms, the ARDL (1,1,1) equation is:

$$SR_{i,t} = \delta_{10i}CPI_{it} + \delta_{11i}CPI_{i,t-1} + \delta_{20i}IP_{i,t} + \delta_{21i}IP_{i,t-1} + \delta_{30i}IR_{i,t} + \delta_{31i}IR_{i,t-1} + \delta_{40i}Exrt_{i,t} + \delta_{41i}Exrt_{i,t-1} + \delta_{50i}MS_{i,t} + \delta_{51i}MS_{i,t-1} + \delta_{60i}DummyUSCrisis_{i,t} + \delta_{61i}DummyUSCrisis_{i,t-1} + \delta_{70i}DummyRSS_{i,t} + \delta_{71i}DummyRSS_{i,t-1} + \lambda_{i}SR_{i,t-1}\mu_{i} + \epsilon_{i,t}$$
 (2)

Hence, the resulting error correction equation is:

where ϕ_i is the error-correction speed of adjustment parameter and the long-run coefficients, θ_{1i} , θ_{2i} , θ_{3i} , θ_{4i} , θ_{5i} , θ_{6i} , θ_{7i} , and θ_{8i} are of primary interest. When θ_{0i} is a nonzero, it signifies that the variables would be moving together in the long-run. Henceforth, it is expected that the variables would be co-integrating with θ_{1i} , θ_{2i} , θ_{3i} , θ_{4i} , θ_{5i} , θ_{6i} , θ_{7i} , and θ_{8i} will be of particular importance.

Furthermore, the relationship between CPI and stock return is expected to be negative with the basis of theory and previous studies which has proven that increasing inflation would be likely to lead to an slow down in the economy hence lower firm's performance and cash flow As rate of inflation is likely to be increased, the interest rates would also be increased, hence raises the discounting factor in the valuation model which lower the stock price thus the return is affected (hence θ_{1t} and θ_{3t} would be negative).

Previous studies also asserted that Industrial production has a positive effect to the real economic activity, hence would positively affecting the expected future cash flows of the firm which ultimately resorts to the positive stock return. In terms of exchange rate and stock return, a depreciation of a currency is believed to lead to an increasing demand of exports, hence increasing the productivity of the firms which will be also resorts to a positive stock return. As for money supply, the growth rate of money supply would generally positively affect the aggregate economy and hence the expected stock returns. Hence, it is expected to have θ_{2t} , θ_{4t} , and θ_{5t} are all positive. Meanwhile, due to the co-integrating relationship between the U.S. and Malaysian stock market, it is also forecasted that burst in the Wall-Street (which will resort in declining stock returns) would impact similarly Malaysian stock market subsequently (thus θ_{6t} is expected to be negative). Ultimately, as previous findings have suggested, it is also forecasted that application of RSS would positively affect the stock return. Hence θ_{7t} sign is expected to be positive.

6. Results and Discussion

It is shown that Restricted Short Selling mechanism does positively affect the stock return of stocks listed in Bursa Malaysia as *Shari'ah* compliance stocks in the long-run. It signifies that stock returns would be relatively higher in the market when it allows RSS to be implement than it was during the ban. This finding is as predicted, hence it confirms our hypotheses, as well as provide support with previous studies by Bris et al. (2005), which asserted that short-sales resulted in more positively skewed returns, especially for developing countries markets. This is *perhaps* due to the increasing idiosyncratic portion of stock returns gained once short-sales restriction is released.

Notwithstanding, this result may suggest the efficiency of Malaysian Islamic capital market. As long-term return *anomalies* provide an indication of market efficiency (Fama, 1997), the positive long-term return indicates that there is *perhaps* inefficiency in the market. As in an efficient market, where the speed of price adjustment is fast and according to the *true* information of firm, the expected returns shall be limited (if not omitted) to zero. Hence, *anomalies* returns would only indicate the otherwise. Henceforth, the positive returns enjoyed under RSS period would be *likely* to distort the complete and efficient market vision. Therefore, this empirical findings supplements the recommendation by Lamba and Ariff (2006) which found that removal of short selling restrictions helps complete markets and is valued by market participants, particularly for actively traded stocks in Malaysian market as investors would have *relatively more* control in stock pricing and benefit from the instrument. Also, worth noting that using Hausmann test, PMG result is preferred. Both MG and PMG resorted to similar result as it is shown in Table 2.

Table	2.	PMG	and	MG	Result

	PMG			MG				
ECT	Coef.	Std. Err.	Z	P> I z I	Coef.	Std. Err.	Z	P> I z I
CPI	346	.092	-3.73	0.000	287	.1343	-2.14	0.033
IP	.0310	.022	1.42	0.155	.05	.0275	1.87	0.062
IR	0014	.001	-1.39	0.164	.0015	.0025	-0.60	0.548
EXRT	.0014	.001	1.42	0.157	.0047	.0066	0.71	0.477
MS	.055	.023	2.4	0.016	.035	.0345	1.00	0.316
USCRISIS	0089	.002	-4.28	0.000	0146	.0034	-4.27	0.000
RSS	.0085	.0026	3.24	0.00`	.012	.0043	2.78	0.005

SR								
ECT	-1.05	.0134	-78.49	0.000	-1.089	.01315	-82.8	0.000
CPI	132	.362	-0.37	0.715	.086	.42	0.2	0.84
IP	080	.0274	-2.95	0.003	099	.0328	-3.04	0.002
IR	0047	.0073	-0.65	0.516	006	.00757	-0.81	0.419
EXRT	125	.0152	-8.25	0.000	127	.0168	-7.6	0.000
MS	.18	.072	2.52	0.012	.188	.074	2.56	0.010
USCRISIS	034	.0055	-6.24	0.000	0309	.0056	-5.5	0.000
RSS	.03	.007	-4.28	0.000	028	.007	4.1	0.000
CONST	.35	.0043	81.23	0.000	.303	.134	2.26	0.024

Source: Data Processed

In addition, the study also confirms the negative relationships between inflation, interest rates, and financial crisis to the stock return, in particular of the Malaysian market. It could be reasoned out as high inflation is more likely to restrain the business performance, hence is reflected in the stock return received by investors. Subsequently, high inflation would necessitate the regulator to increase the interest rate which would negatively affect the firms' performance (hence, it lowers the stock returns of investors). Furthermore, confidence level of investors in firms would be significantly deteriorated in the age of (U.S. financial) crisis, as *generally* they would have lost confidence due to strong co-integration amongst the financial markets.

The significance of macroeconomic variables, that are Industrial Production, Exchange Rate, and Money Supply, towards stock returns are also found to be positive. It asserts that increasing in these three variables would resort to an increasing stock returns. As discussed in the previous section, the reasons for this are plethora. However, a rather *general* reason for this would be a favorable real market conditions indicated through increasing Industrial Production, strong Exchange Rate, and growing Money Supply- are positively influencing aggregate economy and hence stock return.

However, it is asserted that most long-term return anomalies tend to disappear with reasonable changes in technique (Fama, 1997). Hence, in order to provide a more robust result and reliable recommendation, panel unit root, co-integration and causality tests are also attempted. Deploying Johansen Fisher Panel Cointegration test (result is in Appendix 2.2.), it is found that there is indeed more than 1 co-integration relationship amongst variables. This finding confirms our assumption that the variables are co-related in the long run, implying that the relationship would not be disappeared once the technique is altered. Nonetheless, an intriguing result is obtained from panel Granger causality test (shown in Table 3, full result in Appendix 2.3.) that RSS does not influence (cause) the stock return. Meanwhile, it is evidenced that it is, in fact, the stock return which causes the application of RSS. This suggests at least two points; first, a high return invites the implementation of the instrument. This confirms the theoretical foundation of short selling that it is a manifestation of investors' pessimistic behavior (short sellers) towards the performance of the firms. Secondly, RSS does not prove to bring benefit to the stock returns for stocks listed in Malaysian Islamic Capital Market.

Table 3. Panel Granger Causality Test

Null Hypothesis:	F-	Prob.	Implication
	Statistic		
RSS does not Granger Cause SR	1.15353	0.2829	Cannot Reject

SR does not Granger Cause RSS	16.1881	6.00E-05	Reject
MS does not Granger Cause SR	5.25086	0.022	Reject
SR does not Granger Cause MS	0.36281	0.547	Cannot Reject
IP does not Granger Cause SR	2.80004	0.0943	Reject
SR does not Granger Cause IP	0.00605	0.938	Cannot Reject
CPI does not Granger Cause SR	3.02206	0.0822	Cannot Reject
SR does not Granger Cause CPI	17.1524	4.00E-05	Reject
IR does not Granger Cause SR	0.27153	0.6023	Cannot Reject
SR does not Granger Cause IR	0.81284	0.3673	Cannot Reject
EXRT does not Granger Cause SR	0.43667	0.5088	Cannot Reject
SR does not Granger Cause EXRT	0.70226	0.4021	Cannot Reject

Source: Data Processed

7. Conclusion

Using heterogeneous panel techniques, it is evidenced that there is positive influence, or causal relationship, of stock returns during RSS is allowed. Nonetheless, the result seems to disappear in the result of panel Granger causality test, as it is suggested that RSS does not affect the stock returns. Thus, its application in current Islamic capital market of Malaysia is statistically proven to bring less (if not at all) benefit for the stocks and ultimately potentially distorts market efficiency.

Therefore, two policy recommendations are suggested here. First, for SAC of securities commission (SC) Malaysia to revisit their current position of Security Borrow-Lending (SBL) and RSS permissibility. It is understood that SAC plays significant role in shaping a *vibrant true Islamic capital market*. Revisiting permissibility of SBL and RSS requires a whole gamut of analysis; it's Shari'ah position, and it's economy implication. Indeed, the study has provided SAC an empirical financial (economical) analysis attained from a rigor statistical analysis.

Secondly, in order to establish a vibrant Islamic capital market, regulators shall smoothen information dissemination process amongst the market participants by discouraging speculation practices. Short-term institutional investors might also be restrained in order to close the doors for speculators to enter the market. Risk sharing instruments are promoted, whereas zero-sum game instruments are banished. Hence, an Islamic capital market would only rehearse its noble objectives.

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ⁱ It is mentioned by Charles W.L.Hill in his writing entitled "The Asian Financial Crisis" that; "According to Dr. Mahathir, foreign fund managers were selling Malaysian shares because they were racists; currency traders were ignoring Malaysia's sound economic fundamentals; the West was gloating over the crisis in SE Asia; rumor mongers who "should be shot" were spreading lies and a "Jewish" agenda was at work against the country. Unfortunately for Dr. Mahathir, every time he gave free rein to his thoughts on the matter, the Malaysian currency and stock market declined even further. He even tried to outlaw short selling on the Malaysian stock market, but this too had the opposite effect of that intended, and the policy had to be pulled shortly after it was introduced"

ii In Chapter 12, Secton VI of The General Theory of Employment, Interest, and Money (1937); Keynes mentioned that: "Speculators may do not harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of laissez-faire capitalism-which is not surprising, if I am right in thinking that the best brains of Wall Street have been in fact directed towards a different object. These tendencies are a scarcely avoidable outcome of our having successfully organized "liquid" investment markets. It is usually agreed that casinos should, in the public interest, be inaccessible and expensive...

The introduction of a substantial Government transfer tax on all (stock market) transactions might prove the most serviceable reform available, with a view to mitigating the predominance of speculation over enterprise in the United States."

Example of this is Jesse Livermore (1877-1940) who had an extraordinary memory of numbers and patterns of stocks movements as such he identified when to short and when to long from the behavior of the stock prices and did not believe on the rumors (Taulli, 2003).

iv In 1987, the American stock market crashed and short sellers were the easy and comfortable culprits to be blamed. Commissioner Joseph Grundfest of the SEC commenting on calls for more stringent regulation of short sales by saying: "When you sell short, you are in a sense betting against the team. At a minimum, it is an emotional issue." (Macey, Mitchell, and Netter, 1989).