

DOCTORAL THESIS

Overreaction in Asia-Pacific index futures markets

Lam, Ka Ming

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Overreaction in Asia-Pacific Index Futures Markets

LAM Ka Ming

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ABSTRACT

Under the efficient market hypothesis (EMH), the asset prices should fully reflect all relevant information and future asset prices will not be predictable based on past information. However, we found intraday price reversals were found in Asian Pacific index futures markets following extreme movements in US stock market overnight. The observed price reversals cannot be explained by non-behavioral factors such as stop-loss activities, bid-ask bounces and thin trading. It is inconsistent with the implication of EMH.

On the other hand, we found that the observed price reversal is indeed triggered by the investors' overreaction to the overnight US stock market performance. For example, the greater the magnitude of the overnight US return, the greater is the overreaction. The price reversals were reduced after holiday, it is consistent with the calm down effect in psychological reaction. Intraday patterns of the futures were also studied, and we found that the overreaction will not be completed in a short period of time. All these suggest that the price reversals are caused by investors' behavioral biases.

A parallel study by Fung, Mok and Lam (2000) and Fung and Lam (2004) reported that the overreactions in the Hang Seng Index futures were related to the opening gap in futures prices and yesterday's basis. In this dissertation, we added these two factors with the overnight US return to explain the overreaction in the futures markets.

We developed different trading strategies based on the overreaction hypothesis and compared their performances with the benchmark buy-and-hold strategy. Although some strategies can generate profits in many markets and in many out-sample periods, no single trading strategy can beat the benchmark buy-and-hold strategy in all markets and in all periods.

TABLE OF CONTENTS

Declaration	i	
Abstract	ii	
Acknowledgements	iii	
Table of contents	iv	
List of tables	vii	
Chapter 1	Introduction	
1.1	Introduction	4
1.2	Objective of the study	4
1.3	Scope of the study	5
1.4	Organization of the study	6
Chapter 2	Literature review	
2.1	Introduction to the efficient market hypothesis (EMH)	8
2.2	Biases in human behaviors	9
2.3	Overreaction – A review on empirical and theoretical studies	12
Chapter 3	Data	
3.1	Introduction	22
3.2	Time frame of study	22
3.3	The index futures contracts under study	23
3.3.1	Hang Seng Index Futures	23
3.3.2	KOSPI 200 Index Futures	24
3.3.3	Nikkei 225 Index Futures	25
3.3.4	MSCI Taiwan Index Futures	25
3.3.5	MSCI Singapore Index Futures	26
3.4	Data Sources	27
3.5	Excluded markets	27
Chapter 4	Intraday reversal in Asian futures markets triggered by US price movement	
4.1	Introduction	30

4.2	The open-to-close return of futures and the Asian portfolio	31
4.3	Test of reversal hypothesis	32
4.4	Empirical results	35
4.5	Conclusion	38
Chapter 5 Are reversals caused by non-behavioural factors?		
5.1	Introduction	40
5.2	Liquidity	40
5.3	Bid-ask spread	43
5.4	Impact of news	46
5.5	Impact of other market variables	48
	5.5.1 Open Interest	49
	5.5.2 Transaction volume	51
5.6	Conclusion	53
Chapter 6 Are reversals caused by investors' behavioural biases?		
6.1	Introduction	55
6.2	Magnitude effect	56
	6.2.1 Is there a magnitude effect?	56
	6.2.2 Is the magnitude effect linear or convex?	59
6.3	Effect of market maturity	61
6.4	Monday calm-down effect	64
6.5	Holiday calm-down effect	69
6.6	Intraday pattern	70
6.7	Economic significance of contrarian strategies	72
6.8	Risk consideration	74
6.9	The role of hedger and open interest	77
6.10	Further investigation of overreaction hypothesis	78
6.11	Gap and Basis	79
6.12	Conclusion	85
Chapter 7 Trading strategies		
7.1	Introduction	88
7.2	Formulation of the trading strategy	89
7.3	Empirical results	92
7.4	Discussion on the performance of the trading strategy	94
	7.4.1 Transaction cost	94

7.4.2	Number of execution days of the trading strategy	94
7.4.3	Structural Change	95
7.5	Fitting a best regression model	96
7.6	Combining the overreaction strategy and buy-and-hold strategy	98
7.6.1	Combining buy-and-hold strategy and short signals from overreaction strategy	99
7.6.2	Combining buy-and-hold strategy and both long and short signals from overreaction strategy	100
7.6.3	Combining buy-and-hold strategy to create a “long-or-neutral” strategy	101
7.6.4	The performance of the combined strategies	102
7.6.5	Overall performance of overreaction strategy and the combined strategies	103
7.6.6	Combining buy-and-hold strategy with stepwise trading strategy	105
7.6.7	Overall performance of stepwise regression strategy	106
7.7	Discussion: Further potential development of the trading strategies	108
7.7.1	Trading strategy with stop loss	108
7.7.2	Filter size	108
7.7.3	Excluding Monday observations	109
Chapter 8	Conclusion	
8.1	The findings of this dissertation	111
8.2	Limitation of this study	116
8.2.1	Length of study	116
8.2.2	The out-sample period for the trading strategies	117
8.2.3	Data availability	117
8.2.4	Low R^2 issue	118
References		119
Curriculum Vitae		170