

UNIVERSITY OF MANAGEMENT & TECHNOLOGY. (UMT)

The stock volatility and contagion effect – study from pakistan

Submitted to

School Of Business and Economics

In partial fulfillment of the requirements

For the degree of

MASTER OF SCIENCE IN FINANCE

By

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DECEMBER, 2017.

Research Completion Certificate

It is certified that the research work contained in the thesis “**The Stock Volatility and Contagion Effect – Study from Pakistan**” has been conducted under my supervision to my satisfaction by Muhammad Muaaz ID 15009096003 of MS Finance Program.

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Declaration

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This thesis is my original work, and the data/material presented herein has not been used for the acquisition of any other degree from any institution.

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Acknowledgment

A project such as this thesis can only be completed as a team effort. The assistance of many individuals was particularly helpful in the development of this thesis. I would like to express my gratitude to those whose support was essential for the completion of the thesis.

First of all I would like to give my sincere thanks to Almighty ALLAH for His blessing and strengths that enabled me to complete my thesis. I would like to express my gratitude to Dr. Safia Nosheen, my supervisor. She provided me with timely guidance and advice to generate this thesis, edit various drafts of my thesis and gave valuable suggestions. She not only provided guidance from her knowledge and experience in the field of finance to my study but also provided emotional support during times of personal trauma. She continually motivated me to persevere with the thesis and displayed extreme level of patience especially with my language difficulties. I am extremely grateful to Dr. Safia Nosheen for her great generosity in supporting me in my study.

I am deeply grateful to Mr. Faisal Sajjad, my co-supervisor. I tremendously benefited from his expert knowledge in the area of financial derivatives and econometrics. His guidance with the modelling is gratefully appreciated.

I would like to record my appreciation to Miss Isma Rasheed and my fellow MS students and friends in University of Management Technology. They have always supported me with encouragements to continue with my study.

I would like to pay my gratitude to my mother, wife and children. They always pushed me to study at this level.

Abstract

The notion of efficient market hypothesis has dominated the financial markets for a long period of time which explicitly states the prices of the securities reflect all levels of information available. This fact was pursued by many of the rational investors but in response to the global market crash, the concept of behavioral finance emerged and the patterns changed. In a decision making process, a relational financial decision maker must take into account not only returns but also the variance and volatility of returns. The primary feature of this study examine the sentiments approach and random walk theory effects on the Pakistan stock market, in addition to this, forecast the volatility of Pakistan stock exchange index by using past index values, whether such noise traders are present in the Pakistan stock exchange. Furthermore investigates the effect of the market index contagion factor, risk, return and volatility effect on Pakistan stock exchange using the GARCH estimation models. These results propose that market index and volatility have an impact and an important role in determining the dynamics on the stock returns.

In this study, quantitative methods have been adopted to investigate the research hypothesis. Time series data of stock indices from 2000 to 2015 is used to conduct this research. Augmented Dickey Fuller test (ADF), Autoregressive Integrated Moving Average (ARIMA) and Generalized Autoregressive Conditional Heteroskedasticity (GARCH) are the quantitative techniques used to measure the factors affecting the Pakistan stock market volatility, moreover for contagion affect testing the correlation coefficient test and GARCH with exogenous model are engaged on US, UK and selected Asian countries.

The analysis clearly shows that volatility trend is predictable on the basis of historical trend as variance equation of GARCH has significant positive impact. The analysis also revealed that leading stock exchange indices have strong impact on Pakistan stock market. The study support the argument for the international and national investors to hypothecate their strategies to minimize the risk. In addition of this strategy formulators may also change the results of these acquirements to inform the macro and micro stage policy making. Moreover this study is used to fill the gap between the volatility prediction and contagion factors which have significant impact on the capital market.

Key words: Market Risk, Market Index, Volatility, Contagion Approach, Random Walk Theory, ARCH &GARCH

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Chapter 1

Introduction

1.1 Background of the study

In recent era, the globalization of financial markets reflects the fast growth in world portfolio investments. The most commonly used vehicles for global portfolio investments are mutual funds, closed finances, financial derivatives, shared funds and hedge funds.

The study about the relation among performance of the industry, price of capital, financial easing, financial variables, industry combining and events came out with the learning that all of these factors affect the stock market. Nonetheless, the past research on these areas did not taken into consideration the effect of this recent financial market phenomenon, namely; the irregularities in oil prices