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IMPACT OF GLOBAL MARKETS ON SAUDI STOCK MARKET

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ABSTRACT

Globalization has led to interaction between people, businesses and governments of all countries, it will be a leader on international trade and investment also, derive help from the technology that provides them with information and influence in culture and economic development. It has also affected stock markets around the global. This study aims at investigating the impact of global market on Saudi stock market. In this regard, regression is used to analyze 10-years monthly data from Jan 2005 to Dec 2014 on Saudi stock market and global market. In addition, the relationship is tested for the impact of financial crisis. The test results reveal that global market has significant impact on Saudi stock market over ten- year period and in post-crisis period. The impact is not seen in the before-crisis period.

INTRODUCTION

Globalization is considered as a gathering of financially and politically structure and procedures got from the changing idea of the merchandise and resources that make up the universal economy in the base of certain political, auxiliary and increment the separation of these products and resources [1]. Carr and Chen express that globalization implies diverse things to various individuals. In its broadest sense, the term incorporates a wide range of monetary and social exchanges between countries – including mastery of the media and across the board utilization of the World Wide Web [2].

In a smaller sense, it alludes to the monetary trade of merchandise and ventures universally and global budgetary streams. Worldwide exchange and speculation designs are dramatically affecting business relations and work

courses of action far and wide [3]. However, there is no single significance of monetary globalization for the worldwide workforce. The effect can be both negative and positive and contrasts by setting, by industry and exchange, and by business status. A portion of the individuals who work in the casual economy have possessed the capacity to discover new employments or new markets for their items while others have lost occupations or markets. Also, numerous specialists have seen their wages decrease, their working conditions break down, or their outstanding tasks at hand increment [4]. Albeit expanding consideration is being given to the effect of globalization and exchange advancement on work, a lot of what has been composed is so far very hypothetical, extremely summed up, or basically episodic. What's more, there is an inclination towards taking a gander at the effect of globalization on formal wage work and, to a lesser degree, on casual business. Moderately little has been composed on the effect of globalization on ladies who work in the casual economy [5].

Ali and Afzal [6] allude to "The infection of the emergency on the planet was because of mechanical progression and globalization. Creating nations likewise confronted negative repercussions of this emergency and experienced unfavorable effect on their economies through the channel of back and exchange. Net capital inflows from created nations to creating nations contracted definitely from the earliest starting point of this emergency.
Campello, Graham and Graham [7] allude to "Concentrate both preceding and amid the 2008 emergency, with contrasts among obliged and unconstrained. firms ending up more critical as the credit emergency unfurls. Conventional imperative measures, conversely, neglect to recognize any financially important cross-sectional or time arrangement designs in corporate strategies in our example.

Shiller [8] claims that innovative advances and globalization are caused by the emergency in the transmission of disease on the planet. Demonstrate a negative effect on their economies through exchange and fund channel. Lessened net capital streams from created to creating nations significantly from the earliest starting point of this crisis." They found in their investigation is the last money related emergency have a substantial negative effect on stock returns in these business sectors notwithstanding the way that this impact isn't exceptionally solid. This emergency has emphatically added to the instability of stock returns in these business sectors.

Asongu [9] as said the "the procedure of monetary globalization, at that point a great deal of potential advantages. In any case, a flood of later monetary emergencies and contamination as a result of the expanding progression of the money related frameworks and the reconciliation of budgetary markets far and wide, may lead some to state that globalization creates money related precariousness and emergencies. Through inside elements are for the most part out of the emergency, and there are different channels through which money related globalization can be connected emergencies.
What's more, it was accounted for that world money related markets were amidst a credit emergency of chronicled expansiveness and profundity [10]. In this examination, they give a one-of-a-kind point of view on the effect of the

emergency on the genuine choices made by companies far and wide. While the emergency is sensational and appalling, it gives a chance to think about how monetary limitations affect corporate conduct". They are found in their examination that compelled arrangement to decrease greater speculation, innovation, promoting and work with respect to deranged unconstrained firms amid the emergency.

Onour [11] as said the "despite the monetary emergency is certainly not another wonder, the worldwide budgetary emergency in 2008/2009 vary from past emergencies in both size and globalization. What's more, after the event of the worldwide money related emergency, and the general population in developing markets, the issue of move of hazard in the capital markets is relied upon to pick up.

Thus, this study seeks to aims at examining the impact of developments in global stock market on Saudi stock market. The objectives of study are (1) to investigate impact of global market on Saudi stock market. (2) To investigate of impact of financial crisis on relationship between global market and Saudi market includes investigating impact of global stock market on Saudi stock market before and after financial crisis. The research questions that this study aims an answering are as follows; how does global market affect Saudi market. The significant of study is the understanding of the relationship between global market and Saudi stock market will help local and foreign investor in their investment decision-making.

METHODOLOGY

Regression analysis is a factual strategy that enables us to foresee whether a normal arbitrary variable relies upon the estimations of estimations of other irregular factors. Relapse has a few sorts, for example, straight relapse, strategic relapse, and Poisson relapse. As indicated by Gujarati [12], regression investigation is worried about the investigation of the reliance of one variable, the needy variable, on at least one different factors, the logical factors, with a view to evaluating as well as foreseeing the (populace) mean or normal estimation of the previous as far as the known or settled (in continued testing) estimations of the last mentioned.

$$RD = a + bRG + e$$

Where, RD is Return domestic market and Saudi market, bRG is Global market.

Data and Sources

The examination will utilize auxiliary information from Jan 2005 to Dec 2014 utilizing 10-years month to month information from Bloomberg. As per Gujarati [12] "the hypothesis of theory testing is worried about creating tenets or techniques for choosing whether to dismiss or not dismiss the invalid speculation. There are two commonly reciprocal methodologies for contriving such principles, specifically, certainty interim and trial of noteworthiness. Both these methodologies predicate that the variable by far the most (measurement or estimator) under thought has some likelihood circulation and that theory testing includes making proclamations or declarations about the value(s) of the parameter(s) of such dispersion. T-measurement will be

utilized to test huge of effect of free factors, on the depended factors. Moreover, this examination will utilize R2 to compute logical intensity of the model.

Hypothesis Testing

Gujarati [12] states that t-test is "An option however integral way to deal with the certainty interim technique for testing measurable speculations is the trial of-importance approach created along autonomous lines by R. A. Fisher and mutually by Neyman and Pearson. Comprehensively, a trial of essentialness is a system by which test results are utilized to confirm reality or misrepresentation of an invalid speculation. The key thought behind trial of essentialness is that of a test measurement (estimator) and the inspecting dispersion of such a measurement under the invalid speculation. The choice to acknowledge or dismiss H0 is made based on the estimation of the test measurement got from the current information.

Model Selection Criteria (R2)

R2, accordingly characterized of need lies somewhere in the range of 0 and 1. The closer it is to 1, the better is the fit. Be that as it may, there are issues with R2. In the first place, it gauges in-test integrity of fit in the feeling of how shut an expected Y esteems is to its genuine incentive in the given example. There is no certification that it will estimate well out-of-test perceptions. Second, in looking at least two R2's, the dependent variable, or relapse and, should be the equivalent. Third, and all the more essentially, a R2 can't fall when more factors are added to the model. Subsequently, there is each impulse to play the session of "amplifying the R2" by just adding more factors to the model. Obviously, adding more factors to the model may build R2 yet it might likewise expand the fluctuation of the forecast error.

RESULT AND DISCUSSION

Regression Statistics for the Overall Period of Study

The regression equation based on the output for the overall period of the study is as follows: RD = 0.0017 + 0.00685 * RG Based on Table 1, The regression equation says that if return on global market increases by 1% the return on the Saudi market will increase by 0.00685% The test (regression result) show that the null hypothesis of return on global market has to impact on return on Saudi stock market (H0: βG =0) is rejected at 1% significance level. The t-test statics, obtained for the regression is 4.38002, with p-level of 0.00003 which is less than critical value of 0.05. Hence, the null hypothesis is rejected. In other words, the return in global market has a significant impact on return on Saudi market. The explanatory power of the model R2 is 0.1409, which means that 14.09% of variance in return on Saudi market is explained by return on the global market. The F- statistic of the model is 19.18 with p-level = 0.00003. 19.18, p- level = 0.00003 < 0.05 significant. Hence, the model is a good fit model.

Table 1: The regression based on the output for the overall period of the study

	d.f	SS	MS	F	p-level1		
Regression	1	0.11822	0.11822	19.1846	0.00003		
Residual	117	0.72097	0.00616				
Total	118	0.83919					
	Coefficient	Standard Error	LCL	UCL	t Stat	p-level	H0 (5%)
Intercept	0.0017	0.00727	-0.01271	0.23314	0.23314	0.81606	accepted
RG	0.00685	0.00156	0.00375	0.00994	4.38002	0.00003	rejected

Regression Statistics for the before financial crisis period of study

The regression equation based on the output is on before the financial crisis period of the study is as follows. RD = 0.03389 - 0.01288 * RG. Based on Table 2, the regression equation says if return on global market increases by 1% the return in the Saudi market decreases by 0.013%. The test (regression result) show that the null hypothesis of return on global market has no impact on return on Saudi stock market is accepted at 1% significance level.

Table 2: The regression before financial crisis period of study

	d.f	SS	MS	F	p-level1		
Regression	1	0.03058	0.03058	2.68128	0.11104		
Residual	33.	0.37637	0.01141				
Total	34.	0.40695					
	Coefficient	Standard Error	LCL	UCL	t Stat	p-level	H0 (5%)
Intercept	0.03389	0.02028	-0.00737	0.07514	1.67094	0.10419	accepted
RG	-0.01288	0.00786	-0.02888	0.00312	-1.63746	0.11104	accepted

According to Table 2, the t-test statics, obtained for the regression is (1.63746), with p-level of 0.11104 which is greater than critical value of 0.05. Hence, the null hypothesis is not rejected. In other words, the return in global market has no significant impact on return on Saudi market. The explanatory power of the model $R2$ is 0.07515, which means that 7.515% of variance in return on Saudi market is explained by return on the global market.

Regression Statistics for the after financial crisis period of study

The regression equation based on the output is on after the financial crisis period of the study is as follows RD = 0.00167 + 0.00804 * RG. The regression equation says that if return on global market increases by 1% the return in the Saudi market increases by 0.01. The test (regression result) shows that the null hypothesis of return on global market has impact on return on Saudi stock market H0: $\beta G = 0$ is rejected at 1%, significance level. The t-test statics, obtained for the regression is 6.773, with p-level of 1.84431E-9 which is less than critical value of 0.05. Hence, the null hypothesis is rejected. In other words, the return in global market has a significant impact in return on Saudi market. The explanatory power of the model $R2$ is 0.36156, which means that 36.15% of variance in return on Saudi market is explained by

return on the global market. The F- statistic of the model is 45.9 with p-level = 1.84431E-9. The F-Statistic 45.9, p- level =1.84431E-9 < 0.05 significant. Hence, the model is a good fit model. In addition, Table 4 summarizes the hypothesis test result of the model for three scenarios.

Table 3: The regression after financial crisis period of study

	d.f	SS	MS	F	p-level1		
Regression	1	0.14601	0.14601	45.8717	1.84431E-9		
Residual	81.	0.25782	0.00318				
Total	82.	0.40383					
	Coefficient	Standard Error	LCL	UCL	t Stat	p-level	H0 (5%)
Intercept	-0.00167	0.00623	-0.01407	0.01072	-0.26864	0.78889	Accepted
RG	0.00804	0.00119	0.00568	0.0104	6.77286	1.84431E-9	Rejected

Table 4: Hypothesis $\beta=0$

Overall period	Rejected	Significant
Before financial crisis	Not rejected	Not significant
After financial crisis	Rejected	Significant

Thus overall, the spotted relationship between Saudi stock market and global market for the overall period is return on global market increases by 1% the return on the Saudi market will increase by 0.00685% The test (regression result) indicate that the null hypothesis of return on global market has no impact on return on Saudi stock market is rejected at 1% significance level. The t-test statics, and receive with p-level of 0.00003 which is less than critical value of 0.05., the null hypothesis is rejected. Other meaning, the return in global market has a significant impact on return on Saudi market. Moreover, return on global market increases by 1% the return in the Saudi market increases by 0.013%. The test (regression result) show that the null hypothesis of return on global market has no significant impact on return on Saudi stock market is not rejected at 1% significance level. The t-test statics, obtained for the regression is (1.63746), with p-level of 0.11104 which is greater than critical value of 0.05. Hence, the null hypothesis is not rejected. In other words, the return in global market has no significant impact on return on Saudi market. The test (regression result) show that the null hypothesis of return on global market has impact on return on Saudi stock market H0: $\beta G =0$ is rejected at 1% significance level. The t-test statics, obtained for the regression is 6.773, with p-level of 1.84431E-9 which is less than critical value of 0.05. Hence, the null hypothesis is rejected. In other words, the return in global market has a significant impact in return on Saudi market. Relationship tested for the impact of financial crisis also, the test results uncover that global market has significant impact on Saudi stock market over ten- year period and in after-crisis period. The effect does not exist in the before crisis period. However, in before-crisis period, the coefficient of global market was negative or the relationship between global market returns and Saudi market returns was inverse but insignificant. Both significant relationships, after-crisis and overall period, are significant and positive,

showing a direct relationship between return on global market and return on Saudi market.

CONCLUSION
The findings of this study show that the return on the global market is significant in explaining returns on the Saudi stock market. The impact is mainly due to the relationship between the markets in post-crisis period. In other words, the Saudi market's level of integration with global market increased significantly in the post-crisis period.

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