IMPACT OF GEOPOLITICAL RISK AND ECONOMIC POLICY UNCERTAINTY ON SECTORAL ISLAMIC INDICES

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DEDICATION

Dedicated to my Parents

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ABSTRACT

We investigate the influential of the co-movement and causal relationship of Sectoral Islamic Indices with Geopolitical Risk and Economic Policy Uncertainty using descriptive statistics, coefficient of correlation and bounds test. The empirical results demonstrate that geopolitical risk and economic policy uncertainty have different possible effects on Sectoral Islamic Indices. If relationship among different countries is better, it has positive impact on the returns and values of Sectoral Islamic Indices and in case of bad relationship among neighbouring countries it will have negative results alike. The same situation is about economic policy uncertainty. If Import & Export Policy, Agricultural Policy, Taxation Policy, Education Policy, Foreign Investment Policy (FDI), Public Expenditure Policy and Employment Policy are positively employed, they will certainly have a positive impact on Sectoral Islamic Indices otherwise they will caste negative impact.

Key words: Economic Policy Uncertainty, Geopolitical Risk, Sectoral Islamic Indices

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LIST OF ACRONYMS

EPU = Economic policy uncertainty

GPR = Geopolitical Risk

DJI = Islamic industrial

DJIF = Islamic financial

DJHC = Islamic health care

DJOIL = Islamic oil and gas

DJIT = Islamic technology

DJITC = Islamic tele-communication

DJIU = IslamicUtilities

CHAPTER ONE

INTRODUCTION:

1.1 Introduction:

This chapter shed some light on the background information related to the geopolitical risk, economic policy uncertainty and sectoral Islamic indices. This is followed by statement of problem where the influence of geopolitical risk and economic policy uncertainty on the sectoral Islamic indices. This chapter also presents the research questions, objectives of the study, justification and contribution of the study, scope of the study and plan of the study.

1.2 Background of The Study:

Economic policy uncertainty has become a rising area that every economy and every multinational company watch for periodically (OECD). This happens because economic policies that are made by governments very often contribute to huge economic uncertainty, that create an overspreading on the investment capacity not only on the nation progressing new economic policy, but also on any nation around the world which industriously trades with the theoretical nation in question (Taillard 2012). It normally happens when markets cannot adapt quickly the change in economic policies, resulting market shocks that push related sectors to deviate from equilibrium under conditions of ceteris paribus. Internationally this has become a major issue, where at every point in time, economic policy analysts are looking for the nature and implications of economic policies being proposed by each national government of relevance in order to provide direction on how to encourage or discourage the

passing of policies without violating national sovereignty and suitably respond to the proposed policy should it pass (Alqahtani and Taillard 2019).

On a domestic front, economic policy uncertainty leads to increased stock market fear via investor sentiment when economic policies are hard to predict among market participants. The increased uncertainty on every side of economic policies also increase stock market fear through the stochastic discount factor, which build up risk premia and thereby fear in stock markets. The increased levels of financial and economic combination, the domestic economic policy uncertainty shocks are not just restricted to the source country, but excess across borders (Yin and Han, Kang and Yoon, Liow et al.).

With the increase in US economic policy uncertainty, risk-averse investors start to sell risky stocks and stock markets in the United States of America and other countries usually decline. A rise in US economic policy uncertainty has a negative impact on the stock markets of China, Japan, Canada and Korea (Christou et al., 2017); upon the stock markets of Mexico and Canada (Sum, 2012); upon the co-movements between American stock market and Chinese stock market (Lia and Peng, 2017); on the mean return of the stock indices of China, Russia, India and Brazil (Dakhlaoui and Aloui, 2016); on the return of the stock market of Philippines, Malaysia, Indonesia, Thailand and Singapore (Sum, 2012).

By 2019, Chinese stock market had a total market value of 7.6 trillion Yuan, which made it the third largest stock market in the world. But at the same time, policy uncertainty put pressure on the stock market. With the increase of policy uncertainty investors become less

confident and more cautious about investment decisions (Lu 2019). Julio and Yook used the electoral uncertainty to represent the policy uncertainty and according to them the uncertainty of election results will show to the decrease of investment expenditures of firms. Fluctuation of tax policy leads to the decline of investment and growth (Aizenman and Marion, 2012).

For the recent past decade, Islamic asset-based securities have been increasingly capture attention in both the literature and among practitioners. Islamic securities can be used to generate both, government finance via sovereign issues and organizations funds via corporate issues. In Islamic financial markets, sukuk are the basic form of Islamic financial securities. These instruments differ from conventional bonds in concrete ways, such as the repayment of the conventional bonds occurs with interest, while repayment of sukuk occurs with partial ownership in an asset or business. Such differences between conventional bonds and sukuks have made sukuk attractive to an increasing number of Islamic investors (Allen at el. 2020). All sukuk issuances are related with GCC member 49% , Malaysia 46% and with other countries remaining 5% (Ogino 2018). Even among non-Muslim investors sukuk is gaining attention. It is one of the main central principles of sukuk ownership is that the investor periodically gains a fixed income profit, contributing to cash flow stability (Abdel-Khaleq & Rishardson, 2007).

The recent global financial crisis, which was occured by 2007 U.S. credit market crisis, caused acute damages to global economic growth and financial markets and has renewed the interest in secured assets including Islamic finance assets. Sukuk were created in recent years

as an alternative to interest bearing instruments such as conventional bonds(Naifar and Hammoudeh, 2016).

1.3 Problem Statement:

The main goal of our study is to clarify the impact of geopolitical risk and economic policy uncertainty on sectoral Islamic indices, so that we may check whether both of these two independent variables (GPR & EPU) have negative or positive impact on dependent variable (SII) and also the intensity of both two independent variables on dependent variable separately because it has been seen that no study has been conducted in the past on it which can give us satisfactory answer to our question.

1.4 Research Questions:

Does geopolitical risk affect sectoral Islamic indices?

Does economic policy uncertainty effect to sectoral Islamic indices?

1.5 Objectives of the Study:

To examine the effect of geopolitical risk on sectoral Islamic indices.

To examine the effect of economic policy uncertainty on sectoral Islamic indices.

1.6 Justification and Contribution of the Study:

Theoratically and empirically it seems that geopolitical risk and economic policy uncertainty have different possible effects on Sectoral Islamic Indices. If relationship among different countries is better, it has positive impact on the returns and values of Sectoral Islamic Indices

and in case of bad relationship among neighbouring countries it will have negative results alike. The same situation is about economic policy uncertainty. If Import & Export Policy, Agricultural Policy, Taxation Policy, Education Policy, Foreign Investment Policy (FDI), Public Expenditure Policy and Employment Policy are positively employed, they will certainly have a positive impact on Sectoral Islamic Indices otherwise they will caste negative impact on Sectoral Islamic Indices.

No study has been done in the past which clearly show the impact of both, Economic Policy Uncertainty and Geopolitical Risk, on sectoral Islamic Indices. This study evaluates the relationship between Economic Policy Uncertainty, Geopolitical Risk and Sectoral Islamic Indices. The major contribution of this study is to analyze the influencing role of economic policy uncertainty and geopolitical risk on Sectoral Islamic Indices. Moreover, the major methodological contribution of this study is in measurements. This study also provides policy recommendations to policy makers in the world.

1.7 Scope of the Study:

This study examines the impact of Geopolitical Risk and Economic Policy Uncertainty on Sectoral Islamic Indices. Moreover, this study also analyzes the relationship of Geopolitical risk, economic policy uncertainty and sectoral Islamic indices. This study is using Panel data of Geopolitical Risk and Economic Policy uncertainty and Sectoral Islamic Indices which includes: Islamic Financials, Islamic Health Care, Islamic Industrial, Islamic Oil & Gas, Islamic Technology, Islamic Tele Communication, Islamic Utilities.

1.8 Plan of the Study:

The thesis is arranged as follows: chapter one consists of the introduction, background of the study, problem statement, research questions, objective of the study, justification of the study and scope of the study. Chapter two consists of theoretical background, variables' definitions, empirical findings, research gap and hypothesis. Chapter three comprises of the conceptual framework, variables and sources. Chapter four consists of descriptive statistics and results, correlation coefficients and bounds test. Chapter five consists of summary of major findings, conclusion, recommendations, limitation of the study and recommendation for future researches.

1.9 Summary of the Chapter:

This chapter put some light on the background information related to the geopolitical risk, economic policy uncertainty and sectoral Islamic indices. This is followed by statement of problem where the influence of geopolitical risk and economic policy uncertainty on the sectoral Islamic indices. This chapter also presents the research questions, objectives of the study, justification and contribution of the study, scope of the study and plan of the study.

The main goal of this study is to clarify the impact of geopolitical risk and economic policy uncertainty on sectoral Islamic indices, so that we may check whether both of these two independent variables (GPR & EPU) have negative or positive impact on dependent variable (SII) and also the intensity of both two independent variables on dependent variable separately.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction:

In this paper, we examine whether the sectoral Islamic indices react to international economic policy uncertainty (EPU) and geopolitical risk (GPR) alike. The extant literature suggests that each of these variables have an impact on the sectoral Islamic indices. we demonstrate the effect of macro-political events using EPU and geopolitical events using GPR in Asian emerging Islamic stock markets.

2.2 Theoretical BackGrounds:

In this section we discuss the different theories related to Geopolitical Risk, Economic Policy Uncertainty and sectoral Islamic Indices.

2.2.1 Related Theories:

This section gives a brief introduction of asset pricing theories for the sake of theorizing with the variables of interest.

2.2.1.1 Efficient Market Hypothesis Theory:

The efficient market hypothesis (EMH), alternatively known as the efficient market theory, is a hypothesis that describes that share prices consider all information and consistent alpha generation is not possible.

According to the EMH, stocks always trade at their fair value on exchanges, making it impossible for investors to purchase undervalued stocks or sell stocks for inflated prices. Therefore, it should be impossible to outperform the overall market through expert stock selection or market timing and the only way an investor can obtain higher returns is by purchasing riskier investments.

- The efficient market hypothesis (EMH) theory describes that share prices reflect all information.
- The EMH theorizes that stocks trade at their fair market value on exchanges.
- Proponents of EMH predicate that investors benefit from investing in a low-cost, passive portfolio.
- Opponents of EMH believe that it is possible to beat the market and that stocks can turn away from their fair market values.

2.2.1.2 Capital Asset Pricing Model Theory:

Capital market theory evolves in 1964 when Sharpe proposes Capital Asset Pricing Model for portfolio analysis. Sharpe extends the insight of Markowitz (1959) work by adding securities that are likely to co-move with market. The CAPM determines the risk-return relationship under conditions of general market equilibrium. A key innovation of this theory is introducing a risk-free asset in asset choice paradigm. An efficient portfolio is the one that lies on the efficient frontier and a line tangent to this portfolio intersects the vertical axis at the risk-free rate. The portfolio corresponding to the tangency point is regarded as market portfolio or super-efficient portfolio, representing most optimal amalgamation of risk and return achieved by combining this super-efficient portfolio and a position in the risk-free investment. The investors can take long or short position in the risk-free security on the basis

of their risk appetite. The core assumption of the model is that security returns are linearly related to broader movements in the market index. The degree of sensitivity of a security to market is dubbed as beta. The model also assumes that security-specific returns are generated with known mean and variance parameters.

Within CAPM paradigm, agents optimizing their portfolios interact in market and agree upon the joint distribution of returns. Consequently, they derive prices to equilibrium. Therefore, an asset with higher systematic risk is likely to give higher return and vis-à-vis. Beta, a measure of systematic risk, is defined as covariance of an asset's return with the market portfolio's return. The key implications of CAPM are the quantification of portfolio systematic risk, the required rate of return for investors, and the hurdle rate for project evaluation.

In traditional CAPM framework, both return and risk grow in a linear fashion along the straight-line from the risk-free rate to the market portfolio, that is, capital market line (CML), which is further expanded to the creation of a security market line (SML henceforth).The SML visually represents the relationship between risk and the expected or the required rate of return on an asset. The equation of SML, together with estimates for the return on a risk-free asset and on the market portfolio, can generate required rates of return for any asset based on its systematic risk.

Although, CAPM has been regarded as the most renowned model amongst asset pricing models, however, it's been highly criticized by academicians and practitioners. The traditional CAPM developed by Sharpe (1964), Linter (1965), and Black (1972) implies that there is a positive relationship between an asset's expected return and its systematic risk. It considers market beta as the only risk factor that explains cross-sectional differences in

returns. Roll's critique in 1976 brings a turning point in empirical testing of CAPM. Roll totally negates considering market beta as the only measure of systematic risk by arguing that market index should include all assets and wealth of mankind. Therefore, the market portfolio proxy used in the theoretical framework of CAPM does not constitutes the true market portfolio. Furthermore, the emergence of asset pricing anomalies such as P/E anomaly (Basu, 1977), size (Banz, 1981), value anomaly (Rosenberg, 1985) further explains that these anomalies have systematic influence on security prices.

Fama & French (1992) are the first who propose a multi-factor model that explains cross-sectional differences in equity returns. They identified two firm-specific characteristics, viz. size and book-to-market factors, affecting stock returns. Back in 1972, the study of Scholes, Jensen, and Black put the CAPM on trial by showing that low beta stocks may earn high returns. Such empirical evidence strongly suggests that widely used market beta cannot be regarded as the only factor explaining stock returns. Roll (1977) presented the idea that stock indexes cannot be used as a proxy for the true market portfolio. He argues that doing so can definitely lead to CAPM being un-testable. A true market portfolio comprises all assets and liabilities like human capital, real estate, art work and so on, or anything that investors can hold as an investment. However, the market for such assets either does not exist or it is unobservable. Campbell (1993) associates asset's expected returns to its covariance with the market portfolio and factors forecasting stock returns.

2.2.1.3 Arbitrage Price Theory:

The foremost criticism on the CAPM is that it takes into consideration only a single factor in determining return of a security. In other words, the systematic risk measured in relation to the market risk is the only determinant of stock returns. In traditional CAPM framework, there is no factor other than the market factor that affects the equity returns. In 1986, Roll and Ross addressed this problem by presenting a new model known as Arbitrage Pricing Theory (APT). Likewise the CAPM, APT also assumes a linear relationship between portfolio risk and return. However, the model has fewer assumptions as compared to the CAPM. The following assumptions are required to hold APT:

1. The capital markets are perfectly competitive.
2. Investors opt more wealth over less wealth.
3. The return generating stochastic process is a linear function of K-risk factors.

The APT can be substituted for CAPM as both assume linearity in the risk-return relationship and their co-variation with a random variable. In CAPM framework, this risk is measured as covariance of a security's returns with the market portfolio's return while APT explains it as a measure of un-diversifiable risk. The covariance is interpreted as risk premium and the slope coefficient exhibits the linear relationship between risk and return. Such relationship is closely tied to Markowitz's mean-variance efficiency.

Chen, Roll and, Ross (1986) propose one of the first large-scale empirical tests of the APT. In the APT framework, all investors believe in stochastic properties of returns. It is a K-factor model, where returns of capital assets are consistent with a factor structure. According to Ross, in the absence of no arbitrage opportunities, expected returns are linearly related to factor loadings. The factor betas or loadings are proportional to an asset's return's covariance

with the factor. As noted, the theory supposes that the stochastic process generating asset returns can be indicated as a K-factor model.

The arbitrage pricing theory does not identify the factors that contribute the return generating process. Numbers of factors have been studied in various parts of world. Since inception of APT, the academic debate remained on the number and the factors that are significant in explaining security returns. Early empirical test of APT by Roll and Ross (1980) use factor analysis to identify factors which were priced in US stock market. Yet, the major criticism on the technique used it is that factors have no economic interpretation. Later in 1986, Chen, Roll & Ross use observed macro-economic factors as risk factors. They argue that the price of security is discounted future cash flow and therefore choice of the factor includes any systematic shock that may affect stock returns. They only report changes in industrial production, spread between yield on short-term and long-term government bonds, spread between yield on low- and high-grade bonds, expected and unexpected changes in the inflation rate influence stock returns.

Likewise CAPM, the empirical tests of APT are also subject to the criticism by various researchers. Shanken (1985) argue that the approximation implied by APT is so vague that it is impossible to get exact pricing relationship with existing assumptions. They further argue that previous tests of APT merely test the model in equilibrium form. Therefore, controversy leads to the fact that there are fundamental limitations to the empirical verification of APT like CAPM.

2.3 Variable's definitions:

2.3.1 Economic Policy Uncertainty:

To understand this variable more clearly, let us first understand economic policies. Economic policies play a significant role in determining the economic environment of business. These policies are framed to direct economic activities in a desired direction. These policies are classified into four major parts: Industrial Policy, Trade Policy, Monetary Policy and Fiscal Policy.

The economic policy includes: Import & Export Policy, Agricultural Policy, Taxation Policy, Education Policy, Foreign Investment Policy (FDI), Public Expenditure Policy and Employment Policy

All these policies exert their influence on several businesses.

If a broad frame is not lay down or policy changes go out the frame, then such uncertainty can indeed spook investors and there by effect investment in the economy. Policy uncertainty is a class of economic risk where the future path of government policy is uncertain.

2.3.2 Geopolitical Risk:

Geopolitics is defined as the study of how geography and economics influence politics and the relations between countries. An example of geopolitical risk could include a flare-up of tensions between Saudi Arabia and Iran that resulted in a spike (sudden and large price move-either up or down) in the price of oil.

Other examples include a banking crisis in Europe that results in market players piling into U.S. Treasuries, which could result in American bond yields falling, a strengthening of the greenback and selling force on global equities.

There are huge amounts of geopolitical risk and the geopolitical risk has the potential to proceed markets very aggressively in short term periods.

Increased volatility in previously secure regions and the uncertainties that go after political change are key geopolitical drivers of familiar and emerging risks. Challenges are being created by rising inequality and the risk of conflict, climate change politics and its impact, as well as a decline in commitment to the international rule of law.

Following are the examples of Geopolitical Risk:

1 Expropriation: Government can confiscate assets, nationalize property, breach contracts, impose embargos or prohibit trade with specific countries.

2 Regulatory Burdens: Short of outright expropriation, governments can discriminate against foreign firms by imposing stringent regulatory requirements, limiting foreign direct investment and allowing domestic industry monopolies to form.

3 Violence and Civil Unrest: Organized crime syndicates, terrorist organizations or rebel groups can also threaten the supply chains, assets and personnel of foreign firms.

4 Cultural Missteps: Careless efforts to understand the social and cultural dynamics of the communities in which foreign firms operate, and superficial attempts to engage local stakeholder, can quickly turn into biases and resentment and lead to boycotts, protests and negative media attention.

5 Human Rights Violations: Operations in countries with poor human rights records can cause supply chain disruptions but can also lead to reputational damage and give rise to class action lawsuits, public boycotts or stockholder divestment campaigns. Many

governments have introduced laws requiring companies to take actions to reduce the risk of adverse human rights impacts.

2.3.3 Sectoral Islamic Indices:

Indices calculate the performance of a class of stocks. An index is a method to path the performance of some group of assets in a standardized way. Indices typically measure the performance of a basket of securities intended to replicate a certain area in the market.

Let us see how many stocks in each sector are:

Stocks – Sector Wise

- Islamic Financials
- Islamic Health Care
- Islamic Industrial
- Islamic Oil & Gas
- Islamic Technology
- Islamic Tele Communication
- Islamic Utilities

2.4 Empirical Findings

2.4.1 Impact of Geopolitical Risk on Islamic Stocks:

Kannadhasan and Das (2019) explored that international economic policy uncertainty and geopolitical risk have an impact on the stock return of Asian emerging stock markets, using quantile regression approach. They considered the stock indexes of nine Asian emerging markets as classified by the Morgan Stanley Capital International as on June 2018 and found that Economic Policy Uncertainty dampens the asset prices more intensively than the Geopolitical Risk.

Hoque et al. (2019) explored the impacts of geopolitical risk, global economic policy uncertainty and oil stocks pricesn Malaysia using factor augmented SVAR approach. 70 monthly time series variable over the period 2009 to 2017 is employed for extracting the structural factors.

Bouri et al. (2018) explained the causal effect of geopolitical risks on return and volatility Islamic equity and bond markets. Geopolitical risks have an impact on Islamic equity market volatility measures, rather than returns while geopolitical risks predict both returns and volatility measures of Islamic bonds. They used the quintile based methodology by using monthly data on geopolitical risk from: https://www2.bc.edu/matteo-iacoviello/ gpr.htm, and is based on the work of Caldara and Iacoviello (2016).

Das, Kannadhasan and Bhattacharyya (2019) examined the effects of international economic policy uncertainty, geopolitical risk and financial stress on the emerging stock markets by using 24 emerging markets. They used monthly data from January 1997 to May 2018 and used nonparametric causality in quantiles test as the methodological approach and found that the impact of EPU is mostly profound and significant as compared to GPR and FS.

Mamun et al. (2019) investigated the effect of geopolitical risk, US and global economic policy uncertainty on the structure of Bitcoin correlation and found out that both geopolitical risk and global economic policy uncertainty command a risk premium particularly in distress market condition. For this purpose they used various multivariate GARCH models. And considered the daily frequency data for Bitcoin from18th July 2010 to 30th October 2016.

Akdag and Alola (2020) examined whether related risks in selected economies such as Mexico, South Africa, China, Russia, Republic of Korea, Indonesia, Brazil and Turkey, with geopolitical risks have a significant effect on consumer and producer confidence indices. They employed a monthly data between January 2014 to June 2018. They found a causality relationship from geopolitical risk index to the consumer and producer confidence index for the overall panel.

Alqahtani, Bouri and Vo (2020) investigated the in-sample and out-of-sample stock return predictive power of the global and Saudi geopolitical risk indicies and crude oil returns in the context of six Gulf Cooperation Council countries. They followed monthly data from February 2017 to December 2019 and also used feasible generalized least square estimator for predictive modeling by Westerlund and Narayan (2012, 2015). They found that Global and Saudi geopolitical risk indices show weak evidence of in-sample predictability of excess stock returns and out of sample forecasts show that only global geopolitical risk indices provides superior prediction in the context of Kuwaiti and Omani stock markets.

Baur and Smales (2020) analyzed the relationship between asset prices and geopolitical risk and showed that geopolitical risk is distinct from existing measures of economic, financial and political risk and that the response of precious metals to geopolitical risk differes considerably

from that of other assets. They also found out that stocks and bonds respond negatively to geopolitical risk and geopolitical threats.

Aloui and Hamida (2019) analyzed the relevance of geopolitical risk in the oil-stock nexus in a time frequency domain. They used various wavelete coherence methods to capture the influence of geopolitical risk on the dynamic association between oil and stock rices in Saudi Arabia. The results showed that news relating to geopolitical tensions affects the stock market in high frequency bands.

Khan, Su and Tao (2020) analyzed whether oil prices affect financial liquidity in Saudi Arabia. They considered the co-movement between oil prices and financial liquidity in Saudi Arabia in the presence of geopolitical risk ranging from 1998 to 2918. The results showed positive relationship between oil prices and financial liquidity in medium run. Geopolitical risk led oil prices in the medium term and had a positive influence on financial liquidity in short term.

Ahmed (2018) aimed different impacts of political risk on sharia compliant and conventional stock. He analyzed whithin the separate contexts of developed and developing economies and employed a framework that controls for an arrangement of relevant influence and risk factors, based on dynamic panel GMM techniques. The results did not support to the decoupling hypothesis between Islamic and conventional equities.

Suleman et al. (2018) analyzed the role of country specific and global geopolitical risk on the returns and volatility of 18 emerging market economies over the monthly period of November 1998 to June 2017. They used a panel Generalized Autoregressive Conditional Hetroskedasticity approach. They found that country specific geopolitical risk do not have an impact on stock

returns and positive effect on equity market volatility is statistically weak but on broad measure of global geopolitical risk the impact on volatility is both economically and statistically stronger.

Charfeddine and Refai (2019) examined the impact of two recent political and economic crises of March 2014 and June 2017 on the stock market dependence and volatility between Qatar and other GCC countries. They used various multivariate GARCH models (DCC, ADCC and CADCC-GRANCH). The results showed that only the recent GCC crisis of June 2017 affected the level of stock market dependence and volatility between Qatar and other GCC countries, except Bahrain.

Demiralaya and Kilincarslan (2019) analyzed the impact of geopolitical risk on tourism. They employed traditional and quantile regression techniques. They selected the data from four different areas, stoxx travel and leisure global, stoxx travel and leisure Asia-Pacific, stoxx travel and leisure Europe and stoxx travel and leisure North America They found that the negative effects of geopolitical risk were mostly driven by the threat of adverse geopolitical events only during the period of falling Travel and Leisure stock prices.

Nor et al. (2020) suggested that a little research is available on whether geopolitical risk helps predict the return of the tourism equity sector. In this case they provided country level evidence on whether local and global geopolitical risk predicts the first and second moment of tourism stocks in emerging economies. They adopted non-parametric causality-in-quantiles model and a cross-quantilogram test. They found the importance of tourism sector that can help the market recover to stability as well as an open economy that allows local investors to diversify country specific risk in their portfolios.

Khalil et al. (2017) investigate the reaction of Karachi stock exchange 100 index during political event. They used event study methodology, and selected all the listed firms in Karachi stock exchange as the population for their study. The findings showed that the investor that invest their money in financial

sector may earn more abnormal returns than non-financial sector. They also found out that Karachi stock exchange showed inefficient behavior to political event.

Lee, Lee and Li (2020) investigated the causal relation among oil price, geopolitical risk and green bond index in the US. They took data from December 2013 to January 2019. They analyzed causal relations based on Granger-causality in quantile analysis. Their finding revealed uni-directional granger causality from geopolitical risk to oil price at the extreme quantiles. They also found significant bi-directional causality from oil price to green bond index at the lower quantiles. They also found causality from geopolitical risk to green bond index in the lower quantiles of the distribution.

He et al. (2021) investigated the risk spillovers from geopolitical risk to five renewable energy stock markets. They incorporated the variational mode decomposition and time varying copula approaches and further tests the possible asymmetries of risk spillovers. The results found that there are significant risk spillovers from geopolitical risk to renewable energy stock markets, and risk spillovers do not exhibit clear negative or positive pattern.

2.4.2 Impact of Economic Policy Uncertainty on Islamic Stocks:

Ftiti and Hadhri (2019) investigated the relationships among economic policy uncertainty, prices of oil, sentiment of investor and stock returns of nine Dow Jones Islamic Market Indices and found causal relationships between the underlying variables and Islamic stock returns in several time frequencies. They used nine Islamic stock prices for the period from January 2002 to February 2018. To identify whether the above mentioned variables can affect Islamic stock returns, different analyses were conducted which are as follow: Ensemble empirical mode decomposition ; Nonparametric nonlinear causality ; Out-of-sample causality test.

Hoque et al. (2019) explored the impacts of geopolitical risk, global economic policy uncertainty and oil stocks pricesn Malaysia using factor augmented SVAR approach. 70 monthly time series variable over the period 2009 to 2017 is employed for extracting the structural factors.

Belkhir et al. (2018) explored the relation between political risk and volatility of Islamic and conventional assets of banks for this purpose they used an international sample of bank year observations over the period of 1999 to 2013 and found that conventional banks are more exposed to political risk compared to Islamic banks.

Das, Kannadhasan and Bhattacharyya (2019) examined the effects of international economic policy uncertainty, geopolitical risk and financial stress on the emerging stock markets by using 24 emerging markets. They used monthly data from January 1997 to May 2018 and used nonparametric causality in quantiles test as the methodological approach and found that the impact of EPU is mostly profound and significant as compared to GPR and FS.

Chaua , Deesomsaka and Wang (2013) examined the impact of political uncertainty on the volatility of major stock markets in Middle East and North Africa. They followed the data consists of daily closing prices from six countries, namely Bahrain, Kuwait, Oman, Egypt and Lebanon and adopted the four step empirical methodology and found out that conventional and Islamic stock market investments react heterogeneously to the recent political turmoil.

Guyot (2011) analyzed both the market quality and price dynamics of a sample group of Islamic indexes. Results highlighted that efficient investment allocation is not compromised by the application of Shariah criteria. They adopted a global approach, incorporating no fewer than eighteen regional indexes.

Alqahtani and Taillard (2019) analyzed the impact of the United States' Economy Policy Uncertainty shocks on the Gulf Cooperation Council countries' stock market returns. They used monthly data spanning from 31-01-2010 to 31-08-2018 and employed a Non-Structural Vector Auto-regression and Vector Granger Causality Tests. Their results suggested that United States' Economy Policy Uncertainty has little impact on the Gulf Cooperation Council markets with the exception of Bahrain.

Balli et al. (2020) examined the impact of factors affecting the conventional bond and sukuk markets, including financial factors, economic policy uncertainty, U.S. and EU macroeconomic news. They using an ordinary least squares approach. Their results showed that European and U.S. macroeconomic announcements and economic policy uncertainty have a significantly greater impact on sukuk spreads than on conventional bond spreads.

Hasan et al. (2020) explored the extent to which the connectedness of fear among global stock markets is driven by the cross-country connectedness of economic policy uncertainty. They used data on stock market fear and EPU indices for 13 countries, which spans from January 2011 to December 2018 and followed the cross-sectional regression model. They found out that EPU connectedness between any two partner countries significantly drives the connectedness of fear of fear between their stock markets.

Istiak and Alam (2019) investigated the nature and degree of US economic policy uncertainty spillover on the stock markets of a group of non-conventional economies like the Gulf Cooperation Council countries, where a risk-sharing based financial system is prominent and foreign investment, risk-free interest, derivatives, etc. are not as widespread as in the western economies. They used the monthly data from 1990 to 2018 and followed linear and nonlinear

structural vector auto-regression model, and an impulse response based test to explore the nature and degree of US economic policy uncertainty spillover on the stock markets of the GCC countries. They found that an unexpected increase in the US economic policy uncertainty significantly decreases the stock market index of all the GCC countries.

Lu (1019) examined the relationship between policy uncertainty and stock market returns by using MF-DCCA method and chose China economic policy uncertainty index and Shanghai stock market returns. They found that both returns and CNEOU changes series have multifractal characteristics. They also found that there exists strong anti-persistent cross-correlation between Shanghai stock market returns and CNEPU changes series.

Naifar and Hammoudeh (2016) investigated the co-movement and causal relationship of the GCC sukuk returns with global financial distress and various uncertainty factors, using the quantile regression analysis. They found that global financial, economic policy and oil uncertainties have negative impacts and causality effects on the GCC sukuk returns which is limited to the lower quantiles and the global financial distress has a negative impact and a causality effect on GCC sukuk but only for the upper quantiles.

Naifar, Mroua and Bahloul (2017) investigated the impact of regional and global uncertainty factors including financial and economic uncertainty on sukuk returns. They used quantile regression approach for the period from January 2010 to December 2014. The results showed independence between sukuk returns and global and regional economic policy uncertainty for all the quantiles. They also investigated that sukuk and conventional bonds are different from each other in terms of co-movement with global and regional uncertainty factors. These two assets are are complementary but not substitutes.

Phan, Sharma and Tran (2018) investigated, whether economic policy uncertainty predicts stock excess returns. For this purpose they used data from 16 different countries. They used EPU-based model and number of robustness tests. And found out that the ability of economic policy uncertainty to forecast stock returns depends not only on the country used but also on the sectors examined.

Reboredo and Naifar (2017) explored the relationship between Islamic bond prices and financial and policy uncertainty conditions. They used a quantile regression approach and from 2010 to 2014. They results showed that financial uncertainty had a negative impact on sukuk prices; and economic policy uncertainty had no effect on sukuk prices.

Alharbi (2019) examined that how the volatility and change in US economic politics affect the performance of Saudi stock markets. The results found that there is inverse link between the uncertainty of US economic policy and the monthly returns from TASI. They also investigated that the uncertainty of US economic policy accounts for only 1.4% of the Saudi Arab's stock exchange share returns.

Wu et al. (2020) modified the GARCH-MIDAS model by introducing a skewed T-distribution and employ it to study the impact of economic policy uncertainty on the volatility of China's financial stocks between 2000-2019. They found out that economic policy uncertainty worldwide and in the European Union, Canada, Brazil, Russia and China are negatively correlated with the long-term component of volatility of financial stocks of China.

Kutan et al. (2018) answered some of the questions which are as follow: what is the rational of the US-China trade conflict? Is the rising of Chinese economy creating a realistic threat to the US-led post-war international system? A time series model is built to estimate the influence of

both, US and China on many different key international markets namely financial, credit, energy and commodity markets. The results indicate that concerns regarding China's competition with the US in shaping the global world order are more likely to be driven by political factors and not by economic motives.

2.5 Research Gap:

The main goal of our study is to clarify the impact of geopolitical risk and economic policy uncertainty on sectoral Islamic indices, so that we may check whether both of these two independent variables (GPR & EPU) have negative or positive impact on dependent variable (SII) and also the intensity of both two independent variables on dependent variable separately because it has been seen that no study has been conducted in the past on it which can give us satisfactory answer to our question.

2.6 Hypothesis:

In this study, we compare and contrast the influence of EPU and GPR on sectoral Islamic indices. We report the three interesting findings:

2.5.1 Hypothesis 1: EPU dampens the stock prices and its impact is negative across all quartiles of Islamic indices, whereas GPR is negative in lower quartiles and positive in the intermediate and upper quartiles.

2.5.2 Hypothesis 2: the negative impact of EPU is stronger than the negative impact of GPR.

2.5.3 Hypothesis 3: the relationship between EPU, GPR and sectoral Islamic indices is asymmetric and varies across the different conditional quartiles.

CHAPTER THREE

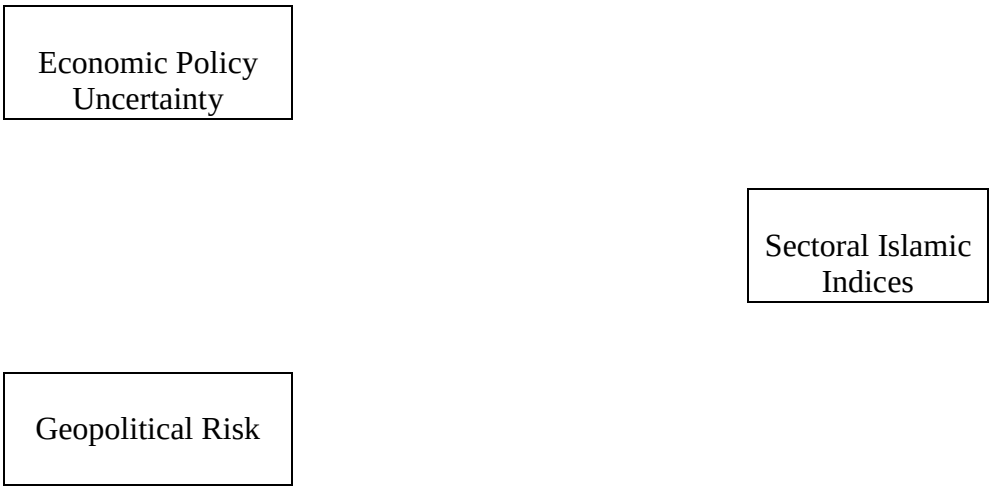
THEORATICAL FRAMEWORK AND RESEARCH METHODOLOGY

3.1 Introduction:

In this chapter, we will discuss the theoretical framework for the present study with a view to formulating the model that will be used to analyze the relationship among geopolitical risk, economic policy uncertainty and sectoral Islamic indices.

3.2 Conceptual Framework:

According to literature review economic policy uncertainty and geopolitical risk expressed positive and negative impact on sectoral Islamic Indices and long run and short run relationship among these variables.



3.3 Variables and Sources:

Three variables are being used in this study; Economic Policy Uncertainty, Geopolitical Risk and Sectoral Islamic Indices. In this study, panel data is being used worldwide by analyzing time series. The data is collected from 2002 to 2020. The objective of this study is to check interaction among economic policy uncertainty, geopolitical risk and sectoral Islamic indices. The sectoral Islamic indices is dependent variable which include Islamic industrial, Islamic Financial, Islamic Health Care, Islamic oil and gas, Islamic Technology, Islamic Tele communication & Islamic Utilities and economic policy uncertainty and geopolitical risk are independent variables.

Table 3.1 Variables, Sources and Description:

Variables	Description	Units	Sources
EPU	Economic policy Uncertainty	Index	Worlduncertaintyindex.com
GPR	Geopolitical Risk	Index	Worlduncertaintyindex.com
SII	Sectoral Islamic Indices	Index	Worlduncertaintyindex.com
DJI	Islamic Industrial	Index	Worlduncertaintyindex.com
DJIF	Islamic Financial	Index	Worlduncertaintyindex.com
DJHC	Islamic Health Care	Index	Worlduncertaintyindex.com
DJOIL	Islamic Oil and Gas	Index	Worlduncertaintyindex.com
DJIT	Islamic Technology	Index	Worlduncertaintyindex.com
DJITC	Islamic Tele Communication	Index	Worlduncertaintyindex.com
DJIU	Islamic Utilities	Index	Worlduncertaintyindex.com

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction:

In this chapter, the results of empirical estimations and further discussion of these results is presented in the theoretical and conceptual context. Augmented Dickey-Fuller Unit Root test is used to check the stationarity of all variables. I have checked the correlation of all the variables. Furthermore, NARDL model is also applied to check the asymmetric impact of all independent variables on dependent variables.

4.2 Descriptive Statistics:

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures, which are shown in the table 4.1 below. Descriptive statistics includes:

Frequencies:

In statistics the frequency of an event is the number of times the event occurred in an experiment or study. These frequencies are often graphically represented in histograms, pie charts or bar charts etc.

Mean:

The statistical mean refers to the mean or average that is used to derive the central tendency of the data in question. It is determined by adding all the data points in a population and then

dividing the total by the number of points. The resulting number is known as the mean or the average.

Mode:

It is the value that is most repeating in the data.

Median:

The median is the value separating the higher half from the lower half of a data sample.

Standard Deviation:

In statistics, the standard deviation is a measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean of the set, while a high standard deviation indicates that the values are spread out over a wider range.

Variance:

Variance is the expectation of the squared deviation of a random variable from its mean. Informally, it measures how far a set of numbers are spread out from their average value.

Minimum, Maximum and Range:

The minimum is the smallest value in the data set. The maximum is the largest value in the data set. The range is the difference between the maximum and minimum values of a data set.

Skewness:

Skewness is usually described as a measure of a dataset's symmetry or lack of symmetry. A perfectly symmetrical data set will have a skewness of 0. If the distribution is negatively skewed

then skewness is negative and if it is positively skewed then skewness is positive. The range for skewness is from – 3 to +3.

Kurtosis:

Kurtosis is all about the tails of the distribution, not the peakedness flatness. It is used to describe the extreme values in one versus the other tail. It is actually the measure of outliers present in the distribution.

Before estimating the model, the descriptive statistics of all the variables used were computed. The table 4.1 shows the properties of the variables. The GPR has the mean value of 95.58170 and its standard deviation is 62.08141. The maximum value of GPR is reported as 464.5309 whereas, the minimum value of 27.82720 is reported. The Skewness and Kurtosis were reported as 2.608539 and 14.36425 and probability was reported as 0.000000 ; The WP has the mean value of 8.797756 and its standard deviation is 44.28958. The maximum value of WP is reported as 416.3459 whereas, the minimum value of 0.000000 is reported. The Skewness and Kurtosis were reported as 8.384054 and 75.66060 and probability was reported as 0.000000 ; The WUNC has the mean value of 18698.33 and its standard deviation is 7876.033. The maximum value of WUNC is reported as 49820.61 whereas, the minimum value of 7838.522 is reported. The Skewness and Kurtosis were reported as 1.428912 and 5.374908 and probability was reported as 0.000000 ;The DJI has the mean value of 1970.332 and its standard deviation is 706.6047. The maximum value of DJI is reported as 3355.875 whereas, the minimum value of 752.7122 is reported. The Skewness and Kurtosis were reported as 0.779100 and 2.626237 and probability was reported as 0.000000 ; The DJIF has the mean value of 1032.862 and its standard deviation is 379.9408. The maximum value of DJIF is reported as 2313.089 whereas, the minimum value

of 519.6612 is reported. The Skewness and Kurtosis were reported as 1.751927 and 5.830632 and probability was reported as 0.000000 ; The DJIH has the mean value of 3083.059 and its standard deviation is 1434.393. The maximum value of DJIH is reported as 6465.738 whereas, the minimum value of 1030.909 is reported. The Skewness and Kurtosis were reported as 0.875650 and 2.513137 and probability was reported as 0.001176 ; The DJIOIL has the mean value of 2679.272 and its standard deviation is 919.3880. The maximum value of DJIOIL is reported as 4734.252 whereas, the minimum value of 1034.768 is reported. The Skewness and Kurtosis were reported as 0.02.432 and 1.875709 and probability was reported as 0.075461 ; The DJIT has the mean value of 3149.173 and its standard deviation is 1650.975. The maximum value of DJIT is reported as 7963.861 whereas, the minimum value of 1011.159 is reported. The Skewness and Kurtosis were reported as 1.229400 and 3.615958 and probability was reported as 0.000002 ; The DJITC has the mean value of 2157.965 and its standard deviation is 516.4453. The maximum value of DJITC is reported as 4036.721 whereas, the minimum value of 1083.638 was reported. The Skewness and Kurtosis were reported as 0.392505 and 4.275515 and probability was reported as 0.010257 ; The DJIU has the mean value of 1787.743 and its standard deviation is 440.3890. The maximum value of DJIU is reported as 3251.632 whereas, the minimum value of 1115.824 is reported. The Skewness and Kurtosis were reported as 1.015752 and 4.886151 and probability was reported as 0.000000 ;

Table 4.1 Descriptive Statistics

	GPR	EPU	DJI	DJIF	DJIH
Mean	95.58170	18698.33	1670.332	1032.862	3083.059
Median	78.62541	16564.52	1505.559	945.0518	2501.357
Maximum	464.5309	49820.61	3355.875	2313.089	6465.738
Minimum	27.82720	7838.522	752.7122	519.6612	1030.909
Std. Dev.	62.08141	7876.033	706.6047	379.9408	1434.393
Skewness	2.608539	1.428912	0.779100	1.751927	0.875650
Kurtosis	14.36425	5.374908	2.626237	5.830632	2.513137
Jarque-Bera	631.9715	56.38001	10.48472	82.84866	13.49170
Probability	0.000000	0.000000	0.005288	0.000000	0.001176
Sum	9271.425	1832437.	163692.5	101220.5	302139.8
Sum Sq. Dev.	369993.8	6.02E+09	48431148	14002433	2.00E+08
Observations	98	98	98	98	98

	DJIOIL	DJIT	DJITC	DJU
Mean	2679.272	3149.173	2157.965	1787.743
Median	2857.646	2506.415	2180.167	1795.312
Maximum	4734.252	7963.861	4036.721	3251.632
Minimum	1034.768	1011.159	1083.638	1115.824
Std. Dev.	919.3880	1650.975	516.4453	440.3890
Skewness	0.020432	1.229400	0.392505	1.015752
Kurtosis	1.875709	3.615958	4.275515	4.886151
Jarque-Bera	5.168274	26.23583	9.159652	31.37868
Probability	0.075461	0.000002	0.010257	0.000000
Sum	262568.6	308619.0	211480.6	175198.8
Sum Sq. Dev.	81991603	2.64E+08	25871430	18812419
Observations	98	98	98	98

Note:

EPU = Economic policy uncertainty; GPR = Geopolitical Risk; DJI = Islamic industrial; DJIF = Islamic financial; DJHC = Islamic health care; DJOIL = Islamic oil and gas; DJIT = Islamic technology; DJITC = Islamic tele communication ; DJIU = Islamic utilities

4.3 Correlation coefficients:

Table 4.2 shows the correlation coefficients of the variables. The results show that all the variables including GPR, WUNC, DJI, DJIF, DJIH, DJIOIL, DJIT, DJITC and DJIU put a positive and significant relationship with one another. Here DJI has slightly weak correlation with GPR which is 0.31327 while with WUNC it has slightly strong correlation which is 0.64299 ; DJIF has slightly weak correlation with GPR which 0.32642 while with WUNC it has slightly strong correlation which is 0.63072 ; DJIH has slightly weak correlation with GPR which is 0.40697 while with WUNC it has slightly strong correlation which is 0.70073 ; DJIOIL has weak correlation with GPR which is 0.03788 while with WUNC it has also weak correlation which is 0.18063 ; DJIT has slightly weak correlation with GPR which is 0.28315 while with WUNC it has slightly strong correlation which is 0.56100 ; DJITC has weak correlation with GPR which is 0.19166 while with WUNC it has also weak correlation which is 0.09011 ; DJIU has slightly weak correlation with GPR which is 0.21061 while with WUNC it has also weak correlation which is 0.09011 .

Table 4.2 Correlation

	GPR	WUNC	DJI	DJIF	DJIH	DJIOIL	DJIT	DJITC	DJIU
GPR	1								
WUNC	0.41194	1							
DJI	0.31	0.64299	1						
DJIF	0.32642	0.63072	0.86540	1					
DJIH	0.40697	0.70073	0.96461	0.82427	1				
DJIOIL	0.03788	0.18063	0.50701	0.23406	0.42905	1			
DJIT	0.28315	0.56100	0.87558	0.83121	0.83021	0.15352	1		
DJITC	0.19166	0.03061	0.42391	0.15177	0.32751	0.51133	0.47895	1	
DJIU	0.21061	0.09011	0.27845	0.17855	0.13918	0.75599	0.14803	0.65424	1

Note:

EPU = Economic policy uncertainty; GPR = Geopolitical Risk; DJI = Islamic industrial; DJIF = Islamic financial; DJHC = Islamic health care; DJOIL = Islamic oil and gas; DJIT = Islamic technology; DJITC = Islamic tele communication ; DJIU = Islamic utilities

4.4 Bounds Test:

Bounds Test (GPR, WUNC and DJI)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 4.499833 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.3

F-Bounds Test

Test Statistic	Value	Signif	I (0)	I (1)
			Asymptotic	
			n = 1000	
F-Statistic	4.499833	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample	
Actual Sample Size	94		n = 80	
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJIF)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 4.130570 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.4

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.130570	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	94			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJIH)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 5.730812 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.5

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	5.730812	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	94			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJIOIL)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 4.361577 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.6

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.361577	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	94			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJIT)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 6.138094 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.7

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	6.138094	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	93			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJITC)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 4.465211 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.8

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.465211	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	94			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

Bounds Test (GPR, WUNC and DJIU)

H_0 = There is no co-integration between the given variables.

Our F-Statistics which is 4.264130 is not less than lower bound I(0) rather it is greater than upper bound it means I(1) at 5% significant level, so rule says Hypothesis is rejected and now we can say that there is co-integration among the given variables.

Table 4.9

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.264130	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=80	
Actual Sample Size	94			
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND POLICY IMPLICATIONS

5.1 Introduction:

This chapter presents the summary of major findings, conclusion, implication of policy & recommendation for future study. In the summary and conclusion section, we have briefly discussed the need, contribution, objective and results of this study. The policy implication and limitations of the study are also shown. Recommendation for future research and conclusions are also presented.

5.2 Summary of major findings and conclusion:

We investigate the influential of the co-movement and causal relationship of Sectoral Islamic Indices with Geopolitical Risk and Economic Policy Uncertainty using descriptive statistics, coefficient of correlation and bounds test. The empirical results demonstrate that geopolitical risk and economic policy uncertainty have different possible effects on Sectoral Islamic Indices. If relationship among different countries is better, it has positive impact on the returns and values of Sectoral Islamic Indices and in case of bad relationship among neighbouring countries it will have negative results alike. The same situation is about economic policy uncertainty. If Import & Export Policy, Agricultural Policy, Taxation Policy, Education Policy, Foreign Investment Policy (FDI), Public Expenditure Policy and Employment Policy are positively employed, they will certainly have a positive impact on Sectoral Islamic Indices otherwise they will caste negative impact.

5.3 Limitations:

This study examines the impact of Geopolitical Risk and Economic Policy Uncertainty on Sectoral Islamic Indices. Moreover, this study also analyzes the relationship of Geopolitical risk, economic policy uncertainty and sectoral Islamic indices. This study is using Panel data of Geopolitical Risk and Economic Policy uncertainty and Sectoral Islamic Indices which includes: Islamic Financials, Islamic Health Care, Islamic Industrial, Islamic Oil & Gas, Islamic Technology, Islamic Tele Communication, Islamic Utilities. In this study, we only focused on the relationship of geopolitical risk and economic policy uncertainty with sectoral Islamic indices. The future researches may be conducted on the sample of many more independent variables which may have positive or negative impact on Islamic indices. The non-availability of enough literature on the topics is also a limitation of this study.

5.4 Recommendations for Future Research:

In this study, we only focused on the relationship of geopolitical risk and economic policy uncertainty with sectoral Islamic indices. The future researches may be conducted on the sample of many more independent variables which may have positive or negative impact on Islamic indices.

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