DO MACROECONOMIC VARIABLES INFLUENCE ON THE STOCK MARKET? A THEORETICAL REVIEW

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Abstract - The purpose of this study is to review how macroeconomic variables influence on the stock mar-ket.The studycomprehensively reviews the finance theories and macroeconomic variables used by the past studies to investigate the nexus between the macroeconomic variables and the stock market. The study employs 61 studies, published in the journals, whichare rated by the Australian Business of Deans Council (ABDC). As per the review, dividend discount model, arbitrage-pricing theory and the efficient market model are the commonly used finance theories by the selected literature. The review results further shows that, selected past research have given more emphasize on domestic macroeconomic variables and a very poor attention on the international and global macroeconomic variables. Furthermore, as the impact of given macroeconomic variables on a given stock market, varies based on different time intervals and based on different econometrics techniques employed.

Index Terms - Stock market, macroeconomic variables, finance theories.

I. INTRODUCTION

According to the theory of economics, an economy is a system, which allocates scarce resources among competing ends of a particular society. Macroeconomic variables are indicators which signal the current trends in the economy, like, the gross domestic product, rate of employment, consumer price index, balance of pay-ments, broad money supply, lending interest rate, house hold consumption etc. (source: https://data.worldbaindicatornk.org/) . Stock market is an important segment in the financial system of any economy, as it facilitates the allocation of scares resources,by channeling the funds throughthe surplus units to the deficit units. As a part of a widespread economic system, stocks markets inevitably exposed to theinfluences emerge within this system.

Over the past few decades, a large growing body of literature has investigated the influence of macroeconomic variables on the stock markets. However, a very poor attention has given towards the review of such literature. Therefore, this paper aims to fill that gap by conducting a comprehensive review on the carefully selected litera-ture on this area. This study carries out a thorough literature review based on 61 studies, published in the jour-nals, whichrated by the Australian Business of Deans Council (ABDC). The review comprises; the finance theo-ries depict the nexus between the macroeconomic variables and the stock market and investigate macroeconomic variables and their effect to the stock market.This review will have important implications mainly for academic researchers.

II. LITERATURE REVIEW

Selected literature have been analysed under the two headings: Finance theories and Macroeconomic variables.

A. Finance Theories

This section provides a detailed discussion on finance theories, which explain the nexus between stock prices and macroeconomic variables as per the selected literature. Figure 1 depicts how each theory provides the theo-retical background for the nexus between stock prices and macroeconomic variables.

1. Dividend Discount Model (DDM)

DDM (Miller and Modiglliani, 1961) emphasizes the role of expected future dividends (or expected cash flows) and discount rate (or rate of return) in determining the current stock price.Change in any economic variable which influences expected cash flows and required rate of return will affect stock prices (Chen, Roll and Ross, 1986; Clare and Thomas, 1994; Khan et al., 2015).Previous studies (for example; Gjerde and Sættem, 1999; Morelli, 2002; Gunasekarage, Pisedtasalasai and Power, 2004; Verma and Ozuna, 2005; Srivastava, 2010; Quadir, 2012) have highlighted the importance of DDM , in explaining the theoretical background of the nexus between stock prices and macroeconomic variables.

2. Efficient Market Hypothesis (EMH)

EMM (Fama, 1970) emphasizes the importance of available information in determining the share prices. Num-ber of studies have attempted to examine market efficiency in respect to macroeconomic information (Gay, 2008; Kurov and Stan, 2018).Ibrahim (1999) concludes that Malaysian stock market is not informationally efficient with respect to consumer prices, credit aggregates and official reserves. Kurov and Stan (2018) report that S&P 500 is significantly responding to the macroeconomic announcement emerge from real activity (which includes GDP, unemployment rate, employment, personal

income, consumer credit), consumption (which includes new home sales), investment (which includes durable goods orders), government budget and prices (which includes producer price index).

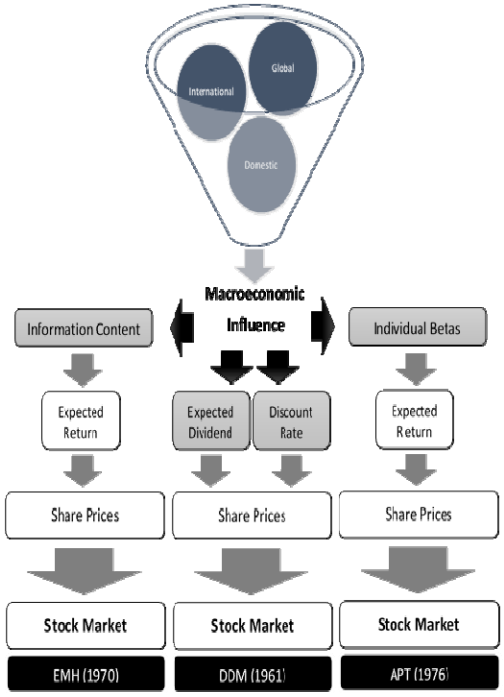


Figure1 : Theoretical Background for the Nexus between the Stock Market and the Macroeconomic Variables.

3. Arbitrage Pricing Theory (APT)

APT (Ross, 1976) assumes that the returns on the particular subset of assets under consideration are subjectively viewed by agents (or factors) in the market. A number of studies have been carriedby employing APT to analyse the effect of macroeconomic variables on stock returns (or share price). Chen, Roll and Ross (1986) have developed a five-factor model including the macroeconomic factors; industrial production, expected inflation, unanticipated inflation, excess return of long-term corporate bonds over long-term government bonds and the excess return of long-term government bonds over T-bills.Clare and Thomas (1994) conclude that number of macroeconomic factors (such as oil prices, retail price index, UK private sector bank lending, current account balance) have been priced in the UK stock markets.Groenewold and Fraser (1997) propose a multifactor model, which incorporates both local and global macroeconomic variables. Srivastava (2010) employs a multifactor model to identified macroeconomic factors (such as industrial production index, MSCI world equity index) which can explain pricing process of Indian stock market. Geambaşu et al. (2014) in their study apply the APT on the Bucharest Stock Exchange and determined the macroeconomic factors with influence over shares' return.

B. Macroeconomic Variables

This section reviews the macroeconomic variables which have been investigated in previous studies and their corresponding impact on stock marketunder the three subheadings as; domestic macroeconomic variables, international macroeconomic variables and global macroeconomic variables.

1. Domestic Macroeconomic Variables

Past studies identify, the domestic macroeconomic variables as country specific macroeconomic variables (by Gjerde and Sættem, 1999), state macroeconomic variables (by Fama, 1981; Chen, Roll and Ross, 1986; Clare and Thomas, 1994), country factors (by Abugri, 2008) and as local factors (by Khan et al., 2015; Yang et al., 2018).

1.1Domestic Interest Rate

Previous studies use a range of proxies for domestic interest rate for example; the term structure of interest rate (Chen, Roll and Ross, 1986; Clare and Thomas, 1994; Chen, 2009), 3-month treasury bill rate (Clare and Tho-mas, 1994; Khan et al., 2015), 12-month treasury bill rate (Hondroyiannis and Papapetrou, 2001), 90-day bank-accepted bill rate (Groenewold and Fraser, 1997), 91-day certificate deposit rate (Yang et al., 2018), 3-month NIBOR rate (Gjerde and Sættem, 1999; Hooker, 2004),6-month LIBOR rate (Snieška, Laskiene and Pekarskiene, 2008), Federal fund rate (Verma and Ozuna, 2005; Beltratti and Morana, 2006; Chen, 2009), policy interest rate (Abugri, 2008) and ten-year bond yield (Srivastava, 2010).Some researchers have used nominal interest rate (Osamwonyi and Evbayiro-osagie, 2012; Ozcan, 2012; Forson and Janrattanagul, 2013; Bhargava, 2014; Geambaşu et al., 2014) while others use the real interest rate (Gjerde and Sættem, 1999; Hooker, 2004; Hsing, 2011a, 2011b).

As interest rate is expected to influence discount rate (Mukherjee and Naka, 1995), according to the Dividend Discount Model (DDM) interest rate has a negative impact on stock prices (and thereon the stock market), as the rise in interest rate causes the stock prices to fall and vice versa (Srivastava, 2010).

Mukherjee and Naka(1995), Hondroyiannis and Papapetrou(2001), Verma and Ozuna(2005), Abugri(2008), Humpe and Macmillan(2009), Hussainey and Ngoc(2009), Hsing(2011a), Kyereboah-coleman and Agyire-Tettey(2011), Hsing and Hsieh(2012) and Papadamou, Sidiropoulos and Spyromitros(2017) find a sig-nificant negative influence of domestic interest rate on the stock market. In contrast, Hussainey and Ngoc (2009) Shabri Abd. Majid and Yusof (2009) and Chinzara (2011) find a significant positiveinfluence.

Moreover, a short-run nexus between domestic interest rate and the stock market was found by Gjerde and Sættem(1999), Pilinkus and Boguslauskas(2009), Al-jafari, Salameh and Habbash(2011) and Yang et al. (2018) whilstBhattarai and Joshi(2009) Srivastava(2010),

Ozcan(2012) and Kotha and Sahu(2016) find a long-run relationship. Furthermore, a bidirectional causality between the domestic interest rate and the stock market was found byWongbangpo and Sharma(2002) and Gunasekarage, Pisedtasalasai and Power(2004) whilst Beltratti and Morana(2006), Gan et al. (2006), Ratanapakorn and Sharma(2007) and Kumari and Mahakud(2014) find an unidirectional causality from domestic interest rate to the stock market. However, Clare and Thomas (1994), Chanchart, Valadkhani and Havie (2007), Snieška, Laskiene and Pekars-kiene (2008), Laopodis (2011), Hassan and Al refai (2012), Quadir (2012) Forson and Janrattanagul (2013) and Kumari and Mahakud (2014) do not find a significant relationship between domestic interest rate and the stock market.

1.2 Domestic Inflation

Some researchers have used the general inflation rate of the economy to analyse the influence ofthe change in domestic price level on the stock market (Errunza and Hogan, 1998; Morelli, 2002; Hooker, 2004; Beltratti and Morana, 2006; Chen, 2009). On the other hand CPI or consumer price index is the most commonly used proxy for domestic inflation(Bilson, Brailsford and Hooper, 2001; Verma and Ozuna, 2005; Khan et al., 2015; Yang et al., 2018). Moreover,WSPI or whole sale price index (Srivastava, 2010), retail price index (Clare and Thomas, 1994) and the index of manufacturing prices (Groenewold and Fraser, 1997)have also been used as proxies for domestic inflation. Mukherjee and Naka(1995), Humpe and Macmillan(2009), Chinzara(2011), Hsing(2011a, 2011b), Kyereboah-coleman and Agyire-Tettey(2011) andHsing and Hsieh(2012)find that domestic inflation has a significant negative influence on the stock market, but Clare and Thomas (1994), Wongbangpo and Sharma (2002) and Ratanapakorn and Sharma (2007) find a significant positive impact. Moreover, a short-run nexus between domestic inflation and the stock market was highlighted by Ibra-him(1999), Al-jafari, Salameh and Habbash(2011) and Yang et al. (2018) whilst Bhattarai and Joshi(2009), Srivastava(2010), Ozcan(2012), Forson and Janrattanagul(2013) and Kotha and Sahu(2016) state a long-run relationship.

Furthermore, a bidirectional causality between domestic inflation and the stock market was found byWongbangpo and Sharma(2002), Al-jafari, Salameh and Habbash(2011) and Kumari and Mahakud(2014) whilst Ibrahim (1999), Tsoukalas(2003), Gunasekarage, Pisedtasalasai and Power(2004), Beltratti and Mora-na(2006) and Ratanapakorn and Sharma(2007) state an unidirectional causality from domestic inflation to the stock market. However, Mukherjee and Naka (1995), Gjerde and Sættem (1999), Bilson, Brailsford and Hooper, (2001), Flannery and Protopapadakis (2002), Morelli (2002), Ibrahim and Aziz (2003), Verma and Ozuna (2005), Gan et al. (2006), Chanchart, Valadkhani and Havie (2007), Snieška, Laskiene and Pekarskiene (2008), Pilinkus and Boguslauskas (2009), Hussainey and Ngoc (2009) and Khan et al. (2015) do not find a significant relationship between domestic inflation and the stock market.

1.3 Domestic Output

GDP or Gross Domestic Production is the most common used proxy for domestic output(Pilinkus and Bogus-lauskas, 2009; Osamwonyi and Evbayiro-osagie, 2012). Other proxies are; expected GDP growth (Hooker, 2004), GNP or Gross National Production (Flannery and Protopapadakis, 2002; Wongbangpo and Sharma, 2002), industrial production (Chen, Roll and Ross, 1986; Clare and Thomas, 1994; Errunza and Hogan, 1998; Gjerde and Sættem, 1999; Bilson, Brailsford and Hooper, 2001; Morelli, 2002; Yang et al., 2018), IIP or Indus-trial Production Index (Groenewold and Fraser, 1997; Abugri, 2008; Chen, 2009; Srivastava, 2010; Khan et al., 2015).Some researchers have used nominal output (Beltratti and Morana, 2006; Humpe and Macmillan, 2009) whilst others use real output (Gan et al., 2006; Hsing, 2011b). Clare and Thomas(1994), Flannery and Protopapadakis(2002), Abugri(2008), Humpe and Macmillan(2009), Hussainey and Ngoc(2009), Hsing(2011b, 2011a) and Hsing and Hsieh(2012) find a significant positive impact from domestic output to the stock market. On the contrary, Hondroyiannis and Papapetrou (2001), Brahma-srene and Jiranyakul (2007) and Forson and Janrattanagul (2013) state significant negative impact. Moreover, a short-run relationship between domestic output and the stock market was stated by Errunza and Hogan(1998), Al-jafari, Salameh and Habbash(2011) whilst,Kwon and Shin(1999), Srivastava(2010), Forson and Janrattanagul(2013) and Forson and Janrattanagul (2013) find a long-long run relationship.

Furthermore, a bidirectional causality between the stock market and domestic output was reported byWongbangpo and Sharma(2002), Ratanapakorn and Sharma(2007), Al-jafari, Salameh and Hab-bash(2011) and Papadamou, Sidiropoulos and Spyromitros(2017) whilst, Gjerde and Sættem(1999), Hondroyiannis and Papapetrou(2001), Tsoukalas(2003), Beltratti and Morana(2006) and Gan et al. (2006) report an unidirectional causality from domestic output to the stock market. However, Mukherjee and Naka (1995), Groenewold and Fraser (1997), Ibrahim (1999), Bilson, Brailsford and Hooper (2001), Morelli (2002), Laopodis (2011), Quadir (2012) and Khan et al. (2015) conclude that domestic output as insignificant.

1.4 Domestic Money Supply

As pre the literature, narrow money supply (M1) is the most common proxy of money supply(Clare and Tho-mas, 1994; Bilson, Brailsford and Hooper, 2001; Morelli, 2002; Verma and Ozuna, 2005; Beltratti and Morana, 2006; Chen, 2009). Other proxies are; M2

money supply (Liljeblom and Stenius, 1997; Flannery and Protopapadakis, 2002; Ibrahim and Aziz, 2003; Chanchart, Valadkhani and Havie, 2007; Hassan and Al refai, 2012), and M3 money supply (Groenewold and Fraser, 1997; Shabri Abd. Majid and Yusof, 2009; Chinzara, 2011; Kumari and Mahakud, 20A14; Kotha and Sahu, 2016).

A significant positive impact of domestic money supply towards the stock market was reported byMukherjee and Naka(1995), Flannery and Protopapadakis(2002), Shabri Abd. Majid and Yusof(2009) and Hsing(2011b). In contrast, a significant negative impact is reported by Clare and Thomas(1994), Errunza and Hogan(1998), Abugri(2008) and Humpe and Macmillan(2009).

Moreover, Errunza and Hogan(1998), Ibrahim and Aziz(2003), Pilinkus and Boguslauskas(2009) and Al-jafari, Salameh and Habbash(2011) highlight a short-run nexus between domestic money supply and the stock market, whilst a long-run nexus is pointed out by Kwon and Shin(1999), Ibrahim and Aziz(2003), Gunasekarage, Pisedtasalasai and Power(2004), Bhattarai and Joshi(2009), Hassan and Al refai(2012) Ozcan(2012), Forson and Janrattanagul(2013) and Kotha and Sahu(2016).

Furthermore, a bidirectional causality between domestic money supply and the stock market was reported byWongbangpo and Sharma(2002) while, an unidirectional causality from domestic money supply to the stock market was found byTsoukalas (2003), Gunasekarage, Pisedtasalasai and Power(2004), Beltratti and Mora-na(2006), Brahmasrene and Jiranyakul(2007) and Ratanapakorn and Sharma(2007).

Unidirectional causality from stock market to domestic money supply (Al-jafari, Salameh and Habbash, 2011).

However, Groenewold and Fraser (1997), Ibrahim (1999), Morelli (2002), Chanchart, Valadkhani and Havie (2007), Chen (2009), Chinzara (2011), Hsing (2011a) and Khan et al. (2015) find that domestic money supply as insignificant.

1.5 Other Domestic Macroeconomic Variables

Clare and Thomas(1994), Ibrahim(1999), Flannery and Protopapadakis(2002) and Mittal and Pal(2011) have analysed the impact of domestic consumer credit on the stock market. Chen, Roll and Ross(1986), Clare and Thomas(1994), Gan et al. (2006) Chinzara(2011) and Bastianin and Manera(2018) have studied the effect of domestic crude oil prices on the stock market. Effect of domestic gold prices was studied by Chinzara (2011). Gjerde and Sættem(1999), Morelli(2002) amd Laopodis(2011) have investigated the nexus between retail trade and the stock market. Groenewold and Fraser(1997) and Flannery and Protopapadakis(2002) study the effect of domestic employment on the stock market while Snieška, Laskiene and Pekarskiene (2008), Pilinkus and Boguslauskas(2009) and Rjoub, Türsoy and Günsel(2009)study domestic unemployment.Chen,(2009) and Hsing and Hsieh(2012) investigate the impact of government debt. Flannery and Protopapadakis (2002) and Yartey (2010) analyse how personal income affect the stock market. Yartey (2010)analyses the impact of domestic investment on the stock market.

III. INTERNATIONAL MACROECONOMIC VARIABLES

Past studies have used cross-country macroeconomic variables like exchange rate, inflation of a foreign coun-try (Verma and Ozuna, 2005), regional macroeconomic variables like regional trade and regional economic activity (Khan et al., 2015). In this study, “international macroeconomic variables” cover all the macroeconomic variables outside the local economy, but which are not recognised under the global macroeconomic variables.

3.1 ExchangeRate

Foreign currency exchange rate expresses a currency in terms of another currency. Previous studies have fre-quently used USD/Local Currency exchange rate(Bilson, Brailsford and Hooper, 2001; Hooker, 2004; Khan et al., 2015; Yang et al., 2018). In addition to that Yen/Local Currency (Groenewold and Fraser, 1997), German Deutsche/Local Currency (Morelli, 2002) exchange rates were also found in literature. Some researchers use the real exchange rate (Shabri Abd. Majid and Yusof, 2009; Kyereboah-coleman and Agyire-Tettey, 2011) whilst others use the nominal exchange rate (Ibrahim, 1999; Tsoukalas, 2003; Verma and Ozuna, 2005; Snieška, Laskiene and Pekarskiene, 2008).

Clare and Thomas(1994), Hondroyiannis and Papapetrou(2001), Ratanapakorn and Sharma(2007), Chinza-ra(2011) and Kyereboah-coleman and Agyire-Tettey(2011) find that exchange rate has a significant positive impact on the stock market. On the other hand Ibrahim and Aziz(2003), Verma and Ozuna(2005), Brahmasrene and Jiranyakul(2007), Abugri(2008), Gay(2008) and Hsing(2011a) report that as negatively significant.

Moreover, a short-run relationship between exchange rate and the stock market was found byIbrahim(1999), Pilinkus and Boguslauskas(2009) and Al-jafari, Salameh and Habbash(2011) whilst, Kwon and Shin(1999), Ozcan(2012) and Kotha and Sahu(2016) find a long-run relationship.

Furthermore, a bidirectional causality between exchange rate and the stock market was reported by Wongbang-po and Sharma(2002) by Al-jafari, Salameh and Habbash(2011) whilst, Ibrahim(1999), Wongbangpo and Sharma(2002), Tsoukalas(2003) and Gan et al. (2006) report a unidirectional causality from exchange rate to the stock market.

However, Mukherjee and Naka (1995), Groenewold and Fraser (1997), Morelli (2002), Gunasekarage,

Pisedta-salasai and Power (2004), Rjoub, Türsoy and Günsel (2009) and Srivastava (2010) find no significant nexus between exchange rate and the stock market.

3.2 Foreign Interest Rates

Abugri(2008), Hussainey and Ngoc(2009) and Khan et al. (2015)investigate the influence of U.S. 3-month T-Bill Yield on domestic stock market. Hsing (2011b) analyses both U.S. Government Bond Yield and UK Gov-ernment Bond Yield. Wu and Lee (2015) studies the impact of U.S. Money Market Rate and U.S. Term Spread on domestic stock market. Verma and Ozuna (2005)in their comparative study investigate the impact of foreign countries' interest rates (Argentina, Mexico, Brazil and Chile) on each stock market under the study.

Hussainey and Ngoc(2009) and Hsing(2011b) report a significant positive relationship between foreign interest rate and the domestic stock market whilst, Abugri (2008) and Hsing (2011b) find a significant negative relation-ship. An Insignificant influence was found byVerma and Ozuna(2005) and Khan et al. (2015).

3.3 Foreign Stock Markets

Hsing(2011b), Hsing and Hsieh(2012) and Wu and Lee(2015) studies the impact of U.S. stock market Index on domestic stock market. Hsing and Hsieh (2012) investigate the influence of German stock market Index on Poland stock market while Hsing (2011b) analyses the effect of UK Stock Market Index on South African stock market.Gunasekarage, Pisedtasalasai and Power (2004) find the influence of S&P 500 Composite Price Index and Nikkei 225 Price Index on Sri Lankan stock market.Hsing(2011b) and Hsing and Hsieh(2012) have found a significant positive nexus between foreign interest rate and the domestic stock market.

3.4 Foreign Output

Khan et al. (2015) include the output of the region given the fact that a crisis occurring in one country may lead to a crisis in neighbouring countries, the economic weakness or instability of the region can affect the local economy as well as the stock market.Hussainey and Ngoc(2009) in their study investigate the impact of U.S. Industrial Production on Vietnam stock market and find a significant positive relationship.Khan et al. (2015) analyse the effect of regional GDP of South Asia on the stock markets in Bangladesh, India, Sri Lanka and Pakistan and found a significant relationship.

3.5 Foreign Inflation

Khan et al. (2015) include the inflation of the region given the fact that a crisis occurring in one country may lead to a crisis in neighbouring countries, the economic weakness or instability of the region can affect the local economy as well as the stock market. Verma and Ozuna (2005) in their comparative study investigate the impact of foreign countries' inflation (of Argentina, Mexico, Brazil and Chile) on each stock market under the study. Khan et al. (2015) analyse the effect of regional CPI of South Asia on the stock markets in Bangladesh, India, Sri Lanka and Pakistan and found a significant relationship.

3.6 Other International Macroeconomic Variables

Clare and Thomas(1994) and Ozcan(2012) have examined the impact of current account balance on the domestic stock market. Influence of the trade balance is studied by Liljeblom and Stenius (1997), Kwon and Shin (1999), Flannery and Protopapadakis, (2002), Hassan and Al refai (2012) and Khan et al. (2015). Also, Ozcan (2012) investigates the effect of export volume on the domestic stock market.Ibrahim (1999) and Hassan and Al refai (2012) have studied the influence of official reserves on the domestic stock market. Wu and Lee(2015) examine the impact of U.S. M1 and M3 monetary aggregates, U.S. credit spread and U.S. unemployment rate on the individual stock markets of ten industrialized countries. Khan et al. (2015) analyses the effect of regional money supply and interregional trade balance of South Asia on the stock markets in Bangladesh, India, Sri Lanka and Pakistan.

IV. GLOBAL MACROECONOMIC VARIABLES

In this review, "global macroeconomic variables" covers macroeconomic variables, which are common to the entire world.Bilson, Brailsford and Hooper (2001), Abugri (2008) and Khan et al. (2015) in their studies clearly recognize global economic variables.

4.1 Global Crude Oil Prices

Arabian Light crude oil (Gjerde and Sættem, 1999) and Brent Crude Oil Price Index (Gunasekarage, Pisedtasa-lasai and Power, 2004) are found in literature as proxies of global curd oil prices.

Gay(2008) reports that global crude oil prices have a significant positive impact on the domestic stock market whilst, Brahmasrene and Jiranyakul(2007) andChanchart, Valadkhani and Havie(2007) report that as negatively significant. Moreover, Hassan and Al refai (2012) and Ozcan(2012) find a long-run nexus between global curd oil prices and the domestic stock market. However, Gunasekarage, Pisedtasalasai and Power (2004) do not find any significant relationship.

4.2 Global Inflation

Khan et al. (2015) includes global inflation into his study as he expects an impact of that inflation on domestic inflation, exports, imports and thereon corporate profitability and stock prices. Gunasekarage, Pisedtasalasai and Power(2004) and Khan et al. (2015) studies the impact of global

inflation on the domestic stock market, by taking world consumer price index (WCPI) as the proxy, and found no significant impact.

4.3 Global Stock Market

Previous studies have used MSCI World Index as a proxy of global stock market to investigate the nexus be-tween the global stock market and the domestic stock market (Bilson, Brailsford and Hooper, 2001; Gunaseka-rage, Pisedtasalasai and Power, 2004; Hooker, 2004; Abugri, 2008; Srivastava, 2010; Khan et al., 2015). Some report a significant relationship(Bilson, Brailsford and Hooper, 2001; Abugri, 2008; Khan et al., 2015) whilst, others find no significant relationship (Gunasekarage, Pisedtasalasai and Power, 2004; Hooker, 2004; Khan et al., 2015).

4.4 Global Output

Khan et al. (2015) includes global output into his study as he expects an impact of that output on domestic exports, imports and thereon corporate profitability and stock prices. Previous studies have used Industrial Production Index of the OECD (Gjerde and Sættem, 1999) world industrial production (Gunasekarage, Pisedtasalasai and Power, 2004)and world GDP (Khan et al., 2015) as the proxies of global output or production. Khan et al. (2015) found a significant relationship between the global output and the domestic stock market. However |Gjerde and Sættem (1999) and Gunasekarage, Pisedtasalasai and Power (2004) found it as insignificant.

CONCLUSION

The review of literature shows that a very little attention has paid to research the impact of global macroeco-nomic variables compared to domestic macroeconomic variables on the stock market. Although some research has carried out to examine the impact of international macroeconomic variables on the stock market, very few number of international macroeconomic variables covered by such studies. Therefore, this research gapcan be filled by including many new and unexamined international and global macroeconomic variables into the fu-ture studies. Moreover, as the impact of given macroeconomic variables on a given stock market,varies based on different time intervals and based on different econometrics techniques employed. Thus, there is enough room to carry out research work time to time in the same context to capture and understand such impact.

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