The Impact of Stock Market Performance upon Economic Growth during Lockdown

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ABSTRACT:

The main purpose of this study was to explore the causal link between stock market performance and economic growth in terms of a simple theoretical and empirical literature framework. Researchers hold diverse opinions regarding the importance of stock markets playing a significant role in economic growth processes by performing the following functions: improving liquidity, aggregating and mobilizing capital, observing managers and exerting corporate control, providing risk-pooling and sharing services including investment levels.

The unfortunate situation created by COVID-19 gives us a unique opportunity to gauge the impact of an unexpected and dreaded disease on the economy of affected nations while globalization continues under debates. The COVID-19 virus first broke out in China and exerted a direct influence on China's stock market. Fluctuations in China's stock market may have spill-over effects on others due to the breadth and depth of interdependence among contemporary economies. In China, the spread of the disease is gradually being curtailed, but it continues to spread in other countries, some of which might adversely influence back on China's stock market. The growing theoretical literature argues that stock markets are crucially linked to economic growth. The findings suggest a positive relationship between efficient stock markets and economic growth, both in short run and long run and there is evidence of an indirect transmission mechanism through the effect of stock market development on investment. They are seen as providing a service that boosts economic growth. The results are consistent with the theoretical and empirical predictions.

Keywords: Stock Market Performance; Economic Growth; Developed and Developing Countries

Introduction

Recent theoretical studies have already commenced the first step to link the financial market and the rate of economic growth; it is proposed that higher per capita income may affect many aspects of the economy and stock market performance. Gurley and Shaw (1955, 1960 and 1967) argued that financial development is a positive function of real income and wealth. This study supports the quantitative work of Goldsmith (1969) who discovered that, in most of the 35 countries investigated, both developed and developing, the ratio of the financial institution to GDP tends to increase with higher real income and wealth. This relationship between growth and financial system size is further supported by more recent evidence from the World Bank (1989). Much of the research within empirical studies concurs that finance is strongly associated with economic growth rate.

Financial markets are today classified as bank-based or market-based systems. This division can be further exemplified by the Anglo-Saxon market-based models which are capitalist economies and allow for private investment and private ownership and the other, largely exemplified by Germany, which is the bank-based model that has been practiced more widely by Eastern European countries. These latter are centrally-planned or, to be politically correct, communist economies (Hall and Soskice, 2001). The UK and US are market-based as these countries have similar long-term growth rates. Throughout the world, the type of financial model practiced by sovereign countries reflects the type of government as a regime in power. Many, Eastern European, Middle Eastern and African countries, including Libya, have practiced socialism for a long time.

Review of Related Literature

Definition of a Stock Market

A stock market can be a very sophisticated market place, where stocks and shares are the traded commodity. At the same time, it is central to the creation and development of a strong and competitive economy. It is a key to structural transformations in any economy; from traditional, rigid, insecure bank-based to a more flexible, more secure economy that is immune to shocks, fluctuations and lack of investors' confidence (Stapley, 1986). According to Arnold (2004), stock markets are where government and industry can raise long-term capital and investors can purchase and sell securities. Typically, markets, whether they be shares, bonds, cattle or fruit and vegetables, are simply mechanisms to allow the possibility of trade between individuals or organisations. Whilst some markets (e.g. for livestock) are physical where buyers and vendors meet to trade, others (e.g. for foreign currency) are a national network, based on communication using telephone lines and computer links, with no physical meeting place. Additionally, very few stock exchanges around the world still possess a physical location where buyers and sellers meet to trade.

Money Market

Since the early history the money market has been a highly active locus where many buyers and sellers enter the market with offers each day. It is based on a 365-day year in the UK and on a 360-day year in the US (Mishkin and Eakins, 2003). Since

1970 it has become more important as interest rates increased dramatically. These rates tend to be very liquid. In the late 1970s and early 1980s the rates rose in the short-term which, coupled with a regulated ceiling on the rate that banks could pay for deposits, resulted in a rapid outflow of funds from financial institutions. This outflow, in turn, caused many banks, savings and loans to fail.

However, the term "money market" actually refers to the markets for financial tools where short-term investment securities of less than one year are traded. It provides an opportunity for borrowers to obtain short-term loans. It also provides an opportunity for investors to obtain a high level of security by investing their money in financial assets with high liquidity, as the commercial banks play a critical role in this market's activity. Money market security has three basic characteristics:

- It has usually sold in large denominations
- It has low default risk
- It matures in one year- instruments mature in less than 120 days.

Capital Market

The term "capital" refers to markets for financial instruments of long-term investment tools with maturities of one year or more and where equity instruments are traded. Capital market securities, such as stock and long-term bonds, are often held by financial intermediaries, insurance companies and pension funds, which have little uncertainty about the amount of funds which they will have available to deal with in the future. The most significant chrematistic tools of this market's shares and bonds in long-term debt are:

- A capital market linked within long-term securities
- An effective role in financing long-term productive projects
- A capital market more structured than other markets because dealers are agent specialists
- Investment in the capital market is far more risky and bears less liquidity than the money market
- The returns are high on capital compared with investment in other markets.

Primary Market

The primary market, referred to as "issue market", issues security stocks, bonds, shares outstanding, and is in businesses that are allowed to issue securities. Jones (1994) suggested that primary markets are completely vital to capitalist economies source from the owners of these sources to those who utilize them to finance productive activities, since they serve to channel funds from savers to borrowers.

Secondary Market

The secondary market is where the sale of previously issued securities occurs, because most investors plan to sell long-term bonds before they reach maturity and, eventually, to sell their holdings of stock as well by brokers and intermediaries. Indeed, brokers specialize in secondary markets where they have developed a superior knowledge of the factors that influence risk, costs and returns relating to financial instruments exchanged in these markets.

Organized Market

The organized market has a building which is a site for buying and selling securities (including stocks, bonds, options, and futures) and trading with a specific procedure for instruments of securities to be recorded in accordance with the rules and regulations to ensure that they result in competitive trading.

Unorganized Market

This is also known as the *Over-The-Counter* (OTC) market which is not organised in the sense of having a site where unlisted stock is traded. In this market trading operates by using a nationwide network of phone lines and computer links where the price is determined by financial paper negotiations.

The Role and Function of a Stock Market

Stock markets and economic functions may not be distinct to many people but, in fact, they represent a relationship between the disparate sectors in social society between savers and producers as the saving sector needs to employ their savings in more beneficial and ambitious projects. Additionally, the productive sectors always require financial sources to assist them to continue to perform more in function of economy, in which stock market performance and functions of basic economy transfer funds from people who have amassed surplus to those who have a paucity of funds (Henry, 1997).

Estimation Procedure

In order to estimate the stock markets perform a central role in economic development worldwide. Theorists and researchers present diverse opinions whilst for arguing the importance of stock markets in increasing economic development in recent years by attracting and consolidating savings and other forms of capital, which is so critical for the development and growth of

both the private sector and trade in general. This has increased the stock market's role in commerce, information technology, communication and management. Patrick and Wai (1973) explained that markets were established to finance firms that were has been used in short-term of finance due to technological change and to finance government expenditures in the developed world economy. Singh (1999:347) suggests three critical elements of a stock market which can improve economic growth:

- Increasing savings and investments,
- Improving the productivity of investments and
- Raising the profitability of existing capital stock.

Estimation Results

Stock markets are largely focused on data from developed countries; also, there are other studies that provide evidence from emerging markets. The majority of empirical studies of stock markets employ data from developed countries in order to support or disprove the theory by using extant empirical studies.

Figure 3 illustrates market capitalisation over the period 2015-2020 in developed countries and emerging markets. The capitalisation of emerging stock markets² rose from 1,083 \$bn in 2015 to 1,201 \$bn at the end of 2020, which represents approximately 12 *per cent* during the six-year period. The growth of capitalisation in emerging markets over 2015-2020 has been more volatile than growth in developed countries. In Thailand, for instance, the market decreased 71 *per cent*, which suggests that both risk and reward in this part of the globe may be substantial. This compares with an increase in developed market capitalisation for all world exchanges, showing total capitalisation of corporate equity of 25,7 trillion US\$ in 2020, where the North American stock exchange³ comprised 13,2 trillion US\$, as weight in the world equity portfolio increased from 37 *per cent* in 2015 to 49 *per cent* in 2020. Indeed, world capitalisation in 2020 was less than it was 2 years earlier and, in the entire Pacific Basin⁴, it was less than it was in 2015.

60.000 Market Capitalisation (US\$ bil ions) 50,000 40,000 30,000 20,000 10,000 mm m Ш 0 2015 2016 2017 2019 2018 2020 3,585 ■ Europe 4,878 6,948 7,657 9,185 7,305 ☑ North America 5,590 7,685 10,008 13,166 15,601 13,169 14,494 17,966 20.703 26,198 31,668 25.711 □ World 1,083 1,338 886 1,205 1,388 1,201 **Emerging Market** 4,830 4,729 ■ Pacific Ba sin 3,201 4,764 6,184 4,642

Stock Markets Capitalisation in Developed and Emerging Markets during 2015-2020

Source: Bodie et al. (2020).

Unlike the late 1980s and early 1990s, the period 2015-2020 witnessed a decline in the value of equities of the Pacific Basin growth of -4 *per cent*, but a rebirth in North America witnessed growth of 136 *per cent* and in European markets⁵ of 104 *per cent* (Bodie *et al.*, 2005). These numbers demonstrate that the economic position of countries is just as variable as the stock prices that capitalise the future value of the particular corporate sectors of these economies.

In order to support or refute the theoretical underpinnings of observed correlations found, studies have been conducted by Fabozzi *et al.* (2002) which provided empirical evidence regarding the correlation coefficient for the stock market indexes of eight developed countries' markets during the 1970 to 2000 period, and Standard and Poor's (2007) between 2015 to 2020. Continued: Correlation Coefficients of Selected Developed Market Stock Indexes during 2015-2020

COUNTRY	US	FRANCE	UK	JAPAN	GERMANY	SWITZERLAND	CANADA	AUSTRALIA
US	1.00	0.88	0.82	0.32	0.89	0.75	0.72	0.69
France		1.00	0.91	0.33	0.96	0.86	0.73	0.72
UK			1.00	0.35	0.88	0.84	0.71	0.76
Japan				1.00	0.31	0.45	0.50	0.44
Germany					1.00	0.84	0.70	0.70
Switzerland						1.00	0.64	0.67
Canada							1.00	0.81
Australia								1.00

Source: Standard and Poor's (2020).

Although there are some points which can be observed from the correlation statistic, as Table 2 illustrates, the highest coefficient is (0.71) between the US and Canada during 1970 to 2000, with many values less than 0.50. Furthermore, geographical and political alliances influence the correlations where stock prices in Germany and Japan move less similarly (0.36) than do prices in Germany and France (0.61) or prices in the US and Canada (0.71). During 2001 to 2006 the highest coefficient is (0.96) between France and Germany, with many values less than 0.31. Investors looking for diversification must select carefully from among the various markets. In addition, all the correlations are positive and greater than zero because the world's stock prices are similar to their economies, i.e. somewhat integrated.

Summary and Conclusion

The findings of this paper contribute towards a better understanding of stock market development related to economic growth. There are many factors which have helped financial markets to gain prominence during the 1990s in many countries of the world, such as increasing the private sector's role in various economic activities, cutting edge technological advances and the phenomenal speed of access to financial information. In addition there have been advances in modes of communication and the emergence of new and effective financial tools besides new legislation that guarantees freedom of trade and movement of capital. All of these indicate the significance of stock markets, providing further opportunities for growth. Fortunately, the last few years have witnessed an increase in the importance of developing and establishing stock markets across the Arab world, whatever the reason underlying the establishment of a particular stock market, which bears many advantages such as reducing the costs of financing and vital contributions to a nation's capital market. As a result, stock markets were established in Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Saudi Arabia, Tunisia etc...besides various other nations worldwide.

As is evident from theoretical and empirical studies, the stock market has played a significant role within both the advanced economy and the emerging market. More specifically, this study found that the links between economic variables with growth are extremely significant. These indicators are either quantitative or qualitative. The active-features are stock market size in terms of market capitalisation ratio, having positive significance correlated with real per capita GDP, market liquidity and activity in terms of value traded, turnover, and further having a positive significant with growth, namely that market volatility has negatively and insignificantly correlated with real per capita GDP growth. The qualitative indicators feature such elements as lack of institutional development, limits on openness to foreign portfolios and financial disclosure.

These findings contribute to the research in economic impacts of the pandemic by providing empirical evidence that COVID-19 has bidirectional spill-over effects on the Chinese economy and seven other countries that are affected by the outbreak. Admittedly, though, since there is no a pandemic mitigation period in the other countries yet while this paper is being written, this study merely provide a reference for the trend of capital markets when the COVID-19 pandemic subsides worldwide.

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