THE DYNAMICS OF CAPITAL MARKET DEVELOPEMNT IN ZIMBABWE

KunofiwaTsaurai*, NM Odhiambo**

Abstract

This paper takes stock of the achievements, the trends, as well as the challenges facing the stock market development in Zimbabwe. The study has been motivated by the recent debate on the role of stock market development in economic growth in developing countries. Apart from highlighting the role of stock market development, as well as the efficacy of the stock market in bolstering economic growth in Zimbabwe, the study also pinpoints some of the factors that limit the stock market development in Zimbabwe. The findings of this study show that the experience of Zimbabwe with stock market development, just as in many other developing countries, is mixed. In particular, the positive influence of stock market development on savings and investment remains low in Zimbabwe. While stock market development has been increasing, the country's gross domestic savings and investment have been low and subsiding. This suggests that Zimbabwe's gross national savings could be stock market development inelastic.

Keywords: Capital Market, Zimbabwe, Zimbabwe Stock Exchange, Savings, Investments

*Department of Banking, Risk Management and Finance, University of South Africa, P.O Box 392, UNISA, 0003, Pretoria, South Africa

Email: tsaurk@unisa.ac.za; kunofiwa.tsaurai@gmail.com

**Department of Economics, University of South Africa, P.O Box 392, UNISA, 0003, Pretoria, South Africa

Email: odhianm@unisa.ac.za; nmodhiambo@gmail.com

1. Introduction

The growing importance of stock markets around the world has reinforced the belief that finance is a vital ingredient for economic growth. Although there have been numerous studies analyzing the role of stock markets in economic growth, most of them have focused on developed¹² economies, and very few have focused on less-developed countries. However, the studies on the role of the stock market in economic growth have typically excluded Zimbabwe, which is somewhat distinct from other less-developed countries – for a range of reasons¹³, which include economic crisis characterized by political instability, high unemployment and high inflation rate from 2000 to 2008. These conditions actually repelled the international investment community from the ZSE.

In this paper, we extensively explore the role of the Zimbabwe Stock Exchange (ZSE) in the economy of Zimbabwe for the period 2000 to 2010. According to the IFC (1998), the proliferation of stock exchanges in Africa indicates that a number of countries, including Zimbabwe, now consider stock exchange as The results from this study will be valuable, not only to policy makers through strengthening their policy decisions to attract more investors, but also to academics — by providing them with empirical evidence on the relationship between stock market development and economic growth. The rest of the paper is structured as follows: Section 2 gives an overview of the role of stock market development in Zimbabwe. Section 3 presents the trends of stock market development in Zimbabwe, while section 4 deals with the challenges facing stock market development in Zimbabwe. Section 5 concludes the study.

one of the strategy intended to develop national, and regional economies. The large amount of academic and policy research interest shown over the past decade in promoting stock market development in African countries is an indicator of its untapped contribution to economic growth potential. This paper – apart from highlighting the role of stock market development in Zimbabwe and those factors that are limiting the ZSE from effectively mobilizing its resources -- will provide insight into the effectiveness and efficiency of the Zimbabwe Stock Exchange in shaping economic growth in Zimbabwe.

¹² Most of these studies have used the empirical research methodologyand no case studyapproach.

¹³The fact that the stock market has been upward in nature, when the economy is not doing so well, indicate that some problems still exist.

2. The role of stock market development in Zimbabwe

Makina (2009) pointed out that the role of stock markets in economic growth processes is to help companies raise finance through the issuing of shares, and providing a secondary market for trading of those shares. Zimbabwe has been fortunate in having such a stock market for many decades¹⁴. According to the World Bank (2007), there is now an overwhelming body of empirical evidence that stock market development plays a pivotal role in economic growth through the mobilisation of savings, and by providing the financial resources required for investment.

Recent empirical work by N'Zue (2006), Mohtadi and Argawal (2004), Caporale, Howells and Soliman (2004), Liu and Sinclair (2008 pp 507), Yu, Hassan and Sanchez (2011), Dan (2006), Agrawalla and Tujeka (2007), Erdem, Gozbasi, Ilgun and Nazlioglu (2010), Nazir, Nawaz and Gilani (2010), Choong, Baharumshah, Yusop and Habibullah (2010), Tachiwou (2010), Caporale, Howells and Soliman (2005), Levine and Zervos (1998), (Azzam,1999) and Nevin (1997), among others, concur that stock market development spurs economic growth.

In this section, the role of stock market development in Zimbabwe will be respectively discussed under the following headings: a) The role of the ZSE in the mobilisation of foreign resources for the economy; b) analysis of sectoral financial resource allocation through ZSE; c) the frequency of raising equity finance by companies listed on the ZSE; and d) analysis of the contribution of the ZSE towards the mobilisation of national savings

(a) Foreign resource mobilization through the Zimbabwe Stock Exchange

Following the opening of the ZSE to foreign investors in 1993, portfolio inflows rose from nil in 1993, to US\$23.6 millionin 1998. The ZSE was able to attract positive foreign resources into the country between 1995 and 1998¹⁵. This inflow was, however, shortlived, as the trend in foreign resource flow was reversed from 1999 to 2003¹⁶. Portfolio inflows declined, as shown by the increasingly negative net balances from minus US\$9.5 million in 1999 to minus US\$10.6 million in 2003, reflecting capital flight as a

result of unfavourable macroeconomic climate (see Figure 1).

According to the RBZ (2005)¹⁷, the decline in foreign, non-debt equity flows (both Foreign Direct Investment and portfolio investment) negatively impacted on the economy and the country's balance of payment position. As a result, the capital account, which had historically been a surplus account, recorded deficits from 2000 up to 2011. The net portfolio outflow of funds from the ZSE compounded pressure on the country's external position, thus limiting the ability of the ZSE to attract foreign resources. The decline in portfolio inflows has been mirrored in declining domestic investments from 15.1% of GDP in 1997 to 10.2% of GDP in 2002. The dismal foreign resource mobilization (see Figure 1) by the stock market in Zimbabwe indicates that the stock market failed¹⁸ to attract foreign savings from investors, contrary to the widely held belief that opening the stock market would enable a country to tap into foreign resources.

According to ZSE statistics, net foreign resource inflows through ZSE dropped by 1319% from US\$ 0.866 million in 2000 to a negative US\$ 10.553 million in 2003. The period from 2003 to 2005 saw net foreign resource inflows through the ZSE improving from a negative US\$ 10.6 million in 2003 to a negative US\$5.16 million in 2005, representing a 51% increase. The improvement in the net foreign resource inflows through ZSE continued as slight increase was registered from a negative US\$5.16 million in 2005 to a positive US\$ 2.61 million in 2006, representing an increase of 151%. The year 2009 saw huge net foreign resource inflows to the tune of US\$146.4 million being recorded at the ZSE in response to a more politically and economically stable environment after the formation of an inclusive government. Net foreign resource inflows through the ZSE recorded a marginal increase of 1% from US\$146.4 million in 2009 to US\$147.4 million in 2010. However, a significant increase of 11% in 2011 saw net foreign resource inflows through the ZSE jumping upwards to US\$164.2 million.

¹⁴ ZSE is a relatively well-developed stock market with 80 listed companies, which achieved a market capitalisation of 153.6 percent of GDP in 2010, ahead of the median of 14.3 percent of low income sub-Saharan countries.

¹⁵During this period, the stock exchange was a capital importer, although the figures were generally low.

¹⁶From year 1999 to 2003, the ZSE became a net capital exporter of portfolio funds as foreign participation on the ZSE fell, according ZSE statistics.

 $^{^{17}\}mbox{Reserve}$ Bank of ZimbabweMonthly Bulletin for September 2005.

¹⁸As a result of limited foreign participation, the ZSE failed to act as a conduit through which improved reporting standards and the required technological expertise could be mobilized.

Amount in US\$

Year

Figure 1. Analysis of net foreign resource flows (US\$ Millions) through portfolio investments into ZSE

Source: Primary data

(b) Analysis of the sectoral allocation of resources through ZSE

The manufacturing sector was the second largest contributor to GDP (17.9%) during the decade 2001 to 2010 (see Figure 2); yet the sector has been on the decline, due to a number of constraints – mainly financing costs. Despite its significance to the economy of Zimbabwe, the manufacturing sector was only able to mobilize 14.41% of the total funds raised through the ZSE. The transport and tourism sector made a significant total contribution to the economic activity through linkages with other sectors; yet they only managed to mobilise 2.62% and 0.4%, respectively, from the stock exchange (see Figure 2).

The major beneficiaries of the funds mobilized through the stock exchange were the financial and insurance sectors. Banks and insurance companies dominated the fund mobilization activity at the ZSE, alone accounting for 42.52% and 29.1%, respectively, and a combined 71.6% of the total equity raised; yet these sectors represented only 8% of the total listings on the ZSE at the end of 2011.

(c) The frequency of raising equity by companies listed on the Zimbabwe Stock Exchange

Figure 3 presents an analysis of the distribution of the frequency with which ZSE listed companies called on their shareholders to shore in more funds through rights offers and/or initial public offerings for the period 2000-2010.

The above analysis reveals that only 37.07% of the ZSE listed companies raised funds through the ZSE during the period 2000 to 2010. A period of eleven years is a long enough period, and it shows that the other 62.03% of the ZSE-listed companies

¹⁹ Transport and tourism sectors combined contributed 23.2% of GDP during the period 2001 to 2011.

relied on other sources of finance besides equity finance. A total of 29.11% ZSE listed firms raised funds through rights offer and initial public offers just once, while 7.59% sought capital from the stock market twice. Only Zimnat Lion Insurance Company raised capital from the ZSE three times from 2000 to 2010. Most of the companies listed on the ZSE through unbundling, 20 never had any direct cash flow benefit from their listing on the stock market during the same period.

This reveals that even listed companies placed little reliance on the ZSE as a source of capital for growth²¹. This was confirmed by Singh and Hamid (1992), whose research found that 57% of corporate growth for the top ZSE listed companies was financed internally. A brief look at the reasons why some companies raised funds through rights offers clearly shows that the companies use the stock exchange – not because they want to expand operations – but for special viability reasons.

(d) Analysis of the contribution of the ZSE towards the mobilisation of national savings

As indicated by the ratios reported in Figure 4, the proportion of national savings mobilized through the Zimbabwe stock exchange from 2000 to 2010 was very low²². The percentage contribution of the ZSE to savings was 5.1% in 2001; it declined to 3.7% in 2002, before it went up in 2003 to 5%.

²⁰ Unbundling is a process whereby large conglomerate companies break into their various subsidiary companies, which then list separate from the parent company.

²¹ The growth in assets of the companies has over the years for the listed companies been to a lesser extent financed by equity.

²² The percentage contribution towards national savings ranged from as low as 0.3% in 2004 to a peak of only 5.6% in (2008), according to the ZSE statistics.

The average percentage contribution was 2.8% over the period 2000-2010, with the highest ZSE contribution towards national savings of 5.6% being recorded in 2008. The ratios remained subdued between 2004 to 2010, with the average ZSE contribution to national savings being 2.3% during this period. This illustrates that the equities market has played a limited role in attracting savings, as compared with other financial institutions and other sectors of the economy. The absence of an equities culture during the period 2000 to 2010 resulted in less funds being saved through the purchasing of securities, as compared with savings in other financial institutions, such as banks.

80% 70% % raised from ZSE 60% % Funds Raised / % to GDP ■ % contribution to GDP 50% 40% 30% 20% 10% 0.3% %0.0 0% Agric Manf Mining Fin & Insu Real Est Tourism Trans Health

Sector

Figure 2. Sectoral distribution of cumulative funds mobilized by the ZSE from 2001 to 2011

Source: Primary Data



Figure 3. The frequency of raising capital by companies listed on the Zimbabwe Stock Exchange

Frequency 0

Source: ZSE Publications

10%

0%

20%

30%

40%

Percentage

50%

60%

70%

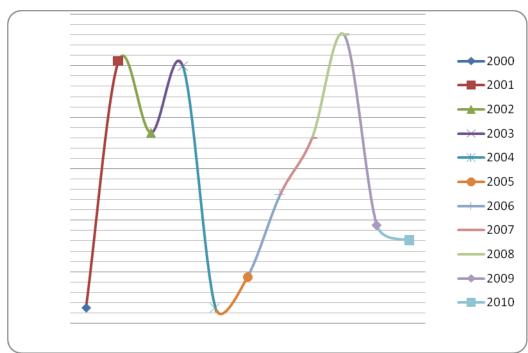


Figure 4. Contribution of Zimbabwe Stock Exchange (%) towards national savings from 2000 to 2010

Source: Primary data

The share of equity finance in the total corporate finance of the economy has been low; and the growth of savings, investment, industry and the economy has not been very much dependent on the primary market activity on the ZSE. According to Makina (2009), very little activity of the ZSE, as gauged by the volume of market activity has been to do with the translation of savings into corporate investment and economic growth, but speculative activities.

(e) Analysis of the availability of stock market finance to small to medium-scale enterprises

The small-to-medium scale sector in Zimbabwe continues to assume an increasingly significant role in terms of employment creation and contribution to national employment²³. The total employment is estimated at 3.8 million people; and it contributes about 15% to GNP²⁴. The growth in small-to-medium scale enterprises thus forms a central component of the country's strategy for economic growth and development; yet this small-to-medium scale sector has been constrained by limited access to equity capital on the ZSE (RBZ, 2005).

The classification of listed companies by market capitalization shows that there is no small-to-medium scale enterprises listed on the stock exchange. Even the low capitalized companies cannot be categorized

as small-to-medium scale enterprises, as they are well- established companies. In Zimbabwe, indigenous companies, which tend to be small and medium-sized, so far have made relatively little use of the stock exchange, in part because they lack experience and resources for issuing shares, but also because of stringent listing requirements²⁵, which are applied to all companies, irrespective of size.

Contrary to the assertion by Allen and Gale (2000), that stock market finance becomes handy to those firms which cannot access loan finance from banks, it is stock market finance to which agriculture and small-to-medium enterprises are denied access. Activities on the ZSE are entirely urban-based, thus failing to tap the resources necessary for the SMEs and largely agro-based rural people. Banks and other financial institutions such as micro finance institutions are the usual sources of finance for these disadvantaged economic sectors in Zimbabwe.

 $^{^{23}\}mbox{Reserve}$ Bank of Zimbabwe Annual Review Report (2005).

²⁴Reserve Bank of Zimbabwe Annual Review Report (2005).

²⁵ According to the ZSE 2012 handbook, the listing requirements consist of one million shares with a value of not less than US\$500 000, a minimum of 30% of the issued equity capital being offered to the public, compliance with the requirements of the Exchange by the company's Memorandum and Articles of Association (regardless of whether this is a legal requirement), the existence of a spread of shareholders wide enough to justify the listing (a minimum of approximately 300 shareholders), provision of the name, history and description of the company's interests and activities, a report by the company's auditors for the last five financial years, forecast earnings and dividends,details of share capital structure, loan capital and borrowing powers.

3. The trends of the stock market development in Zimbabwe

The Zimbabwe Stock Exchange (ZSE) comprised 57 listed companies by the end of 1990, with a total market capitalization of US\$2,4 billion; and it was ranked 6th in 1999, out of the 33 emerging capital markets in the world, by the IFC²⁶.Foreign participation at the ZSE trading, which was introduced in mid-1993, following the partial lifting of exchange control regulations²⁷, saw annual turnover²⁸ going up from US\$53 million in 1990 to US\$150 million in 1995, representing an increase of 184.61%.

The listing of Ashanti Goldfields in 1996 brought a major excitement in the economy that saw the industrial index going up, and further pushing up market capitalisation to US\$3,64 billion by December 1996. This was a significant jump from US\$2,04 billion by the end of 1995 (see Figure 5).

In response to the liberalisation of the Zimbabwe economy, the number of new listings that took place during 1996 increased, bringing the total number of listed companies to 64 by the end of 1996. ZSE market capitalisation increased by 240% in US dollar terms from 1989 to 1996, the boost coming partially as a result of the relaxation of controls on foreign investment. The increasing activity led to a 528% rise in annual turnover, from US\$39 million in 1989 to US\$245 million in 1996. The number of listed companies at the ZSE increased from 64 in 1995 to 69 in 2000, whilst stock market capitalization went up from US\$2.04 million to US\$2.4 million during the same period, representing a growth of 19.35% in percentage terms (World Bank²⁹).

Despite an increase by 14.49% in the total number of companies listed on the ZSE from 2000 to 2005, stock market capitalization decreased by 1.26% 30 during the same period.

According to Makina (2009), the ZSE offered investors the highest returns in Africa in 2005 and for

most of 2006, despite a deep economic recession in Zimbabwe. He further noted that the ZSE was a relatively well-developed stock exchange, with 80 trading firms, which achieved a market capitalization of over 40 percent of GDP in 2005. Makina (2009) further observed this was higher than the median of 14.3 percent of low-income sub-Saharan African countries, but still lower than that of South Africa, which recorded over 200 percent.

There was a marginal increase of 2.53% in the total number of companies listed on the ZSE, from 79 at the end of 2005 to 81 at the end of 2010. During the same period, stock market capitalization³¹ went up by 61.74%³² to reach a US\$3.89 million mark by the end of 2010, whilst the annual turnover went up 19%, from US\$329 million to US\$392 million.

According to ZSE statistics, the industrial index dropped 54 percent, whilst the mining index went up by 175 percent from 2001 to 2003 (see Table 1). The period from 2003 to 2005 saw both industrial and mining index going up from US\$65.83 to US\$184.84 (representing an increase of 181 percent) and from US\$20.91 to US\$64.5 (an increase of 208 percent) respectively. The superb performance of the ZSE continued during the period from 2005 to 2007, which saw the industrial index further pushing up by a 589 percent, whilst the mining index also went up by a massive 2343 percent to reach 1575.51 points.

The period from 2007 to 2009 was characterized by an 88 percent decline in both the ZSE industrial and in the mining index. The ZSE performed poorly in 2010, with the industrial index closing, at 151.27 points, 0.47 lower from the beginning of the year versus a 52.0% gain for the year in 2009. Year to date for 2010, the industrial index moved up a mere 6.8% (ZSE³³: 2010). Table 1 shows trends of the ZSE industrial and mining index from 2001 to 2011 on a two year interval.

²⁶ Kingdom Stockbrokers Zimbabwe (Pvt. Ltd) publication (1999)

²⁷Foreign investors may hold up to 10% of any listed company without recourse to Exchange control. Collectively, foreign ownership in a listed company may not exceed 40% of the issued share capital. These rulings exclude holdings which were acquired before June 1993.

²⁸World Bank Global Statistical Indicators 2011.

²⁹Standard & Poor's, Global Stock Markets Factbook and supplemental S&P data.

³⁰ According to the RBZ, (2004), the ZSE has turned into an explosive source of wealth creation being derived from mere trading of paper without injecting significant cash flows into the underlying listed companies. As a result, ZSE has been bringing little benefit to the real economy. Instead of positively contributing to economic growth, the ZSE has been used as a vehicle for externalizing foreign currency through arbitraging of dual listed shares (RBZ: 2004).

³¹World Bank Global Statistical Indicators (2011).

³² The significant increase in market capitalization was due to renewed interest on the ZSE, following political and economic stability in the country that was realized from February 2009.

³³Zimbabwe Stock Exchange Annual Review, 2010.

Year ZSE market...

Figure 5. Trends in ZSE stock market capitalisation and annual turnover from 1988 to 2010 on an annual basis

Source: Derived from World Bank Global Statistical Indicators (2011), Zimbabwe Stock Exchange and Zimbabwe Statistics Agency

Table 1. Trends of the ZSE industrial and mining index from 2001 to 2011

| Year | ZSE Industrial index (US\$) | ZSE Mining index (US\$) |
|------|-----------------------------|-------------------------|
| 2001 | 141.7 | 7.6 |
| 2003 | 65.8 | 20.9 |
| 2005 | 184.8 | 64.5 |
| 2007 | 1274.4 | 1575.5 |
| 2009 | 152.0 | 186.0 |
| 2011 | 145.9 | 100.7 |

Source: Zimbabwe Stock Exchange Statistics

The ZSE shed about US\$300 million³⁴ in year 2011, as investors fretted about the implementation of the indigenization and empowerment regulations, including the illiquid conditions of the local money market. The mining sector took a major hit and the mining index consequently declined 49.8 percent from 2011 to 100.7 points, whilst the industrial index dropped 3.6 percent to close 2011 at 145.86 points.

4. Challenges facing stock market development in Zimbabwe

Seven factors are at play in explaining the ineffectiveness of the ZSE in promoting economic growth in Zimbabwe. These include weak regulation and supervision, unethical practices, restricted and thin trading, structural and organizational imbalances in the operation of the ZSE, lack of diversity in the type of securities offered and speculative tendencies, as previously discussed.

There is relatively weak regulation supervision of listed companies on the ZSE, and reliable financial information is generally disseminated. Unethical practices of a diverse nature on the part of listed companies, entrepreneurs, brokers and other operators in the market characterize the working of the ZSE more directly, as a result of weak regulation and supervision. Mergers and acquisitions being entered into through malpractices, for example the merger between CFX and Century was characterized by misrepresentation of information, which resulted in failure of the deal and the placement of CFX under curatorship in December 2004. Other malpractices on the ZSE include excessive insider trading, the stealing of shares, rigging up premium on new issues, and trading in fake shares. As a result, an almost complete lack of protection of interest of genuine and small investors has resulted in the malfunctioning of the ZSE.

Another challenge is that trading on the ZSE is thin and restricted. The number of listed companies is only 81, of which only about 10 are on-the-run stocks (companies actively traded). Daily trading is extremely low, so that stocks, such as PPC, Biccaf, and Caps among others, can go for months without any shares changing hands. According to Makina (2009), while foreign participation is allowed on the ZSE, it is limited to 40% percent of the total equity, with a single foreign investor being allowed to acquire a maximum of 10 percent of shares. In addition to limiting foreign investment, the rule has the effect of lowering liquidity – given that foreign investors have more liquidity in foreign currency than domestic investors, argued Makina (2009).

According to Petersen (2002), there is no secondary market for government debts in Zimbabwe, because of the prescribed asset requirements of the government, which result in institutional investors, who are the main investors, adopting a buy-hold strategy, rather than making use of trading strategies. Investors on the ZSE lack choices of instruments through which they can save their finances. The absence of complementary markets, such as futures, forwards and options market has limited the ability of investors to effectively spread their portfolio risk. This has also limited the ability of the stock exchange to attract investors' savings, which were directed mostly to the money market, considered to be less risky. Furthermore, the ZSE, according to Makina (2009), is still being negatively affected by the deep recession that has gripped the country since 2000 – to the extent that it is not yet able to play the role of being a leading economic indicator of the economy, but rather has been a vehicle for speculative activities.

There are also structural and organizational imbalances in the operation of the ZSE. Stock market activity is mainly based in Harare, where the exchange is located with little trading in other cities like Bulawayo and Gweru. All stock broking firms are centred in Harare, except for Imara and Kingdom, which have subsidiary branches in Bulawayo. Thus, the stock exchange has failed to tap the resources on offer from the vast rural economy and from smaller towns.

5. Conclusion

This paper has examined the role and progress that the ZSE has made in contributing to economic growth in Zimbabwe. The study has also discussed some of the challenges facing stock market development in Zimbabwe. Considering the ongoing debate on the merits and demerits of stock market development, several conclusions and policy recommendations are

³⁵Indigenisation and Economic Empowerment Act provides for a 51 percent local ownership in all foreign firms operating in Zimbabwe.



Makina also cited the Indigenization and Economic Empowerment Act (No. 14 of 2007)³⁵ as having a long-term adverse effect, in as far as foreign investors' participation on the ZSE is concerned. The Zimbabwe stock exchange lacks diversity in the type of securities it offers, which makes it predominantly a common stock market. There is no market for industrial debentures, which has limited effectiveness of the stock market in mobilizing debt finance for companies. The absence of government, local municipality and infrastructure companies' securities is somewhat more surprising, given that these sectors, in Zimbabwe, are cash-strapped of longterm capital. The stock exchange has not been of any use to the government in terms of raising funds, as there is no secondary market for these securities.

³⁴ZSE Performance Annual Review Report (2011).

applicable to Zimbabwe. Firstly, the experience of Zimbabwe with stock market development, as in many other developing countries, has been mixed. In particular, the positive influence of stock market development on savings and investment remains low in Zimbabwe.

While stock market development has been increasing, the country's gross domestic savings and investment have been low and subsiding. This suggests that Zimbabwe's gross national savings could be stock market development inelastic, and that the stock market development in Zimbabwe could be only re-allocating the existing financial resources in favour of a market-based financial system. The government, through the stock market regulatory agencies and participants should pursue adequate sensitisation of the public on benefits derivable from investing in the stock market. Effective supervisory and regulatory measures should also be put in place to prevent unethical practices by the stock market operators, implying that all aspects of the financial services sector must begin to reflect transparency and honesty in all their dealings.

References

- Agrawalla, R.K., and Tuteja, S.K., (2007). Causality between stock market development and economic growth: A case study of India. Journal of Management Research, Volume: 7, Issue: 3.
- 2. Allen, F. and Gale D. (2000). "Comparing financial Systems." Cambridge, Mass: MIT.
- Azzam, H.T., (1999). Arab stock markets: Country by country analysis and review, Middle East Executive Reports 22, 8.
- Caporale, G.M., Howells, P., and Soliman, A.M., (2005). Endogenous Growth Models and Stock Market Development: Evidence from Four Countries. Review of Development Economics, 9(2), 166-176, 2005.
- Caporale, G.M., Howells, P.G.A., and Soliman, A.M., (2004). Stock Market Development and Economic Growth: The Causal Linkage. Journal of Economic Development Volume 29, Number 1, June 2004.
- Choong, C.K., Baharumshah, A.Z., Yusop, Z., and Habibullah, M.S., (2010). Private capital flows, stock market and economic growth in developed and developing countries: A comparative analysis. Japan and the World Economy 22 (2010) 107-117.
- Dan, H., (2006). Effect of Stock Market Development on Capital Accumulation. Evidence from China

- Provincial Panel Data. School of International Business, Shaanxi Normal University, Xi'an 710062, China
- Erdem, E., Gozbasi, O., Ilgun, M.F., and Nazlioglu, S., (2010). Stock market and economic growth nexus in emerging markets: cointegration and causality analysis. International Journal of Business Forecasting and Marketing Intelligence Vol 1, Number 3-4/2010.
- Ezeoha, A., (2009). Stock Market Development and Private Investment Growth in Nigeria: Journal of Sustainable Development in Africa (Volume 11, No. 2, 2009).
- 10. International Finance Corporation (1998): Emerging Stock Markets Factbook, Wahington D.C. (1998).
- Levine, and Zervos (1998). Stock Markets, Banks and Economic Growth. American Economic Review 88: 537-558
- 12. Liu, X., and Sinclair, P., (2008). Does the linkage between stock market performance and economic growth vary across Greater China?, Applied Economics Letters, 15:7, 505-508.
- Makina, D., (2009). Comprehensive Economic Recovery in Zimbabwe Working Paper Series. Recovery of the Financial Sector and Building Financial Inclusiveness. Working Paper 5. United Nations Development Programme, Zimbabwe.
- Mohtadi, H., and Agarwal, S., (2004). Stock market development and economic growth: Evidence from developing countries, Oxford University Press, New York.
- Nazir, M.S., Nawaz, M.M., and Gilani, U.J., (2010).
 Relationship between economic growth and stock market development. African Journal of Business Management Vol. 4(16), pp. 3479, 18 November, 2010
- Nevin, T., (1997). Corporate Profile for Investors. Euro money Corporate Profile For Investors Ltd, London.
- 17. N'Zue, F.F., (2006). Stock Market Development and Economic Growth: Evidence from Cote D'Ivoure. The Author. Journal Compilation © African Development Bank 2006.
- Tachiwou, A.M., (2010). Stock Market Development and Economic Growth: The Case of West African Monetary Union. International Journal of Economics and Finance. Vol. 2, No. 3; August 2010.
- World Bank (2007), Making Finance Work for Africa.
 World Bank, Washington DC.
- Yu, J.S., Hassan, M.K., and Sanchez, B.C., (2011). A re-examination of financial development, stock markets development and economic growth. Applied Economics, 44:27, 3479-3489.