# G.G.A. Note...

Global Growth Advisors - Global Strategic Consultancy Group

# The Zimbabwean Economy - *The Prospects for Stock Market Automation…*

## Introduction

Dear Readers,

Over the last decade the Zimbabwean economy has experienced a drastic shift, from boom to the bust and back. Emerging out of a crisis, Zimbabwe is exhibiting signs of promising recovery and revived growth. The hyperinflation of 2008, which reached astronomical level of 23,000,000 percent halted the economy and halved the value of nominal national output. In 2009, Zimbabwe abandoned its own currency and set the American dollar and South African rand as its currency which contracted the ever growing money supply, bringing back confidence to the economy.

In this report our GGA Research Associate based in London, Amirali Motahari explains how it is believed that the automation of the Zimbabwe Stock Exchange can put the economy on a different growth path, moving from allocative efficiency to productive efficiency, in other words from 'static allocation' to 'dynamic allocation' of resources.

GGA has been advising clients in the Zimbabwe market in 2013 and will continue to expand its portfolio. For more information regarding GGA Portfolios do not hesitate to contact us.

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Over the last decade the Zimbabwean economy has experienced a drastic shift, from boom to the bust and back. Emerging out of a crisis, Zimbabwe is exhibiting signs of promising recovery and revived growth. The hyperinflation of 2008, which reached astronomical level of 23,000,000 percent halted the economy and halved the value of nominal national output. In 2009, Zimbabwe abandoned its own currency and set the American dollar and South African rand as its currency which contracted the ever growing money supply, bringing back confidence to the economy. The high interest rates (12 percent) triggered a 31 percent growth in domestic savings. The economy seems to be emerging out of the crisis stronger than ever, as manifested in country's impressive GDP growth of 7.3 from 2009 to 2011, surpassing Hong Kong growth record which only amounts to 5 percent in the respective period. Despite the unfruitful land reform widening the country's food gap, farm yields have started to improve. In fact, recent figures imply that Zimbabwean economy has been outperforming its Sub-Saharan counterparts, the Lion Kings - Angola, Chad, Ethiopia, Mozambique, Nigeria, Rwanda - turning Zimbabwe to a possible investment destination in near future.

However, before such assertion can be made, there is a need for reflection and a closer examination at the economy, particularly at the structural level. One needs to look beyond the promising figures to verify whether such impressive macroeconomic indicators are sustainable in the long run.

## Is Zimbabwe recent impressive growth sustainable?

With regards to the Zimbabwe's recent macroeconomic figures, three significant stylised facts deserve attention. First, government expansionary fiscal policies coupled with significant grants coming from the IMF and China, account for two third of GDP growth. Second, Western countries have significantly increased their grants. As a result, 9 percent of the GDP is comprised of foreign aid. Third, and most importantly, part of Zimbabwe's economic growth is due to an international boom in the price of mineral commodities. Zimbabwe's lack of export diversification and rising dependency on the export of raw mineral commodities - which are infamous for exhibiting little backward linkages with the rest of the economy - raise concern over the sustainability of the country's economic growth.

Over the first decade of the 21st century, there has been a number of factors that have affected Zimbabwe's export diversification. Firstly, since there existed a set of robust economic linkages between the agricultural and manufacturing sector, the negative impact of land reform which intensified since 2000, has been passed on to the manufacturing sector. A sizable share of the industrial sector (60 percent) has been reported to be dependent on either agricultural sector's supplies of inputs or demand for its manufactured outputs.

Secondly, there are a number of institutional obstacles that hinder the expansion of the economy and the manufacturing sector in particular. Despite the recent reforms, weak property rights and anti-capitalist sentiments are still haunting the economy. In 2011 it still took 90 days (reduced only by 7 days since 2005) for setting up a business in Zimbabwe, a significantly high time span compared to Rwanda, where entering the formal sector takes only 3 days. The shear size of Zimbabwe's informal sector affects the government tax collecting ability. This will have considerable ramifications for the Zimbabwean government, as its budget deficit has grown up to 6.5 percent of nominal GDP and will continue to widen.

Thirdly, following the dollarization of the economy in 2008, confidence has returned to the banking sector. The increase in the rate of saving has provided the banks with necessary means to provide capital for potential investors. However, the absence of a lender of last resort and an imposed conservative leveraging ratio of 30

percent, in most liquid form -cash- has rendered the banking sector more oriented towards provision of short term loans. The longest term for repayment of loan is 90 days, which renders the banking system biased against the manufacturing sector and more supportive towards the service sector. This is indicative of worsening of dynamic allocation of productive resources in the long run, as the manufacturing sector - a sector regarded as an engine for growth - will end up deprived of its much needed long term capital.[1]

The indigenization act of 2008, has been criticized by the IMF and World Bank as another obstacle to Zimbabwe's economic expansion. This policy has been portrayed as a major disincentive factor against attracting foreign capital and it believed to further deprive the economy of foreign direct and indirect investment inflows. However, this report refrains from sharing this view. We believe that the indigenization policy has been formulated with the intention of unbundling the FDI package, guarding the economy against footloose capital inflows, excess profit repatriation and financialization. It offers negotiation and collective bargaining power, tailoring foreign investment in a way that provides the economy and the manufacturing sector in particular, with the much needed commitment to long term investment, coupled with the possibility of technology diffusion and knowledge spillovers.

Much economic development in the Middle East and Africa has focused on developing natural resources such as oil, minerals, or lumber. But the greatest resource of the Middle East and Africa has remained largely untapped - the creativity of its people.

## Stock Market performance and economic development

It is important to separate the argument of attracting extra productive resources, i.e. foreign capital, from the effective mobilization and allocation of the already available productive resources in the economy. As discussed above, part of the recent relative shrinkage of the Zimbabwean manufacturing sector is attributed to the scarcity of long term capital due to the workings of the banking sector. As a result of dollarization, the banking sector is inherently unable to accommodate the expansion of the manufacturing sector and the provision of long term loans. However, it is indisputable that a developed and efficient stock market would play a pivotal role in compensating for this inherent shortcoming of the Zimbabwe's banking system.

Theoretically speaking, there exists a causal relationship between stock market development and economic growth which has been widely discussed in the literature. Levrine and Zevrose (1998) found a significant and positive correlation between stock market development and long run growth. More relevant to the argument above, Greenwood and Smith (1996), demonstrate that efficient stock markets lower the cost of mobilizing savings and facilitate the channeling of investments into the most productive technologies. Stock market development can also exert its positive effect on economic growth through the improvement of transparency and corporate governance. Improved stock market liquidity has been recognized as a key factor in assisting development and sustainability of growth.

This has significant implications, the lack of liquidity has been considered as a prevailing inhibiting factor in most of the African thin stock markets,[2] causing high market volatility. Some risk averse investors may prefer short term investments due to their preference for not relinquishing control of their savings for longer periods. Liquid and efficient stock markets, while accommodating the manufacturing sector with access to long term capital, provide assets to (risk averse) savers that can be easily liquidated at anytime. Mohtadi and Agarwal (2001) using

[1] [1] According to (Lo et al, 2011), allocative efficiency refers to a growth path that in every point in time, allocation of resources yields the maximum level of output-to-input ratio subject to constraints, while productive efficiency in contrast refers to a growth path that guarantees a continues increase in the output-to-input ratio. The latter is concerned with long run economic outcomes and the output-to input ratio may not be at its highest possible at one point in time. Chang (1999) refers to this distinction as Dynamic (long run) versus static (short run) efficiency.

[2] With the exception of Johannesburg stock market exchange (JSE).

a time series- cross sectional data for 21 countries from 1977-1997, show that stock market development indirectly promotes growth by increasing the market capitalization ratio.

## The Efficiency of Zimbabwe's stock market

The Zimbabwe stock market is classified as a medium size stock market next to Egyptian, Moroccan or Nigerian stock markets. Being established in 1946, it is regarded as one of the oldest African stock markets. However, numerous weak-form efficiency tests have rejected the probability of the ZSE to follow a random walk, thus rendering it inefficient[3] More importantly, using a test capable of tracking gradual efficiency changes in time has shown that the Zimbabwean Stock market shows no tendency towards eliminating inefficiency. Considering the inherent shortcomings of the banking sector in providing long term capital for Zimbabwean firms, the prevailing inefficacy in the ZSE can have significant repercussions for the expansion of the manufacturing sector, export diversification and sustainability of Zimbabwean economic growth.

Taking to account the inefficiencies associated with the ZSE, it is plausible to infer that Zimbabwe would benefit from a reform in its stock market microstructure. Greater mobilization of capital and efficiency in resource allocation would strengthen confidence in the economy, while reduction in transaction costs and information asymmetry would increase liquidity and confidence in potential investors, all leading to an efficient stock market with significantly reduced market volatility.

## Prospects of Automation

Perhaps the first step for Zimbabwe towards a more efficient stock market would be the automation of the trading system, which as an important institutional factor leads to higher weak form efficiency. It is believed that automation, would reduce transaction costs, increase trading activity (Turn over ration), market capitalization, liquidity and transparency. It would speed up operations and reduce costs associated with manual trading systems. It would also have an indirect impact on trading activity as it facilitates the extension of trading days and hours due to less cumbersome procedure. In addition, automation is regarded as a pre-requisite for regional integration of the african stock markets.

According to Jefferis and Smith (2005) both Zimbabwe and Kenya's stock markets, still operating under the outcry system, demonstrate no tendency towards eliminating inefficiencies. The importance of automation becomes more tangible upon realizing that four emerging stock markets that are moving towards weak-form efficiency - Egypt, Morocco, Nigeria and Mauritius - have all undergone stock market automation in year 2000, 1997, 1999, 2001 respectively.

Automation entails prohibitive expenses and could have significant budgetary implication for the Zimbabwean government. However, considering the short and long term benefits, any cost-benefit analysis would favor embarking on this project. Moreover, the proliferation of electronic communication networks (ECNs) and alternative trading system (ATS), the cost of automation is reducing.

## Summary

As discussed in the second section of this report, the inhibiting prevailing factors in the Zimbabwean economy, are considered as a threat to long run development and sustainability of Zimbabwe's recent impressive growth.

[3] For markets to be weak-form efficient, current prices must fully reflect all historical information. In an inefficient stock market prices do not reflect all available information, as a result stocks are not being appropriately priced at their equilibrium values (Jefferis and Smith, 2005).

However, improving the efficiency of the stock market can reverse the already started de-industrialization by providing long term capital for the manufacturing sector. It is believed that the automation of the ZSE can put the economy on a different growth path, moving from allocative efficiency to productive efficiency, in other words from 'static allocation' to 'dynamic allocation' of resources.

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### About G.G.A.

G.G.A. is a strategic consulting firm and the leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 2010, G.G.A. is a private company with locations in more than 20 countries. We seek to be agents of change—for our clients, our people, and society overall.