Can Botswana Optimise on Harnessing the Demographic Dividend?

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Abstract

Botswana has entered the window of opportunity as occasioned by the bulging labour force relative to those outside. This paper seeks to give a narrative of Botswana's population transition and drawing on international experience endeavour to calibrate the extent to which the country might be able to harness the dividend. To this end some variables that impact on the country's ability to enhance economic growth and development are analysed. The global competitiveness report has been the main source of data used. Graphical presentations have been the mode of analysis used to calibrate on the country's relative competitiveness in the attraction of Foreign Direct Investment (FDI). The country has shown a trend of a loss of competitiveness against other countries of late, a factor the authors argue could tanish the country's prospects of harnessing the dividend.

Keywords: Demographic Dividend, Economy, Investment, Population, Employment, Fertility, Mortality

Introduction

The Demographic Dividend concept

The Demographic Dividend (DD) refers to "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)". In other words it is "a boost in economic productivity that occurs when there are growing numbers of people in the workforce relative to the number of dependents". The DD has both demographic and economic ingredients. It is a concept which emphasises the potential benefits of the blend of both the increased working population and the economy, when such is alloyed with dexterous economic policy initiatives.

It is imperative to note that one of the major benefits of the dividend is in terms of declining dependency ratio. Such is a measure of the ratio of those not in the labour force per every member of the labour force. It is a measure of the economic burden, one could say. At best it overstates the burden more particularly in cases where those outside the labour force earn some income upon which others dependent on. At worst it underestimates the burden, more so in cases where those within the labour force are dependents themselves. This under or overestimation of the measure is indicative of the shortcomings of some of the measures used in economics. It is not that economists are incognizant of these deficiencies but rather they are the second best measures in light of the complexity of issues economists have to contend with, in particular their measurements.

A high dependency ratio as defined by the number of dependents or those outside the labour force who have to depend on a single member of the labour force, can cause serious problems for a country if a greater proportion of government's expenditure is on health, social security & education, upon which the youngest and the oldest in a population demand the most. A low dependency ration on the other hand is a boost in the quest to support schools, retirement pensions, disability pensions and other assistances to the youngest and oldest members of a population, often considered the most vulnerable members of society.

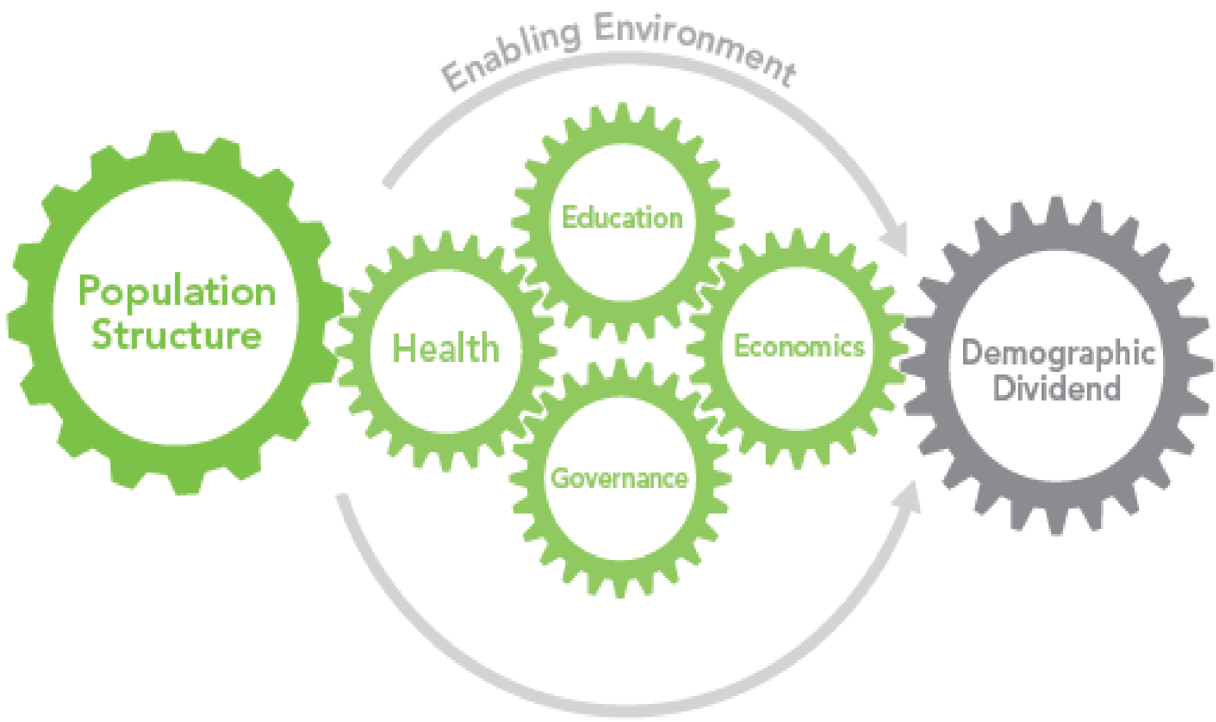
An idling labour force is a cost to the economy and could be paradoxical in light of the definition of economics. Economics is often defined as the study of limited resources in the midst of unlimited wants. The human resource which is not utilised is an indictment on this definition. It appears after all that resources may not be as limited as the definition would have us believe.

The lower dependency ratios and the resultant impressive growth rates and subsequent potential development help in the accumulation of wealth and savings. Such accumulations are key for sustenance when the current bulge translates into a greater old age population. A failure to capitalise on the dividend may prove quite detrimental when the population of the elderly bulges. Effective policy prescriptions and prudent economic interventions are necessary if a country is to capitalise on this window of opportunity and the role of government in this regard is invaluable.

The main purpose of this assignment is to endeavour an investigation into the likelihood of Botswana capitalising on the Demographic Dividend. To carry out this exercise, the authors seek to investigate the variables which are most likely to have an influential bearing on employment creation through investment promotion and in particular Foreign Direct Investment (FDI). The trend of some of the variables will be quite instrumental in guiding the analysis as to whether Botswana is likely or not to harness the DD. The paper is therefore intended to investigate the country's potential in realising the demographic dividend. It is meant to investigate the impediments to the realisation of the dividend and possible measures that the country can adopt with a view to enhance the potential for the realisation of economic benefits availed by this population transition. The paper may prove very helpful in aiding policy formulation intended to harness the dividend. The paper will conclude by suggesting possible economic measures which could possibly help in optimising on the dividend.

Literature Review and Theoretic Framework

Changes in population structure - resulting in changes in the dependency ratio (entry of a youth bulge in the workforce), accompanying investments in human capital (health and education), implementation of sound economic and governance policies, and sustained political commitment, are necessary to provide an opportunity for economic consequences. The harnessing of the demographic dividend is not automatic. Once the population dynamics have set in, they create the opportunity for economic advancement and wealth generation. The bulging employable population requires that opportunities for employment be generated. If such is attained the increased labour resource will help stimulate economic growth and possibly development. Whereas the decline in population growth requires the decline in both fertility and mortality, the realisation of the economic dividend requires the effective formulation and implementation of sound policies aimed at economic growth and development. For this to be realised particularly for resource poor countries, there would be a need for the necessary policy framework and conducive investment climate to be put in place. For the enablement of investment inflows in the economy to compliment the meagre existing resources. It is also important to note that as Todaro M and Smith (2012) put it, investment is driven by profitability more than the desire to fight economic ills such as poverty, inequality and unemployment.



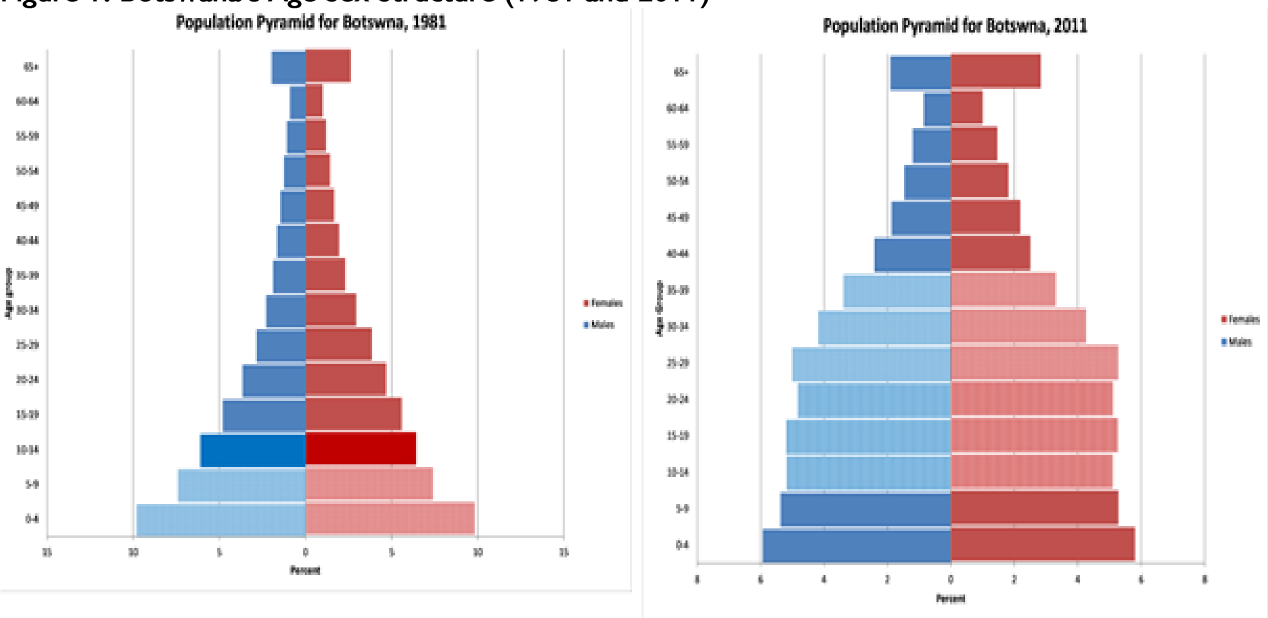
Source: *Adapted from Population Reference Bureau - Population Bulletin 2012*

While the demographic dividend is theoretically applicable to all countries, the extent to which it has been realized differs across regions. East Asia and its "economic miracle" countries are often cited as the success story for the demographic dividend, their strong economic growth followed changes in population age structures due to robust fertility declines. The dividend for Latin America was more muted than East Asia's because its economic growth was smaller (Bloom, D. Canning, D. Sevilla, J., 2003). As Africa edges along the demographic transition, several studies have explored whether the demographic dividend is applicable to the continent in theory and practice (Bloom, D. Canning, D. Fink, G. Finlay, J, 2007). In general, while the average total fertility rate (TFR) for the African continent remains high at close to five children per woman, the level has begun to decline. The working-age population is also continuing to grow throughout Africa as a result of high fertility in past decades. Since the second half of the 1990s, Africa has known consistent economic growth, with 40% of African economies growing at 5% or more annually between 2000 and 2008 (UNECA & AU, 2012). Africa's youthful population is the beam of hope in realizing the demographic dividend. Young people are central to the realization of the demographic dividend. Unleashing the potential and power of youth is a critical component of the developmental strategies. Investments in youth—particularly health and education—foster opportunities for developing a skilled and healthy labor force. Through strengthening health programs to address the full range of child, youth, and adult needs, children can grow into healthy adults who can contribute more significantly to economic growth. Education allows young people to learn skills to take on higher-quality jobs in a changing and growing economy. Through these investments, nations develop a labor force well equipped to move into new opportunities that emerge from a demographic dividend (Population Reference Bureau, 2013). UNFPA notes that a demographic dividend can only occur if countries invest in the empowerment, education and employment of young people, and assure macroeconomic and labour policies that lead to a major expansion of safe and secure employment, including good governance.

The Demographic Transition in Botswana

Numerous national surveys, including population censuses, health surveys and demographic surveys have consistently presented declining fertility levels in Botswana since the 80's. According to the past Botswana Population and Housing Censuses (Central Statistics Office/Statistics Botswana, 2011), downward trends have been observed over the years on Total Fertility Rate (TFR), General Fertility Rate (GFR) and Crude Birth Rate (CBR). TFR has dropped from 6.5 to 2.7 children per woman between 1971 and 2011 (Central Statistics Office/Statistics Botswana, 2011). Crude Birth Rate (CBR) has also decreased from 45.3 births per 1000 in 1971 to 25.7 births per 1000 in 2011 (Central Statistics Office/Statistics Botswana, 2011). Other fertility measures such as General Fertility Rate (GFR), Children Ever Born (CEB) and Age-Specific Fertility Rates (ASFR) have similarly been declining over the years. For instance, GFR declined from 189 in 1971 to 92.2 in 2011. The Natural Rate of Increase (NRI) has consequently diminished by 2.8 points between 1981 (4.7% per annum) and 2011 (1.9% per annum).

Figure 1: Botswana's Age Sex Structure (1981 and 2011)



Botswana is at a mature stage of the demographic transition as a result of the relatively low and falling fertility and mortality trends. Age distribution has simultaneously been changing. Typically, Botswana as a developing country is characterized by a youthful population. The proportion of children (0-14 years) to the general population has gradually been reducing in between the inter-censal period while the economically active population (15-64 years) has been steadily rising. While the proportion of 0-14 years declined from 47.5% in 1971 to 32.6% in 2011, the 15-64 years increased from 46.9% to 64.9% for the same reference points. The elderly population has on the other hand been stable at an average 5% between 1971 and 2011. Correspondingly, the dependency ratio has been dropping to lessen the burden for the economically active population. The dependency ration declined from 113 to 93 and to 60.2 for the period 1971, 1991 and 2011, respectively.

Having attained some remarkable level of the demographic transition and with other favourable attributes such as the youth bulge and low dependency ratios, the window of opportunity to harness the demographic dividend is open for Botswana.

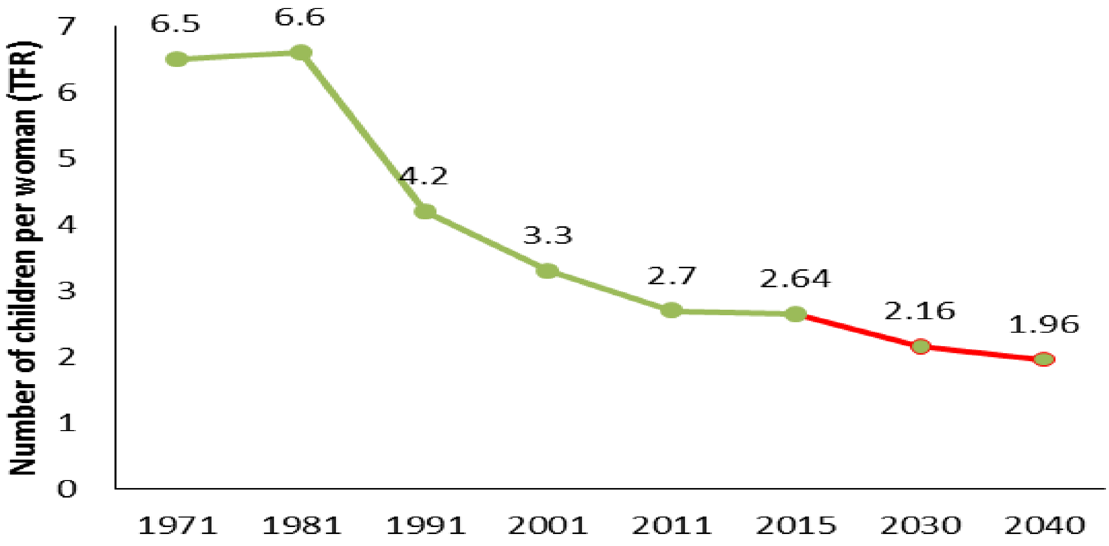
Investments in the Social Sector

Earning the demographic dividend in Botswana would require sustenance in the attained level of the demographic transition as well as enhanced investments in public health, including family planning, addressing the quality of human capital, ensuring universal access to quality and labour-market oriented education focused on developing innovation and competitiveness, and empowering young people and women. This should of course be substantiated by simultaneous investments in economic policies and reforms and governance, addressing accountability and efficiencies in the public system.

Investing in Sexual and Reproductive Health (SRH)

Fertility trends depicted below in figure 2 suggest that fertility in Botswana will continue to be low and decline, though gradually, in the next three to fou decades. This low fertility momentum is mainly affected by key fertility determinants such as higher literacy rate, especially for women standing at 87.3% (Statistics Botswana 2015, Literacy Survey 2014 Stats Brief), high knowledge and use of modern contraceptive use (CPR=52.8 %) ((Botswana Family Health Survey III (1996)), declining marriage levels from 47.1% and 42.9% in 1971 to 18.8% and 17.9% in 2011 for males and females respectively (2011 Census Analytical Report), and a relatively high urban population (64.1% - 2011 Census). Government has reasonably invested in the public health system of the country. Government is the major source of health funds, accounting for 68.1% (Ministry of Health, 2012). In the health sector Botswana spends 4.5% of its GDP and 18% of the total Government budget on the sector. Botswana has a well-organized health care system ensuring adequate accessibility to health facilities throughout the country. Nationally, 95% of the population lives within 8 kilometers of a health facility (Ministry of Finance and Development Planning, 2012). The private sector services are steadily growing except that they are more confined to towns and cities. A few non-profit organizations and NGOs are also augmenting provision of health services to the general public. As such, utilization of health services with regards to fertility issues is seemingly high. For instance, Ante-Natal Care (ANC) attendances were estimated at 97.1 (Central Statistics Office, 2009).

Figure 2: Total Fertility Rate trends *(actual and projected)*

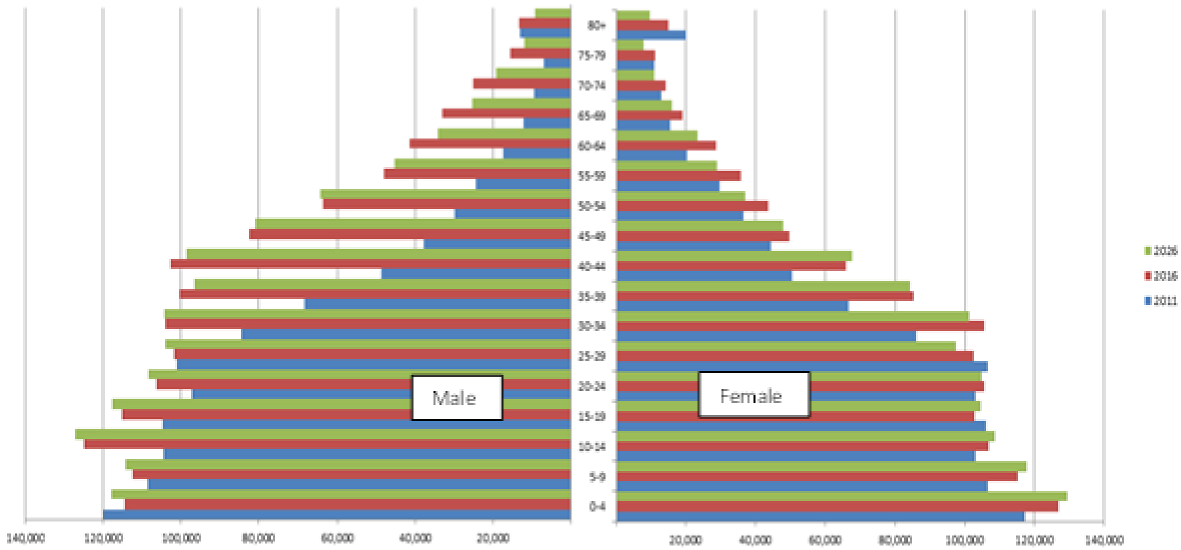


The fertility transition has resulted in the changing age structure of the country creating a 'youth bulge' phenomenon, reducing the proportion of children (0-14 years), providing an increase in the labour-supply and consequently reduce the total dependency ratio. Relative to the projected low fertility levels, these indicators (table 1 and figure 2) are also predicted to remain favourable to the attainment of the demographic dividend in the next few decades.

	2001	2011	2016*	2026*
Children, age 0-14	36.6	32.6	31.6	27.5
Youth, age 15-24	22.3	20.4	18.7	17.3
Working Age population, age 15-64	58.2	64.9	63.8	66.6
Dependency Ratio	72	60	57	50

Source: Statistics Botswana, 2011

- *Projected estimates*



Source: Statistics Botswana, 2011

Investing in Youth and Adolescents

Botswana has a youthful age structure. The importance of addressing youth issues such as youth development and economic empowerment are key to the country's development strategy. Key challenges confronting young people in Botswana include, but not limited to, unemployment (ranging between 41% and 22% for ages 15-29 years – Botswana Core Welfare Indicator Survey, 2009/10) inequalities and poverty (11.1% and 7.6% for 15-19 and 20-24, respectively: Botswana Core Welfare Indicator Survey), HIV prevalence (e.g. 4.7% for ages

15-19 and 10.3% for 20-24: Botswana AIDS Impact Survey IV), limited accessibility to health services, especially SRH services and high teenage pregnancies (9.7%: Botswana Family Health Survey IV) and limited participation of youth in decision-making processes. Botswana has over the years introduced several youth empowerment policies and programmes which include the Youth Development Fund (YDF), Young Farmers Fund (YFF); Youth Empowerment Scheme (YES); and Citizen's Economic Empowerment Programme. The Ministry of Youth, Sports and Culture continues to pursue these and other initiatives with a view to harness youth entrepreneurship development. These seek to ensure that youth are given opportunities to reach their full potential as individuals.

Investing in Education

Access to education is an important ingredient in the social and economic growth and development process. Botswana's commitment and investment to offering education to its citizen resulted in attainment of high levels of school enrolment, retention and literacy rates. The literacy rate has risen from 68.9 percent in 1993 to 88.6 percent in 2014. The Gross Enrolment Rates has been more than 100% since 1994 due to increase in primary schools from 770 in 2003 to 790 in 2008. Net enrolment rates for primary school is very high ranging between 88 and 90 percent of all 6-12 years olds between 2000 and 2011 (CSO, 2012). The Revised National Policy on Education emphasizes provision of Vocational Education and Training as well as tertiary education and skills development. Concerns on Botswana's education have however been on the quality of education. Whilst tertiary schools produce a good number of graduates, the job market is not able to absorb them and in some instances graduates do not match what the market requires in terms of skills. Pass rates at primary and secondary school level have consistently been declining in the past few years.

Global Overview of the Economics of the Demographic Dividend

Africa's most populous country and the 8th global most populous country is at the brink of the demographic dividend as its working age group surges relative to the non-working ages. To realize the dividend the country needs to adopt effective policies with a view not only to conquer the current challenges but also to promote economic growth therefore catapulting herself not only to being an African leader but rather a global one (Reed H. E and Mberu B. U. 2014). Despite her valuable human capital and tremendous oil and gas resources endowment, which makes the country one of the 13 leading oil producers in the world, the country lags behind in various development indicators as it has failed to invest in her current and future labour force, develop both the oil and gas industries as well as diversify her economy.

As correctly pointed out by Mberu and Reed (2014), the dividend can only be realized through employment generation for the bulging working age population. A failure to create employment means that those outside the labour force will consume part of that which is produced by those employed and thereby leaving relatively some small surplus for investment. Though unemployment is high, the authors have noted the immense contribution of agriculture as a possible source of significant employment generation albeit with potential adverse environmental effects if the traditional practices are continually adhered to.

A failure to generate employment opportunities may culminate in what De Silva W. I. (2013) calls the 'demographic turbulence', a state of affairs in which the elderly dependency surges, with potentially suppressive effects on economic development. The window of opportunity occasioned by the demographic transition is conducive for economic takeoff and for this to effect, there will of necessity be need for adequate savings and investment, human capital and knowledge economy and political stability (De Silva W. I.2013).

The Asian tigers were able to overcome their internal political instabilities and had their governments focused on goals and objectives necessary for economic growth. This focus coupled with good governance and the maintenance of law and order motivated the citizenry to be proactive and to work in partnership with government in pursuit of growth and development (De Silva W. I.; 2013). In addition, these economies were able to optimize on the dividend through three key elements namely the development of human capital, saving and investment growth and the creation of employment opportunities (Beyene K. 2015). It was the pragmatic economic management and strong and sound educational system of the Asian Tigers which enabled the absorption of the ever increasing working population into the workforce (Ashford L. S. 2007).

Such an atmosphere is conducive for the attraction of foreign direct investment (FDI). FDI is critical in complementing the domestic investment in addition to conferment of such benefits as employment generation, increased domestic competition, technological transfer and other positive externalities to the host economy (De Silva W. I.; 2013).

A knowledge based economy calls for investment into education and knowledge, the results of which will be enhanced productivity for both capital and labour as the human capital is developed thereby driving economic growth (De Silva W. I. 2013). In the case of Cambodia, 20 years of the dividend which is expected to end in 2045, has passed without meaningful economic gains, in part as a result of low education and skills level of the workers, low industry value added economy and narrow economic base. Two sectors account for 80 percent of GDP and those being food, beverages and tobacco products at 15% and leather, wearing apparel and textiles at 65% (Beyene K. 2015).

South Korea has done well and has capitalized on the demographic dividend. With high children population in the 1970s, the country has through conscious and pragmatic economic interventions managed to transform into a high income economy. The country made the right choices by engaging in industries with comparative advantage and availed the necessary resources including financial in an endeavor to attain accelerated economic development (De Silva W. I.; 2013). The need for targeted economic intervention for the realization of the dividend calls for effective formulation and implementation of opportune policies and strategies, a failure of which may culminate in unbearable economic and social costs (Beyene K. 2015). This sentiment is equally shared by Drummond P., Thakoor V. and Yu S. (2015) as they caution that a failure to capitalize on the dividend may breed an entourage of unemployed youth leading to increase in social risks and tensions. It is evident that the dividend does not guarantee economic prosperity. This is equally amplified by (Ashford L. S. 2007) who wonders if indeed Africa's young population will drive economic prosperity unless sound, relevant and effective programs and policies are put in place, along with better educated workforce. The author points out that for Africa to harness the dividend, she needs amongst others institutional quality, which is inclusive of the rule of law, minimal corruption, efficient bureaucratic system, government stability and a business environment conducive for the promotion of both domestic and foreign investment. The criticality of supportive policies for fostering human capital accumulation and job creation, for meaningful economic growth in Africa has equally been echoed by (Drummond P., Thakoor V. and Yu S. 2015).

The Botswana Economy

Botswana's impeccable economic growth performance ever since the discovery and mining of minerals, and in particular diamonds, can never be a subject of debate. The country's remarkable growth of the economy is well documented (Malema B. W., 2012). Following its attainment of independence in 1966 when she was one of the poorest countries at the time, the country registered impressive Gross Domestic Product (GDP) per capita growth rates, which catapulted her to upper middle income status within her forty years of independence.

It was this growth, which was unprecedented by African standards, coupled with a democratic system of government in a continent in which civil wars, dictatorship and civil conflicts were the order of the day, which endeared the country to many commentators. The country received accolades amongst which are "an island of peace in a troubled sea", "Africa's foremost success story" and "an African economic miracle" in reflection and appreciation of strides she made towards transforming the country from one which was poor to middle income status in an atmosphere of peace and tolerance (Malema B. W., 2012, Hillbom E. 2008, Maipose G S 2008, Leith C 2000, Harvey C 1992). Leith (2000) notes that the country's GDP per capita growth was the global fastest over a 30 year period stretching from 1966 to 1996 as given in table 2 below. The exceptionality of the country both within the underperforming African continent and beyond over a period 35 years is also documented (Acemoglu D, Johnson S & Robinson J A 2001).

Table 2: Botswana's international comparison on Real Growth of GDP per capita

Country	1996 Population	1996 GDP/Cap US$	10 Year Growth Rate	20 Year Growth Rate	30 Year Growth Rate
Botswana	1 490 000	3 296	4.9%	5.2%	8.2%
Chile	14 420 000	4 800	6.2%	4.0%	2.8%
China	1 221 500 000	683	8.7%	n/a	n/a
Hong Kong	6 190 000	24 898	4.6%	5.3%	6.0%

Indonesia	198 340 000	1 146	5.2%	4.5%	5.7%
Ireland	3 520 000	19 526	5.8%	4.3%	4.5%
Korea	45 540 000	10 641	7.2%	6.8%	7.7%
Lesotho*	2 050 000	420	4.9%	n/a	n/a
Malaysia	21 170 000	4 690	5.6%	4.3%	n/a
Singapore	3 040 000	30 942	7.0%	6.4%	7.8%
Thailand	60 000 000	3 007	8.0%	6.1%	6.4%
Trinidad & T	1 310 000	4 177	-0.8%	-0.4%	0.8%

Source: IMF, International Financial Statistics (c.f. Leith C, 2000)

Notes:

* Latest population is for 1995

US$ GDP per capita calculated using latest available current price GDP, converted at average exchange rate for 1996.

Botswana GDP data are averaged over adjoining national account years ending June 30, to yield calendar year.

There is some literature emerging which seeks to argue that Botswana, though an economic growth miracle, has failed to realise pre-modern growth as witnessed by lack of structural change in production patterns as well as political and social institutions. It is the contention of some of the observers that the remarkable growth rates have been accompanied by high levels of poverty, unemployment and inequality amidst plenty (Hillbom E. 2008, Jeferris K. R. & Kelly T. F., Maipose G S 2008, and Malema B W 2012). Leith accedes and recognises the negative dimensions within the Botswana economy, but goes on to conclude that notwithstanding these negativities, the country's economic record remains exceptional (Leith C, 2000). Leith conclusions could rightfully be correct when viewed within the African context. However, they will, in all likelihood, be a subject of intense debate if viewed within the context of countries which were at more or less the same level with Botswana but relatively lacking in terms of natural resource endowments. Such countries, amongst which are Singapore and South Korea, have outdone Botswana and looked at from this perspective, Botswana's exceptionality is therefore delusional as is based on underperforming African countries (Magang D, 2012).

The failure to transform the Botswana economy into a broad based one, through diversification has meant that the economy had for a very long time been anchored on the mining sector, in particular diamonds. It was only after the 2008 Global Financial Crisis (GFC) that the share of diamond to overall GDP decreased there by generating an impression that the economy has diversified, a factor for which Malema (2012) argues has serious misleading implications and a falsified sense of achievement as far as diversification is concerned. It is the view of many that the country is besieged with problems of unemployment, poverty and inequality primarily as a result of the failure to diversify the economy (Hillbom E. 2008,). The lack of diversification is further aggravated by a private sector which has for some decades now failed to outgrow the stages of infancy and remains largely dependent on government for existence. It could further be argued that diversification of the Botswana economy in particular with regard to diverse product mix will require the development and growth of private sector as against through the conventional privatisation process as manifested by the change of ownership from public to private ownership. The privatisation process will serve to diversify the ownership of enterprises without a profound diversification of the product mix within the economy.

Unemployment

The creation of employment is synonymous with the reduction of unemployment. The harnessing of the dividend calls for the creation of employment for the working age population so as to drive economic growth and possibly development. Economic growth is still possible in the presence of high unemployment and therefore it does not on its own help address the problems of unemployment. Capital intensive mode of production is both a source of economic growth and unfortunately unemployment and possible escalation of poverty and inequalities.

The unemployment rate in Botswana stood at 17.8 percent in 2010 and 20 percent in 2013 in its narrow definition. It could possibly be around 40 percent when broadly defined. The youth unemployment is perceived to be far much higher than the overall national unemployment rate. As attested to by the table below, unemployment is highest amongst those aged 15-19 at 41.4 percent followed by those aged 20-24 at 34 percent and those aged 25-29 have an unemployment rate of 22.4 percent. The rest of the distribution is given in the table.

Table 3: Unemployment Rates in Botswana 2009/10

Age Group	Unemployment Rate (%)
12 – 14	6.4
15 – 19	41.4
20 - 24	34
25 - 29	22.4
30 - 34	17.2
35 - 39	12.9
40 - 44	10.3
45 - 49	9.9
50 - 54	9.6
55 - 59	6.8
60 - 64	5.7
65+	0.3

Source: Statistics Botswana, 2011 - BCWIS

Investment

It is important to note that the most effective means towards job creation, which is central to the harnessing of the dividend, is through investment. The modern economic system, may be through the influence of the Neo Classical Counter Revolution and the Washington Consensus, has espoused the private mode of investment as key to driving the economy. They and those who rally behind them promulgates that public investment, in their view, should be in areas of social and physical infrastructural developments. It is likely that this line of thought is contentious and is subject to debate. It is the view that such an idea may be relevant to well developed economies than the developing economies, particularly where governments may be viewed as the dominant entity with the nationa economy as could be said to be the case for Botswana (Malema B. W. & Kaelo G., 2014).

Data and Methods

The study uses data from the competitiveness report and uses graphs for analysis as a way of gauging Botswana's relative competitiveness in attracting FDI.

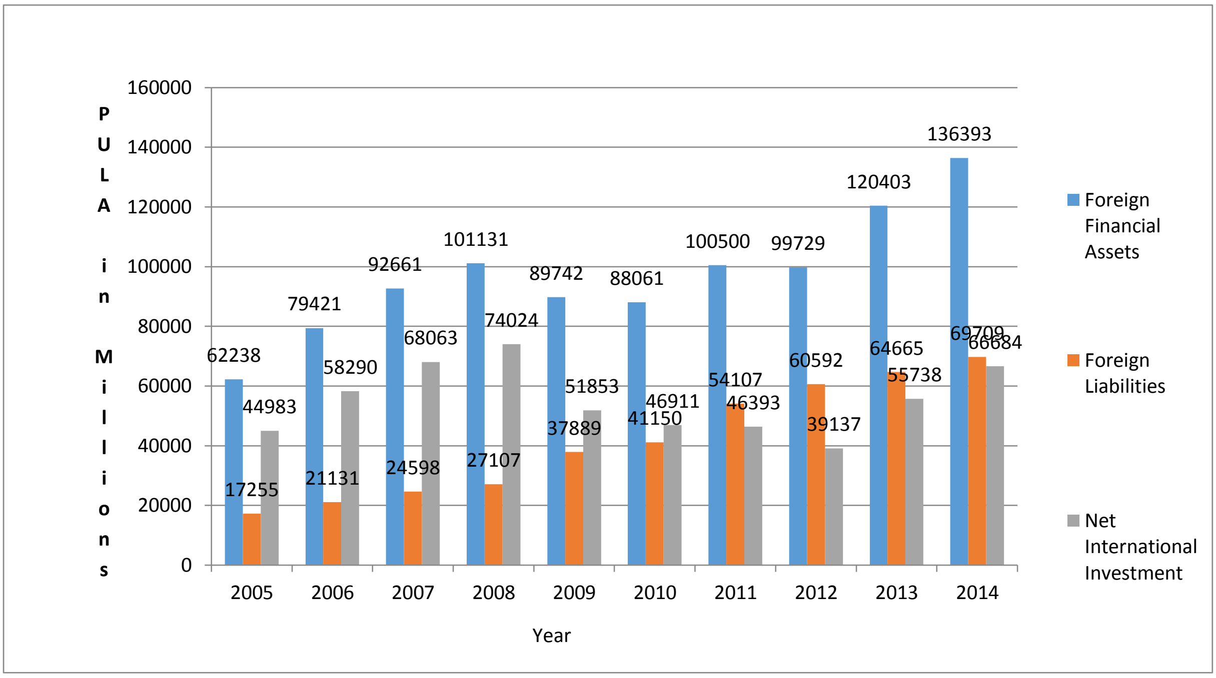
As has been indicated in the literature review, certain variables such as infrastructure and human capital are key to the attraction of FDI and given the competitive nature for FDI attraction globally, the country's performance relative to her competitors is vital in FDI attraction hence the likelihood of harnessing of the dividend. By doing relatively well against her competitors, the country could be said to be standing a better chance of optimising on the dividend while a loss of comparative advantage against her competitors does not augur well for the realisation of the dividend.

Results

Net International Investment Position (NII)

The figure 7 below shows the Botswana assets invested in other countries in millions of Pula (Botswana currency) and is denoted by foreign financial assets. The assets of foreigners invested in Botswana are given by foreign liabilities. It is clear from this figure that there are more of Botswana's assets invested outside the country than that which foreigners have invested in the country. This simply means that Botswana is a net exporter of investment, something it could be argued, should be least expected from a developing country, which needs to develop. Malema (2009) observed a similar trend for the period 1994 to 2003. This trend has significant implications for any policies geared towards optimising on the dividend as we shall argue under the discussion section.

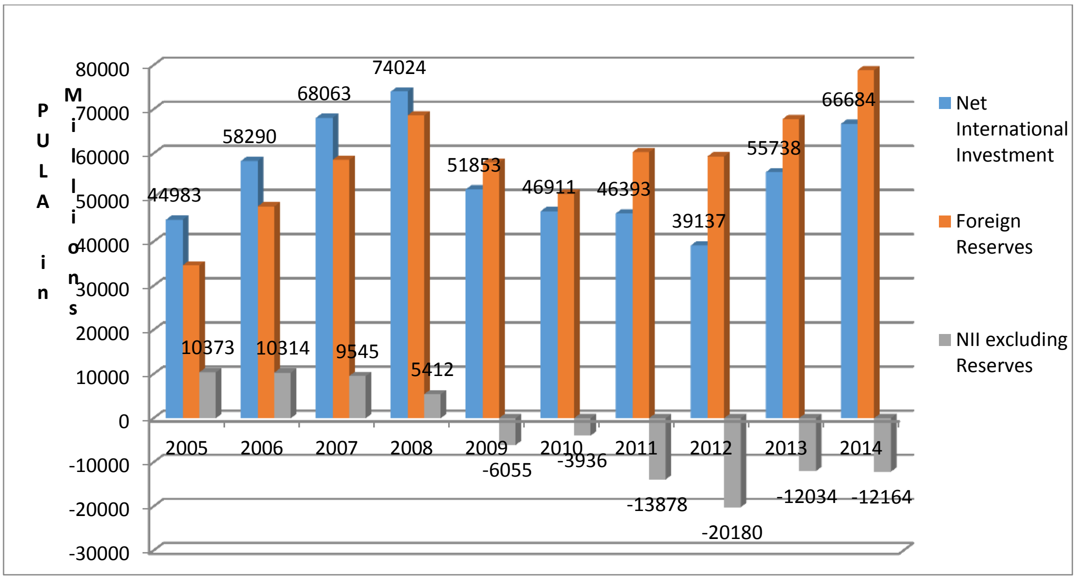
Figure 4: Botswana's International Investment Position, 2005-2014



Net International Investment Position adjusted for Reserves (NII (R))

Botswana has over the years accumulated massive foreign reserves, which currently stands at one and half years of import cover. Given that foreign reserves are included in foreign financial assets, we decided to subtract and determine the country's net international investment position, without them as given in figure 8 below. From the figure below it is clear that Botswana remained a net exporter of investment until the setting in of GFC of 2008. It was only after the GFC that Botswana became a net importer of investment, a factor most likely attributable to the crisis which severely dented the economy's mainstay, diamonds.

Figure 5: Botswana's Net International Investment adjusted for reserves, 2005-2014



Investment Attraction

The harnessing of the DD within the Botswana context and the rest of the developing countries requires an infusion of investment into their economies. This is key in driving employment creation and economic growth as well as in helping address the problems of poverty, which is one of the defining attributes of developing economies. Given that third world countries are engulfed in the dungeon of poverty, it becomes imperative that investment resources should be sourced from outside their borders. The attraction of such resources is contingent upon multifarious factors. It is the view of Schneider and Frey (1985), that foreign direct investment attraction is influenced by both political and economic considerations. They point out that the two economic determinants, those being gross national product per capita and balances of payments are both positively related to foreign direct investment attraction. On the political front they argue that bilateral aid from western countries and multilateral aid have a stimulus effect whereas aid from communist countries has an adverse effect.

In another study conducted amongst 29 Chinese regions, Cheng and Kwan (2000) discovered that large regional market, good infrastructure, and preferential policy were positively related with FDI while cost of wage had some negative effect. The effect of education though positive was insignificant.

Asiedu (2002) undertook a study which sought to establish if determinants of FDI in the developing world had a similar effect on the Sub-Saharan African (SSA) countries. The author discovered that whereas returns on investment and good infrastructure had an effect on FDI in non-SSA developing countries, this was not applicable in SSA. Openness to trade had an effect in both the SSA and non-SSA counties.

Botswana Investment Attractiveness Attributes

A number of factors are central to investment attraction across countries. As noted above, some of these investment determinants though key to some countries, may not be equally significant in attracting investment in other countries. The above illustration of non-SSA versus SSA is a case in point. Without necessarily delving into the significance or otherwise of such determinants on investment attraction into Botswana, we endeavour to investigate how Botswana has been able to perform in global comparison with the rest of the world or the countries that make part of the competitiveness survey and subsequent reports.

To this end, a number of potential investment determinants in Botswana are analysed with a view to calibrate on how the country has fared in this particular attributes with the hope that if the country has done well it may most likely attract investment. Such investment inflows will be critical in helping to optimise the demographic dividend.

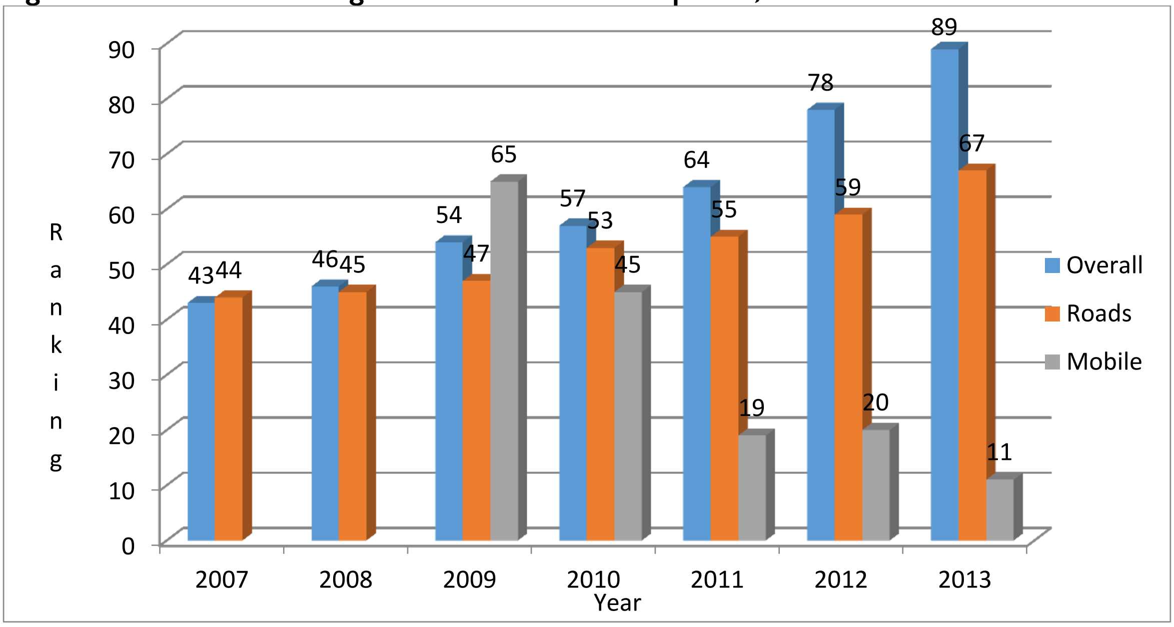
The paper analyses three key determinants, that being infrastructure, education and training and Labour market efficiency. It should be borne in mind that this are not the only key investment determinants as per the literature and their choice could be said to have random and dictated upon by data convenience.

Infrastructure

The analysis has focused on three areas being overall infrastructure, roads and mobile networks from 2007 to 2013. It needs to be noted that the mobile sector was only included from the competitiveness report in 2009 as shown by the figure below. At the time the country was in position 65 of all the countries in the report which were in excess of 130. By 2013, the country has leap frogged to position 11. If mobile infrastructure was instrumental in investment attraction, then Botswana should have done quite well in bringing investment into the economy.

On the other hand, whilst the country was in the top 45 both in terms of the roads and overall infrastructure at positions 44 and 43 respectively in 2007, its ranking plummeted to 67 for roads and 89 for overall infrastructure by 2013. This does not augur well in a global economy in which investment demand is very competitive and by going down the packing order the country could be said to have lost its competitive advantage in terms of these parameters. Effective and efficient infrastructure is key in helping reduce the costs of doing business. It is critical in costs containment associated with both transportation and the provision of utility services amongst others.

Figure 6: Botswana's ranking in infrastructural development, 2007-2013

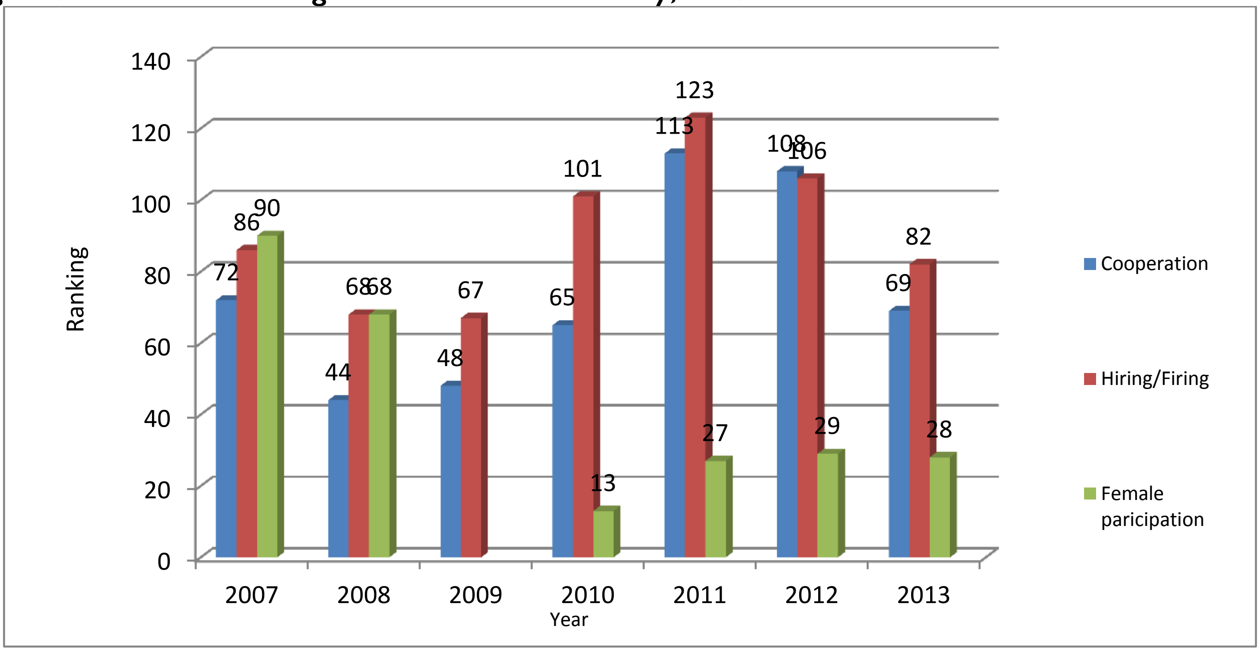


Labour Market Efficiency

An efficient labour market is critical to the promotion and enhancement of productivity. The economy does not only require quality human capital but that such should be allocated to areas where it is needed the most. Once such allocation is attained, a good rapport between the employer and the employee becomes an important ingredient towards efficiency. In addition a labour market that promotes gender equality, in particular through the promotion of women participation is important in the elevation, empowerment and participation of women in the broader scope of life which goes far beyond employment and the economy.

Whereas Botswana appears to have improved beyond 2007 in the areas of cooperation between the employer and employees, in her hiring and firing practices and in female participation, this success seem to have been short-lived. In 2007 the country ranked between 72 and 90 in these three areas and improved tremendously to rank in between 44 and 68 in 2008. Even though the country continued to do relatively well in the area of female participation in which it attained a ranking of 13 in 2010, the same cannot be said with regard to the other two areas. The worst record over the seven year span of analysis was in 2011 when the country was ranked 113 in her industrial relations and 123 in the fairness of firing and hiring. It is quite likely that the 2011 national civil service strike could have had a significant bearing on this performance. The ranking in these areas have been improving since then and this is indeed in the best interest of any economy seeking growth and development. The fluctuations in rankings within the labour market reflect the intricacy and volatility of the labour market and therefore call for prudency in the management of this market by all stakeholders.

Figure 7: Botswana's ranking in labour market efficiency, 2007-2013

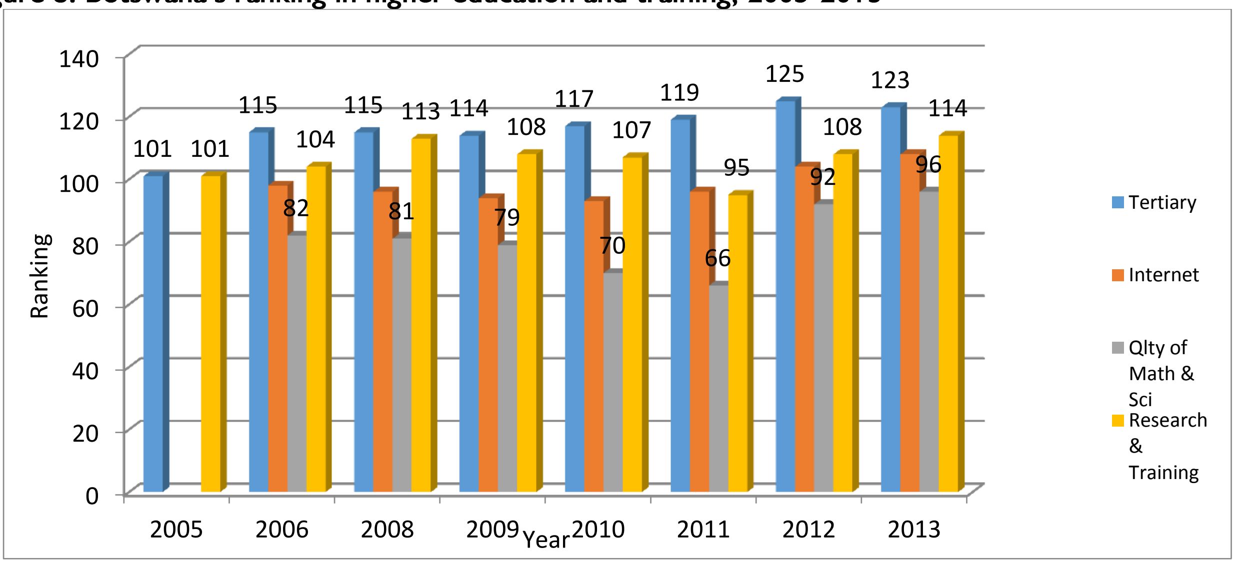


Higher Education and Training

Higher education and training is quite paramount in the development of the human capital resource. Their quality is key in investment promotion and productivity in the work place. It is therefore important for a country seeking to attract investment to ensure that it is internationally competitive in terms of the quality of its human capital.

As per figure 11 below, Botswana has over the period 2005 to 2013 been in the lowest third of rankings in terms of both tertiary and research & training sub-sectors. Internet services did not lag far behind since 2006. The quality of mathematics and sciences ranked best over the period in 2010 at 70 and has since been on an upward trend since. In actual fact all these components are showing a downward trend in rankings which translates to loss of competitive edge in terms of human resource capital. This has the effect of diminishing the inflow of investment as human capital has a direct bearing on productivity and overall efficiency of the economic system.

Figure 8: Botswana's ranking in higher education and training, 2005-2013



Discussion

Botswana's commitment and investment in the social sector has provided good returns as demonstrated by the healthy demographic and socio-economic indicators. The attributes include: declining/low fertility; decline in child population; increasing working population; increasing youth labour force; universal primary education and high enrolment in higher education; universal health care; economic growth; and a history of relatively good governance.

As a result of these social initiatives the country has been able to enter into the window of opportunity which has been there for probably just over a decade. Whereas the definite onset of the DD could be a subject of debate, what is critical is for the country to put in place measures necessary for the promotion of the harnessing of the dividend. As embodied in the DD definition, the realisation of the DD requires the utilization of economic opportunities which have been availed by the entry into the demographic window of opportunity by the country. It is this concern about utilizing these opportunities that we delve into in the ensuing discussion.

Botswana's capacity to optimise the dividend is in the view of the authors a major challenge. It requires urgency, prudency and dexterity in helping expedite enhanced economic growth through employment creation. In the phase of the emerging phenomenon of jobless growth, this would be a mammoth task which would require sacrifices, selflessness and boldness, in particular on the part of government for the harnessing of the demographic dividend.

It is evident from figures 7 & 8 above that the attraction of foreign investment into the country, which is necessary for growth and development, is insufficient for the realisation of the long term objectives of making Botswana a first world country. This is further aggravated by the investments made outside the country which points out that the country may have impediments to both the attraction of investment and retention of resources within the country.

The country's performance on the global competitiveness landscape is another source of possible concern. Botswana's diminishing ranking in some of the areas that might be pivotal in investment attraction undermines the fulfilment of the desirable economic growth and development objective. This could also possibly frustrate the development of the private sector which continues to remain in stages of infancy despite the government's long term pursuit of turning the sector into an engine of economic growth. With the private sector remaining in stagnancy, the economic diversification objective may remain an unattainable dream. All these do not augur well for the harnessing of the dividend. Something needs to be done.

In view of these investment dynamics, it will be in the interest of the country for government to take initiatives aimed at filling the available gaps rather than to hope against hope that there shall be an inflow of investment soon. The country has the potential given its current resource or financial status to engage in productive investment that goes far beyond infrastructural one as espoused amongst others by Neo Classical counter revolution and the Washington consensus schools of thought. This avenue in our view requires practical zero tolerance for corruption. In the face of corruption it shall be a vent for embezzlement of state funds. In the face of emerging concern that the country's austerity measures and prudent use of resource may be waning as corruption surges, this route may be a possible disaster.

In the face unfavourable investment flows and the perception that corruption might be on the rise, the country's capacity to harness the dividend is under siege. This reality calls for some to let go in the collective good of the country, as socio-political unrests may become a reality. Corruption is what the country has control over and a reign over it will be good for government investment into the economy. It may also help address some of the factors which impede investment inflow into the country and also possibly curtail the outflow of the same from the country.

Conclusion

Botswana's is losing some competitive ground to the rest of the world as per some of the trends indicated above such as infrastructure and educational quality. This does not augur well for the harnessing of the dividend as such trends may prove to be an impediment to attraction of foreign investment and may still lad to capital flight from the country.

Botswana needs to maintain the social infrastructural initiatives necessary to extend the already existing favourable demographic transition and by extension the window of opportunity of potential economic benefits. Deliberate and strategic investments and empowerment should be on young people and women as well as expanding the potential returns on education and health sectors. Botswana's youthful population structure would remain for some decades to come. Sustained investment in young people would therefore be imperative in order to facilitate meaningful social & economic benefits at macro and micro levels, thus earning a demographic dividend.

In spite of all these positive social initiatives, the country has major challenges of poverty, inequality and poverty as already elucidated. Given that the unemployment rate under the narrow definition is quite high at 17.8 percent and the proportion of the working age to the overall population stands at 66.6 percent, this dividend may prove substantively elusive for the country to realise and reap. There is need for injection of investment into areas with great potential for employment creation. Both private and public investments intended for employment creation are paramount for the dividend to come to fruition. A failure to harness the dividend, which currently is likely, may perpetuate the socio-economic ills of inequality, poverty and unemployment.

References

Acemoglu D, Johnson S & Robinson J A (2001). An African Success Story: Botswana. MIT Department of Economics Working Paper No. 01-37. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=290791

Ashford L. S. (2007). africa's youthful population: risk or opportunity? *Population Reference Bureau*

Asiedu E. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? World Development, Volume 30, Issue 1, January 2002, Pp. 107–119

Beyene K. (2015). Cambodia Harnessing the Demographic Dividend Lessons from Asian Tigers and other emerging Asian economies. http://www.academia.edu/14480533/: Accessed 21/06/2016

Bloom, D. Canning, D. Fink, G. Finlay, J. "Realizing the Demographic Dividend: Is Africa any different?" Working Paper Series, Program on Global Demography of Aging. May 2007.

Bloom, D. Canning, D. Sevilla, J. The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change. Population Matters, RAND Corporation. 2003. www.rand.org/pubs/monograph_reports/2007/MR1274.pdf

Central Statistics Office. (2009). Botswana Family Health Survey IV. Gaborone: Central Statistics Office.

Central Statistics Office. (2006). Botswana Demographic Survey III. Gaborone: Central Statistics Office.

Central Statistics Office/Statistics Botswana. Botswana Housing and Population Censuses (1971, 1981,1991, 2001and 2011).

Cheng L K and Kwan Y K (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. Journal of International Economics, Volume 51, Issue 2, Pp. 379–400

De Silva W. I. (2013). The Age Structure Transition and the Demographic Dividend: An Opportunity for Rapid Economic Take-off in Sri Lanka. Sri Lanka Journal of Advanced Social Studies Vol. 2 - No. 1. Pp 3 - 46

Drummond P., Thakoor V. and Yu S. (2015) Africa Rising: Harnessing the Demographic Dividend. IMF Working Paper. WP/14/143

Ellen Hillbom (2008). Diamonds or development? A structural assessment of Botswana's forty years of success. The Journal of Modern African Studies, 46, Pp. 191-214 doi:10.1017/S0022278X08003194

Harvey C. (1992). Botswana: Is the Economic Miracle Over? Journal of African Economies. Volume 1, Issue 3, Pp. 335-368.

Jefferis K. R. & Kelly T. F. (1999) Botswana: Poverty amid plenty, Oxford Agrarian Studies, 27:2, 211-231

Leith J. C. (2000). Paper for Presentation at Canadian Economics Association Thirty-fourth Annual Meetings, University of British Columbia, June 2000

Maipose G. S (2008). Institutional Dynamics of Sustained Rapid Economic Growth with Limited Impact on Poverty Reduction. A paper prepared for the UNRISD project on Poverty Reduction and Policy Regimes.

Malema B. W. (2015). Key-Note Address - Creating a harmonious environment for investment and industrial relations– introducing the new complementary laws time frames - Employment Act, Trade Disputes Act, Workers' Compensation Act and Trade Unions and Employers' Organisations Act. A key note address delivered at the "Botswana Labour Relations and Local Empowerment Market Briefing 2015, 15 & 16 September 2015. The Grand Palm Hotel Resort, Gaborone

Malema B. W. and Kaelo, G. (2013). Privatization as a Vehicle for Economic Development: A Critique. Botswana and Notes, Volume 45

Malema B. W. (2012). Botswana's formal economic structure as a possible source of poverty: Are there any policies out of this economic impasse? Pula: Botswana Journal of African Studies- Special Issue on Botswana Economy 26(1), Pp. 51-69.

Malema B. W. (2008). 'Botswana's International Investment Position: The role of Direct

Foreign Investment'. Asian-African Journal of Economics and Econometrics, Vol. 8, No.1: Pp.45-54

Magang D. (2012). Delusions of Grandeur: Paradoxies and Ambivalences in Botswana's Macroeconomic Firmament

Mberu B. U. and Reed H. E. (2014). Capitalizing on Nigeria's demographic dividend: reaping the benefits and diminishing the burdens. African Population Studies Vol 27, 2 Supp (Mar 2014). Pp 319 -330

Ministry of Finance and Development Planning (2012). Mid-Term Review of NDP 10. Gaborone: Government of Botswana.

Ministry of Health, Republic of Botswana (2012). Botswana National Health Accounts for Financial Years 2007/08, 2008/09 and 2009/10. Gaborone, Botswana.

Population Reference Bureau (2013). The Potential of Youth for a Demographic Dividend: Investing in Health, Education, and Job Creation: International Conference on Family Planning – Addis Ababa, Ethiopia.

Schneider F and Frey B. S. (1985). Economic and political determinants of foreign direct investment. World Development Volume 13, Issue 2, Pp. 161-175

Statistics Botswana. (2011). Botswana Population & Housing Census Preliminary Results Brief.

Statistics Botswana. (2011). Botswana Population & Housing Census Analytical Report.

Statistics Botswana (2011). Preliminary results of the Botswana Core Welfare Indicators Survey, 2009/10

Todaro M. C. and Smith S. C. (2012). Economic Development, 11th Edition. ISBN 978-0-13-801388-2 Pearson Education Limited, Essex, England.

United Nations Economic Commission for Africa (UNECA) & African Union (AU). Economic Report on Africa 2012: Unleashing Africa's Potential as a Pole of Global Growth. March 2012. http://new.uneca.org/era/era2012.aspx

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