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Alexander Maune (South Africa)

Human capital intelligence and economic development

Abstract

This article explored human capital intelligence and economic development in Zimbabwe with some examples adopted from Israel and many other countries. A qualitative-exploratory literature review methodology was used for the purpose of this study because of its suitability. The primary concern of the author was to have and provide an in-depth analysis and understanding of the multiple realities and truths pertaining to human capital intelligence and economic development in Zimbabwe. An inductive approach was adopted for the purpose of this study. The findings of this article will make it possible to generalise the role of human capital intelligence towards economic development of a country and to develop some valuable propositions for future studies. The findings showed that human capital intelligence plays a critical role in economic development, through laying a foundation for economic development, attracting foreign direct investment, personal remittances, as well as attracting venture capitalists. Empirical evidence from countries such as Israel shows the criticality of human capital intelligence development to economic development of a nation. This article will assist business managers, societal leaders, policymakers, as well as governments to understand the criticality of human capital intelligence towards the development of a company, society and nation at large. This article has, therefore, academic, societal and business value.

Keywords: Zimbabwe, economic development, human capital, intelligence, intellectual capital.
JEL Classification: O1, J41, O34.

Introduction

Human capital intelligence has been described as a key economic driver (Schultz, 1961 and Benhabib and Spiegel, 1994) and many countries have invested much in this cause. Human capital accumulation is of major significance in the process of economic development and growth (Skolnik and Berenbaum, 2007, p. 526). Olaniyan and Okemakinde (2008) state that the functioning of a nation and economic prosperity depends on the stock of a nation's physical and human capital. How a society develops may result from the accumulation or absorptive power of knowledge available to them which become a competitive advantage. Skolnik and Berenbaum (2007) postulate that human capital is know-how, expertise, skill, acquired through education in schools, universities, training institutions, and on-the-job training (the last, though, usually also requires some previous formal training or education). Accumulating human capital involves costs, and in industrial societies these can be heavy in view of the length of the learning process. Although human capital is sometimes called intellectual capital, intellectual capital encompass structural capital (intellectual property, methodologies, software, documents, and other knowledge artifacts), and customer capital (client relationships) (Stewart, 2001, p. 13). According to Stewart (2001, p. 18), intellectual human capital has become more important for both company and economic development than any other sources of competitive advantage, because only by means of knowledge can companies and countries gain competitive advantage. It was already visible clearly by 1960, and supports the proposition that the rapid accumulation of human capital was a significant factor explaining rapid productivity enhancement, and thus growth of product per capita, and rising welfare of Israel (Skolnik and Berenbaum, 2007, p. 541). Skolnik and Berenbaum (2007, p. 541) further state that the levels of education and expertise displayed by the immigrants reflected the state of the art in the industrial countries from which they came and contributed immensely to the human capital intelligence development of the host countries. Technology has boosted learning and consequently human capital intelligence in general (Ndinguri, Prieto, and Machtmes, 2012). Today, technology plays a big role in human capital intelligence as the demand for new skills and relational requirements in organizations increases. Today with the change in organizational demographics, globalization, and technological changes; emergence of human capital intelligence has taken prominence as a new model for economic development. Human beings are seen as a critical aspect of economic development, where they are seen as agents and intangible assets for economic development. Technology has had a significant influence on human capital intelligence approaches vital for economic development.

The purpose of this study was to explore human capital intelligence and economic development in Zimbabwe through a qualitative-exploratory literature review.

1. Literature review

Fink (2005) succinctly defines a literature review as a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners.

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1.1. The origins of concept of human capital. The concept of human capital (Schultz, 1961) and its subsequent consolidation in the Theory of Human Capital (Becker, 1964) form a corpus of theory that explains the positive impact of investing in employee training. Basically, better qualified employees will have gained new skills and abilities that enable them to be more productive in their work. The first empirical studies emerged on the factors that determine the existence of training processes in companies. The seminal work of Mincer and Polachek (1974) analyze the decision-making process in families from a gender perspective, and in terms of human capital investment. After this, the first scientific studies were published on the existence of a pattern explaining how investment in staff training is distributed (Duncan and Hoffman, 1979; Greenhalgh and Stewart, 1987). Malloch (2003) expresses it in detail stating that the term "human capital" appeared first in an article of *American Economic Review* in 1961, titled "Investment in Human Capital," by Nobel laureate economist, Theodore W. Shultz. Most economists agreed that human capital comprises knowledge, skills, and experience while some add appearance personality credentials and reputation to the mix and still some others suggest human capital consists of "educated and skilled people" (Khan, 2015, p. 36).

1.2. Education in Zimbabwe. In 1980, education was declared a basic human right. The new government changed the constitution to recognize primary and secondary public education as free and compulsory[1]. One of Zimbabwe's Millennium Development Goals was to achieve universal education for all students; however, the goal was not achieved as of 2015 due to a public health crisis, economic downturn and inability to afford costs associated with education[2]. The country is currently workings towards the Sustainable Development Goal of providing universal and free education to all students by 2030[3]. Figure 1 below shows a significant jump in enrollment figures in secondary education from 1980 going forward showing the positive impact of government policy towards education after independence. However, not much has been achieved in tertiary education enrollment since independence in 1980 although there has been a marginal growth from 1989 before it stabilizes. The chart shows a huge gap in enrollment between secondary and tertiary education that is worrisome, as many secondary school graduates are failing to make it to tertiary education. This scenario is detrimental to human capital intelligence development and to economic development of a country.

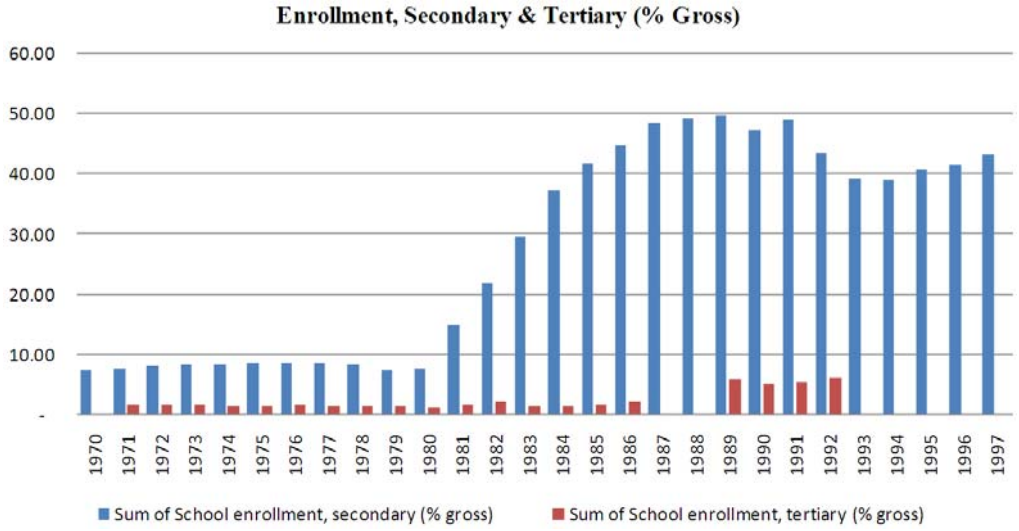

Fig. 1. Enrollment, secondary & tertiary (% gross)

Source: based on the World Bank (2015) World Development Indicators data.

Figure 2 below shows government expenditure towards secondary and tertiary education in Zimbabwe and Israel from 1973 to 2011. The government of Zimbabwe has done much in terms of promoting both secondary and tertiary education and towards human capital intelligence development. In 2010, government spent 62% of GDP per capita towards students in tertiary education with Israel spending 20% that same year. In 1993, the government of Zimbabwe spent a high of 44% of GDP towards education in totality with Israel spending 7.4% that same year. However, what is critical is the quality of graduates generated from these institutions which in a way will help the government to recoup its investment. Israel seems to be doing well given the number of engineers, scientists and technicians per capita the country has managed to produce over the years which are more than any other country (Senor and Singer, 2009).

[1] SACMEQ. *Education in Zimbabwe*. SACMEQ 2010. Available at: http://www.sacmeq.org/education-zimbabwe.htm.
[2] "Millennium Development Goal 2". *UNDP in Zimbabwe*. UNDP.
[3] UNICEF Zimbabwe - Media centre - Sustainable development goals.

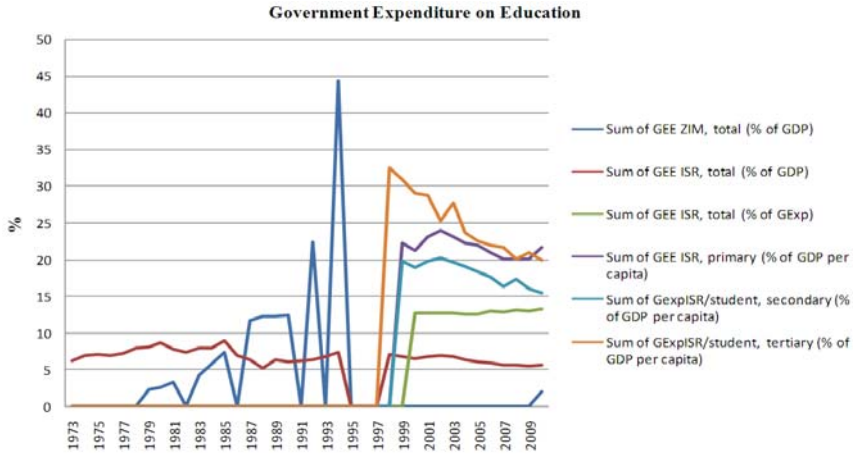

Fig. 2. Government expenditure on education

Source: based on the World Bank (2015) World Development Indicators data.

1.3. Higher education provisions in Zimbabwe since 1980. Tertiary education was first introduced to Zimbabwe in 1957 by the University College of Rhodesia and Nyasaland, now known as the University of Zimbabwe. At independence in 1980, the University of Zimbabwe had an enrolment of 2,000 students (Chivore, 2006) which increased to 9,017 by 1990 (Chiyevo, 2013). There were 12 universities, seven of which were state-owned and five of which were private as of 2006 (Chivore, 2006). Currently, there are 16 universities, ten state-owned and six of which are private universities. However, what is critical is to establish world-class institutions that produces high-quality workforce like what Israel did. Table 1 below shows Zimbabwe's literacy rate since independence.

Table 1. Literacy rate in Zimbabwe

Year	Adult total (% of people ages 15 & above)	Youth total (% of people ages 15-24)
1982	77.79	89.02
1992	83.51	95.41
2011	83.58	90.93

Although government has done much in promoting education in Zimbabwe since 1980, there is need to align the educational system to one that has a high concentration of talented teachers, researchers and students. Universities must strive to produce graduates that are employable or who has the capacity to create employment. Table 2 below shows Zimbabwe's 2015 university world ranking based on the above mentioned four indicators.

Table 2. Zimbabwean Universities 2015 world ranking

University	World ranking
University of Zimbabwe	2 542
National University of Science & Technology	4 704
Bindura University of Science Education	9 251
Africa University	9 495
Zimbabwe Open University	9 975
Midlands State University	10 194
Chinhoyi University of Technology	15 589
Great Zimbabwe University	17 636
Solusi University	17 933
Harare Institute Technology	18 308
Women's University in Africa	18 778
Catholic University of Zimbabwe	20 890

Source: Webometrics. Available at: http://buzzsouthafrica.com/latest-ranking-Zimbabwean-best-universities.

2. Methodology

Research methodology refers to the philosophical framework and the fundamental assumptions of research (Kuhn, 1962). How do we study things and issues? The purpose of this study was to explore human capital intelligence and economic development in Zimbabwe with some comparison with Israel and many other countries. An exploration of variables that relates to Zimbabwe was done. The study took an interpretive paradigm that was informed by an inductive logic approach. Kuhn (1962) states that a paradigm is a patterned set of assumptions concerning reality (ontology), knowledge about that reality (epistemology), axiology (value system) and particular ways of knowing that reality (methodology). The interpretivist paradigm was adopted, because it takes a view of the world and reality as being socially constructed and influenced by people (Easterby-Smith, Thorpe and Lowe, 2001). Saunders, Lewis and Thornhill (2003) further add that this paradigm is concerned with subjective, qualitative phenomena which is rich in context and aims to understand what is happening in the totality of each situation.

A qualitative-exploratory approach was conducted to have a better understanding of human capital intelligence and economic development in Zimbabwe (Du Plooy, 2006, p. 48; Bless, Higson-Smith and Sithole, 2013, pp. 57-60; Babbie, 2013, p. 90; Du Plooy-Cilliers, Davis and Bezuidenhout, 2014, p. 75).

Data were gathered through a literature review of some identified peer-reviewed and published journal articles on human capital intelligence and economic development. Literature review was used for its suitability for this study (Light and Pillemer, 1984; Bem, 1995; Mulrow, 1995). Reviewing data of existing journal articles was necessary to enhance the generalizability of the findings (Morse, 1999). To identify relevant literature, academic databases and search engines were used. Keywords such as "human capital development," "human capital intelligence," "intellectual capital," and "economic development" were used in search engines to find relevant sources. Although there are paradigm wars between purist and pluralist on combining research methods, researchers should forge ahead with what works, because truth is a normative concept – truth is what works.

3. Discussion of findings

The following is a discussion of the findings, as well as empirical findings by other researchers that have been adapted to support or refute some of the findings of this study.

3.1. Human capital intelligence development as a foundation for economic development. The debate about whether democracy causes economic development or vice versa is misplaced (Adjibolosoo, 1998, p. 27). Adjibolosoo (1998) argues that neither democracy nor development causes the other to occur. So what causes economic development? Adjibolosoo (1998) provides that those who pursue diligently human capital intelligence development will, no doubt, experience both democracy and economic development concurrently. To him many scholars have failed to perceive and acknowledge the role of human capital intelligence development in democratization and economic development processes. Human capital intelligence development is the kingpin of every human endeavor. No human program achieves its best result without human capital intelligence development or no nation can achieve successful economic development without, first, developing its human capital intelligence.

3.2. Human capital intelligence development and economic development in Zimbabwe. There are four main economic development perspectives on Zimbabwe. These are the conservative, the liberal, the radical and the human capital intelligence development perspectives as advocated by Ofori-Amoah (1998) who propounds the four main perspectives for Africa's economic development. The economic development problems of Zimbabwe are, according to the conservative perspective, a natural order of things. As a result, the conservative perspective has no other solution, but to maintain the status quo of things and keep Zimbabweans as 'hewers of wood and carriers of water' (Ofori-Amoah, 1998, p. 36). The liberal perspective on the causes of developmental problems focuses on the existence of certain factors or structures that are considered to be detrimental to development and lack of essential factors that are needed to enhance development. These factors, according to World Bank (1981, 1983, 1984), include lack of entrepreneurial skills, inadequate financial resources, market distortions, rapid population growth, political instability, poverty, low per capita income, low productivity, failure to implement development plans, existence of archaic social structures, poor land tenure system and inadequate transportation systems. On the other hand, radicals attribute the causes of developmental problems to contradictions within the underlying structures of the global economy.

The human capital intelligence development perspective on the causes and solutions of developmental problems begins with the definition of human capital intelligence. This perspective, according to Ofori-Amoah (1998), sees people as the most important resource of any country or society or organization. Human capital intelligence is more than just human capital obtained through schooling. It includes spiritual, moral and aesthetic capital, as well as human abilities and potential (Adjibolosoo, 1995). Ofori-Amoah (1998) argues that economic development will falter unless topmost priority is given to the development of the appropriate human capital intelligence. Ofori-Amoah (1998) states that all the three perspectives have been experimented with in Africa and failed. To him, the only hope for economic development in Africa is through human capital intelligence development.

Figure 3 below shows Zimbabwe's GDP growth since 1960 to 2014. The trend has not been consistent, but rather zigzag with some positive growth, as well as recessions. Zimbabwe recorded the highest growth rate in 1970 (22.57%) and its lowest negative rate in 2008 (17.67%) as a result of the local and global financial crises. Human capital intelligence has proved to be an essential factor for economic development. This is true for countries such as Israel a Start-up Nation slightly smaller than New Jersey or Wales born in 1948 with a population of around 8 million as of 2013. Israel has defied all odds to become an Innovation Nation with more companies listed on the National Association of Securities Dealers Automated Quotations (NASDAQ) outside the United States of America (Maune, 2015). The quality and innovativeness of Israel's workforce is reflected in the fact that Israelis have the highest ratio of college degrees per capita, they produce more scientific papers per capita than any other nation by a large margin –109 per 10,000 people – and have one of the highest per capita rates of patents filed, including the highest in absolute terms in the life sciences (Ibid).

Innovation made Israel a global leader in a range of military technologies, including unmanned aerial vehicles, missile-systems, night vision, lasers, radar, intelligence systems, C4, military communications and homeland defense solutions. Israel became one of the few countries to develop an independent space launch capability and satellite technology. Over the years, this know-how formed the basis for the development of the country's commercial high-tech sector. Oz[4] cited in Senor and Singer (2009) stated that, Judaism and Israel have always cultivated a culture of doubt and argument, an open-ended game of interpretations, counter-interpretations, reinterpretations, opposing interpretations. From the very beginning of the existence of the Jewish civilization, it was recognized by its argumentativeness. To add on to that, Unterman (1971) states that, whoever has not observed two rabbis or scholars conducting a discussion on some subject never saw a mental game between two intellectual-artists played on the highest logical level. So, from the Talmud to Einstein, the Jewish people were always asking questions, truth was never finite. It never ended. There was an iterative process from Jewish communities around the world trying to find out what is the right thing, what is the true thing? And that questioning mind, to Netanyahu (2014), is something that is in the Jewish culture. This seems to be lacking in the Zimbabwean context.

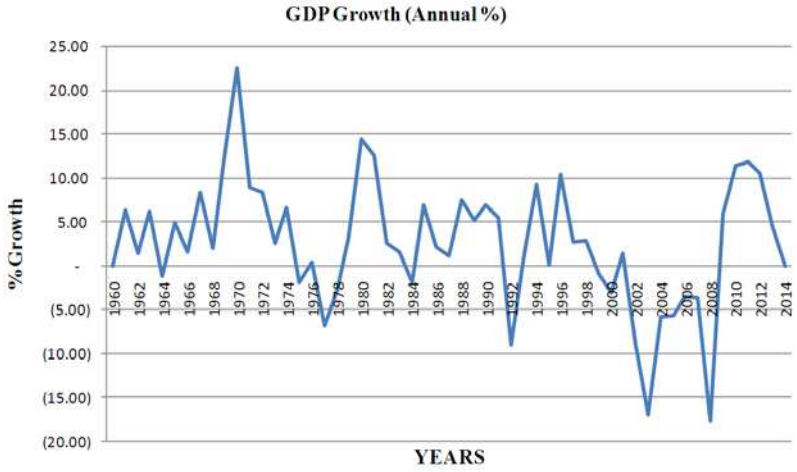

Fig. 3. GDP growth (annual %) in Zimbabwe

Source: based on the World Bank (2015) World Development Indicators data.

3.3. Education and human capital intelligence in Zimbabwe. Although education has been viewed as a vital key to human capital intelligence and economic development, many societies often fail to establish viable educational and training systems that facilitate human capital intelligence and economic development in these societies (Adjibolosoo, 1998, p. 21). Regardless of how much education an individual possesses in the modern world, as long as that education does not foster human capital intelligence development, it is unlikely that it will lead to economic development (Adjibolosoo, 1998).

Human capital intelligence development, rather than mere academic education, is the critical factor for the development of successful economies. Examples abound in the real world to substantiate the view that many people earn higher degrees like PhDs, MAs, MScs and MBAs and yet fail in performing their civic duties as expected (Adjibolosoo, 1998). Lipset (1959, pp. 69-105) notes that the French and the Germans have in the past attained very high educational levels; their higher educational attainments neither sustained nor stabilized their economies. According to Dewey (1916), German education was more focused on disciplinary training rather than personal human capital intelligence development. Zimbabwe seems to have fallen into the same trap. Zimbabwe has been ranked number one in Africa in terms of literacy rate, but its economy has been performing badly since 2000 when the government impacted on the land redistribution programme to correct the imbalance that was caused by the colonial regime. It is sad, according to Adjibolosoo (1998), to note that even at the close of the 21st century, modern men and women are still failing to differentiate between wisdom and mere academic disciplinary knowledge. Truly, there is more to education and training than is being pursued today in the academic institutions all over the world. These sentiments were echoed by Zimbabwe's Minister of Higher & Tertiary Education, Science & Technology Development who recently lambasted local universities for failing to produce graduates who are capable of building the nation. The local education system has caused the decay of human capital intelligence in Zimbabwe. Professor Jonathan Moyo (Zimbabwe's Minister of Higher & Tertiary Education, Science &

[4] Amos Oz, speech at the Israeli Presidential Conference, Jerusalem, May 14, 2008.

Technology Development) states that there is a lot of rot in higher and tertiary education institutions in Zimbabwe with most of the country's academics failing to make an impact on developmental issues (Tshili, 2015). As a result of that, none of Zimbabwe's universities are recognized regionally and internationally. Zimbabwean academics' failure to research on sound projects has led to the country failing to make it into the top 50 universities in Africa (Tshili, 2015).

Figure 4 below shows a trend analysis of scientific and technical journal articles that has been published in Zimbabwe, South Africa and Israel from 1980 to 2010. The trend shows that Zimbabwe has published not more than 150 scientific and technical journals articles per year since 1980 to 2010 compared to South Africa with more than 2500 and Israel more than 6000 articles per year. Scientific and technical journal articles refer to the number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences (World Bank, 2015). This shows that Zimbabwe lags behind in terms of human capital intelligence development.

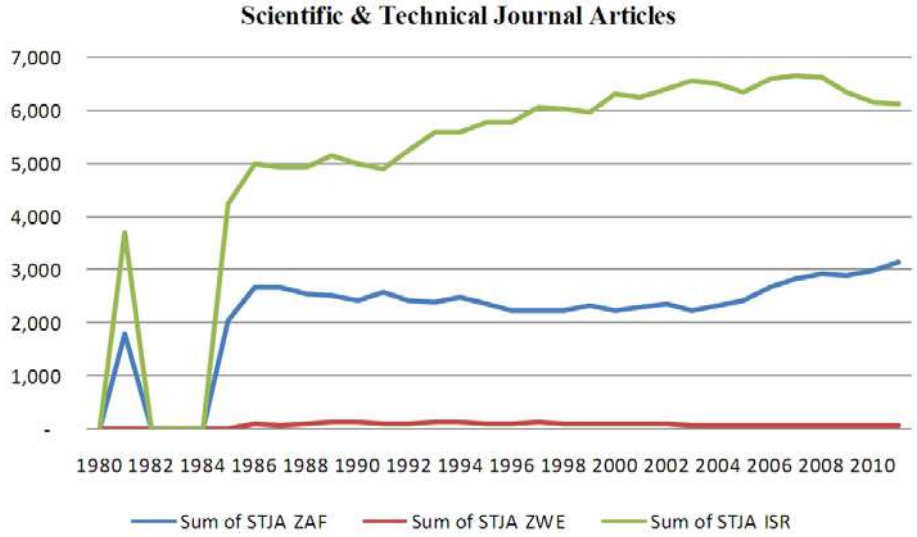

Fig. 4. Scientific & technical journal articles

Source: based on the World Bank (2015) World Development Indicators data.

Per capita, Israel is among the leading countries in the world for the number of engineers, PhDs, patents, scientific papers published and citizens with a tertiary education. The World Economic Forum (2014) ranks Israel highly for the quality of its research organizations, which include the Technion – Israel Institute of Technology, the Weizmann Institute, the Hebrew University and the Ben-Gurion University of the Negev. In addition, Israelis enter the work force at a higher average age than in other countries after having completed compulsory national service, where they develop problem-solving, leadership and teamwork skills, and take on significant responsibilities (Berry and Grayeff, 2009). These elements have fostered a culture of innovation. The caliber of the work force has also played an important role in drawing multinational corporations and international investment to Israel.

3.4. Human capital intelligence and migration. Human capital intelligence, the accumulation of which is of major significance in the process of economic development and growth can be affected significantly by both immigration and emigration. According to Skolnik and Berenbaum (2007), the waves of immigration in Israel in the 1960s had a major positive impact on Israel's economic growth. This wave caused a rapid productivity enhancement, thus growth of product per capita, and rising welfare. Furthermore, the levels of education and expertise displayed by the immigrants of the 1920s and especially the 1930s reflected the state of the art in the industrial countries from which they came and contributed immensely to the human capital intelligence of the Jewish community as this saw the breakthrough in the Jewish economy between 1932 and 1939. Zimbabwe has been hard hit by a wave of emigration since 2000. This wave has caused a serious brain drain due to the country's economic hardships. Zimbabwe's educational system has been condemned for not doing enough to produce employable graduates or graduates who are entrepreneurs hence a huge wave of emigrants of educated Zimbabweans to seek employment opportunities in greener pastures.

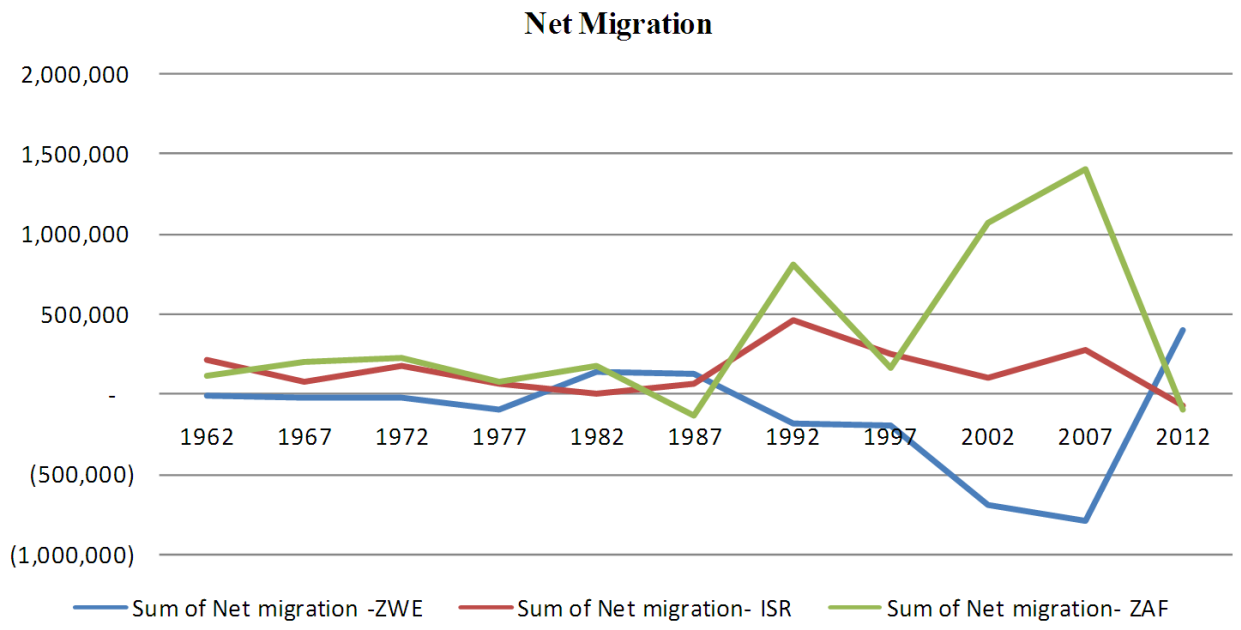

Fig. 5. Scientific & technical journal articles

Source: based on the World Bank (2015) World Development Indicators data.

Figure 5 above shows the net migration[5] for three countries, that are, Zimbabwe, South Africa and Israel. Zimbabwe has recorded a huge negative net migration since 2002 (700,000) before realizing a positive net migration in 2012 (400,000) due to economic stabilization caused by the multi-currency regime that was introduced in 2009 that had a huge impact towards economic stabilization. Figure 6 below shows a comparative trend analysis of personal remittances received since 1970 to 2012 for countries such as Zimbabwe, Zambia, Mozambique, Botswana, South Africa and Israel. Zimbabwe has received the lowest amounts from 1970 to 1994; although data was not available from 1994 one is forced to conclude that the figures might have risen since 2002 as a result of the huge wave of emigrants due to economic challenges that faced the country during that period.

The fear is that migration to some extent subsidizes rich countries by supplying them a steady stream of skilled individuals. This has grave consequences to poor countries (Contreras, 2013). For one, the investment of scarce public monies on education may not have the desired effect on the welfare of the state. According to Contreras (2013) the literature on migration has been considerably enhanced by Bhagwati and Hamada (1974), Galor (1986), and Bhagwati and Wilson (1988). From their works, the literature has evaluated the implications of migration on skill formation (Mountford, 1997; Vidal, 1998; Beine et al., 2001; Stark & Wang, 2002b; Kugler & Lotti, 2007 cited in Contreras, 2013). Contreras (2013) states that the focus has been to evaluate the net effect of migration on the average human capital intelligence level of the source country. The evidence on the question of brain drain is far from being settled.

In a recent paper, Beine et al. (2011) showed that a brain gain might exist if the rate of emigration of the skilled is not too large. Works by Adams and Page (2005) shows that both international migration and remittances help explain reductions of poverty rates in poor countries. For instance, Edwards and Ureta (2003) cited by Contreras (2013) show that remittances in El Salvador help explain an increase in school attendance. According to Contreras (2013), the existing literature (Mountford, 1997; Stark & Wang, 2002a; Fan, 2007; and McKenzie & Rapoport, 2010) shows that the probability of migration increases with the level of education. Then, as a poor country is left with some fraction of its skilled labor force it follows that a country should experience brain drain from migration (Stark & Wang, 2002a; Beine et al., 2011 all in Contreras, 2013).

That is, the average skill level in a developing country falls as there are less skilled individuals left after emigration. These arguments have been felt in Zimbabwe as the country treads through a period of economic challenges since 2002. The impact of emigration is yet to be established in Zimbabwe although on the surface it looks detrimental.

[5] Net migration, see definition by the World Bank (2015).

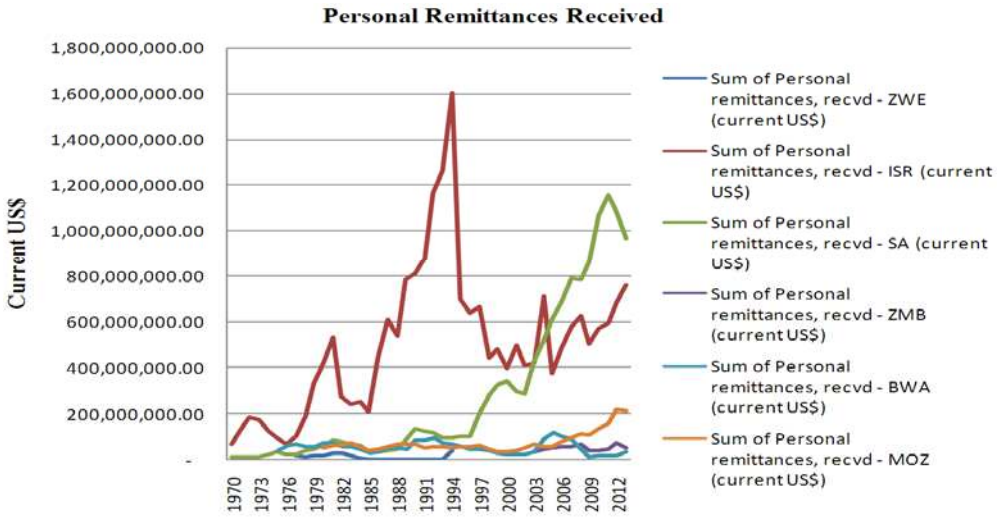

Fig. 6. Personal remittances received

Source: based on the World Bank (2015) World Development Indicators data.

While many countries, including Israel, bemoan the fact that some of their brightest academics and entrepreneurs go abroad, people like Michael Laor at Cisco show that the "brain drain" is not a one-way street (Senor and Singer, 2009). In fact, international-migration researchers are increasingly noting a phenomenon they call "brain circulation," whereby talented people leave, settle down abroad, and then return to their home countries, and yet are not fully "lost" to either place (Senor and Singer, 2009). As Devane (2006, p. 60) writes in a study issued by the World Bank, "China, India, and Israel enjoyed investment or technology booms over the past decade, and these booms are linked ... by expatriate leadership in all three countries."

3.5. Human capital intelligence and FDI in Zimbabwe. There are many factors that are instrumental in attracting FDI inflow. According to Kar (2013) some of the factors include cost competitiveness, potential of the home market and qualified workforce. FDI not only brings money, but also new technology, new managerial capabilities and new benchmarks in corporate functioning (Kar, 2013). The direct effects include training of local employees as well as suppliers, distributors, subcontractors and customers by the multinational corporations (MNCs) for their better functioning. The indirect effects are imparted through change of profession of the trained employees of the MNCs. Thus, a spiral comes into existence through the spillover effect of the MNCs on human capital towards a better business environment which may attract more FDI in the host country.

In fact, whereas China's Diaspora is the source of 70% of FDI into China and India's Diaspora did much to help to build its homeland's high-tech infrastructure when the country's economy and legal system were both underdeveloped, Israel's experience has been different (Senor and Singer, 2009). The vast majority of American Jewish investors historically would not touch the Israeli economy. It was not until much later, when Israel became more successful, that many Diaspora Jews started looking at Israel as a place to do business, not just as a draw for their sympathy and philanthropy. So it has required creativity for Israel to learn how to use its Diaspora community in order to catalyze its economy. The tradition of Israelis' tapping into a very small, but passionate subset of the Jewish Diaspora to help to build the state has its roots in institutions like Israel's start-up air force. Zimbabwe alike should follow the same strategy to attract Diaspora Zimbabweans in order to catalyze its economy. An enabling environment is vital to attract FDI into the country. Figure 7 below illustrates Zimbabwe and Israel's FDI, net inflows as a percentage of GDP from 1970 to 2013. The two countries recorded FDI net inflows as a %age of GDP that was below 2% from 1970 to 1997. In 1998, Zimbabwe recorded its highest of 6% before subsiding to its previous level of 2%. Israel achieved its highest FDI net inflow of 10% in 2006 before falling to 4% in the following year. There has been no consistency in the level of FDI net inflows for both countries since 1970 with Zimbabwe recording net outflows in 1977, 1982, 1983, 1984, 1987, 1988, 1989, and 1990.

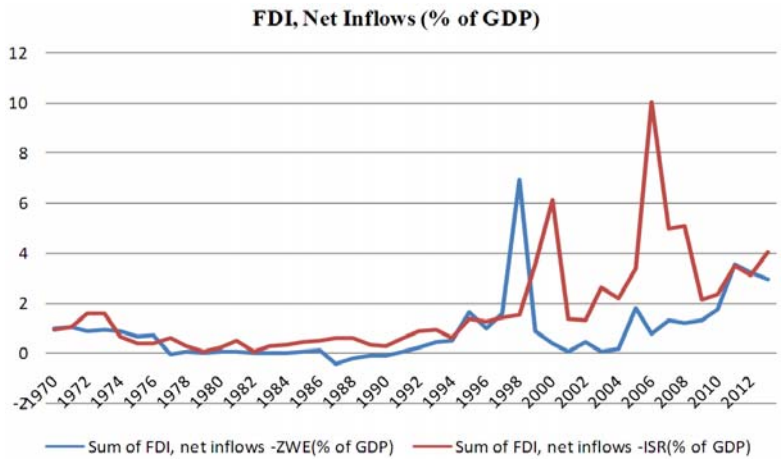

Fig. 7. FDI, Net Inflows as a % age of GDP

Source: based on the World Bank (2015) World Development Indicators data.

Conclusion

In conclusion, it must be emphasized that human capital intelligence is a key economic driver (Schultz, 1961 and Benhabib and Spiegel, 1994) and many countries have invested much in this cause. Human capital accumulation has been described as a major significance in the process of economic development and growth (Skolnik and Berenbaum, 2007, p. 526). Olaniyan and Okemakinde (2008) state that the functioning of a nation and economic prosperity depends on the stock of a nation's physical and human capital. How a society develops may result from the accumulation or absorptive power of knowledge available to them which become a competitive advantage. Skolnik and Berenbaum (2007) postulate that, human capital is know-how, expertise, skill, acquired through education in schools, universities, training institutions, and on-the-job training (the last, though, usually also requires some previous formal training or education).

Although education has been viewed as a vital key to human capital intelligence and economic development, many societies often fail to establish viable educational and training systems that facilitate human capital intelligence and economic development in these societies (Adjibolosoo, 1998, p. 21). Regardless of how much education an individual possesses in the modern world, as long as that education does not foster human capital intelligence development, it is unlikely that it will lead to economic development (Adjibolosoo, 1998). The USA has introduced STEM (Science, Technology, Engineering, and Mathematics) in its education system as a way to boost high-tech industrial innovation. In Israel it is called SETI (Science, Engineering, Technology, and Innovation). The high-tech industry has been seen as critical in economic development the world over, hence, its support and promotion. High-tech industry has become a national sport that helped the Israelis to fend against the claustrophobia, that is, life in a small country surrounded by enemies (Senor and Singer, 2009). Countries must champion the teaching of STEM subjects as a way of promoting sophisticated human capital intelligence that boosts economic development through establishment of high-tech start-up companies. These companies have helped to grow economies the world over; for example, the high-tech industry in the USA employed nearly 17 million workers in 2014. This accounted for about 12% of total employment; the high-tech sector contributed almost 23% percent of output. Countries like Israel have depended much on high-tech start-up companies for economic growth. Zimbabwe has also introduced STEM in its educational curriculum as a way of boosting its industrial and technological innovativeness.

Human capital intelligence development plays a critical role in organizational, societal and national development. An investment in human capital intelligence pays dividends as this leads to economic development and growth. Governments must play a critical and leading role in promoting human capital intelligence development. An investment in education and R&D is critical in producing a quality workforce that will help attract investment through multinational companies, venture capitalists as has been experienced in countries such as Israel. Zimbabwe has not done much in terms of science and technology as well as innovativeness. Zimbabwe must focus more to produce more engineers, scientists and technicians per capita for it to prosper as a nation. As Netanyahu (2014) states that the future now belongs to those who innovate and those who do not innovate, whether in companies or in countries, will fall behind. Innovation has become the only way to consistently add value to products and services in an increasingly competitive global economy. However, innovation can be best achieved through human capital intelligence development. Innovation is all about finding ideas.

Innovation often depends on having a different perspective. Perspective comes from experience. Real experience also typically comes with age or maturity. But in Israel, one gets experience, perspective, and maturity at a younger age, because the society jams so many transformative experiences into Israelis when they are barely out of high school through national service (Senor and Singer, 2009).

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