A Case Study on Mauritius and South Africa: An Analysis of Good Governance and Human Capital on Export Diversification

Rumbidzai Pamacheche

Student Number: 678614

E-mail: 678614@students.wits.ac.za

Supervisor: Gareth Roberts

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Abstract

This paper looks at how human capital and good governance interact with export diversification in an economy, with particular reference to Mauritius and South Africa. Further, a comparative analysis is done on how the degree of human capital development and good governance determines the level of export concentration. Findings show that there is a positive correlation between human capital and good governance on the one hand, and export diversification on the other. The comparative analysis showed that the more developed human capital and governance are in a country, the less concentrated exports become. Recommendations are suggested for policy makers on how to manage the two determining factors with a view to expanding export diversification and ultimately growing economies.

Keywords: Human Capital, Governance, Export Diversification

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Declaration

The Supervisor and Student:

1. Will establish agreed roles and clear processes to be maintained by both parties.
2. Will meet regularly and as frequent as is reasonable to ensure steady progress towards the completion of the proposal and research paper. The normal requirement for face to face contact, spread across the year of registration is 10 hours for a master's project.
3. Will keep appointments, be punctual and have timely responses to messages.
4. Will keep one another informed of planned vacations or absences as well as changes in her personal circumstances that might impact on the work schedule. Unplanned absences or delays should be discussed as soon as possible, and arrangements made to catch up lost time.

Signed:

_____ _____

Supervisor Student

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List of Abbreviations

AFDB	African Development Bank
CENADEP	Centre National d'Appui au Development et a la Participation Populaire
DRC	Democratic Republic of Congo
GEAR	Growth, Employment and Redistribution
HCI	Human Capital Index
HDI	Human Development Index
IMF	International Monetary Fund
MAU	Mauritius
MOECHR	Ministry of Education and Human Resource
NHI	Normalised-Hirschman Herfindahl
OECD	Organisation for Economic Co-operation and Development
RDP	Reconstruction and Development Programme
SADC	Southern African Development Community

UN	United Nations
UNCOMTRADE	United Nations Comtrade Database – International Trade Statistics – Import/Export Data
UNDP	United Nation Development Programme
UNTACD	United Nations Conference on Trade and Development
WDI	World Development Indicators
WGI	World Governance Indicators
WLD	World
ZAF	South Africa

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1. Introduction

1.1. Background to the Study

Every country generally strives to attain sustained and inclusive economic development that can create business and employment opportunities; improve the socio-economic wellbeing of its population and alleviate poverty. To move in this direction, authorities adopt and implement policies and strategies that are multipronged in order to achieve economic growth and development by focusing on human capital and skills development, investing in research and development, attaining macroeconomic stability, financial sector reform, investing in health and infrastructure and trade liberalisation. Trade liberalisation is one of the key focus areas of structural adjustment programmes and it is premised on export led growth which entails export diversification to increase foreign exchange earnings. Export diversification, was therefore, an essential ingredient of these programmes and the question of human capital and good governance played a critical role in ensuring that a state adopted decisive, credible, consistent and coherent policies and implemented them faithfully.

In this regard, export diversification in this research is taken in the context of overall economic reforms/economic transformation policies designed to raise the standards of living of individuals in the country concerned. It also takes into consideration the structural adjustment programmes and similar economic reforms that many developing countries implemented during the period 1980 to 2000, some with great success, and others with serious problems. Only strong democratic institutions staffed with skilled personnel could lead the reform or transformation process. This also entailed ensuring that government departments, state enterprises and governance institutions conducted themselves in a transparent and accountable manner. The role of the private sector as a key player in this development and cannot be overemphasised.

Mauritius was mainly exporting sugar which contributed 95% of export earnings and it took advantage of the World Bank and IMF supported structural adjustment economic reforms of the 1980s and 1990s to diversify exports from sugar to various other sectors it currently relies on. Trade liberalisation and export led growth was the main focus for propelling economic growth.

For South Africa, prior to democracy, import substitution was key to its export diversification.

After attaining democracy, there were clear economic programmes such as the Reconstruction and Development Programme (Corder, 1997) (RDP) whose objectives were to generate a strong, dynamic and stable economy; to advance human resource capability of all citizens; ensure that no one suffers discrimination in employment or training circumstances; to develop an affluent**,** stable regional country in Southern Africa; and to democratise the state and society. RDP's thrust was reinforced under the Growth, Employment and Redistribution (GEAR), a macroeconomic strategy which consolidated the focus on human capital development and democratising state institutions to promote sustainable economic development led by robust export growth and diversification. The entry of South Africa into the community of nations gave the country new opportunities for accessing new markets and attracting foreign direct investment.

1.2. Definition of Key Concepts

Dennis & Shepherd (2007), describe export diversification as an increase in the number of products that a country exports. There are two stages of export diversification. Firstly, horizontal export diversification occurs when the number of export sectors has increased. This reduces a country's dependency on a few sectors. The second stage is vertical export diversification, which occurs when a country starts manufacturing and exporting high value products that would have formerly been exported as raw materials (Herzer & Nowak-Lehnmann, 2006). Vertical export diversification is linked to higher learning possibilities and incorporates the use of new and existing innovative export products through value-added ventures which produce greater benefits than horizontal export diversification (Dennis & Shepherd, 2007).

In a nutshell, export diversification, is defined as the transformation of an economy's export structure. This can be accomplished by changing the current basket of products or by enhancing them through innovation and technology to add value and export the manufactured products. It also implies that the number of export sectors has increased over time.

A country diversifies its exports in order to expand export and production which fosters sustainable and inclusive growth, generate employment, reduce poverty and the country's vulnerability to external shocks (Elhiraika & Mbate, 2014). Africa's exports tend to be concentrated on a few products, often natural resources (i.e. sugar, oil, minerals such as platinum and gold), with very volatile demand and high price fluctuations. In addition, resource wealth is generally focused in

the hands of small groups that hope to reserve their own riches by interfering in the way of diversification which would dissolve their authority and wealth (Gylfason, 2005).

The decline in Africa's share of global exports from 5% in 1970 to 2.3% in 2000 with a minor recovery to about 3% in 2010, is evidence of the continent's heavy reliance on primary commodity production and exports when compared to rapidly diversifying East Asian countries which have experienced significant increases from 2.3% in 1970 to 17.8% in 2010 (Ehliraka & Mbate, 2014).

According to Hare (2008), countries that recognize the need for economic transformation and successfully implement diversification that drives manufacturing and services-based activities, are able to move towards a sustainable and ultimately more inclusive growth path. Such transformation reinforces the importance of export diversification for developing countries, particularly in Africa, in order to reduce vulnerability, promote sustainable socio-economic stability and inclusive economic growth.

There has been extensive research undertaken on the influence of export diversification, economic growth and assessing determinants of diversification on African countries. Al-Marhubi (2000), found a positive correlation between the level of export diversification and rate of economic growth. Agosin (2007) and Lederman & Maloney (2007) found similar evidence of export diversification-led growth. When, Elhiraika & Mbate (2014), and Agosin *et al.* (2011) assess the long-run determinants of export diversification, they find that factors such as good governance institutions and policies, technology, research and development, human capital, and infrastructure have significant influence on resource intensive developing countries in promoting the diversification of exports (Gelb & Sina, 2010). These factors showed varying levels of influence on a country's capability to diversify its exports and are therefore described as drivers of export diversification.

This research intends to demonstrate that human capital and good governance are determinants for promoting export diversification. On one hand, human capital development entails improving on technology advancement, which boosts innovation, enhancing technology absorption and enlarges the skills base. These are instrumental in the creation of quality and high value products. On the other hand, good governance denotes that institutions that make policy decisions and facilitate implementation of decision—or provide oversight, must exude high level transparency,

accountability, respect for and adherence to the rule of law and serve society. Literature from Gylfason (2005), emphasizes that positive changes in governance and human capital development tend to facilitate widening of the base of manufacturing, services and trade in developing countries. Mengistu (2009) also suggests that investment in human capital and macro-economic environment are necessary ingredients to accelerate export diversification which ultimately promotes sustainable economic growth and contribute to poverty reduction.

Simply put, human capital is defined as the means of production which can generate added value. Capital is a means of production used to create goods and services with human resources as the key drivers of production. Human resources take charge of all economic activities such as production, consumption and transaction. The success of human capital in influencing production and productivity depends on the level of knowledge, skills and competency of those employed (Alan et at., 2008). Highly skilled labor force is associated with higher levels of productivity. Highly skilled and knowledgeable human resources have the capability to bring about innovation and acquire or absorb new technologies with ease, which they employ to improve the quality, and efficiency of production, thus making the end-product more competitive on the export market (Gylfason 2005).

The terms governance and good governance are used interchangeably in this paper. Governance is a broad term covering aspects in which a country is governed, including economic policies, safety, security, adherence to the rule of law and credible oversight public institutions. Governance generally promotes transparency, accountability, consistency, credibility, coherency and predictability, high responsiveness to the needs of the nation and efficiency in policy implementation to achieve equitable and inclusive growth which is underpinned by the rule of law (World Bank, 1992). The United Nations (2003), in short, describes governance as the process of decision-making and the process by which decisions are implemented. The World Development Report 1997, underlines the importance of good governance by stating that an effective state is vital for the provision of the goods and services, institutions that allow markets to prosper without hindrance and for people to lead healthy and happy lives. Whereas, poor governance is closely linked to corruption, non-transparency and non-accountability which undermine the public's trust in its government, corrupt activities are a huge threat to market integrity, distort competition, and compromise economic development (World Bank Development Report 2002, 2002).

Mauritius and South Africa are two distinct economies which have both successfully transformed into middle-income countries, despite historic adversities faced by both these countries which then managed to reform and transform their fortunes into credible and strong democracies. Both countries prioritized and have continued to make progressive investments, although with varying degrees, into education and skills development for their labor force.

1.3. Relevance of Study

In recent decades several developing economies have adopted structural reforms aimed at improving their economic performance particularly through export diversification. This study hopes to show that human capital and good governance have significant roles in diversifying exports. The understanding of the determinants of export diversification is a contribution to the development of new theoretical literature linking diversification to human capital and institutions and governance. Findings from this study are commended for consideration by policy makers in order to successfully pursue policies that will boost export diversification.

1.4. Aim of the study

The aim of this research paper is to show how human capital and governance influence export diversity whose effect results in economic growth. Interest in this area of study stems from confluent of the writer's academic fixation and professional interest in both areas of human capital development economics and its related social requirements for good governance. This interest among other motives is encouraged by the need to understand the impact of varying levels in export growth and diversification, differing levels of social development and governance regimes across Sub Saharan Africa, notably in SADC countries.

1.5. Problem Statement

There are many factors that promote or facilitate export diversification in any country. In general export diversification is affected by the level of foreign direct investment as well as domestic investment; level of human capital development; industrial research and development; the consistency, coherency, and predictability of the macroeconomic policy environment (interest rates, exchange rate, domestic borrowing by Government, budget deficit, capital budget); credibility governance (state institutions, quasi-government institutions transparency,

accountability, recognition for the rule of law and property rights) and stable political environment. All these and other factors are determinants of export diversification. For the purpose of this paper, it is assumed that, everything else held constant, high human capital and good governance are key drivers and long-term determinants of export diversification.

1.6. Research Objectives

The main objective of this paper is to explore the relationship between export diversification on one hand and levels of development in human capital and governance, on the other hand. Essentially the paper will examine the role of human capital and governance in fostering the growth and diversification of exports in Mauritius and South Africa. The extended case study by Michael Burawoy is used to analyse the long run impacts of the variables (human capital and governance) on the dependent variable (export diversification). The other objective is a comparative analysis on how varying levels of — human capital development and good governance in Mauritius and South Africa impact export diversification during the period 1995 to 2015.

1.7. Research Questions

The research questions which this paper seeks to find answers to include the following:

a) whether human capital development and good governance play any role in facilitating export diversification;

b) what evidence there is to support the argument that these two key drivers have facilitated diversifying exports in South Africa and Mauritius;

c) since it appears that South Africa has weaker human capital and good governance than Mauritius, whether South Africa has a lower vertical export diversification, or whether it concentrated on horizontal export diversification and;

d) given results from above, what recommendations can be drawn as lessons for other countries on their path to sustainable export diversification?

1.8. Research Hypotheses

It is reasonable to assume that individuals with high levels of education are aware of the overwhelming effects of poor governance on the economy to drive export diversification. Therefore, it is reasonable to assume that rise in human capital development is likely to result in high levels of export diversification. Equally, it may be reasonable to expect that a country that exhibits good governance properties such as democracy, political stability, efficient institutions is likely to result in high levels of export diversification.

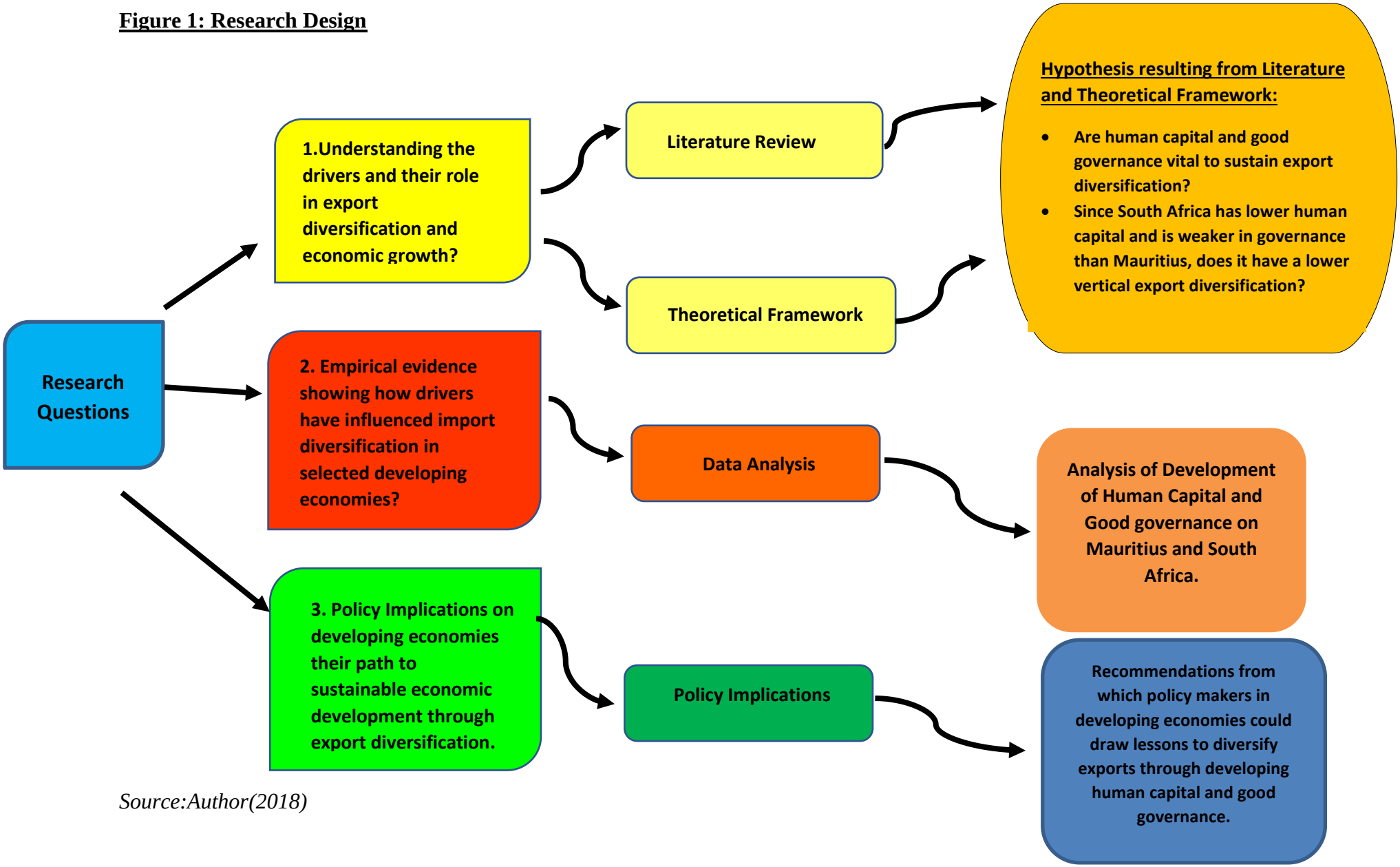
Therefore, this study hypothesises that human capital and good governance are vital to sustain export diversification and that a country with lower human capital and weak governance will have a lower vertical export diversification.

2. Research outline

2.1. Research Design

A research design is similar to a master plan that shows how the study is carried out and demonstrates how the study will attempt to address selected research questions. The research design for this two-country case study is based on the explanatory, empirical and interpretive approach. The study approach involves analysis through qualitative methods with a minor quantitative element. In this type of case study, the researcher analyses, infers and theorizes about the development against a theoretical framework which in this case infers that human capital and good governance play critical roles in promoting export diversification. Hence, the framework developed in this research report will support evaluating theoretical perceptions (Bogdan & Biklen, 2003). Deductions are discussed in association with existing literature with the aim of demonstrating how this study contributes to existing body of knowledge. Figure 1 below illustrates the structural depiction of the framework adopted for this research study. Figure 1 provides an outline of the execution of the design, development and implementation.

Figure 1: Research Design



Source:Author(2018)

3. Literature Review

This section will provide background literature on export diversification and its benefits to sustainable development. While it is not the primary focus, it does provide motivation for this study which aims to understand the role human capital and good governance play in driving export diversification. The section will also discuss learning theories and previous studies performed, surrounding the role of human capital and good governance on export diversification.

Key determinants consistently found to be effectively strong in explaining export diversification are *per capita* income, investment, population, terms of trade, human capital, and good governance (Elhiraika & Mbate, 2014). For the purposes of this research, focus will be on the selected two key determinants namely, human capital development and good governance, which in the researcher's view are important drivers for boosting high value exports and product diversification.

There are several different ways to describe and measure export diversification. Recent studies from Dennis and Shepard (2007) define export diversification as broadening the range of goods and services that a country exports. Cadot et al (2007) describe export diversification as exporting new products to existing or new markets. For the purpose of this paper, it is safe to use both descriptions.

Export diversification is measured in different ways and different levels. Measurement can occur either vertically or horizontally. Horizontal export diversification implies a rise in the number of export sectors, reducing a country's dependence on fewer sectors. The additional sectors could still be exporting primary products. Horizontally there is an increase in the range of exports or number of export products. For example, Mauritius used to be dependent on exports of sugar, in the early 1990s. It gradually moved to exporting garments, then medical equipment and now it exports financial and business service as well (Ali, Alwang and Siegel, 1991). This literally implies that Mauritius achieved horizontal export diversification.

On the other hand, vertical diversification occurs when the structure of exports shift from primary products to manufactured products (Ali, Alwang and Siegel, 1991). For example, a country that exports cotton can move from just exporting cotton to producing yarn, fabric and garments for export. The country has added value to its original export product through value chain development. At the same time the number of its export products have increase, not horizontally across sectors but vertically based on value addition. To

add value, the country requires to change its human resource skills mix, technological change and investment in new machinery and equipment and capital. This means that vertical diversification requires more advanced technology, highly developed skills and much more capital investment than horizontal diversification. This research study is focused on how this stage of diversification, is achieved through a significant amount of investment on human capital and good governance (Cramer, 1999).

Literature on export diversification has centred on the relationship between diversification and economic growth (Hausman *et al*, 2007). Al-Marhubi (2000) observed the relationship between export diversification and economic growth and found a positive relationship between the rate of economic growth and the level of export diversification. They also assessed the theory that export diversification could possibly result in high levels of economic growth through both knowledge spillovers and less export volatility stimulated by shocks to primary commodity prices.

Agosin (2007), in a cross-country regression analysis, observes that export diversification has a strong effect on *per capita* income growth. Agosin (2007) tested a growth model which emphasizes the introduction of new exports. Findings showed that about 80 percent of the difference in income growth rates were explained by changes in the rule of law, investment rates and export diversification. Controlling for other variables that affect growth, results suggested that export diversification, by itself and interrelated with export growth, is found to be highly significant in explaining *per capita* GDP growth. Lederman & Maloney (2007) in a panel model discover similar results in support of 'diversification-led growth'. Pineres & Ferrantino (1997) as well as Herzer & Nowak (2006) performed a case study on Chile. They studied the relationship between export diversification and economic growth. Their results implied that Chile has benefitted from diversifying its exports.

Chile is a typical example of a country that has moved up the value chain to produce high valued manufacturing products. It is the largest copper producer in the world with over one third of the world's copper reserves. Chile's approach to industrialize focused on policymakers building strong institutions and developing new industries (Vars, 2012). In the initial phase of industrialization policy, Chile applied the import substitution policy—an economic policy which discourages imports and promotes domestic production of most products. Import substitution is an attempt to limit a country's foreign dependence on imports through local production of manufactured goods (Bruton, 1998). However, Chile acknowledged failure of this import substitution policy which led to the adoption of an outward looking policy and

changed course by using exports to achieve economic growth. In 1970, Chile implemented export market reforms through high levels of government intervention to diversify resource-based industries such as salmon, wine, berry and pork (Vars, 2012). Chile's role model for economic reform was strengthened when democracy was restored in the early 1990s after the dictator Augusto Pinochet was overthrown. Economic reforms were achieved through export promotion policies and privatization of state-owned companies and continued privatization (OECD, 2013). Currently, Chile is ranked as a high-income economy with a low perception of corruption. Its largest sectors are mining (mainly copper), business services, manufacturing (mainly concentrated on food processed products, chemicals and paper). Chile has experienced rapid and consistent diversification reinforced by investments in education, which have increased specialist skills and knowledge among the workforce (OECD, 2013). Notably, Chile went into partnership with World Bank in 1999, implementing the Millennium Science Initiative (MSI), with the aim of boosting Chile's science and technology sector by supporting local scientists and investing in new research facilitated human capital development. This has enabled Chile to cultivate core skilled scientists who are up to date with cutting-edge research conducted in developed countries and add value to research and development.

The case for low income countries is different. A large number of low income countries exporting mostly primary goods struggle to develop as they face low human capital, poor governance, compounded by declining terms of trade. A notable example is the Democratic Republic of Congo (DRC). The DRC has vast natural-resources and minerals worth $24 trillion (CENADEP, 2009). Despite this vast wealth, the economy has declined drastically since the mid 80's. At the time of the country's independence in 1960, the DRC was the second most industrialized economy in Africa. Its mining sector thrived, and its agriculture sector was relatively productive (Shekhawat, 2009).

Since the mid-1980s the DRCs mining sector has contributed over 70 percent of total exports. During the year 2000, the mining sector continued as the main source of export growth and accounted for more than 5 percent of real GDP. In the last five years DRCs exports have decreased at an average of 14 percent each year during the period 2010 and 2015. The mining sector has encountered a number of problems that have limited its development. These include; "(a) persistent war resulting from failure to resolve democracy and governance issues; (b) a legal and regulatory framework not conducive to the development of the private sector; (c) serious transportation problems and; (d) chronic lack of investment. Exports mainly consist of oil products, cotton, cocoa, coffee, tea, and forestry products" (Jonathan, 2006:7).

Moreover, the conflicts in the DRC over minerals between the militant and the government and corrupt political agendas have destroyed the country's economy. Civil wars and armed conflicts have destroyed schools, health facilities and infrastructure. Children are not able to go to school as they are busy fighting to stay alive. This is the source of poor human capital development which continues to affect production even of primary products. More so, these civil wars have destroyed governance institutions, weakened the judiciary, the legislative and government departments. Lack of accountability, supervision, oversight, rampant corruption and looting, unnecessary human fatalities from continuous conflicts, and misappropriation of funds have attributed to the country's lack of basic services such as education, heath, water and sanitation (Jonathan, 2006).

Since 2001, harmony has been restored over majority of the country, although the hostility continues in some areas of the east. It is only after the introduction of economic stability policy's that considerable progress was achieved. In 2002, economic growth was revived and surpassed 6 per cent in 2004 after hyper-inflation and currency depreciation was put under control. The African Economic Outlook 2004/2005 suggests that a government prospers in conserving political stability, improving governance, eliminating corruption and pursuing structural reform to improve the economic environment, which could assist the DRC in regaining high rates of development. Today the DRC remains heavily dependent on primary products from agriculture, fishing, mining and forestry industries which are vulnerable to price fluctuations.

The DRC's low human capital development and poor governance has significantly affected the country's ability to diversify exports. The IMF (2015) recommends that human capital development could have a substantial impact on economic diversification and growth rates in DRC, as future investment in health, education and training could benefit the country from increases in productivity. In particular, importance should be put in increasing years of schooling, accountability and control on recurrent costs and superfluous spending.

Mengistu (2009) also analyzed the main determinants of vertical and horizontal diversification based on countries from Sub-Saharan Africa and East Asia. The results revealed that education, health, infrastructure development and trade openness are crucial factors to promote vertical as well as horizontal diversification in Sub-Saharan Africa and East Asia. Since, human capital is more developed in East Asia than in Sub-Saharan Africa, according to the HCI 2017 Report, key findings showed that Sub-Saharan

Africa countries continue to be the lowest ranked countries and have the largest gap in human capital development of 47% which fall below global average gap of 38%. Whereas, East Asia gap in human capital development falls below the global average gap at 34% (Global HCI, 2017). The perception is that East Asian countries have dedicated a substantial amount of investment on education, health and infrastructure, which in turn create a favorable atmosphere for promoting export diversification.

Mengistu's study also revealed that political instability, a product of bad governance, had a strong adverse effect on export diversification, especially in Sub-Saharan Africa. The key findings of this study suggest that investment on human capital, stable macro-economic and political environment are necessary to accelerate vertical and horizontal diversification which ultimately promote sustainable economic growth. Plekhanov *et al.* (2009)'s findings establish that improvements in the governance structures of an economy are not only related with a diversified export base and industrial diversification, but also with reduced conflicts and civil wars that weaken investment, production and export diversification.

This empirical evidence showing the existence of a positive relationship between human capital, good governance and export diversification. It also shows how human capital development and governance are important determinants to promote export diversification. Thus, this research adds value to the current body of knowledge regarding export diversification and its long-run determinants. An attempt is made to analyze the development of human capital and good governance and their influence on promoting export diversification. This is relevant given that developing countries have undertaken structural and transformative socio-economic and political governance reforms in recent decades in order to improve economic performance through diversifying and increasing exports, with the ultimate objective of reducing poverty and raising the standards of living of their societies.

4. Theoretical Framework

This section will provide a theoretical framework adopted in this research and will attempt to establish a relationship between and among export diversification and the driving variables of human capital and governance.

4.1. Human Capital

As discussed earlier, human capital refers to the stock of productive capabilities both inherited and acquired through education and training such as knowledge and skills embodied in human resources or labor force. These human capital capabilities are expected to improve productive and entrepreneurial skills, and further provide access to markets and basic social services (sanitation, health, water and nutrition). In addition, individuals are expected to gain the capabilities of participating in institutional structures and political decision-making processes (Acemoglu *et al*., 2001).

There are two types of human capital. The first is utilizing 'humans as a labour force' in conjunction with other production factors such as land and machinery. The second is viewing human capital as the target of investment through education and training. This is often referred to as 'human capital as creator' (Alan *et al*., 2008).

The importance of 'human capital as creator' relates back to the 1950s, when economists Adam Smith and Alfred Marshall, discovered that the investment of human capital was the key factor to raise economic growth (Schutt, 2003). Macroeconomists, Denison (1962) and Lucas (1988) demonstrate that human capital affects economic activity at all levels, i.e. growth of wages, productivity, and national economy. Lepak & Snell (1999) state that human capital affects a firm's competitive advantage through worker's productivity.

Human capital theory can be considered from a labour economics view that human capital is a set of skills that increases production. The Becker view states that "human capital is directly useful in the production process", (Acemoglu et al, 2001: 5). Basically, human capital increases an individual's output depending on the task, organization, or situation. According to this view, human capital is represented by the supply of knowledge, skills, and this supply directly influences the production process in an economy.

Fundamentals of human capital are important when examining the incentives to invest in it. Schooling is the most evident element of human capital followed, by quality of schooling. The quality of schooling varies depending on the acquired level of human capital. Training is a factor of human capital which individuals obtain after schooling. It is usually linked with some set of skills acquired that are valuable for a particular industry or set of technologies. Investments in training are very high and most individuals, especially the rural poor, are not able to afford such level of investment hence, the government has the major responsibility to invest in training the labour force. There is also pre-labour market exposure concept which shows that there is increasing recognition amongst economists that individuals that are pre-labour exposed before joining the labour market, increase their human capital significantly (Acemoglu et al.2001). This is because they will have refocused their skills and knowledge towards specific skills gaps.

4.2. Human Capital and Export Diversification

Hausman & Klinger (2006) show that human capital accumulation is a pre-requisite for technological advancement and for boosting innovation and skills that are instrumental in the creation of quality and high value products. Hausman and Klinger empirically show that many developing countries have specialized in exporting certain goods but are not able to transfer those assets and skills to the production of more high value goods.

Human skills have been associated with increased diversification especially in the production of manufactured goods or services which are knowledge based (Agosin *et al*, 2011). Since the generation of new products like information technology equipment and gadgets are dependent on research and development, human knowledge is crucial in the exploration of new, efficient and affordable production techniques. The internationalization of production processes, has also led to skills specialization on components of a good produced from various locations in the world. For example, the production of aircraft components is executed in a variety of countries and assembled in one country. Human resource skills and knowledge is becoming more specialized to meet these new developments in production.

A study done by Elhiraika & Mbate (2014) on the long-run determinants of export diversification for the periods 1995 to 2011 on 53 African countries showed evidence that human capital is a strong and positive determinant of export diversification, indicating that countries whose populations exhibit higher levels of education are more likely to achieve export diversification. Elhiraika & Mbate (2014) hypothesized that to promote export diversification there needs to be availability of skilled labor for new and innovative investments. Results from the study also suggested that an increase in specialized human capital is

associated with higher research and development, low cost of production, higher technology production techniques and a greater diversified production chain. The authors highlight the importance of post primary education in equipping the workforce with sufficient and practical skills that stimulate innovation, research and development.

Similarly, Agosin *et al.* (2011), explored the determining factors of export diversification around the world. Their results suggest that countries with higher education were aided in boosting diverse exports. This is consistent with the idea that countries with high levels of human capital, are able to move from primary export products to manufactured goods and high value-services.

Kodila-Tedika & Asongu (2016), find that human capital is positively related to export diversification, manufactured added value and export manufacturers. Their empirical evidence is based on a world sample of 170 countries for the year 2010. Their findings provide implications for the fight against the 'Dutch disease'—which refers to vast wealth in natural resources that ends up having a negative impact on a country's broader economy. Essentially, capitalizing on human capital can bring economic diversity and therefore reduce negative external shocks related to resource-dependency.

4.3. Good Governance

Whereas governance theories include numerous perceptions of governance and how they develop, an appropriate theory which relates to governance in most African countries is the 'good governance' theory. The structures and methods of governance in developing countries are related to the good governance theory. The good governance theory was developed from a set of strategies. The theory was formerly introduced by the World Bank, as a precondition for borrowing and technical assistance provision to developing countries.

The good governance theory, therefore, sets out basic principles to the way in which a good government must be run. The principles include accountability, receptiveness, transparency, public participation, economy, and efficiency. In accordance with the World Bank's principles and policy interventions in developing countries, good governance encompasses legal framework, well-organized public service, and a legal system to enforce agreements and responsible management of public resources. Including requirements such as self-regulating auditors, diverse institutional structures and the recognition for human rights and rule of law. The World Bank (1992), identifies three sectors of the society that have direct influence on governance, which are: the form of political regime; the ability of governments to

formulate policies and have them successfully executed; and the way in which power is applied to the management of socio-economic resources (World Bank, 1992). Bjork &Johansson (2001) recognize that current forms of government are not only about efficiency but include accountability between the state and its citizens. Good governance gives citizens the right to hold their governments accountable.

Political democracy forms an integral part of the good governance theory, because without political democracy emerging countries result in poor governance, mistrust, corruption, and maladministration of public resources. According to (Paldam and Svendsen, 2000) an increase in democracy is an investment in societal capital which is the infrastructural connection that holds a society together and keeps it functioning. Other factors of social capital include trust, no corruption, and rational equality in the distribution of income and wealth. The idea is that political instability, domination and excessive disparities tend to reduce social unity and cohesion and thus also the quantity or quality of social capital.

Gylfason (2005)'s study on institutions, human capital and economic diversification stresses that for economies to function well they need extensive political participation and a broad base of authority. This will enable them to offer the citizens an effective and fair way of exercising their political and public rights through free elections and freedom of expression and association. In addition, there is a need for political diversity considering that majority of resource-rich countries' wealth is concentrated in a relatively small number of individuals that seek to preserve their own riches by standing in the way of both economic and political diversifications that would dissolve their authority and wealth (Gylfason, 2005).

4.4. Governance and Export Diversification

Most recent literature places greater emphasis on the importance of the factors of good governance and institutions as pre-conditions to export diversification. These factors engender the protection of property rights, facilitation of transactions and ensuring accountability of government resources, (Djankov et al, 2002). Hague & Harrop (2013) define institutions as major organizations of national government, particularly those specified such as the judiciary, legislature and the executive. Hague & Harrop (2013) assert that institutions play a crucial role, as they offer the framework within which decisions are reached. Furthermore, the strength, integrity and reliability of governance related institutions including state owned enterprises that implement Government policies and provide basic services should avoid negative factors such as over-regulation, pilferage and political interference and instability, all which have an impact investment, innovation and diversification.

Authors Cabral & Veiga (2010) studied the political and economic factors that determine export diversification and export sophistication policies in Sub-Saharan Africa and East Asia. They ran separate regressions for the determinants of export diversification and sophistication, using data of 48 Sub-Sahara African countries from 1960-2005. Key findings of the study show that governance is an important determining factor for the success of diversification policies in Sub Saharan Africa.

Cabral & Veiga (2010) highlighted that the level of corruption, transparency and responsibility are vital factors in influencing diversification of exports. The findings infer that a rise in human capital does promote export diversification and sophistication. The research results also show that the quality of education, specifically primary education, play very important role in explaining export diversification. This could emanate from the fact that primary education forms the foundation for any further formal or informal training and higher education accessibility. Therefore, investment in primary education lays the foundation for further human resource development and skills acquisition.

4.5. Human Capital and Good Governance

Human capital and good governance are fundamentals needed to promote export diversification. The success of human capital depends on the government ability to provide citizens with higher levels of knowledge, skills and competency. Gylfason (2005) stresses that education and training are essential inputs into successful diversification because they enable individuals in low-skilled labour to acquire high-skilled work in manufacturing, trade, and services. Education at all levels plays a critical role in successfully transferring labour after acquiring critical skills to high-technology services sector. In addition, political diversity reinforces diversification as democracies naturally want to develop their citizens, equipping them with skills to work in modern diversified manufacturing and service-based industries. A complementary relationship between human capital and good governance can therefore be established. High standards of human capital call for good governance, as it is unlikely for a high-skilled population to accept poor standards of governance. Good governance encourages high standards of human capital development. Similarly, a democratic economy is less likely than a dictatorship to endure low standards of education.

Research by Kloop & Haan (2012) examines the relationship between different dimensions of governance and human capital. Results showed that good governance is positively related to human capital, while governance instability has a negative relationship with human capital. The researchers perform their

analysis in two steps. Kloop & Haan (2012) observe an analysis on sixteen human capital indicators to generate two new human capital measures, basic and advanced. They estimate a cross-sectional model on 100 countries to determine the effects of political factors on human capital. They come to the conclusion that a political system with a democratic approach is positively related to basic human capital, while an unstable political regime is negatively linked to basic human capital. They find that good governance has a positive association with advanced human capital, while government instability has a negative link with advanced human capital. Kloop and Haan (2012) view an indirect positive relationship between governance and democracy on both types of human capital through their individual impacts on income *per capita*.

The effects of human capital go past improved economic revenues in the form of individual earnings or economic growth. Indeed, human capital is "a political process constantly being negotiated between state and labour, which offers for the many political regimes of human capital forms" (Blair, 2011: 602). Traditional regimes are commonly characterized by lower public expenditure on education, as the problem of education posed is specifically on the middle-class for advanced education (Pontusson, 2005). On the contrary, Pontusson (2015) states that governments with a democratic approach to social and human development are viewed as structures with higher public expenditure on all levels of education in which their policies are focused towards strong support to human capital development.

Piketty (2014) imposes that "the main forces for convergence are the diffusion of knowledge and investments in training and skills, which are even more powerful than the economic, law of supply and demand" (Piketty, 2014: 21). These different institutional arrangements and political regimes in turn invoke economic and non-economic earnings for human capital specifically regarding improved governance and enhanced social development.

4.6. Case of Sub-Saharan Africa

Political institutions in most Sub-Saharan African countries have failed to deliver political and economic development. As such when compared to other continents, Africa performs badly in political and socio-economic indicators. According to the World Bank *Global Monitoring Report* (2005), more than half of the African population lived below the international poverty line of $1.25 a day, and about 70 percent of AIDS and HIV infected deaths in the world were accounted for in Africa, and this has negatively affected the regions human capital development.

Various explanations have been suggested for Africa's poor performance and governance failure. Reasons provided include slavery, geography, poor health, culture, globalization, and colonialism, according to Ukwandu & Jarbandhan (2016). Alence (2004), on the other hand, argues that the continent's poor performance is linked to 'dysfunctional political institutions, poor leadership and governance'. Authors such as Ong'anyo (2008) point out that difficulties in leadership in Africa is characterized by destructive examples such as Uganda's Idi Amin and Zimbabwe's Robert Mugabe than by positive roles such as Botswana's Seretse Khama and South Africa's Nelson Mandela. Poor governance in Uganda and Zimbabwe resulted in economic chaos, destruction of institutions, and impoverished economies. These African countries continue to face challenges relating to poor economic performance, violence, weak institutions, lack of infrastructure and corruption. Regardless of international institutions and global initiatives seeking to collaborate with these countries to improve social and economic indicators such as life expectancy, access to water, infant mortality and education, there has been no real movement towards embracing the change (Sebududu & Mooketsoane, 2016).

In addition, Africa's human capital and skills development levels remain a challenge to its economic development and that of its private sector. The African Development Bank identified that "Africa suffers from crippling shortages of human capital and skills. Only 1 percent of African adults had completed tertiary education by 2010, compared to a global average of 3.9 %" (AFDB, 2011: 102). This transforms into a declining human capital development base, low levels of adult literacy and insufficient support instruments for education. The latent earnings for human capital are together with the challenges are massive considering the large population of over 2.3 billion projected in 2050.

The AFDB (2011) observes that "after Asia, Africa is the world's largest and most populous continent and accounts for about 15% of the world's population… it is also the youngest region in the world... By 2040, Africa will have the largest workforce in the world" (AFDB, 2011:5). The continents demographic features could benefit from high investments in both quality and quantity of human capital or encounter dreadful socio-economic costs of uninformed and jobless individuals particularly the youth. Today most African countries depend on natural donations under product-based models which do not require high skilled labour and continue to produce low quality of human capital.

In order to reverse the economic riches of a continent with such significant labour resources the African continent needs, according to the World Bank "to invest heavily in physical infrastructure and productive

capacity…However, maximizing productivity and achieving competitiveness will depend upon success in augmenting human capital and raising its quality" (AFDB, 2009: 9). Certainly, human capital will offer conditions for skills development, concentrated growth and a sustainable economic path. But firstly, such an outcome as advised by the African Development Bank will entail "continued, high impact, investments in human development – in education, nutrition and health, science and technology in the absence of which African economies will remain uncompetitive" (AFDB, 2011:4).

Simply put, the necessary transformation needed for this region will involve an efficient knowledgeable labour force in order to move SADC and most African countries up the value chain. This will improve workers employability, production and competitiveness. In the 21st century, the path to economic success is dependent on how countries can connect available knowledge and innovative technologies to sustain production capabilities and build competitive advantages (AFDB, 2011).

On the other hand, Africa has also made substantial development steps in some areas. For instance, there has been a shift from one-party states to multi-party democracies. Economic growth rates have increased, with GDP increasing from 2.3 percent in 2009 to 4.7 percent in 2010. However, Africa has failed to transform this growth into employment, poverty reduction and continue to rely on natural resources which is unsustainable in the long-run (AfDB, 2013). The African Union (AU) and the Economic Commission for African (ECA) in the Millennium Development Goals 2013 report stated that most African countries do not show any visible movement towards export diversification or have no sustainable movement towards diversification.

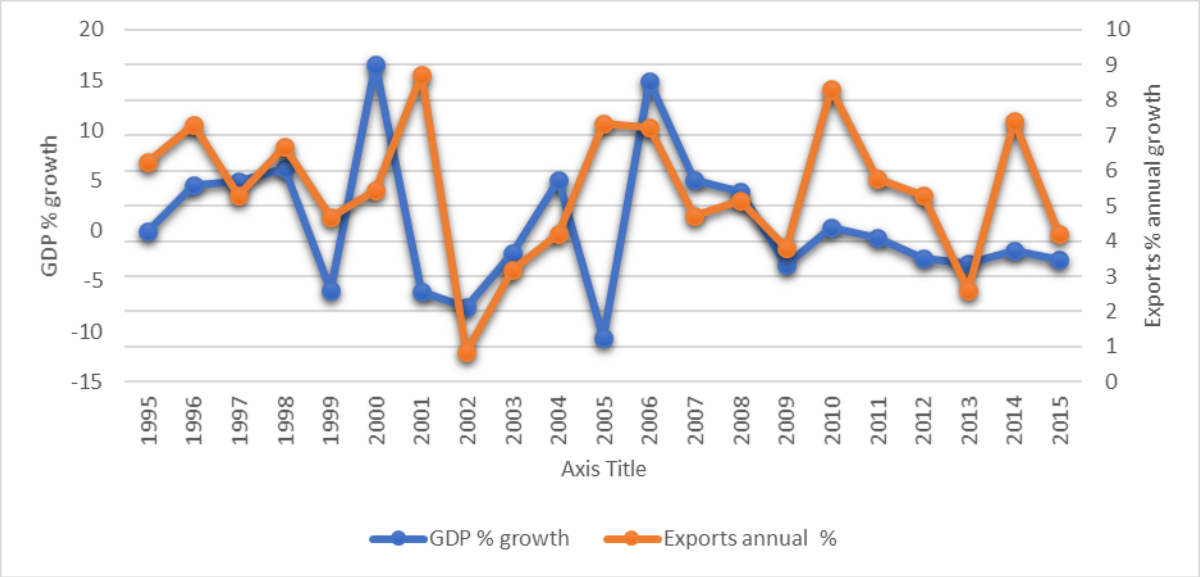
This discussion suggests that Africa needs strong and capable bureaucracies to ensure independent and efficient institutions to stimulate diversification.

Despite the downsides of most African countries, there are a select few that differ from the rest of the continent. Botswana, South Africa, Mauritius, Ghana and Namibia are among the few countries with outstanding economic performance in Africa.

4.7. Why Mauritius and South Africa?

Mauritius and South Africa have been selected for this research given their distinct export diversity performance, ability to achieve sustainable socio-economic development and their governance systems which appear to have remained consistent over the period under review.

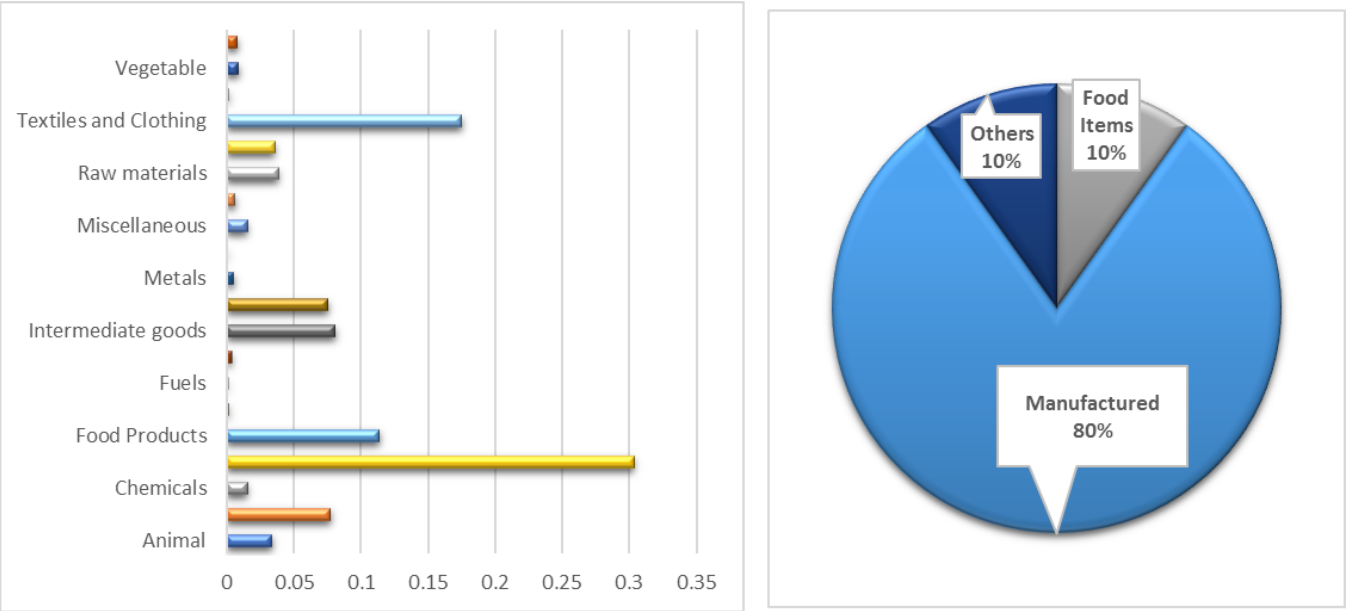
Figure 2: Gross Domestic Product and Exports of goods and services annual % growth rates for Mauritius



Source: Authors own work, data obtained from World Development Indicators (2018)

Figure 2 illustrates trends in real GDP and export growth for Mauritius from 2000 to 2015. It shows the export structure of Mauritius product groups as a percentage of total exports for 1981-2015. The increase in textile and fabric exports made a significant contribution to the increase in both exports and real GDP between 1981 and 2000. Mauritius diversification can be seen through its increase in manufacturing share making up a total of 57% of total exports. Similarly, the rise in textiles is evident and is more than half of the export product groups. Despite the country's significant growth in exports and GDP, its technology base continues to lag behind the regional average, this may be because of the significant part of production and the bulk of exports being garments, which are classified as low technology.

Figure 3: Mauritius Export Products and Product Groups for 2015

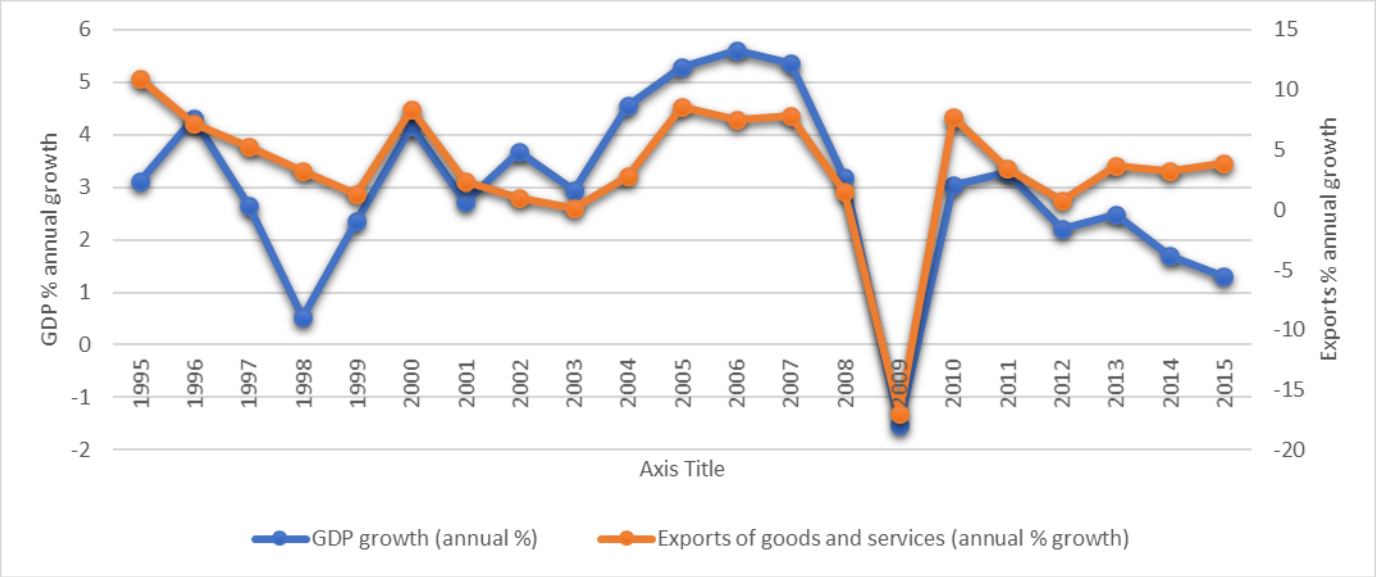


Source: UNCOMTRADE, 2016

South Africa has competitive advantage in the production of mining, agriculture and manufactured products which are exported worldwide. Towards the end of the twentieth century South Africa made gradual shift from primary to secondary products, this was primarily driven by the tertiary sector (Yager, 2010). South Africa's economy is relatively diversified with key sectors: agriculture and fisheries, mining, vehicle food processing, manufacturing, clothing and textiles, telecommunications, energy, financial and business services, transportation, tourism and wholesale and retail trade (Yager, 2010).

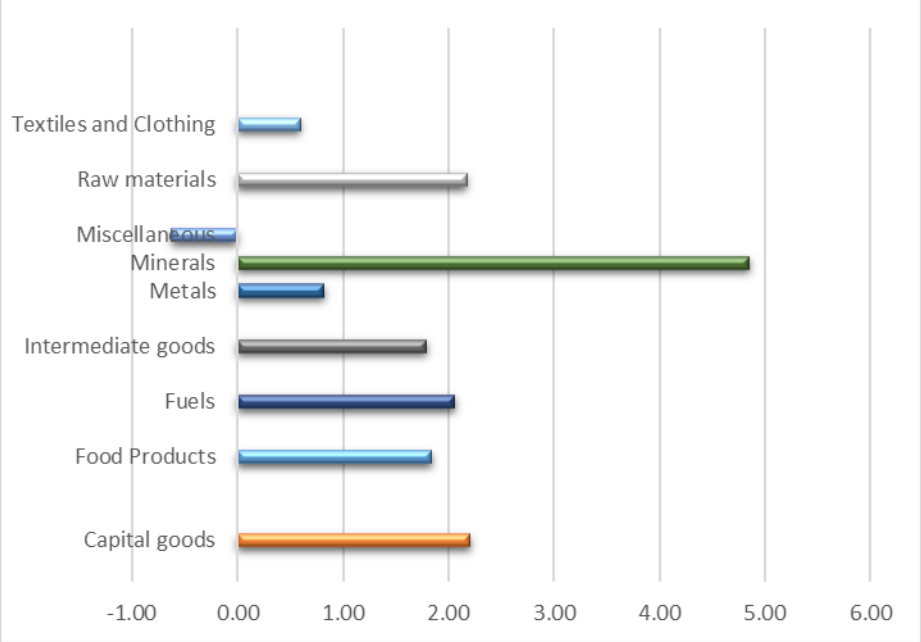
South Africa's GDP increased at an average of 2.4% a year, from1994 to 2000, while export growth increased at an average of 3%. With growth acceleration from 2001 to 2010, GDP rose to 3.2% a year and exports increased to an average of 3.6%. The global recession in 2009 had significant impact on South Africa's GDP and export growth as shown in Figure 5. The country reached its -1.5% growth for GDP and -17.22% growth for exports. South Africa has since recovered, and average overall growth has been 3% for 2013 to 2015.

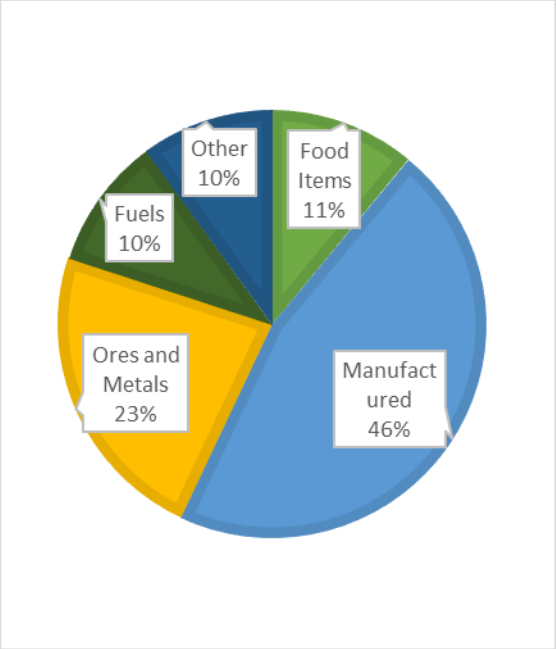
Figure 4: Gross Domestic Product and Exports of goods and services annual % growth rates for South Africa



Source: Authors illustration, data obtained from World Development Indicators (2018)

Figure 5: South African Export Structure for 2015





Source: UNCOMTRADE, 2016

The country's share of manufactured merchandise in total exports dominated South Africa's vast export structure for the year 2015 at 46%. As shown in Figure 5, despite South Africa's diversified manufacturing-base, the country's trade structure remains unchanged from its primary and resource goods where ores and metal and fuels account for a sum of 33% of total exports. South Africa has horizontally diversified its exports. Despite historic hardships, both countries have sustained a track record of being democracies and politically stable which is key to good governance.

Mauritius is among the selected few countries in Africa that are notable for successfully promoting diversification (Sebududu & Mooketsoane, 2016). Profiting from its long-standing democratic system, political stability, flexible regulatory system, and good governance, Mauritius has become the most diversified nation on the African continent (ACET, 2014). Since its independence in 1968, Mauritius has advanced from an agricultural economy to a diversified economy. In addition to being ranked 1st for export diversification in Africa; Mauritius has developed from a three-pillar based economy of sugar, tourism, and textiles, into a modernized economy. Mauritius now has five pillars of an export economy of fabrics, sugar, service sector, and currently developing sectors such as financial services and information communication technology (ACET, 2014). The Mauritian government centre's its growth policies on building a domestic information telecommunications industry and increasing local financial institutions (Frankel, 2010).

However, corruption in Mauritius is becoming a growing concern. Even with anti-corruption initiative such as Independent Commission Against Corruption (ICAC) which investigate offences and appropriates funds of corruption and money laundering, incidences of corruption are increasing. In 2003, the former Minister of Housing and Lands was arrested and charged with conspiracy to accept bribes. Despite drawbacks, Mauritius' governance remains very effective and progressive.

South Africa is considered an 'economic powerhouse' of Sub-Saharan Africa (OECD, 2001). Since 1994, South Africa has pursued several political, economic, and social transformations designed to achieve a stable democracy and economic development. South Africa trades considerably within the SADC region despite having a diversified manufacturing-base that can participate in the global economy.

After the removal of international sanctions, through policies (that promote foreign investment by relaxing restrictive labour laws, increasing privatization, raising government spending and cutting interest rates) advocated by former President Thabo Mbeki in 2000, South Africa saw a significant rise in economic

growth, employment and exports. South Africa's Gross Domestic Product has since grown to over $400 billion, and exports rose from $3 billion in 2000 to nearly $50 billion in 2003, thus, forming a diversified economy with an increasing and sizeable middle class, within twenty years of establishing democracy (OECD, 2001).

However, challenges of corruption and poor governance continue to dominate and increase in South Africa. Tenderpreneurism and BEE-fronting are two forms of corruption prevalent in this country. Bloom (2010), defines Tenderpreneurism as the process in which an individual or firm enriches themselves by awarding government tender contracts to individuals based on personal connection or corrupt relations. BEE-fronting involves the abuse of rules governing Black Economic Empowerment (BEE), where qualifying individuals are given a seat on the Board of Directors but are not allowed to partake in the decision-making process of the company. Corrupt companies do this with the sole purpose of qualifying the company for government contracts in terms of BEE (Bloom, 2010).

Mauritius and South Africa are developing countries that have made significant investments in human capital and development. Investments in human capital and development has attributed to Mauritius' diversification performance as reflected by the country's declining infant mortality, rise in growth in per capita averaged 5.4 percent over the period 1970-2010, increased life expectancy to 72.8 years, and developed infrastructure. Mauritius has accomplished what few emerging economies can achieve. For example, Mauritius' Gini coefficient, which measures income distribution and inequality, declined during the period 1980 and 2006 from 45.7 to 38.9, respectively. In addition, no individual in Mauritius lives below the poverty line of USD $1.25 per day (Bird & Vandemoortele, 2011).

The country has ensured effective and quality education and institutions. High levels of human capital development have been achieved through continued, high and dependable investment in education, health and nutrition. This allowed Mauritius to utilise access to international market opportunities and maintain socio-economic growth (Neeliah & Seetanah, 2013). In addition, with the termination of the Multi-Fibre Agreement in the global textile market, Mauritius seeks to refine its strategies to find other drivers of export growth.

South Africa's economy has shifted towards medium-economy with high technology manufacturing services, and a value placed on investing in the development of a high skilled labour force. This has enriched the current skills shortage problems that previously negatively affected the economy but more

fundamentally equipped South Africa's with a workforce able to sustain an accelerated rate of growth. South Africa use of expatriates has complemented its human resources identified critical skills shortage areas.

This study hopes to show that the development of human capital, good institutions and governance have played significant roles in promoting export diversification. The understanding of the determinants of export diversification is a contribution to the development of new theoretical literature linking export diversification to human capital and strong institutions and governance, by revealing their interactions and some of the processes. This study will have relevant recommendations to encourage sustainable export diversification in developing countries. Thus, the policy recommendations from this study could be considered by policy makers to successfully pursue policies that could further boost export diversification.

From the theoretical framework discussed the following hypotheses extend the initial research questions posed, are human capital and good governance vital to sustain export diversification, and that since South Africa has lower human capital and is weaker in governance than Mauritius, does it have a lower vertical export diversification.

5. Methodology and Data

This section outlines the methodology and describes the data used to estimate the bivariate relationship of governance, human capital and export diversification.

5.1. Methodology

This research report is a theoretical paper and uses the extended case study method developed by Michael Burawoy as a base for methodology. This methodology intensively studies a phenomenon over time within a physical setting in one or a few sites. This paper utilizes multiple methods of data collection, observations, pre-recorded documents, and secondary data, employed and inferenced about the topic of interest. This case research employs an interpretive manner with the purpose of discovering flaws in and improving existing theories (Burawoy, 1989). It follows an exploratory and descriptive study as it evolves towards qualitative and inductive research.

Advantages and Disadvantages of Methodology

Exploratory research is a kind of research carried out for an issue which has not been clearly defined. Generally, the outcomes are not helpful for decision-making by themselves, however, they can offer significant signs about a specified situation. Most of exploratory research supplies qualitative information, and clarification of the findings usually is hypercritical. Moreover, the use of qualitative research could result insignificant interpreter bias. Most of exploratory methods make use of modest samples that might not be illustrative since they have not been chosen on a likelihood bases. This case study, for instance was selected simply because the two countries represent extremely good comparable examples of successful promotion of export diversification (Burawoy, 1989).

5.2. Data

The research involved the collection of a wide range of secondary data and information. This paper utilized secondary quantitative and qualitative data. Qualitative Data was used from policy papers, published journals. Reports as well as available public information from internet sources relating to export diversification, governance, institutions and human capital will be included. Quantitative Data on exports diversification, good governance was obtained from Worldwide Governance Indicator (WGI), Normalised-Hirschman-Herfindahl Index (NHI), and Human Capital Index (HCI) on the World Bank Database and Direction of Trade Statistics (International Monetary Fund), as from Human Development

Index (HDI) from the United Nations Comtrade Database – International Trade Statistics – Import/Export Data (UNCOMTRADE).

5.2.1. Measures of Export Diversification

There are several measurements used to estimate the degree of export diversification. Concentration indices, counting exported product or using indexes that incorporate the productivity content of the export basket are examples of the different measures of diversification (Hausman and Klinger, 2006). The most widely used measures include the Finger-Kreinin Index, which measures diversification and no diversification, relative to average structure of exports elsewhere. This index only measures merchandise of exports, not services. Theil Index, measures the sum of export diversity across sectors (vertical diversification) and diversity within sectors (horizontal diversification). Normalised-Herfindahl-Hirschman Index (NHI), this index measures export concentration using the sum of squares of the shares of each sector in total output. Finally, the Economic Complexity Index rates countries by their diverse and complex export structure. This measure of export diversification has coverage is limited only to goods, not services (Gylfason, 2001).

This study will use the Normalised-HH Export Concentration Index (NHI). Export concentration refers to the degree a country's exports are concentrated on few product, this is the opposite of export diversification. The NHI is measured from 0 (minimum value diversification) and 1 (maximum level of concentration).

Since vertical diversification implies that a country moves from primary exports into manufacturing exports. It can be measured by the share of manufactured exports to total exports (Mengistu, 2009). The following equation illustrates the measure vertical diversification.

Vertical Diversification or VDIV = (Total Manufactured Exports) / (Total Exports) (Equation 1)

5.2.2. Measures of Human Capital

Human Capital is usually measured by gross secondary school enrolment rate of life expectancy. It is hypothesized that through increased availability of skilled labour for new and innovative investments, export diversification will rise. Moreover, increases in specialised human capital is associated with higher

research and development, high technology production techniques, low cost of production and larger diversified production volume (Barro & Lee, 2000).

For this research report the researcher will utilize the World Bank, HCI (Human Capital Index), as it discovers the inhibitors and contributors to the development and distribution of a healthy, educated and productive workforce. The HCI ranks countries to allow for effective comparison across regions and income groups. The purpose of the rankings is to create greater awareness for the global World Bank's Human Capital Index economy and to serve as a basis for leaders to increase public and private policies to develop human capital.

There are three key features to this index. First, this Index is based on four pillars: education, health, employment and enabling environment. It illustrates a brief overview of the current state of a country's human capital. The index incorporates indicators from policy decisions which impact and shape the future workforce. Consequently, absence of long-term planning of human capital can result in lost potential in a country's population and results in losses for a country's productivity and growth (Global HCI Report, 2017). The HCI measures the quality of early childhood and lifelong learning and training by looking at how investments made in beginning years in education and health are recognized in the working age population. Hence, using the HCI enables the researcher the ability to trace back the human capital development and provide evidence of how it has aided in diversifying exports in South Africa and Mauritius.

5.2.3. Measures of Governance

Governance and institutional factors, will focus on six policy indices from the World Governance Indicators; government effectiveness captures the government's ability to formulating and implementing its policies, the quality of public service delivery; rule of law index incorporates the quality of property rights, legal enforcement, and the probability of crime and violence; voice and accountability captures indicators such as accountability of officials, institutional stability human rights, and freedom of speech; political stability and absence of violence measures the risk of militant coup, insurgency, terrorism, political assassinations; regulatory quality captures trends in exports, imports volumes affected by the changes in government regulation; and the control of corruption measures the costs and losses of corruption and political instability (World Bank, 1992).

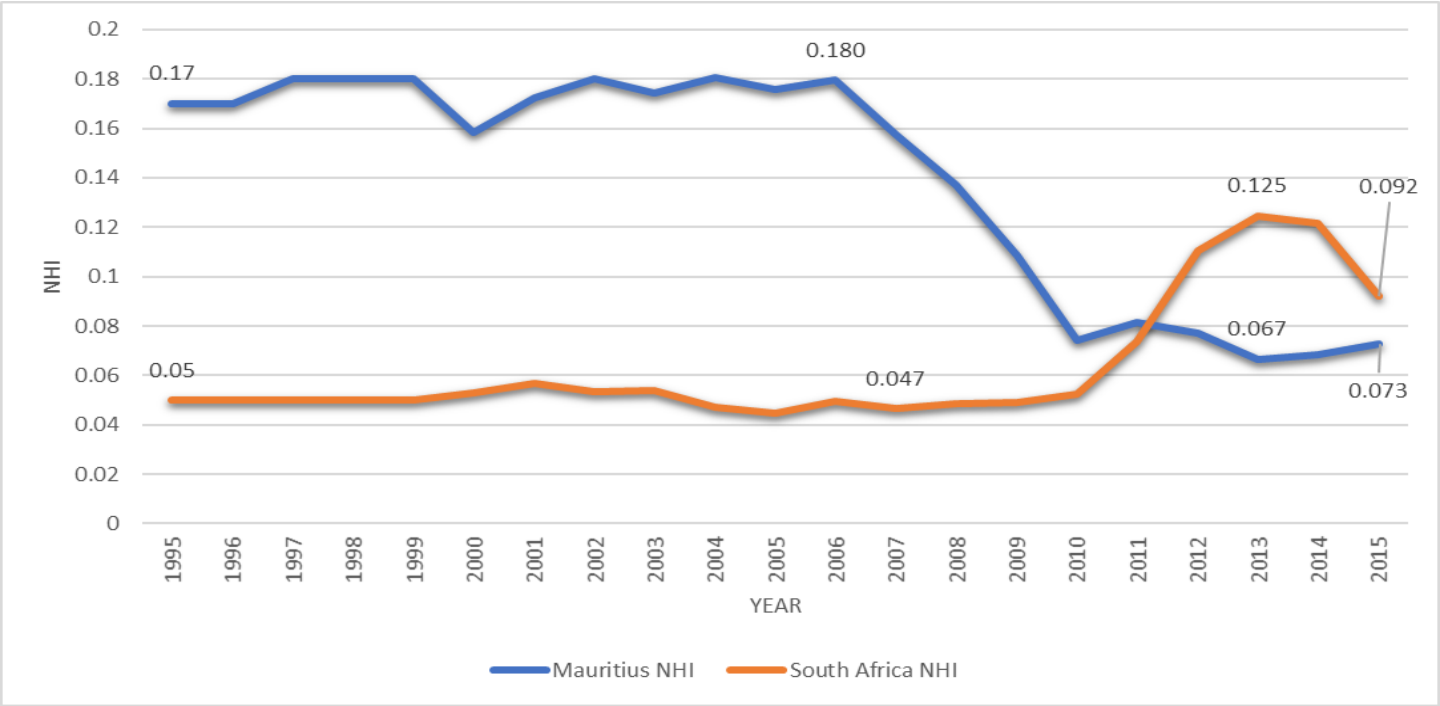
These policy indices are measured on a scale of -2.5 (poor governance) to 2.5 (good governance). Low values of these indices indicate poor governance levels which lower export diversification.

6. Data Analysis

This section will provide a detailed data analysis and empirical evidence to support the argument that human capital and good governance have played a positive role in diversifying South Africa and Mauritius exports. In addition, this section will draw out policy from this study that will foster sustainable export diversification.

Figure 6 illustrates the evolution of export diversification trends in Mauritius and South Africa, over the period 1995 to 2015. Figure 6 shows a declining trend in export concentration for Mauritius, from an NHI value of 0.17 in 1995 to 0.16 in 2000 and finally 0.07 in 2015. A steep decline in export concentration between 2007 and 2010, may signify Mauritius steady increase in export diversification. There increasing trend for South Africa's export concentration, from an NHI value of 0.05 in 1995 to 0.053 in 2000, and finally 0.092 in 2015. The impact of the 2009 global recession resulted in a significant increase in export concentration as shown between 2009 and 2015 from an average NHI value of 0.05 in 2009 to 0.92 in 2015. Overall Mauritius and South Africa have both experienced a negative 0.9 percent change in export diversification from 1995 to 2015.

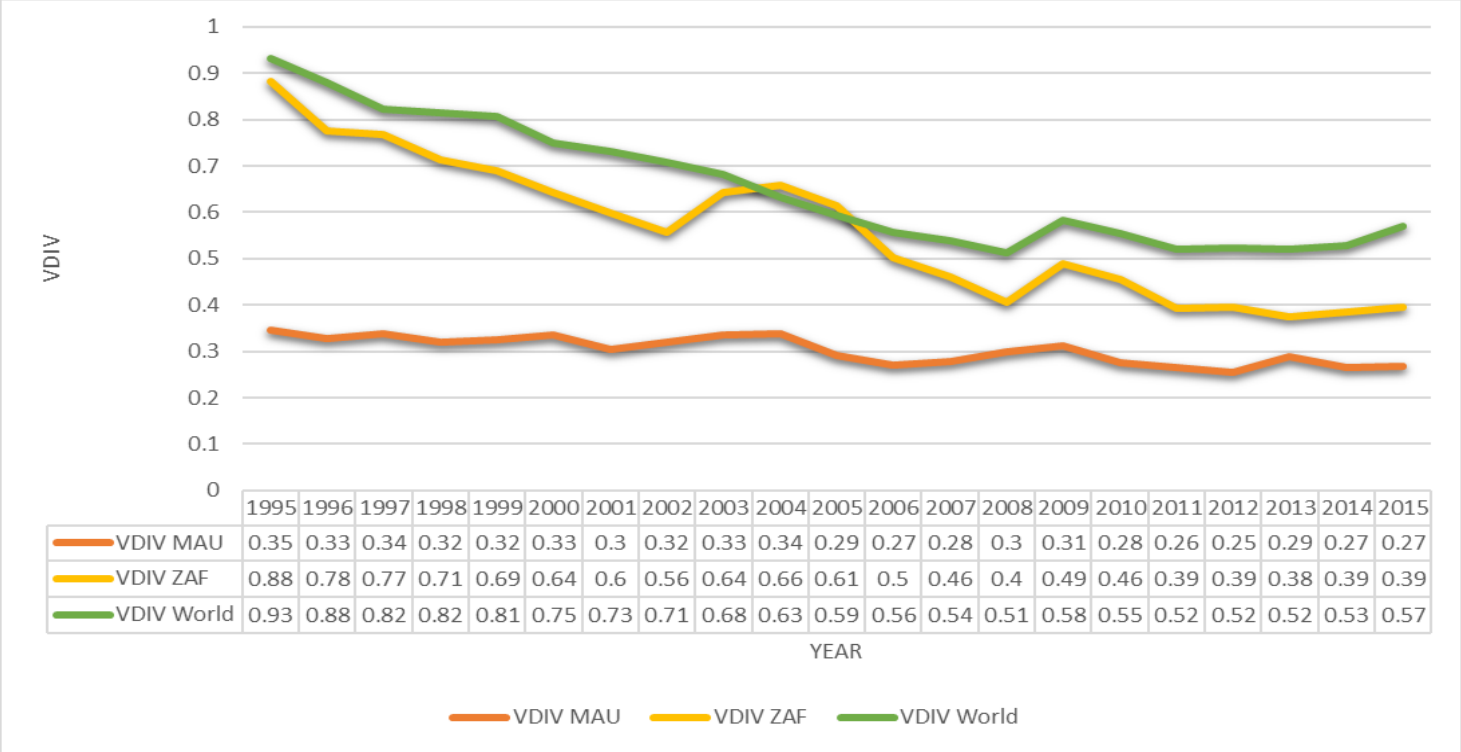
Figure 6: Evolution of NHI for Mauritius and South Africa, 1994 to 2015



Source: Authors own work, data obtained from UNCOMTRADE, 2018

Relatively, we can see that both countries have made significant attempts to widening their export base. However, it still does not show us the how much they have vertically diversified their exports. Figure 7 below shows both country's evolution to vertical export diversification.

Figure 7: Vertical Diversification for Mauritius, South Africa and World for 1995 to 2015



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
VDIV MAU	0.35	0.33	0.34	0.32	0.32	0.33	0.3	0.32	0.33	0.34	0.29	0.27	0.28	0.3	0.31	0.28	0.26	0.25	0.29	0.27	0.27
VDIV ZAF	0.88	0.78	0.77	0.71	0.69	0.64	0.6	0.56	0.64	0.66	0.61	0.5	0.46	0.4	0.49	0.46	0.39	0.39	0.38	0.39	0.39
VDIV World	0.93	0.88	0.82	0.82	0.81	0.75	0.73	0.71	0.68	0.63	0.59	0.56	0.54	0.51	0.58	0.55	0.52	0.52	0.52	0.53	0.57

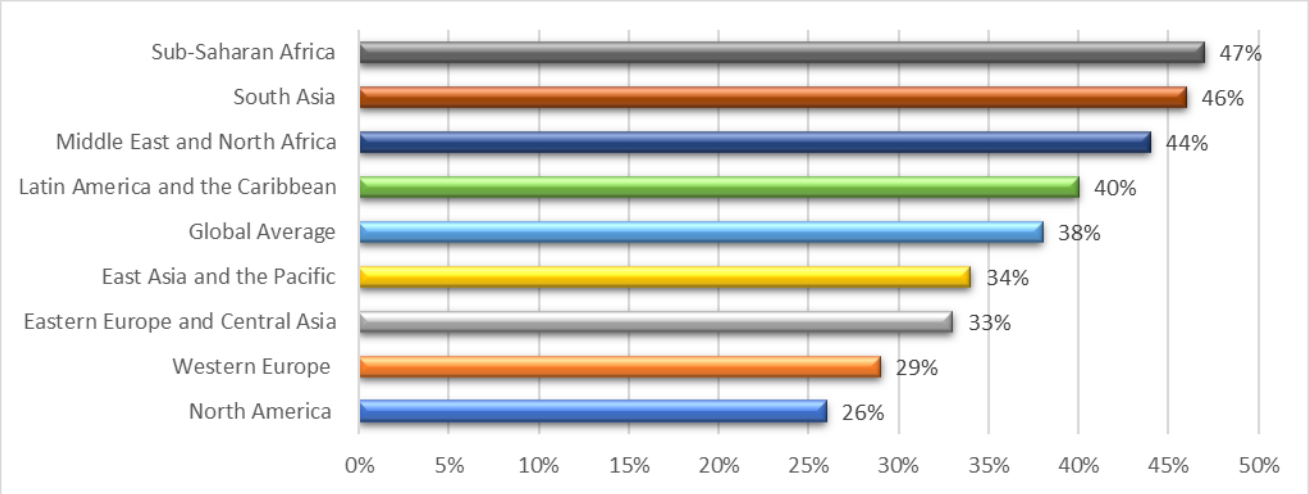
Source: Authors own illustration, data obtained from World Development Indicator (2018)

From calculations of VDIV for Mauritius and South Africa shown in Figure 7, over the past 15 years both countries experienced a decline in their share of manufactured exports total exports. However, account must be taken of the fact that each country has different export bases and structure which may have a negative or positive influence when on comparing VDIV values. As such, the country's export structure discussed in Section 4 is taken into account. Mauritius experienced a steady decline in manufacturing exports ratio to total exports, whereas, South Africa experienced a sharp decline particularly between 2005 and 2010 from 0.61 to 0.46 share of total manufactured exports to total exports. Despite the declining trends in both countries, when compared to the Worlds share of manufactured exports total exports, South Africa perform relatively well. For example, in 2005, South Africa's share of manufactured exports total exports of 0.61 exceeded the World share of 0.59. Therefore, considering the above discussion on export concentration and both country's VDIV measures, it can be concluded that despite Mauritius' consistent decline in export concentration and VDIV, and South Africa's decline in export diversification, both economy's exhibit as export diversified countries.

6.1. Human Capital and Export Diversification

The way a country develops its human capital determines its long-term economic success (Global HCI 2017 Report, 2017). The Global Human Index ranks over 130 countries on how they are developing their human capital on a scale of 0 (lowest) to 100 (highest) across different age groups. The HCI 2017 Report key findings showed that the world has only developed an average of 62% of its human capital. This means that countries have an average of 38% capable individuals with underdeveloped human capital. This idle human resource could be trained and participate in the productive sectors of the economy. Sub-Saharan African countries continue to be the lowest ranked countries and have the largest gap in human capital development which fall below global average gap of 38%, as shown in Figure 8.

Figure 8: Gap in Human Capital Development, by region



Source: Global Human Capital Index, 2017

Table 1 shows a detailed structure of the Global HCI for Mauritius and South Africa.

Table 1: Detailed Rankings Global Human Capital Index 2017

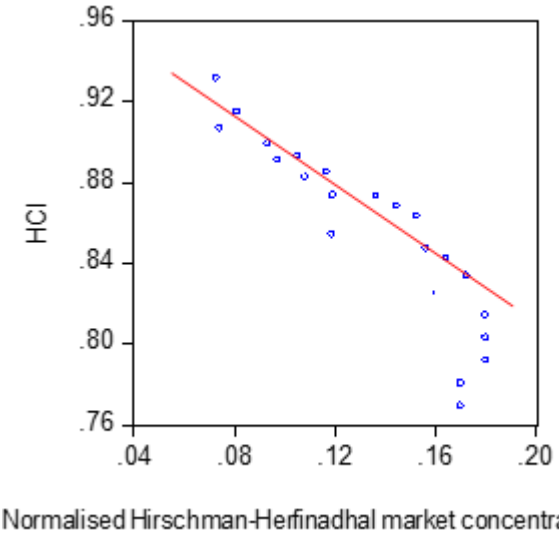
	Overall Index		Capacity Sub-index	Deployment Sub-index	Development Sub-index	Know-How Sub-index
Country	*Score*	*Rank*	*Score*	*Score*	*Score*	*Score*
Mauritius	60.34	**74**	65.43	60.09	64.59	51.25
South Africa	58.09	**87**	69.65	56.39	57.64	48.70

- Capacity Sub-index: measures the human capital through past education investments.
- Deployment Sub-index: measures the extent to which countries are developing human capital through deployment in the labour market.
- Development Sub-index: measures countries current state in building human capital of individuals already in the workforce.
- Know-how sub-index: captures the current quality and extent workplace environment is likely to create additional learning opportunities.

Source: Global Human Capital Index 2017

The Global HCI 2017 Report emphasizes that it is important for countries to try to realize their citizens' capabilities to contribute to the economic environment. Countries such as Switzerland and Singapore, with overall rankings of 76.4 and 78.28 respectively, have been successful in ensuring the majority of their population work in high-skilled occupations. In contrast, African economies have yet to create work opportunities outside of low-skilled occupations in a restricted number of sectors.

Figure 9: Correlation between Human Capital and Export Diversification



Source: Authors own work, data obtained from World Development Indicators, 2018

Figure 9 illustrates the correlation between human capital index per person and export concentration measure, NHI. It shows a significant negative linear correlation (-0.43) between human capital index and NHI. The slope of the regression line drawn through the scatter plot suggests that the likelihood of an increase in years of schooling and returns to education by percent will result in export concentration. In simple terms, this means that in economies, the greater the investment in education the greater the likelihood for economies to diversify their export. This falls in line with the discussion expressed in the theoretical framework and literature review.

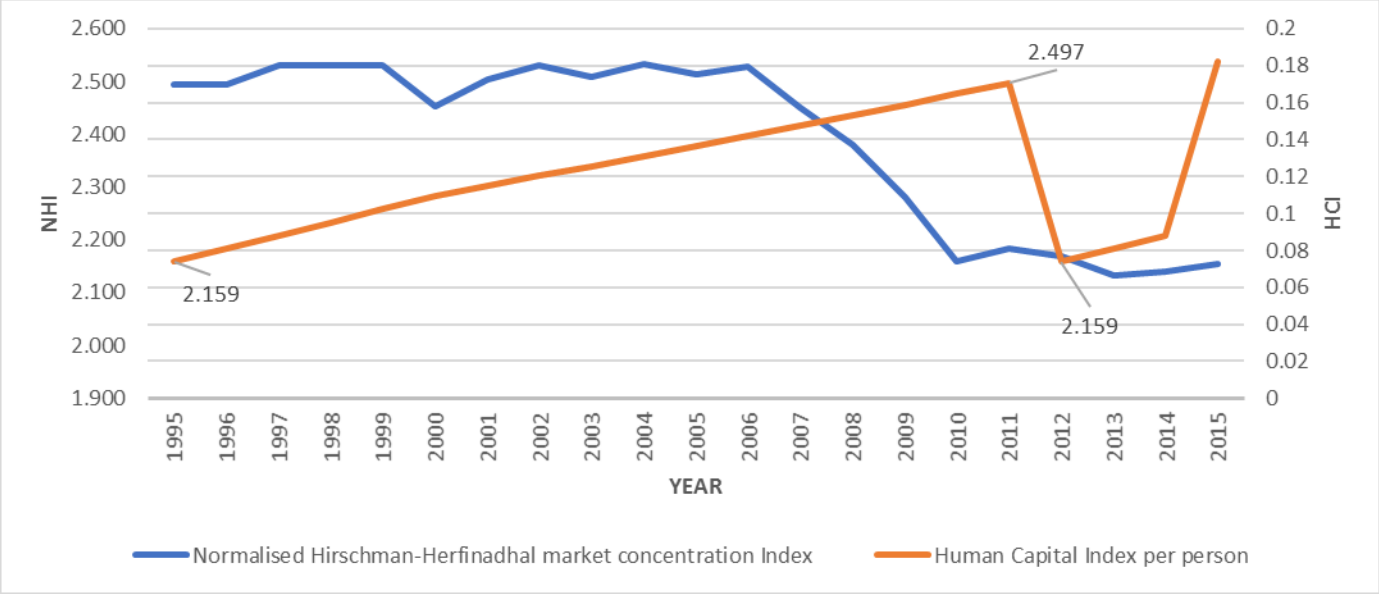
6.1.1. Mauritius

Mauritius has increased its overall human capital index by 60.34% against a current world ranking of 74 as shown in Table 1. The Global HCI placed Mauritius as part of the cluster of African countries that have developed more than 60% of their human capital. This places Mauritius ahead of Latin America, South Asia and the Middle East. Mauritius scored relatively high in the capacity and development sub-indexes, which measure human capital through past education investments and individuals already in the workforce (World HCI 2017 Report, 2017). Mauritius' high investment in education and high labour force participation has benefitted the country. In addition, Mauritius has developed a greater share of its human capital from strong education quality and staff training. However, there is room for further improvement

especially on the quality of the current workplace environment, where beneficial learning opportunities could be created.

Figure 10 below illustrates a rising trend Human Capital Index per person measured by years of schooling and returns to education (Feenstra *et al*., 2013) against Mauritius decreasing export concentration. This in conjunction with the negative correlation between HCI and NHI as discussed above, are in agreement with predicted hypothesis: that a country with a rising human capital is more likely to diversify its exports.

Figure 10: Trends in Human Capital per person and NHI in Mauritius, 1995 to 2015



Source: Authors own, data obtained from Feenstra et al., 2013 and UNCOMTRADE, 2018

Mauritius is ranked 64 out of 188 countries on the UNDP Human Development Index 2016 Report. This sets Mauritius as a high human development country. There are positive trends in Human Development index from 2000 to 2015. From 1990 to 2015, life expectancy has increased by 5.2 years. Mauritius's good service delivery, infrastructure, top health care system and low occurrence of HIV/AIDS, Tuberculosis and malaria have attributed to Mauritius' rise in life expectancy. GNI per capita increased by 141.5 percent, mean years of schooling increased by an average of 3.4 years and expected schooling increased by 4.7 years. The Mauritian primary and secondary education system is based on the British education system. Like many other developing countries, Mauritius education system has evolved from a small-scale private initiative to a large-scale, publicly funded education system. As the economy grew and

prospered, the demand for quality education increased, and the country's well-integrated partnership between the public and private sector aided in the evolution of this system (MOECHR, 2008).

Since 1977, the Mauritian government made the decision to provide free secondary education to all, which is facilitated and funded by the state and the private sector. While the state provides large grants to cover recurrent costs, the private sector provides facilities and maintains standards at private secondary schools. However, despite Mauritius' evolving education system, it still struggles with the language of instruction in schools. Many students are disadvantaged as they have limited exposure to English, the language of instruction. This limits future learning abilities (MOECHR, 2008).

Overall, the education system in Mauritius is high quality with a highly trained teaching population producing high and quality literacy rates (Bird & Vandemoortele, 2011). Furthermore, since 1924, the tertiary education in Mauritius has developed into a diversified system, from having only one college to an education system encompassing public, technical, private regional and overseas institutions, which create and equip individuals with greater practical and career skills and employability (MOECHRC, 2008).

Mauritius' HDI value of 0.781 performed exceedingly above the Sub-Saharan average of 0.523. This is due to the continued increase in human capital development through consistent investment in human and social development by increasing public expenditure on health and education sectors. Additionally, the Mauritian government ensured appropriate policy formulation on education as a vital focal point to sustain economic performance (Bird & Vandemoortele, 2011).

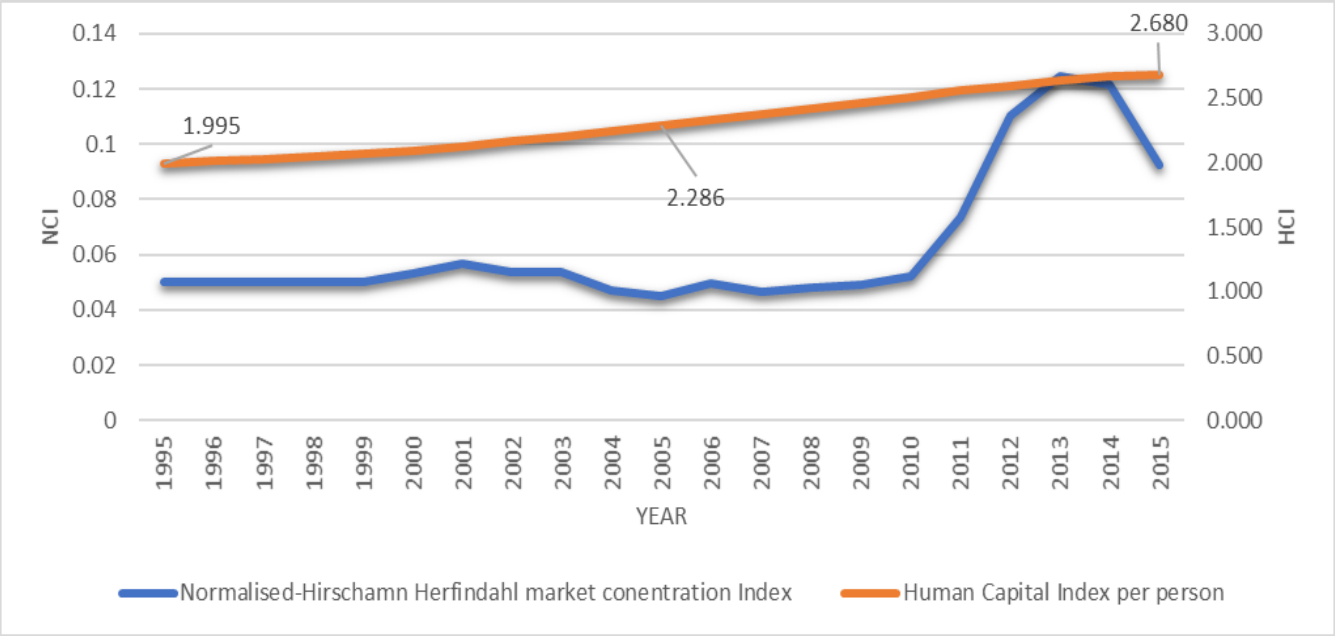
6.1.2. South Africa

South Africa is ranked 87th in the Global Human Development Index with an overall score of 58.09%. The Global HCI 2017 Report, stated that South Africa has been effective in building the future of human capital of the younger generation. Its development sub-index compared relatively well to other Southern African countries. South Africa is benefitting from a high share of workforce in high-skilled occupations and training, resulting in higher deployment and capacity sub-indexes. However, South Africa's high workforce share in high skilled occupation may be contradictory, considering that the country has been experiencing skills drain with more than half of South African professionals migrating to OECD countries (StatSA, 2017).

South Africa continues to underperform when it comes to education quality. The primary and secondary education system in South Africa is considered one of the worst of middle-income countries and performs worse than even low-income countries. A study performed by Spaull (2013) in found that "undue union influence, weak institutional functionality, uneducated or untrained teachers and insufficient learning time, low teacher content knowledge, misappropriation of resources and inequality between the private and public education system" are responsible for the poor education system in South Africa (Spaull, 2013: 3). In 2013, the South African government spent an estimated 21% of the national budget on education (with little impact on results), more than Canada's estimated 9% budget for education. The education system in South Africa is based on national curriculum formed post-apartheid by the Ministry of Education (Jansen, 1997). Jansen (1997) suggests that if South Africa had adopted the British education system it would have had a thriving basic education like other former British colonies such as Ghana, Kenya, Uganda, Zambia, and Zimbabwe that adopted the British education system.

However, despite a poor basic education, South Africa's tertiary education includes institutions such as University of Cape Town and University of The Witwatersrand ranked in the top 300 globally. Masondo (2016), argues that tertiary education produces better-educated citizens who can add value to development of an economy, through skills development and on-work training. Additionally, tertiary education provides individuals with employable skills and access to greater opportunities in the local and global market place.

Figure 11: Human Capital Index per person and NHI for South Africa, 1995 to 2015



Source: Authors own illustration, data obtained from, Feenstra et al., 2013

Figure 11 illustrates the trend between human capital index per person based on years of schooling and returns to education and NHI in South Africa. South Africa return to education and years of schooling have increased over the past 15 years. From an HCI value of 1.995 in 1995 to 2.286 in 2005 and finally 2.680 in 2015. From Figure 11 we can by association infer that as South Africa's human capital per person steadily increased, the country's export diversification experienced relative increases.

The 2016 UNDP HDI Report, ranked South Africa 118 out of 188 countries, positioning it as a medium human development country. Between 1990 and 2015, South Africa's mean years of schooling increased as did expected years of schooling and the GNI per capita.

However, South Africa faced a decline in life expectancy by 4.4 years. According to the University of Washington study in the Lancet journal (Barber, 2017), South Africa suffered from a wide spread of transmittable diseases such as HIV/Aids and Tuberculosis. Maternal conditions, deaths caused by violence, and the sharp rise in lifestyle diseases such as stroke, cancer and heart disease added to South Africa's challenges. The gradual increase in human capital development that South Africa has experienced since the year 2000 regardless of the lower ranking, is said to be particularly successful in building future

human capital for younger generations with the recent increase in investment in critical qualifications at tertiary institutions.

The OECD in 2015, reported that South Africa has one of the world's worst education systems. It ranked 75th out of 76th of education systems. Furthermore, a study into trends in mathematics and science placed South Africa at the bottom of various categories, and its school results were worse than poorer countries in Africa. Widespread corruption and abuse of resources in the education system were said to be contributing to this situation. Corruption diverts financial resources from core areas of focus and undermines development.

A more detailed outlook on South Africa's human capital shows a decrease in recent years with an estimated 1 million to 1.6 million people (StatSA, 2017) working in skilled, managerial and professional employment and most of these skilled individuals having emigrated. Reasons surrounding the increase in migration since 1994 include the declining quality of living and high levels of crime (Collier & Venables, 2007).

Although the fall in human capital in South Africa relates to migration of a skilled workforce, demand for skilled labourers in countries like Australia and Canada also account for approximately half of South Africa's skilled workforce between 1990 and 1996. Currently, South Africa's skilled workforce has grown through the use of expatriates from neighbouring countries. This, complements the country's human resources in areas which are identified as critical skills shortage areas in agriculture, architecture, finance, information communication and technology, health and engineering (IMF, 2009).

6.2. Findings

From the discussion above, it is clear the need for increasing human capital development particularly in education to drive export diversification is imperative. The positive (negative) correlation shown between export diversification (concentration) and human capital, measured by return of education and years of schooling. It can be argued that overall investment in human capital development has a positive correlation with export diversification, and such investment needs to be strengthened so that developing economies can transition into the next stage of development (Hare,2008).

Findings showed Mauritius with a positive trend in the HDI, HCI per person and increased overall World HCI to 60.34% placing Mauritius as a part of the cluster of African countries that have developed more than 60% of their human capital. The country's strong education system, diverse tertiary education, well-

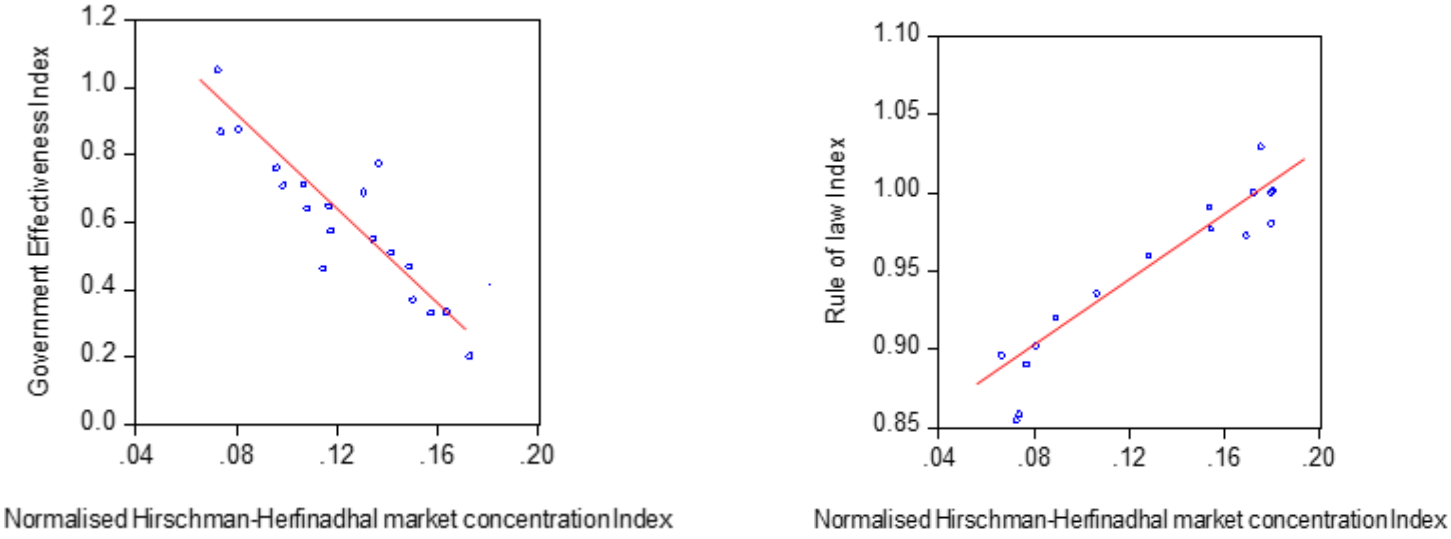
integrated partnership between private and public sector and efficient health care system are main factors which attributed to the sustained rise in human capital and development. In conjunction, Mauritius showed a declining trend in export concentration. So, by association, it can be theorised for Mauritius that the higher levels of human capital, human development, and levels of education had a positive influence in encouraging export diversification

Whereas South Africa showed a relatively lower HDI trend and HCI score of 58.09, the country's effective ability to building the future of human capital of the younger generation through efficient tertiary institutions and having a large share of its workforce in high-skilled occupation and training contributed to its increase in human capital and human development (Global HCI 2017 Report, 2017). However, the poor quality of basic education system, poor infrastructure especially in rural schools and widespread misappropriation of resources in the education system attributed to the lower score for HCI and HDI trend. The NHI for South Africa showed a gradual increase in export concentration. As such by association, it can be concluded that despite a country having a relatively diversified export base, lower human capital, particularly, lower levels of primary and secondary education will discourage development of export diversification.

6.3. Good Governance and Export Diversification

The strength and reliability of institutions and good governance affect factors such as regulation, and political stability, all which impact investment and entrepreneurial activities. Improvements in the governance structures of an economy are associated with a diversified export base and industrial diversification (Plekhanov *et al*, 2009).

Figure 12: Correlation between Governance and Institutional factors and the NHI



Source: Authors own work, data obtained from World Governance Indicators (2018) and UNCOMTRADE (2018)

Figure 12 shows the cross-country relationship between governance indicators captured by Government Effectiveness Index and Rule of Law index and export concentration measure NHI from 1995 to 2015. The correlation is -0.48, which shows a negative relationship is significant (and the regression line through the scatterplot in Figure 12 suggests that an increase in the governance effectiveness index goes along with a decrease in export concentration. A positive relationship (correlation of 0.56) is shown between rule of law index and export concentration, and the regression line through the scatterplot in Figure 12 implies that an increase in the quality of legal and human rights and corruption goes along with an increase in export concentration. However, this correlation does not adhere to the governance theory that a country dependent on fewer exports is more likely to have a poor governance this takes into considering the DRC example discussed in Section 3.

6.3.1. Mauritius

Figure 13 illustrates the WGI six aggregates. Relative to scale measure (-2.5 poor governance, 2.5 good governance, 0 world average), all of Mauritius governance aggregates fall above the world average and move upwards towards good governance, except for the significant decline in the control of corruption from 2011 to 2015. From bribery to pass a driving license to allegations of embezzlement of an ex-Prime Minister, it is not a surprise that the control of corruption in Mauritius has somewhat deteriorated. In the

2013 Corruption Perceived Index (CPI), which measures the level of corruption in the public sector, Mauritius ranked and scored 52 out of 177 countries. The CPI uses a scale measure of 0 (highly corrupt) and 100 (highly clean) (Transparency International, 2013). This implies that Mauritius is more, clean than corrupt (CPI, 2013).

Figure 13 below also shows a rise in all governance aggregate. This may suggest that as Mauritius employed good governance practices aligned to development, its export diversification was rising. However, this does not imply causality, further research is needed to determine actual causation of this relationship. Mauritius used practical development strategy in which a free-thinking process was organised and adapted to its strengths and weaknesses in the competitive market. The export-led growth strategy has encouraged liberalization, which is reinforced by strong state involvement as an enabler, an operator and a regulator. Mauritius has experienced consistent and stable governance, even with changing political governing parties (Bird &Vandemoortele, 2011).

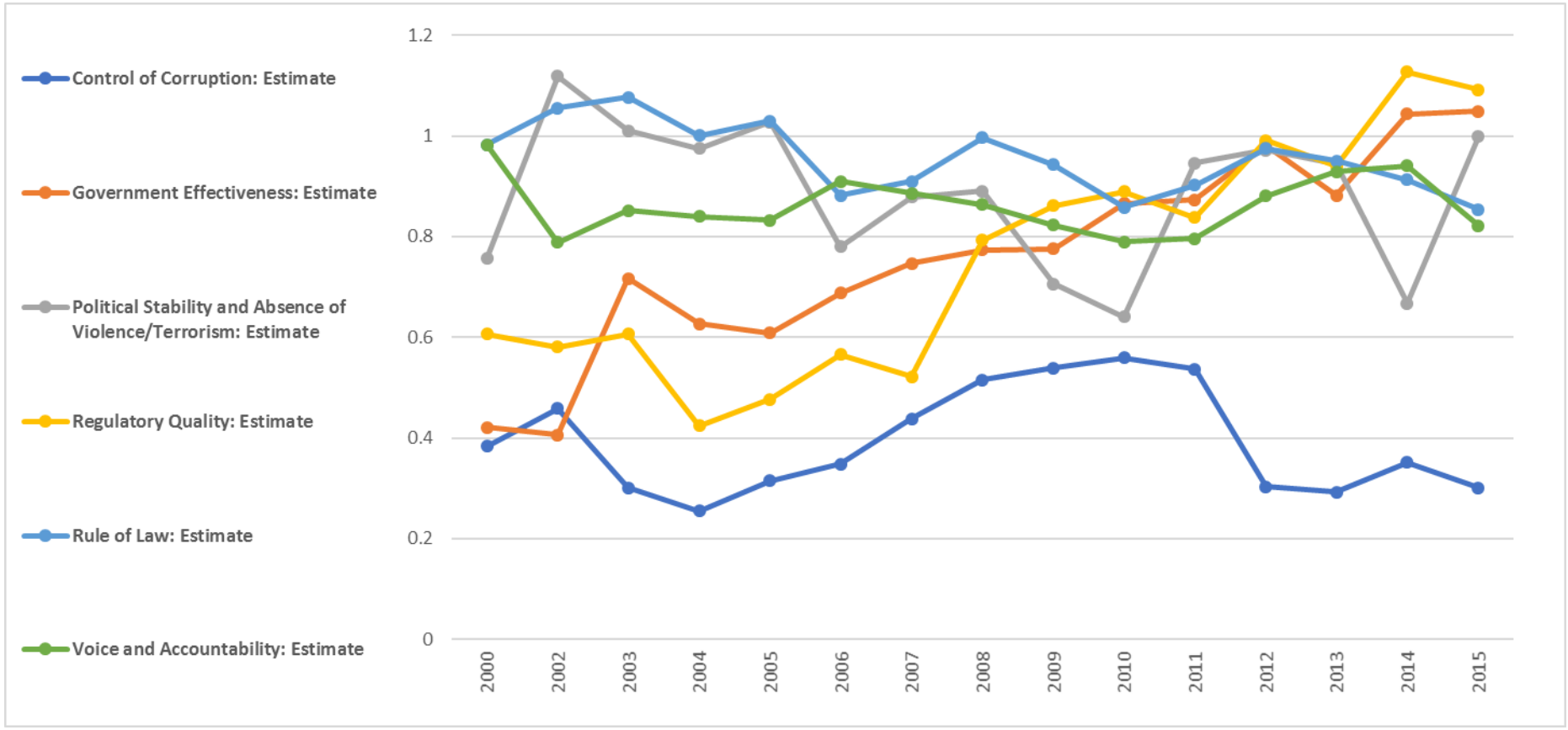
Since independence, Mauritius has formed fundamentals for continuous growth. Organizations across cultural groups allowed negotiations of economic redistribution and resulted in stable economic and political authority, which allowed strong and independent institutions. An ideal example is the Joint Economic Council, an organizing body for the private sector to promote the interests of businesses aligned to the government's development strategy. Mauritius institutions are transparent and well-defined with an investment policy and legal system and efficient levy system. The evolving political system has encouraged a review method to policy formulation that allowed strategies for growth to be sustained despite any changes in the parties in authority (Bird & Vandemoortele, 2011).

Well-built institutions are crucial in making sure that a country's development, economic sustainability and stability. Successive governments have maintained development strategies and guaranteed that export revenues are invested in services and productive sectors. In the financial sector, they have built is a regulated and well-invested banking and financial system that protected Mauritius from bad assets prior to the 2008 global financial crisis (Bird & Vandemoortele, 2011).

Mauritius' commitment to good governance is embodied in its Ministry of Financial Services and Good Governance, created after the Alliance Lepep came to power in 2014 (Fakun, 2016). The efficiency of Mauritius' institutions has long been credited as a major factor in the nation's development success. According to the Organisation for Economic Cooperation and Development, trust in institutions for the success of many government policies, programs, and regulations depend on cooperation and compliance

by citizens (OECD, 2017). According to the latest Afro barometer survey, however, Mauritians are less satisfied with their democracy and have less trust in their institutions than they did just a few years ago. Support for democracy has relatively declined, and while citizens overwhelmingly endorse multiparty competition and insist on government accountability, they have given their political leader decidedly mixed performance reviews (Joomun & Dulani, 2013). This relates to export diversification through the role of institutions in governance, asserted by Hague & Harrop (2013) that the integrity and reliability of governance related institutions including state owned enterprises that implement government policies and provide basic services should avoid negative factors such as over-regulation, pilferage and political interference and instability, all which have a negative impact on diversification. However, further research specifically on the long-run relation between corruption and export diversification needs to be carried out.

Figure 13: World Government Indicators for Mauritius



Source: Authors own, data obtained from Word Governance Indicators, 2018

6.3.2. South Africa

South Africa has prevailed from suffering from long years of internal conflict and external sanctions to becoming the 'powerhouse' of Africa. With an effective three-tier government system (legislative, judiciary and executive), South Africa has succeeded in creating a solid democratic government with established public, educational and financial institutions and infrastructure. Such institutions are the Institute of Directors Southern Africa(IoDSA), the Section 9 oversight institutions like the Public Protector, and globally ranked universities like the university of The Witwatersrand and University of Cape Town.

South Africa's financial institutions, backed by sound regulatory and legal framework, are considered sophisticated amongst emerging markets. The South African Reserve Bank (SARB) regulates local banks and participates in international forums such as the G-20 and the Financial Stability Board. South Africa's access to deep pools of capital, both local and foreign, has provided sufficient entry and exits of large investors. The country's large banking sector of 17 registered banks which comply with international banking standards also contributes to the efficiency of South African financial institutions.

Over the years, South Africa has placed great emphasis on statutory principles of accountability and the rule of law. In fact, global icon and former President Nelson Mandela, when subpoenaed to defend his decisions to set up a commission to investigate alleged prejudice, exploitation and discrimination in South Africa rugby, submitted himself before the court Alence (2004).

However, over the last 10 years corruption by high ranking officials and public persons has crept in. The current public debate on 'state capture' validates the state of declining governance in South Africa. Corruption has left millions of citizens without basic services of water, sanitation, housing, quality education and health while public funds are diverted to unnecessary personal luxuries. The IoDSA (201 5) reported that due to poor corporate governance caused by an immeasurable amount of mismanagement in public institutions such as Eskom, South African Airways and Postal Rail South Africa, the current state of public institutions has become "offensive to governance and independence".

Figure 14 below illustrates South Africa's overall governance WGI aggregate. This shows an overall declining trend, moving towards poor governance, with aggregates Control of Corruption and Political stability & Violence falling below the mean (0). In the Corruption Perceived Index 2013, South Africa scored 43 and ranked 69 out of 177 countries. The CPI reported that 2001 South Africa has fallen 34

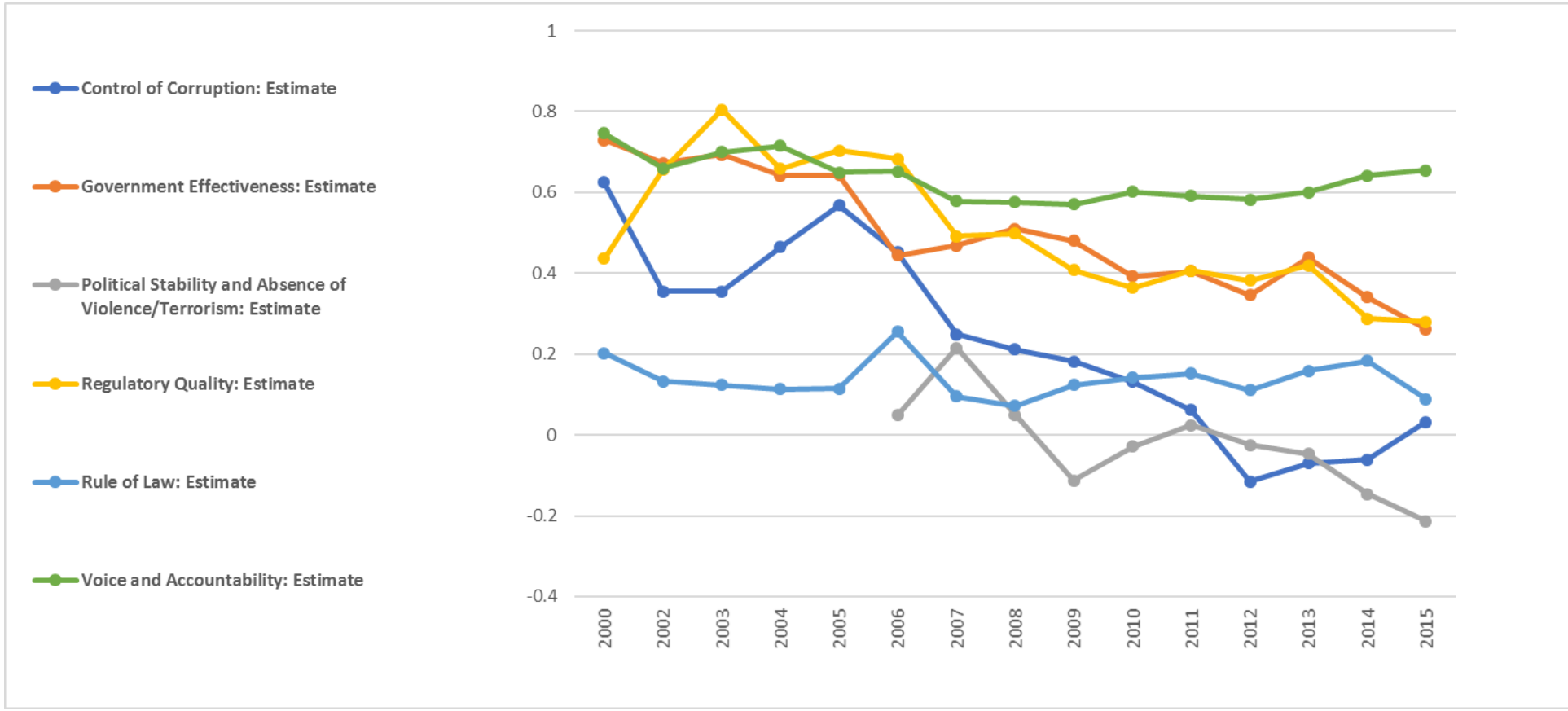
places. Similarly, the Afro-barometer (2013) report showed that in contrast with countries like Malawi, Zambia, Botswana Senegal and Mozambique, where governments made gains in curbing public-sector corruption, since 2008 South Africa's corruption has increased in the public sector (CPI, 2013).

South Africa is presumed as one of many developing economies which could tackle corruption. South Africa's robust anti-corruption frameworks, dedicated policies, standards and legislation and initiatives such as the Public Protector, Department of Public Service & Administration and the Hawks are well designed to fight corruption. The failure to effectively deal with corruption, casting a bad shadow on economic development, including export diversification.

South Africa's negative export diversification trend and the overall negative trend in good governance, shows that the more governance indicators decline towards poor governance, the more South Africa's export concentration increases, or the less export diversified it becomes. This does correspond with the theory that a country with good governance is more likely to promote export diversification.

Compared to Mauritius, South Africa is trailing behind with regards to governance.

Figure 14: World Governance Indicators South Africa



Source: Authors own illustration, data obtained for World Governance Indicator (2018)

7. Key Findings

The key findings can therefore be summed up and listed below:

1. The discussion above shows that increasing human capital development particularly in high-skills development motivates growth in export diversification. When Chile embarked on structural adjustment and invested in human capital development, it managed to grow its export and to vary the range of exports. Research has shown that despite the DRC having so large a resources base, it has failed to diversify on imports, and to achieve sustained economic growth partly because of poorly developed human capital among others.
2. The importance of good governance in the growth of any economy cannot be over emphasised. When there is no peace in a country, the economy will be affected negatively. When democracy was established in Chile, performance improved, and export diversification was achieved. The DRC seems to continue struggling to retain peace and as a result no export diversification is being achieved.
3. It can be argued that overall investment in human capital development has had a long-run influence on promoting export diversification in both Mauritius and South Africa.
   Both Mauritius and South Africa have had marked growth in export diversification because of the investments they are making towards human capital.

Results in South Africa show that because of policies and oversight institution present, export diversification is being achieved relatively but could have been higher. Mauritius embarked on structural adjustment program and established governance institutions and this is paying off with very high levels of export diversification.

4. The level of investment in human capital and good governance has a positive correlation with the level of export diversification. The comparison between Mauritius and South Africa in this regard showed that the more developed human capital and governance a country is, the less concentrated its exports become. Mauritius achieved much more export diversification due to its investment in human capital, whereas South Africa achieved more of vertical export diversification with export concentration mainly due to its large export base and poor investment in quality primary and secondary education, as well as poor infrastructure for rural schools.
5. Findings showed Mauritius with a positive trend in the HCI per person HDI and increased overall World HCI to 60.34%. This places Mauritius in the cluster of countries that have developed more than 60%

of their human capital. The country's stronger education system, diverse tertiary education, well-integrated partnership between private and public sector and efficient health care system are main factors which attributed to the sustained rise in human capital and development. Mauritius showed a declining trend in export concentration; thus, its exports have become more diversified, and increased. From this discussion, it can be concluded for Mauritius that the higher levels of human capital development, and levels of education had a positive influence in encouraging export diversification compared to South Africa.

6. South Africa showed a relatively lower HDI trend and HCI score of 58.09. The country's effort to build the future of human capital of the younger generation through allowing foreign nationals with scarce critical skills to work in the country contributed to its increase in human capital and human development (Global HCI 2017 Report, 2017). The poor quality of basic education and widespread misappropriation of resources in the education system attributed to the lower score for HCI and HDI trend. The NHI for South Africa showed a gradual increase in export concentration.
7. Mauritius and South Africa both have strong and efficient financial, legal and governmental institutions which have positively aided in diversifying their exports. Findings showed Mauritius had an overall increase in all aggregates of WGI indicators, which showed movement towards good governance, except in the control of corruption index. South Africa, showed a decline in all WGI aggregates, which showed South Africa moving toward poor governance, its NHI showed a gradual increase in export concentration. From this it can be concluded that as a country moves toward poor governance, its concentration in fewer exports increases. This is the case for South Africa.
8. Mauritius has sustained high levels of human capital development and maintained good governance and has managed to successfully vertically diversify its exports. On the contrary, South Africa with a relatively wider export base, showed an overall decline in governance towards 'poor governance' and a lower level of human capital. This resulted in increased export concentration, leading to a more horizontal diversification of exports.

8. Implications and Recommendations

There are several policy implications that can be drawn from this study. Recommendations suggested here are based on literature and findings for emerging economies and on the study of Mauritius and South Africa.

1. In order to sustain long-term export diversification, which is anchored on enhanced human capital development and good governance, good investment must be directed towards increasing quality education and stamping out corruption.

2. With regards to human capital development, the Global HCI 2017 Report suggests better investment in developing current and future work-forces to strengthen human skills, innovative and productive capacity. Greater investment in developing education and training is mandatory in order to expand employment skills to enhance human capital. One way to enhance employment skills is to engage job shadowing, internship, apprenticeship, and on the job learning and training.

Literature confirms that human concentration and capabilities expand when individuals enter the labour market. This can be achieved through training, as discussed in the section 4.1, training is usually linked with some set of skills acquired that are valuable for a particular industry or set of technologies. Investments in training enhance employment skills. This also enables the generation of earnings on original investment and ensures that individual skills are strengthened and increase over time. Thus, the greater human specialization the more innovation and generation of new products which are dependent on research and development, and human knowledge, and inevitably diversification of exports (Global HCI 2017 Report, 2017).

3. To maintain high levels of human capital, countries need to keep reviewing legislative and regulatory frameworks for the provision of quality education, undertaking regular review of education curricular, and ensuring that educators are fully trained and qualified.

4. Peace and security are a must for good governance to thrive. Countries therefore need strong and capable bureaucracies that effectively promote these conditions in order that export diversification and growth may be realized.

6. There is great need to combat corruption within government, and quasi-government institutions in developing countries through transparent and accountable management of resources. This will promote good governance and drive export diversification.

7. Further research is suggested to determine the long-run relationship between corruption and export diversification influence increases in export diversification. Another area of further study could also look at the impact of the two-fold approach of horizontal and vertical diversification for countries needing to achieve sustainable growth that can generate employment and more wealth for the nation.

9. Conclusions

Human capital and good governance are important pre-requisites to boosting export diversification. This is evident in the case of Mauritius and South Africa. Studies of Chile and the DRC show similar results. Findings do suggest that the more invested a country is in human capital development and good governance, the more development it will achieve in export diversification. Mauritius exemplified this situation. It is highly invested in human capital and human development. Its improved indexes of rule of law, ease of doing business and investment and easy method of paying taxes and low tax rates have contributed to the country's success in increasing export and market base.

In the case of South Africa, it illustrates an economy with a large export base that has declining governance and a regressive human capital development. The somewhat export diversified economy does show signs of export concentration. Between 2010 and 2014, South Africa experienced a rapidly increase in export concentration. The country's unchanging trade structure from primary and resource-based products may have attributed to the recent increase in export concentration.

It is important to highlight that from the limitations of the methodology as stated by Burawoy (1989), it cannot be said with certainty that although the results in this study show strong association between the measures of human capital, good governance and export diversification in Mauritius and South Africa, outcomes may not be similar for other emerging economies.

A common thread from both countries was the decline in managing corruption. However, resolving one issue in isolation will not result in sustainable economic growth and development, but a multi-focused approach of innovative policies (i.e. investment in human capital, holding governments' accountable, effective institutions and policies that meet basic needs of citizens) is imperative. As such, by association, it can be concluded that despite a country having a relatively diversified export base, lower human capital,

particularly, lower levels of primary and secondary education will definitely discourage development of export diversification. Deteriorating governance adherence, may also lead to decline in export diversification and overall economic growth.

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