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Can human rights create productivity?

An empirical study of the effects of social human rights on labour productivity in Sub-Saharan Africa

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Abstract

For decades international organisations, corporates and governments have been creating initiatives to improve human rights. Although there has been great progress made in establishing basic and institutional human rights, social human rights and human development in the developing world are lagging behind developed economies. In Sub-Saharan Africa, the challenges to human development persist. The region is immensely challenged by poor human development and multidimensional poverty and performs below every other region on most measures of this. While only 44 countries in the world are still classified with low human development, 36 of these are located in Africa. The challenges in Sub-Saharan Africa suggests a need for further attention to how Africa will bridge the poverty gap and improve human development rights. In order to address this need, this paper aims to provide knowledge on the effect of social human rights on one important economic factor, productivity.

This paper studies the effects of social human rights or human development on labour productivity in Sub-Saharan Africa by examining the specific effects of sanitation, health care and education. Utilising data from 1995 to 2014 from a variety of international data gathering institutions, the results of this paper show a positive significant correlation between human development rights and labour productivity in Sub-Saharan Africa. The results are robust to a variety of sensitivity tests. To uncover the underlying drivers of this effect, I analyse a Zambian case study on improvements in human rights on a firm-level. The results suggest that the positive effects of human rights on productivity may be driven by increases in employee motivation, attraction and retention of talent, quality of the labour pool and innovative capacity on a micro-level. The results of this study have important policy implications, as they suggest investment in human development could achieve growth in Sub-Saharan Africa.

The conclusions from this study support increasing attention to human rights and suggests that this may be one way for Sub-Saharan Africa to accelerate growth and bridge the poverty gap. Although the study supports current theory and empirical results from other regions, it also raises questions regarding how other measures of human development affect productivity and how human rights affect not only labour productivity, but a variety of productivity factors. Additionally, this study implies a need to collect more data in Sub-Saharan Africa to assess and support the results of this study and to further the understanding of how and why the correlation between human rights and labour productivity occurs.

Glossary

CSR – Corporate Social Responsibility

DRC – Democratic Republic of Congo

FTE – Full-time employee

GDP – Gross Domestic Product

HIPC – Highly Indebted Poor Countries

OECD - Organisation for Economic Co-operation and Development

OLS – Ordinary Least Squares

PCA – Principal Component Analysis

R&D – Research and Development

TFP – Total Factor Productivity

USD – US dollar

WHO – World Health Organisation

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1. Introduction

The establishment and protection of human rights has become a key objective in most countries around the world. For decades, the international political community have focused on improving human rights worldwide. Generally there is consensus that human rights is an important factor in global sustainable development and that improving human rights is the normatively right thing to do. The United Nations Development Report (2016) states *"From the Universal Declaration of Human Rights, 68 years ago, to the Millennium Declaration 15 years ago, and to the Sustainable Development Goals today, global attention remains focused on promoting human rights and eliminating discrimination and inequitable outcomes for women, men, girls and boys."* These initiatives highlight that the international community through organisations such as the United Nations are continuously trying to improve human rights and commit to increasingly higher standards for them.

In recent years especially, the 2030 Sustainable Development Agenda has provided a foundation for international goals of sustainable economic growth. Human rights are widely incorporated in this agenda and the 17 goals of this agenda, which incorporates social, economic, and environmental goals build on the ideas and concepts of human rights. This agenda captures the key elements of the international agreements over the past decades and provides a political legitimacy to the pursuit of improving human rights to obtain sustainable development. Furthermore, this agreement recognises the interdependence of human rights and economic development and address a range of social human development needs (Thornberry, 2018).

Most recently the Organization of African Unity (OAU)/African Union (AU), supported by the New Partnership for Africa's Development (NEPAD) Planning and Coordinating Agency (NPCA), the African Development Bank (AfDB) and the UN Economic Commission for Africa (UNECA), agreed on the Agenda 2063 "The Africa We Want", which has provided a framework for socio-economic development in one of the most challenged regions globally. In this agreement the political community of the African region demonstrate their dedication to improving human rights and socio-economic development.

With these agendas and agreements it becomes apparent that human rights is one of the key objectives on the international political agenda, and specifically solving the poverty and human rights challenges in Africa. Human rights, especially in Africa, are on the top of the international political agenda, which is becoming continuously more ambitious. Therefore, it is interesting to examine how human rights actually interact with economic growth and productivity in this region. Specifically, the global nature of economic development stresses the importance of improving our understanding and knowledge of the African continent, its socioeconomic development and how this interplays with the current state of human rights in the region.

Africa is one of the regions in the world with the fastest rates of improvement in human development, however the region has the lowest human development in the world compared to every other region. Although there is great variation in human rights across the Sub-Saharan African region, with around 12 countries classifying as high-medium human development levels, the problem remains severe. A total of 33 countries in the region classify in the low human development group, which only consists of 44 countries globally. While the countries with the lowest human development levels have seen the highest acceleration of improvements on average, this pace has slowed in the past decade (UNDP, 2016). Sub-Saharan Africa as a region is consistently lagging behind the human development in all other regions and the poverty in many countries persists at tremendous levels. Therefore, it is interesting to attempt to uncover how investments in human rights in Africa will affect the region's economic growth and productivity, and to understand whether the effects of human rights in this region follow the trends found in other, more developed regions.

In academic literature, studies specifically on social human rights and their productivity effects are still scarce. In the academic community there seems to be a consensus that human rights are tremendously affected by economic growth, however the reverse relationship remains less understood (Marslev & Sano, 2016). The economic effects and determinants of human rights, especially human development rights, remain inconclusive. Some suggest that there should exist an economic trade-off between human rights and economic growth, however most research in the field actually find positive effects from improving human rights on the economy. There is a large amount of literature that investigates the economic effects of equality (Ostry et al, 2014; Easterly et al, 2007) and political stability (Alesina et al, 1996; Fosu, 2002; Jong-A-Pin, 2009), which provide confidence in the existence of a positive effect on economic growth and productivity from human rights (Stewart, 2000). Furthermore, several authors find that human rights, in an institutional sense, are an essential foundation for economic growth (Rodrik, Subramanian & Trebbi, 2004; Moral-Benito, 2012). Within human development researchers have found a positive link between several socio-economic rights, such as education and health care, and economic growth (Barro, 1991; Mankiw et al, 1992; Ranis et al, 2000). However, these studies leave much unexplained in terms of why especially African growth has been relatively weak compared to other regions in the world (Barro, 1991). Furthermore, in the academic literature measurements of human development remain partial, often only assessed through school enrolment rates, literacy rates or mortality measures. The purpose of this study is to expand the understanding of the human development effect specifically for the Sub-Saharan African region, where much is still left unexplained, and

attempt to expand the measurement of human development rights beyond school enrolment, literacy rates and mortality to achieve a more holistic understanding of the effect and its return to investments.

Based on the political and academic interests described above, this thesis will attempt to contribute to academic literature by enhancing the knowledge in the field of human development rights and its effect on the economy; in particular, trying to understand the effects of more holistic human development rights on labour productivity in Sub-Saharan Africa.

Problem statement: *What is the effect of human development rights initiatives on labour productivity for Sub-Saharan African economies?*

- *Does improvements in human development rights create labour productivity growth?*
- *How and why do investments in human development rights affect labour productivity?*

1.1 Structure and limitations

In order to investigate the problem statement above, this thesis will utilise a triangulation of data and methodologies. Based on a compilation of quantitative and qualitative empirical evidence and theoretical foundations, I will attempt to answer the above research questions. To understand the general effect of human rights on labour productivity I use data from 45 countries over a 20-year period. Using an econometric analysis I test whether human rights do in fact affect labour productivity and in which direction. In order to gain a more comprehensive understanding of this effect I use a firm-level case study of human rights investments in Zambia. Using qualitative data from the case study enables an understanding of how and why the results of the quantitative analysis arise on an individual- or micro-level. The generalisability and inferences of the case study results are supported by theoretical foundations and prior research, and can thereby be used to support and extent the quantitative macro-level analysis.

The results of this analysis suggest that improving human rights in a country does create a positive effect on labour productivity. The quantitative analysis shows that the effects of specific social human rights have a significant and positive effect on productivity, which remains robust when exposed to a variety of sensitivity tests. The case study results support this relation and provide evidence that increasing human rights for employees can create increased motivation, labour quality, innovation, and better retention and attraction of talent. Previous studies and established theories have demonstrated that each of these outcomes can be an important driver of labour productivity.

This thesis will be presented in 12 sections. In Section 2, I will provide a brief background to the economic environment and current state of human rights in Sub-Saharan Africa and why it is especially interesting to investigate social human rights and productivity here. Furthermore, I will provide some anecdotal evidence, which gives rise to the hypothesis that improvements in human rights would positively influence economic growth and productivity in a country in this region. In Sections 3 and 4, I will give some theoretical background for the definitions and types of human rights, labour productivity and its drivers, and how types of social human rights could theoretically affect productivity. Then, I provide a literature review covering some main literature within the field of human rights and productivity on an aggregate level, firm level and specifically for the Sub-Saharan Africa region. In Sections 5 and 6, I will present the data for the quantitative analysis and some methodological considerations for the econometric analysis and the case study interview analysis. In these sections, I will provide details to the empirical strategy, limitations, and critique of the methods. In Sections 7 and 8, I provide results and robustness tests for the econometric analysis and in Section 9 I provide the results of the case study analysis. In Section 10, I will combine and discuss these results and draw on literature and theory to make generalisations and answer the problem statement. In Section 11, I will review on the previous sections and present the final conclusions of this thesis. In addition, I will suggest some further research areas and extensions in Section 12.

2. Background

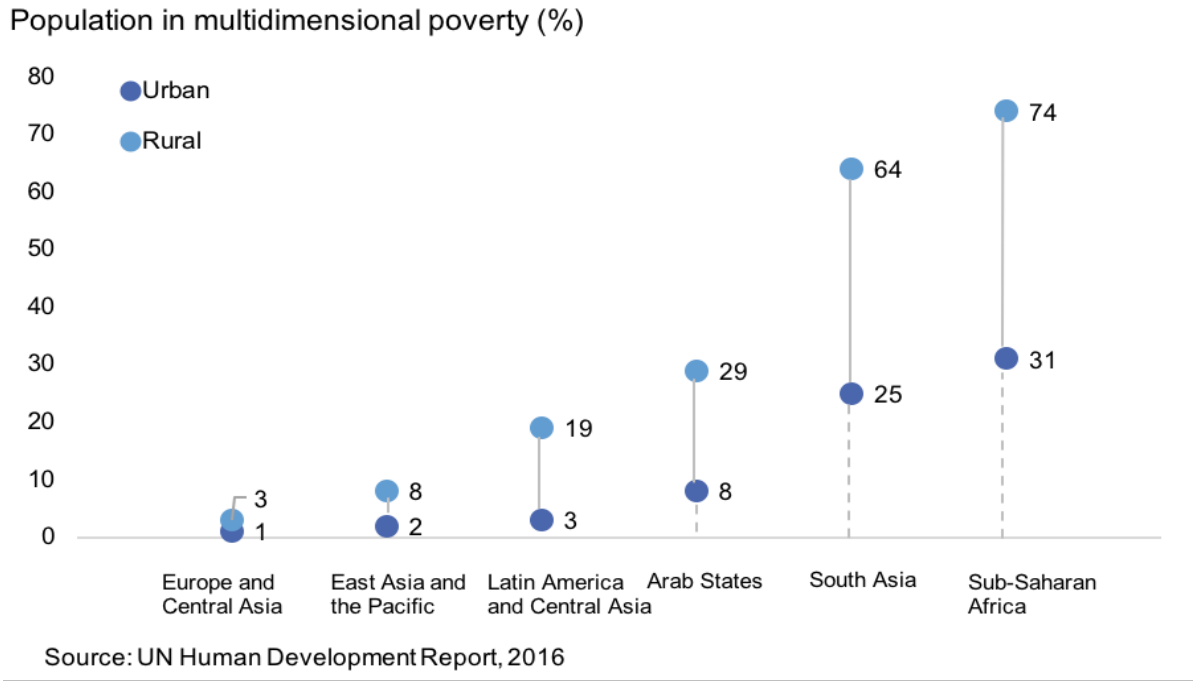
In this section, I will present some background information on Sub-Saharan Africa outlining the characteristics of the region as well as specifically providing some background for the economic environment and current state of human development. Furthermore, I present cases from Sub-Saharan Africa, where human development may have created productivity growth. This supports my hypothesis that human development rights could create productivity and economic growth.

2.1 Sub-Saharan Africa

The Sub-Saharan Africa region consists of 49 countries, typically split into four geographical areas; West Africa, East Africa, Central Africa, and Southern Africa. Africa consists of thousands of distinct ethnic groups and over 2,000 spoken languages (UNESCO, 2018). Although the colonial era ended in the 1950s and 1960s, most of the national boundaries of today were enforced by colonial powers. Therefore, ethnic groups and languages often flow over these boundaries. This is also the reason that many countries in the region are extremely ethnically and linguistically diverse. Nigeria for example has over 250 ethnic groups and more than 500 indigenous languages (CIA

World Factbook, 2018). The indigenous elites are often highly influential in the respective countries, and these groups vary greatly across the region in size and character across countries. Following the independence of the Sub-Saharan Africa region, most countries were left with little infrastructure and low levels of human capital (Austin, 2010). The main objectives of the colonial powers had not been to develop the African colonies to be well-run, self-sufficient states, but rather to be providers of agricultural products and minerals to European markets. Today, 60% of the Sub-Saharan workforce is still employed within agriculture (UNDP, 2018). The lack of attention to economic policy and human development, as well of high degrees of corruption, has caused the region to remain very poor and underdeveloped today (Hanson, 2009).

Figure 1. Multidimensional poverty in global regions



2.1.1 The economic outlook for Sub-Saharan Africa

From 2013 to 2017 Sub-Saharan Africa saw an acceleration of their economic output potential of 0.4 percentage points compared to its long-term average (Global Economic Prospects, 2018). From 2000 to 2015 the region grew rapidly as a result of better governance, improved policy and institutional environment, net inflows of capital and high commodity prices. However, the growth momentum of the beginning of the decade has slowed down since 2015, where the region only grew by 3.4% (IMF Regional Economic Outlook, 2016). Some external drivers have affected the slowdown in Sub-Saharan African growth; the reduction in commodity prices, less access to financing and droughts in Eastern and Southern Africa (IMF Regional Economic Outlook, 2016).

Approximately half of the countries in the region are resource exporters; especially these economies have suffered from the exogenous shocks in 2014-15, and therefore contribute greatly to the slowdown in the region. Oil producers such as Angola, Congo, Gabon, Ghana, Equatorial Guinea and metals producers such as Zambia, DRC and Tanzania saw great reductions in economic growth and credit ratings. However, non-resource economies, such as Senegal and Cote d'Ivoire have sustained high growth rates, are benefitting from the reductions in oil prices and have been resilient to the recovery of commodity prices in the latest years (IMF Regional Economic Outlook, 2016).

The world and economic growth is shaped by technological progress and the digital revolution. However, although almost 50% of the world's population use the Internet, in Sub-Saharan Africa only 25% of people are users (UNDP, 2018). Although the region is lagging in Internet penetration and technology innovation, certain trends suggest that the African region will find new and different ways to use technology in the future. For example, Africa is the global leader in mobile money. Mobile payments are being used widely in some countries and new innovation hubs are commencing in the region, such as Namibia and South Africa. Over half of the global mobile money services operators in the world are located in Sub-Saharan Africa and 11.5% of adults are users, which is far above the numbers in any other region (McKinsey, 2018).

Sub-Saharan Africa is changing rapidly; the African population is expected to grow by 1.3 billion by 2050 (UN World Population Prospects, 2017). The region will have to deal with changing demographics and could benefit from a growing workforce. However, 20% of the unemployed in the region are young people (World Bank, 2018). This trend of youth unemployment suggests an underutilisation of human capital resources in the region.

2.1.2 Africa's debt burden

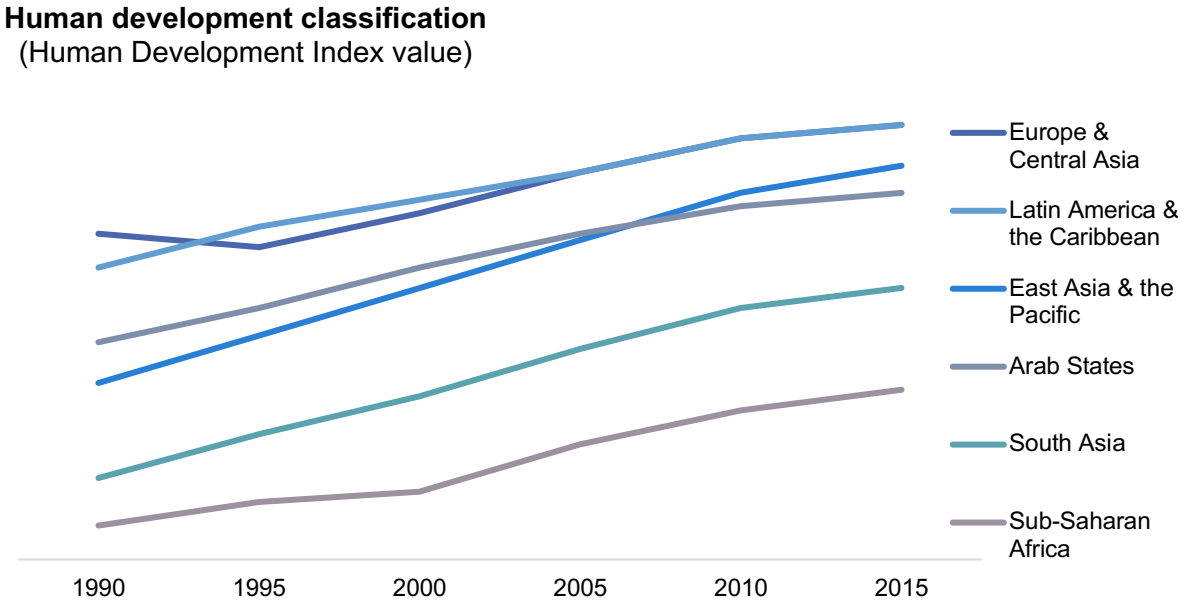
Since 1995 the African economies have seen an overall recovery of economic growth (Arndt et al, 2016). However, many Sub-Saharan countries have amassed a high degree of debt. The African debt burden is quite severe and has been so since the last century. In 1996 the World Bank, the International Monetary Fund ("IMF") and other multilateral, bilateral and commercial creditors began the HIPC initiative to reduce the debt burden for heavily indebted poor countries following certain criteria. The heavily indebted poor countries include 36 countries globally, but 30 of these countries are located in Sub-Saharan Africa (World Bank, 2018). In the region many countries have a low tax base and therefore much of government revenue is being spend on servicing debts. While the HIPC initiative has helped the Sub-Saharan Africa region to lower indebtedness, there is still a huge debt burden in the region. In 2017, the IMF warned that the median level of debt had risen from 34% to 48% since 2013. This suggests that despite the political willingness to invest in

human development, many African countries may have to rely on private sector investments as governments are constrained by public debt and therefore do not have the necessary funds to make these investments.

2.2 Human rights in Sub-Saharan Africa

Sub-Saharan Africa, despite its rich resources, is home to some of the poorest countries in the world. Almost half (41%) of the Sub-Saharan African population is living in extreme poverty (UNDP, 2018) and only around 25% of countries in the region are classified as having medium or high human development. The poverty is especially significant in the rural population where 74% live in multidimensional poverty[1]. The severity of the poverty situation in Africa is more outspoken than any other region in the world. Only 44 countries worldwide are classified as having low human development, but 36 of these countries are African and of the 20 lowest ranking countries worldwide, 19 are African (UN Human Development Plan, 2016). Not only does the region have many countries with vast issues of poverty and low human development, but they have on average also remained below all other regions in the world on human development indices.

Figure 2. Global human development classifications



[1] Multidimensional poverty considers non-monetary aspects of poverty as well, i.e. overlapping deprivations suffered by individual. The measure includes three dimensions: Health, education and standard of living.

2.2.1 Sanitation, Health and Education in the region

Focusing specifically on the current status of human development in Sub-Saharan Africa, this section will discuss access to and quality of water and sanitation, health care and education in Sub-Saharan Africa.

First, access to clean drinking water and sanitation infrastructure remains low in Sub-Saharan Africa. In 2015, the average access to improved water sources was merely 74% across the region and access to least basic drinking water services was 63% of the population compared to any other region, where the average was over 90% access to improved water sources and drinking water. Even more severe is the lack of improved sanitation facilities; on average only 35% of the population in the region had access in 2015 (World Bank Data, 2018). The UNDP (2018) estimates that 250 million Africans could face water shortages by 2020. However, Sub-Saharan Africa has made great progress in improving the access and quality of water and sanitation. The goal to halve the proportion of the population without access to these resources was reached five years ahead of schedule (UNDP, 2016). From 48% in 1990, the region has managed to raise the total proportion of people with access to improved water sources from to 68% in 2015 (UNDP, 2016).

Second, the Sub-Saharan African health care system has made huge progress in the later years. Between 2000 and 2015 the global life expectancy at birth rose by 4.9 years, and the increase in the Sub-Saharan Africa region was the greatest in the world, rising by 8.8 years. Furthermore, the region had the sharpest decline in under-five mortality (UNDP, 2016). However, Sub-Saharan Africa still has a long way to go in order to catch up with the rest of the world in having an efficient health care system. When looking at global life expectancy and maternal mortality ratios, the 20 worst performing countries are still all from the Sub-Saharan Africa region (WHO, 2018). Sub-Saharan Africa is the only region with countries that exhibit over 10% probability of dying before the age of 5 (WHO, 2018). Challenges remain great in health care as mortality rates remain much more severe with the poorest households; however the mortality rates here are declining faster than for other income groups (UNDP, 2016). Although maternal mortality ratios and adolescent birth rates have experienced declines in the region they still remain high. For every 100,000 live births in the region there are 551 maternal deaths and still in 2015 103 of every 1,000 women giving birth were under 20 (UNDP, 2016).

Third, within education Sub-Saharan Africa has shown the same pattern as with health care, exceeding growth in all other regions globally and having the greatest progress in improving access and quality of education. In the region, net enrolment rates rose from 52% to 80% from 1990 to 2015. From 1998-2002 and 2013-17 secondary completion rates were almost doubled in the region (Global Economic Prospects, 2018). In relation to quality of education, Sub-Saharan Africa is still seeing significant challenges with high pupil-teacher ratios. Worldwide, 26 countries

still had average pupil-teacher ratios of over 40:1 and 23 of these countries were in Sub-Saharan Africa (UNDP, 2016). This may explain why the region is still lagging behind the rest of the world on educational completion, with a primary completion rate of 68% in 2014, when all other regions had over 90% completion (World Bank, 2018).

2.3 Human rights and productivity in Sub-Saharan Africa

There have been several cases of countries in Sub-Saharan Africa creating massive initiatives for change in human rights and human development. These cases give reason to believe that implementing human rights initiatives and improving human development will enable more sustainable economic growth and productivity improvements.

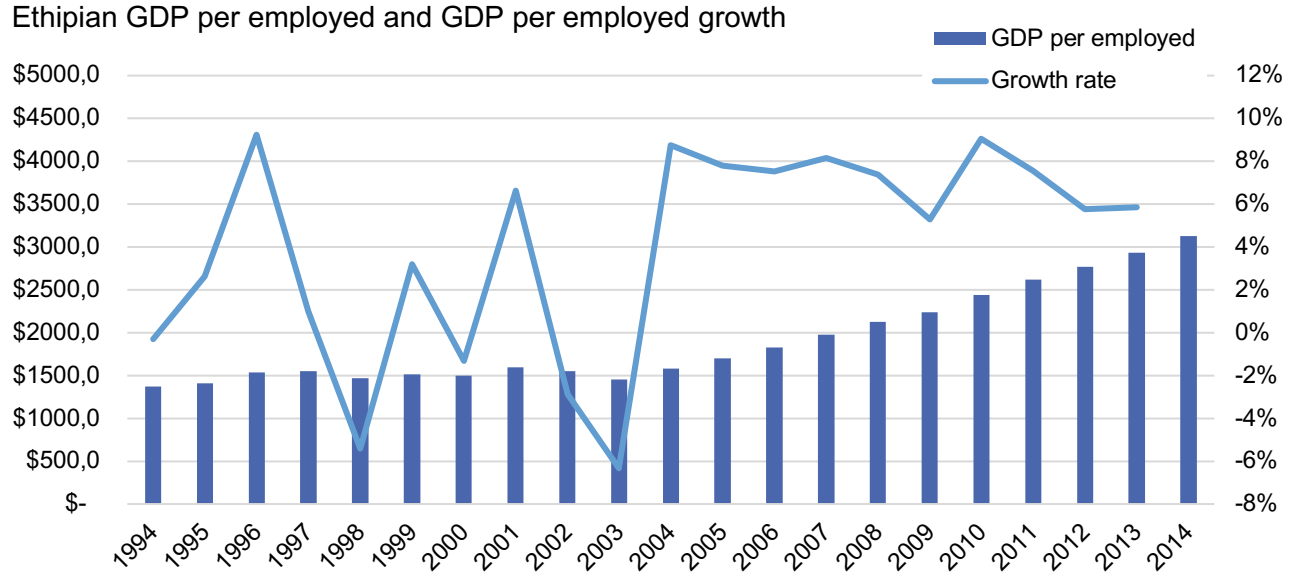
The first example of a massive initiative in human rights in Sub-Saharan Africa is the revolution in South Africa in 1994. In the 1990s South Africa began its transition to democracy and in 1994 the first general democratic elections were held, which came to mark the end of apartheid in South Africa and therefore was a major step in the direction of providing equal human rights to the citizens of South Africa. The African National Congress (ANC) won the election having campaigned for equality and the need to honour workers' rights, eliminate rural poverty, and prioritise education, housing and health services (South African History Online, 2018). When comparing the 10-year period before and after 1994, it is apparent that South Africa reaches significant increases to economic growth in the aftermath of the democratic transition. Average annual GDP growth in constant prices increased from 0.8% to 3%, while GDP per capita growth went up from -1.3% to 1% in the period from 1995 to 2004 (Plessis & Smit, 2006). On a sectorial level, South Africa saw an even greater dominance of the tertiary sector after the transition, as the proportion of this sector to GDP went from 77% to 95.5% (Plessis & Smit, 2006). In terms of the economic cycles of South Africa, the upswing seen in 1998 was by far the longest in Post-War South African history, however this period was characterised by slower and steadier growth rather than a rapid growth pattern seen before (Plessis & Smit, 2006). This supports the hypothesis that economic growth created from improvements in human rights is more sustainable than other drivers of growth, as it provides long-term, stable effects.

The second example of drastic politically driven improvements in human rights is in Ethiopia. In 2005, Ethiopia launched Sub-Saharan Africa's largest social protection programme, the Productive Safety Net Programme (House of Commons Environmental Audit Committee, 2011). This program was launched in effect of the 2004 Humanitarian Appeal, a national account for the food, health, water and sanitation conditions in the country. The Productive Safety Net Programme (PSNP) focuses specifically on preventing and addressing food insecurity. The programme has benefitted

7.8 million people to date and reduced the average household food gap from 3.6 months to 2.3 months. Furthermore, it has increased the productivity of land significantly and reduced soil erosion and losses.

In 2000, Ethiopia was the third poorest country in the world with more than half of the population living in poverty. However, the country's poverty rate fell to 31% in 2011 and given its size Ethiopia became one of the fastest growing countries in the world in the last decades. On average Ethiopia grew by 10.8% annually from 2004 to 2014 (Quartz Africa, 2018). In Figure 2, Ethiopia's labour productivity from 1994 to 2014 is depicted. This figure suggests that after 2005 Ethiopia achieved a positive trend in labour productivity, expressed as GDP per employed, that has persisted to this day. The graph shows the growth pattern of labour productivity as well. As seen in Figure 2, Ethiopia's labour productivity growth remains above zero for all years after 2005. Furthermore, when compared to the period from 1994 to 2004, the labour productivity in Ethiopia appears to reach a steady level of positive growth rates and a reduction in the volatility of this rate. This suggests that the human rights initiative not only had a positive effect on labour productivity, but also a stabilising effect on its rate of growth.

Figure 3. Ethiopian labour productivity development and growth



3. Theory

In this section, I will discuss how human rights are defined and classified and their place in the international political agenda, specifically focusing on how human development rights can create economic growth. Furthermore, I will define productivity, specifically labour productivity, and how

productivity growth is theoretically driven by increases in the level of human rights and human development. Finally, I will present a conceptual framework based on the various literature within these fields, that will provide an onset and structure for the analysis.

3.1 Contemporary understanding of human rights and the human rights agenda

3.1.1 Human rights in the international political society

Human rights have been on the top of the international political agenda for decades. Human rights have been a key focus of the United Nations since its conception in 1945, mentioned seven times in the founding Charter alone. The UN is aimed at promoting and protecting human rights through its human rights council, treaties, procedures etc. Still the broadest work is the Universal Declaration of Human Rights (UDHR), which was adopted by the members of the United Nations in December 1948 (UN webpage, 2018). In the preamble of the declaration it declares:

”*recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world [..] human beings shall enjoy freedom of speech and belief and freedom from fear and want”*

Although only a declaration, which is not legally binding, the UDHR is often considered an important piece of international law on the topic (UN webpage, 2018).

In the 2030 Agenda for Sustainable Development of 2015 several world leaders in the UN agreed to pursue 17 Sustainable Development Goals putting human rights initiatives on their agenda, such as good health and well-being, quality education and access to clean water and sanitation (2030 Agenda for Sustainable Development, 2015).

3.1.2 Definition of human rights and types of human rights

Blume & Voigt (2007) define human rights as the rights and claims on society of an individual belonging to every human being in every human society. Human rights can be characterized as positive or negative. Positive human rights are rights to basic resources and positions, such as food, education, property and employment. Negative human rights are rights protecting the individual’s freedom to do something and against interference from third parties or the state. Examples of negative rights include protection against torture, slavery and imprisonment without trial (Blume & Voigt, 2007). Blume and Voigt (2007) point towards four groups of human rights; basic human rights, meaning freedom from state interference. Economic rights, mainly in terms of property rights and protection as well as independent judicial power and fair regulation. Civil and political rights, such as freedom of speech, religion, movement. Emancipatory rights and social rights such as a right to work, education and equal rights across genders.

3.1.3 Human rights and economic development

Although the international community agrees that pursuing the global establishment of human rights is the normatively correct course of action, there is a lot of disagreement on how human rights and economic development influence each other. Many theories suggest a positive relationship between increased human rights and economic growth and productivity, however some suggest that there may be a trade-off between human rights and economic development (Marslev & Sano, 2016). The Hayek Hypothesis states that although basic human rights and property rights create economic growth, social rights could have a negative effect (Blume & Voigt, 2007).

Marslev and Sano (2016) define four potential pathways in which human rights can create an impact on economic development: economic inequality (negative), human development (positive), institutions and governance (positive), conflict and political instability (negative). My thesis will focus on the human development aspect of intermediary pathways to economic growth.

3.1.4 Human development and economic growths

The human development pathway is derived from social or emancipatory human rights. Access to and quality of education, health, food, housing and water creates human development, which in turn can produce economic growth. The relationship between human development and economic growth is presumably bidirectional. On one hand economic growth can create and enable these human rights, on the other hand human development can produce growth through increases in labour productivity, innovation and contributions to institutional development (Marslev & Sano, 2016).

Ranis, Stewart and Raminez (2000) investigated the relationship between GDP per capita growth, life expectancy and literacy rates for developing countries and found significant evidence for a positive effect in both directions. Based on this they hypothesize that the two variables follow two self-reinforcing cycles: the virtuous cycle, where improvements in human development lead to further economic growth and thereby even more human development as an effect, and the vicious cycle, where decreases in either human development or economic growth lead to a deterioration of the other. Sometimes, increases in human development do not lead to increased growth or, economic growth does not lead to improved human development. Ranis et al (2000) define this pattern as lopsided development. The key finding in their study was that countries that enter into lopsided development in all cases entered into the second cycle, the vicious cycle, in later periods. They therefore conclude that without human development, a virtuous cycle of growth is near impossible. In a later study by Suri, Boozer, Ranis and Stewart (2011) this conclusion is reaffirmed, that human development is necessary if the economy is to sustain and accelerate growth (Marslev & Sano, 2016).

3.2 Definitions of productivity and growth

3.2.1 Definition of productivity

Productivity is defined as the rate for which an output is produced from a certain input, often labour or capital within the field of economics. Productivity is typically expressed as an output/input ratio, so high productivity is a more efficient use of the inputs, or resources, for the output produced (Syverson, 2011). Productivity can be expressed through a single factor or by multiple factors. The most commonly used measure of single-factor productivity is labour productivity, the level of output for each input of labour, such as number of employees, hours worked etc. As this thesis is focused on the human development aspects, I will specifically be focusing on the productivity driver that is expected to have the strongest correlation with human or social development. Therefore it becomes important to look at the productivity of labour and how this can be increased.

3.2.2 Labour productivity

This thesis is specifically focused on the productivity of labour (hereafter simply referred to as productivity) and how human rights could drive this. Productivity is an important factor for economic growth. Macroeconomic theory defines the aggregate output of the economy as determined by 4 factors: workforce, technology, physical capital and human capital (Taylor & Greenlaw, 2014). Productivity is determined by human capital, technology and economies of scale. Human capital creates a higher level of productivity per employed through the aggregate level of knowledge, skill and experience in the economy. When people are more educated or have more experience they are theoretically able to produce a higher amount of output per employee. Furthermore, technology effects how much an economy is able to produce per labourer (Taylor & Greenlaw, 2014). In theory, higher human capital should lead to more innovation and inventions, which in turn creates more efficient technology and productivity. All else equal, high productivity should create increased economic growth by making each labourer more efficient and thereby allowing a higher amount of output and more resource availability to create new technologies. Theory therefore dictates that the quality of human capital is essential for productivity to increase and thereby important in order to create economic growth (Taylor & Greenlaw, 2014).

3.3 Human rights as a driver of productivity growth

Human development is theoretically a driver of macroeconomic growth and the quality of human capital leads to increases in productivity in the economy. To understand the specific channels through which human development is transformed into productivity and growth it is important to understand productivity on a disaggregate level. Syverson's (2011) drivers for firm productivity can

be assumed as disaggregate drivers of country level productivity. The internal drivers include managerial practice and talent, quality of labour and capital, information technology and R&D, learning-by-doing and firm structure. External drivers include productivity spillovers, competition, regulation or deregulation and flexible input markets. In the next sections, I will outline the effects of these drivers as they relate specifically to human development and labour productivity.

3.3.1 Human development as a driver of productivity

The direct effect of human development on productivity is created through an increase in the quality of human capital as described in Section 3.2.2. Increases in the quality of human capital are theoretically driven by managerial practice and talent and quality of labour and capital (Syverson, 2011).

Maslow's (1943) hierarchy of needs may explain how improvements in social human rights can create motivation for employees in a society. Maslow's (1943) theory is that each individual goes through at least five stages of need or motivation: physiological, safety, social, esteem and self-actualisation. For each stage, an individual is motivated by the need to fulfil each of the categories in the hierarchy. The intuition behind Maslow's (1943) hierarchy is that as each level of needs are satisfied the individual is enabled to pursue the next level of needs, until reaching the final level of self-actualisation. The last stage is characterised as a growth need; here individuals are no longer motivated by needs that are unmet, but rather a continuous need to develop personally and achieve self-fulfilment. Therefore when basic needs are fulfilled through human rights improvement it allows people to pursue different needs and thereby achieve new motivation.
Nohria, Groysberg & Lee (2008) categorise four underlying drivers of motivation in a workplace. First, employees are motivated by the need to acquire; this could refer to physical acquisitions or intangible, but the desire to own is one driver of employee motivation. The second desire is to bond. This desire comes from the need to build connections; creating bonds of belonging in an organisation that can boost motivation. Third, the desire to comprehend; employees are motivated by intellectual challenges that enable them to learn. Last, employees are motivated by the need to defend; therefore many employees are reluctant to change (Nohria et al, 2008). Human rights could theoretically fulfill some of these desires or needs and thereby create motivation.

Creating motivation amongst employees and fulfilling their needs can enable improved attraction and retention of these employees (Phillips & Connell, 2003). Increased human social rights thereby enable an increased opportunity to attract and retain talent, which Syverson (2011) describes as a key driver of productivity. Bloom and Van Reenen (2007) showed a correlation between

managerial practices and productivity on the firm level in the US, UK, France and Germany and later in China, India and Brazil. They also showed that in the emerging economies of China, India and Brazil the lower quality of management was driven by a large left tail of poorly managed firms compared to the developed countries. Bertrand and Schoar (2003) show a significant fixed effect of specific top executives across firms from 1969-1999. These studies point towards the importance of attracting and retaining management talent specifically through having strong social human rights.

Furthermore, the quality of the human capital is tied to education, training, experience and tenure (Syverson, 2011). Staffing and training in firms also increase the competitive advantage of firms, enabling them to develop employee knowledge, skills and abilities – either generic abilities through staffing or specific capabilities through training, showing the importance of firm investments in education (Kim & Ployhart, 2014). Ilma et al (2004) show that productivity of firms increase with the education level and age of the employees, stressing the importance of education and health care initiatives on a macro level.

3.3.2 Indirect effects of human development on productivity

Kim and Ployhart (2014) suggest that building productivity is key for creation of firm profits. Not only does higher productivity put human resources to better use, but the greater efficiency also enables slack resources or resource abundance in terms of energy, motivation and time. This resource abundance can further intrinsic motivation for employees, creating incentives for increased staff effort and smoother internal processes. Slack resources create incentives for employees to innovate and invent and should therefore theoretically lead to more R&D efforts as well as new technologies and better applications of current technologies. In the Romer (1990) model of economic growth, human capital is a significant input to the research sector, pushing technological progress. Nelson & Phelps (1966) also suggested that more human capital could make it easier for a country to absorb new technologies developed in another country (Barro, 1991). Human capital can further technological progress, but many economists also suggest that technology is the modern driver of productivity (Taylor & Greenlaw, 2014). Usage and employment of technology account for great deals of increases in labour productivity in developed economies in the latest decades (Timmer & van Ark, 2005; O'Mahony & van Ark, 2003).

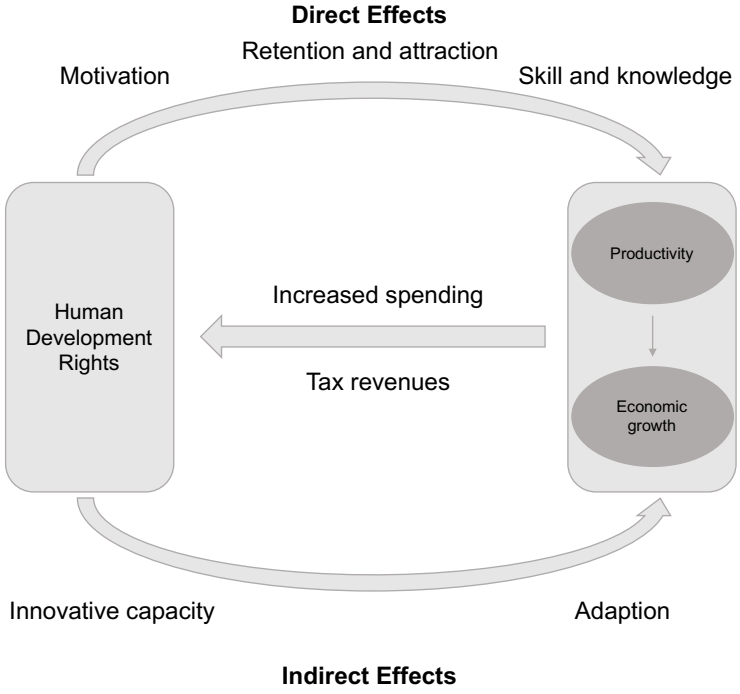
Slack resources can be created through human development, such as education, health care, and improved human rights. According to Maslow's hierarchy of needs, when these basic human needs are fulfilled people are more likely to pursue self-actualisation. In theory this pursuit should

lead to more innovation and creativity, thereby greater technologies in society, as well as more competition and flexible input markets, which are all important drivers of modern productivity.

3.3.3 Conceptual framework

The above sections find several conceptual pathways through which increasing human rights can affect productivity. These pathways can be thought of as a framework of how human development can increase productivity. Based on Bloom, Channing, Chan & Luca's (2006) framework on the effect of tertiary education on economic development, the theoretical effects of human development as described in the sections above can be visualised. In Ranis et al's (2000) conceptual framework of the relationship between GDP and human development (see Appendix 11) the pathways from human development to economic growth are labour and managerial abilities (direct effect) and innovative capacity (indirect effect). The conceptual model of this study takes basis in the Ranis et al (2000) framework by decomposing the direct and indirect effect based on the literature presented in Section 3.3. Figure 4 shows how human development can lead to increased motivation, better opportunities to attract and retain talent, increased quality and skill of labour, innovative capacity and adaptability, which in turn can all create increases in productivity and thereby economic growth and wealth.

Figure 4. Conceptual framework of human rights effects on productivity



4. Literature review

In this section I will discuss the previous literature on social human rights and development and its effect on economic growth and productivity. The literature is divided into studies on an aggregate macroeconomic level and micro level, of either firms or individuals. I will not attempt to uncover all the literature that discusses this topic but rather some key studies that are relevant for the research topic: the effect of human development rights on productivity. Furthermore, as many studies are focused on developed economies, due to the vast amount of data available this section will also discuss available literature specifically for the Sub-Saharan Africa region, as there may be essential differences between the relation between human rights and productivity here compared with other regions.

4.1 Aggregate level

Many economists have addressed human capital and especially education in empirical studies and theoretical models (Nelson & Phelps, 1966; Lucas, 1988; Romer, 1989; 1990). Many economists have also stressed the importance of human capital (Mankiw et al, 1992; Ranis et al, 2000; Suri et al, 2011). In this section I will go through a few of the key empirical studies on how human rights can affect economic growth. Two early studies on economic growth have had a great impact on the future research within the field; Barro (1991) and Mankiw, Romer & Weil (1992).

Barro (1991) provides empirical evidence from 98 countries from 1960 to 1985 based on a variety of neoclassical and modern macro-economic theories about the determinants of economic growth. Barro (1991) looks at how the beginning wealth or size (GDP per capita in 1960) of a country affects its future ability to create economic growth. Unlike what neoclassical models predict, which is that countries with a higher beginning wealth will experience diminishing returns and thereby lower acceleration of growth than countries with lower beginning wealth, there does not seem to be a negative simple correlation between the beginning size of a country and its growth. However, when holding human capital constant – Barro (1991) uses enrolment percentages in primary and secondary schools as a proxy for human capital – growth is significantly negatively related to the initial per capita GDP. Furthermore, given a fixed level of initial per capita GDP there is a strong relation between the level of human capital and growth. These results suggest that a poor country will only surpass a rich country through increased growth rates if they have a high level of human capital relative to their initial size and wealth. Otherwise, rich countries will continuously outperform poor countries as measured by growth. Barro (1991) finds examples of this in Japan, Korea and Taiwan. In all of these countries their relative human capital to countries of the same size and wealth was much higher than predicted by the model. These high levels of human capital lead to

an increase in estimated growth rates of 1.5%, 1.4% and 1.2% respectively for the three countries. Furthermore, the effect explained much of the gap between the estimated growth and actual growth in the period. However, in Sub-Saharan Africa, Barro (1991) found the reverse effect, countries with relatively low human capital compared to their wealth, such as Ethiopia, Sudan and Senegal saw reductions in their estimated growth rates of 1.2%, 1.1% and 1.1%, respectively. The same results were found for oil producing economies such as Algeria, Nigeria, Iran and Venezuela. His results show the same human capital and growth relations when using student-teacher ratios as a proxy for the quality of education. Barro (1991) also found that when introducing a dummy variable for Sub-Saharan African economies, this was significantly negatively related to growth with a magnitude of around one percentage point per year. However, his analysis does not capture the characteristics of Sub-Saharan African countries' underperforming economic growth.

Mankiw, Romer and Weil (1992) take departure in Solow's (1956) model of economic growth, showing that variations in population growth and savings can explain differences in income per capita. Although these two variables explain more than half of the cross-country variation in income they do not correctly predict the magnitudes. Mankiw et al (1992) augments Solow's model to include accumulations in human and physical capital; this augmentation allows the model to explain around 80% of cross-country differences. Mankiw et al (1992) find that human capital, measured using enrolment in secondary school as a proxy, is related to both savings and population growth and is therefore a key variable for the model to be unbiased. Their results show that when introducing human capital the size of the physical capital coefficient decreases greatly. It also improves the fit of the regression for all the sample groups chosen (OECD, intermediate and non-oil producing countries), strongly supporting an augmented model that includes human capital levels.

Since these early studies, many have tried to explain the drivers and effects of economic growth. Several studies on economic growth look at the positive effects this can create on human development, however few have looked at how economic growth is affected by human development beyond the effects of education. Suri, Boozer, Ranis and Stewart (2011) look at secondary school enrolments as well as life expectancy and infant mortality rates as human development variables. Based on the theoretical framework of Ranis et al (2000) (see Section 3.1.4), Suri et al (2011) test the effect of human development on economic growth for all developing countries (except for those in Eastern Europe) with a population over one million during 1960-2001 (79 countries total, in four regional categories). They find that levels of and changes in human development are significant drivers for growth. The study also finds that policies and

investments in human development must precede or happen simultaneous with initiatives for economic growth in order for countries to enter a virtuous cycle of growth as defined by Ranis et al (2000).

4.2 Firm level

There are many articles that look at the firm level effects of various human capital parameters on firm performance. Due to the breadth of human development rights and their definitions, it is difficult to find studies that focus specifically on the holistic labour productivity effects of these. Many articles have researched the effects on productivity of the many potential theoretical pathways of improving human rights (see Section 3.3.3), such as employee motivation and incentives, employee retention and attraction of employees. Because the literature in these pathways is so vast and since this thesis is mainly focused on whether human development rights specifically create labour productivity, this review will focus on studies that have linked types of human development initiatives to productivity. The empirical evidence and literature within the human rights pathways on micro-level will be further explored in Section 9, as a tool to generalise and validate the specific results of the analysis.

4.2.1 Effects of organisation factors on firm performance

Hansen and Wernerfelt (1989) study the relative importance of economic and organisational factors on firm performance. Hansen and Wernerfelt (1989) measure the effect of a variety of economic and organisational factors on firm performance, measured as five-years average return on assets, for 60 Fortune 1,000 companies in USA. They investigate economic variables such as industry profitability, the firm's relative competitive position and firm size. As organisational measures they look at the emphasis on human resources in the organisation and the emphasis on goal accomplishment. The emphasis on human resources can be interpreted as initiatives and focus on the social human rights of employees. They find that the organisational model has a highly significant effect on firm performance, and that it alone explains substantially more of performance than the economic model alone.

4.2.2 Effects of corporate responsibility initiatives

Sánchez and Benito-Hernández (2013) look at Spanish small and micro firms to find whether corporate social responsibility initiatives can create increased labour productivity on a firm level. They look at the effect on labour productivity from relationships with external stakeholders, sales distribution per employee, employee training, environmental expenses, quality control, and R&D expenditures. Sánchez and Benito-Hernández (2013) test these hypotheses on 929 small firms

and 135 micro firms. They find that the only significant factors on labour productivity is labour efficiency, measured by the inverse variable labour cost over sales, which can be interpreted as a strong employee relationship (Sánchez & Benito-Hernández, 2013). The other significant factor was the company's concern with quality in its processes and products, measured by whether the firm had quality control processes in place. Their results suggest that increases to labour productivity through investments in social initiatives mainly derive from the improvements in employee relationships and increased organisational quality.

4.2.3 Effects of increasing access and quality of education

Kim and Ployhart (2013) study 359 listed South Korean firms with more than 100 employees before and after the financial crisis in 2008. They use human resource data from management surveys to test whether selective staffing and internal training increases productivity in a firm, in two different economic environments. Selective staffing is measured by hired candidates divided by total applicants and internal training is measured by total internal training programs completed by FTEs to total FTEs. Productivity refers to labour productivity of the firm, total sales to number of employees. They find that in both periods selective staffing and internal training has a significant positive effect on firm profits both before and after the recession. Furthermore, they also find that more selective staffing pre-recession is significantly correlated with higher profits post-recession (Kim & Ployhart, 2013). The conclusion from this study is that for larger firms there seems to be a significant positive effect from staffing and training efforts on firm productivity and profits and resilience to exogenous shocks.

4.3 Sub-Saharan Africa studies

The Sub-Saharan Africa region differs from other regions as it has seen great challenges in achieving growth, economic welfare and human rights. The political instability and economic environment separates the region from other regions dominated by developing countries. Studies have shown that the economic inequality in Sub-Saharan Africa, stemming from a lack of human rights, is a determinant for violent conflicts (Fjelde & Østby, 2014) and political instability, which in turn have a significantly negative effect on economic growth (Fosu, 2002). However, in this section I will focus on the studies that specifically look at the effects of human development rights in Sub-Saharan Africa.

4.3.1 Human development and productivity

Bloom, Canning, Chan & Luca (2006) investigate how increases in levels of tertiary education is related to productivity in Africa. The study looks at total years of education and life expectancy in

108 countries from 1975-2010. Looking at TFP they, like many others, find that labour and capital are major drivers of economic growth. They also find that health is a significant factor for growth. Although the study does not find tertiary education to be a significant factor of the production function, the findings show that years of education has a positive and significant effect on the speed of technological convergence. To avoid reverse causality problems, Bloom et al (2006) instrument each variable's growth rate with its lagged value; this model yields a significant result for the effect of tertiary education on productivity. The positive significant effect of health is still supported as well as the effect of tertiary education on technological catch-up. In conclusion, Bloom et al (2006) show that when accounting for the potential contemporaneous productivity shocks, increasing tertiary education and health in an African economy positively and significantly impacts productivity and economic growth. Furthermore, it speeds up the country's ability to catch up with technological innovation. In absolute terms, Bloom et al's (2006) results suggest that a one-year increase in total education would increase long-run steady state GDP per capita by 16%. However, these results have met criticism due to the shortcomings of their methodology, specifically in the use of the instrumental variables as well as potential omitted variable biases (Glewwe, Maiga & Zheng, 2014).

5. Data (refers to quantitative data)

To estimate the effect of social human rights on productivity I find the main estimation variables: labour productivity and access and quality of sanitation, education and health care. To estimate these variables I have used data from the World Bank on 45 countries in Sub-Saharan Africa. This section will provide an overview of the data sources, reliability and limitations, as well as descriptive statistics of the main estimation variables.

5.1 Data source

The data is constructed using the World Bank data bank (WBDB henceforth). The WBDB consists of a variety of data sources, the variables of this study is constructed combining four data sources. Combining these data sets I achieve a panel of 45 Sub-Saharan countries over 20 years from 1995 to 2014.

5.1.1 Productivity variable

The productivity data is constructed using the global numbers from the International Labour Organization, ILOSTAT database, which consist of data from every country from 1991-2017. The productivity variable is measured by the gross domestic product (GDP) divided by total employment in the economy. The variable is converted into 2011 constant international dollars

using purchasing power parity (PPP) rates. This measure has the advantage that when converted into 2011 international dollar, each dollar has the same purchasing power over GDP that a USD had in the United States in 2011. Thereby, this measure of productivity accounts for differences across time and countries in exchange rates and inflation.

5.1.2 Human rights variables

The human rights variables will consists of data from three databases and measure human development in the economies through the access and quality of water and sanitation, health care and education. The reason these variables have been chosen is because the access and quality of all of these are fundamental human rights, which can all be used as proxies for the progress of human development. Also, these three aspects of social human rights (water and sanitation, health care, and education) constitute the contemporary priorities in the international political community (2030 Agenda for Sustainable Development, 2015). Additionally, these variables are all tracked on a country level throughout the world by major reputable institutions, which contributes to data availability and reliability.

First, water and sanitation access is gathered from the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene from 1991-2015. As a proxy for water and sanitation access I will use access to improved sanitation facilities, this measure calculates the percentage of the population using improved sanitation facilities, defined as sanitation systems including flush/pour flush (to piped sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet (World Bank, 2018). The access to water and sanitation is an important human right and development factor as it can be used to measure the improvements in the reduction of poverty, disease and death (World Bank, 2018).

Second, health care access and quality is gathered by the WHO Global Health Expenditure and measures out-of-pocket health expenditures from 1995-2014. Out-of-pocket health expenditures is defined as any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services, whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups (World Bank, 2018). The data is reported as a percentage of private expenditure on health, but can be converted to a dollar amount using the numbers of private health expenditure from the World Health Organization and GDP numbers from the World Bank International Comparison Program.

Third, the indicator for education will be measured by general government expenditure on education from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics from 1991-2016. The variable includes current, capital, and transfer expenditures and expenditure funded by local, regional and central governments and transfers

from international sources to government (World Bank, 2018). This education measure is very broad and takes into account all expenses on education, therefore it is beyond primary and secondary schooling expenses. Furthermore, it could reflect combination of quality and quantity of education, that enrolment rates and student/teacher ratios individually does not capture.

5.2 Data reliability and limitations

In this study it is important to mention that there are certain considerations regarding the data reliability. In this section I will discuss the limitations of the data set and reliability by firstly addressing the missing data and observations in the study. Second, I will discuss the use of proxies and the interpretational leaps necessary due to lack of data. Third, this section will mention considerations regarding the reliability of measurements and collection of data, specifically for the Sub-Saharan Africa region.

5.2.1 Missing data

The data available for the estimation variables vary from country to country and throughout the years of observation. The Sub-Saharan Africa region consists of 49 countries, which includes islands located outside of the main land. Due to the lack of productivity data in the Seychelles and South Sudan, I have excluded these countries from the study. After the exclusion of the Seychelles and South Sudan the productivity variable has all observations for each country in every year from 1991 to 2017, i.e. 1269 observations. However, the human rights variables have less consistency in terms of observations. The sanitation access variable has observations until 2015 for all countries, however there is missing data for several economies between 1991 and 1995. The health care variable is only observed from 1995 to 2014, furthermore the variable is not observed for Somalia throughout the period. Although the education variable has been tracked by UNESCO from 1970 there is much missing data for this variable. There are only a total of 535 observations for this variable, as there are no observations for Nigeria and Somalia throughout the period. In the regression, I will only include the years for which all variables were observed for a given country. Therefore, the number of observations is reduced to 312 in the regression model. As this is still a high sample size, the observed lines in the panel where there are missing values will simply be excluded.

5.2.2 Proxies and lack of data

When investigating the level of social human rights, the researcher must choose certain proxies as a way to track the progress of human development. However, social human rights consist of a variety of rights that cannot all be included and many of which are not necessarily tracked by data

gathering institutions. The decision to use sanitation, health care and education is due to the data availability of these variables and that these have traditionally been used in many studies as a proxy for the quality of human capital. However, in choosing these variables for human development, many other types of human rights and their effect are not being reflected in the study. Furthermore, the choice of specifically using access to improved sanitation, out-of-pocket spend on health care and government expenditure on education has depended on the data availability for the region. These decisions expose this study to a selection bias of the researcher. The decision to use these variables and the bias that this exposes the study to will be discussed in further detail in Section 6.1.2.

5.2.3 Reliability and limitations of measurement

These macro-level estimation variables are liable to certain limitations of measurements and potentially contain measurement errors. The reliability of macro-economic data is dependent on the definitions, coverage and methodology of the specific national accounts conventions. When looking at labour productivity the differences in definitions of informal sectors and methodologies in estimating the nonmarket service sectors is a significant limitation to the data. Furthermore, the sanitation data is based on representative household surveys. As the coverage rates are based on information from service users rather than providers it may include non-functioning systems. These limitations will most likely be present whenever one is using macro-economic data from a variety of countries from different data sources.

5.2.4 Reliability of collection in SSA

Especially in the region of Sub-Saharan Africa there are certain considerations regarding the reliability of the data collected that I must address. Firstly, a consistent series of data is rarely easily available in developing countries in the Sub-Saharan African region, especially in both national currencies and purchasing power parity dollars (World Bank, 2018). These countries often have very low transparency and big problems with government corruption and false information. Therefore this region is specifically liable to false observations or falsification of numbers regarding the economic development and human rights (Jerven, 2014).

Table 1. Variable descriptions

Variables of interest		Variable description (as in World Bank Data Base)	Source
Sanitation	SANI	Improved sanitation facilities (% of population with access) Access to improved sanitation facilities refers to the percentage of the population using improved sanitation facilities. They include flush/pour flush (to piped sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet	WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation
Health Care	HEALTH	Out-of-pocket health expenditure (constant 2011 international $ per capita) Out of pocket expenditure is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure	World Health Organization Global Health Expenditure database
Education	EDUC	Government expenditure on education, total (constant 2011 international $ per capita) General government expenditure on education (current, capital, and transfers). It includes expenditure funded by transfers from international sources to government. General government refers to local, regional and central governments	United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics
Control Variables			
Capital formation	CAPITAL	Gross capital formation (constant 2011 international $) Gross capital formation consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings	World Bank national accounts data, and OECD National Accounts data files
Technology	TECH	ICT service exports (% of service exports, BoP) Information and communication technology service exports include computer and communications services (telecommunications and postal and courier services) and information services (computer data and news-related service transactions)	International Monetary Fund, Balance of Payments Statistics Yearbook and data files
Population	POP	Population, total Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. The values shown are midyear estimates	United Nations Population Division and Census reports and other statistical publications from national statistical offices
International trade	TRADE	Exports of goods, services and primary income (constant 2011 international $) Exports of goods, services and primary income is the sum of goods exports, service exports and primary income receipts	International Monetary Fund, Balance of Payments Statistics Yearbook and data files
Investments	INV	Foreign direct investment, net inflows (constant 2011 international $ Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital	International Monetary Fund, Balance of Payments database
Dependent variable			
Productivity	PROD	GDP per person employed (constant 2011 PPP $) GDP per person employed is gross domestic product (GDP) divided by total employment in the economy. Purchasing power parity (PPP) GDP is GDP converted to 2011 constant international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a U.S. dollar has in the United States.	International Labour Organization, ILOSTAT database. Data retrieved in March 2017

Note: Variables Health care, Education and Capital, International trade, and Investments are recalculated from percentage of GDP to constant 2011 international $ using the World Bank's International Comparison Program database GDP, PPP numbers

5.3 Descriptive statistics

The descriptive statistics of the panel data of this study is presented below. This section will begin with an analysis of the main estimation variables across the period in different countries in the region. This section will also present descriptive statistics of all the estimation variables in the study and lastly the relation between productivity and each of the human rights variables.

In Table 2 an overview of the countries with the highest and lowest averages of the estimation variables through 1991-2015 is shown. When looking at the high and low groups there are a few countries who persist across each category of estimation variables, suggesting that the top performers in productivity also are top performers across social human rights. The countries that follow this pattern in the highest segment are Gabon, Equatorial Guinea, South Africa and Mauritius. As for the lowest performers especially the Democratic Republic of Congo (DRC) and Central African Republic reappear across the variables. There are not many apparent similarities across the countries that are performing best. They vary hugely in size, languages, religions, resource base, and geography, however most of the countries that appear in the top have been characterized by long-term political stability. As for the lowest performers most are located in Central or East Africa, and the majority of the countries that appear as the lowest performers are landlocked. Many of the countries with the lowest productivity and human rights are resource exporting countries, rich in metals and oil. Several of these countries are also characterized by recent or on-going political unrest, e.g. in DRC, Central African Republic and Burundi, including massacres, civil wars, and rebellions.

Table 2. Highest and lowest average performers across the period

Variables	Country	Highest	Country	Lowest
	Gabon	62,535	Congo, Dem. Rep.	1,767
Productivity	Equatorial Guinea	42,892	Burundi	1,819
	South Africa	38,296	Central African Rep.	1,936
	Mauritius	91.91	Niger	7.47
Sanitation (%)	Equatorial Guinea	78.08	Chad	10.25
	Gambia, The	59.46	Tanzania	10.60
	Mauritius	248.89	Mozambique	4.16
Health Care	Gabon	244.34	Malawi	10.49
	Equatorial Guinea	151.84	Congo, Dem. Rep.	11.95
	Botswana	1,046.98	Congo, Dem. Rep.	12.57
Education	South Africa	598.33	Central African Republic	12.91
	Gabon	542.16	Liberia	21.31

Note: Productivity, Health Care and Education are all expressed in 2011 international $

These numbers can be compared to the descriptive statistics in Table 3. Looking at the highest and lowest country averages against the means it becomes apparent that for all the human rights variables there is a fairly long right tail (see histograms of the observations in Appendix 1). There is much variation between the top performers whereas the lowest performers experience much less variation. However, the lowest performing countries are still far below the averages for the entire region.

Table 3. Descriptive statistics

Descriptive statistics of independent variables					
Variables of interest	**Count**	**Mean**	**Std. Dev**	**Min**	**Max**
Sanitation (%)	1,142	30.13	19.58	2.60	93.20
Health Care	904	55.62	59.50	2.59	438.74
Education	535	147.18	189.43	9.76	1,236.93
Control Variables					
Growth in Capital formation (%)	1,059	21.82	1.56	16.25	25.79
Technology (%)	718	19.24	15.47	0.19	90.07
Population	1,217	15,900,000	24,200,000	116,294	186,000,000
International trade (in billions)	1,094	14.75	35.01	0.08	282.46
Investments (in billions)	1,141	1.37	3.40	-9.17	38.23
Dependent variable					
Growth in GDP per employed (%)	1,269	8.75	0.96	6.64	11.34

Table 3 above shows the descriptive statistics of all the main estimation variables as well as the control variables. The human rights variables all have relatively high standard deviations. The access to sanitation varies from 2.6% of the population in Ethiopia to 93% in Mauritius. The expenditures on health care and education also vary greatly with the lowest being 2.6 and 9.8 dollars per capita per year, respectively. This compared to the highest expenditures of 439 dollars on health care and 1237 dollars on education per capita per year. On average the countries in the group spend 55.6 dollars on out-of-pocket health care and 147.2 dollars on education from government per capita per year over the period. The control variables include proxies for technology, capital and population as these are key drivers of productivity. As a proxy for capital, I use the natural logarithm of gross capital formation, which has a relatively low standard deviation of 1.56%. As a proxy for technology, I use the proportion of service exports that are within information and communication technology, which on average is just under 20%. As a robustness test, I will also include controls for macro-economic drivers of productivity, international trade and investments. For international trade I will use exports of goods and services as a proxy and for investment I will use net inflows of foreign direct investments. Both of these variables have very high standard deviations. The dollar amount of exports per country varies from 80 million to almost 283 billion, and FDI net inflows vary from minus 9.2 billion to 38 billion.
The dependent variable has a relatively small standard deviation. On average GDP per employed over the period was just over 10 thousand dollars. The mean of the natural logarithm of GDP per employed is 8.75 over the period.

5.3.1 Access to sanitation, health care and education

To provide some preliminary insights into the correlation between the productivity and human rights variables, I plot each variable against the natural logarithm of GDP per employed below.
In the simple scatter plots of each human rights estimation variable against productivity, there is a significantly positive relationship between human rights within sanitation, health and education and

productivity growth. These results are consistent with the theoretical inference that there is a positive relationship between human rights and productivity. In later sections, I will examine the relationship closer to investigate whether this apparent relationship holds when exposed to more rigorous econometric analysis and when controlling for other drivers of productivity and endogeneity.

Figure 5. Simple correlation of productivity and sanitation

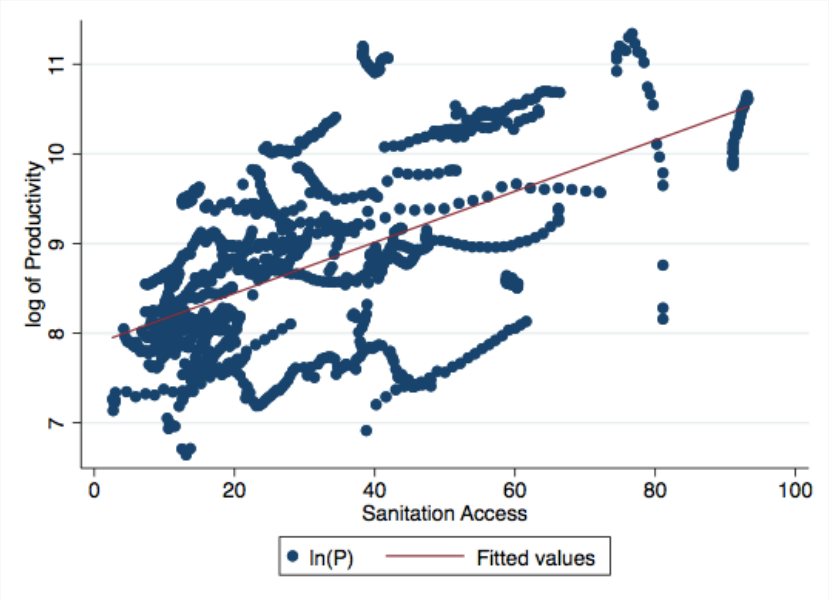


Figure 6. Simple correlation of productivity and health care

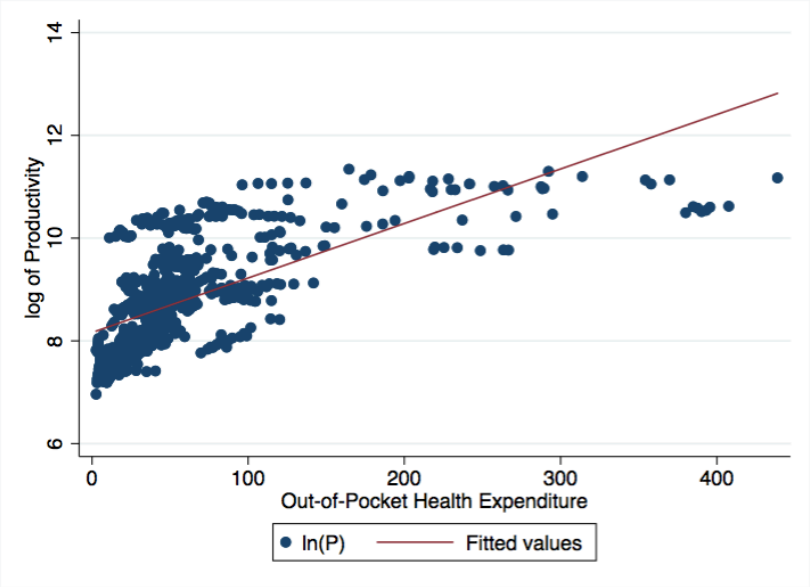
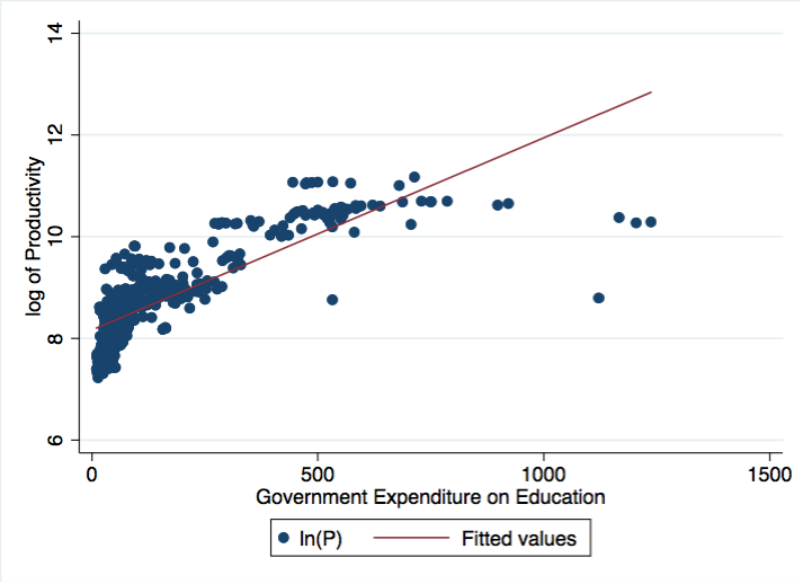


Figure 7. Simple correlation of productivity and education



6. Methodology

This study attempts to answer the research sub-questions by using both quantitative analysis and a qualitative case study. In the first section, (6.1), I will present the empirical strategy of the quantitative study and the estimation variables used. In addition I will discuss limitations and critique of the empirical strategy and the variables. In the second section, (6.2), I will discuss the methodology of the case study, the use of interviews, the goals of the interviews, style and guide. Furthermore, I will discuss critique and limitations of the interview style and the primary data obtained.

This study is limited by the research design, as changes and micro improvements in human rights may not have the same effects on productivity as changes on a national level. However, the combination of macro-economic quantitative analysis and micro-level qualitative analysis is the most feasible practically. The intuition behind it is that changes to labour productivity from human rights must come from an individual level, i.e. improvements in human rights will create changes for the individual and thereby improve their efficiency on a micro-level, which leads to an aggregate change given substantial scale.

6.1 Empirical strategy

To estimate the effect of human rights on productivity, I will use a linear regression on the panel data. Specifically, the following models are estimated:

$$lnPROD_{i,t} = \beta_0 + \beta_1 SANI_{i,t} + \beta_2 HEALTH_{i,t} + \beta_3 EDUC_{i,t} + \beta_4 C_{i,t} + \gamma_t + \epsilon_{i,t} \quad \text{(OLS)}$$

$$lnPROD_{i,t} = \beta_0 + \beta_1 SANI_{i,t} + \beta_2 HEALTH_{i,t} + \beta_3 EDUC_{i,t} + \beta_4 C_{i,t} + \gamma_t + \gamma_i + \epsilon_{i,t} \quad \text{(FE)}$$

Where the dependent variable, $lnPROD_{i,t}$, is the natural logarithm of labour productivity in country *i*, at time *t*. The main independent variables in this study are the human rights variables. First, per cent of the population with access to improved sanitation, $SANI_{i,t}$, in country *i*, at time *t*. Second, amount of 2011 international dollars spend on out-of-pocket health care per capita, $HEALTH_{i,t}$, in country *i*, at time *t.* Third, amount of 2011 international dollars of government expenditure on education per capita, $EDUC_{i,t}$, in country *i*, at time *t.*
The control variables are a set of country characteristics consisting of capital formation and technological progress and population size, $C_{i,t}$, in country *i*, at time *t.* Furthermore, the estimation includes fixed effects, time fixed effects, γ_t, and country fixed effects, γ_i, to account for the effects of a data set ranging over heterogeneous economies and spanning across several time periods. Finally the equations include the error term, $\epsilon_{i,t}$.

The first estimation model is an ordinary least squares model (OLS)[2] that estimates the correlation between human rights, expressed as the three variables, $SANI_{i,t}, HEALTH_{i,t}$, and $EDUC_{i,t}$, and productivity, $lnPROD_{i,t}$, controlling for other drivers of productivity and labour to account exogenous effects on productivity such as the intensity of use of capital or technology and the size of the population. Furthermore, the OLS model accounts for time fixed effects, meaning effects that are constant across countries but varies over time. Such as greater shifts in the global economic environment, e.g. the great recession or structural regional changes to levels of productivity, e.g. disruptive innovations.
One of the major econometric issues in estimating productivity is an endogeneity problem, when a determinant of productivity is not observed in the model. This problem causes the explanatory variables to be correlated with the error term, and thereby the OLS estimates of coefficients to be biased (Ackerberg et al, 2006). Since productivity is such a complex measure with many determinants, a simple OLS model has a high possibility of having determinants that are unobserved by the model. One approach to solve this endogeneity problem, first argued by Hoch (1955, 1962), Mundlak (1961, 1963), and Mundlak and Hoch (1965), is the fixed effects model. The OLS model conceals any heterogeneity between the 45 countries included in the study, which in turn means that the error term may be correlated with the independent variables making the

[2] The ordinary least squares (OLS) model is a linear regression model commonly used in econometrics. The OLS model minimizes the squared residuals to find the estimation coefficients.

coefficients of the model biased. In order to measure the heterogeneity between the countries observed and potentially avoid endogeneity, I test the relation while including a country fixed effect, γ_i. Using the country fixed effects, the second model accounts for the unique time in-variant effects of each country and control for them in the estimation, so if an omitted variable is different across the countries but constant over time, the fixed effect model accounts for it.
As Section 3 discussed, theory also argues that productivity is a driver of human rights. This constitutes an econometric problem as there may arise issues of endogeneity and it will be difficult to identify the causal effect and conclude which direction the causality runs. There are two common ways to prevent this potential endogeneity problem in a regression. One way is to lag the explanatory variables, the intuition behind this methodology is that when using lagged explanatory variables any effects of reverse causality will be absent because this effect would only happen at the time of the change in the dependent variable or in the future. Another way to prevent endogeneity problems is to use instrumental variables. The intuition behind this method is to find an exogenous variable that is only strongly correlated with the potentially endogenous variable. Thereby the instrument only affects the dependent variable through the endogenous explanatory variable; this way it is possible to obtain only the exogenous part of the variation. However, the precision of the instrumental variable estimation depends on the instrument. In this study specifically, finding good and precise instruments can prove very difficult. Therefore, I use the lag method in order to examine whether there is a causal effect from human rights to productivity and remove the effects of reverse causality. I lag the human rights variables by three years. When using the lag of these variables, I can test the effect of an improvement in human rights on future productivity in the short-medium term. The intuition is that when using the lagged models, the model only includes the effect these variables have on productivity three years after the change. The assumption is that a change in productivity cannot reversely effect human rights three years earlier than when that change occurs. Thereby, this methodology should control for simultaneous shocks or endogeneity (limitations to this approach will be discussed further in Section 6.1.3). Lastly, in a panel data set one can expect that standard errors may not have constant variance, as it rarely does in practice. Since the data set has the presence of heteroscedasticity, I use Huber-White robust standard errors.

6.1.1 Productivity estimation

In order to measure the dependent estimation variable, $PROD_{i,t}$, I construct a productivity variable by taking the natural logarithm of GDP per employed (constant 2011 international dollar) which measures the annual growth of single-factor productivity in each country. The single-factor productivity is based on the labour resources of each country in every year. Using this measure of productivity has the advantage that it has been observed for every year since 1991 for 47 of the 49

Sub-Saharan African countries. Other than availability of data, it also has the advantage that it relates the explanatory variables clearly with a unique productivity driver, namely labour. As human rights are theoretically bound to improvements in human capital and thereby labour, this clearly allows me to test the hypothesis that human rights are a driver of direct productivity, rather than indirectly increasing technological progress or ability to attract capital investments. However, there are a number of disadvantages with using a single-factor productivity variable. Firstly, the single-factor productivity is affected by the intensity of which the excluded variables or drivers of productivity are used (Syverson, 2011), for example two countries in this study may have very different growth rates of labour productivity if one country has relatively easier access to capital and therefore uses this input more intensively. In order to prevent the results from being biased by the effects of intensity of use of other productivity drivers than labour, as well as from drivers of the size of the labour pool, I control for capital formation, technological progress and population size. These variables should explain changes in the growth of productivity that are unconnected to human capital changes from increases in human rights. Mankiw et al (1992) present the classic Solow model based on the Cobb-Douglas production formula, $Y(t) = K(t)^{\propto}(A(t)L(t))^{1-\propto}$. In this classic macro-economic model, output is driven by capital, labour and the level of technology. Mankiw et al (1992) expand the Solow model by including stock human capital as a determinant of output. Based on this theoretical model, I expect capital and technology along with labour and human capital to be the main determinants for productivity. Therefore, I control for the effects of capital and technology on productivity, leaving the effect of human capital on labour productivity. Furthermore, I assume that population size is an important determinant for the labour input, as a larger population all else equal should increase the size of the employment pool.

When studying productivity, or any ratio of GDP, it is near-impossible to include all relevant factors that could affect macro-economic output. As GDP and employment levels are affected by a variety of macro-economic factors and the interplay between them. Therefore, the control variables for this study will take departure in basic productivity theory, although at the risk of having an omitted variable bias (this will be discussed further in Section 8.1).

Furthermore, as the human rights factors of this study are often used as control factors when estimating effects of some variable on economic growth or productivity, it is difficult to find control variables that will effect GDP and at the same time not create issues of multicollinearity with the explanatory variables.

6.1.2 Human rights variables

This study attempts to estimate the effect of social human rights on productivity, however social human rights is a very broadly defined term and cover a variety of different rights, including everything from the equal right to work to the right to have access to clean drinking water and food.

As there are many different parameters to choose from when measuring social human rights it creates a selection bias in the study. In order to estimate social human rights, I have chosen to look at access to sanitation, education, and health care, since these variables are simpler to measure than more abstract rights such as the right to women empowerment. Furthermore, there exists much data collected on the conditions and expenditure on these three variables, and since they are relatively tangible I assume that these variables would have a lower degree of measurement error.

Even when limiting the study to three variables of social human rights, there is still more selection necessary as there are a variety of ways to measure the access and quality of sanitation, education, and health care in a country. Many variables either measure accessibility or quality of one of these resources, but as an increase in either theoretically would affect productivity it is important to find a measure that has the potential to capture both access and quality.

First, when I look at the access to sanitation rather than water, because of the persistent high degree of variance across countries in this human right. Furthermore, the access to sanitation does not vary with exogenous factors in the same way water access does. In order to increase access to sanitation, one must invest in the necessary infrastructure required for an improved sanitation facility. Therefore, this variable also expresses the engagement of the country in trying to improve access and the degree of investment in improving this human right. Also, using a measure of the access to improved sanitation facilities rather than simply sanitation or water incorporates the extent of the quality of this human right. Additionally, the World Bank (2018) defines sanitation as a key measure of human development, often used by many international organisations as a measure of progress in the reduction in poverty, disease and health.

Second, when looking at the access and quality of health care in a country there are a variety of different measures available. Health care is mentioned and used in several studies as an indicator for human development and human capital (Mankiw et al, 1992; Suri et al, 2011). In this study, I am looking at out-of-pocket expenditures on health care, which is a subset of the private health care expenditure. The reason for looking at out-of-pocket spend rather than total expenditure is to prevent any multicollinearity in the estimation model, as the government expenditure on health care may be highly correlated with the expenditure on education (see Appendix 4). To find out-of-pocket spend per capita, I multiplied per cent of private health care expenditure which was out-of-pocket by the total private health care expenditure recalculated to 2011 international dollar per capita. The out-of-pocket expenditure per capita is the amount of 2011 international dollar each person uses on direct outlay for health care, including gratuities and in-kind payments. The variable measures the part of private health care expenditure that is not paid by private insurance, charitable donations, and direct service payments by private corporations. The drawback of using

this variable is that investments in health care from the government and private sector may have a significant impact on the social human rights. Furthermore, using out-of-pocket spend may be driven by differences in fiscal policies rather than an expression of increased willingness and ability to invest in health care, e.g. a country that provides free health care or has mandatory health care insurance through the private sector may have a much lower out-of-pocket spend without being less invested in improving the national health. However, when looking at the general trend of out-of-pocket spend and total health care expenditure, it follows the same general pattern and relation to productivity (see Appendix 2). Therefore, there is a certain degree of confidence that this measure does follow the general trend of total expenditures on health care and can be used as an appropriate proxy for this human right.

Third, a very common measure for education in econometric studies is primary or secondary school enrolments (Suri et al, 2011). There are a few weaknesses of these variables as they only consider quantity of education and not quality, which is known to be a considerable issue in Sub-Saharan Africa (UNDP, 2016). In addition, they do not include adult education and training, which may be a very important measure for increases in short-term productivity. Therefore, in this model I will use government expenditure on education per capita. This measure is possibly more reliable in terms of accuracy of measurement than school enrolments and it includes the education capital and transfers. In addition, since this measure looks at how much is being spend on education per capita it also suggests whether education is a high priority in a given country. However, the expenditure does not guarantee that people actually use the education services provided or that the money reaps the same educational benefit per dollar spend across various countries.

The weakness of the variables based on expenditure is that they do not relay any information of the application of the services and where the money goes. Therefore, other factors could be interfering with how the expenditure actually affects the underlying improvement in social human rights. Also, expenditure factors may be an expression of increased prices and low supply rather than increased investments, which in theory would lead to a potentially negative effect on social human rights. However, expenditure variables are very useful in assessing the effect of investing in human rights and understanding the effect of a dollar-amount may be useful for policy implications.

6.1.3 Considerations and critique of estimation strategy

When using panel data in this estimation there are certain advantages, as discussed earlier the panel data allows me to control for country and time invariant factors that are otherwise unobservable. However, there are several limitations with using panel data, specifically with the data design and collection. This data set is unbalanced, which means that it does not have data for all years and countries on some dependent variables, this creates a risk of lack of representativeness in the data (as discussed in Section 5). Also there may be measurement errors

in the data set and selectivity biases, e.g. differences in data collection and measurement methodologies across countries or years. These effects are amplified in a panel data set.

Using the OLS model certain assumptions must hold, exogeneity of regressors, conditional homoscedasticity, and conditionally uncorrelated observations (Cameron & Trivedi, 2009). The first assumption entails that all relevant variables have been included in the sample. As this is impossible to ensure when testing productivity, I cannot exclude the possibility of an omitted variable bias. However, I will control further for this in a robustness test in Section 8.1. As mentioned earlier in this section, I use Huber-White standard errors that are robust to the heteroscedasticity of this data set. This way I can relax the assumption of conditional homoscedasticity. Lastly, in order to minimize the risk of multicollinearity in the regression I look at the variance inflation factors. As these are all at relatively low levels I assume that the variables are conditionally uncorrelated observations (see Appendix 4).

These assumptions and limitations are also necessary for the fixed effect model. However, the fixed effect model has some additional limitations, which may prevent the huge advantage of the model, namely to adjust for heterogeneity amongst the countries and years. In the fixed effect model, there may be unobserved effects that are heterogeneous across countries but not time invariant. In this case using the fixed effect model does not remove the omitted variable bias or solve the endogeneity problem of estimating productivity. Furthermore, the fixed effect model is not able to assess estimation variables with little within-group variation.

6.2 Case study analysis strategy

The econometric analysis leaves the reader with several uncertainties about why a certain variable does or does not affect another. To understand not only if, but also why an increase in social human rights could create increases in productivity, I use a case study approach based on qualitative primary data. Using qualitative data allows me to get a more detailed and in-depth view of how improved human rights affect individuals and the way they work.

6.2.1 Interview process

In order to understand how and why human rights affect productivity, I used a case of Zambian property management firms “Foxdale Court and Fox Estate”, which participated in a collaboration[3]

[3] The collaboration refers the project initiated by the Danish Institute for Human Right (DIHR). DIHR gave grants in Zambia to companies who participated in an initiative to improve human rights for employees, specifically within the access and quality of water, food, education and health. Along with the grant from DIHR the companies participating received advice and assistance from Kukula Capital on which specific initiatives to focus on and with tracking the progress of the project.

to increase employee human rights. I conducted five interviews with top executives and middle managers/employees.

In structuring the interview process I followed Kvale's (2011) seven stages of inquiry; thematising, designing, interviewing, transcribing, verifying, and reporting. In this section, I will discuss the considerations and limitations relating to the interview process, their reliability as a source, and the generalizability of the results.

6.2.1.1 Research goals and interview style

The first step of the interview process was defining the research goal or thematising. Before conducting the interviews it is important to define exactly what question I wanted to answer and my hypothesis for the result. The research goal is to answer the unanswered questions arising from the econometric analysis, namely: "*How and why improvements in human rights effect labour productivity?".* The hypothesis is based on the theoretical foundation discussed in Section 3.3. In theory an increase in social human rights increases employee motivation, loyalty and employer attractiveness, enabling more efficient staff and better attraction and retention of employees as well as key management talent. Also, improvements in training and education should create more generic and firm specific knowledge, which raises competitiveness of the firm. Furthermore, improved human rights increases slack resources which is a driver for innovation and technological progress.

The second step was to design the study taking into account the goal of the analysis. In order to design the study, one key step is the subject identification. Subjects for these interviews were selected from a variety of firms and employees who participated in the collaboration with the DIHR and Kukula Capital to improve human rights in selected Zambian companies. The subjects were all picked from two firms under the same ownership and top management. Furthermore, the group of subjects were chosen based on their English language abilities in order for the language barriers to be as small as possible. Lastly, the interviews consist of three top management subjects and two employee or middle-management subjects, in order to capture the different views on how the initiatives affected the people on an individual level and on a firm level.

Table 4. Description of subjects in the primary data

Subject	Title	Age	Education	Time of employment	Degree of involvement	Employee interaction
Interviewee 1	Top manager	31	Masters in Fashion Buying	2010	Medium	Medium
Interviewee 2	Top manager	28	BTech Construction	2016	High	High
Interviewee 3	Employee	29	Primary School	2011	Low	High

Interviewee 4	Middle manager	31	Primary School	2011	Low	Medium
Interviewee 5	Top manager	28	Tertiary education in Finance	2013	Low	High

The interview style attempts an exploratory approach, which allows openness to new and unexpected phenomena. The advantages of using this interview style is that it obtains a description that is more detailed, comprehensive and as presupposition-less as possible (Kvale, 2011). However, this style also has certain drawbacks as it allows ambiguity and heterogeneity in the results. Therefore, it is the responsibility of the interviewer to lead the open-ended questions towards certain themes as well as clarify ambiguities and contradictory statements (Kvale, 2011).

Due to these characteristics of the research form it is important to discuss some philosophical considerations regarding the ontology and epistemology of the research. The ontology of this study is subjectivism, which perceives the world of social phenomena created from perceptions of the actors within it and their actions. In this view the truth is perceived as whichever beliefs and attitudes the actors hold, thereby there is no one objective truth. This opinion of the ontology shapes the epistemology of the study; the view on the nature, sources, and limitations of knowledge received through this research. Kvale (2011) defines postmodern views of epistemology as seeing knowledge as a social construct. In this view, knowledge is defined as having an interrelational character, where there is an emphasis on the context in the creation of knowledge and the heterogeneity of these contexts. For this reason there is no ultimate truth in this view but rather several different truths that depend on the context and interpretation of reader. In the validation and analysis of the interview data this philosophical stand becomes important as it influences the data gathering approach to reflect over the importance of interpersonal relations, as well as suggests a hermeneutical approach to interpretations, which means that there is an emphasis on the multiplicity of meanings in the interviews, and the interpretation of these meanings are key to the analysis and conclusion of the problem statement.

Lastly, there are some ethical considerations in conducting interviews and designing a qualitative study. When conducting the interviews it is important to receive informed consent from each individual who participates, therefore each interview starts with an introduction of the research purpose and use of the data. This is constructed to ensure that subjects are aware of the study they are participating in and which consequences it could potentially have. In addition, the study is anonymous and the identity of each interviewee is not revealed. This confidentially enables interviewees to be honest and reveal their opinions to make sure the interviews are as trustworthy as possible.

The analysis of the qualitative evidence will follow an abductive approach since the scarcity of the data does not allow a fully inductive approach. The abductive approach addresses the weaknesses of the deductive and inductive methods by using the observations to deliver a best prediction (Saunders et al, 2012). The research or analysis will take departure in the theoretical foundations or conceptual framework presented in Section 3. Following a conceptual, theoretical framework allows me to organise and direct to analysis, as well as link the results to the econometric analysis and the existing body of research. However, there are certain disadvantages with this onset as it can produce a premature closure to the analysis (Saunders et al, 2009).

Using cognitive reasoning, I analyse how the empirical evidence reflects and supports the hypotheses arising from the theoretical background. This analysis implements a high level of structure and is therefore analysed under three topic areas derived from the conceptual framework. I use previous empirical studies and theoretical foundations to support these findings and their association to the main framework. Based on the observations from the case study and knowledge from past literature, I am able to infer certain hypotheses and conclusions from the results obtained in the analysis.

6.2.1.2 Interview execution

The interview structure follows the semi-structured method of interviewing. The interview follows an interview guide with a variety of open-ended questions to allow an exploratory approach. However, each interview follows the words of the guide, with complementary questions guiding the interviewee towards the topics of interest for the study. The structure of the interviews follows a semi-structured approach which allows for flexibility in the interview guide, but at the same time a certain degree of structure to ensure comparability across the data. Unlike a structured interview this style allows for the interviewer to clarify ambiguities and clear misunderstandings.
The interview guide (see Appendix 12) is structured based on a funnel approach. The interview begins with a briefing, which explains the purpose of the study, use of recording devices and anonymity. The briefing is designed to give subjects key information about their rights and consent up front, as well as to reduce any anxiety or tension of the subject. Beginning the interview with a briefing is intended to establish trust between the interviewer and interviewee, as well as to set the stage for an open and honest interview. This briefing is also used to make it clear to subjects that the answers are open-ended and subjective, and that there is no wrong answer. In order to make subjects comfortable with the one-sided format of the interview and the interview situation, the interview continues after the briefing with some factual questions on the subject's employment

position, age, education level, and time at the firm. After the potential anxiety or tension is removed from the interview context, the open-ended questions on the topics of interest are presented. To steer the subjects towards the topics of interest, open-ended questions could be followed up by probing questions or specifying questions to avoid ambiguity.
Practically, the interviews were conducting at the workplace of the interviewees in a private setting. This was done in order for them to feel safe and in a familiar environment as to reduce anxiety during the interview process.

6.2.2 Critique and limitations

Using the interview as a research method has a variety of limitations. As the interview is an interpersonal process there are certain inherent biases that will arise. The interview is subjective and the context of the interview will influence the results from it. This creates a bias based on the intersubjectivity of the dialogue in the interview process and the subjectivity of the individual's interpretation of events and effects. Specifically for this study there was a language barrier between the interviewer and subjects, as the interviews were not performed in the native languages of all of the subjects. This creates a problem for the reliability of the data collected as it may include misunderstandings due to the language barrier. Also, these interviews have a potential selection bias as subject selection was non-random. Selection of subjects was based on their exposure to the project as well as their language abilities in order to reduce the language barriers of the interview. One can imagine that employees who have different characteristics would have had different experiences. Based on these characteristics of the interviews and the general format, there may be misleading or false information in the data set. Subjects can give misleading or false information consciously or unconsciously by trying to project a certain self-image or giving the answer they think the interviewer is seeking. Misleading or false information can also arise from misunderstandings, especially in cases where subjects are being interviewed in a different language than their native one. The small sample size of this study, with only five interviews, makes it sensitive to false data or biases. This is a key critique of using the interview as a research methodology.

Another issue in using interviews for research is the potential manipulation of the subject by the interviewer. In conducting the interview the interviewer may affect or manipulate the subject through the phrasing of the questions and the follow-up questions. In relation to this it is important to point out the subjectivity of interpretation of the interviews. The analysis and interpretation of the data is biased by the views and experiences of the researcher and are therefore subjective. These issues are key in ensuring the reliability and validity of the interviews. According to Kvale (2011) the way to ensure validity of the interview despite the inherently biased nature of the method is to

continuously check, question, and theorize on the findings of the interview. Furthermore, having taken a postmodern epistemological stand, this study is not trying to find a single truth but rather an admittedly subjective truth in a case study which may shed light on the how and why of the correlation between human rights and productivity. The analytical generalisations of this study will rest on the arguments for transferability of the findings in the interviews (Kvale, 2011).

7. Results

The main regression analysis suggests that sanitation, health care and education has a significant, positive effect on productivity. In both the simple OLS model and the fixed effect model the human rights variables are significant at a 5% level, and at a 1% level in all models for health and education variables. The human rights variables are robust to the three-year lag, although with slightly lower magnitude in the lagged models and in the fixed effect models relative to the baseline OLS. These results are supportive of the hypothesis and will be discussed in detail below.

7.1 Main results

The main results indicate a significantly positive correlation between human rights and productivity. The results suggest that an increase in access to sanitation or expenditure on health and education increases the growth of labour productivity. The results, as reported in Table 5, show that for each human rights variable there is a positive coefficient that is significant in each estimation model.

Due to the log-level model, the interpretation of coefficients is that a 1% increase in the people with access to sanitation, or a 1 dollar increase in health care or education per capita leads to an increase in productivity of a percentage value equivalent to the coefficient of each variable, i.e. the coefficient is the growth rate of productivity with a one unit increase in the respective human rights variable. The interpretation of the natural logarithm as a growth rate is deducted by taking the derivative of the estimation model:

$$\ln(Productivity_{i,t}) = \beta_0 + \beta_1 X_{i,t} + \epsilon$$

$$\Rightarrow \quad Productivity_{i,t} = e^{\beta_0 + \beta_1 X_{i,t} + \epsilon}$$

$$\Rightarrow \quad \frac{\partial Productivity_{i,t}}{\partial X_{i,t}} = \beta_1 e^{\beta_0 + \beta_1 X_{i,t} + \epsilon} = \beta_1 Productivity_{i,t}$$

$$\Rightarrow \quad \beta_1 = \frac{\partial Productivity_{i,t}}{\partial X_{i,t}} \frac{1}{Productivity_{i,t}}$$

In the baseline OLS model, ("OLS") in Table 5, I find evidence that each human rights variable is significant at a 1% level and has a positive correlation with productivity. These results are robust to the introduction of fixed effects . In the baseline fixed effects model ("FE"), I find evidence that all

human rights variables are significant at a 5% level. I find the strongest result with expenditures on health care and education, as the P-value for access to sanitation increases to 4.7%. Furthermore, there is a reduction in the coefficients for each variable, suggesting that country fixed effects do account for some of the association to productivity. The sanitation variable coefficient is reduced from 1.7% to 1.1% growth in productivity for every 1% increase in the proportion of the population with improved sanitation systems. The education variable coefficient is also reduced from a 0.065% to 0.061% increase in productivity for every additional international dollar spend on education per capita. The reduction in the health care coefficient is very slight and persists at a 0.13% increase in productivity for every additional dollar spend per capita.

The fixed effect model controls for average differences across countries, including unobservable differences. However, the method has certain drawbacks as it only accounts for time invariant differences. Therefore this approach does not completely ensure that there are no endogeneity problems in the model. This will be discussed further in Section 8.1, where I will test the robustness of these models to the inclusion of potential omitted variables.

Table 5. Main estimation model

Models of Productivity Growth

	OLS	OLS_lagged	FE	FE_lagged
SANI	0.0173***		0.0112**	
	(0.00417)		(0.00547)	
HEALTH	0.00127***		0.00126***	
	(0.000175)		(0.000138)	
EDUC	0.000651***		0.000605***	
	(0.000185)		(0.000183)	
TECH	0.000752	0.000206	0.000725	0.000160
	(0.000820)	(0.00112)	(0.000902)	(0.00117)
lnCAPITAL	0.0924***	0.115***	0.0768**	0.104***
	(0.0266)	(0.0273)	(0.0303)	(0.0304)
POP	9.11e-09	7.61e-09	1.71e-08***	1.54e-08***
	(5.94e-09)	(5.28e-09)	(5.51e-09)	(5.16e-09)
year	-0.00931**	-0.00965***	-0.00926*	-0.0101**
	(0.00376)	(0.00358)	(0.00480)	(0.00471)
SANIlag		0.0171***		0.0125*
		(0.00455)		(0.00656)
HEALTHlag		0.00104***		0.00105***
		(0.000175)		(0.000251)
EDUClag		0.000603***		0.000481***
		(0.000154)		(0.000153)
Constant	24.54***	24.81***	24.90***	25.98***
	(7.253)	(6.989)	(9.155)	(9.052)
Observations	312	302	312	302
R-squared			0.634	0.551

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

Although the coefficients appear small they are quite significant in magnitude when taken in absolute increases of productivity. For example, spending one additional dollar on education per capita can create an increase of 0.06% in productivity growth, which is equivalent to an increase of 6.4 dollars in GDP per employed when using the mean productivity. Furthermore, this suggests that if the lowest performers in human rights of the region (see Table 2) increase their social human rights to the average level (see Table 3) they have massive potential productivity to unleash. For example, if the Central African Republic increase their 2017 access to sanitation from 21.8% to the regional average of 30.1% they can achieve between 9-14% increase in productivity growth, depending on the estimation model, which based on their 2017 productivity is equivalent to a value of between 150-235 dollars of GDP per employed.

As mentioned in Section 6.1, I address the reverse causality issue by using lagged values for the human rights variables. I use a three year lag for each of the variables to test the effect in the short-medium term. When using the lagged values I am testing whether increasing the current level of human rights has an effect on future productivity. The intension is to remove potential reverse causality effects or contemporary shocks from productivity on human rights. The lagged OLS model indicates that all human rights variables have a significant positive effect on productivity. All three human rights variables are significant at a 1% level when lagging the variables with three years. This suggests that a change in human rights variables today will have a positive effect not only on current, but also on future productivity. However, there is a reduction in the magnitude of the coefficients when using the lagged values; health care and education variables in particular are reduced from 0.13% to 0.10% and from 0.065% to 0.060%, respectively. In the lagged FE model the results are consistent with the baseline FE model; the human rights variable coefficients are still positive and significant, but there is a reduction in the magnitude of the coefficients. However, the sanitation variable coefficient increases slightly in magnitude compared to the fixed effect model without lags. The strength of the result decreases, as the sanitation variable is only significant at a 10% level for the lagged fixed effect model.

The lag method to adjust for endogeneity is intuitively appealing and easy to implement since it does not require additional data. However, using this method rather than instrumental variables has some disadvantages. Although the lag may remove endogeneity from the model it depends on the seriousness of the endogeneity. If the endogeneity is still significant across the medium term then the lagged method does not remove this effect. Furthermore, it raises some difficulties in that the estimation variables are proxies of an underlying trend, i.e. human rights, and therefore may not follow the exact pattern of the underlying variable of interest.

As the quantitative effects of the control variables are not of interest in this study, the potential endogeneity of these variables should not affect the magnitude of the variables of interest. Therefore, I do not take the lagged values of these variables.

8. Robustness tests

In this section, I will perform various tests to assess the robustness of the main findings. The tests will investigate the sensitivity of the results obtained in Section 7. The robustness tests will ensure that the methodology and structure of the study is not driving the results of the estimation models. Furthermore, they are intended to strengthen the results that human rights are positively correlated to increases in productivity.

8.1 Omitted variable bias

In the main estimation I use capital and technology as control variables to account for potential endogeneity. However, there may still be several variables that could potentially have simultaneous effects on productivity. In order to address this in the baseline model I include controls for capital and technology as well as controls for population and time fixed effects. Furthermore, the main estimation model accounts for country fixed effects and contemporary shocks through lagged values. But there are many factors known to affect productivity and therefore there may still be unobserved shocks in the model. In macro-economic theory the output of an open economy is typically defined as $Y = C + G + I + NX$, meaning that GDP is the sum of private and public consumption, investments, and net exports (Andolfatto, 2005). I use exports and foreign direct investments as proxies for the non-consumption factors of GDP, to control for the effect of these. However, my explanatory variables are defined as types of private and government consumption, specifically on human rights improving initiatives, therefore I do not include controls for these effects. Previous studies of human development have used trade and investments as control variables. In Ranis et al's (2000) study of human development on economic growth, they theorize that the other factors impacting GDP is investments, technology and openness. In Suri et al's (2011) study of human development they use exports and investments as control variables. As my productivity variable is a ratio of GDP I can assume that these factors would also affect my measure of labour productivity. Therefore, I will conduct a robustness test to assess the robustness of the results to the inclusion of effects from international trade and investments.

8.1.1 International trade

As previously discussed, international trade is an important driver of the output of a country and of productivity. Trade is also likely to be correlated with increases in human rights. Trade drives up GDP and the national wealth, and increases in exports signal competitiveness of the country relative to trade partners. International trade can also drive productivity through the competitive environment and exchanges of knowledge. I include the effect of international trade by adding a new control variable to the main estimation. The proxy for international trade is total exports of goods, services, and primary income in 2011 international dollars. The results from including this variable in the estimation models are robust for both baseline OLS and fixed effect models and using lagged human rights variables. Although the magnitude of the coefficients are slightly reduced all human rights coefficient remain significantly positive. This allows me to dismiss the hypothesis that international trade is driving the effect of human rights on productivity as estimated in the main results (see Table 6).

8.1.2 Investments

Another variable that may simultaneously drive productivity and be correlated to increases in human rights is investments, as investments into a country is known to drive growth and improvements in productivity as well as potentially improving human rights through investments, direct or indirect, in these areas. I include the effect of investment inflow using net inflows of foreign direct investments as a proxy to ensure that the results are robust to this effect. This variable includes the inflow of equity, reinvestments and capital investments to the country. When including this effect to the main estimation models, the coefficients of the human rights variables remain positive and significant in all the main estimation models, although there is a slight decrease in magnitude especially in the education variable. Because of these results, I can dismiss the hypothesis that investments are driving the results from the main estimation (see Table 6).

Table 6. Extended models on productivity growth

	OLS	OLS_lagged	FE	FE_lagged
SANI	0.0173***		0.0121**	
	(0.00435)		(0.00572)	
HEALTH	0.00127***		0.00126***	
	(0.000176)		(0.000147)	
EDUC	0.000581***		0.000552***	
	(0.000178)		(0.000182)	
TECH	0.000738	0.000271	0.000701	0.000257
	(0.000921)	(0.00115)	(0.00102)	(0.00119)
lnCAPITAL	0.114***	0.130***	0.101***	0.121***
	(0.0228)	(0.0304)	(0.0257)	(0.0325)
TRADE	4.51e-13	1.50e-12	2.23e-13	1.44e-12
	(6.50e-13)	(1.14e-12)	(5.62e-13)	(1.05e-12)
INV	1.58e-12	-2.03e-12	1.10e-12	-3.04e-12
	(2.21e-12)	(2.84e-12)	(1.93e-12)	(3.03e-12)
POP	7.76e-09	5.40e-09	1.61e-08***	1.38e-08**
	(6.00e-09)	(5.32e-09)	(5.20e-09)	(5.26e-09)
year	-0.00928**	-0.00883**	-0.00963*	-0.00904*
	(0.00393)	(0.00348)	(0.00492)	(0.00456)
SANIlag		0.0153***		0.00971*
		(0.00427)		(0.00543)
HEALTHlag		0.00108***		0.00107***
		(0.000168)		(0.000238)
EDUClag		0.000491***		0.000358**
		(0.000163)		(0.000175)
Constant	24.06***	22.94***	25.13**	23.68**
	(7.534)	(6.857)	(9.389)	(8.856)
Observations	294	286	294	286
R-squared			0.669	0.584

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

8.2 Principal component analysis

I combine the effects of the human rights variables in a principal component analysis (PCA). The purpose of this analysis is to reduce the number of variables and create one index that summarizes all the effects of human rights. The PCA index is a linear combination that extracts maximum variance of the variables. In order to use the PCA index in my estimation models I standardize the human rights variables by calculating each of their Z-scores. I calculate the Z-scores by subtracting the mean from each observation and dividing this difference with the standard deviation of the data set:

$$Z - score = \frac{(x_i - \mu)}{\sigma}$$

The Z-score can be interpreted as the distance from the mean of each observation given in standard deviations. I create the PCA index using the Z-scores for each human rights variable. The PCA index consists of three components that cumulatively explain 100% of the variation in the data.

Table 7. Principal components analysis

Principal components/correlation — Number of obs = 483; Number of comp. = 3; Trace = 3; Rho = 1.0000

Rotation: (unrotated = principal)

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	2.05006	1.50698	0.6834	0.6834
Comp2	.543079	.136221	0.1810	0.8644
Comp3	.406858	.	0.1356	1.0000

Component rotation matrix

	Comp1
Comp1	0.5954
Comp2	−0.2802
Comp3	−0.7530

Each component accounts for the maximum variance possible. The eigenvalue measures the variance in all the variables that is accounted for in that component. A low eigenvalue suggests that the explanatory value of a component is low and including that component is redundant. I use the eigenvalue-one criterion to minimize the number of components used (Kaiser, 1960; Stevens, 2002) and only use Component 1, which has an eigenvalue of 2.05 and explains over 68% of the variance in the data. I perform the baseline regressions again using the PCA index Component 1. The results are robust to the use of a PCA index and Component 1 is significant at 1% for each estimation model. In the OLS model, the results suggest that an increase of one standard deviation in human rights increases the growth of productivity by 17.6%. The fixed effect model shows similar results suggesting a 15.5% increase in productivity growth given an increase of one

standard deviation in the PCA index. For the lagged models the results are also consistent, suggesting an increase of 16% (OLS) and 12.5% (FE) in productivity growth with one standard deviation increase in human rights at time t_{-3}.

Table 8. Principal component regression model

Principal Component Analysis

	OLS	OLS lagged	FE	FE lagged
Scores for compone~1	0.176***		0.155***	
	(0.0354)		(0.0360)	
lnCAPITAL	0.0742***	0.0999***	0.0634**	0.0881**
	(0.0287)	(0.0313)	(0.0307)	(0.0339)
TECH	0.00143*	0.000236	0.00132	0.000275
	(0.000798)	(0.00128)	(0.000898)	(0.00131)
POP	7.54e-09	5.91e-09	1.41e-08*	1.29e-08**
	(6.65e-09)	(5.61e-09)	(7.13e-09)	(6.38e-09)
year	-0.00240	-0.00181	-0.00356	-0.00317
	(0.00447)	(0.00400)	(0.00537)	(0.00488)
Scores for compone~1		0.160***		0.125***
		(0.0342)		(0.0382)
Constant	11.79	10.12	14.32	13.03
	(8.663)	(7.835)	(10.38)	(9.497)
Observations	312	302	312	302
R-squared			0.528	0.460

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

8.3 Regional effects

Despite controlling for country specific effects there may still be heterogeneous effects in the data set. The effect of human rights on productivity may not be homogenous across regions as these vary in their level of human development and economic development, which may in turn affect how human rights interact with productivity. In order to test whether the results from the baseline regression are robust across regions, I split the sample between South-East Africa and West-Central Africa; I use macro-regions, as the sample is not large enough to perform the test on each of the four sub-regions individually. I perform the baseline estimation models on each of the regions. From Table 9, it appears that in South-East Africa all the results from the OLS model and fixed effect model are robust. Furthermore, the lagged models have robust results for all but one

coefficient. The magnitude of the coefficients is slightly higher for sanitation and health care variables. The sub-regional model shows an increase in the coefficient from 1.7% to 2.4% for the sanitation coefficient and an increase from 0.13% to over 0.15% for the health care coefficient in the OLS and FE models compared to the main regression models.

Table 9. Regional analysis of South-East Africa

Regional analysis – South East region

	OLS	OLS lagged	FE	FE lagged
SANI	0.0241***		0.0219***	
	(0.00632)		(0.00749)	
HEALTH	0.00153***		0.00158***	
	(0.000210)		(0.000208)	
EDUC	0.000473***		0.000490**	
	(0.000173)		(0.000178)	
lnCAPITAL	0.0944***	0.115***	0.0923**	0.112***
	(0.0349)	(0.0387)	(0.0379)	(0.0388)
TECH	-0.000255	-0.0000230	-0.000457	-0.0000520
	(0.000389)	(0.00113)	(0.000382)	(0.00110)
POP	1.85e-08***	1.42e-08*	2.23e-08***	1.79e-08**
	(5.69e-09)	(7.76e-09)	(5.24e-09)	(7.46e-09)
year	-0.0136**	-0.0149**	-0.0150*	-0.0164**
	(0.00622)	(0.00622)	(0.00723)	(0.00656)
SANIlag		0.0286***		0.0288***
		(0.00523)		(0.00740)
HEALTHlag		0.00133***		0.00140***
		(0.000243)		(0.000272)
EDUClag		0.000427*		0.000377
		(0.000235)		(0.000234)
Constant	32.69***	34.71***	35.57**	37.91***
	(11.95)	(12.67)	(13.74)	(13.25)
Observations	150	156	150	156
R-squared			0.837	0.732

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

However, the results are not as robust for the West-Central Africa region. As reported in Table 10, the estimation model on this sample suggest a significant effect of all human rights variables in the OLS model and lagged OLS model, however only the education variable is robust in this region when introducing the fixed effect. None of the variables are significant when introducing the fixed

effect and lagged human rights variables. From this test it appears that the effect of human rights on productivity has been stronger in the South East region.

The average level of human rights in the two regions throughout the estimation period is lower in the West-Central region, specifically for sanitation and education expenditure. The average access to sanitation in West-Central is 26% of the population on average, however in South-East this number is 35%. The government expenditure per capita on average is 97 dollars in West-Central compared to the 206 dollars per capita in South-East. Interestingly, when looking at the average human rights for the regions in 1995, South-East Africa had very low expenditures on health care and education. The acceleration of the growth and improvements in standards of human rights has been much grander in the South-East Africa region rather than the West-Central region from 1995 to 2014. South-East Africa's access to sanitation grew with 25%, and expenditures per capita on health and education grew by 84% and 168%, respectively. In West-Central Africa access to sanitation grew by 29% and expenditures on health and education grew by 6% and 27%, respectively (see Appendix 8). These differences in the extent of the improvement in human rights may explain the difference in the effect of improvements on productivity for the regions.
Another potential explanation for the weakness of the FE model in the West-Central region is the lower degrees of freedom in this model compared to the baseline FE model.

Table 10. Regional analysis of West-Central Africa

Regional analysis – West Central region

	OLS	OLS lagged	FE	FE lagged
SANI	0.0125***		0.00483	
	(0.00353)		(0.00805)	
HEALTH	0.00151*		0.000926	
	(0.000809)		(0.000877)	
EDUC	0.00171***		0.00107***	
	(0.000340)		(0.000372)	
lnCAPITAL	0.121***	0.130***	0.0876**	0.0879**
	(0.0272)	(0.0302)	(0.0327)	(0.0341)
TECH	0.00132*	0.000771	0.00150	0.00127
	(0.000704)	(0.00122)	(0.000902)	(0.00125)
POP	-1.85e-08***	-1.78e-08***	-1.33e-08	-7.10e-09
	(4.03e-09)	(4.18e-09)	(1.18e-08)	(1.04e-08)
year	-0.00547	-0.00320	-0.000731	0.00198
	(0.00399)	(0.00390)	(0.00670)	(0.00568)
SANIlag		0.00981***		-0.00302
		(0.00379)		(0.00536)
HEALTHlag		0.000809***		-0.0000910
		(0.000297)		(0.000271)
EDUClag		0.000953**		0.0000864
		(0.000483)		(0.000184)
Constant	16.59**	12.08*	7.932	2.798
	(7.606)	(7.260)	(12.89)	(10.84)
Observations	162	146	162	146
R-squared			0.427	0.334

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

8.4 Falsification test

The falsification test is a method for evaluating the validity of the causal relationship between human rights and productivity. The intuition behind the test is to check whether there are “placebo” effects in the data or whether the relation is driven by other unobserved variables of region or country characteristics. The falsification test evaluates the internal validity of the empirical analysis and can assist in improving the reliability of the results (Pizer, 2015). The point of the test is to see

whether the coefficients of the main estimation variables are significant to a relation that there is no logical foundation for.
In order to test whether the main results are driven by unobservable factors, I regress the human rights variables of Mali on the productivity growth in Chad. I choose Mali and Chad for this test as the two countries have many similarities in macro-economic characteristic and due to the high data availability in both countries to achieve the highest number of observations. Mali and Chad are both countries located in the Western sub-region of Sub-Saharan Africa and have many similarities that could potentially drive productivity growth. Both countries are landlocked and resource exporters, furthermore both countries are similar in national language, French; currency system, CFA (Communauté Financière Africaine); and main religion, Islam (BBC Country Profiles, 2018). Also, both countries have experienced conflict and political instability. However, there is no reason to assume that the level of human rights in Mali should impact the productivity growth in Chad. The hypothesis is that there is no correlation between human rights in Mali and productivity in Chad. The result from the falsification test, in Table 11, is a non-rejection of the null-hypothesis. The data does not imply that human rights in Mali have an effect on productivity in Chad. The results of the main hypothesis are therefore robust to the falsification test, which suggests that there are no unobservable effects driving the results and creating a placebo effect of human rights on productivity.

However, given the results in Section 8.3 we cannot know whether the rejection arises from a lack of placebo effects of from the potentially weaker results in the West-Central African region. Therefore, I perform the test for Tanzania and Uganda which are both located in the East African region. Uganda and Tanzania are bordering countries, both with populations over 30 million. Both countries have similar languages, English and Swahili, and religions, Christianity and Islam (BBC Country Profiles, 2018). However, Tanzania does possess natural resources, whereas Uganda mainly exports agricultural products. Both countries are currently marked by political stability. Although not as similar in characteristics as Mali and Chad, I choose these countries based on the described similarities and data availability. Again, the null-hypothesis is that increases in human rights in Tanzania will not have any effect on productivity in Uganda.
The result from the falsification test, in Table 12, is also a non-rejection of the null-hypothesis. The data does not imply that human rights in Tanzania have an effect on productivity in Uganda. The results of the main hypothesis are therefore robust to the falsification test in the South-East Africa region as well.

Table 11. Falsification test: Mali on Chad

Falsification test

	OLS	OLS_lagged
SANI	0.126	
	(1.011)	
HEALTH	-0.0106	
	(0.00995)	
EDUC	0.00243	
	(0.00640)	
lnCAPITAL	0.444	-0.164
	(0.272)	(0.281)
TECH	0.0123	0.00985
	(0.0105)	(0.0103)
POP	1.89e-09	-0.00000123**
	(0.000000243)	(0.000000359)
year	-0.0616	0.0525
	(0.421)	(0.323)
SANIlag		1.178
		(0.734)
HEALTHlag		-0.0115
		(0.00947)
EDUClag		-0.00204
		(0.00469)
Constant	119.6	-99.09
	(821.9)	(633.8)
Observations	15	12
R-squared	0.947	0.963

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

Table 12. Falsification test: Tanzania on Uganda

Falsification test 2

	(1) OLS	(2) OLS_lagged
SANI	-0.792	
	(-1.23)	
HEALTH	0.00343	
	(1.52)	
EDUC	-0.00142	
	(-1.10)	
TECH	0.00915	-0.00138
	(1.40)	(-0.43)
lnCAPITAL	0.119	0.186
	(1.46)	(0.86)
POP	0.000000169	7.72e-08
	(1.03)	(0.32)
year	0.117	0.0775
	(2.33)	(1.02)
SANIlag		-0.439
		(-0.45)
HEALTHlag		-0.000304
		(-0.12)
EDUClag		-0.00184
		(-0.61)
_cons	-227.5	-150.2
	(-2.25)	(-1.02)
N	11	10
R-sq	0.994	0.991

t statistics in parentheses
* p<0.10, ** p<0.05, *** p<0.01

Although the falsification test does not imply a placebo effect, it does not completely remove the possibility. This test is limited by the narrowness of the regression as it only tests the correlation between two countries. A rejection of the null-hypothesis could potentially also be due to the low number of observations or suffer from a selective bias.

9. Results from the case study

In this section, I will present the results of the empirical evidence found in the case study of Zambian real estate management firms', Foxdale Court and Foxdale Estate, investment in employee human rights. The goal of this analysis is to uncover the underlying effects of improving human rights that could potentially lead to changes in productivity. Based on the interviews of key

employees in the firms, I will attempt to induce some of the relations between human rights and employees that would lead to increased productivity. This section will investigate the question: *How and why do investments in human rights affect labour productivity?*

In the previous section, I provide quantitative evidence that human rights are positively correlated to labour productivity in Sub-Saharan Africa on an aggregate level. However, this does not give any insight into why and how this correlation occurs. The qualitative analysis is extremely useful in discovering the complex and intangible effects that could drive the main results in Section 7.

In order to uncover the effects of improved human rights in Sub-Saharan Africa, this section will analyse interviews from a Zambian case study using theoretical foundations as an anchor point for the analysis. Theory predicts that increases in human rights lead to increases in a country's or firm's ability to attract and retain talent, as well as improve the knowledge and skills of the labour pool and thereby productivity. Based on the theoretical and empirical insights uncovered in Section 3, the analysis will specifically focus on three key areas that should theoretically improve labour productivity on an individual level:

- Motivation and loyalty
- Knowledge and skills
- Attraction and retention

I will begin by introducing the case study before analysing the results within the four key areas of relevance. Furthermore, I will discuss other key findings that fall outside the conceptual framework presented in Section 3. I do this in order to avoid premature closure of the results.

9.1 Introduction to Kukula project

The case study is an initiative initiated by Kukula Capital and the Danish Institute of Human rights (DIHR) ("the initiative"). The initiative's purpose was to improve human rights in Zambia through investing in the corporations and their ability to improve conditions for employees. The DIHR gave a grant to a variety of Zambian corporations that could be used to improve the human development rights of local employees. Kukula Capital assisted the corporations in finding the specific human development rights initiatives that would have the highest impact for the employees through focus groups and interviews with the employees at various corporations.

Foxdale Court and Foxdale Estate are two real estate management firms under the same ownership and management. The Foxdale Court and Foxdale Estate Group ("Foxdale") was one of the first companies to receive the grant with which the project was implemented. In these firms, the management, along with Kukula Capital and DIHR, started three initiatives to improve the human

rights of Foxdale employees. The initiatives were based on creating better access and quality of water, education and health care. Specifically, the firms offered their employees certificate training in their fields, medicine provisions and a co-investment and installation of rainwater harvesting units in their homes.

As mentioned in Section 6.2, I conducted five interviews of employees in these firms. Three of these interviews were with top management employees ("managers") and two interviews with middle management employees ("employees"). The interviews followed two different interview guides depending on whether the interviewee belonged to top management or middle management (see Appendix 12), as top management could not participate or benefit from the initiatives personally.

9.2 Effects on employee motivation and loyalty

The results provide evidence that investing in human rights increases employee happiness and loyalty and thereby their motivation and dedication to the firm. One manager describes the results of the project in the following way: *"I think human rights interventions have definitely made them [the employees] happier and they are more loyal to the company and they want to stay with the company; they are not looking to jump ship or they are not looking for other jobs. They feel that it's a good company and would like to stay and work with it."*

Common for most of the interviews is the conclusion that the initiatives have created more workplace happiness. As a result of the increased happiness amongst the employees, managers believe that there is an increased level of employee loyalty in the firm. The happiness is arising specifically because the employees feel that the workplace is "good". Several studies in the last decades have proven that employee happiness and well-being have a significant effect on performance (Wright & Bonett, 1997; Wright, Bonett, & Sweeney, 1993; Wright & Cropanzano, 1998, 2000; Wright & Doherty, 1998; Wright & Staw, 1999).This improvement in employee happiness furthermore allows an improvement in employee retention (Wright, 2015). Employees are less likely to look for other jobs or leave their current position, as they feel happy because they feel appreciated and included, thereby increasing loyalty to the firm.

"We haven't perhaps seen higher levels of efficiency from all the staff but I'd say just generally a little bit more happy and they feel more appreciated and included, so that's been great." However, several interviewees mention that they have not observed an increase in productivity or a quantitative effect of the initiatives. Despite this they have experienced increases in personal compliance and enthusiasm towards the tasks and instructions given. Also, an interviewee suggests that the initiative has led to a reduction in shirking and conflicts in the workplace. Although the results do not provide evidence for a quantitative effect in productivity, they do suggest that increasing human rights can create better labour quality and accuracy in the workplace, as employees are following

orders “correctly”, “to the T” and have seen a reduction in “being idle” and “loitering”. *“No I've not had any change in the productivity but I have felt more change in compliance. So if I give out an instruction it will be followed to the T and they will be more enthusiastic in carrying out instructions. [..] I do feel like if I do give them orders the orders will be carried out without anyone being disgruntled or anyone being unenthusiastic. They wouldn't question my orders so I do feel like there's been an improvement in compliance. [..] it means that guys are not being idle, they're not loitering, they're not taking their time when they do things so when I do give out instructions they are followed and they are followed correctly. So I feel like in that way productivity is being boosted even if we are not seeing it in the numbers.”*

The case firm also experienced a higher degree of inclusion and loyalty that top managers describe as a “family”-like environment. Managers mention that the initiatives have projected to the employees that the firm’s values extend to them beyond the workplace. If improving human rights enables firms to create ties to employees beyond the workplace, this could potentially have great effects on employee loyalty as well as employees willingness to sacrifice for the firm due to fulfilments of desires to bond (Nohria et al, 2008). These results may suggest that improving human rights for employees can create intrinsic motivation for these individuals and improve the sense of belonging and commitment to the firm. *“I feel, because of this new program, initially everybody would just do their job, get their salaries at the end of the month and shut themselves off, but it kind of makes them feel more of like a family environment. They feel like the company is very concerned not just about their input to their company, but beyond that to their homes [...] and their futures. So I feel like, yes they’re really part of the business”*

Creating motivation and a positive work environment are key factors in building employee loyalty. In turn, increased employee loyalty can lead to improved service quality and improved firm performance (Yee, Young & Cheng, 2010). *“I just feel like they are very, very motivated and feel like they are part of a family and a company that really cares about them beyond the working hours”*

One important factor that is mentioned by both managers and employees alike is that the happiness not only originates from improved living standards and the physical benefits, but it also is created from a sense of gratitude and a feeling of being listened to and considered. *“We've seen at the staff just generally feeling just a lot happier and very grateful ^ feel that they are being listened to and considered so that's been great”*

Managers also observed that the initiatives have created a more open and clear organisational communication. Generally, we could expect a more open and transparent internal communication in the firm to lead to increased productivity, as several business units are able to collaborate and thereby make the business operations more efficient (Clampitt & Downs, 1993). Furthermore, studies have previously showed that effective organisational communication can reduce absenteeism and thereby reduce costs for the firm (Clampitt & Downs, 1993). *“The human rights initiatives it's just further emphasised that sort of family approach that we have and staff feel very included*

and having a very open dialogue with the staff. And clear communication channels and very open communication channels. So I think just feeling included and respected is what we're seeing"

However, for some employees the initiatives also brought negative experiences. Some employees feel that although the initiatives do bring change, these changes are not completely positive. This suggests that when introducing initiatives to improve human rights it is essential that the firm manage to meet the concrete needs of their employees. This can be due to the undermining effect of introducing incentives or extrinsic motivation to produce employee loyalty and intrinsic motivation. Earlier evidence suggests that the introduction of incentives on an enjoyable task can reduce the future intrinsic motivation for that task (Cerasoli, Nicklin & Ford, 2014). This may be the case for human rights improvements as well if these improvements do not match the expectations of the receivers or are asymmetrically divided. *"I has been positive, but to be honest (/), for me it hasn't been fully positive. There are so many negativities in that project. Unless, (/) you just consider what the workers need, once you consider opinions, then the project is going to help us and it is going to be positive. Because it is going to do to what everyone wants it to be [..] The change is there, but not in the manner we expected. We thought, uh, I feel it's almost one and the same. There isn't motivation."*

Despite the lack of quantitative evidence of productivity increases and potential undermining effects, generally the interviewees perceive the initiatives to have had a positive effect on employee happiness, loyalty, and motivation in general. Furthermore, they have seen better internal communication, work environment and service quality as a result of this.

9.3 Effects on employee knowledge and skills

Improvements in human rights include the improvement in the access and quality of education. Improving the level of knowledge in a population is one intuitive way that human rights can bring productivity increases. Whether it is general or specific knowledge that employees acquire one can expect, all else equal, that this will make the labour pool more efficient and improve the quality of their work (Kim & Ployhart, 2014). In dynamic external environments, human resources can be the most important asset of a firm, if they manage to develop the employee capacity, to train and learn fast, and to stay agile (Tabassi, Ramli & Bakar, 2011). One Foxdale manager points out how trainings in workplace safety have made employees more conscious of this: "*I mean from the education, from the training, they had with Thorn Park I feel like they're more safety conscious and they give safety talks every day because that was part of the training with Thorn Park to do health and safety so I feel that's affected the work environment in that way for the better."*

This suggests that initiatives on education and training will affect employees because they bring this knowledge to the workplace and utilise it to improve the quality of their labour. These results suggest that if education is implemented it can directly be transferred to the work environment of the firm. Thereby, generating higher operational efficiency and service quality.

Additionally, increasing the level of knowledge in a firm can create employee empowerment and confidence. One interviewee points out the importance of education, especially in Sub-Saharan Africa, where this is a scarce resource relative to developed economies. Creating pride and empowering employees could lead to more independent workers and increased efficiency and motivation through this effect (Sagie & Koslowsky, 2000). *"In Zambia, education is really important to people, it's very it's something that is hugely valued and to have a certificate in a course is also something that is hugely valued so I think generally the staff have been very proud of themselves as well and very grateful for the opportunity."*

Furthermore, the employee empowerment could increase the likelihood of innovation in the firm, as employees become more confident and will therefore be more likely to suggest new initiatives or criticize inefficiencies in the firm. Garavan et al. (2002) suggested that effective training and motivation enables companies to find new solutions to problems and enhance their offerings. One example of this in the case study is how employees are able to innovate utilising the various resources from the initiatives. In the case a manager mentions a plumber who utilised the specialised knowledge acquired through trainings and the physical resources from the water-harvesting unit to build an improved sanitation system in his home. *"Our plumber then did an add-on so he's recently told me that he's connected his rainwater harvesting units to his toilet so the tank is full he's fitting a toilet inside his house and he's able to flush it from his rainwater so that's really exciting that the staff are also taking through their initiative on their own to figure out device the system."*

These results suggest that increases in employee knowledge leads to increases in curiosity and a willingness to experiment to improve the quality and efficiency of services. Managers noticed that as a result of the trainings, employees began asking more questions and experimenting with new technologies. This suggests that providing education for employees makes them more curious and entrepreneurial. These effects could potentially be drivers for increased firm innovation and quality and thereby create productivity improvements. *"In terms of the feedback we received from the staff, we are seeing a higher level of skills from them from that training. Some of the plumbers are asking questions that they never asked before, they'd like to use more advanced equipment so I think it's been very positive and the team felt very empowered through that training course."*

Furthermore, by increasing the firm specific skills and knowledge of employees across divisions, companies are able to leverage this knowledge to allow for more efficient collaboration across units and to improve service quality while reducing costs. Previous studies have proven that employee knowledge is an important determinant of service quality (Yee et al, 2010). A manager points out the advantages of providing specific training to staff across the firm: *"Increasing the knowledge of the work environment. Because as much as we have, maintenance department with specialised electricians and specialised plumbers, they may not be here for 24 hours. The guys who are here instead are security, who have no idea about any of the electrical planning or whatever. So in case of an*

emergency we always have to rely on a maintenance guy from his home in the middle of the night, and transport, but if we train the guys are able to understand basic electrical, plumbing works and then have professional help to come over and finish the job. So definitely I would recommend for any other company."
These findings suggest that an increase in education for employees can create a larger knowledge base of the labour that is utilised in the firm, improvements in work environment, employee empowerment, increased curiosity as well as better cross division efficiencies. All of these could result in improved productivity, especially through improved service quality, operational efficiency and innovation.

9.4 Effects on attraction and retention of employees

An important driver of productivity is the managerial talent and quality of the employees of the workplace (Syverson, 2011). One key factor in obtaining talent is managing to attract employees. Employer branding is vital for a company to do this (Drury, 2016). The results suggest that initiating in human rights improvements allows the company to improve its brand and image in the local community. *"I would say it has had a positive effect on the community and making us an interesting company to work for."*
Through the initiatives, the firm can attract employees from the local community and increase their chances of attracting the best talent. Improving human rights allows employers to offer benefits within the two different types of attributes, functional and symbolic, both of which have proven to influence the employer brand and ability to attract talent (Drury, 2016). Several interviewees mention that the initiatives create attention and brand recognition externally, which enables the firm to attract talented employees.
"Even the people in the compound say: "Where did you get this" "We need this also", something like that."
Furthermore, one manager mentions that the initiatives give the firm additional bargaining power once interviews are being held. The initiatives facilitate an attractive profile as an employer:
"Whenever you are interviewing a new potential employee, they want to know what benefits comes with the job. It's not just the pay, they want to know is there a future in the company, they want to know the medicals, in case of an accident what the benefit or what security do I have that the company will take care of me. So those are the questions most potential employees would ask in an interview, and then now because of whatever we have going on there's more interest in people ^ wanting to work for Foxdale."
However, one critique is that in Zambia, like many other Sub-Saharan African countries, unemployment is very high and local talent is easy for firms attract, as the labour markets are underdeveloped. *"Because of the high unemployment rates in Zambia, [..] I don't think I'll be able to attract better employees for this but I think the ones who we do employ, who we feel are good are more likely to stay ^ that's what I feel they're more likely to develop a long-term relationship and they see themselves*

working with the company for a long time. ^ They envision it as a long-term thing and not just a stepping stone."

Another important factor of productivity is the firm's ability to retain talent. In addition, good employee retention enables cost minimization in terms of recruiting and other human capital resources. Improving the employer brand not only ensures improved attraction of talent but also encourages long term relations between employer and employee (Drury, 2016). Furthermore, high retention rates signal organisational health (Wright, 2015). The results suggest that improving human rights can lead to better long-term relationships. The internal firm image effects of engaging in human rights improvements intensify this effect. One manager suggests that through improvements in human rights the company can prove its commitment to employees and thereby increase employee loyalty, satisfaction, and retention. *"I think the employees are seeing the company who's committed to developing their capacity especially the new ones they've seen that it's a good company who cares about its employees and they would like to stay with it they would like to stay with this company [..] yes the initiative severally made people feel much more a part of the company valued and appreciated and want to stay on."*

Furthermore, one employee suggests that without the improvements in human rights the company would not have been "the same" for this person. These results suggest that improving employee human rights may enable a company to get more employee lenience on other issues, such as low salaries or lack of sufficient monetary incentives. *"I want to be in this company for so many year but the thing is that our salaries ^ even if I tell you my salary, what I am getting at the month end, you can't even, you know what I mean ^. But like, this initiative, you are coming with, it's a good one. We are benefitting. Because if it was only Foxdale minus this Kukula initiative, I think I wouldn't be the same like I am today."*

This indicates that a company may invest in human rights rather than monetary incentives in order to achieve employee retention and attraction in the long-term.

9.5 Other firm effects of improved human rights

The case study also uncovers a variety of other effects beyond the change in employees. One thing that the increase in human rights brought to the firm was goodwill in the local communities. Improving employee human rights was a way for the firm to improve their brand, not only to attract talent, but also to attract customers and build good customer relationships. One manager pointed out that the initiative increased brand awareness and created a positive image of the firm in the local community. *"the rainwater harvesting systems because that's something it's very visible so people can see that their friends have that system and [..] I think they saw the company come out with the van, which is labelled so I do think they know it's a company initiative but just generally gives us a positive image in the compounds. [..] Just more goodwill I suppose and company brand awareness and also that we do lots of green initiatives because a lot of the initiatives that we implemented were green initiatives."*

Furthermore, employees also got an increasing awareness of the values of the firm and the initiative created an alignment between firm brand, firm values and employees. These results indicate that an improvement in human rights on a firm level may lead to, not only a better customer relationships, but also an increased awareness of the firm strategy by employees and thereby an internal alignment to the firm's goals. This may increase productivity since the employees have a better and more holistic understanding of the objectives of the firm and how to fulfil these objectives through their work. Furthermore, the initiatives can decrease liabilities of miscommunication both externally and internally.

"green awareness and those green objectives, it's a huge objective, it's very much a part of our profile as the company so just being able to push it out into their homes just makes them feel much more a part and makes them understand the benefits much more. [..]it just personalise is the whole experience and they understand what we're doing is a company on a bigger scale."

In extension to the results of Section 9.3, building knowledge in the organisation and aligning the employees with corporate values can create an ideal environment for creation and innovation. As a result of the initiatives, the case company build new employee knowledge along with a creative way to bring water to their employees. This innovation led to a new revenue source as a result and attracted attention from a new potential customer. These results suggest that when improving human rights, the organisation is likely to innovate and increase their brand awareness and thereby increase their output.

"I don't know if that idea [rainwater harvesting units] would have come up without all the brainstorming in the focus groups, identified what their challenge was and then putting all our heads together and thinking what can we do. […] and what has come out of it was that ILO asked us to do this manual on how to install a rainwater harvesting system and they paid us for ^ that so that brought in revenue."

In addition to improving human rights across the organisation the case company also saw increased teamwork. Several studies point to teamwork as highly interdependent with task efficiency and therefore an important determinant for quality and performance (Tabassi, Ramli & Bakar, 2011). This suggest that human rights initiatives can assist in achieving a more organic organisational structure with more collaboration across divisions, which can lead to a more efficient and agile organisation and reduced conflicts and bureaucracy.

"Before we had like different departments of security, cleaning, maintenance and gardening, and each of them were like more independent groups. But then with the training they kind of bonded and became a big family. They will come if they have a problem. They will group up before it even reaches the office, they will discuss it internally between themselves. So it has kind of increased the team spirit and also just the teamwork. They are really working very hard in cooperating together. "

These results suggest that improving human rights can lead to a variety of derivative effects such as improved customer relations through brand awareness, better employee alignment to corporate values, increased innovation, and better teamwork.

9.6 Discrepancies between management view and employee view

There are certain discrepancies between the views of top management and the other employees. One example is on the health care initiative, where employees were unhappy and did not use the facility because they found the initiative insufficient. These discrepancies further emphasise the limitation of this methodology and subjectivity of this research form as discussed in Section 6.2. The results are liable to individual interpretations and will therefore include a variety of views of these effects. However, most of the main conclusions as discussed above are repeated across various subjects, which indicates that they can be generalised above a single case study. Furthermore, the inferences also rely on examples of specific work situations described, where the subject is less likely to attempt to mislead the reader or project a different effect than their experiences would reflect.

10. Discussion

In this section, I will discuss the insights and results from Sections 7-9, and how these are applied to answer the problem statement of this paper. The research design offers a combination of methodologies in order to provide empirical evidence of the effect of human rights on productivity and its direction, as well as evidence for possible explanations of the effect and the underlying drivers.

The design of this study is created in a way that triangulates quantitative and qualitative data from secondary and primary sources. In addition, it addresses the research question from an aggregate level and an individual level. This section will attempt to generalise the results from the individual level to provide insight into the aggregate results. The research question attempted is: What is the effect of human rights initiatives on labour productivity for Sub-Saharan African economies?

This section will first discuss how the quantitative analysis provides evidence and answers the sub-question: Does improvements in human rights create labour productivity growth?. Second, this section will discuss how the interviews and theoretical background relate and assists in identifying the effects of human development rights to answer the sub-question: How and why do investments in human rights affect labour productivity?

The hypothesis of the study is that increasing human rights will in fact increase labour productivity through increased labour motivation, talent retention and attraction, improved labour skills and increased innovation. The hypothesis is intuitively appealing, as human rights are widely perceived

as the normatively positive thing to do. The results presented in Sections 7-8 support the hypothesis that human rights affect labour productivity positively and significantly. Section 9 supports the hypothesis on an individual level, providing evidence that increases in human rights lead to certain psychological and organizational changes that are theoretically positive drivers of productivity.

10.1 The effect of human rights on productivity

In Section 7, I present the results that increases in human rights, measured as access to sanitation, expenditures on out-of-pocket health care and government spend on education, are positively and significantly related to labour productivity growth, measured as GDP per employed, in Sub-Saharan African economies in the period from 1995-2014. The results of the baseline OLS suggest that a 1% increase in the access of sanitation can create 1.7% growth in productivity; an increase of 10 dollars in health care or education expenditure per capita can create an increase of 12.7% and 6.5% in labour productivity growth, respectively. All of the results in the baseline OLS are significant at a 1% level when controlling for changes in capital, technology and population. These results persist as positive and significant when introducing a fixed effect to the model and when testing the effect of these human rights exposed to a three year lag. Furthermore, the results are robust to a variety of sensitivity tests, specifically in the South-East sub-region of Sub-Saharan Africa. However, the results are not robust in the West-Central Africa region when exposed to fixed effects. This sensitivity weakens the results that the effect is significant across the entire Sub-Saharan Africa region.

The results generally support previous literature which provides evidence that human rights have positive significant effects on economic growth. The results suggest that the evidence provided by other studies on human rights and economic effects is consistent in Sub-Saharan Africa. The results are consistent with the theory that improvements in human rights are necessary to achieve economic growth (Ranis et al, 2000).

Although the results provide evidence that increases in human development rights in Sub-Saharan Africa leads to productivity growth, it does not exclude the possibility of the undermining effect described in the Hayek hypothesis (Blume & Voigt, 2007). There may still exist an undermining effect to welfare and growth of social human rights once these human rights reach a certain degree. However, the result suggest that to the degree where Sub-Saharan Africa's social human rights exist there is still a positive effect to productivity from improvements and there may still be unrealized economic growth potential of increasing human rights in these countries.

10.2 The drivers of human rights effects

In Section 9, I present results from a Zambian case study on the micro-effects of human rights increases for employees. Through qualitative evidence I find results that improvements to human rights leads to increases in employee motivation, improved staff retention and attraction, and enhanced labour and service quality. Furthermore, I find evidence that corporate initiatives within human rights may built innovative capacity and accelerate technological adoption. In order to utilise these results to answer the research question: How and why investments in human rights effect labour productivity?, I assume that these results can be generalised to explain aggregate effects across firms, industries, and countries. I discuss below how the results can be generalised based on theoretical foundations and previous literature on human resources, incentives, and productivity. Based on these generalised results, I discuss several hypotheses regarding the drivers of the human rights effect found in the results of Sections 7 and 8.

The results from Section 9 suggest that one outcome of improving human rights is increased happiness and motivation amongst labourers. The results are in line with the expectations based on psychological theory. According to Maslow's hierarchy of needs (Maslow, 1943) human motivation is driven by a variety of needs where certain needs take precedent over others. When an individual see an improvement in basic needs, such as increased security and safety a person will progress to the next level of personal fulfilment. When an individual obtains better fulfilment of social needs, belonging and esteem, they advance to the final stage of the hierarchy of needs, self-actualisation. The results of Section 9 suggest that initiatives in human rights enables individuals to fulfil their needs of belonging, specifically described as "family feeling", and their sense of esteem, specifically mentioned as empowerment and confidence. Thereby, the initiatives help individual employees progress towards their final stage of motivation and need. When an individual achieves this level of need, Maslow's (1943) theory predicts they will attempt to achieve their full potential. At this stage motivation is assumed increasing as needs are met. Hence, achieving this stage of motivation should make employees not only more productive and dedicated to their work, but also motivate employees to pursue creative activities. Therefore, the results suggest that an increasing happiness due to the fulfilment of esteem and belonging needs will lead to increased productivity by creating employee motivation through self-fulfilment needs. Furthermore, the results support the assumption that a change in the type of motivation will lead to an increase in creative activities. The evidence suggest that as a result of the human rights improvements employees and firms become more creative and innovative, which according to Venturini (2015) is a key driver of modern productivity.

The results also indicate that human rights lead to improving the knowledge and skills of employees, which can create increased productivity in the organisation. According to Syverson (2011) one key driver of productivity is the quality of general labour inputs. As discussed in Section 3.3, previous studies have provided evidence that education level and age increase productivity in a firm. The results from Section 9 are in line with this evidence, suggesting that increasing training and education of employees leads to higher engagement, curiosity and service quality.
Syverson (2011) describes the ability to attract and retain talent as a main driver of productivity. The results suggest that even in Sub-Saharan Africa where unemployment is high and labour mobility is relatively low, attraction of talent is improved by providing social human rights. Furthermore, the evidence from Section 9 strongly suggests that increases in human rights allows better retention of employees and talent, through increased employee loyalty and employer brand. These theoretical and empirical sources support the general results of Section 9 and therefore strengthen the validity of the qualitative analysis. This suggests that the drivers and channels of human rights effects on productivity in the case study can be generalised to an aggregate level.
Other potential aggregate explanations for the effect of human rights on productivity is that an improvement of general social human rights may lead to increased political stability and decreases of macro-economic conflict, which evidence suggests has a significantly negative effect on productivity (Fosu, 2002).

10.3 Impacts and critique

As the above section suggests human rights significantly increase productivity by creating motivation, higher labour quality and innovation, and improved attraction and retention of talent. These results have some important policy implications. Firstly, these results suggest by improving human development and investing in sanitation, health care, and education, countries in Sub-Saharan Africa can increase their productivity growth and thereby their economic growth and competitiveness. As described in Section 2, the region is lagging behind all other regions in the world with regards to human development and has extreme multidimensional poverty. Improving human rights could potentially assist in narrowing the poverty gap and enable the Sub-Saharan African countries to catch up with developed economies. In addition, these results support Ranis et al's (2000) theory of vicious and virtuous cycles, stressing the importance for economies to align their fiscal or economic strategy with investments in human development in order to ensure long-term growth.
Also, the results in Section 9, suggest that there are several potential benefits from companies investing in social human rights, not only as CSR-initiatives but also as investments in bettering the organisational factors and improving internal efficiency and productivity. The results suggest that

there may be great returns to investing in this area and encourages companies in Sub-Saharan Africa to prioritise these initiatives.
However, due to the case study's specific nature the validity of the generalisations is in question. The differences between industries, countries and nature of initiatives may impact the magnitude and significance of the effect of human rights and how these drive productivity. Although there are potential limitations to the generalisation of the results of Section 9, the results of the aggregate quantitative analysis suggest that the general direction of the effect is significant across the region, specifically robust in South-East Africa. These results, along with the theoretical foundations, support the relevance of the conclusions to the entire region and provide a level of confidence in the qualitative inferences.
The results are also liable to several weaknesses due to the extent of the study and the nature of the methodologies. Reverse causality or other unobserved variables might be important drivers of the effect of human rights on productivity and therefore calls for further attention and empirical evidence in the subject. Specifically, studies on various aggregate and disaggregate levels and further analysis on the sensitivity of the results can create a greater understanding of the effects, which will be discussed further in Section 12. Furthermore, the qualitative evidence behind the results of Section 9 does not suggest an immediate quantitative effect to productivity. This does raise some limitations to the conclusions of these results and whether the effects of the human rights initiatives will actually create labour productivity or if these are not sufficient to describe the underlying causality of the results in Sections 7-8.

11. Conclusion

In this study, I have analysed the effects of social human rights or human development on labour productivity in Sub-Saharan Africa. By triangulating data from academic literature, quantitative data on an aggregate level and qualitative data from a Zambian case study, I find evidence that human rights initiatives within human development does effect labour productivity significantly and positively. Furthermore, the analysis suggests that this is specifically due to increases in employee motivation, labour quality and innovation and improved attraction and retention of talent.

In the period from 1995 to 2014, the degree of population with access to sanitation was 31% in Sub-Saharan Africa, and the average expenditure was 56 dollars on out-of-pocket health care and 145 dollars on education by the government per capita. The region, on average, has performed far below all other regions in the world on these human rights measures. Furthermore, the region has major problems with multidimensional poverty and poor human rights that are widely recognised in the international community. Theoretical background on human rights and normative discourse

advocate that increasing the level of human rights of any kind will allow long-term economic growth in a given country. The results of this analysis support that improving social human rights does in fact create increases in labour productivity growth that are statistically significant and of substantial magnitude. The quantitative analysis finds a robust relationship between human rights and labour productivity growth. Specifically, I find that an additional 1% of the population with access to sanitation can create up to 1.7% productivity growth, an additional 10 dollars spend on health care or education per capita can offer up to 12.7% and 6.5% increases in productivity growth, respectively.

Furthermore, the robustness tests reveal that the correlation between human rights and productivity is not homogenous across regions. I am not able to find strong evidence of the correlation in West-Central Africa when controlling for country-fixed effects. This suggests that there may be significant differences in the effectiveness of human rights on productivity across sub-regions or that other factors may impact this relation. One potential explanation of the sub-regional difference is the relatively higher acceleration of human development growth in South-East Africa.

In the Zambian case study of firm-level effects on productivity from investments in human rights, I find evidence that investing in improving employee social human rights can create increases in employee motivation through improved happiness and belonging. Improving human rights for employees allow firms in Sub-Saharan Africa to improve their general labour quality through improved skills and knowledge as well as indirect effects of increased innovation and creativity. Furthermore, the qualitative analysis provides evidence that investing in employee human rights makes it easier for a firm to attract and retain talent. The case study also finds other effects of improving human rights beyond the predictions of the conceptual framework. It finds that improving social human rights creates goodwill, brand awareness and improved customer relationships, as well as improved value alignment with employees and better teamwork and communication in the organisation.
Triangulating the data from the quantitative macro analysis and the qualitative micro analysis, I find that increases in human rights creates growth in labour productivity, and I discuss that this effect could potentially be due to increased motivation, quality improvements, innovative capacity and better attraction and retention of talent.

Although the interviews suggest an overall positive outcome of investing in human rights and agreement that this leads to further motivation, attraction, retention and quality, it does not provide

evidence that these effects lead to quantitative effects on firm performance or productivity. Despite the theoretical foundations that the results of the case study would lead to productivity effects and the quantitative analysis that supports a positive significant relationship, it is difficult to draw definitive conclusions in this effect and its drivers. There is a potential risk that the productivity effect is driven by unobservable factors that coincide with the improvements in human rights. In addition the results also suggests effects on other firm factors such as improved customer relationship, better alignment to corporate values and increased collaboration in the organisation.

Lastly, there may be potential conflicts in utilising a case study and qualitative evidence. Given the exploratory nature of the interviews, a certain level of subjectivity is expected in the evidence. This makes the argument for generalization difficult, as there may be a variety of unobserved effects in the evidence. The theoretical foundation provides some confidence in the relations, which are intuitively appealing, however due to these limitations I am not able to definitively conclude anything on the underlying effects of human rights on productivity. Despite these limitations the results of this study still provides an insight into the effects on productivity of a relatively under-researched area of human rights, human development, in a globally unique region. These results are relevant for the political and academic communities as they fill a knowledge gap in human rights research and economic research in Sub-Saharan Africa.

12. Further research

To my knowledge, the results of this study fills a knowledge gap in the literature on how social human rights interact with productivity growth in Sub-Saharan Africa. Furthermore, it uncovers a potential key driver of productivity for the region. The academic literature on labour productivity in Sub-Saharan Africa is scarce relative to the extent of the research available in other regions. The data availability in the region is poor in comparison and performing large studies can provide researchers with several logistic roadblocks. Therefore, despite the limitations of this study it still provides some fundamental conclusions on the importance of human development to the Sub-Saharan African economies.

Due to the limitations of the study however there are several areas that calls to further attention from the academic community. Overall, there is a need for more reliable data collection in the Sub-Saharan African region to uncover why the countries have been unable to create economic growth, equality, and bridge the poverty gap to the degree of other developing regions.

Due to the vast nature of human rights and economic productivity this study has several delimitations. In order to provide concrete results, this study only investigates the specific effect of social human rights on labour productivity growth measured as the natural logarithm of GDP per employed. As there exists a broad range of acknowledged productivity measures, it is essential to understand how human rights interplay with other productivity factors, such as the widely recognised Total Factor Productivity measure, to understand the effects of human rights on other productivity factors and inputs. Furthermore, there is a need to understand the effect on other economic measures, such as economic growth and development. Due to the complexity of macro-economic effects, when investigating productivity measures using econometric methodology, there is a need for researchers to continuously test the sensitivity and robustness of the results. Especially, this study calls for other researchers to test for potential control factors or omitted variables in order to strengthen or challenge the conclusion found in this study.

Within human rights research there is still much left unexplained about the underlying effects of social human rights. Social human rights entail many factors of human development in an aggregate environment. There may be much heterogeneity in how the various aspects of these human rights affect productivity and their magnitude. One important step in understanding the effects of social human rights better is mapping the various social rights that belong within this field and understanding their relative importance and interconnectivity, as well as mapping the existing literature on social human rights and economic factors on aggregate and disaggregate levels. Additionally, this study encourages further research in how other social human rights than sanitation, health care, and education effect productivity. Obvious potential human rights that may affect productivity could be access to food and water. Another consideration for future research could be a variety of measures of human rights. In this study, I use specific measures of human rights based on data availability and econometric limitations. However, there is a need to understand whether the effect is robust to other types of measures, or proxies, and to improve the validity of the results by using different sources of information, such as employee surveys or corporate accounts.
Overall it would be immensely useful for future researchers to achieve a unified framework for investigating social human rights. A framework that collected theory and previous literature and mapped all the potential pathways of the effect of human development rights and suggested a methodological approach to testing a variety of social human rights and measures in a standardized, comparable way, imposing stricter definitions on the topic.

The robustness tests in Section 8 show sensitivity in the results to sub-regional divides. West-Central Africa does not have the same strength of results as South-East Africa. It is important for researchers to find out the sub-regional fixed effects and potentially municipality effects, in order to understand whether there are any unobservable drivers of the results. Furthermore, it would be interesting to understand if there really are sub-regional or municipality differences in how human rights affect productivity and if so then why these differences arise. One could imagine that differences in culture, language or values could impact how increases in human rights affect productivity on an individual level.

Furthermore, this thesis appeals to further investigation of how human rights affect productivity on a firm level, especially what the differences across industries are and whether the aggregate effects on productivity can be seen on the individual firm's bottom line. An investigation into the effect on a firm level would firstly create support to any macro-economic results in this study and increase the understanding of the mechanisms of human rights effects on productivity. Furthermore, a greater amount of data, which could be found in firm-level analysis, could provide stronger or more robust results.

Lastly, to implement these results into policy there is a need to include knowledge from other fields to assess the legal environment and political limitations to implementing social human rights. It is important to specifically investigate how countries in Sub-Saharan Africa can improve human rights and which will have the most impact on the productivity and economic growth of that country. The results also suggest that there are potential gains from the private sector to invest in social human rights, however it is important to further develop the knowledge on how firms can do this and track the returns on their investments in order to ensure shareholder buy-in and encourage further improvement.

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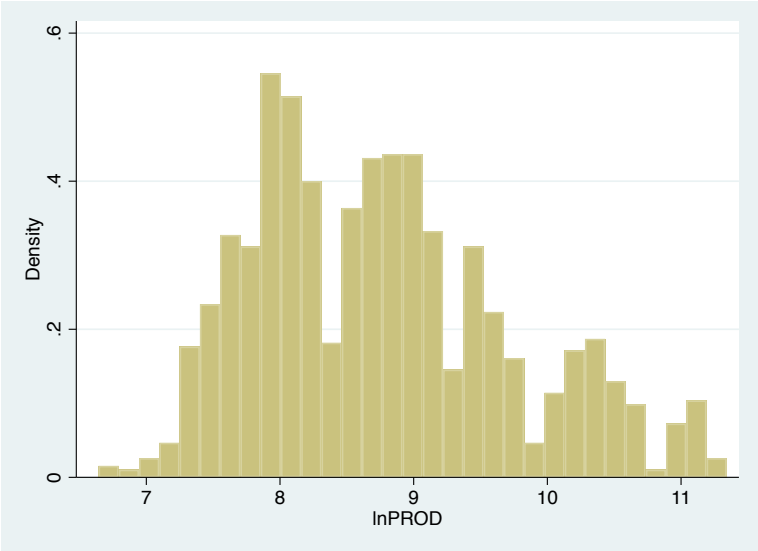
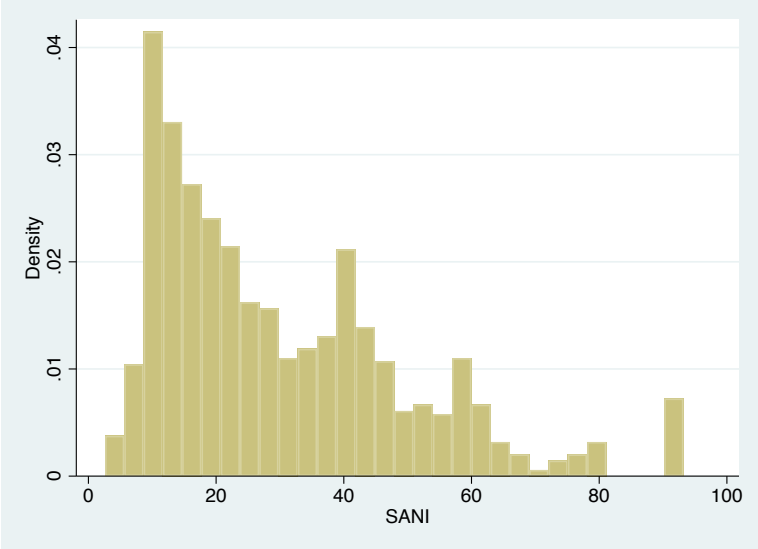
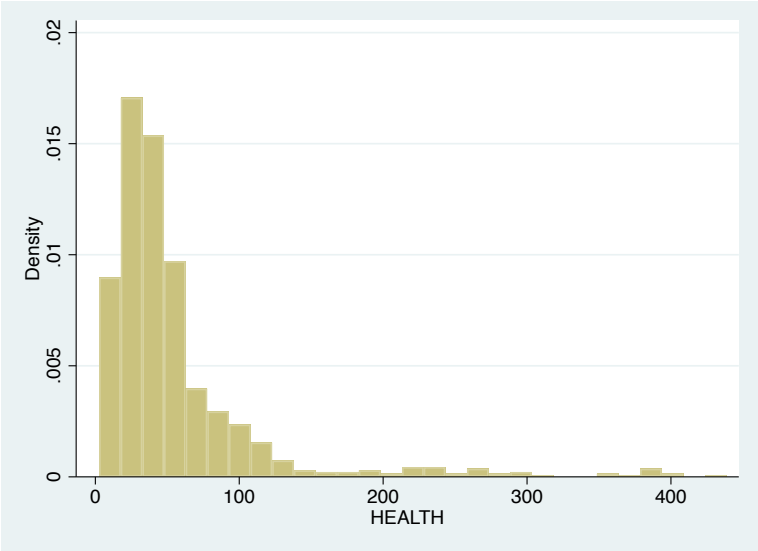
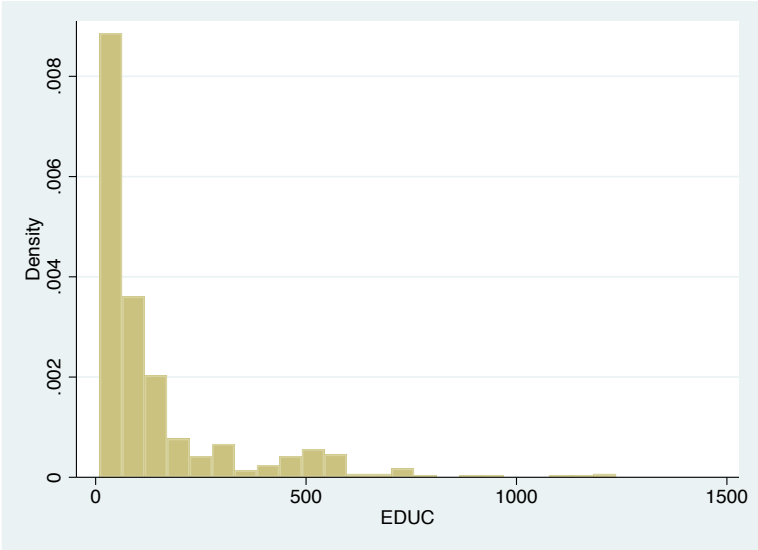
Appendices

Appendix 1. Distribution of data – Histograms of estimation variables





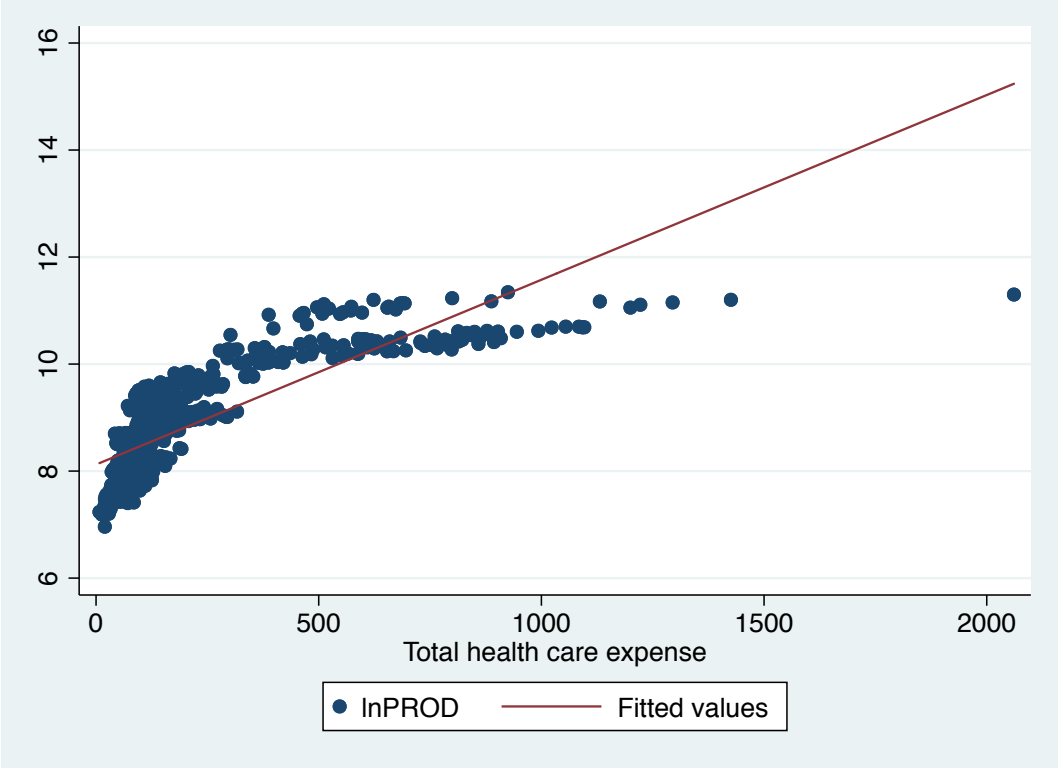


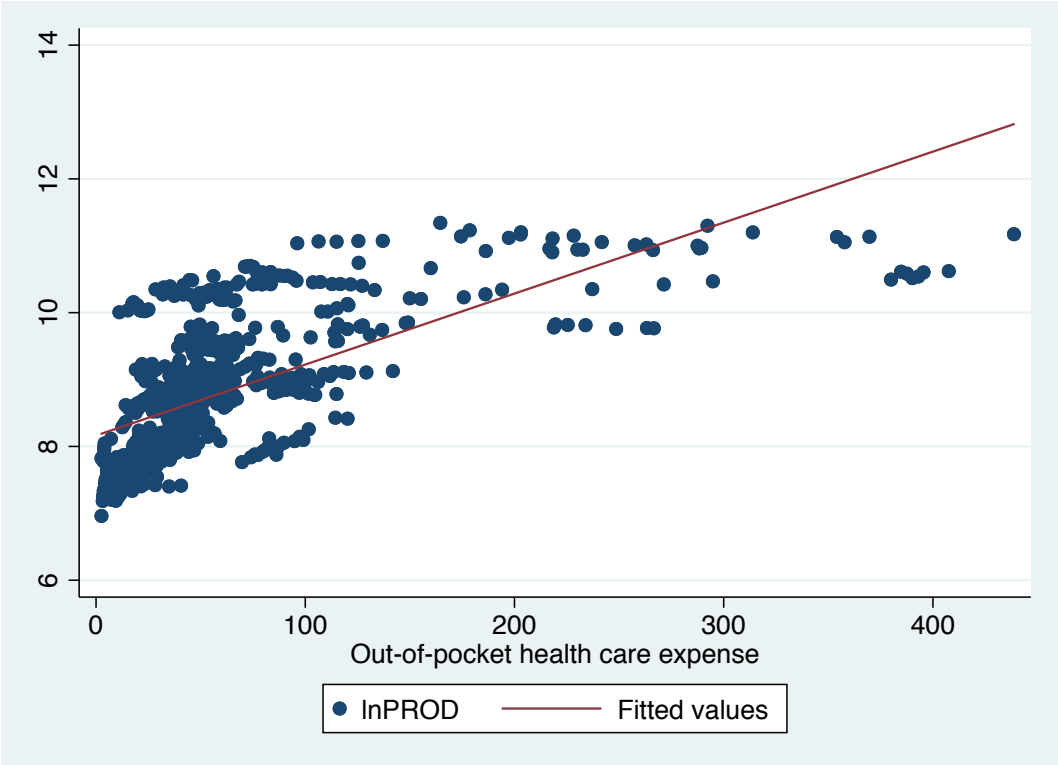


Appendix 2. Health care and productivity trends

Despite the apparent disadvantage of using out-of-pocket expenditures rather than total expenditure, I use this variable as a proxy for health care.

When looking at the simple correlation between total health care expenditure and the natural logarithm of productivity, I find a high resemblance to the trend found when looking at the simple correlation between out-of-pocket health care expenditure and the natural logarithm of productivity. I therefore assume that both measures have a relatively similar relation to the growth in labour productivity.


16
14
12
10
8
6
0
500
1000
1500
2000
Total health care expense
lnPROD
Fitted values


14
12
10
8
6
0
100
200
300
400
Out-of-pocket health care expense
lnPROD
Fitted values

Appendix 3. Correlation matrix

	lnPROD	SANI	HEALTH	EDUC	lnCAPI~L	TECH	POP
lnPROD	1.0000						
SANI	0.7353	1.0000					
HEALTH	0.5765	0.5627	1.0000				
EDUC	0.8477	0.6853	0.4818	1.0000			
lnCAPITAL	0.3037	0.0817	0.1378	0.2758	1.0000		
TECH	0.0032	-0.0513	0.1090	-0.0794	-0.1554	1.0000	
POP	-0.0396	-0.1073	-0.1479	-0.0072	0.7725	-0.2483	1.0000

Appendix 4. Multicollinarity tests – Variance Inflation Factors

I find a high correlation of 0.9 between government spend on education and total spend on health care (private and governmental).

```
. corr HEALTH HEALTH_TOTAL EDUC
(obs=484)
```

	HEALTH	HEALTH~L	EDUC
HEALTH	1.0000		
HEALTH_TOTAL	0.6125	1.0000	
EDUC	0.5085	0.9047	1.0000

I perform a simple OLS regression using total health care expenditure and find high variance inflation factors. Therefore, I exclude this variable for multicollinearity.

```
. regress lnPROD SANI HEALTH_TOTAL EDUC lnCAPITAL TECH POP year, vce(robust)

Linear regression                               Number of obs     =        312
                                                F(7, 304)         =     289.79
                                                Prob > F          =     0.0000
                                                R-squared         =     0.8353
                                                Root MSE          =      .3802
```

lnPROD	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
SANI	.0117507	.0013664	8.60	0.000	.009062	.0144395
HEALTH_TOTAL	.0013045	.000351	3.72	0.000	.0006138	.0019952
EDUC	.0011598	.000514	2.26	0.025	.0001485	.0021712
lnCAPITAL	.1892364	.0273809	6.91	0.000	.1353562	.2431166
TECH	.0037113	.0016731	2.22	0.027	.0004189	.0070036
POP	-1.34e-08	2.08e-09	-6.45	0.000	-1.75e-08	-9.32e-09
year	-.0250755	.0043992	-5.70	0.000	-.0337322	-.0164187
_cons	54.25259	8.81227	6.16	0.000	36.91183	71.59336

```
. vif
```

Variable	VIF	1/VIF
HEALTH_TOTAL	7.28	0.137329
EDUC	6.53	0.153138
lnCAPITAL	3.25	0.307916
POP	3.09	0.323601
SANI	2.18	0.459258
TECH	1.12	0.896674
year	1.09	0.918103
Mean VIF	3.50	

I perform a simple OLS regression using out-of-pocket health care expense and find a significant reduction in the variance inflation factors from 3.5 to 2.16. I therefore accept this variable.

```
. regress lnPROD SANI HEALTH EDUC lnCAPITAL TECH POP year, vce(robust)

Linear regression                               Number of obs     =        312
                                                F(7, 304)         =     226.03
                                                Prob > F          =     0.0000
                                                R-squared         =     0.8230
                                                Root MSE          =     .39411

------------------------------------------------------------------------------
             |               Robust
      lnPROD |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        SANI |   .0125771   .0018305     6.87   0.000     .0089751    .016179
      HEALTH |   .0011104   .0006094     1.82   0.069    -.0000887    .0023095
        EDUC |   .0022903   .0003541     6.47   0.000     .0015935    .0029872
   lnCAPITAL |   .1944151   .0278878     6.97   0.000     .1395377    .2492926
        TECH |   .0039118   .0017442     2.24   0.026     .0004795    .0073441
         POP |  -1.01e-08   2.19e-09    -4.64   0.000    -1.44e-08   -5.83e-09
        year |  -.0259138   .0046054    -5.63   0.000    -.0349762   -.0168514
       _cons |   55.74741   9.155842     6.09   0.000     37.73056    73.76426
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
   lnCAPITAL |      3.40    0.294425
         POP |      3.27    0.305972
        SANI |      2.32    0.431726
        EDUC |      2.26    0.442402
      HEALTH |      1.68    0.593609
        TECH |      1.13    0.888170
        year |      1.09    0.919500
-------------+----------------------
    Mean VIF |      2.16
```

Appendix 5. Heteroskedasticity test – Breusch-Pagan / Cook-Weisberg test

```
. regress lnPROD SANI HEALTH EDUC lnCAPITAL TECH POP year
```

Source	SS	df	MS	Number of obs	=	312
				F(7, 304)	=	201.89
Model	219.510423	7	31.3586319	Prob > F	=	0.0000
Residual	47.2177787	304	.15532164	R-squared	=	0.8230
				Adj R-squared	=	0.8189
Total	266.728202	311	.857646952	Root MSE	=	.39411

lnPROD	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
SANI	.0125771	.0015381	8.18	0.000	.0095504	.0156038
HEALTH	.0011104	.0004135	2.69	0.008	.0002967	.0019241
EDUC	.0022903	.0001582	14.47	0.000	.001979	.0026017
lnCAPITAL	.1944151	.029059	6.69	0.000	.1372329	.2515974
TECH	.0039118	.0015615	2.51	0.013	.0008391	.0069845
POP	-1.01e-08	2.49e-09	-4.07	0.000	-1.50e-08	-5.23e-09
year	-.0259138	.0046095	-5.62	0.000	-.0349844	-.0168432
_cons	55.74741	9.208018	6.05	0.000	37.62789	73.86693

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnPROD

         chi2(1)      =    56.16
         Prob > chi2  =   0.0000
```

Appendix 6. Sub-regional summary statistics

South-East region summary statistics

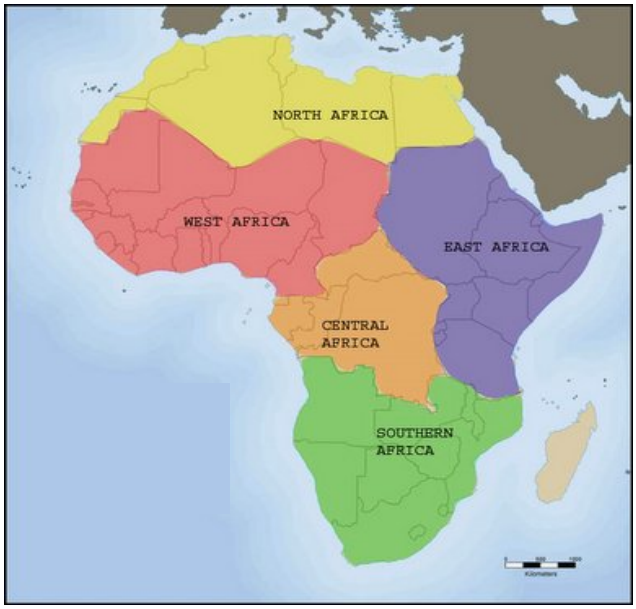
Variable	Obs	Mean	Std. Dev.	Min	Max
PROD	621	11363.6	11528.71	1006	44736
SANI	565	34.84637	20.10791	2.6	93.2
HEALTH	432	51.18744	61.01295	2.591179	407.5993
EDUC	247	206.05	240.896	11.08242	1236.925

West-Central region summary statistics

Variable		Mean	Std. Dev.	Min	Max
PROD	648	9963.809	14926.03	767	84320
SANI	577	25.5201	17.89948	4.2	81.1
HEALTH	472	59.68447	57.84872	4.19124	438.737
EDUC	288	96.69438	107.1536	9.761318	714.0193

Appendix 7. Regional classification

Region	Number of countries	Countries
West	18 countries	Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo
East	15 countries	Eritrea, Ethiopia, Somalia, Djibouti, Sudan, South Sudan, Uganda, Kenya, Tanzania, Rwanda, Burundi and plus the islands: The Comoros, Mauritius, the Seychelles and Madagascar
Central	6 countries	Central African Republic, Congo, Democratic Republic of Congo, Equatorial Guinea, Gabon, and São Tomé and Príncipe
South	10 countries	Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe



Appendix 8. Sub-regional developments in human rights

South East	SANI	HEALTH	EDUC
Mean 1995-2014	34.85	51.19	206.05
Average in 1995	31.58	39.03	114.28
Average in 2014	39.58	71.70	305.72
Change from 1995-2014	*25%*	*84%*	*168%*

West Central	**SANI**	**HEALTH**	**EDUC**
Mean 1995-2014	25.52	59.68	96.69
Average in 1995	23.10	56.37	101.99
Average in 2014	29.73	60.02	129.64
Change from 1995-2014	*29%*	*6%*	*27%*

Appendix 9. Stata code

For the fixed effect model, I use the STATA command:

```
xtset id year
gen lnPROD = log(PROD)
gen lnCAPITAL = log(CAPITAL)

xtreg lnPROD SANI HEALTH EDUC lnCAPITAL TECH POP year, fe vce(robust)
```

This formula gives the fixed effects regression model results.

Appendix 10. Human rights averages in Sub-Saharan Africa over time

Human rights over time ***(Averages for the region)***	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**
SANI	27.8	29.5	31.5	33.6
HEALTH	50.3	50.6	58.7	62.6
EDUC	116.0	127.0	165.8	157.7

Appendix 11. Conceptual framework for human development on GDP

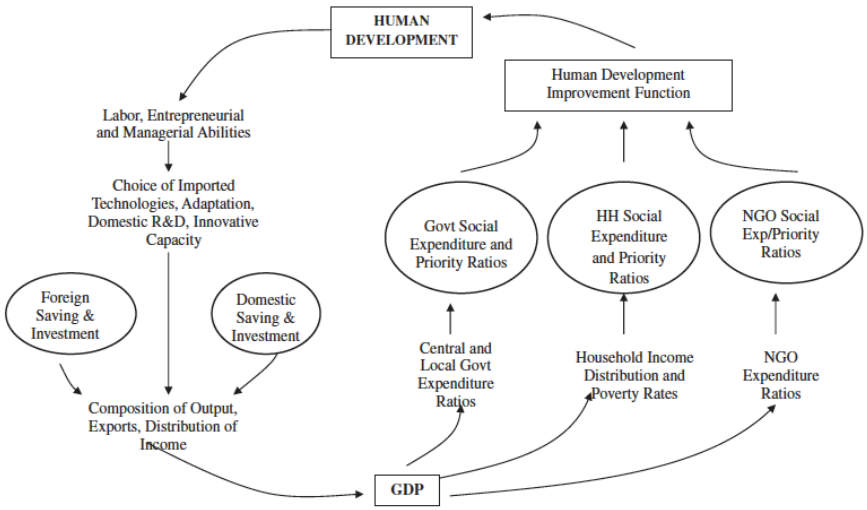


Figure 1. *The relationship between EG and HD.*

Appendix 12. Interview guides

Guidelines for the interviewer:

Presentation

I am interviewing various stakeholders from the human rights project in order to understand opinions and perspectives regarding the outcome and efficiency of the project and how it has affected or changed your everyday work environment.

Interviewee rights:

- The interview will be recorded
- There is full anonymity, so your name, age and other characteristic are not disclosed
- These interviews will not be communicated to your employer or colleagues
- You can at any time retract a comment or refrain from answering a question

Introduction

Thank you for participating in this interview

The purpose of the interview is to understand what your opinion is and what you think of the project. I am not looking for a specific answer so please elaborate and add to any of the questions.

Background

What is your position within the company?

When did you start working at the company?

What is your age and education level?

How much do you interact with employees/managers?

How involved would you say you have been in the human rights project?

Manager interviews

Do you think there has been a change in employee motivation?

Please elaborate what you understand employee motivation to be?

Can you compare the motivation in your opinion before and after the initiatives?

In your perception, has there been a change in employee loyalty to the company?

Do you believe the initiatives has or will make it possible for you to attract better employees in the future?

What would you say would be the benefits of retaining your staff?

Have the initiatives effected employees' productivity?

Ask to elaborate with an example

Can you think of any other ways the initiatives have affected your workplace?

Would you say the project has been an overall positive or negative experience?

Do you think it's possible for you to monetise the company benefits you have noticed from the project?

Would you recommend implementation of similar initiatives to other SMEs or corporates? *Probe by asking why?*

Would you say the investment in employee's welfare was worth the company's resources (time, money and human resources)?

Employee interview

How would you describe your benefits in the workplace before and after these initiatives?

Please name some of these benefits?

Do you feel a change in your motivation as an employee?

Please elaborate what you understand employee motivation to be?

Can you compare your motivation before and after the initiatives?

How would you describe your effort at work before and after the initiatives?

Give examples

Do you feel you are more or less willing to make sacrifices for work (stay longer/work harder) now than before?

Do you identify more or less with your company after the initiatives?

Can you think of any other ways the initiatives have affected you in your job?

Would you say the project has been an overall positive or negative experience?

Debriefing

That is all from me, do you have any questions?

Appendix 13. Transcription key

/ = Words that could not be heard during the transcription

“” = Quotes or explanatory phrases

[Laugh] = Interviewer or subjects laugh

* = The sentence is interupted by the person speaking

^ = The sentence is interupted by another person

[Interuption] = Interuptions from outside environment or sounds

I will transcribe timestamps around every 5 minutes

Appendix 14. Interview transcripts

The audio files of the interviews have been deleted to ensure anonymity of the subjects.

Interview 1

Interviewer: So first just to tell you a little bit about the interviews we're interviewing various stakeholders of the project just to hear what are your opinions so there's no specific answer we are looking for, just to understand how have your regarded the outcome of the project and changes in efficiency. The answers are recorded and of course there's full anonymity. So if you're ready to start, let's go.

Interviewee: Yea, I mean would you like to ask me a question

Interviewer: Yes, of course. So first some background questions, if you could just explain your position in Foxdale Court and when you started working here?

Interviewee: So we've been doing the human rights initiative with two companies, I'm the managing director of both companies, it's Foxdale Court and Foxdale Estate and I've been the managing director of Foxdale Court since we founded the company in 2010 and Foxdale Estate we founded that company in 2013, so yeah, it's been a good amount of time

Interviewer: If you could expand a bit on your own background, so your age and education level?

Interviewee: I've got a Masters degree in business management, sorry a Masters degree in fashion buying, undergraduate degree in business management and I am 31 years old.

Interviewer: Thank you. Can you expand on how much you interact with the employees on a daily basis?

Interviewee: Lots, lots of interaction. We have daily roll call, then we have weekly site meetings and weekly team meetings, but daily interaction with the team

Interviewer: Thank you. Can you describe how involved you've been in the human rights project?

Interviewee: I think it's been a little bit more on the high level involvement. Kukula have done a great job of managing the program, under Lombe, but I've been involved in reviewing some of the

questionnaires. I've introduced the concept to the team. Whenever we've handed out certificates, I've always been there to do that, but Lombe has handled the actual interviews. Initially we did some focus groups with the staff to understand what their needs were. I would maybe kick it off, but then Lombe would sit in on that, the actual interview, and take the results.

Interviewer: Yep. In terms of the human rights project, have you felt that there's been any change in employee motivation? And if you could just expand with a few examples of what type of motivation?

Interviewee: So there's been several programs or several initiatives that have been undertaken so I think there been different responses from the staff for the different initiatives. I think some of the most successful then past others, so we have more feedback from them than others. So, it did take about a year to kick off, when there were just interviews with the staff to understand what their needs were. And then the second year was when we started introducing the initiatives. So we started initially, I think it was the education initiative. The staff were given education on bricklaying and plumbing so there were two courses that staff could undertake, so that was bricklaying and plastering and plumbing and electrical. It was a training that took place over about a 5 month period, where electrical came to site and the staff had trainings in the evenings. We literally finished that about 2 weeks ago and the staff got their certificates about a week ago. In terms of the feedback we received from the staff, we are seeing a higher level of skills from them from that training. Some of the plumbers are asking questions that they never asked before, they'd like to use more advanced equipment so I think it's been very positive and the team felt very empowered through that training course. In Zambia, education is really important to people, it's very it's something that is hugely valued and to have a certificate in a course is also something that is hugely valued so I think generally the staff have been very proud of themselves as well and very grateful for the opportunity. We haven't perhaps seen higher levels of efficiency from all the staff but I'd say just generally a little bit more happy and they feel more appreciated and included, so that's been great. The evolution of we did which was last year in November, that was a rainwater harvesting system we offered it to all the staff but I think it was only 15 staff that volunteered to have this rainwater harvesting unit. I don't know if you've seen some pictures of the units that have been installed,

5.22

Interviewer: Yes

Interviewee: So there were 15 staff, they have to contribute 20% of the price of the system which was then deducted slowly off their salaries and that has had a huge effect, huge benefits with the staff. It's really worked. They have been able to pay it off pretty much over the course of the rainy season which is sort of four months but sometimes we get a little bit of early rain, late rain and then we deduct it slowly from their salaries during the rainy season. So normally they would spend 100 Kwacha a month buying water but then during the rainy season they had the savings, they didn't have to buy water at all. In addition to our staff feeling very excited and people around their homes asking for the same systems, we were then contacted by the ILO and they saw the systems, they thought it was a great idea to have those systems in many compounds in Zambia. So they asked us to to create a training manual on how to build a rainwater harvesting system so we just recently completed that so that's in a way just another positive effect that it's hard and they have now done a training programme with a construction school where there is going to be training small plumbing companies to be able to roll out these rainwater harvesting systems and it's something I will just have a huge effect on the whole country if we can see more homes having them because it means we don't have to draw from the underground portable water and collecting more rainwater. So that has been hugely successful and I think a lot of staff - it was the first time that people were trying it out so perhaps some of the people were a little sceptical look at them and their salary was a 600 Kwacha contribution that they had to make and it was still quite a lot that was withdrawn from their salaries so some of them were a little bit sceptical initially but just from the effects that they've seen from speaking to them their friends I think if we did another roll out I think there will be a lot more people who opt for it so that's been very successful. Our plumber then did an add-on so he's recently told me that he's connected his rainwater harvesting units to his toilet so the tank is full he's fitting a toilet inside his house and he's able to flush it from his rainwater so that's really exciting that the staff are also taking through their initiative on there own to figure out device the system. I mean having clean running water on the doorstep of your home is a huge benefit in Zambia. We've seen at the staff just generally feeling just a lot happier and very grateful

Interviewer: Yes

Interviewee: Feel that they are being listened to and considered so that's been great. The most recent initiative was the water wheelers that was introduced perhaps 2 months ago even just 6 weeks ago and that I haven't received that much feedback from the staff because it's still quite a new since that was introduced. The other initiative was the health initiative it came up with the system with there is there a pharmacy in Foxdale Court and the staff were given a provision to buy

medicine of 25 Kwacha a month but that for some reason hasn't taken off I don't really know why but the provision is there but I think the staff generally buy their medicine from the pharmacy in the compound. I'm not sure but it hasn't really been coming into the office and using the facility. Maybe would have to do a second rounds and remind them about it that that budget is available. I haven't seen any positive effects from it because the staff haven't really been using it I believe those are all the initiatives that we've done so far

Interviewer: Yes

Interviewee: So generally very positive from the staff the staff feel they are working in a very special company that are much more than others

Interviewer: On that note, do you believe that these initiatives have enabled you to attract better employees, or will enable you to do that in the future?

10.08

Interviewee: We would like that. We hope that would be how it worked but I feel generally Foxdale Court and Foxdale Estate are very attractive companies to work for so we don't really have a shortage of applications or people that want to work with us. We have a very good reputation in the market also just generally in Zambia there is a huge need for jobs so if we advertise for a position there is literally hundreds of applications that do come in period I do think that generally if there is a spill on a fact but definitely particularly the rainwater harvesting systems because that's something it's very visible so people can see that they're friends have that system and I'm not sure if they know whether it's a company initiative but I think they saw the company come out with the van, which is labelled so I do think they know it's a company initiative but just generally gives us a positive image in the compounds. Just more goodwill I suppose and company brand awareness and also that we do lots of green initiatives because a lot of the initiatives that we implemented were green initiatives. I would say it has had a positive effect on the community and making us an interesting company to work for. And I would also say that with our green initiatives just pushing it out that we are green building and we support those things.

Interviewer: How do you feel about retaining staff, has it given you any benefits? Do you feel any changes in retaining staff?

Interviewee: Generally as a company we have a relatively low staff turn. And I'd say yes the initiative severally made people feel much more a part of the company valued and appreciated and want to stay on. I'm pleased to say so.

Interviewer: Can you think of any other way that the initiatives have affected the workplace, possibly in terms of the productivity of the employees or in terms of the service they provide to the customers?

Interviewee: I think it's giving them, on the rainwater harvesting systems, it just further emphasizes our green objectives and green initiative which is something that we really want the staff to feel a part of and kind of value as well. [Interruption] I'm sorry, could you repeat the question?

Interviewer: This is just in regards to any gains or benefits or any other changes the initiatives have brought

Interviewee: Yes, I think it's brought that awareness of that inclusion and getting the staff feeling much more involved in the green initiatives I might go back again to the example of the rainwater harvesting tanks which I think is one of the most successful initiatives that came out of the program and that had the biggest knock on effect because it's not just the green initiative that we had in the building we take it out into their homes and it sort of green awareness and those green objectives, it's a huge objective, it's very much a part of our profile as the company so just being able to push it out into their homes just makes them feel much more a part and makes them understand the benefits much more. We have a big rainwater harvesting at Foxdale Court, I don't think all the staff understand what the big system is actually doing, what the benefits are. Whenever they are home they can physically see that they're not having to buy water spending money on water, buy the water that month and they don't have to work a few hundred metres to carry buckets of water back home it's an immediate Direct positive effect on there direct lives. ^ Which is really important for us because it just personalise is the whole experience and they understand what we're doing is a company on a bigger scale.

15.39

Interviewer: How would you say that's affected the work environment and the everyday employee tasks

Interviewee: Lots of Foxdale Court employees comment that the firm has a very family oriented approach and they feel a part of that family when it comes to Foxdale Court. So I think just been the human rights initiatives and having that sort of green focus with the human rights initiatives it's just further emphasised that sort of family approach that we have and staff feel very included and having a very open dialogue with the staff. And clear communication channels and very open communication channels. So I think just feeling included and respected is what we're seeing.

Interviewer: So I think you already answered this, but would you describe this project as an overall positive and negative experience also taking into consideration the monetary efforts you've had to put into this?

Interviewee: it's definitely been a very positive experience and we've seen a lot of results come out of this through our staff and Kukula has made it very easy for us to implement and it is a bit bureaucratic there a lot of people involved in a focus groups and it takes a bit of time to actually start seeing the initiatives and minutes ago whole year and for the staff that were being asked these questions over the course of the year and it kept coming to me and being like you are asking us all these questions what are you doing? And I said you just have to wait. It did take some time but I did just say on that on the paperwork Kukula did make it a lot easier for us. So they've really reduced on the bureaucratic side that we would have to do. Anything on the monetary side there is that financial outlay is 20% for us and the staff contribute 20% and the grant covered the 60% remaining but I think the benefits we received have been huge and I would say yes definitely there is a cost associated to it and we're not in the best financial position at the moment just because of the current economy at the moment there's sort of a small depression but the benefits that we've got we feel far exceeded the costs so we would be happy to work with the initiative again

Interviewer: Do you think you as a company will be able to monetize on these benefits? Do you think they will bring in further revenue or increase the productivity of your company?

Interviewee: Well what did come out of the initiatives was the rainwater harvesting system for our staff which came out of brainstorming and talking about what we could do because an issue that the staff raised was a need for water. So we're just brainstorming what can we do and the idea of water wheeles came up and I said what about a rainwater harvesting tank a small one for them. And I don't know if that idea would have come up without all the brainstorming in the focus groups identified what day challenge was and then putting all our heads together and thinking what can we do. So that was a huge area that came out and we've used it a lot in our presentations to

companies about the different green initiatives that we're doing and what has come out of it was that ILO asked us to do this manual on how to install a rainwater harvesting system and they paid us for ^ that so that brought in revenue. Definitely with staff productivity it's just feeling included and as a family and also reducing on staff turnover although it is very low in either case ^ but definitely just helps further reduce it because they feel apart of a family ^ and looked out for, that their needs are being heard ^so yes it's been very positive.

20.45

Interviewer: Would you recommend to do a similar implementation of initiatives or similar projects for another company similar to yours or other SMEs in the region?

Interviewee: Yes definitely period I think it's interesting to look at the specific initiatives that we've done. Some have really taken off a lot more than others like the health initiative hasn't really taken off, so it might be to sort of narrow down on the initiatives and just pick three and roll those out in a few other companies. I think the needs of staff are quite similar across different companies if they're employing staff of a similar salary level so I think on water, on the education, I think those have probably been the two most successful initiatives. It might be just take it out to and roll those out into the other companies because I think that they need to be similar. You might not have to go to through the whole process of interviews which does take some time, but those have been quite successful.

Interviewer: Would you say that the investment in the employees welfare was worth the resources that you spent? You already came into it a little bit but just in general and you take the entirely had this been without the human rights project would it have been worth the time and money on the benefits that you get out of it?

Interviewee: I think without the human rights project it would be very unlikely we would have done the full scope of initiatives that we did implement and the scale that they were implemented because we have 54 members of staff, and that's our current team now but I think when we did the education training we had about 40 members of staff and they all got this course which is quite a lot period given, so given the economic environment we wouldn't have been able to support financially for the staff and doing the course so definitely through the grants were able to implement initiatives that we otherwise wouldn't have been able to do. It's gone a very long way.

Interview 2

Interviewer: First I'll just tell you a little bit, I'm writing my thesis on the human rights project and I'm reading about how it has affected the corporate performance in the different companies that have been involved. So this interview is more about your perceptions, and what your feeling is and the things you've seen so there is no specific answer I'm looking for

Interviewee: But you have specific questions?

Interviewer: Yes, I have specific questions

Interviewee: Okay, that helps.

Interviewer: I'm recording this interview but there's of course full anonymity. Just let me know if you have any other questions. I'm just going to start with some background questions. So, what is your position in the company?

Interviewee: I'm the project manager at Foxdale Estate

Interviewer: When did you start working at Foxdale Estate?

Interviewee: In February 2016

Interviewer: What is your age and education level?

Interviewee: I'm 28 years old, I've got a BTech in Construction, so that's a step below a degree but identical

Interviewer: And how much would you say You interact with the employees on a daily basis?

Interviewee: On a scale?

Interviewer: On a scale or how many times

Interviewee: I chat with them quite a lot. I give them out instructions constantly so from the foreman to the guy at the bottom rank. I give them instructions.

Interviewer: How involved would you say you've been in the human rights Project?

Interviewee: In terms of the rain and water harvesting units that were installed I've been quite involved in that. I was very involved in that from selecting the employees to installing the units and insuring that everything got done for the rainy season I was involved in that. And with regards to the other interventions, the education, the trainings at the training school, I've ensured that if they have to knock off early to go to school and there's not too much work to do, I've allowed that. I've given them transport. I've been relatively good.
Interviewer: Do you think there's been a change in the motivation of your employees, the motivation to work and if you could give just a few examples of what you mean

Interviewee: In terms of productivity what do you mean

Interviewer: In terms of motivation, so in terms of employee happiness

Interviewee: I think human rights interventions have definitely made them happier and they are more loyal to the company and they want to stay with the company, they are not looking to jump ship or they are not looking for other jobs. They feel that it's a good company and would like to stay and work with it.

Interviewer: Do you think there's been any change in this before and after the human rights Project, how big is effect do you think it's hard?

Interviewee: I think the employees are seeing the company who's committed to developing their capacity especially the new ones they've seen that it's a good company who cares about it's employees and they would like to stay with it they would like to stay with this company it's so I haven't had much labour turnover. I've had very few guys resigning or quitting or leaving for another company.

Interviewer: Do you believe that these initiatives have made it easier for you or will make it easier for you in the future to attract better employees or more motivated employees?

Interviewee: Yes I do

Interviewer: Have you seen any examples of this in the past or is it still too recent?

Interviewee: Any examples of what?

Interviewer: Of being able to attract better employees?

Interviewee: The thing is we don't advertise these things when we look for carpenters or bricklayers or artisans, we don't say hey we are doing these human rights interventions or providing you a medical scheme, provided you education and training, we don't call for that we say we need carpenters. Because of the high unemployment rates in Zambia, I get 50 applicants for one job call so no I don't think I'll be able to attract better employees for this but I think the ones who we do employ, who we feel are good are more likely to stay ^ that's what I feel they're more likely to develop a long-term relationship and they see themselves working with the company for a long time. ^ They envision it as a long-term thing and not just a stepping stone.

5.43

Interviewer: In terms of productivity have you felt any change or any effect in the employees productivity?

Interviewee: No I've not had any change in the productivity but I have felt more change in compliance. So if I give out an instruction it will be followed to the T and they will be more enthusiastic in carrying out instructions. In terms of productivity, no because when I'm not around still stuff doesn't get done. So It's not like I can delegate and give them targets and they will reach those targets, no. But I do feel like if I do give them orders the orders will be carried out without anyone being disgruntled or anyone being unenthusiastic. They wouldn't question my orders so I do feel like there's been an improvement in compliance.

Interviewer: Can you think of any other ways that the initiatives have affected the work environment?

Interviewee: Well you know not really. I mean from the education, from the training, they had with Thorn Park I feel like they're more safety conscious and they give safety talks every day because that was part of the training with Thorn Park to do health and safety so I feel that's affected the work environment in that way for the better.

Interviewer: So would you say overall this project has been an overall positive or negative experience?

Interviewee: I think it's been a very positive experience. it's improved the lives of the employees.

Interviewer: In terms of the work environment do you also feel a positive attitude or do you feel a little bit of positive experience for everyone in the office that people are appreciating it?

Interviewee: I think everyone appreciates it. Everyone appreciates every aspect from the medical to the education the rainwater harvesting units the water barrels. All the employees appreciate it, so it has been positive. It has been very positive.

Interviewer: Do you think the company will be able to monetize On the benefits that you've gained from this?

Interviewee: Do you mean monetize as in charge employees for it?

Interviewer: More like turning into profit or become a more profitable business. In terms of financial performance

Interviewee: Yes, like I mentioned although we haven't seen any productivity gains we've seen gains in compliance So it means that guys are not being idle, they're not loitering, they're not taking their time when they do things so when I do give out instructions they are followed and they are followed correctly. So I feel like in that way productivity is being boosted even if we are not seeing it in the numbers.

Interviewer: Would you recommend these initiatives to other SMEs, to other corporations?

Interviewee: Yes I would, definitely.

Interviewer: Would you say the Investment was worth the company's resources both in terms of time, money and also human resource?

Interviewee: yes yes I do. I feel like some of the interventions could have been better thought out or maybe we could have engaged with the employees before we rolled out, but overall I feel like the initiatives were worth it.

10.00

Interviewer: Do you have any other general thoughts about the project or any other things you've seen happen?

Interviewee: I'd like to see some financial literacy training if we ever do a next round, if there is ever another intervention program. I'd like to see them understand basic financial concepts because our employees are terrible with money. They will spend all their money and then they will go into the Township and go visit loan sharks and borrow at 50% interest per month which works out to 600% per annum and they get into financial debt and can't get out of it. So I'd like to see our employees have financial literacy so they don't get into that debt trap.

Interviewer: Do you feel that has an effect on the work or the work environment and general?

Interviewee: yes because it means - when they are under that they're under debt they're under a lot of pressure and then might be more inclined to ask for a salary advances some of them might be looking to steal company property, things like that. Things that put them at risk. I feel like in the next round of Human Rights interventions if we ever do it that should be included, some financial literacy classes. Not just related to how to borrow and at what interest rates but even simple things like negotiations. If the employees can be taught negotiation skills, I feel that could help them a lot. Some of them they are hopeless at that.

Interview 3

Interviewer: So the reason I wanted to do this interview with you is to talk about the human rights project.

Interviewee: The human rights project?

Interviewer: The project that Foxdale Court has been doing with Kukula Capital. Including the rain water harvesting and other initiatives. I'm here to just talk about your opinion, there is no specific

answer I'm looking for, just your opinion and your perspectives. So, first I'm going to ask about your background.

Interviewee: My background

Interviewer: Yes, so what is your position at Foxdale

Interviewee: My position is uh I'm a security officer

Interviewer: And when did you start working here

Interviewee: I started working here on the 1st of November 2011

Interviewer: What's your age and education level

Interviewee: I'm 29 years old, and uh education level is basic, I did not go through secondary school, I just did some basic, of which I did from grade 1 up to (/) 9

Interviewer: How much would you say you interact with your managers and employees on a weekly basis

Interviewee: Pardon

Interviewer: How much do you interact, talk to, the people at Foxdale Court, the other employees

Interviewee: How often

Interviewer: How often do you meet or talk with the managers

Interviewee: Many times, uh many times

Interviewer: How involved have you been with this human rights projects

Interviewee: Uh, 3-4 times

Interviewer: Ok, thank you. Uh how would you describe your benefits from working with Foxdale Court before and after these initiatives

Interviewee: Ok, (/) I have benefitted quite a lot from Foxdale Court, especially where working conditions are concerned. I work under minimal provision, you know. We have that free of mind, we are not being pressured by seniors where work is concerned. We work on minimal provision.

Interviewer: Have you used any of the benefits from the human rights project? Any of the iniatives?

Interviewee: One thing we have discovered from this, we have been attending so many meetings with the same people, the Kukula people, but there are certain things that are not yet seen changing and we need to be helped in these things. You cannot see any change.

Interviewer: Can you explain what areas you don't see any change

Interviewee: I would love to talk about this initiative that was recently introduced, uh, the (/) schools that initiative, or that plan, was done not in a proper manner. It was (/) made others not to benefit or not to be part (/) of the same project. Especially my department and the cleaning department. We found it very difficult to attend to school programs, due to the shifts we have in our departments. ^ There aren't many people that attended this programs fully, except the maintenance department and gardening department. ^ Like us, we failed to attend, even the certificates we didn't even get because we didn't do focus.

5.40

Interviewee: And the other thing, we're looking at these other conditions, especially where salaries are concerned, these are the things that affect us the most. We get little money, and it's difficult for us to survive with our families in our compounds. Otherwise life in Zambia, I know it's everywhere ^ in the world, but what I'm asking for, if they were to look into this matter I think even things can change, you know. The major thing is adjusting the salaries, once they tackle this problem, ^ I think work will be work.

Interviewer: So you think this issue is more important than the other things that have been implemented or have you seen any results from them as well, even if it didn't affect the salaries?

Interviewee: We have received the other things, like these other initiative, which was good. The issue of container wheelers. Those things are helping also. But at the same time the container wheeler, when we fill water in that container, that thing is quite expensive, more than the containers, the normal containers, we use. They charge us more, because of how big that container is ^. So, this also, we do benefit, but not much more than what we expect. ^ The only that we received, or what I can say about the container is it helped us much in terms of maybe carrying water, it's easy for us to fit in short days. But where funds are concerned the water wheeler is much more expensive.

Interviewer: Ok, and do you fell that Foxdale Court in starting this initiative has made you feel a change in your motivation, as an employee?

Interviewee: The change is there, but not in the manner we expected. We thought, uh, I feel it's almost one and the same. There isn't motivation.

Interviewer: Ok, and do you think there has been a change in your effort at work? Do you think you are more or less willing to make sacrifices, so for example stay longer or work harder?

Interviewee: As I said before, Foxdale, as for me, I think it is a good company because of the way I work. My mind is free. You know there are some companies where you are working and you are not free ^, because of the management. But our management is a good management, despite having these problems. I am still willing to work, many more years than I have. Because of the way they make us work. ^ But they just need to improve where our salaries are concerned, because we don't even benefit in ways which other people are benefiting in other companies. Like, we do not have access to clinic or hospital schemes, all those things it needs to be looked at. Training, education. We have, we do not have everything, we do not have access to that. Now if you look at our payments, our salaries, we are even finding it difficult to educate our children. I'm not educated but I don't want my children to be where I am, I want at least change, if I'm not educated now I should make my child educated, so that in the future she or he doesn't suffer.

11.11

Interviewer: And, do you identify more with Foxdale Court after they made these initiatives?

Interviewee: This medicine initiative, for us, or let me not put it in general, for me this was a good initiative but the way [interupted] but looking at the way it was brought, I think it wasn't a good idea. (/) But the way they had to put it, I think, we are not benefiting Madam. They said the medical, this medicine initiative, they told us to say, we will be curating medicine through this pharmacy downstairs and this medicine should only be worth 25 Kwacha per month. Now if you go to the hospital you are given a prescription and that medicine, you will find, is even costing you more than 25 Kwancha. The company told us to say, we cannot get the medicine which is more than 25 Kwancha, we just need to maintain at 25 Kwancha or less than that.

Interviewer: Ok

Interviewee: Now, what can that 25 Kwacha, Madam, help us, sometimes we even feel like we better don't go there. We decide, we just decide to use our own money, if you happen not to have money we just borrow and then we buy. Rather than going to the office, it's a challenge, it's a big challenge. Otherwise in terms of this medicine initiative, I think for me, it's not a good idea ^. They did that in order to help us, but its small, they are not helping us. And if you did not go there to get medicine for the other months, then you are going to have a problem. They don't, they didn't come up with this idea, that if you didn't collect that medicine in the previous month they do not ^ transfer that figure to the other, that's where the problem is. Otherwise I feel like they are not helping where this issue is concerned.

Interviewer: How does that change your motivation at work? Did that change your motivation in any way?

15.00

Interviewee: Pardon

Interviewer: When you feel like they are not helping, does that change your motivation in any way?

Interviewee: (/) Once I like the company, I like it. I've worked in so many companies before joining Foxdale. And I looked at Foxdale as a better company, because I've seen those before. That's why I've stayed in this company for 6 years, it's not a joke. ^ I still don't have that in my mind yet. You know, this is what I tell people, you don't just wake up and say today I will resign, you need to think about it. What you do, and what normally happens in that company. And compare the people you

have worked with somewhere and the people you are currently working with. These are the things you should look at. For me, despite having these things, offering some challenges, that cannot make me think over that.

Interviewer: Can you think of any other ways this initiative has affected you?

Interviewer: [Laugh] Would you say the project or these initiatives have been overall positive or negative?

Interviewee: I has been positive, but to be honest (/), for me it hasn't been fully positive. There are so many negativities in that project. Unless, (/) you just consider what the workers need, once you consider opinions, then the project is going to help us and it is going to be positive. Because it is going to do to what everyone wants it to be.

Interviewer: You don't think the initiative has achieved that? Do you think the initiatives has achieved or do you think it hasn't achieved that?

Interviewee: Hm, it's quite tricky. It has been. It has been.

Interview 4

Interviewer: So the reason I am doing these interviews is to ask different people who are involved in the human rights project of their opinion and their perspective. So, I'm not looking for any right or wrong answer, it's just your opinion and what you feel about the project.

Interviewee: Ok

Interviewer: As I said, the interview is recording and there is full anonymity so none of your information will be shared it's between you and me. So, first I will start with some background questions. What is your position within the company?

Interviewee: I'm the head of the maintenance team.

Interviewer: When did you start working at Foxdale Court?

Interviewee: I've been here 7 years now, 7 years.

Interviewer: What's your age and educational level?

Interviewee: 31 years. I went to school. It's just because of some family issues, my father died, I just did from grade 1 until 7. (/)

Interviewer: How much do you interact with other employees and managers?

Interviewee: Come again.

Interviewer: How much do you talk to and work with the other employees and managers?

Interviewee: We are communicating. But not so much with [the director]. Our manager and some other guys in the Foxdale office, we are cooperating, we are doing our best.

Interviewer: How involved have you been in the human rights project?

Interviewee: Come again

Interviewer: How involved would you say you have been in the human rights project? So, the project Foxdale Court has done with Kukula Capital to do the rain water harvesting and the training and the medicine?

The project, (/) it has helped us. Like medicine. But I think there is a bit, like you know what I mean, 25 Kwacha. It's not. I think it's a small amount.

Interviewer: What about. Have you used any of the training?

Interviewee: Yes, I did. I got the training, electric and the plumbing trainings. Yes, I did.

Interviewer: What about the rain water harvesting?

Interviewee: I don't have that. I've been involved in the water wheel trainings. ^ and also medicine.

Interviewer: Would you describe your benefits before and after you got these initiatives?

Interviewee: I have benefitted a lot. What I can say is that even before I benefitted. I remember, before I started working here, I was a general worker. From general worker I was promoted to learner bricklayer. From learner bricklayer to senior bricklayer. From that until now I'm the head of the department. After that, I also benefitted from the trainings that we had. The trainings. And it's not just here our benefits, even in my future, if I stop working here, I go, I still benefit. That's the main one ^ where I have benefitted, the trainings.

Interviewer: So, do you feel a change in your motivation as an employee before and after you attended the training?

Interviewee: Before, I didn't benefit much, but after we did the trainings, as you know, and also the medicine, I think there is a bit of change at least.

Interviewer: Can you give an example of this change?

5.01

Interviewee: Like for the trainings?

Interviewer: Yes

Interviewee: I was a bricklayer. I don't even know how to do plumbing or electrician work, but now I know. I know everything. Plumbing, electrical work. I'm benefitting and I will be benefitting.

Interviewer: And do you think that this has made you more or less willing to sacrifice for work? So for example to stay longer or work harder?

Interviewee: I think the problem now. I think there's a bit of a problem with our office now. The Foxdale office. You can have that .. . I want to be in this company for so many year but the thing is that our salaries ^ even if I tell you my salary, what I am getting at the month end, you can't even, you know what I mean ^. But like, this initiative, you are coming with, it's a good one. We are benefitting. Because if it was only Foxdale minus this Kukula initiative, I think I wouldn't be the same like I am today.

Interviewer: So, you think it has made different?

Interviewee: Yes, there is a bit of change

Interviewer: And, do you identify more with Foxdale Court after they made this initiative?

Interviewee: Yes. There is a bit of change, like with medicine. I think for medicine, 25 Kwacha, I don't think it's enough for medicine. You can go to the chemist, you will find that the illness you have, to get that medicine, you have to pay about 50 Kwacha. Then you are not qualified to get the medicine. I think it needs to be a bit, maybe you can bring it up, change on medicine. But for the water wheels and training, it was perfect. We appreciate that.

Interviewer: Do you feel, yourself and your colleagues make more of an effort at work now than before you had the water wheels and the training?

Interviewee: Like, the water problem where we live, in the compounds, I think water was a challenge, because we used buckets. 20 liters on this side and 20 liters on that side. From the time I got my water wheel, when I got my water wheel, I think there was a change. Because, that one does not have labour, you know what I mean. The labour is less now than the way I was doing it before the water wheel. But the water wheel is perfect. It's perfect. Even the people in the compound say: "Where did you get this" "We need this also", something like that.

Interviewer: Do people in your compound, do you think they are more willing to apply to Foxdale Court, when they see your water wheel?

Interviewee: Yes, exactly. They want them. (/) We are using the tabs and we pay the water wheel. I think there is a difference, when I get two buckets of 20 liters, then the water wheel is 45. The two buckets are 1 Kwacha, and that is 40 liters. Then the water wheel is 45 and the water is still at 1 Kwacha, there's a differences of 5 liters. It's like it is for free now. 5 liters is for free. I'm happy with that.

10.03

Interviewer: Would you say, is there any other way this initiative has affected you, not only in your work but also in your personal life?

Interviewee: Yes, because before I had no certificate of plumbing or whatever. That certificate can help me here and if I stopped working here still. And also the water wheel. It's all the same, even if I stopped here I would be using the same.

Interviewer: And would you say then that this project has been overall positive or negative?
It's positive. There is a change. We're happy about that.

Interviewee: What I will just add *. The medicine I think is a bit.

Interviewer: Is there anything else you would like to add or any other comments on the project?

Interviewee: No, but what I can say is, because as human beings there's no way you are working and you are not improving. Because when you are working, you are different from someone who is not working. ^ Because if you are working, you are like a house, you need a foundation and then coming, coming until the house is finished. That's how we are supposed to be, we need to start with a bit and a bit and then we are moving. We don't just stay at the same position for a long time. I think there is a change.

Interview 5

Interviewer: So, the reason I'm conducting this interview is to get your opinion on the human rights project and what outcome you think has come out of it. So, I'm not looking for any specific answers, I'm looking for your perspectives and your opinion about the project. And, I will be recording the interview as well. First of all I will start with some background questions and then I have some specific questions for you regarding the project and your opinions about the initiatives. So first, what's your position within the company?

Interviewee: I'm the property manager

Interviewer: And when did you start working here?

Interviewee: I joined in 2013, beginning of 2013

Interviewer: What's your age and educational level?

Interviewee: I'm 28. I have done, mostly finance, [laughs] I know I have … in finance, but I have been like everywhere in the company.

Interviewer: How much would you say you interact with the employees?

Interviewee: A lot.

Interviewer: How involved would you say you have been in the human rights project?

Interviewee: Not very much. What I have is mostly organised the training and finding the logistics for the guys, also just getting feedback from them whether there's an issue.

Interviewer: Thank you. So, do you think there has been a change in employee motivation before and after this initiative?

Interviewee: I think there has. Especially, with the, I'll take something very specific, like with the medical arrangement that we have with GraceChem. Initially we never used to have that, so whenever anyone used to have a headache or any medical related issues they would come and apply for it, wait for approval, but with the new medical scheme it's kind of like a good motivation for them. They are very excited about it and they are very, very happy, because in a country like ours health care is a big issue. So for them to have some sort of scheme that works for them is one of the most positive parts of the initiative.

Interviewer: Do you think there has been a change in employee loyalty as well?

Interviewee: What

Interviewer: In the employee loyalty?

Interviewee: Yes, I think so. I feel, because of this new program, initially everybody would just do their job, get their salaries at the end of the month and shut themselves off, but it kind of makes them feel more of like a family environment. They feel like the company is very concerned not just about their input to their company, but beyond that to their homes and their (/) and their futures. So I feel like, yes they're really part of the business.

Interviewer: Ok, do you believe it will make it possible for you to attract better employees in the future because you have made these initiatives?

Interviewee: Yes, I think it will. We have a great team already, but also whenever you are interviewing a new potential employee, they want to know what benefits comes with the job. It's not just the pay, they want to know is there a future in the company, they want to know the medicals, in case of an accident what the benefit or what security do I have that the company will take care of me. So those are the questions most potential employees would ask in an interview, and then now because of whatever we have going on there's more interest in people ^ wanting to work for Foxdale.

Interviewer: Would you say it has also made it easier for you to retain your staff or do you think there has been any change in how you can manage to retain your staff?

Interviewee: Mostly, our, even before, our employee turnover has been very, very good. We have guys who have been with the company right from the beginning and are still with us. So I would say it was good already, we haven't seen any changes because we haven't had any loss of staff from the last, I think the last year or so.

Interviewer: Yes, do you think it has affected the employees efficiency and productivity?

4.58

Interviewee: From there, I can't really confirm. I haven't had the time to really monitor them, because they just finished the program just a few months ago, so there hasn't been time to weigh or evaluate if the performance has improved after the training ^ yes.

Interviewer: Ok, can you think of any other ways these initiatives have affected your workplace?

Interviewee: Just like, more I would say teamwork. Before we had like different departments of security, cleaning, maintenance and gardening, and each of them were like more independent groups. But then with the training they kind of bonded and became a big family. They will come if they have a problem. They will group up before it even reaches the office, they will discuss it

internally between themselves. So it has kind of increased the team spirit and also just the teamwork. They are really working very hard in cooperating together.

Interviewer: Ok, so would you say this has been an overall positive or negative experience for the company?

Interviewee: It's been very positive. From the time that the scheme was introduced, there has been very positive response, both from the management and from the departmental staff too.

Interviewer: Do you think, is this something you would recommend to similar companies or other SMEs?

Interviewee: Definitely. I would recommend it. Even more, everybody would be welcome for such. Especially the training, like increasing the knowledge of the work environment. Because as much as we have, maintenance department with specialised electricians and specialised plumbers, they may not be here for 24 hours. The guys who are here instead are security, who have no idea about any of the electrical planning or whatever. So in case of an emergency we always have to rely on a maintenance guy from his home in the middle of the night, and transport, but if we train the guys are able to understand basic electrical, plumbing works and then have professional help to come over and finish the job. So definitely I would recommend for any other company.

Interviewer: Would you say that the initiatives have outweighed the costs of implementing them?

Interviewee: I haven't quite looked at the figures, but definitely it has. Because it was partly sponsored by us and the grant we received. The benefit. We just hope that we don't have any staff turnover and then we will be back to square one. Finding new people. But yes, the benefits are really there. Lot of benefits. I think it outweighs the cost.

Interviewer: Do you have any other things you think has come out of this, sort of anything else that has effected the employees or the workplace?

Interviewee: Specifically no, I don't think so. I just feel like they are very, very motivated and feel like they are part of a family and a company that really cares about them beyond the working hours.

Interviewer: That's everything I have, do you have any questions for me or anything you would like to add?

Interviewee: No. However, I just wanted to add a concern from some of the guys if the medical facility can be reviewed again, maybe to something a little bit wider. I think the average cost per month is about 40 Kwacha per month, which is a bit minimal for a person with a large family. If it can be extended a little bit, I don't know. And also if it can cover, even other medical skills like basic clinical checkups for malaria or any other (/) diseases, that they can (/). Because that's where most of the expenses comes from. If someone has a child who has malaria the expense is just huge for medicals and transportation. So if this thing can be extended for medical, I think that would be great.