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Child labour, child labour laws and economic growth – The case of Bolivia

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Abstract

The objective of this thesis is to conduct an illustrative case study examining how child labour and the decision to legalize child labour from age ten might impact Bolivia's future economic growth and development. By doing so, this thesis yields insight into the issue of child labour and its impact on economic growth and development as well as the effectiveness of child labour laws and regulations, especially minimum age of employment regulation. This thesis shows that child labour has a negative impact on economic growth and development, however, it also shows that child labour laws and regulations are very often not enforced and that they therefore are not as effective as most people hope. Well-intentioned regulation might actually make children and their families worse off. The effect of Bolivia's legislation on child labour and consequently economic growth and development remains uncertain.

KEYWORDS: Children, Child labour, Economic Growth, Laws and regulations, Bolivia

Table of contents

1	Introduction	p. 1
1.1	Research questions and objectives	p. 2
1.1.1	Delimitations	p. 3
1.1.2	Terminology and definitions	p. 3
1.1.2.1	Child labour	p. 3
1.1.2.2	Economic growth and development	p. 4
1.2	Methodology, method and material	p. 4
1.2.1	Preconceptions, biases and the importance of objectivity	p. 5
1.3	Disposition	p. 6
2	The Bolivian context	p. 6
2.1	Child labour in Bolivia	p. 9
3	Theoretical framework	p. 11
3.1	Human capital theory	p. 11
3.2	Economic growth theory	p. 12
3.2.1	Jones' simple model of growth and development	p. 14
4	Child labour and economic growth	p. 15
4.1	Child development	p. 15
4.1.1	The impact of child labour on education	p. 15
4.1.2	The impact of child labour on health	p. 17
4.2	Poverty persistence	p. 18
4.2.1	Child labour breeds child labour	p. 19
4.2.2	Child labour leads to higher fertility	p. 20
4.2.3	Child labour depresses wages	p. 20
4.2.4	Child labour discourages the adoption of new technologies	p. 21
5	Child labour laws and regulations	p. 21
5.1	International labour standards on child labour	p. 22
5.1.1	The Convention on the Rights of the Child (1989)	p. 22
5.1.2	Convention No. 138 on the Minimum Age of Employment (1973)	p. 23
5.1.3	Convention No. 182 on the Worst Forms of Child Labour (1999)	p. 24
5.2	Notions of childhood and approaches to child labour	p. 26
5.2.1	Children fighting for the right to work in dignity	p. 27
5.3	Bolivian child labour laws and regulations	p. 28

5.3.1	The Children and Adolescent Code (2014).....	p. 28
5.3.1.1	Protecting the rights of working children.....	p. 29
5.3.1.2	The history of the code.....	p. 30
5.4	The effect of child labour laws and regulations	p. 31
5.4.1	Enforced regulations would change how children work.....	p. 31
5.4.2	Regulations are rarely enforced.....	p. 33
6	Bolivia's future prospects.....	p. 35
7	Conclusion.....	p. 37
8	Bibliography.....	p. 38
	Appendix A – Derivation of the mathematical expression for steady state per capita income in Jones' simple model of growth and development	p. 45
	Appendix B – Worst forms of child labour in Bolivia.....	p. 47

1 Introduction

“In all actions concerning children [...] the best interests of the child shall be a primary consideration” (UN 1989: art. 3). Children are our present and our future, and they have the right “to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development” (UN 1989: art. 32). Child labour is a widespread phenomenon and a majority of countries have adopted legislation to prohibit or severely restrict the employment of children. However, despite all efforts there are still 264 million working children around the world and 168 of them are classified as child labourers under local laws (Edmonds 2015). These children are too often robbed of their childhood and trapped in the cycle of poverty with few chances of a better life. The focus of this thesis, however, is not the morals of child labour but rather the economics of child labour.

“To end poverty and boost shared prosperity, countries need robust, inclusive economic growth. And to drive growth, they need to build human capital through investments in health, education and social protection of all their citizens.” – Jim Yong Kim, World Bank President (Todaro and Smith 2015: 382). Child labour is both a cause and consequence of poverty. It can be seen as a result of poverty, a strategy to avoid poverty and a factor perpetuating the circle of poverty through generations (Samonova 2014). Time devoted to child labour reduces time available for investments in the education and health of children, thus impacting the accumulation of human capital, which is vital for economic growth and consequently poverty alleviation (Jones and Vollrath 2013). On the 25th of September 2015 the United Nations adopted a set of goals aiming to end poverty, protect the planet and ensure prosperity called the Sustainable Development Goals. One goal is to “promote inclusive and sustainable growth, employment and decent work for all” (UN 2016a), and to achieve the goal countries should “take immediate and effective measures to [...] secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms” (UN 2016a). Child labour is thus seen as an obstacle to economic growth and development that need to be eliminated.

The dominant tool used to combat child labour globally is minimum age of employment regulation (Edmonds 2014), however, the concept of childhood varies between countries and cultures resulting in different approaches to child labour. Depending on the position one

takes, one can argue for all forms of child work to be abolished or to be regulated in order to restrict exploitive work (Bourdillon et al. 2009). The premise that all forms of child work are harmful leaves no room for the beneficial effects of work on children. Legislation should reflect reality and in reality, work constitutes an integral part of the lives of many children, especially in developing countries. Working children therefore fight for the right to work, be recognized and enjoy the same rights as adults. They fight for the right to work in dignity, which they see as a human right (Hanson and Vandaele 2003).

Bolivia is a country where more than a third of the population live below the national poverty line struggling to survive and where child labour is a widespread phenomenon (World Bank 2016c). In order to reflect reality and protect the rights of working children Bolivia adopted the controversial Children and Adolescents Code in 2014. The code contradicts international standards and recommendations, and has been seen as a step backwards (Watson 2014).

1.1 Research questions and objectives

Children are our present and our future. Destroy them and destroy every chance of economic growth and development, any chance of prosperity. This thesis will therefore focus on the relationship between child labour, child labour laws and economic growth. The objective is to conduct an illustrative case study examining how child labour, and the decision to not abolish but rather legalize and regulate child labour, might impact Bolivia's future economic growth and development prospects. By doing so, this thesis yields insight into the economic consequences of child labour as well as the effectiveness of child labour laws and regulations.

Answering the following research questions operationalizes the objective:

- How might Bolivia's new legislative approach impact Bolivia's future economic growth and development prospects?
- How does child labour impact economic growth and development?
- What are the effects of child labour laws and regulations in general, and minimum age of employment regulations in particular?

1.1.1 Delimitations

There are many different fields within the discipline of economics; development economics is, however, the field that interests me the most and thus the focus of this thesis. Economic development is a complex and multidimensional concept and this thesis will not look closely at economic development per se but rather examine a single piece of the development jigsaw. The phenomenon examined in this thesis is child labour. Child labour generates benefits and costs at both micro and macro level, this thesis mainly focuses on the consequences of child labour at the macro level. Child labour is present all over the world but mainly in developing countries, developing countries can thus be seen as the geographic delimitation of the literature review and general discussion of the thesis. The case study will, however, be limited to Bolivia as this thesis aims to determine Bolivia's future economic growth and development prospects. It is important to be aware that boys and girls around the world are faced with different opportunities, however, gender is not one of my delimitations and both male and female child labourers will consequently be studied.

1.1.2 Terminology and definitions

According to Wallace "we write because we have ideas to convey" (Wallace 2003: 16) but sometimes words can create confusion and misunderstandings. Hoping to avoid confusion and misunderstandings two central concepts will now be defined.

1.1.2.1 Child labour

In accordance with the Convention on the Rights of the Child, a child is any person under the age of 18 (UN 1989), and according to the International Labour Organization (ILO) the short and concise definition of child labour is "work that deprived children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development" (ILO 2016c). It is work that children should not be doing because it is dangerous or otherwise unsuitable for them, or because they are too young (ILO 1973, ILO 1999). Participation in activities that does not affect the health and personal development of children or interfere with their schooling is generally regarded as positive. It contributes to child development, provides children with skills and experience, and prepares them to be productive members of society (ILO 2016c). There is thus a difference between child work and child labour, however, below the minimum age of employment all child work is considered child labour (ILO 1973). The

worst forms of child labour are always prohibited and include slavery, prostitution and pornography, illicit activities and hazardous work. Hazardous work being work that by its nature or circumstance is likely to jeopardize the health, safety or morals of children (ILO 1999).

1.1.2.2 Economic growth and development

Economic growth is an increase in the productive capacity of an economy, usually measured as an increase in an economy's gross domestic product (GDP) over time. Economic growth might lead to improved living standards and economic development by increasing average income per capita, however, economic development is a more complex concept than economic growth. Despite the complexity of economic development, GDP per capita is considered a summary statistic of the level of economic development in the sense that it is highly correlated with other measures of quality of life (Jones and Vollrath 2013).

1.2 Methodology, method and material

An empirical econometric approach is probably the most common approach within economics and while a statistical inductive process testing hypotheses would have been interesting I have chosen another path. To address the purpose of the thesis and answer my research question I will apply my economical knowledge to a current problem using my words in a descriptive and analytical manner. Ethridge argues, "the beauty of economics rests in its theory, but the power of economic lies in its application to current problems" (Ethridge 2004: 11). He sees economics as an art and a science; a science as it accumulates knowledge through systematic inquiry and an art as it applies knowledge to current issues and problems.

Economic growth theory and human capital theory contributed to my decision to look into the effect of child labour on economic growth, and reviewing the child labour literature I found it interesting that Bolivia decided to legalize child labour from age 10 in 2014. Thus going against international standards and recommendations. Child labour is inherently difficult to measure; much of it is unpaid work, often performed in a family context (Dessy and Knowles 2008). Child labour data is scarce both across countries and over time (Boockmann 2010). Unfortunately there is no empirical child labour data available post the new child labour law making it hard to see the effects the new law has had so far. This also made a qualitative approach, emphasizes words rather than quantifications, more suitable. Economic theories,

literature and reasoning will be applied to a contemporary problem, child labour. The research process will be based on deductive logic where the general leads to the particular (Cloke et al. 2004). Given information about Bolivia, the impact of child labour on economic growth, and the effectiveness of child labour laws and regulations on child labour rates, my objectives is to deduce how Bolivia's new child labour law will impact Bolivia's future economic growth and development prospects.

Knowledge accumulates and people both learn from and build on what others have published and a review of literature is therefore essential for all research. The foundation of the thesis is articles written by scholars in the field of economics but as child labour is an interdisciplinary phenomenon papers from other fields have also been used. The material used includes both qualitative and quantitative sources. My first step after deciding the subject of the thesis was to conduct a systematic literature search utilizing the search engine of Lund university, called LUBSearch, and online search engines like Google. Children, child lab*r, child work, economic growth, economic development, human capital, laws, regulations, minimum age of employment, and Bolivia were used as key words on their own or in combination. This generated multiple sources, which were divided into categories that enabled the summarizing and structured the review process. A critical review of the literature was carried out to decide the reliability of the sources. Various problems with the literature have been encountered during the process. There are few papers on minimum age of employment, and slightly more articles and papers on child labour and its relationship with economic growth. However, while child labour has been on the human rights agenda for a few decades, it is has only been studied by economist more recently. Another problem was to find current information about child labour and the situation of working children in Bolivia where the latest national survey on child labour was conducted in 2008 making it eight years old. Since then some household surveys have been made but the information about child labour in those are very limited.

1.2.1 Preconceptions, biases and the importance of objectivity

Objectivity is considered the cornerstone of science and reliable knowledge, and its role is “to avoid bias in the production of knowledge, not to deny the place of values, beliefs, and opinions in one's activities” (Ethridge 2004: 55). New experiences are understood from previous experiences, and no matter how little you think you know and how unbiased you think you are, it is impossible to not have any preconceived notions. I have been to Bolivia as

part of an exchange regarding children's rights between The Guides and Scouts of Sweden and Yanapi, an organization in the poorest part of El Alto that supports girls to build self-esteem, make their voices heard and create a better life. This experience also made the decision of looking at child labour in Bolivia more interesting. Furthermore, growing up in white middle-class family in Sweden my view on childhood probably differs from someone growing up in the developing world. Objectivity is important when conducting research, and while complete objectivity is impossible (Ethridge 2004), my objective is to avoid moral arguments about how children should spend their time and instead focus on quantifying the cost of working for the child and for society. I will do my best to put aside all my biases and preconceived notions while reading and analysing the literature, and while writing the thesis.

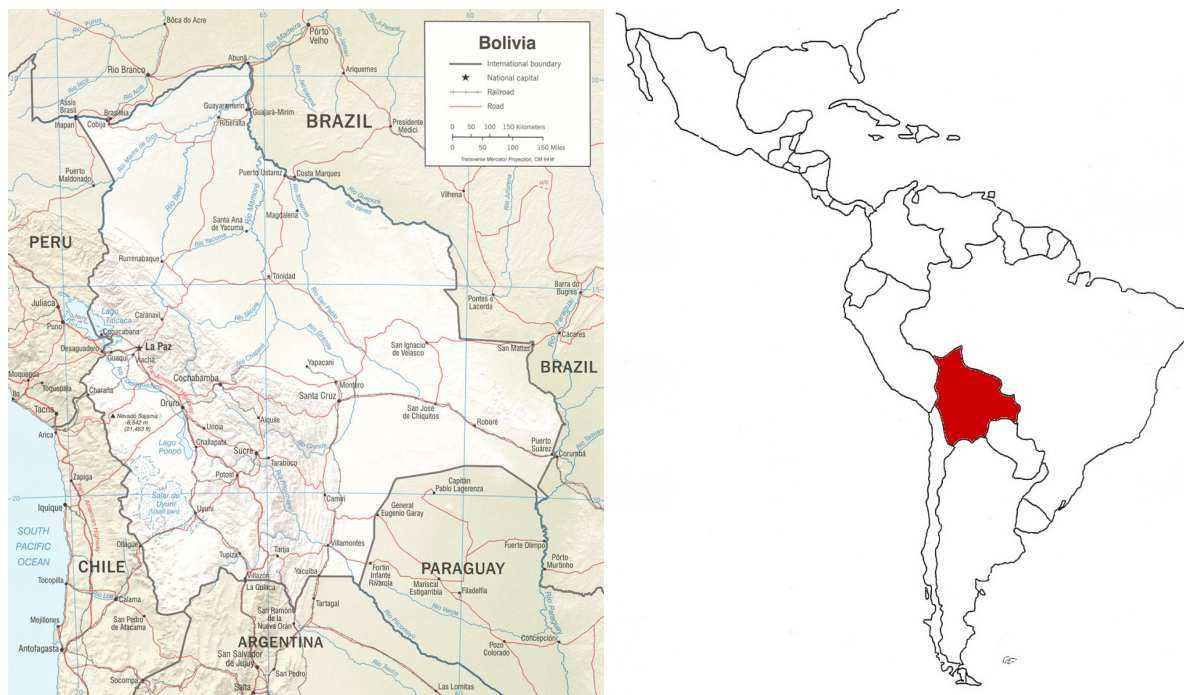
1.3 Disposition

The thesis is organized as follows. The next section provides background on Bolivia thus creating a context for the discussion and analysis. Section three provides the thesis with a theoretical framework, a perspective through which to examine child labour. Section four examines the impact of child labour on economic growth through its impact on child development and poverty persistence. Section five is devoted to child labour laws and regulation and their impact on child labour rates. Section six analyses and discusses Bolivia's future economic growth and development prospects as a result of their new legislative approach. Finally, section seven concludes the thesis.

2 The Bolivian context

Bolivia, officially known as the Plurinational State of Bolivia, is a multi-ethnic, majority indigenous, country situated in the heart of South America. It is a landlocked lower middle-income economy rich in natural resources with borders to Argentina, Brazil, Chile, Paraguay and Peru. It is the poorest country in South America, the third poorest in Latin America after Nicaragua and Honduras, and there are large regional disparities in the distribution of wealth (NE 2016, World Bank 2016a).

Figure 1. A physiographic map showing Bolivia's diverse geography, and a map of Latin America situating Bolivia in the heart of South America (CIA 2006, UT 2016).



Bolivia, named after independence fighter Simón Bolívar, broke away from Spanish rule in 1825. However, much of its history since independence has consisted of social and political instability with a series of nearly 200 coups and countercoups (CIA 2016). The instability has partly been a result of inequalities and power structures created during colonial rule. For example, even after independence, Bolivians of European decent expected Bolivians of indigenous decent to ride in the backs of buses and move to the opposite side of the street to not offend the sensibilities of decent people. Moreover, the indigenous majority were referred to in the familiar *tu* rather than with the formal *usted* (Gurr and Burke 2000). Fortunately the indigenous population has gained both rights and political power during the last decades, however, they still remain the “poorest people in an impoverished country” (Gurr and Burke 2000, p. 178). A country that still faces difficult challenges such as poverty, inequality, social unrest, and illegal drug production (CIA 2016).

In December 2005 Evo Morales, left-wing politician, activist and political leader, was elected president by the widest margin of any leader since the restoration of democratic civilian rule in 1982. Morales is a former coca leaf farmer and llama herder, and the first president to come from the indigenous population. His goal was to change Bolivia’s political class and empower the nation’s poor, indigenous majority. Morales was re-elected in 2009 and 2014, making him

the current president (CIA 2016), and according to Morales himself, his last victory was “a triumph for anti-imperialists and anti-colonialists” (The Economist 2014). Morales and his administration have through the years mixed ethnic politics with economic growth (Fontana and Grugel 2015). The focus has been on indigenous rights, nationalization of natural resources, land distribution, poverty reduction, and combating the influence of the United States of America and multinational corporations in Bolivia (CIA 2016).

As a country Bolivia has a diverse geography with sharp contrasts and a variety of terrains and climates. Three major physiographic regions shape both its politics and its economy: the high plains, the mountains valleys and the lowlands. The high plains of the Andean region has a cool climate, are endowed with a wide range of metals, and serve as pasture land for raising livestock for wool. Also located in the Andes on the border between Bolivia and Peru is Lake Titicaca, South America’s largest lake as well as the highest commercially navigable lake on Earth. The valleys, on the other hand, have a temperate climate, are the most fertile and sustain traditional agriculture. The last physiographic region, the tropical lowlands are rich in oil and natural gas deposits but also sustain commercial agriculture and cattle breeding. Bolivia is endowed with South America’s second largest natural gas reserve (NE 2016).

Looking closer at the Bolivian economy and some social indicators one can see that economic growth averaged 4.9 per cent between 2005 and 2015 (World Bank 2016c), this thanks to “high commodity prices and a prudent macroeconomic policy” (World Bank 2016b). The favourable economic context helped reduce the number of people living below the national poverty line by 21.3 percentage points. The GINI index fell from 0.58 to 0.48 in the same period showing reduced inequality. Nonetheless, 39.3 per cent of the Bolivian population still live in poverty, and while the richest 10 per cent of the population holds 35.55 per cent of national income, the poorest 10 per cent only holds 0.92 per cent (World Bank 2016c). The Bolivian population currently equals 10.7 million and 49.9 per cent of those are women. Two thirds of the population lives in rural areas and one third of the population lives in urban areas. It is a young population. The median age is 22.8 years, 32.5 per cent of the population is under 14 years and over half of the population under 25 years, resulting in a relatively high dependency rate (CIA 2016, World Bank 2016c). Primary education is free and compulsory in Bolivia and both enrolment and completion rates are high. In 2012, the survival rate to the last grade of primary education stood at 96.7 per cent and overall adult literacy stood at 94.5 per cent (World Bank 2016c). The average years of schooling of the population over 15 was

8.25 years in 2010, however, it was 8.49 years in 2005 indicating a decline in the average years of schooling (Barro-Lee 2016). However, Bolivia's human capital index, based on years of schooling and returns to education, show an increase from 2.49 in 2000, to 2.72 in 2010 and 2.83 in 2014 (Feenstra et al. 2015). Barriers to education exist resulting in considerable differences in education between indigenous and non-indigenous children, and between rural and urban areas. There is, however, no significant gender gap in access to education. Aimed to encourage children to enrol in school and to remain in school, the Bono Juancito Pinto was established in 2007 as a conditional cash transfer programme (ILO 2012).

2.1 Child labour in Bolivia

This sub-section of the thesis will be based on the last national child labour survey (*Encuesta de Trabajo Infantil*), which was conducted in 2008 and carried out by the Bolivian National Institute of Statistics (*Instituto Nacional de Estadística de Bolivia*) with help from the International Labour Organization. The survey is unique for two reasons; it includes children as young as 5 years old, and it uses children as direct informants. The findings of the survey are presented in a report called "Magnitud y Características del Trabajo Infantil en Bolivia" (The magnitude and characteristics of child labour in Bolivia, ILO and INE 2010).

Child labour is a widespread phenomenon in Bolivia. The findings of the child labour survey show that 27.94 per cent of Bolivian children between the ages of 5 and 17 are involved in economic activities; this equals approximately 850,000 children. The findings also show that children from rural areas are significantly more likely to work than children from urban areas (64.86% of rural children and 16.96% of urban children work); boys are slightly more likely to work than girls (29.56% of boys work compared to 26.23% of girls); and indigenous children are significantly more likely to work than their non-indigenous peers (50.45% of indigenous children work compared to 20.38% of non-indigenous children). Furthermore, the percentage of children engaged in economic activities increase with age.

The report also shows that Bolivian children are involved in many different types of economic activity. Most children work in agriculture and mining (53.40%), commerce (17.36%), and manufacturing (10.03%). Differences between boys and girls are small, however, difference in type of work between urban and rural areas is striking. In urban areas, the most common economic activities are commerce (34.57%), manufacturing (17.08%), and service (15.33%); while in rural areas working children work in agriculture and mining (89.08%), followed by

manufacturing (3.84%) and construction (2.48%). The findings also show that most working children aged 5-17 work in a family context (77.11%), or are self-employed (19.17%). At national level, few children (2.23%) work for an employer. Most children, boys and girls, in urban and rural areas, work in a family context, however, the findings also show that urban children are more likely to be self-employed than rural children.

The findings showed that in Bolivia almost nine out of ten working children, or 24.55 per cent of all Bolivian children, are categorized as child labourers because they are under the national minimum age of employment or because they perform hazardous activities. Of all children engaged in child labour in Bolivia, 491,000 children were between the ages of 5 and 13 and consequently under the national minimum age of employment at the time of the survey. Out of these children 437,000 also performed work classified as hazardous. In addition to children under the minimum age of employment, 309,000 children aged 14-17 performed hazardous works. Thus, out of all children in Bolivia, 800,000 children are classified as child labourers and 746,000 children are engaged in hazardous activities, including sugar cane harvesting and underground mining. The incidence of rural children performing hazardous work is significantly higher than the incidence of urban children performing hazardous work, boys are slightly more likely to perform hazardous work than girls, and indigenous children are significantly more likely to perform hazardous work than non-indigenous children.

It should also be noted that most children juggle multiple activities at the same time including work, school and household chores. Some children only attend school (11.29%), some only work (0.55%), some only do household chores (2.05%), some study and work (1.18%), some study and do household chores (57.02%), some work and do household chores (2.62%), some work, study and do household chores (23.59%), and some children neither work, study or do household chores (1.69%). Once again, rural children as well as indigenous children juggle multiple activities more often than urban children. At the national level, 85.28 per cent of Bolivian children performed household chores for at least one hour during the reference week. The findings show no major difference between areas of residence (84.07% of urban children and 89.35% of rural children do household chores). However, the findings show that girls perform more household chores than boys in both urban and rural areas. For example, while rural girls performed 8.68 hours of household chores in the reference week, urban boys only did 4.65 hours. The evidence also shows that household chores are more common among indigenous children than non-indigenous children. As for working hours, Bolivian children

spent on average 5.66 hours working during the reference week, not including household chores. Urban children worked for 3.46 hours on average and rural children worked almost four times as much, 13.08 hours. And while almost all children attended school during the reference week (93.08%), urban children spent more time in school than rural children (ILO and INE 2010).

3 Theoretical framework

To change the world for the better "theories to make sense of how society operates and how we effectively change it" (Davidson et al. 2006: 36) are required. Theories provide a set of explanatory concepts that offer ways of looking at the world; they guide understanding and help us interpret and explore the world through a particular lens (Flick 2009). Theories are formulated to explain, predict and understand different social phenomena. The art of theorizing is "to make the inevitable simplifying assumptions in such a way that the final results are not very sensitive" (Solow 1956: 65). The best models are "very simple but convey enormous insight into how the world works" (Jones and Vollrath 2013: 21). This section will provide the theoretical framework of the thesis; it will provide a particular perspective, or lens, through which child labour will be examined.

3.1 Human capital theory

"Although it is obvious that people acquire useful skills and knowledge, it is not obvious that these skills and knowledge are a form of capital, that this capital is in substantial part of a product of deliberate investment" (Schultz 1961: 1). Theodore Schultz wanted to put value on human abilities and pointed out that human capital should be perceived as any other capital. He argues not all labour is equal and that the quality of human effort can be improved and its productivity enhanced by investments in education or health. These investments then generate returns in form of higher wages or other types of compensation (Schultz 1961). Human capital consists of knowledge, skills, social abilities and personal attributes and according to the theory formal education and health care are vital for the accumulation of human capital. Human resources can thus be transformed into human capital through inputs such as education and health care. Education is seen as an investment that raises the productivity of

workers by teaching useful knowledge and skills, increasing future incomes. Education also plays a key role in the ability of countries to absorb modern technology. Investments in health and education are closely related; they are after all investment in the same person. Healthier children have higher school attendance, learn more efficiently, and become more productive adults. Investments in health might thus increase the return to educational investments. Furthermore, health programmes often rely on basic skills such as literacy and numeracy, and schools often teach basic hygiene and sanitation (Todaro and Smith 2015). A stream of higher future income can be generated as a result of investments in human capital (Schultz 1961).

3.2 Economic growth theory

An economic growth theory should explain changes in inputs and output, and their impact on aggregate economic growth; it should be able to explain why some countries grow faster than others, and consequently why some countries are rich while others are poor. The theoretical framework in which economic growth have been studied originates from either neoclassical growth models or endogenous growth models. The neoclassical growth models assume growth occurs because of exogenous improvements in technology, while endogenous growth models focuses on the economic forces underlying technological progress. The majority of modern growth models have their roots in Robert Solow's neoclassical growth model emphasising the importance of accumulation of physical capital. The model also emphasises the role of technological progress as the ultimate driving force behind sustained economic growth. Technology is "the way inputs to the production process are transformed into output" (Jones and Vollrath 2013: 80), and sustained growth in per capita income in the Solow-model is a result of technological progress. Technology is, however, assumed to be exogenous; it is like "manna from heaven" (Jones and Vollrath 2013: 37), "it decants upon the economy automatically and regardless of whatever else is going on in the economy" (Jones and Vollrath 2013: 37).

The production function in the Solow-model assumes constant returns to scale, however, there are diminishing returns to capital per worker, that is to say, each additional unit of capital given to a worker increases the output of that worker by less and less. There is also substitutability between capital and labour, and depending on technological level different combinations of capital and labour could be the most productive and cost effective. Physical capital is accumulated through investments, and the existing capital stock decreases due to

depreciation. Economic output per worker eventually reaches a point where accumulation of physical capital equals depreciation of the capital stock. This is called steady state and at steady state, along the balanced growth path, all variables grow at a constant rate. Every country moves towards its steady state, and although there is no sustained growth without technological progress in the Solow-model, countries experience growth along the transition path to its steady state. The further an economy is below its steady state, the faster the economy grows; and the further an economy is above its steady state, the slower the economy grows. Economic growth therefore depends on the difference between existing level of per capita income and steady state level of per capita income. Identifying a country's steady state is important as it shows the direction in which the country is headed and will move towards in the long run. A shift of a country's steady state in a positive direction accelerates its growth rate temporarily. In the Solow-model this can be achieved by an increase in the savings rate (investments in physical capital), decrease of the population growth rate, or decrease of the depreciation rate. A higher savings rate, for example, means that more capital is accumulated, leading to faster growth, but because of diminishing returns this effect decreases as the country's steady state is approached. One could therefore say that an increased savings rate leads to a temporary increase in the country's growth rate and a permanently higher level of income per capita. Sustained long run growth, however, only occurs in the presence of technological progress. Without technological progress, capital accumulation runs into diminishing returns (Jones and Vollrath 2013).

Unsatisfied with the assumption of exogenous technological progress as the driving force behind sustained economic growth, economists worked to "endogenize" technology. These endogenous models incorporate human capital, the skills and knowledge that make workers productive, and unlike physical capital, human capital has increasing rates of return. By including mathematical expressions for the accumulation of human capital and technological progress in the models, economic growth became the result of endogenous and not exogenous forces. While an endogenous growth model such as the Romer-model is sufficient to explain economic growth in countries that produce technology, it is not suitable to explain economic growth in developing countries. Instead Jones' simple model of growth and development is a more suitable model of explanation as it includes a transfer of technological innovations from developed countries to developing countries. World technology is seen as available to all countries that can learn to use it, and assumed to grow at a constant rate. The higher the level of a country's human capital, the better its ability to absorb and utilize a larger share of the

world technology, thus accelerating economic growth. In Jones' simple model of growth and development it is the ability of countries to learn how to use existing technology that is in focus, and not the creation of the new technology. That is why Jones' simple model of growth and development is more appropriate when discussing developing countries, countries that usually are not driving the research and development of technology but rather grows by learning to use the existing world technology (Jones and Vollrath 2013).

3.2.1 Jones' simple model of growth and development

The mathematical expression for income per capita in steady state according to Jones' simple model of growth and development is presented below. The derivation of the equation can be found in Appendix A.

$$y^*(t) = \left(\frac{s_K}{n + g + \delta} \right)^{\frac{\alpha}{1-\alpha}} \left(\frac{\mu}{g} e^{\varphi u} \right)^{\frac{1}{\gamma}} A^*(t)$$

The first term of the expression is similar to the Solow-model and the Romer-model and shows that income per capita in steady state y^* is determined by the savings rate s_K which is the portion of income invested in the accumulation of physical capital. The term also shows that income per capita in steady state is determined by the population growth rate n , the technological growth rate g , and the depreciation rate δ . One can say that the first term states that countries that invest more in physical capital will be richer, and countries with rapidly growing populations will be poorer. The second term reflects the accumulation of human capital where μ is a measure of the overall productivity, g is the technological growth rate, φ is a measure of the quality of education, and u is the average years of schooling. Countries that spend more time accumulating skills will be closer to the technological frontier and thus be richer. This as skills in Jones' simple model of growth and development corresponded to the ability to use more advanced technology. The last term is simply the world technological frontier at steady state A^* . Implicit in this explanation is the assumption that technology is available all over the world and for anyone to use. This might, however, not always be the case. In reality, there are barriers to technology transfer between countries (Jones and Vollrath 2013). However, barriers to technology transfer, such as object and idea gaps, are not relevant for this thesis and will not be discussed further.

4 Child labour and economic growth

The United Nations' Sustainable Development Goals lists the elimination of child labour as a vital component to promote and achieve “inclusive and sustainable economic growth, full and productive employment and decent work for all” (UN 2016a). The elimination of child labour is thus seen as an essential part of sustainable economic growth. This section will discuss the main mechanisms through which child labour impacts economic growth.

4.1 Child development

The accumulation of human capital plays an important role in the process of economic growth and development. Child labour, however, interferes with the accumulation of human capital, through its effect on education and health (child development).

4.1.1 The impact of child labour on education

There are a fixed number of hours in a day and as such the time children spend working trades off with other uses of time such as playing, attending school or doing homework. Despite the essential role of play and leisure for child development, most modern studies measure the opportunity cost of child labour in terms of education (Edmonds 2015). The relationship between work and education is complex and “multi-directional” (Bourdillon et al. 2009: 110). Child labour often interferes with schooling and prevents children from fully enjoying the benefits of education. Child labour can thus be seen as an impediment to the realization of the right to education (Gayathri and Sreekumar 2008). Sometimes work prevents children from attending school, however, most working children combine work and school. Work and school are thus not mutually competitive as sometimes suggested (Bourdillon et al. 2009). Instead work often allows children to afford school costs and helps their families pay for schooling (Edmonds 2015). Working to pay for school might be a reality for many children from poor families, however, evidence show school attendance rates are lower among working children than their non-working peers (Edmonds 2007). A Latin American study suggests that work reduces the probability that children attend school from 97 to 82 per cent for boys and from 95 to 86 per cent for girls across countries. The study also shows that country of residence has an effect on the propensity of children to engage in economic activities. For Bolivia, the estimated effect of employment is significantly larger (Dessy and

Knowles 2008). Beegle et al. finds similar results for Vietnam (Beegle et al. 2009). Full-time employment has the worst impact on school attendance and consequently children's human capital accumulation and future productivity. Furthermore, hazardous work is more difficult to combine with school than other types of work (Galli 2001). DeGraff et al. shows that Brazilian children in hazardous occupations are less likely to combine work with schooling than both other working children and non-working children (DeGraff et al. 2015). The involvement of children in some form of economic activities impacts both school attendance and school performance. Edmonds argues that there are a strong negative correlation between test scores and child labour even for the most common forms of work (Edmonds 2015). Child labour is also usually negatively associated with years of completed schooling (Samonova 2014). Work is an obstacle to learning resulting in poor learning outcomes and a higher probability of drop out (Gayathri and Sreekumar 2008). Heady uses direct measures of reading ability and mathematical ability among Ghanaian children and finds that child labour impacts learning achievements and educational attainment negatively (Heady 2003). Even when children manage to combine work and school attendance, time available for homework decreases, decreasing school achievements and educational attainment (Galli 2001). Child labour thus diminishes school progression. Psacharaopoulos shows that children in wage work in Bolivia complete nearly a year less of schooling compared to non-working children, and that working children in Venezuela complete almost two years less of schooling than non-working children (Psacharaopoulos 1997). These relationships do not indicate what drives the relationship. In many cases children are pushed into child labour because of the educational system (Bourdillon et al. 2009). The direct and indirect costs of education, including books, uniforms, pens, and paper, but also forgone income while attending school, are extremely high for most poor families struggling to survive. Long distances to school, low quality education and societal norms might also push children into child labour (Samonova 2014). Work can rob children of opportunity, but it can also help them seize it. Many children work to pay for school expenses. If these children for some reason could not work, they would also be unable to attend school (Bourdillon et al. 2009). This discussion has so far assumed that schooling and human capital accumulation is the same thing, that education is an investment for future productive work (Hanson and Vandaele 2003). For education to generate human capital accumulation and increased productivity levels, schools must be of sufficiently good quality as well as a safe and healthy place where children can grow (Galli 2001).

4.1.2 The impact of child labour on health

The impact of child labour on child development and human capital accumulation may extend beyond school attendance, achievements and attainments. Improved health is recognized to increase productivity of labour and consequently economic growth (Beegle et al. 2009). However, the relationships between health status and child labour are complex; they can be static or dynamic, positive or negative, casual or spurious. Work impacts health status, and health status impacts work (O'Donnell et al. 2002). Most evidence, however, show that child labour increases the probability of poor health, both in children and later on in life (Edmonds 2007). Work induced illness and injury may directly worsen the health status of working children and equipment and machinery designed for adults can be particularly dangerous for children (Edmonds 2015). The hazards may also be less noticeable but still threaten the health status of children, especially in the long run. These hazards include exposure to dust, toxin, chemicals and pesticides, and heavy lifting, poor posture and repetitive work movements. Exposure to abusive relationships with employers or clients may also threaten the psychological health of children (O'Donnell et al. 2002). The health consequences thus vary depending on the type of work and the type of hazards working children are exposed to. Furthermore, working children face greater caloric demands than nonworking children and when these demands are not met work may leave the child more vulnerable to illness, injury, and a lifetime of health issues. Working children may also suffer health consequences by foregoing the health and nutritional knowledge usually acquired in school (Edmonds 2015). Evidence from multiple countries shows that agriculture is the most dangerous sector for children to work in. The evidence also shows that children working in an family context account for a disproportionately high percentage of all working children with health problems. Working in a family context is perhaps not as innocent as might be imagined (O'Donnell et al. 2002). While child labour may impact the health of children negatively, all child work is not harmful for the child and its physical and mental health and child labour is not only negative from a health perspective. Although exploitative and abusive work can take a heavy physical and physiological toll on children, work can also bring rewards such improved quality of life and self-esteem (Bourdillon et al. 2009). In some cases, work may lead to increased investments in the health of working child and child labour brings additional income and resources to the child and its family. The fact that children work and consequently contributes to their families often increases their ability to influence the allocation of family resources (Edmonds 2007). According to Edmonds, compelling evidence that working

children have worse health during childhood is generally absent in the literature. However, there is more evidence linking working while young to poor health during adulthood. Physical injury at work may lead to health problems that survive into adulthood. The injuries may be immediately evident to the child such as a broken foot or arm, or may take years to become evident such as exposure to toxins. Furthermore, work related psychological stress or trauma in childhood might lead to health problems in adulthood (Edmonds 2015). The literature shows that child labour, through ergonomic factors, increases the chances of developing musculoskeletal problems later in life. Furthermore, individuals who worked as children are at particular risk of developing chronic health problems later in life (O'Donnell et al. 2002). Kassouf et al. observes that individuals in Brazil who started to work early in life have worse self-reported health status as adults (Kassouf et al. 2001). The correlation between child labour and the persistence of mental disorders and health problems into adulthood seems to be strong (Edmonds 2015). An immediate ban of all forms of child labour may thus not always be in the best interest of the child. Without work, a child may become severely malnourished, and with work, school fees as well as basic nutrition and health care may be available to the child (Todaro and Smith 2015). Another psychosocial health concern is the impact on children of the criminalization of their work through international standards and national laws. Children themselves sometimes have no other choice but to work and therefore often complain they are “transformed from honest workers into criminals by legislation” (Bourdillon et al. 2009: 113). Todaro and Smith claim the health of children is significantly worse than the health of non-working children (Todaro and Smith 2015). Health problems caused by child labour and the lower hygiene associated with lack of education translate into a less health and less productive labour force. Thus, subtracting from economic growth in the long run (Galli 2001).

4.2 Poverty persistence

Child labour is both a cause and consequence of poverty. Child labour increases household income for poor families struggling to survive and can thus be seen as a survival strategy, a way to escape poverty. The need for child labour is thus born out poverty, however, as child labour affects human capital accumulation and perpetuates the cycle of poverty, child labour also results in more poverty (Samonova 2014). Basu and Van claim schooling and leisure can be seen as luxury goods, and parents will therefore only send their children into the labour

market if family income is not sufficiently high to meet basic need (Basu and Van 1998). However, without schooling children remain trapped in a cycle of poverty.

4.2.1 Child labour breeds child labour

Child labourers are disadvantaged in their youth in ways that lead to reduced education and diminished physical and mental health. When they become adults, they will be less educated and poorer than their peers who did not work as children. Child labour can be seen as an “educational poverty trap” (Edmonds 2007: 35) where low educational attainment leads to lower income, which leads to lower educational attainment in the next generation (Edmonds 2007). Working instead of attaining education during childhood leaves individuals unable to improve its future prospects. There is strong evidence of poverty persistence in terms of both wages and type of work. Working children are almost always unskilled and consequently they start in unskilled occupations earning low wages. This poor start in life tends to lead to a lifetime in unskilled occupations earning low wages. As adults, these former child workers might need to rely on their children to help provide for their families. The children of former child worker will then work during childhood and face the same lack of prospects of their parents did (Edmonds 2015). There is an intergenerational persistence of child labour based on the impact of child labour on education (Edmonds 2007). Several studies document that child labourers are more likely to be parents of child labourers themselves. Wahba shows that Egyptian children of former child labourers are more likely to be child labourers themselves, everything else equal (Wahba 2006). Emerson and Souza show that, in Brazil, the impact of having a parent who was a child labourer increases the probability that the child works (Emerson and Souza 2003). Having a parent who was not a child labourer reduces the probability a child works by about the same amount as adding ten years to the parent’s education (Edmonds 2015). Emerson and Souza translate their findings into a child labour persistence effect going beyond income and poverty (Emerson and Souza 2003). Child labour can therefore be seen as being related to cultural norms with former working children believing their children should work because they did it during their childhood. Edmonds, however, argues that as evidence suggests child labour responds to small changes in income and living standards, these cultural norms are hardly steadfast (Edmonds 2015).

4.2.2 Child labour leads to higher fertility

The demand for child labour tend to lower the relative cost of children, which may increase the fertility rate above the level that would have prevailed in the absence of child labour (Dessy 2000). Child labour is seen as a determinant of fertility as the potential return from child labour motivates families to have more children (Samonova 2014). The existence of child labour directly influences fertility through the lower perceived cost of having children and indirectly through lower education. Child labour consequently delays “the growth-enhancing fertility transition” (Galli 2001: 7). High fertility rates often translate into low levels of income per capita, this as factors of production, other than labour, might be a scarce. According to Thomas Malthus, unless passion between sexes could be suppressed, the human race was doomed to breed itself into poverty. Parents want their children to survive into adulthood and mortality can therefore be seen as driving fertility as parents insure themselves from the risk of losing their children by having more children. If more children survive into adulthood, fewer children consequently are needed. When income increases, the economic benefits of children tend to fall while the cost of children tend to rise. Parents hope their investments into their children will have payoffs in the future, and when income increases, the quality of children becomes more important than the quantity of children (Wiel 2014). Emerson and Knabb has developed a model with overlapping generations where optimal fertility, child labour and education decisions depends of parents’ expectations and beliefs. If parents believe the return to education is high, then fertility is low, and child labour does not exist. The mere perception of low returns to education, or high returns to child labour, can lead to more child labour and increased fertility, reducing human capital accumulation and limiting economic growth (Emerson and Knabb 2007). This reasoning also supports the idea that high returns to education results in parents prioritising the quality of children.

4.2.3 Child labour depresses adult wages

Children generally perform tasks that require little education or specialized training. Child labour is unskilled labour. Everything else equal, a country with an abundance of child labour often has an abundance of unskilled labour. Unskilled occupations tend to have lower wages. Child labour increases the pool of unskilled labour, and the theory of supply and demand implies that an increase in unskilled labour will decrease unskilled wages further (Edmonds 2015). Basu and Van claim parents send their children to work because parental income is

below the subsistence level. Child labour then depresses adult wages, making even more child labour necessary (Basu and Van 1998). Empirical evidence is broadly consistent with this line of economic modelling and reasoning (Edmonds 2007). The substitutability of child and adult labour can, however, be questioned.

4.2.4 Child labour discourages the adoption of new technologies

Child labour can depress long run growth by discouraging the adoption of skill intensive technologies (Galli 2001). Technology and human capital are complements, and child labour thus deters technological investment if it reduces human capital levels. Dessy and Pallage examines the relationship between investment technology and child labour theoretically and claim a coordination failure exists. Parents do not invest in their children's human capital, and firms therefore do not invest in technologies requiring high levels of human capital, and vice versa (Dessy and Pallage 2001). This can be seen as a vicious circle where child labour discourages the adoption of modern skill intensive technologies, resulting in more child labour. Increased abundance in unskilled labour induces the adoption of production methods that do not favour accumulation of human capital (Edmonds 2015). The technologies that are adopted when unskilled labour is abundant will be those complementary to unskilled labour. An abundance of unskilled child labour thus leads to employers not needing to invest in fixed physical capital or upgrade production processes, dampening technological progress. However, simply withdrawing children from the labour force does not imply that technological changes will be made (Galli 2001). Evidence, however, does show that technological changes, such as the spread of tractors and irrigation pumps, replacing the type of activities done by children can alter the allocation of child time and increase time allocated to schooling (Edmonds 2007). Countries with an abundance in unskilled labour, such as most developing countries, will choose technologies that are complementary to unskilled labour, reducing the efficiency of physical capital and skilled labour (Caselli and Coleman 2006).

5 Child labour laws and regulations

As a step in fulfilling the objectives of this thesis this section focuses on child labour laws and regulations with a special focus on minimum age of employment regulation.

5.1 International labour standards on child labour

A convention is an agreement between countries usually developed by organizations such as the United Nations (UN) or the International Labour Organization (ILO). Ratifying countries are obligated to incorporate the principles of the convention into their own laws and make sure these laws are applied, respected, and enforced. There are three international conventions that specifically deal with child labour: the Convention on the Rights of the Child, the ILO Convention No. 138 on Minimum Age of Employment, and the ILO Convention No. 182 on the Worst Forms of Child Labour Convention.

5.1.1 The Convention on the Rights of the Child (1989)

The United Nations' Convention on the Rights of the Child was the first legally binding international instrument to incorporate the complete range of human rights for children such as civil, cultural, economic, political and social rights. The convention defines a child as anyone below the age of 18 years (UN 1989: art. 1), and even though the convention deals with all aspects of children's rights there are a few articles that apply directly to working children. According to the convention children have the right to be protected from being hurt and mistreated, physically or mentally (UN 1989: art. 19), the right to enjoy the highest attainable standard of health (UN 1989: art. 24), the right to free primary education (UN 1989: art. 28), the right to rest and leisure (UN 1989: art. 31), the right to be protected from harmful and exploitative work including all forms of sexual exploitation and abuse (UN 1989: art. 32, 34), the right to be protected from being sold or trafficked for any purpose or in any form (UN 1989: art. 35), and the right to be protected from any activity that takes advantage of them or could harm their welfare and development (UN 1989: art. 36). Furthermore, relevant for this thesis and the Bolivian situation is the right of children to be heard in matters that affect them (UN 1989: art. 12), and the right to freedom of association and peaceful assembly (UN 1989: art. 15). It should also be documented that the convention acknowledges "the importance of the traditions and cultural values of each people for the protection and harmonious development of the child" (UN 1989: preamble).

The Convention on the Rights of the Child was adopted in 1989 and compared to other conventions, the speed with which the Convention on the Rights of the Child came into force was "stunning" (Donnelly 2003: 149-150). It is the most endorsed human rights treaty in the

world, and with Somalia and South Sudan ratifying the convention in 2015, all countries but one have ratified the Convention on the Rights of the Child. And while the United States of America has not ratified the convention, they signed it in 1995 meaning they endorse the principles of the convention but are not committing to be legally bound by it (OHCHR 2016).

5.1.2 Convention No. 138 on the Minimum Age of Employment (1973)

Child labour is work that children should not be doing because it is dangerous or otherwise unsuitable for them, or because they are too young. In the early twentieth century, the ILO adopted several conventions setting the minimum age applicable to different sectors of the economy (ILO 1973). In these conventions child work was not seen as fundamentally harmful but instead child work was often considered beneficial (Calitz 2013). To establish a general international instrument for all sectors of the economy, the ILO adopted the Convention No. 138 concerning minimum age of admission to employment in 1973 (ILO 1973: preamble). At the time of writing the convention has been ratified by 169 of ILO's 187 member states (ILO 2016a, ILO 2016d). Countries who ratify the convention undertake to effectively eradicate child labour and progressively raise the minimum age of employment "to a level consistent with the fullest physical and mental development of young persons" (ILO 1973: art. 1). By adopting the Minimum Age Convention, the ILO moved from regulating child work to abolishing all forms of child work below a certain age (Calitz 2013).

According to the convention, any work that is likely to jeopardize the health, safety or morals of children is considered hazardous and the minimum age of employment for hazardous work is 18 years (16 years under certain strict conditions). However, the convention sets the general minimum age of employment at 15 years (or the age of completion of compulsory schooling if that is higher), and the minimum age for light work that is part-time, safe and does not obstruct schooling at 13 years. The minimum age set in the convention is not absolute; it is dynamic and aimed at encouraging the progressive raise of the minimum age of employment (Hanson and Vandaele 2003). The convention provides countries whose "economy and educational facilities are insufficiently developed" (ILO 1973: art. 2) the possibility of initially setting the general minimum age at 14 years and the minimum age for light work at 12 years (ILO 1973: art. 2-3, 7). However, as the minimum age of employment should be progressively raised this should only be considered a temporary measure (Calitz 2013). The prohibition of the employment of children below a certain age includes all forms of work.

Work and school is thus presented as an incompatible part of child development, and no distinction is made between harmful and beneficial forms of work. Bourdillon et al. therefore argue the convention fails to adjust to “the contemporary realities of working children” (Bourdillon et al. 2009: 107), and Calitz claims it is not appropriate for developing countries (Calitz 2013). The convention prohibits work generally considered beneficial and part of acceptable child-rearing practice in many cultures (Bourdillon et al. 2009). Furthermore, if compulsory schooling laws relax at a younger age than the minimum age of employment, distortion in the age profile of time allocation can be created (Edmonds and Shrestha 2012).

The convention explicitly excludes “family and small-scale holdings producing for local consumption and not regularly employing hired workers” (ILO 1973: art. 5). Many countries do, however, have regulation that covers work in a family context, but even when it is law, few countries, rich and poor, discuss enforcement of labour regulations in the family context (Edmonds and Shrestha 2012). Gamblin and Pastor argue children employed in a family or community context may therefore be more vulnerable to exploitation since legislation tends to be less vigorously enforced in these areas (Gamblin and Pastor 2009).

Ratification of the convention has been a slow process. Initially developing countries resisted ratification arguing that their social and economic context did not allow for the elimination of child labour, at least not in the near future (Dillon 2015). Moreover, some economically prosperous countries such as Australia, New Zealand and the United States of America have, however, not ratified the convention (ILO 2016a). This as the practical implication of the convention is that no child below a certain age may perform any work, not even after school or during holidays (Calitz 2013).

5.1.3 Convention No. 182 on the Worst Forms of Child Labour (1999)

Adopted in 1999 and ratified by 180 of the 187 member states of the ILO at the time of writing (ILO 2016b, ILO 2016d), this fundamental convention requires ratifying countries to take “immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency” (ILO 1999: art. 1). In contrast to the minimum age convention, there is nearly global consensus that these worst forms of child labour should be eradicated all over the world and as a matter of urgency (Calitz 2013).

The convention defines a child as a person under the age of 18 years (ILO 1999: art. 2), this in accordance with the definition of a child under the Convention on the Rights of the Child. Ratifying countries are required to provide the necessary and appropriate assistance in the removal of children from the worst forms of child labour and for their rehabilitation and social integration (ILO 1999). These worst forms of child labour are defined as:

- a. all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
- b. the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;
- c. the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;
- d. work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children (ILO 1999: art. 3).

The term worst form of child labour thus encompasses both hazardous work (d) and other worst forms of child labour (a, b, and c). The difference is that while hazardous work, through changes in the work environment or the work itself, sometimes can be modified to remove the hazardous aspects, the other worst forms of child labour can under no circumstances be considered tolerable. The convention leaves determination of what types of work to prohibit as hazardous to national laws (ILO 1999: art. 4). The list of the worst forms of child labour in Bolivia can be found in Appendix B.

The convention recognizes that “child labour is to a great extent caused by poverty and that the long-term solution lies in sustained economic growth leading to social progress, in particular poverty alleviation and universal education” (ILO 1999: preamble). According to Calitz the convention “acknowledges prevailing realities by not attempting to impose a blanket restriction on all economic activity, but addressing the real problem with child labour, namely the worst forms” (Calitz 2013: 90). By prioritizing the elimination of hazardous work instead the elimination of all forms of child work, the convention is establishing achievable priorities without excluding children for economic participation (Gamblin and Pastor 2009).

5.2 Notions of childhood and approaches to child labour

There is almost universal consensus on the elimination of the worst forms of child labour, yet there is no consensus on the abolishment on all forms of child work. In most of the world, children's participation in work is a way of learning essential life skills. Many cultures and societies consider work to be an important part of childhood, and a complement to schooling (Bourdillon et al. 2009). Gamblin and Pastor claim one of the main differences between childhoods in developed countries and developing countries is that children in developing countries often form part of "collective family strategies for income generation" (Gamblin and Pastor 2009: 120). The idea that school and play are the preferable routes for child development is based on conceptions of what some believes constitutes an ideal childhood; conceptions that cannot be superimposed onto a reality where children are forced to work for the survival of themselves and their families (Calitz 2013). The premise that all forms of child work are harmful consequently leaves no room for the beneficial effects of work on children. Fontana and Grugel claim child labour creates a "clash of ideas about childhood" (Fontana and Grugel 2015: 70). Childhood is a culturally embedded concept and it can be argued that child labour should be seen through the prism of local cultures (Fontana and Grugel 2015).

The most common approach to child labour is the abolitionist approach, aiming at the full abolition of child labour (Hanson and Vandaele 2003). The abolitionist approach is the base of the minimum age convention and entails that no child below a certain age should do any form of work, and that this minimum age should be progressively raised (ILO 1973). Children are seen as victims that should be protected and the argument focuses on the economic benefits of the abolition of child labour, which will maximize welfare of the child and of society in the long run (Gayathri and Sreekumar 2008). The abolitionist perspective has been criticised for being "too idealistic" (Hanson and Vandaele 2003: 87). Children work and Bourdillon et al. claim there are beneficial sides to child work and that universal minimum age standards belittle the value of work that children do and the responsibilities it entails (Bourdillon et al. 2009). Working children have complained that the abolitionist approach, established for their protection, places them at a disadvantage. As a consequence, they often reject international labour standards as "the views of children and childhood that they represent do not fit with the realities of developing countries" (Gamblin and Pastor 2009: 120). The abolitionist approach limits children's right to work, and discriminates against children on the basis of age thus infringing their human rights (Calitz 2013). The second

approach to child labour is called the regulatory approach and argues children can work when adequate protective legislation exists. This approach is often combined with the empowerment approach, which treats children as subjects recognizing that they have the right to be heard in matters that concern them. Considering working children as subjects implies the recognition of their right to work and their right to work under decent conditions (Hanson and Vandaele 2003).

5.2.1 Children fighting for the right to work in dignity

Working children live in conditions of working people, and their demands are hardly different from those of working adults. Organisation for working children, frequently referred to by the Spanish acronym NATs (*Niños y Adolescentes Trabajadores*), fight for the right to be recognized and enjoy the same rights as adults. They fight for the right to work in dignity, which they consider a basic human right (Hanson and Vandaele 2003). They argue that by working towards the effective eradication of child labour, working children have become invisible. Work constitutes an integral part of the lives of many children, however, their work is not being recognized, and as a result of their invisibility, their work is not regulated and they have no voice in decisions that affect them, their lives and their welfare (Calitz 2013). Typically, the right to work is claimed by people that do not work. Working children's movements, however, claim the right to work for children who do work (Hanson and Vandaele 2003). Working children argue they have the right to work, to not be exploited, and that their work should be regulated in order to empower them (Calitz 2013). They rely on the rights protected in the Universal Declaration of Human Rights and the Convention on the Rights of the Child. Paradoxically, so does the ILO in the formulation of the conventions on the effective abolition of child labour (Hanson and Vandaele 2003). True protection of children also protects their rights, including the right to work and the right to be heard in matters that concern them. Children should thus both be recognized and safeguarded. To protect children by providing them rights, at least some conditions have to be taken into account. The right to work cannot imperil the right to primary education, and appropriate regulation and control must be in place to guarantee that child work does not turn into exploitation of children (Hanson and Vandaele 2003).

International labour standards related to child labour often find their limitation in the practical impossibility of abolishing child labour. Legislation cannot "float in a cultural void, free of

space and time and social context” (Hanson and Vandaele 2003: 75). Legislation should reflect realities and in reality, children work. It is, however, important to remember that some forms of work, the worst forms of child labour, are in no way acceptable under any circumstances.

5.3 Bolivian child labour laws and regulations

Bolivia ratified ILO Convention No. 138 on Minimum Age of Employment and ILO Convention No. 182 on the Worst Forms of Child Labour in 1997 and 2003 respectively, and the UN Convention on the Rights of the Child in 1990. Bolivia has, consequently, expressed interest and concern about children, children’s rights, and child labour (ILO and INE 2010). Bolivia has also taken legislative measures to bring its national laws in accordance with international instruments. According to the Bolivian constitution, ratified international treaties and conventions recognizing human rights prevail over national law. Furthermore, the rights and duties established in the constitution are to be interpreted in accordance with international treaties and conventions ratified by Bolivia (Bolivia 2009: art. 13). The Bolivian constitution also includes a specific section on children’s rights stating that children have specific rights inherent to their development, their identity, and their needs, interests and aspirations (Bolivia 2009: art. 58). The constitution prohibits violent punishment of children, forced work and child labour (Bolivia 2009: art. 61), guarantees children the same rights as adults (Bolivia 2009: art. 59), and recognizes that, in all matters concerning children, the best interest of the child should be the primary consideration (Bolivia 2009: art. 60).

5.3.1 The Children and Adolescents Code (2014)

The focus of this thesis is the effect of the controversial Bolivian Children and Adolescents Code (*Código Niño, Niña y Adolescente, Ley No. 548*), which was passed by the Legislative Assembly of the Plurinational State of Bolivia on the 3rd of July 2014 and entered into force on the 4th of August 2014. The code grants all children, regardless of their nationality, the full and effective exercise of their rights, and guarantees children that their best interests will have absolute priority. It covers all areas and issues relating to children and emphasizes the importance of the family for the protection, education and development of children. It also stresses that the state must ensure that the family can fulfil its duties (Liebel 2015).

Some have considered the international drive to eliminate child labour to be a form of cultural imperialism, and inappropriate to national realities of developing countries (Dillon 2015). So while the code falls under international instruments ratified by Bolivia, it is based on the actual situation and the everyday challenges of children in Bolivia as well as the culture and traditional values of Bolivia (Bolivia 2014). Bolivia has thus chosen a regulatory approach recognizing and empowering working children. As such, the code sets new standards for the understanding and implementation of the rights of children. It is also the first law in the world to have been created with the active participation and decisive input of children (Liebel 2015).

The individual chapters of the code are devoted to different areas of children's lives; chapter six focuses on the rights of children in relation to work and is the focus of this thesis.

5.3.1.1 Protecting the rights of working children

The customary term child labour (*Trabajo infantil*) is avoided throughout the code, which instead discusses children's work and the rules governing the rights of children in relation to work. Instead of prohibiting and abolishing child labour, the code provides children the right to protection at work. The code stresses that working children have the right to be protected from economic exploitation and any form of work that is likely to jeopardize their right to education, health, dignity and overall development (Bolivia 2014: art. 126). Thus taking an abolitionist approach when it comes to the worst forms of child labour. However, instead of banning all forms of child work, the code differentiates between different types of work and ages of children. Instead of progressively raising its minimum age of employment aiming for the elimination of all forms of child labour, the code decreases the minimum age of employment. The code takes a regulatory approach protecting the rights of Bolivia's working children (Bolivia 2014). The code is thus contradictory to international labour standards and recommendations, making it controversial (Fontana and Grugel 2015). Many were shocked that Bolivia might be moving backwards by allowing children to work. However, supporters of the code claim the code reflects a reality where it is a given that children will work, and where the economic conditions pushing children to work are expected to last (Dillon 2015).

The code assumes that the family and the community will ensure that the rights of children are protected. Work performed by children in the context of family and community is therefore regarded as legitimate regardless of the age of the child. This as family and community work is considered formative in nature and beneficial for child development. The

code situates these family and community activities in the historical and cultural contexts of the country and considered them culturally valued and accepted. This as they embrace indigenous traditions and provide children with the opportunity to learn essential life skills (Bolivia 2014: art. 127- 128). As for minimum age of employment, the code lowers the minimum age of employment to 10 years for self-employed children and 12 years for children working under contract with the permission of parents or guardians and prior authorization from the children's ombudsman (*Defensoría de la Niñez y Adolescencia*). These changes are introduced as exceptional provisions and are permitted only as long as children's other rights are not violated. Working children over the age of 14 years are granted the same rights as adult worker. The minimum wage can therefore not be less than that earned of an adult doing the same work and no less than the national minimum wage. The pay must also be available to the child in the search for a better quality of life. The code also regulates working hours; a workday may not exceed eight hours, with two hours allowed for independent studies, and that a workweek may not exceed 40 hours. For children under the age of 14 years a workday may not exceed 6 hours, and a workweek may not exceed 30 hours. Night work is prohibited for all children regardless of age, and a medical examination assessing the physical and mental ability of the child to perform the work is required before any work can take place (Bolivia 2014: art. 129-133). Furthermore, work performed by children may not jeopardize or obstruct their education, health, dignity and overall development. Economic exploitation, employment of children without their consent, and employment of children without fair compensation are strictly prohibited. Forced labour is prohibited and children of all ages must freely express their willingness to work. The code also provides a list of prohibited types of work that are hazardous by nature or circumstances (Bolivia 2014: art. 126, 131, 135-136). The list of these hazardous types of work can be found in Appendix B.

5.3.1.2 The history of the code

In the draft, submitted in December 2013, the code included a blanket ban prohibiting all work by children under the age of 14 years. The union of working children in Bolivia (*Unión de Niños, Niñas y Adolescentes Trabajadores de Bolivia*, UNATSBO) protested the draft fighting for the right to work in dignity (Liebel 2015). They argue that child labour should not be stigmatized and that their work should not be eradicated, that they, the working children of Bolivia, contribute to the country and want their contribution to be valued. UNATSBO see the abolishment of child labour as age based discrimination and claim the government have a

duty to not take work away from children but rather protect their rights, including the right to work and to participate in public life (Fontana and Grugel 2015). When President Morales, a former working child himself, took the side of the children proposing a regulatory approach to child labour instead of a blanket ban, they knew they had been heard (Liebel 2015).

“Work gives people dignity. But when working conditions are bad, we must fight for better conditions. Not just for us and for our families. Here in Bolivia, for many years the work done by children has not been recognised. Although many children have been working. Now, though, after great efforts we have achieved recognition. [...] We are not calling for children of 10 or 12 to work. We are calling for protection for children, who do work, and for their contribution to be recognised.” – Lourdes Cruz Sánchez, Speaker of the Potosí Working Children’s and Adolescents’ Council (Liebel 2015: Annex).

5.4 The effect of child labour laws and regulations

Regulation of the minimum age of employment is the dominant tool used to combat child labour around the world (Edmonds 2014). The effect of child labour laws and regulations is, however, a “disputed topic” (Boockmann 2010: 679). As a consequence, and in order to fulfil the objectives of the thesis, this sub-section aims to determine the effects of minimum age of employment regulation and whether or not minimum age legislation reduces child labour.

5.4.1 Enforced regulations would change how children work

Children can make productive contributions to their families in many ways by working inside and outside the household. Participation in household work such as domestic services and subsistence farming is widespread, important and far more prevalent than economic activities outside the household. Most children thus work in a family and community context, outside the scope of minimum age regulations. Enforcing minimum age regulations would therefore divert children out of regulated activities into unregulated activities without changing the incidence of child labour. If participation in work outside the family and community context were restricted, children would likely substitute that time for that of other family members engaged in economic activities within the household. This would change the work in which children engage without reducing time allocated to labour (Edmonds 2014). Boockmann, however, argues that when enforced, minimum age restriction “exert a negative effect on the

incentive to use child labour” (Boockmann 2010: 681) which should reduce the number of working children.

If child labour occurs because of parents’ concern for the survival of the family, the popular argument for banning child labour loses its force (Basu and Van 1998). In 1993 the Child and Labor Deterrence Act was introduced in the United States of America banning imports from countries employing children. Thousands of Bangladeshi children lost their jobs, however, instead of going back to school evidence show that these children ended up in even worse jobs, on the streets or forced into prostitution (Powell 2014). Well-intended interventions can thus be counterproductive (Basu and Van 1998) and as “repulsive as a child working in a sweatshop may be, it is not nearly as repulsive as a child forced into prostitution” (Powell 2014: 2). Child labour is an act of desperation and altruistic parents choose the best available option for their children. Taking that option away does not eliminate the necessity of work (Powell 2014). Children often remain out of school for the same reason they were not in school in the first place (Bourdillon et al. 2009). Edmonds also recognizes that minimum age of employment regulation is not a tool to promote education but claims the coordination of compulsory schooling laws and minimum age regulations may help maximize the joint influence of these regulations on child time allocation (Edmonds 2014). Baland and Robinson recognize that a simple child labour ban may be counterproductive fostering illegal and hidden worst forms of child labour (Baland and Robinson 2000). To forcibly remove children from work may push them into more hazardous forms of child labour (Gamblin and Pastor 2009). Preventing children from invoking their rights in relation to work has “tended to render children defenceless” (Liebel 2015: 533). By prohibiting all forms of child work, children who live in desperate poverty, working for survival, will be driven into the worst forms of child labour, which are often both invisible and unregulated (Calitz 2013, Hanson and Vandaele 2003). Bourdillon et al. agree arguing that the minimum age approach prohibiting all forms of child work below a certain age “drives child labour underground, offers no protection to children who are exploited, and interferes with useful child-rearing practices” (Bourdillon et al. 2009: 109). The idea that enforced minimum age regulation primarily diverts children from one sector to another rather than eliminating child labour is, however, different from the premises in most theoretical papers on minimum age regulations (Edmonds 2014). Basu and Van addresses the effects of banning child labour. School and leisure are seen as luxury goods in the sense that poor households cannot afford to consume them, however, chose to consume them when household income increases sufficiently. This is

called the luxury axiom and is one of the assumptions of the model. Another assumption, the substitution axiom, claims adult labour and child labour are substitutes. Child labour can thus be substituted by adult labour. The assumptions could result in multiple equilibria in the labour market; one equilibrium where both children and adults work and one equilibrium where adult wages are high enough for children not to work. Assuming there is only one sector of employment for child labour, imposing a ban on child labour could move the economy to the equilibrium where adult wages are high enough to prevent child labour. The first effect of the child labour ban will be a shortage of labour. Given the substitution axiom, adult wages will rise as a result of the excess demand of labour. As adult wages increases it is possible that, given the luxury axiom, families will choose not to send their children to work (Basu and Van 1998). One reason child labour laws and regulation can fail to achieve the objective of reducing child labour is that it often applies to only certain sectors, and when it covers all sectors of the economy, it may not be enforced equally in all sectors (Boockmann 2010). Basu and Van show that a partial ban, prohibiting child labour in only certain sectors, may have unexpected adverse effects making children and their families worse off. Instead of reducing child labour, a partial ban may divert children from one sector to another causing excess supply of child labour in the sector not enforcing the ban leading to lower child wages (Basu and Van 1998). The welfare effect of a child labour ban could turn out to be negative, leaving the children and their families, particularly those so poor that children's income is essential for survival, worse off (Dessy and Knowles 2008: 1276). The consequence may be that even more children are sent to work (Boockmann 2010). Child labour regulations are not effective in societies where families cannot meet their basic needs. Available research does not support minimum age regulations, this as they often harm the children they claim to protect. Enforcing blanket prohibitions of all forms of work, including safe work, also diverts attention from the urgent need to intervene in the worst forms of child labour (Bourdillon et al. 2009). The effect of child labour prohibitions and regulations could be "hampered by the lack of implementation" (Boockmann 2010: 681).

5.4.2 Regulations are rarely enforced

Boockmann investigates whether ratification of Convention No. 138 on the minimum age of employment has contributed to increasing school attendance of children protected by the convention as opposed to children not protected. He finds that ratifying countries and non-ratifying countries have similar levels of school attendance. Consequently, there is no clear

empirical evidence for an effect of the ratification on children's labour force participation or school attendance. These general findings are also true for Bolivia, where Boockmann finds no significant effect of ratification. Boockmann concludes that the "view that ratification may have little more than symbolic meaning is consistent with our results" (Boockmann 2010: 688). Edmonds also recognizes the symbolic meaning and states that minimum age regulation may establish new societal norms that over time and may provide tools for the legal system to go after gross violators (Edmonds and Shrestha 2012). Using data from 59 developing countries, Edmonds and Shrestha examine what would happen if minimum age of employment were extended an additional year and find little evidence that minimum age regulations influence child time allocation in a meaningful way. In fact, they did not find conclusive evidence of an effect of minimum age of employment regulations in a single country. According to their study, age appear to have a "minor, often negligible, influence on time allocation" (Edmonds and Shrestha 2012: 16). Less than one per cent of the variation in child engagement across the countries can be explained by age. They point out that this does not say anything about whether minimum age regulation influence time allocation but it implies that age based regulations will have limited importance in explaining time allocation. Edmonds and Shrestha also argue that enforced minimum age regulations shifts child labour "from outside to inside the household without changing schooling" (Edmonds and Shrestha 2012: 27).

Minimum age regulations have the potential to reduce child labour, and enforced minimum age regulations would change how children work. There is, however, little evidence of widespread enforcement (Edmonds 2014). Dessy and Knowles claim enforcement is "difficult and costly" (Dessy and Knowles 2008: 1276). Due to poverty it is difficult to enforce minimum age regulation in developing countries (Calitz 2013). Also, many developing countries have been pressured to adopt modern regulations, which perhaps explain why so few resources are devoted to enforcement (Edmonds 2014, Edmonds and Shrestha 2012). Although not influencing child labour directly, minimum age regulations can change how children work. They can also influence societal norms related to child labour. If the weakness of legislation is that it is not implemented and consequently does not lead to action, its strength is its use as an advocacy tool, legitimising the right to challenge existing legislation (Gamblin and Pastor 2009).

6 Bolivia's future prospects

The accumulation of human capital has private benefits such as more skills and knowledge, higher wages, and improved standard of living; and social benefits such as a healthier population, increased productivity and economic growth. The human capital discourse aims to equip children with educational skills improving their labour standards later on in adulthood. According to the theory there is thus no fundamental objection to children being economically active, as long as their human capital accumulation is not threatened. Children are viewed as resources that must be prepared for adulthood. Childhood is a period of economic investment that produces future returns such as higher wages, increased productivity, economic growth and development.

Income per capita in steady state is given by:

$$y^*(t) = \left(\frac{s_K}{n + g + \delta} \right)^{\frac{\alpha}{1-\alpha}} \left(\frac{\mu}{g} e^{\varphi u} \right)^{\frac{1}{\gamma}} A^*(t)$$

A country, such as Bolivia, does not have to create innovations and technology itself; all it needs is the knowledge of how to use technology invented in other parts of the world. The technological progress around the world thus determines economic growth but so does the accumulation of human capital. By learning to use more technology, the technological frontier is approached. While most working children also attend school, time is limited and there is thus a trade-off between work and schooling and evidence suggest child labour leads to less school attendance, achievement and attainment. Evidence shows that the more prevalent child labour in a country, the less educated its future adults will be; and the less educated its future adults will be, the less able they will be to understand and use technology invented around the world. Child labour is deeply rooted in poverty. Child participation in non-work activities such as schooling and leisure is seen as luxury goods that many poor families cannot afford. Child labour is a survival strategy. Cultural norms can also influence parents' decision to send their children to work. In some cases, child work can be beneficial for child development, providing children with useful life skills and learning opportunities. A trade-off between schooling and child labour exist, however, child labour can sometimes help children to afford schooling. However, the overall effect of child labour on education seems to be negative and significant. Furthermore, child labour also impacts human capital accumulation through its

effect on health. Working children have more health problems than their non-working peers, both during childhood and later in life. Child labour provides children and their families with extra income, which could be spend on health care. However, working children, especially those working in the worst forms of child labour, have significantly worse health than non-working children. Evidence also suggest children working in a family context have worse health than self-employed children or children working for an employer. Poor health status decreases productivity of labour, efficiency of learning and consequently also the returns to education. Child labour also perpetuates the circle of poverty through a number of mechanisms, depressing economic growth even further. In the long run, child labour threatens child development, accumulation of human capital and economic growth. The elimination of child labour is thus essential for economic growth and development.

Although some types of work, by its nature of circumstance, jeopardize the health, safety or morals of children, this might not be ground for prohibiting all child work. What constitutes an appropriate childhood vary widely between cultures, and so does the view on child work. Prohibition of all forms of child work might not be in the best interest of children struggling to survive and working children themselves therefore fight for the right to work in dignity. Their voices were heard. In Bolivia, 27.94 per cent of children are engaged in some type of economic activity and to reflect this reality, Bolivia has chosen a regulatory approach protecting the rights of working children. Bolivia thus goes against international standards set by the International Labour Organization. My findings show that, in the long run, the elimination of child labour will maximize human capital accumulation and economic growth. However, my findings also show that if a continuum of employment opportunities is available in unregulated sectors, or sectors where regulation is not enforced, regulation change how children work without influencing whether or not they work. Enforced minimum age of employment regulations might force children below the minimum age of employment into unregulated sector or into the worst forms of child labour. This would result in even less human capital accumulation. Minimum age regulations have the potential of reducing child labour, however, evidence show that child labour regulations, on their own, are not very effective in societies where families cannot meet basic needs and children work to survive. Thus, legalising child work and protecting the rights of working children might paradoxically have a positive effect on economic growth and development. Furthermore, in Bolivia, 27.94 per cent of children are engaged in some type of economic activity, and 24.55 per cent of them are classified as child labourers. Most perform work classified as hazardous, including sugar

cane harvesting and mining, thus likely to jeopardize the health, safety or morals of children. So while the new legislation (the Children and Adolescent Code) lowers the minimum age of employment it still prohibits hazardous work. The effect of the new code might thus be limited. However, just as a ban on child labour might force working children into the worst forms of child labour; Bolivia's new legislative approach might make it possible for children currently employed in hazardous occupation to start working in other, now regulated and safer, occupations. Such a shift would result in a positive effect on children's health and education, as well as on economic growth and development. It should, however, be noted that the Children and Adolescent Code excludes work performed by children in a family or community context, and in Bolivia 77.11 per cent of working children work in an family or community context. Consequently, the impact of the code might be limited. The effect of Bolivia's legislation on child labour and consequently economic growth and development thus remains uncertain, however, most of the evidence points to Bolivia's regulatory approach having a positive effect on economic growth and development.

8 Conclusion

The objective of this thesis has been to determine how Bolivia's new legislative approach might impact Bolivia's future economic growth and development prospects. Child labour impacts human capital accumulation and economic growth negatively, however, the effect of Bolivia's new legislative approach remains uncertain. Economic growth and development might actually increase as a result of Bolivia's new regulatory child labour law.

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Appendix A

Derivation of the mathematical expression for steady state per capita income in Jones' simple model of growth and development

Countries produce a homogenous output good using labour and a range of capital goods. The number of capital goods that workers can use is limited to their human capital, their skill level. When the labour force learns to use more advanced capital goods the economy grows. The aggregate production function is given by:

$$Y = K^\alpha (hL)^{1-\alpha}$$

where Y is total output, K is physical capital, h is human capital per capita, and L is the labour force. Output or rather income per capita is given by:

$$y = \frac{Y}{L} = \frac{K^\alpha (hL)^{1-\alpha}}{L^\alpha L^{1-\alpha}} = \frac{K^\alpha}{L^\alpha} h^{1-\alpha} = k^\alpha h^{1-\alpha}$$

Physical capital is accumulated according to the following equation:

$$\dot{K} = s_K Y - \delta K$$

where \dot{K} equals the change in accumulated physical capital over time, s_K is the savings rate (the portion of the income that is invested in physical capital), and δ is the depreciation rate. Human capital is accumulated as follows:

$$\dot{h} = \mu e^{\varphi u} A^\gamma h^{1-\gamma}$$

where \dot{h} equals the change in accumulated human capital over time, μ is a measure of the overall productivity, g is the technological growth rate, φ is a measure of the quality of education, u is the average years of schooling, A is the technological level, and γ is a measure of the importance of world technology versus human capital in the accumulation of human

capital. The technology grows at a constant rate, g , and in steady state, along the balanced growth path, all variables must grow at a constant rate:

$$g_y = g_k = g_h = g_A = g$$

Given the assumptions and equations above, income per capita in steady state, along the balanced growth path, thus equals:

$$y^*(t) = \left(\frac{s_K}{n + g + \delta} \right)^{\frac{\alpha}{1-\alpha}} \left(\frac{\mu}{g} e^{\varphi u} \right)^{\frac{1}{\gamma}} A^*(t)$$

(Jones and Vollrath 2013).

Appendix B

Worst forms of child labour in Bolivia

Work that by its nature or condition is dangerous and may not jeopardize or interfere with the education, health, dignity or overall development of children is prohibited and should be abolished. The Children and Adolescents Code define these worst forms of child labour.

Work that is harmful and unacceptable in its very nature:

- Sugarcane and chestnut harvesting;
- Mining;
- Fishing (except in the family and community context);
- Brickmaking;
- Sale of alcoholic beverages;
- Garbage collection when the garbage includes hazardous waste;
- Cleaning of hospitals;
- Service work related to safety and security;
- Work in third party households when combined with accommodation;
- Work in plaster processing factories.

Work that is harmful and unacceptable under certain conditions:

- Agricultural work (except in the family and community context);
- Breeding of livestock (except in the family and community context);
- Work that requires more than the allowed number of working hours per day or week, or that is carried out after 22.00;
- Modelling work that includes an erotic element;
- Work in quarries;
- Work as sound operator;
- Handling of dangerous machinery;
- Masonry work (except in the family and community context);
- Watching over cars outside the established time schedule.

The list is to be updated regularly, at least every five years (Bolivia 2014: art. 136).