

A DEVELOPING ECONOMY AS A PART OF GLOBAL VALUE CHAIN

The apparel industry and poverty reduction in Nicaragua

Master's Thesis in Economic Geography

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1 INTRODUCTION

1.1 Global apparel industry

Apparel industry is one of the biggest consumer industries in the world. In 2016, it generated 1.5 trillion euros of retail value globally and as many as 60 million people were estimated to work in apparel industry, along its global value chain. Approximately 62 million tons of apparel were consumed in 2016 and according to an estimation, the number can grow as high as 102 million tons in 2030. (Global Fashion Agenda & The Boston Consulting Group 2017, 2, 8.) Greenpeace (1, 2016) estimates that an average customer buys 60 % more clothes and uses the garments half as long as fifteen years ago. Fast fashion has become a trend when clothes are cheaper and shorter lived than ever before. The industry has a significant environmental and social footprint.

A high share of globally sold apparel is produced in developing countries. The top five exporters of clothing in 2015 were China, European Union, Bangladesh, Vietnam and Hong Kong, and the annual growth rates were the highest in Bangladesh, Vietnam, India and Cambodia. Together, top ten countries exported 87 % of clothing exports in the world. (WTO 2016, 33.) Most of the produced clothes are exported to and bought in Global North (Greenpeace 1, 2016).

Developing countries have been encouraged to boost their countries' manufacturing sector for decades. Growth in manufacturing sector has been related to growth in Gross Domestic Product in developing countries, during the past 30 years. The growth effect of manufacturing sector has been higher than other industries or services. (ILO 2014a, 29-31.) For many developing countries, apparel industry has served as an opportunity to boost a country's industrialization, economic growth and development. The industry does not require a lot of capital to start and it offers employment to many low skilled workers, especially women. Because of its employment-creating effect, the apparel industry is often expected to reduce poverty. (Nadvi & Thoburn 2004, 111-112.)

Indeed, employment, but above all decent work and decent jobs are significant factors to reduce poverty in the Global South. In the 2030 Agenda for Sustainable Development, United Nations has listed seventeen global development targets and one of those is to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all". The same goal of achieving productive employment and decent work was already one of the targets of United Nations' Millennium Development Goals set for 2000-2015. (UN 2014, 10-11.)

In addition to employment, participation in global apparel industry is expected to increase exports and bring Foreign Direct Investments (FDIs) into the country. FDIs can help in poverty reduction by creating jobs, developing local skills, and promoting local

technological advancement. FDIs bring capital, and investments may boost economic growth. (Gohou & Soumaré 2012, 76-77.)

Manufacturing and apparel industry can serve as important ways to diversify a developing country's typically undiversified economy. Apparel industry is a highly global industry and it consists of global networks of raw material producers, manufacturers, buyers, designers et cetera. As a whole, it forms a global value chain (GVC). GVC refers to a product's global production process from research and development (R&D) -phase to production and consumption. GVC framework takes into consideration all phases of production and analyses the value added for example in research, production and marketing, consumption and recycling. GVC of a product is a complex, often global network of actors and production phases. It includes networks of suppliers and buyers, employees and customers from different parts of the world that together act in global economy. (Gereffi & Fernandez-Stark 2011, 2, 4.)

In this research, GVC is used as an analytical tool to understand Nicaragua's apparel industry as a part of global economy. It gives understanding of the opportunities and threats that Nicaragua faces in global apparel production. As a part of GVC analysis, it is recognized that benefits and added value for actors and countries in the chain vary. The benefits vary according to the kind of a role that the country and the actor have in the chain. In apparel industry, more value adding phases such as designing and marketing are often conducted in developed countries, while less value creating activities such as labour intensive production are conducted in developing countries where the costs are lower. Also consumption is concentrated, particularly in USA, EU and Japan. In apparel industry, often the big buyers and brands have most of the power and create most of the value in the value chain. (Gereffi & Frederick 2010, 3,11-12.)

1.2 Nicaraguan apparel industry as a research object

Nicaragua has a growing apparel industry and apparel products form significant part of the country's exports. It is a lower middle income (LMI) country with coasts on both the Pacific Ocean and Caribbean Sea sides (figure 1). Nicaragua exports its apparel mainly to United States and enjoys geographical proximity to its markets (IMF 2011, 82). The map shows the geographical location of the country in Central America:



Figure 1 Map of Nicaragua in Central America (maps.com)

What makes Nicaraguan apparel industry interesting is that it has succeeded to increase its apparel exports thus being an exception in a global trend of garment industry's shift to Asia. (Bair & Gereffi 2013, 1). Part of the success derived from temporary trade benefits in the Dominican Republic – Central American Free Trade Agreement (CAFTA-DR) with the United States. Within the agreement, Nicaragua and Haiti both got a limited number of tariff preference levels (TPLs), that allowed the countries to export to the United States duty-free, even if the products did not meet the agreement's rules of origin. In other words, the two countries could export duty-free even products of which fabrics were not produced in the Americas. This was a significant benefit since most of the apparel manufacturers in these countries import low cost raw material from Asia, manufacture in the area and then export the final products to U.S. However, the special advantage of TPLs expired at the end of the year 2014, which poses challenges in the industry. (Bair & Gereffi 2013, 3.)

The country is industrializing rapidly and on the other hand, it expects a lot of its apparel industry. The industry is both an important employer and a source of FDIs. It forms a significant part of manufactured exports in Nicaragua and is an essential factor of the economic growth and development of the country. (Bair & Gereffi 2013, 1.) Indeed, foreign trade, investments, and employment are often offered as solutions to poverty alleviation and economic development (ILO 2014, 11-12).

Also the Nicaraguan Development Plan highlights the investments, exports, and employment as ways to economic growth and poverty reduction. (IMF 2011, 7.) Compared to other countries in the region, Nicaragua is the second poorest country after Haiti. The GDP in Nicaragua in 2016 was 13.2 billion U.S. dollars and Gross National Income (GNI) per capita was about 2 100 U.S. dollars. As a comparison, GNI per capita in other neighbouring countries are about 10 840 USD in Costa Rica and about 2 150 USD in Honduras. (WB data 2018.)

Indeed, the Nicaraguan National Human Development Plan has defined economic growth, increasing employment, reducing inequality and poverty as the main ways to development. From 2005 to 2014 the country has reduced inequality from 48.8 to 46.2, measured by the GINI index (100 meaning total inequality and 0 meaning that wealth is distributed totally equally). Similarly, people living under national poverty line reduced from 48.3 % of population in 2005 to 24.9 % in 2016. Economic growth and more equal distribution of wealth have been the main reasons for improved living standards in Nicaragua with increasing employment and formal employment. Growth was analysed to be caused by increased exports, investments, and remittances. Social policies are also mentioned as factors in reducing poverty and inequality. (WB data 2018; IMF 2011, 7-8, 31; Aba & Atakisi 2015, 667.)

In Nicaragua and more generally in Central America apparel industry originates from *maquila* production. In *maquila* production intermediate inputs and raw materials are imported to the country for low cost, labour-intensive manufacturing and then the final product is re-exported to its final markets. The first *maquiladoras* were established in northern Mexico, close to the U.S. border. The idea was to supply low cost manufactured goods to the markets in the U.S. and at the same time to create employment in Mexico. (Robertson, Brown, Pierre & Sanchez-Puerta 2009, 131; Hadjimarcou, Brouthers, McNicol & Michie 2013, 207-208, 210.) The *maquila* production has helped Central American countries, including Nicaragua, to industrialize, to boost their manufacturing sectors and to diversify exports. However, it has not been a completely unproblematic way to development, since *maquilas* have sometimes been criticized of their working conditions and low wages.

Indeed, while the apparel industry is often praised for its boosting number of foreign investments, exports, and employment in developing countries, the question remains how it affects Nicaragua, and if it can reduce poverty and on what conditions. The purpose of this study is to examine apparel industry in a lower middle-income country: how does Nicaragua attract foreign apparel investments and do they create employment and reduce poverty in the country.

The **research questions** in this study are:

• What is the role of apparel industry in Nicaragua?

• What challenges and opportunities does the externally originating apparel industry create as a source of employment and poverty alleviation in Nicaragua?

The research questions are examined especially from the perspectives of foreign direct investments and employment, and in the light of poverty reduction. To answer these research questions, this study connects a literature review with empirical data collected in four interviews and second hand sources. The earlier research of foreign investments, employment, and apparel industry in the Global South are first discussed in chapters 2, 3, and 4. They help us to understand the opportunities and challenged related to the apparel industry, foreign investments and employment. Chapter 5 describes and defends the methodological choices made in this study and examines the trustworthiness of the study. Chapters 6 and 7 analyse the Nicaraguan apparel industry in the light of the empirical data and literature review. Chapter 8 concludes and reflects on the academic and managerial implications of the results.

2 FOREIGN DIRECT INVESTMENTS AND ECONOMIC DE-VELOPMENT

2.1 Developing countries in global value chains

Globalization, global outsourcing and geographically dispersed production and value chains have brought multinational investors into developing countries. In apparel industry, participation of a developing economy in a GVC traditionally means that a multinational company has a production plant in the developing country. The country most probably offers cheap labour and low production costs, while the company is expected to create employment and to bring foreign capital and new technology in the country. The reason for a developing country to participate in global trade and global value chain (GVC) is to attract multinational companies and foreign investments in hope to boost economic growth. (Gereffi & Frederick 2010, 3,11-12.)

Open international trade has driven countries to focus on different industries and even on different phases of production. Stages of production are dispersed into different parts of the world, both in the Global North and South. Inputs of production such as capital and raw materials and stages of production are located in different parts of the world. Lower transportation costs and better communication systems have made it possible for firms to disperse their production globally. Processes of industrialization, specialization, and export orientation have had their impacts on both developing and developed countries. At the same time countries are trying to find their position in the global economy, more or less successfully. (Gereffi 1995, 100-103; 105.)

A lot of research has been carried out about the relationship between foreign direct investments and economic growth. Often in these studies it is assumed that economic growth correlates positively with economic development and poverty reduction. Sharma and Gani (2004, 14) studied this assumption in low- and middle-income countries between 1975 and 1999 and they found a positive correlation between foreign direct investments and Human Development Index. According to the researchers, rising amount of FDI led to economic and social development.

A developing country's participation in global trade and value chains is expected to increase exports, foreign investments, and employment. Foreign investments can help a country to raise its per capita income levels (Loayza & Raddatz 2010, 137, 148). Gohou and Soumaré (2012, 76, 91, 93) found a strong positive correlation between foreign direct investments and welfare in African countries. However, the level of correlation depended on the starting point. Richer countries benefitted more from foreign investments but poverty reducing impact was higher in poorer countries. According to Soubbotina and Sheram (2010, 8), economic growth and a rising level of FDIs in a developing country can

reduce poverty and lead to human development, if they manage to improve employment (both number and quality), generate new business opportunities with better conditions, and strengthen democracy.

Developing countries have been encouraged to offer benefits for international companies, in order to attract foreign investments. For example, industrialization by invitation model have been highlighted as a possibility to benefit from cheap and abundant labour supplies and to expand industrialization and develop economy with foreign capital. Industrialization served as a guideline to economic policy and was seen as a way to development. Industrialization by invitation model means that countries (such as Nicaragua) try to attract foreign investments by offering fiscal incentives. Overseas firms establish their factories and produce manufactured products in these countries, in order to export the products back to the final markets in the Global North. (Potter, Binns, Elliot & Smith 2004, 89-91, 144-146.)

Also Free Trade Zones (FTZs) were established in many countries in the Global South to serve as special production areas that are often located close to a port with good connections and infrastructure. The aim is to attract foreign investments with unrestricted trade, tax and legislation relieves in limited geographical areas, for example in the Mexican maquiladoras close to the U.S. border. (Potter et al. 2004, 89-91, 144-146.) Besides FTZs, other factors that attract foreign investments to a country are stable society and political situation, predictable property and tax system, and low level of bureaucracy. Also trade regime, openness of the local economy, infrastructure and the number of fiscal and financial incentives affect the attractiveness of a country. (De Mello 1997, 4.)

2.2 Foreign investments breaking the circle of poverty

A developing country can benefit in many ways from foreign investments that come from economically and technologically more advanced countries. A positive effect is highlighted if an investment can bring technological advancement to the country, in addition to cash flows. This can help developing countries to develop faster than industrialized countries did in the past. (Soubbotina & Sheram 2010, 33.)

FDIs may effect on poverty reduction in different ways, including creating both backward and forward linkages in the local private sector, promoting competition within the industry, provoking implementation of new technology, and creating jobs. An investment can create backward linkages by sourcing local materials and information. Forward linkages can be created by producing an output that is used as an input in another firm. (Gohou & Soumaré 2012, 76.) Foreign investments can help a country to break the vicious circle of poverty: low investments, low productivity, low income, and low savings (figure 2). Foreign investments raise the level of investments in a country. The raising

level of investments may lead to investments in better technology and the FDI itself may transfer advanced technology from developed countries. Better technology leads to higher productivity, which again may lead to higher income and consumption. The level of income also effects on the level of savings, which again are linked to investments. (Soubbotina & Sheram 2010, 32-33.)

When most of the income is needed to the urgent daily needs, less of it is possible to save and invest. Savings and investments again reflect to the level of productivity and that closes the circle. Low savings and low investments in physical and human capital do not help to raise the low level of productivity. Political and economic stability can encourage domestic saving and investing, but foreign investments can additionally boost growth in productivity. (Soubbotina & Sheram 2010, 33.)

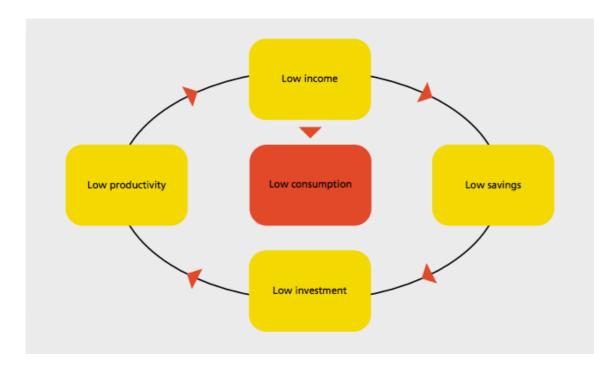


Figure 2 Vicious circle of poverty (Soubbotina & Sheram 2010, 33)

As implied by figure 2, foreign investments may offer a possibility to break the 'vicious circle of poverty' by increasing investments and productivity. This raises incomes, savings and investments in the country. ILO (2014a, 53) highlights the opportunity of domestic savings in this circle, since the share of domestic savings in some of the developing countries' GDP and investment funding has traditionally been higher than the share of FDI. Indeed, in lower middle income (LMI) countries, the share of gross domestic savings of investment funding in 2010 was 27.5 % while the share of FDI was 1.8 %. Investment funding in LMI countries in general has relied more on domestic savings than on FDIs. However, the number of foreign direct investments have increased in the world,

especially in developing countries from 1950's to 1990's. Since then, FDIs have concentrated on countries that offer incentives for foreign investments, like fiscal benefits and subsidies. (Gohou & Soumaré 2012, 76.)

Both foreign and domestic investments are important factors for growth, and foreign investments can complement domestic investments. Foreign investments increase the balance of payments and may offer employment and transfer of knowledge and technology. Knowledge and technology transfers are seen as the most effective mechanisms through which FDI promotes economic growth. But the investments do not convert into benefits automatically. Human capital enhancement and increase in productivity can happen only if there already is a necessary level of skills and efficiency among the labour force and a possibility to additional training. On the other hand, if investments and processes are concentrated in special FTZs and are regionally and practically separated from local firms, technological learning will less likely diffuse to local companies. (De Mello 1997, 9-10, 17-18.)

Technological spill overs happen more likely when labour force is more educated, and when the technology gap between foreign and local firms is not too wide. In addition, competition between foreign and local companies, and low legal and institutional barriers to foreign investments make spill overs more probable. (De Mello 1997, 22-23.) Figure 3 summarizes the possible benefits of foreign investments, and the preconditions that help a host country to benefit from FDIs.

Potential benefits of FDI

Preconditions in a host country

Economic growth

Complementing low domestic in-

vestments

Employment

Technological learning

Knowledge transfer

Stronger balance of payments

Higher productivity

Sufficiently educated labour force Technology gap not too wide Competition and interaction between domestic & foreign companies

Low institutional and legal barriers

Figure 3 Summary of possible benefits from FDI and factors that effect on realization of benefits (based on De Mello 1997, 22-23)

2.3 Foreign investments and local learning

The level of supporting impact of foreign investments on development and productivity growth depends on if it brings new advanced technology and skills to the country, and an easier access to export markets. Foreign investments sometimes create more competition in the country thus making national markets more efficient. (Soubbotina & Sheram 2010, 76; Hatani 2009, 165.) In developing countries foreign investments and participation in global value chains are possibilities to absorb new technology and learning. Learning in developing countries can happen for example when pursuing international labour, environmental or product quality standards. Learning can also happen by a direct involvement of investor and foreign company, for example by training. (Pietrobelli & Rabellotti 2011, 1261.)

The possibility to learn from supply chains is highlighted in many developing country when most of the technology and learning comes from abroad and is imported to the country. For example, in apparel industry upgrading from assembly to full package model requires an increased learning of customer markets, logistics and production chains. (Pietrobelli & Rabellotti 2011, 1261, 1264.) Apparel industry assembly includes only the most basic sewing and the inputs and distribution are provided by someone else, when in full package model the company is also in response of finishing and distribution (Fernandez-Stark, Frederik & Gereffi 2011, 13-14). However, economic upgrading as such does not guarantee social upgrading or better labour conditions. For example, the amount of employment can rise, but that does not guarantee better wages. (Lee & Gereffi 2015, 324.)

FDIs may advance learning in different ways, including creating both backward and forward linkages in the local private sector, promoting competition within the industry, provoking implementation of new technology, and creating jobs. An investment can create backward linkages by sourcing local materials and information. Forward linkages can be created by producing an output that is used as an input in another firm. (Gohou & Soumaré 2012, 76.) Active participation in foreign trade can help a developing country by technological spill overs from trading partners, for example by learning to use imported production equipment. These spill overs create a possibility for a developing country to improve its productivity by better equipment and knowledge. (Soubbotina & Sheram 2010, 67-68.)

However, technological spill overs are not automatic results of foreign investments in a country. Learning requires linkages across firms and sectors. Barriers that reduce linkages and learning between local firms and multinational companies include dispersed production chains, disorganized linkages between companies and changing legislations. Institutional conditions are needed to encourage learning and spill overs. (Hatani 2009, 161, 165.) The host economy needs to be developed enough so that it can take advantage of the new technology and knowledge. Otherwise, the new technology may be limited to

export focused and foreign owned companies that don't have any links to local firms. (De Mello 1997, 21-22.)

De Mello (1997, 31) recommends policy-makers in host countries to consider this when attracting foreign investments, especially if the target is to benefit from possible technology spill overs. The domestic investments need to be encouraged as well, so that the local entrepreneurs can benefit from the possibly new, foreign-led technology. In addition, underdeveloped institutional infrastructure may hinder the developing countries' possibilities to benefit from technology transfers. Rule of law and property rights, but also links between businesses, and links between research, education and industry are necessary institutions to develop an economy by foreign investments. (Hatani 2009, 165.)

2.4 Challenges of foreign investments in poverty reduction

As seen previously, foreign investments have most likely an impact on economic growth but they do not self-evidently reduce poverty. In fact, to reduce poverty and inequality, growth should be pro-poor and foreign investments should benefit the people at the bottom of the income pyramid. Growth and investments should provide jobs and raise the living standards of the poorest people instead of accumulating wealth and power to the already wealthy ones (Loayza & Raddatz 2010, 148; Ravallion 2007, 2). Indeed, economic growth and investments do not necessarily lead to human development. Growth can also increase inequality and weaken democracy if wealth and power accumulates to those who already have it. It can even lead to higher unemployment or overconsumption of resources (Soubbotina & Sheram 2010, 8). Also Anand and Sen (2000, 2045) found that the level of inequality and the nature of the economic growth have their influence in how economic growth and investments create welfare.

The nature of FDI matters in how it effects on poverty reduction. For example, if the logic of a foreign investor is to buy raw materials abroad and not from local markets, it limits the impact of the investment to create employment and reduce poverty. (Gohou & Soumaré 2012, 77.) In this kind of a case, the investment does not create any backward linkages to local entrepreneurs or learning throughout the supply chain. It would probably create employment in production, but would not strengthen the businesses of local material providers. FDI may also have unwanted effects like environmental consequences or exploitation of labour (Oetzel & Doh 2009, 110).

FTZ model with fiscal benefits in a restricted manufacturing area is used in many developing countries to attract foreign investments, but the model is also criticized. It is said that investments and companies that are attracted by FTZ model, tend to create few links to local economies, and to employ only low-skilled and low paid workers. Also the way

foreign investments and companies are attracted is said to be short-sighted, since the companies tend to flee the country immediately when financial incentives in FTZs end. (Potter et al. 2004, 89-91, 144-146.)

In addition to previous challenges, when considering human development, a lot more than only economic growth has to be taken into account. In Human Development Report (UNDP 2015, 9) human development is defined as expanding possibilities of people to live a productive life and to develop their potentiality in a way that fits with their needs and interests. It includes a possibility to a healthy life, a possibility to participate in decision making and in a community, an access to knowledge, and decent standards of living. Some development criteria also include the levels of gender equality, environmental quality, and human rights (Potter et al. 2004, 8).

3 EMPLOYMENT AND POVERTY REDUCTION

3.1 From growth to employment and poverty reduction

Industrialization and structural change boosted economic growth and employment creation in developing countries, especially from the 1950's to the 1970's (Szirmai 2012, 417). However, Melamed, Hartwig and Grant (2011, 3) argue that in order to reduce poverty, economic growth needs to increase demand for work but also productivity of labour. Moreover, an increase in productivity has to result in an increase in the salaries of the workers in order to raise living standards and reduce poverty. Also Gutierrez, Orecchia and Semeels (2007, 3) argue that growth and employment generation are important in poverty reduction, but if the employment growth is obtained by wage reductions, the impact on poverty reduction is naturally lower.

In their research, Loayza and Raddatz (2010, 137, 142-143) demonstrate how the sectorial composition of economic growth effects the possibilities to alleviate poverty in a country. They conclude that when growth creates employment for unskilled labour force, it reduces poverty more efficiently than another type of growth, because it offers additional income for the poorest people of a society. The sectors that these researchers found alleviating poverty the most were agriculture, manufacturing, and construction industry. Growth in these sectors alleviated poverty more than growth in mining, utilities and services, because the former sectors are more labour-intensive and they create linkages to local firms more likely than the latter ones. As the labour-intensive industries most likely create employment for the least skilled workers who usually are the poorest in a country, then poverty alleviation is more probable than when growth happens in a less labour-intensive industry.

However, another study presents that in a period of two years' employment intensive growth in manufacturing sector resulted in poverty reduction, while on the contrary, employment growth in agricultural sector resulted in increase in poverty. The data showed that 1 % of employment growth in manufacturing related to 5-7 % of poverty reduction (Gutierrez et al. 2007, 15, 23). This is probably because manufacturing sector offered more productive jobs with better income than the agricultural ones, and therefore the growing number of workers in manufacturing sector reduced poverty more than in agricultural sector.

Osmani (2005, 9, 19) highlights the importance of employment in the Global South and confirms that growth can only reduce poverty when it creates productive jobs for the poorest. He presents two factors of growth that effect on its possibilities to create employment; elasticity factor and integrability factor. The elasticity factor indicates the number of jobs or improvements in quality of work that growth creates. The integrability factor

determines how well the poorest can access the created jobs and improve the quantity and quality of their work. In summary, growth can only reduce poverty when it manages to create more quality employment, and when the poor have an access to the newly created jobs. Osmani (2005, 20-21) continues that the elasticity factor and demand of labour increase from three interrelated reasons; if growth and production techniques are labour-intensive and if the terms of trade are sufficient for the producers. But also the opportunities of the poor to access the created jobs are important when targeting poverty reduction and better income to the poorest.

3.2 Employment policies towards poverty reduction

In general, the poor get most of their income from work, regardless if they are farmers, salaried workers, or self-employed. This is why poverty reduction requires actions in the quantity and quality of employment and creation of decent opportunities to earnings for the poorest. Indeed, many governments in low income countries have set employment generation at the core of national poverty reduction strategies. (Hull 2009, 69.)

The ILO (2014a, 66) and UNRISD (2010, 7, 10) reports confirm that trade, economic growth, liberalization and industrialization do not self-evidently transform into improved employment, income, and well-being. Although there are countries that have shown that industrialization can be a successful way to improve income and living standards, these countries have managed to use heterodox policies derived from the countries' own national conditions, and not from market-led prescriptions. Also Melamed, Hartwig and Grant (2011, 5) argue, that the connection between economic growth, employment creation, and poverty reduction is not direct but context-related.

In order to understand the connection, Hull (2009, 74-75, 78-79) suggests a framework to analyse the necessary policy implications to reduce poverty by growth and employment. The first step is to understand and calculate the characteristics of growth and to what extent it is produced by changes in productivity, number of employment or population growth. The second step is to reflect how these components of growth affected poverty reduction within an economy and a sector. The third step is to recognize policies and institutions that effect on growth, employment and poverty reduction in the given context. Affecting factors may include for example level of education, labour market regulations, investment climate and trade. (Hull 2009, 74-75, 78-79.)

Gutierrez et al. (2007, 25, 29-30) tested if labour regulation disfavours job creation. They showed that minimum wages have a negative impact on job creation in manufacturing, but unionization variables (share of workers in unions, number of strikes per year etc) did not have a significance to employment growth in manufacturing sector. Surprisingly, based on their study, the researchers argue that neither did education seem to have

a significance to employment-intensive growth in manufacturing sector, so education did not create more employment. They believe that low levels of education among the work force offers cheap labour for employment creation in manufacturing — but at the same time low skills and low productivity may decrease labour demand and eventually these effects together override each other. In agriculture, education improved productivity and had a poverty reducing impact on that sector. Open-mindedness to trade and favourable terms in trade increased trade and employment creation in the manufacturing business, while overvalued exchange rate and a geographically landlocked situation reduced the number of trade and employment creation in the same sector.

A target for a country's employment policy can be to increase the number of jobs and to reduce the rate of unemployment. It can also focus on increasing the level of employment for the underemployed who would be willing to work more, or to improve the quality of already existing work. (Osmani 2005, 10.)

3.3 Job quality and decent work

Achieving full and productive work and decent employment is one of the 2030 Agenda for Sustainable Development goals. It was also one of the Millennium Development Goals (MDG) for 2000-2015. These targets are divided in employment indicators that include labour productivity, the number of workers living under poverty line (working poor), and the number of workers in vulnerable jobs. In a developing country, promoting decent work can be a competitive advantage, instead of minimizing short term costs. For example, ILO's Better Factories Program has served as a tool to improve labour conditions, and for both committed governments and companies a possibility to enhanced and more sustainable competitiveness. Indeed, competitiveness and more investments can serve a country as a way to access better technologies, improving productivity, and improving the role in value chain that again may result in more economic growth and development. (ILO 2013, 3; ILO 2014a, 37; 75-78.)

According to ILO (Decent Work), decent work is a concept for a productive work with a decent income, security and social protection. It also includes possibilities to personal development and the right to organize and participate in decision making. Decent work includes equal treatment for all. ILO's (2014a, 3-6) report suggests that the most important ways to improve labour markets and job quality are

- to boost *productivity*, since productivity can reduce poverty in long-term
- to promote the *employability and productivity of the poor*, since this can reduce working poverty and improve income distribution
- to improve *employment quality* and working conditions
- to decrease the number of *vulnerable employment*

• to reduce youth unemployment and to promote women's share in labour force.

In this research, the concept of job quality is defined by applying the points of ILO and MDG indicators presented above. The concept is divided into three dimensions as presented in figure 4. The dimensions include the number of working poor in the labour market, number of vulnerable workers in the labour market and labour productivity.

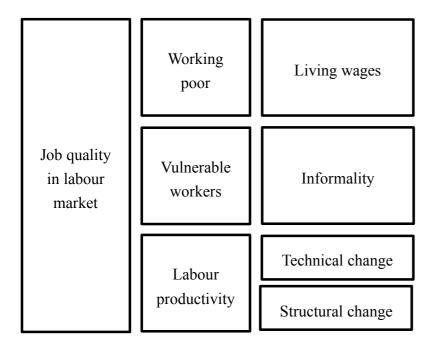


Figure 4 Job quality in labour markets

The concepts presented in figure 4 are defined and analysed with other related concepts in the following sub-chapters.

3.3.1 Working poor and living wages

Having a job is not always enough to pull people out of absolute poverty. About one third of all workers in the world were still living with less than 2 U.S. dollars a day in 2013 (ILO 2014b, 12). Working poor is a concept defined as people who are working but are still living in a household of which income falls under the poverty line (UNRISD 2010, 52). The concept of working poor has to be taken into account when studying job quality in a country, and employment as a means to reduce poverty. The poor cannot afford not to work because of a limited or non-existent social security, but when the salary does not cover the basic necessities, employment doesn't automatically reduce absolute or relative poverty. Osmani (2005, 17-18) shows that working poverty may derive from two main reasons; underemployment or low earnings. Underemployment or inadequate quantity of labour may result from limited working hours or from low intensity of work, whereas

inadequate earnings may result from low productivity of labour, from unfavourable terms of trade, or from a surplus of workers on labour markets. For example, in Latin America the share of working poor living with under 2 U.S. dollars a day has reduced from 27,3% in 1991 to 15,9% in 2009. In general, the Latin American countries have managed to create new jobs, but are struggling to improve productivity and to create better-quality and decent work. (ILO 2011b, 37, 71.)

Different sectors may also have different rates of working poor in a given country. Data from Kenya and Brazil show that when exploring formal sectors, the share of working poor was highest in the agricultural sector, lower in the manufacturing sector and the lowest in service sector. This is context-related, because it may result from the fact that in general, the share of working poor is higher in informal than in formal sector and the service sector may have a higher share of working poor in informal sector. Thus the service sector may have more less-paid informal workers than manufacturing sector and poverty rate may actually be higher in an average service job when counting both informal and formal workers. (UNRISD 2010, 54.) A living wage means a salary that enables a worker to fulfil his or her basic human needs such as decent housing, food, and clothing and it is earned in a maximum of 48 working hours a week (Shelburne 1999, 1). A living wage is a human right and is mentioned in the United Nations' Universal Declaration of Human Rights. The third principle of Article 23 says: Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection (UN).

There are several ways to measure a living wage, but most of the methodologies include also other than the very basic needs, such as education, health care and some extra for savings. Savings are seen necessary to survive in a case of unexpected expense or unemployment. Living wage includes the assumption that a worker's salary must also cover his or her children's or family's expenses, so that the children don't have to work. (ILO 2011a, 49-50.) Difficulties in determining a living wage concern the subjectivity of the concept, for example the varying number of the size of a family and the share of workers per household, but also regional differences in pricing, and the quantity of reasonable products and calories (Shelburne 1999, 11).

3.3.2 Vulnerable employment and informal work

In addition to the number of working poor, it is important to take into account the share of workers in vulnerable employment. Vulnerable workers often refer to self-employed or workers in a family business who are less likely to be covered by social security or protection or to have a secure income than salaried workers. (ILO 2014b, 11-12.)

The global financial crisis has posed challenges for employment creation in many countries and has had its impact on labour market. For instance, it has increased the number of jobs which qualify as low-quality or vulnerable employments, especially in Latin American and Caribbean countries. The global number of workers in vulnerable employment was as high as 48 % of total employment in 2013. Globally, women work more often in vulnerable employment than men. (UN 2014, 10-11.)

Informality is related to vulnerable employment, and it is another challenge in today's labour market globally. Informal economy consists of unregistered economic activities and workers without any official status at work or an access to social security. Informal employment can have many forms and may happen in a registered or in a non-registered company, in self-employment or as informal domestic work. Informal work is usually related to low-productive jobs and low working conditions. (ILO 2014a, 11-12, 38.)

Informal and vulnerable workers are more likely to be caught in a vicious circle of low productive work with low salary and less opportunities to invest on their families' schooling or health care than formal wage workers. That leads to next generation's limited opportunities to increase their education, productivity level, and living standards (figure 5).

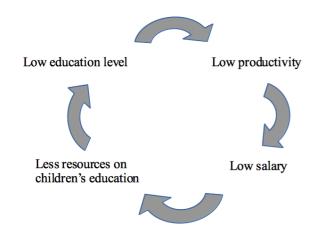


Figure 5 Vicious circle of low productivity work that effects on the next generation's possibilities to increase their productivity level (ILO 2014a, 9)

As in figure 5, the next generation faces difficulties in increasing their productivity level, since their parents were less likely to be able to invest in their children's education and training. Because of the risks associated with informal work, which is present in all countries in the world but is common especially in the Global South, the share of formal and informal employment is important to take into account when studying labour markets in the South.

However, informal work is a broad term that covers a broad range of work and personal circumstances. In some cases, informal work can offer a better or a more tempting option

than a formal work. Maloney (2004, 1160-1161, 1163) studied informal male workers in Argentina, Brazil and Mexico, and concludes that a great portion of informal, self-employed workers entered the sector voluntarily in search of higher salary or more independency. The ones who ended up to the informal sector involuntarily often earned significantly less than the ones who changed sectors voluntarily. For women the informal sector offers a more flexible work that enables to combine employment with unevenly distributed household chores.

Informal work can be tempting to the least educated workers since their earnings in low-productive formal jobs can be as low as in informal work. An informal work can at least offer a more autonomous job. Maloney (2004, 1173) states that in the long term, the most effective way to improve living standards is to increase the number and productivity of formal employment. Education is the key to improve productivity and earnings.

3.3.3 Labour productivity

Researchers have studied whether increasing the number of jobs or the level of productivity is more important for poverty reduction. Kakwani, Neri and Son (2006, 24) studied components of growth in Brazil. They found out that increasing number of employment had a small effect on poverty reduction, but in the end, productivity growth reduced poverty more efficiently.

Labour productivity is defined as output per labour input. For example, in national level it can be counted as how many working hours are needed to produce the country's GDP (ILO 2016, 18). Low productivity keeps workers' earnings low and makes it difficult to escape poverty. Therefore, some researches have expressed that a country's target should be to increase job quality instead of job quantity (Fields 2003, 240). However, there are studies that state that if there are only a few higher-productivity jobs available in a country, it can lead to rising inequality and unemployment for more people (Melamed, Hartwig & Grant 2011, 3).

Manufacturing sector is often described as more productive than the agricultural sector, since manufacturing often uses more effective production techniques. Manufacturing sector is also expected to increase productivity more generally, because it often promotes technological and organizational improvement in the country, not forgetting the possible economic and knowledge spill overs and linkages to other sectors and industries. (ILO 2014a, 68, 70). However, increasing productivity in agriculture was associated with poverty reduction, while in manufacturing sector it did not have a significant impact on poverty (Gutierrez et al. 2007, 15, 23). This is logical in agricultural sector, since the increased productivity correlates directly to the earnings of the farmer. In manufacturing

sector, it may relate to the fact that there are more intermediaries in the production, and the increases in profits may not be passed to the production workers' salaries.

ILO (2014a, 45) resumes that productivity growth in a country may result from two changes; from structural change in the labour market, which means that workers move from sectors of lower productivity to ones with higher productivity, or from technical change. In other words, ILO highlights that employment needs to be created in more productive sectors including advancement in technical knowledge among the work force and improvement of productivity. Furthermore, according to the study, technical change is considered as more significant factor, since in the past decade, three-quarters of productivity change in lower-middle income countries was generated due to technical change and one-quarter due to labour moving to higher productive work. Also human capital has a significant impact in increasing productivity. Education and training are key elements in promoting productivity and job quality, thus impacting on GDP growth as well. (ILO 2014a, 57.)

As a structural change, workers in the less productive jobs have fewer possibilities to advance to more productive ones, (Hull 2009, 71) although moving from a less productive job to a more productive one would reduce poverty efficiently. The question in policy making remains, if it is more beneficial to concentrate on policies boosting growth in low-productivity sectors in which the poorest are working (e.g. agriculture, low-productive service work), or if it is more beneficial to pursue growth in sectors in which the poorest are not working yet, with the idea that more poor people will be drawn into that sector. (Gutierrez et al. 2007, 3, 33.)

In low and middle income countries the labour markets are often highly divided, with significantly lower salaries and conditions in less productive jobs than in more productive jobs. Segmented labour market theories suggest that employment can be divided into "better" and "worse" or more productive and less productive jobs. Less productive jobs have lower wages and worse working conditions, insecure employment and little opportunities to advance, while more productive jobs have better wages and working conditions with more opportunities to advance. (Leontaridi 1998, 80.)

Hull's (2009, 73, 83) study shows that accessibility of the poor to more productive sector is essential in poverty reduction, but there might be barriers that the workers encounter when aiming to more productive work and sector. These barriers include geographical and infrastructural distance and legal or cultural norms. There might also exist institutional weaknesses, for example workers may lack the essential skills and education to move forward. Another barrier may be that the poor don't have access to information about job openings. Also discrimination and work-related exploitation may keep workers away from advancing further.

Gutierrez et al. (2007, 5) suggest that the sectorial pattern of employment growth is essential to be examined in order to understand its potential poverty reduction effect. In

case there are barriers to mobility, and the poor do not gain the benefits of growth in a more productive sector, growth is more pro-poor on low-productive sector. Instead, if there are no extensive barriers and there is enough mobility between the sectors, then growth in a more productive sector may be more efficient to reduce poverty.

According to Hull (2009, 73) highly segmented labour markets have an impact on possibilities of growth to reduce poverty in four ways. Firstly, when labour market is segmented and labour force cannot efficiently move from a sector to another, it may hinder economic growth. Secondly, if labour markets are segmented, wage increase in one sector does not necessarily shift to another sector as in a case of a less segmented labour market. Therefore, for growth to reduce poverty, it must happen in a sector that the poor are located or have access to. Thirdly, an increase in number of employment in less productive sector does not seem to reduce poverty because of its low wages and poor conditions. Instead, increase in productivity in a sector may alleviate poverty and reduce the gap between less and more productive sectors. Fourth, public policy can support mobility of the poor from a sector to another, if it lowers the barriers to entry.

Hull's (2009, 82-83) study shows the importance to promote poverty reducing growth by lowering the barriers and reducing the gap between more and less productive sectors. This is suggested to be done by supporting linkages and supply chains in more productive sectors in order to create more employment in more productive sector. Another suggestion is to improve the quality of less productive sector and to reduce the gap with the more productive work. For example, a better access to credit and technology and improved infrastructure may strengthen linkages between less productive and more productive sectors.

Finally, according to an ILO (2014b, xix) report, it looks like countries in the Global South that have managed to create quality jobs, to cut working poverty, and to reduce vulnerable employment have made the greatest progress in per capita income growth. Sustainable development is only possible when social protection, employment, and decent work are taken into account in policy making (ILO 2014a, xxiii, 13).

4 APPAREL INDUSTRY IN THE GLOBAL SOUTH

4.1 Globalization and labour markets in the South

Globalization has changed the nature of manufacturing and it has a direct impact on the position of buyers and producers in the market. As a consequence of easier global trade, production processes have fragmented geographically and labour intensive phases have moved to lower-cost countries. Similarly, increasing trade of intermediate products is a common side effect of the global fragmentation of light manufacturing processes. For example, in Mexico the imports of intermediate products increased significantly when maquiladoras became popular. Low skilled work had shifted from the U.S. to Mexico and intermediate products were imported to factories, while the final products were again shipped to the U.S. markets for sale. A similar process happened in Hong Kong when light assembly work was shifted to China. (Koujianou Goldberg & Pavenik 2007, 51.)

Reinecke (2006, 30) and Koujianou, Goldberg and Pavcnik (2007, 54, 77) studied how globalization affected workers in developing countries in the last decades of the twentieth century. According to Reinecke, during those decades manufacturing wages increased, but other aspects of job quality deteriorated. Informality increased when companies preferred subcontracting and at the same time social security decreased. Koujianou and Pavcnik again implied that the inequality increased in developing countries during globalization and the least fortunate did not benefit from more open and global trade.

However, both Reinecker's (2006, 30) and Koujianou, Goldberg and Pavcnik's (54, 2007) studies note that the results were not straightforward and the data varied among countries and even within countries. Similarly, the impacts of globalization were difficult or impossible to separate from impacts of privatization or changes in labour laws. Favouring policies of privatization and labour market flexibilization were seen as part of globalization, although they are not necessarily the only possible policy reactions. To conclude, globalization has not evidently led to more decent work in Latin America (Reinecke 2006, 21, 23, 30-31).

While capital moves faster than labour, workers have had to adapt to job flexibilization and instability. More liberalized trade and increased mobility of capital have their risks, since capital can also escape a country more easily, for example in a case of changes in business environment (Soubbotina & Sheram 2010, 76). Indeed, the capital is easily transferred from a country to another, which allows global investors to displace their assets and continue to search for the highest return. If a country tries to improve its position and demand investments to stay longer, the markets can easily react by moving their investments to another region.

Globalization has expanded economic opportunities but at the same time it may have created exploitative working conditions in export-oriented sectors. Without training or education at work, employees get stuck in low productive and low quality work. Long working hours do not give realistic opportunities to educate oneself, turnover is high and workers are not expected to stay long in a job. However, in some cases, exports to clients in Global North have improved compliance of labour laws and job quality, because the customers have demanded it. (Reinecke 2006, 21, 25-26.)

4.2 Global trade politics in apparel industry

A large part of the world's apparel exports' is produced in the Global South (Gereffi & Frederick 2010, 8). Apparel industry is often the first step in the industrialization of a country and according to World Bank report (2012, 9) this is because of three reasons. The first is that starting costs and capital investments for necessary machines are low, raw materials are cheap, and work is simple, and therefore it is relatively easy to set up an apparel manufacturing plant. The second reason is that most of the apparel exports in the world are produced in low-income and cost competitive developing countries. The third reason is that apparel industry provides opportunities for a country to move up the value chain by entering at a simple stage and by learning to move up to more value-adding activities. Moving up to an upper stage requires higher productivity and wages and therefore also more skills and capital.

Global manufacturing and competition has made companies run after lower production costs to low-wage countries. That again has made less developed countries compete for foreign investments that generate employment and bring foreign capital in the country (Gereffi 1995, 105). In addition to Mexico, also China and other countries in Asia started *maquila* model production and are significant competitors in low-cost manufacturing (Hadjimarcou et al. 2013, 209).

Apparel industry has traditionally been one of the most protected industries in the world starting from agricultural subsidies on raw materials like cotton, to quotas and trade agreements. Multi-fibre arrangement limited the level of exports on certain products to protect domestic industries in the United States and the European Union, and was valid until the end of 2004. (Frederick, Bair & Gereffi 2015, 403.) Quotas were eliminated in 2005 opening the U.S. and the EU markets and starting a shift in global apparel production and a change in company strategies. This favoured especially Asian apparel producing countries, for example China and India. (Bair & Gereffi 2013, 4, 6.) Latin American countries, but also the U.S. companies that used to supply textile material for Latin American sewing factories, were expected to lose in the manufacturing shift to Asia (Frederick et al. 2015, 403). In Nicaragua, the TPLs benefit (Section 1.2.) has been an important

factor in maintaining growth in apparel exports. For example, in 2012 42 % of Nicaraguan exports was exported under TPL benefit. (Frederick et al. 2015, 403-404, 408.)

After the expiration of the TPLs at the end of 2014, the apparel firms in Nicaragua were expected to either search the textile manufacturers and necessary inputs and raw material within the area, or to continue importing raw material elsewhere and pay the applicable taxes. Some of the companies were expected to leave the country. According to an approximation, as many as 30-40% of the industry are disappearing because of the TPLs expiration. The most affecting factors in a decision of a company to flee the country after TPLs or not are the origin of the company and if the parent company conducts regionally or globally. If the company already uses raw material from Asia and has production in there, it is likely to leave the country. (Frederick et al. 2015, 404, 408.)

4.3 Global value chain of the apparel industry

Global apparel industry consists of buyer-driven value chains, which are usual consumer goods and labour-intensive industries. The manufacturers are often small companies and the customers are retailers, marketers, and traders, who have more power in the chain than the manufacturers. In its simplest, the branded companies and large retailers design and order finished goods from manufacturers that usually are locally owned factories in the Global South. In these cases, the branded firms do not own any factories, but they design and order the products from a supplier, who then manufactures, packages and ships the ordered products back to the buyer. Usually the manufacturer does not do any marketing or distribution. (Gereffi 1995, 116-117.)

The production network between the suppliers and the buyers forms a complicated network of producers and branded firms and the role of the core company or buyer is to manage this complex network of suppliers. The highest barriers to entry are in the retailer's side in product development, marketing, and retail. Profits originate from a combination of research, sales, and marketing that link the manufacturers in the Global South with the markets in the Global North via branded marketers and retailers. (Gereffi 1995, 116-117.) Scott (2006, 1525) highlights the role of the United States in the global trade of clothing since it is the primary importer of clothing in the world, while most of the exporters are in Asia, America (for example Mexico and Canada) and Europe.

The export led apparel industry requires countries, companies, and workers to adjust to trade liberalization and global competition when acting in the industry. The manufacturers face demands from global buyers to meet the global standards of labour and environment, but at the same are pressured to keep prices low, quality sufficiently high, and lead times short. (Nadvi & Thoburn 2004, 111-112.)

In the global shift of simple manufacturing moving to developing countries, companies are running after lower production, including labour, costs. But the low labour costs only create a temporal competitive advantage for a country in attracting apparel investments and production orders, because the companies can easily move forward to a country with again lower costs and wages. While the international trade becomes more liberalized, the competition between low-wage countries is getting more intense and the production continues to move towards even poorer and lower-wage countries. The less developed countries should pursue better quality instead of ever falling production costs, exploitable workers, and fierce price competition. (Scott 2006, 1528-1530.)

But not all developing countries have growing export rates or a visible role in the global trade. It is evident that not only low costs and wages are enough for a developing country to increase its export rates or attract more foreign investments or clients. Besides low wages, there needs to be infrastructural investments and an entrepreneurial culture in a country to increase its exports. Moreover, there should also be a stable political situation, acceptance of foreign capital, easily convertible national currency, and a pool of disciplined labour force. Good business environment and a strong forecast for economic growth are also needed in order to ensure investors' confidence. (Scott 2006, 1525; Soubbotina & Sheram 2010, 76.)

However, Melamed, Hartwig and Grant (2011, 2) warn that concentrating on international markets driven manufacturing can be risky because of the possible high volatile demand of the market, for example in a case of international financial crisis. Also depending on one market may be risky, and for example many Latin American countries, including Nicaragua, mostly export to the USA. Narrow international specialization on few products makes a country dependent on export, which has its own risks regarding changes in trade agreements and global politics. Income is generated from a focused product base and it makes an economy vulnerable to market price fluctuations. (Soubbotina & Sheram 2010, 67-68.)

Within a country clothing industry is often clustered in special industrial zones and FTZs. These clusters usually have the most suitable infrastructure, services and connections to other actors in the industry (Scott 2006, 1523). While the FTZs are externally strongly connected to the GVCs, they are criticized of being isolated assembly zones that do not have connections to the local economy. They may create jobs and foreign exchange, but many times they do not have any connections to local producers, since for example the raw material is often imported from other countries. Therefore, they do not always generate linkages to local producers or boost local growth and production in the long run. (Bair & Gereffi 2003, 148-9.) Scott (2006, 1519) also argues that big producers in low-wage and low-technology industries are quite independent of the matter of their location decisions within a country because they create their own internal economies and are not that dependent on other producers in the region.

4.4 Apparel industry as an employer

Apparel industry and *maquilas* in the Global South are often criticized for their supposedly low salaries and poor working conditions. However, wages and working conditions in many sectors in Global South are not necessarily poorer than in other industries and actually the wages and conditions in export industries may be better than in other industries in the country. For example, Ver Beek (2001, 1565) studied working conditions in offshore assembly factories in Honduras and concluded that *maquila* factory as an employer was not better nor worse work than a local factory. Interviewed manufacturing employees reported both better and worse parts of working conditions in *maquilas* compared to the control group. *Maquila* workers reported a better income, better household relations, and more political participation than the control group. In this case, it seemed that experience raised a worker's income in a *maquila*, while level of education did not seem to have an effect. In his study Ver Beek concluded that although *maquila* worker's income was higher than the control groups', it still was not enough to pull the worker's family out of poverty.

However, there are evidence of the connection between poverty alleviation and textile and apparel industry in a micro and a macro level. While apparel and textile industries are labour-intensive industries that have potential to create jobs in developing countries, they have also been under criticism since earnings and working conditions could be better (WB 2012, 8). Nevertheless, studies have shown that workers in these industries come from the lowest-end of wage distribution, and actually earn better and work in better conditions compared to other alternatives in the same education level (Robertson, Brown, Pierre & Sanchez-Puerta 2009, 8). Thus, workers benefit by getting better jobs with better earnings and moving upwards from agricultural, informal, or low-productivity service jobs to manufacturing.

An inter-industry wage study in Cambodia compared the wage a worker earns in textile and apparel industry to a wage the worker could earn in another sector of the economy. The data shows that a worker in textile and apparel industry earns about 67 % more than the national average. In this study, the difference was also calculated controlling demographic characteristics (in this case age, gender, and years of education). Now, since the industry employs a high share of women with low level of education, who on average earn less than other workers, the wage difference increases close to 80 %. Therefore, it seems that in Cambodia, a worker in textile and apparel industry earns better than in another industry, and the industry has given better than average earnings for least educated women in the country. However, there remain challenges in the industry, since ILO's Better Factories Program reported also about delays in wage payment, excess in overtime, and illegal strikes. (Robertson et al. 2009, 105, 109-112.)

While the textile and apparel industry workers earn more, they also work more. According to the same study, an average Cambodian worker works 49 hours a week and an average textile and apparel worker worked about 5.6 hours more. However, also the average hourly wage is higher, being almost 30 % more than a national average hourly wage. When controlling the demographic characteristics, textile and apparel worker's hourly wage raises up to 44 % higher than an average in all sectors. (Robertson et al. 2009, 112-114.) Thus, the better wage of a textile and apparel industry worker is explained not only by a higher hourly wage, but also by significantly longer working hours.

4.5 Apparel industry in Nicaragua

As justified in previous chapters, apparel industry can serve as an important source of employment and foreign investments. It creates both opportunities and challenges in manufacturing countries and Global South. Based on the earlier literature, table 1 summarizes the opportunities and challenges of apparel industry, with some propositions on the research questions and apparel industry in Nicaragua.

Table 1 Opportunities and challenges arising from FDI and employment in apparel industry in Global South, and propositions of Nicaragua

	In Global South	In Nicaragua (propositions)
Foreign Direct Investments	Opportunities: -Economic growth -Increase of exports -Improving trade balance -Technology & knowledge spill overs -Productivity growth -Complementing low domestic investments -Breaking the vicious circle of poverty -Creating linkages to local firms Challenges: -No linkages between foreign and local firms -Environmental consequences of manufacturing -Firms flee when financial incentives end	Opportunities: -Increase of exports and economic growth -Complementing low domestic investments Challenges: -Environmental consequences of manufacturing
Employment	Opportunities: -Employment to the most vulnerable (e.g. women) -Employment to the poorest -Rising salaries -Productivity growth of labour -Increasing number of productive work -Increasing number of formal work Challenges: -Productive work for few (increase in inequality) -Inadequate wages or working conditions -Poor do not get access to work	Opportunities: - Employment to the most vulnerable (e.g. women) -Increasing number of employment -Increasing number of formal work Challenges: -Inadequate wages or working conditions

Table 1 shows that apparel industry as a source of foreign investments and employment can create many opportunities for economic and social development in a developing country. As there are opportunities, there are also challenges to meet and tackle. Many of the opportunities and challenges collected in the table are interrelated: as creating linkages between foreign and local actors is a great opportunity of reciprocity and a possibility to learn, it does not happen automatically. If the linkages do not happen, the country may lose some possibilities of for example productivity growth and technological spill overs. Similarly, as an example of employment opportunities, apparel industry can be a possibility to employ and empower some of the most vulnerable people in a country. However, in case there are barriers for the poorest to get access to the apparel jobs, then the poverty reducing impact may be lower.

Based on the literature review, there are also propositions made of Nicaraguan apparel industry in table 1. Propositions of opportunities of Nicaraguan apparel industry include for example an increase in exports and economic growth, and on the other side, the apparel industry is expected to have negative environmental impacts. On the other side, Nicaraguan apparel industry can be expected to create a lot of low productivity work. Inadequate working conditions and wages may be challenges in Nicaraguan apparel industry. Chapters 6-8 go through the Nicaraguan case more deeply.

5 RESEARCH DESIGN

5.1 Research approach

In this study, the research questions "what is the role of apparel industry in Nicaragua?" and "what challenges and opportunities does the externally originating apparel industry create as a source of employment and poverty alleviation in Nicaragua?" were approached in a qualitative analysis. The analysed data was mostly collected by interviews. In addition to interviews, earlier research and for example a publication "Las trabajadoras(es) de la industria maquiladora en Centroamérica" (workers of maquila industry in Central America) of Maquila Solidarity Network (MSN) were used.

When planning and selecting a research approach and design I made various choices that affect the results and analysis. Decisions that I made included the philosophical underpinnings of the research, how to design the research, and which methods to use when collecting and analysing the data. These decisions were in close interaction with planning and conducting the research. While selecting an approach and taking decisions about methods one must also consider the nature of the research problem, researcher's own experience and preference, and the targeted audience (Creswell 2014, 3).

I chose to conduct a mostly qualitative study, because the qualitative approach enabled me to understand and describe the causal relations that I was interested in. As the purpose of this study was to understand a phenomenon and the context, it was justified to use qualitative approach. Eskola and Suoranta (2001, 61) describe the meaning of a qualitative study as to describe an occurrence, or to understand a phenomenon or an action, instead of forming statistical generalizations. Qualitative approach gave this research space for abductive logic and a possibility to continue deepening my understanding of the phenomenon as a researcher during the whole process.

5.2 Research logic

The logic of this research can be described as abductive. While forming the final research questions and research plan I got acquainted with the context, culture and language. I had a six-month period of practical training in two development cooperation projects in a Nicaraguan Non-Governmental Organization (NGO) Movimiento Comunal in 2014. At the end of the working period the data was collected and while collecting, the literature was extended to provide background for analysing the issues raised during the interviews. Later, a publication "Las trabajadoras(es) de la industria maquiladora en Centroamérica" of Maquila Solidarity Network (MSN) was used as a second hand data.

Working in the country helped me to understand the Nicaraguan context and to get used to the culture and accent before collecting the data. Unfortunately, a visit to a local factory was impossible to organize because of a long entry procedure demanded before a visit. Also the limited time of visa made it impossible for me to stay longer in the country and to wait the permission to entry in a factory. However, the interviews and living and working in the country were enough to understand the context and the research industry.

The chosen research logic corresponds to how Dubois and Gadde (2002, 553-554, 556, 559) describe as systematic combining and an abductive approach in a case research. They describe a case research in which the researcher has a continuous data collection and search of literature at the same time. Thus, searching of theories was guided by the empirical findings. The researchers argue that the literature review can only be understood alongside empirical findings and that the empirical findings do not have to be compelled to match the predetermined literature. Also, the motive of systematic combining is to improve existing theories rather than create totally new ones. The chosen approach gave space to the data and to the interviewees' point of views since the literature review and the research questions were adjusted while conducting the research.

Grönfors (1982, 33, 37) describes abductive logic as a research logic that is based on an assumption that forming a theory is not founded only on observation, but there is a guiding principle to follow before collecting the data. The guiding principle can be any clue that the researcher finds important during the research process. Similarly, that guiding principle or clue may be rejected in any point or followed and used in forming a new theory.

5.3 Data collection and analysis

In this research interview data was collected by semi structured interviews. In addition to this, also earlier research and secondary data such as a publication of workers' rights by Maquila Solidarity Network were used to support the interview data. Hesse-Biber and Leavy (2011, 112-113) describe interviewing in a qualitative study as a conversation or a two-way flow of information where the researcher has an agenda but also gives space for the respondent to bring up themes that he or she finds important. This description applies also to this research. All interviews were individual face-to-face interviews that varied from 48 to 83 minutes in length, most of them lasting for more than 70 minutes. The interviews were conducted in Spanish and the quotations in this paper are translated from Spanish to English by the researcher. In one case there was a newly started colleague in the same room, but still all the questions were directed to the interviewed and the interviewed answered all the questions. The interviewer did not see any reason that the other

colleague would have disrupted the interview, and her presence did not affect the interview.

The interviews conducted in this study were carried out with thematic questions (see Appendix). The benefit of thematically formed interviews in this study was that the questions were not formed rigidly according to the researcher's understanding, but they allowed the interviewees to discuss more freely about the study topic. The themes also formed a useful framework when analysing the collected data. Themes followed the literature review and propositions of Nicaraguan apparel industry that were presented in table 1. Eskola and Suoranta (2001, 86) define a thematic interview similarly as used in this research: the researcher defined the themes but the questions and the order were not rigidly fixed beforehand. Instead, the interviewer made sure that all the decided themes were discussed during the interview.

I recorded all the interviews conducted for this study by a laptop and I also took some notes during all the interviews. The interviews were conducted usually in the office of the interviewee, except in one case on request of the interviewed it took place in a cafeteria in a local shopping mall. In the case of the interview conducted in a cafeteria the transcription of the recording proved to be challenging since sometimes background noise made the answers less clear. Nevertheless, all the answers could be transcribed without losing any significant data. There was no sense of hurry during the interviews and every time the participants had enough time to discuss the topics in depth. The answers of the interviewed were extensive responses and it was very easy to get detailed answers from the interviewees. This helped to understand the phenomenon more deeply in all the aspects important to the interviewed.

Living in the country, working in a local NGO and all the local contacts that were gained during working and living in the country made it possible to arrange the interviews. Persistent trying with several calls and e-mails helped to get the interviews. The interviewees were chosen since they represent different points of views of economy, employment and the industry and are experts in the apparel. The experts covered the ideas and points of views of workers and grass roots, but also foreign investments and governmental organizations.

Grass roots and workers were represented by interviewing Johanna Arce, a lawyer in a local non-governmental organization called "Movement for Working and Unemployed Women Maria Elena Cuadra", that works mostly with employees of apparel industry in Nicaragua. She was interviewed because the NGO she represents has worked many years to protect workers' rights in apparel industry. Also a representative of a labour union "José Benito Escobar Union Confederation of Workers", Roger Barrantes, represented the ideas of workers and a workers' union. This workers' union is also a part of Tripartite Agreement, representing workers in a collective agreement. It was necessary to include the points of views of both the workers' union and the grass roots NGO.

Macroeconomic points of views of the industry were represented by Erwin J. Kruger, who is a university professor of Finance and Economics at Keiser University, Latin American campus and Finance & Economics Director of Dracma Magazine. A representative of ProNicaragua, Sergio Quiroz, was chosen as an interviewee because the organization is an agency that promotes foreign investments in Nicaragua. The representative was very familiar with the foreign investors' views and needs, since they serve for mostly foreign companies that consider investing in the country and the industry. The interviews and experts are listed in table 2.

Table 2 Details of interviews conducted for this research

Interviewee	Position and organization	Date and place	Length
Erwin J. Kruger	Professor of Finance and	26.6.2014;	73 minutes
	Economics, Keiser University	Managua	
Johanna Arce	Lawyer, the NGO 'Movement	5.7.2014;	48 minutes
	for Working and Unemployed	Managua	
	Women Maria Elena Cuadra'		
Sergio Quiroz	Investment Promotion Manager	11.7.2014;	74 minutes
	in Manufacturing with expe-	Managua	
	rience in textile and apparel in-		
	dustry, ProNicaragua		
Roger Barrantes	Secretary General, José Benito	24.7.2014; Ma-	83 minutes
	Escobar Union Confederation of	nagua	
	Workers		

In addition to the interviews, also earlier research and for example a publication "Las trabajadoras(es) de la industria maquiladora en Centroamérica" of Maquila Solidarity Network (MSN) was used as a second hand data. MSN is an NGO that works with labour and women's rights issues in apparel industry, mostly in Central America and one of its collaborators is the globally known Clean Clothes Campaign. Second hand data and earlier literature were used in order to complement the relatively small number of interviews and the publication was chosen since it presents broadly and believably the views of workers in the apparel industry. It is published in June 2016 and is therefore more recent data than the interviews.

Following Hesse-Biber and Leavy (2011, 302, 315), after data collection, the data was prepared, explored, reduced and then interpreted. In the preparation phase, the recorded tapes were transcribed word for word with Audionote software to written data. After data preparation phase, I started analysing the raw data by exploring, organizing and reducing it. First, I read through the material various times, drawing mind-maps and categorizing the data into thematic categories according to table 1, highlighting the most important things of the interviews and writing down some important quotes. Then, I returned to the

research problem and literature to see how they corresponded to the data collected in the interviews. The interpretation step was not a separated phase, but was conducted simultaneously through the whole process. As Hesse-Biber and Leavy (2011, 307) describe, data collection and data analysis are interrelated processes that go hand in hand in a qualitative research. Also in this study, both phases supported each other.

5.4 Evaluation of the study

The trustworthiness of this study is analysed with the criteria of Lincoln and Guba (1985, 300). They propose four criteria: credibility, transferability, dependability, and conformability. In their naturalist worldview, reality is a collection of mental constructions, and the **credibility** criterion concerns how well those constructions are represented in a study or how trustworthy or credible the findings and interpretations are. Lincoln and Guba present five techniques to answer this question.

Firstly, in order to confirm that the findings are credible, Lincoln and Guba (1985, 301-304) propose prolonged engagement, persistent observation and triangulations as activities to increase the level of trustworthiness. While doing this research, the necessary time was spent in the country to achieve prolonged engagement and to understand the Nicaraguan context, culture, language, and considering if the country and its apparel industry were suitable for a case study. However, because of the reasons presented in section 5.3., there were not possibilities to visit an apparel factory, which could have deepened my understanding about the industry. Neither workers were interviewed for this study, but the views of workers were intended to understand by interviewing the NGO representative Johanna Arce, and the labour workers representative Roger Barrantes. Also a publication of NGO Maquila Solidarity Network was used with the purpose of deepening the understanding of workers' situation. Nevertheless, the Nicaraguan context and poverty were familiar for me because of the NGO work presented in section 5.2. Presence in this context helped me to understand the difficulties of local friends' poverty or unemployment or a local NGO's understandings about the industry. All in all, enough time was spent in the country and doing this research to understand a broader view about the issue.

Not only me but also the interviewee may have had their own intended or unintended distortions to their answers. For example, the backgrounds of the interviewees may provide motivations to give certain types of answers so that the interviewer would see the phenomenon from his or her point of view. For instance, the fact that the workers' union is part of the Tripartite Agreement and negotiations, may affect the answers of the representative. He may benefit from that the Agreement is seen favourably from the worker's view in order to portray the organization in a positive light. In addition to the representative of workers' union, also the workers in governmental organization ProNicaragua may

have had pressures to answer in a good light to the government. However, all the interviewed viewed the topics on both positive and negative sides, regardless of the organization they presented. In addition, all the interviewed recognized similar things, even though their points of view varied. The respondents gave full and in-depth answers which gave an impression that the interviewer was trusted enough. In addition to the interviews, earlier research and the NGO publication (Maquila Solidarity Network) about worker's rights was used to complement the collected data.

Lincoln and Guba (1985, 304-307) continue about the credible findings by stating the importance of persistent observation in order to be able to identify the most relevant characteristics of the issue and to focus on them in detail. In this study, the most relevant issues about the selected topic were found in an interaction with the interviewees in a process described in section 5.3. Also through triangulation, or multiple uses of sources, methods and literature, the researcher can support the credibility of the findings. Multiple sources were used in this research as well, including the interviews and the second hand data.

Secondly, *peer debriefing* (Lincoln & Guba 1985, 308) as an analytical discussion of the study may increase credibility serving as an external check for the study and making the researcher defend and therefore possibly reconsider his or her working hypotheses and research design. It may function as a viable way to clear the researcher's mind from emotions and bias that may effect on judging the research process. During this research process the study was many times discussed unofficially with local acquaintances and colleagues from Nicaraguan NGOs.

Thirdly, the object of a negative case analysis (Lincoln & Guba 1985, 309-312) is to find a hypothesis that explain all the cases of a qualitative study with no exception, working as an equivalent to statistical testing of quantitative data. However, this technique is also criticized as too rigid and even impossible, since there are few or no cases without a single exception. In this study, this technique was not used, since I found it not relevant.

Fourthly, also *referential adequacy* (Lincoln & Guba 1985, 313-314) can increase the credibility of a study and in this study it was followed by recording and transcribing all the collected data. This improves the credibility since the stored data remains accessible after collection and it is possible to later return to the raw data.

Fifthly, *member checks* (Lincoln & Guba 1985, 314-316) increases credibility since in this technique the data, interpretations, constructions, and conclusions are reviewed with the ones that the data was collected with. It is an opportunity to correct possible errors and to test overall adequacy of the study. In this study, this technique was not fully used, but some details were confirmed afterwards by e-mail.

The second aspect of trustworthiness criteria according to Lincoln and Guba (1985, 316) is **transferability** which means that the study is described in detail enough for anot-

her researcher to be able to transfer the study to another context. To answer to this criterion in the case of this research, the study subject is described in the introduction and in this methodology chapter, propositions based on literature review are presented in table 1 and empirical results are compared to literature in chapters 6 and 7. Also the possibilities of applying the results to poverty reduction in other industries and countries are described in chapter 8.

By **dependability** Lincoln and Guba (1985, 318) mean that the research process is not dependent on the researcher, but instead, whoever researcher could end up in similar results in a similar study. In short, the research process is examined and its acceptability is challenged. To increase dependability in this research, the research process is described in detail in section 5.3., and its impacts on results are analysed in this section. Also, the reported results are compared to previous studies in chapters 6 and 7. Clearly, there were also some cultural and linguistic differences between the interviewees and the researcher because I was originally from another cultural context. Nevertheless, it was very useful that I had lived and worked in the country for several months before conducting the interviewes. Therefore, there were no problems in understanding the interviewees, and if something was unclear, I was able to ask to clarify the answer. There were some minor linguistic problems in transcribing the records, but I used plenty of time for transcribing so that any important data would not be left out.

Confirmability in Lincoln and Guba's (1985, 318, 323-324) criteria mean that the data, findings, interpretations, and recommendations are examined, and are internally coherent so that any researcher is able to end up in similar analysis. Similarly, the interpretations are not based on the researcher's own constructions. It requires that the analysis is logical and justifiable and that reverse evidence is also considered. In the case of this research, not only the whole study process, but also the data analysing process were described in detail in section 5.3. The study process in detail and the collected data are completely public.

6 NICARAGUAN APPAREL INDUSTRY IN A GLOBAL VALUE CHAIN

6.1 Economic development and industrialization in Nicaragua

Industrialisation in Nicaragua started in the 1950's. From 1950 to 1977 industrialization was boosted by Central American countries' integration and the creation of *Mercado Común Centroamericano* (Central American Common Market) in 1960. However, most of the foreign investments in the region were directed to other countries in Central America, creating growing inequality in the area. The neighbours, for example El Salvador, received more investments and developed faster than Nicaragua. Nicaragua got less investments and enjoyed less industrial development, but in the end of the 1960's more investments started to flow into the country. (ICTSD 2010, 13-15.)

Industrial development in Nicaragua was hindered by unequal distribution of land and dependency on imports in the 1970's, that culminated in a monetary crisis and a high incurring of debts. In the end of the decade, a civil war broke out that created high costs and hindered economic stability and development. In 1970 the *maquila* model was introduced in Nicaragua, but it practically disappeared in the 1980's. Nicaragua underwent a revolution until 1979 and after that, leader Daniel Ortega and his party *Frente Sandinista de Liberación Nacional* (Sandinista National Liberation Front) took the power. The new government restructured private and public sectors and promoted sectorial change in order to reduce dependency on imports. (ICTSD 2010, 13-15.)

In 1990 the power was transferred to liberal president Violeta Chamorro establishing the recommendations of the IMF and other international institutions with various adjustments. The politics changed dramatically in comparison to the previous decades and liberalization of trade gained ground in the country. The first years were characterized by privatizations and attracting foreign investments. Unfortunately, corruption and weak governance in a still fragile economy obstructed the creation of employment and fostered the growth of the informal economy. (ICTSD 2010, 13-15.)

The governments of Chamorro and after her, of Alemán, re-established the maquila model and created FTZs that mostly comprised foreign owned firms exporting apparel. The number of apparel and textile companies in the Nicaraguan FTZs has grown from 18 in 1995 to 40 in 2001 and 72 in 2008. FTZs in Nicaragua offer for example commercial and fiscal benefits and are created in order to attract foreign investments to the country. The subsequent governments of Chamorro, Alemán and Bolaños (1990-2006) promoted export-oriented FDIs and the maquila model. Their policies managed to generate employment and attract FDIs, mostly in manufacturing. However, they were also criticized for their negative impacts, since there were non-compliance of environmental and labour

laws, and little technological transfer occurred and few connections were created to the local economy. (ICTSD 2010, 13-15.)

Map in Figure 6 shows the locations of 40 industrial parks in Nicaraguan FTZs:



Figure 6 Map of Free Trade Zones in Nicaragua (ProNicaragua 2014)

Figure 6 shows how FTZs in Nicaragua are concentrated around the capital Managua and in a few north-western cities. The whole eastern part has been left out of the FTZs and urbanization. As pointed out in section 4.3., FTZs tend to locate in special industrial zones with good infrastructure. This is also the case in Nicaragua since in these areas the infrastructure is significantly better than in the eastern, mostly rural, side of Nicaragua. From 2005 to 2009 manufacturing exports grew, resulting from an increased foreign demand and from the opening of new markets. Some of the most viable sectors were textile and clothing industries, which increased manufacturing especially in Nicaraguan FTZs. (IMF 2011, 82.) In 2013, there were 57 apparel firms operating in Nicaraguan FTZs. Apparel industry in FTZs is an important part of Nicaraguan export economy, forming 1.55 billion USD in export in 2014. Exports in total were 5.4 billion USD. The most important export market of apparel industry is the United States since 96 % of Nicaraguan apparel exports head to the U.S. (ProNigaragua.org; Frederick et al. 2015, 409.) In comparison with other major export industries, the value of exports of coffee in 2014 were 0,4 billion USD and the value of insulated wire exports was 0,7 billion USD.

6.2 The role of apparel industry in Nicaraguan economy

Nicaragua's National Poverty Reduction Paper (IMF 2011, 69, 94) highlights the importance of FTZ's exports. Open trade policy, export promotion and economic diversification are highlighted as reasons for the growth in exports in 2010. FTZs are praised for boosting productivity in the long term and for reducing poverty by creating a number of new jobs. In addition to FTZs, also the importance of the apparel industry for Nicaraguan economy was emphasized in interviews. In 2013 the share of FTZ's exports were 23 % of Nicaraguan GDP (ProNicaragua 2014), and the value of apparel industry forms 60 % of the value of all the exports of FTZs. (Quiroz, interview 11.7.2014.) As proposed in table 1, apparel industry has managed to create economic growth and increase of exports in the country.

As Erwin J. Kruger (interview 26.6.2014) expressed, apparel products are an important cornerstone in the Nicaraguan economy and they reduce the dependency of the economy on coffee, which has traditionally been the most important export product. Apparel products have diversified Nicaraguan economy from primary coffee production to manufacturing. This is in line with the IMF (2011) poverty reduction paper that promotes diversification and strengthening of exports, investments and trade.

The high number of FDIs directed to the Nicaraguan apparel industry has managed to complement low domestic investments. Erwin J. Kruger (interview 26.6.2014) mentioned that apparel industry is a possibility to open Nicaraguan economy for other sectors as well and to attract new businesses. For example, auto harness industry has gained foreign investments in the country after the apparel industry boom. Moving from apparel industry to other industries like auto wire harness industry can serve as a great opportunity to diversify the economy and move to more productive industries. This again is another target of the IMF (2011) poverty reduction paper. On the other hand, auto harness industry does not necessarily create a significant number of employment, but can create more productive work. However, as a whole, the wire harnesses industry is the second biggest employer in the FTZs (Frederick et al. 2015, 409). At the moment, important industries besides apparel, measured by their value in exports of FTZs are auto wire harnesses (22%), to-bacco (8%), and agribusiness (6%) (ProNicaragua 2014).

As mentioned in the literature review, countries in the Global South are under pressure to offer incentives and tax relieves to attract investments in the apparel industry. According to Erwin J. Kruger (interview 26.6.2014), the government wants to promote the industry and offers benefits because it generates employment. He also stated that if a country does not offer certain conditions, the companies do not invest. This is in line with the literature part that presents how multinational companies tend to locate in countries with benefits and are in search for low production costs (see section 4.3.). Nicaragua offers a combination of beneficial laws and tax relieves to attract multinational companies

to invest in the country and to generate more exports and trade. The tax benefits that Nicaraguan FTZs offer to foreign investors and export-oriented operations include a total exemption from income tax; exemption from importing duties on machinery, equipment, raw material, intermediate products, transportation and support services; exemption from value added tax; and exemption from capital gains and property tax. Other benefits are also offered, for example free currency convertibility and freedom to repatriate generated profits and earnings after taxes are being paid. (Quiroz, interview 11.7.2014; ProNicaragua 2013, 22, 24.)

The list of benefits for foreign investors in the FTZs is long and the government is under pressure to offer benefits, although it means less taxes and less resources to improve the society and public services. The interviewee Sergio Quiroz (interview 11.7.2014) defends fiscal benefits since the industry and its employment generating character are highly important to Nicaragua. He states that the industry also indirectly improves the security situation in cities and areas where the factories are located, because they reduce criminality by creating jobs and generating a living for local workers. In general, open trade policy and export promotion are recognized as ways to tackle poverty also in the national poverty reduction paper (IMF 2011).

6.3 Opportunities and challenges of apparel industry as a source of foreign direct investments

6.3.1 Full-package production

Most of the companies operating in Nicaraguan FTZs produce by full-package model. Full-package model means a production model in which the producer is in charge of the purchase of fabric and material (in this case, mostly from abroad) and other operations including sewing. In comparison to maquila model that only includes the sewing part, full-package model gives better opportunities to higher returns. Most of producers in the industry are knitted fabric manufacturers who produce mostly tops for international buyers and clients from discount retailers like Wal-Mart to fashion brands like Ralph Lauren. Many of the knit manufacturers operate globally and the manufacturing companies in Nicaragua are mostly registered in other countries, many of them in the United States and South Korea. In addition to the full-package model, there are also knit manufacturers that produce both for their own brands and for retailers as subcontractors. There is a fierce price competition in knit manufacturing. (Bair & Gereffi 2013, 8, 13; ICTSD 2010, 47; ProNicaragua.)

There are also woven fabric manufacturers in the Nicaraguan apparel industry that produce mostly jeans and professional wear, by full-package model or maquila model. One of the woven manufacturers is a Nicaraguan owned company, while others have ownership registered for example in the United States, Mexico, and Taiwan. The clients are diverse but include for example companies like Wal-Mart and Levis. (Bair & Gereffi 2013, 10, 15). Since the buyers are globally represented and networked and have many potential producers all over the world, they are not regionally dependent on any country. These brokers get the orders from clothing brands and make the producers compete for orders. Eventually the brands define the terms and conditions.

6.3.2 Buyer-driven production chain

Erwin J. Kruger (interview 26.6.2014) and Roger Barrantes (interview 24.7.2014) emphasized in their interviews that the global apparel buyers have a lot of power when placing an order in a country in the Global South. For a buyer it is relatively easy to place an order in a particular country and to move from a country to another in search of lower production costs. Therefore, Barrantes expressed that a country like Nicaragua can only play by the rules formed by the big multinational buyers, since they can always produce in another country and it is relatively easy for the international buyers to change their location (see section 4.3.).

In addition to the international agent that places the orders, also the global clothing brands such as Wal-Mart and Levis have a lot of power in pricing. The brands define conditions and prices of production that the agents or buyers have to adapt to. Most of the profits in the apparel value chain end up to the clothing brands and agents. The producing country gets a small part of the profits, mainly from the cost of energy and labour. As the paid taxes are low, the producing country benefits little in the value chain. More value adding processes such as marketing and selling to the final consumer are conducted in the Global North. (Barrantes, interview 24.7.2014; Kruger, interview 26.6.2014.)

At the same time, Nicaragua has little power in the global trade agreements. The more powerful alliances or countries, such as European Union or United States create the rules. Even free trade agreements have their conditions on for example the rule of origin that states that the raw material cannot be imported from other continents. (Barrantes, interview 24.7.2014; Kruger, interview 26.6.2014.) So the producers and producing countries have to adapt to the prices defined in the other parts of the value chain. Most of the countries in the Global South are trying to get more foreign investments, and in the apparel industry, competition is tight. Consequently, Barrantes (interview 24.7.2014) continued, it is not a challenge that can be resolved by a nation or government, but it is a character of the industry and rather an international challenge. Since the international apparel buyer

has a lot of power in the global value chain, the producer does not have much authority on the terms and conditions but is under pressure to accept what is offered. This is why a local producer can only set higher production goals to increase productivity and profits and to get its part of the revenue:

"They [multinational buyers] set their prices. The factory here says no, this price is too low, I don't accept it. The buyer says: So, you don't do this for me? Don't worry, I'll go to Haiti."

(Roger Barrantes, interview 24.7.2014.)

Indeed, Haiti is a serious competitor for Nicaraguan apparel industry since the countries share similar competitive advantages. As Nicaragua, also Haiti is situated close to the North-American markets and has low labour costs with even lower minimum salary than Nicaragua. Therefore, it is cheap to produce in Haiti, but at the same time, the political situation and the society is not as stable in Haiti as it is in Nicaragua. Nicaragua does not have a good port and infrastructure in the Caribbean side of the country, whereas Haiti enjoys better connections to eastern coast of the U.S. The fact that Haiti will enjoy the TPL advantage a limited time longer than Nicaragua, until the end of 2018, created concern amongst all the interviewees, but at the time of interviews in 2014 the situation was also considered as potentially opening opportunities for Nicaragua. They saw the possibility that after the cheapest production would leave Nicaragua and go to Haiti, the more stable ones would potentially stay in the country. (Barrantes, interview 24.7.2014; Kruger, interview 26.6.2014.) Also Bair and Gereffi (2013, 13, 16-17) got similar results on high pressures on prices and Haiti was mentioned as an attractive location alternative for manufacturing companies aiming at lowest costs. As a single country, United States is the most important trading partner and market for the apparel made in Nicaragua. From Nicaraguan exports in 2013, 33 % were shipped to the United States of which more than half (52 %) were clothes. (Quiroz, interview 11.7.2014.) The Trump administration in United States may change the rules of trade, and most probably they will not benefit Nicaragua.

6.3.3 Expiring Tariff Preference Levels

Nicaragua enjoyed the TPL benefit for 10 years, from 2004 to 2014. This concerns Nicaraguan apparel industry, since there is little raw material available in the region, and when the TPLs expired, Nicaragua lost its opportunity to import raw materials duty-free for apparel industry. Barrantes (interview 24.7.2014) predicted in 2014 that the ending of the TPLs are seen especially in the production goals. He figured that the additional cost that

derives from the ending of the tariff benefit is added to the production goals or in another way reduced from the cost structure. All the interviewed saw the ending of tariff preference levels as a challenge for the industry in Nicaragua. Sergio Quiroz (interview 11.7.2014) anticipated that the most cost aware companies may leave the country and move to Haiti, where the TPLs benefit still prevails.

Unfortunately, energy is relatively expensive in Nicaragua compared to for example Costa Rica, and therefore, producing raw material has not been very cost effective in Nicaragua. The advantage of Nicaragua is its low labour costs, and it cannot compete with the energy costs. (Quiroz, interview 11.7.2014.) After the expiring of TPLs some of the companies are expected to make a decision about the future of production. It can be a decision to leave the country, to start to supply textile from the region, or it can be a decision to continue importing raw material from Asia and pay taxes for the imported materials. As seen in literature review and in table 1, the expiration of TPLs is expected to cause job losses and fleeing of companies, but it can also have positive effects in the region.

Amongst the opportunities arising from the expiration of TPL could be growth of raw material production in the area, which could strengthen the whole regions' apparel industry. As reasoned above, the neighbouring countries are probably more suitable for textile factories than Nicaragua. In January 2017 there was an announcement of some new investments in the Nicaraguan FTZs of which two were logistics companies in the textile industry (pronicaragua.gob.ni). Information about these logistics companies are scarce, but it gives a signal that the industry is adjusting to the changes. There was also news about a large investment in a plant that will produce synthetic raw material to the textile industry in the neighbouring country Honduras. It will be the first factory that produces synthetics in Central America and it can create better opportunities to import raw material to Nicaraguan apparel industry as well. Raw material factories could boost employment generation and create linkages through the area and value chain, but in the long term they may not boost productivity in the area. Another question is how high are the environmental standards of the new raw material factories and what kind of environmental impacts they have to the nature and local people.

6.3.4 Competitive advantages

In addition to fiscal benefits and tax relieves, other competitive advantages of the Nicaraguan apparel industry include its geographical location relatively close to the U.S. markets. Geographical proximity to production countries and fast shipment allows North American companies to react fast to changes in markets and fashion. In Nicaragua there is an abundant, young, and disciplined labour force with low labour costs and the lowest

minimum salary in Central America. Similarly, living costs are also lower in Nicaragua than in other countries in the area. (Quiroz, interview 11.7.2014.)

As expected, TPLs created an important competitive advantage that helped to foster and boost apparel industry in the country as seen in section 6.3.3. Also a favourable business climate and the Tripartite Agreement are competitive advantages, because they make business and the local economy more predictable (Quiroz, interview 11.7.2014). The Tripartite Agreement makes the industry more predictable since the conditions and labour costs are defined for several years. It motivates the companies to follow the negotiated rules and reduces the dissatisfaction and incentives of workers' unions for example to organize strikes. (Barrantes, interview 24.7.2014.)

Low salaries may be one of the reasons why multinational companies want to buy product assembly in Nicaragua, but it is not the only one. In Nicaragua, the interviewees remind that the relatively good security situation is also an important factor. Nicaragua is safer and more stable than for example its northern neighbour Honduras. The business and health risks are fewer and the national economy and the society is more stable. Competitiveness within a country can be improved with investments on education and infrastructure, namely on transport, energy, and communications, but also with simplifying administrative processes that reduces the time and effort for trade. In companies, investments on management capacity and in workers' training may boost workers' morale and efficiency. (ILO 2014a, 79.) In Nicaragua there are no ports on the Atlantic coast and the infrastructure between western and eastern part of the country is very weak. This hinders transportation to the east coast of the United States and favours Honduras and Costa Rica that have good infrastructure on Atlantic side. (Quiroz, interview 11.7.2014). However, there is a plan of constructing a canal that would connect the Atlantic Ocean with the Pacific Ocean. The canal would change the economic and logistic geography of Central America but in 2018, the construction of the canal had not been started yet and the funding remains unclear

6.3.5 Local linkages and learning

The apparel industry has a significant role in the Nicaraguan economy. But still today, the industry in Nicaragua is criticized for forming little linkages to local economy and to micro, small, and medium enterprises. Indeed, most of the companies in the export-oriented industry are foreign owned, the linkages to national economy are few, and most of the materials are not produced in the country but are imported from abroad. Also technology used in the industry is relatively simple and easy to use and it forms little technological spill overs to local industry or other opportunities to learn. (Quiroz, interview 11.7.2014; ICTSD 2010, 21, 47; Bair & Gereffi 2013, 10.)

Local subcontracting of for example buttons or zippers could serve as an important business opportunity and transfer of learning and technology to local companies. If more phases of the production chain were realized in Nicaragua, it would serve as a way to learn and create more value in the local economy. (Quiroz, interview 11.7.2014.) However, the interviewees and an ICTSD study (2010, 43-44) recognized various reasons why there is so little subcontracting in the industry. Limits for subcontracting include little experience and competence in the relevant fields of apparel, such as cotton trousers and limited capabilities to fulfil certain international environmental and labour standards. There is also a limited capital available for local investments and start-ups. The local operators and operating capabilities are few, which creates difficulties in committing to prices and times of delivery. Also, the Nicaraguan Customs demands that inside the FTZs, the exchanged products and services are registered as imports and exports, which reduces incentives for trade with local companies. Furthermore, the high cost of energy reduces cost efficiency in technology-intensive raw material production. (Kruger, interview 26.6.2014; Quiroz, interview 11.7.2014; Bair & Gereffi 2013, 15.)

Nevertheless, apparel investments and maquila production do create some employment and value in other sectors of the economy. According to ProNicaragua (2014) apparel industry creates as many as 215 000 indirect jobs. More forward and backward linkages would generate even more employment and learning, stated Sergio Quiroz (interview 11.7.2014) and Erwin J. Kruger (interview 26.6.2014). Kruger mentioned that the industry consumes energy, water and services, but there would be potential to produce raw materials, like cotton, in the country, that now are imported from Asia. Raw material production in Nicaragua still has its challenges as presented in the earlier paragraphs. As a conclusion, the industry creates value in the country mainly through employment and energy consumption. Employment is crucial, but local learning and value creation would create more potential that is not yet fully met. (Barrantes, interview 24.7.2014.) As seen in literature review and in table 1, lack of local linkages and technology and knowledge spill overs are common challenge in apparel industry in Global South.

7 OPPORTUNITIES AND CHALLENGES OF NICARAGUAN APPAREL INDUSTRY AS AN EMPLOYER

7.1 Apparel industry creating formal employment

Nicaragua has a relatively big workforce. In 2017, 76 % of the total population was under 39 years old and about half of the population of 6 million in total was part of the labour force. A big share of workforce is partly a result from a limited social security that does not cover most of the population. In the same year 2017, the unemployment rate in the country was 3.3% and underemployment rate was 42.7 %. (ProNicaragua 2018.) Underemployment rate reveals that many Nicaraguans are looking for more employment and therefore are not fully integrated into the working market. It tells more about the labour market than the unemployment rate, since the poor cannot stay unemployed in a country with low social security (section 3.3.1.). Johanna Arce (interview 5.7.2014), also noted that there are thousands of young people entering the labour market every year in Nicaragua. All these new workers need employment, and the apparel industry among others may create a growing number of much needed employment in the country. At the moment, apparel is one of the industries that offers most of the employment in the country (Quiroz, interview 11.7.2014).

There is a big informal sector in Nicaragua and for example in 2010 75 % of employment outside agricultural sector was informal (ILOSTAT). The importance of the apparel industry as a source of formal employment in Nicaragua was emphasized by all the interviewees. In 2014 light manufacturing in Nicaraguan FTZs employed more than 83 000 workers, of which 81 % worked in apparel industry (ProNicaragua Investment Overview 2015). In 2013 53 % of workers in the apparel firms were women. Most of the jobs are sewing machine operators (Frederick et al. 2015, 409).

The fact that the employment is formal is important for low skilled workers, because of the limited number of formal employment in the country. Barrantes (interview 24.7.2014) emphasized that it is important that the workers have contracts of employment and access to social security. These cannot be taken for granted in a country with a high level of informal workers in many other sectors that may not meet all workers' rights. In fact, he stated that in 2013, 18% of the workers who were covered by social security in Nicaragua worked in a FTZ factory:

"In Nicaragua there are approximately 650 000 workers who are covered by social security. 105 000 of them are working in a maquila" (Barrantes, interview 24.7.2014)

The social security by itself may alleviate poverty, since there is evidence for example from Brazil, that shows that increase in social security among other factors have had a poverty reducing impact (Ferreira, Leite & Ravallion 2010, 33). It gives a financial security for example in case of a disability or retirement. Unfortunately, there are employers in the industry that do not register their workers in the social security system, or the registered salaries differ from what is actually paid to a worker. Therefore, some of the workers are not covered with for example the legislative health care and maternity benefits. (Maquila Solidarity Network 2016, 21.)

7.2 Living wages and the level of salary

The minimum salary in apparel industry in Nicaragua is the lowest in Central America, but it is not the lowest compared to other industries within the country (Maquila Solidarity Network 2016, 13). The interviewed compared employment in an apparel industry factory in a FTZ to another alternative employment such as manufacturing work in a local owned factory (Barrantes, interview 24.7.2014; Kruger, interview 26.6.2014). An apparel factory worker in a FTZ earns about 168 USD (approximately 4970 Nicaraguan cordobas) in a month in 2017 (ProNicaragua 2014) and in another factory outside the FTZ the minimum wage is about 10 USD lower (Comisión Nacional de Salario Minimo 2016). Compared to other minimum salaries in the country, for example construction and commercial workers earn more (Maquila Solidarity Network 2016, 13).

According to the Tripartite Agreement, workers have also additional benefits such as basic groceries at reduced price by workplace-based commissariats. There are also government and private sector initiatives for low-cost housing constructions. (Barrantes, interview 24.7.2014; ILO & IFC 2013, 4.) These efforts have been Nicaragua's answer the social challenges of the financial crisis, declining orders, and companies moving their production to even lower-cost countries. However, the grocery benefits and housing projects are criticized of slow progress and inefficient distribution (Maquila Solidarity Network 2016, 14).

For a worker that begins his or her work in an apparel industry, the salary may be a significant improvement compared to the salary in previous work. Many of the factory employees worked earlier in other low productive and low paid service sectors, for example as a domestic worker, or in agriculture for example as a farmer. In addition to a higher level of salary and more secure income, a work in apparel industry most likely raises economic independence in the worker's life. (Kruger, interview 26.6.2014.) As seen in the literature review, some poverty reducing effect is gained when workers move from a less productive sector to a more productive one.

In Nicaragua, the share of working poor (the share of employed with less than 2 U.S. dollars in purchasing power parity terms) in 2012 was 14,2 % of total employment in all sectors (UNDP 2015, 49). A worker in a FTZ most likely has a higher wage and therefore also a better opportunity to pull oneself out of poverty than a worker in a similar local factory. On the other hand, Johanna Arce (5.7.2014) reminds that although the salary in absolute terms is higher than in an alternative work, it is still not enough to afford basic living costs in the country and therefore it is not enough for a living wage (section 3.3.1.). The price of basic living costs is sometimes used as an indicator of relative poverty in a country. In this case, it consists of basic groceries, household goods, clothing, and other necessary living costs like rent and water for a typical Nicaraguan family. The value of basic living costs in Nicaragua in September 2016 was about 12 453 Nicaraguan cordobas (Ministerio del Trabajo, Department of Labour of Nicaragua), and therefore a worker's salary is about 40 % of the value of the basket. The value includes living costs of a family with two adults and two kids, but even two adults' salary in apparel industry does not cover the costs. There are many single mothers in the country working in the industry and the salary makes it difficult to survive:

"You work and what you earn only serves to survive" (Johanna Arce, interview, 5.7.2014.)

In addition to the salary, a worker can earn more by meeting production goals and working extra hours, but the production goals are often set so high that they are practically unreachable to the workers as the working hours are already long (Arce, interview 5.7.2014). According to the Nicaraguan Labour Code, a work week is 48 hours long and the hours can be divided freely across the week (ProNicaragua 2013, 19). It is often impossible for the workers to work extra, since the majority of the workers are women that often carry the main responsibility of household chores and childcare, and many of the working women in apparel industry are single mothers. The wages as such should cover the basic needs, since the low salary may affect also on the dependants of the worker. Neither the government nor the employers have been able to offer statutory day care for worker's children. The NGO accuses the public actors of supporting the governmental politics by declining the possibility to raise salaries more rapidly, referring to productivity. (Maquila Solidarity Network 2016, 7, 18-19.)

Despite admitting that the salary is not sufficient for basic living costs, Quiroz (interview 11.7.2014) and Kruger (interview 26.6.2014) expressed their concerns that the wages in the industry should not be raised without improvements in productivity, since an increase in wages with no improvement in productivity would harm the competitiveness of the country to attract foreign investments. According to them, in order to get higher salaries the industry should be more productive. Ways to raise productivity in the industry

could be adoption of more advanced technology and education of the workers. In general in the country, improvements in public primary education could raise productivity and employability of the work force. Kruger (interview 26.6.2014) stated that when improving the industry, it would be more important to provide more education to the workers than to raise the salary. This could improve a workers' position in labour market and in society in the long term, but would not help his or her economic situation immediately.

7.3 Job quality and decent work

The Tripartite Labour Commission of the Free Trade Zone was established in order to improve apparel industry. It consists of representatives of Nicaraguan government, multinational companies, and workers' unions. The previous agreement is signed for four years, and it includes a target to continue improving working conditions and to increase minimum wage annually. (Barrantes, interview 24.7.2014.)

Nicaraguan manufacturers have reported that the Tripartite Agreement has increased labour costs but on the other hand, it has also provided more clarity and stability to the industry, that formerly was very unpredictable and suffered from many strikes. The benefit of the agreement is that all the parties are committed to it and that for the business, all labour costs are predicted. The agreement and the stability that it leads to was also mentioned as a competitive advantage by Barrantes (interview 24.7.2014). For a Nicaraguan apparel industry worker, the industry that is committed to the Tripartite Agreement theoretically gives predictable and stable earnings and working conditions. As labour unions are strongly involved in it, also workers' views are presented in the negotiations. All the interviewed saw Tripartite Agreement as an opportunity for a good, common ground for building a better apparel industry.

Roger Barrantes (interview 24.7.2014) believes that the situation is better for everyone now partly because of the efforts of the workers' unions. He also noted that there are still problems in the industry on the whole and in individual apparel factories, but in the big picture the situation is constantly improving and is better now than before, because at least there is a mechanism and a channel of communication to tackle the issues, to find solutions and to protect workers' rights. The Tripartite Agreement has also improved salary and conditions in the industry. Also Kruger (interview 26.6.2014) praised the Tripartite Agreement as it works as a social dialogue mechanism between workers' unions, government, and private companies and improves the dialogue.

In Nicaragua, the apparel industry is labour-intensive and employs mainly low-skilled workers. Entry to industry is possible with relatively low investments and simple technology. It creates employment for people with low education as most of the employment created in the industry is light manufacturing work. In addition, the industry creates a

small number of more technical or specialized employment for example for engineers, accountants etc. Low quality of employment and a very high turnover of workers were discovered in a study by Bair and Gereffi (2013, 17-18) on apparel factories in Nicaragua. There were factories especially among knit manufacturers with as high turnovers as 120-300 percent in a year, although woven manufacturers had significantly lower turnovers (less than 25 percent). The researchers found that benefits like transportation and subsidized lunch lowered turnover, while limited training was found as a potential reason for increasing turnover. Some knit factories did not offer training at all, but the average training period was one month, while in woven factories the average training period was longer, from 8 to 10 weeks. High turnover in factories correlates with lower productivity and quality. The factories that reported a 60 % or higher turnover a year reported also lower productivity than factories with a lower turnover. A better education, technology and training could improve productivity of the industry significantly.

In a study of Better Work Nicaragua (ILO & IFC 2013, 7), no "zero level tolerance" violations like child labour or forced labour were found in the Nicaraguan apparel industry. However, problems were found relating to occupational safety and health (e.g. obstructed emergency exits, missing fire alarm systems), contracts, and human resources (e.g. unclear contracts, missing 13th month payment provided by law), and working time and compensation (e.g. regular and overtime shifts exceeded legal limits). In total, the number of working children in all industries in the country (ages 5-14) was 14,9 % (UNDP 2015, 49).

Barrantes (interview 24.7.2014) calls maquila work decent work, or at least better than alternative employment. Workers' unions are active in the FTZs and have done a lot of effort to raise the minimum wage and to improve working conditions in factories. The unions are also monitoring that the labour law is complied with and they are protecting the workers' rights. However, Maquila Solidary Network (2016, 16) criticize the monitoring as inadequate and since there are many workers' unions in the industry, it makes a single union weaker.

The workers' unions and non-governmental organizations such as *Movimiento Maria Elena Cuadra* teach the workers about their rights and duties, in order to reduce the possibility that the companies would violate the workers' rights. In an alternative informal employment, the workers naturally do not have a collective agreement that workers in formal industry employment have. Informal employment is more insecure because there is little or no supervision of working conditions, security, or salary. The interviewed said that in maquilas working conditions are better than elsewhere:

"In Nicaragua, there are problems with decent work. But maquila work is improving, going towards a better work."
(Roger Barrantes, interview 24.7.2014.)

"Maybe it's not the best. But worse is to have them on the street with no food."

(Erwin J Kruger, interview 26.6.2014.)

However, according to Maquila Solidarity Network (2016, 21) and Johanna Arce (interview 5.7.2014), the legislation is adequate, but enforcement of the laws is weak. In addition, fines from violating the laws are small and some of the employers prefer to pay the possible fine in case of an inspection, instead of complying all regulations appropriately. There has been for example cases of discrimination of pregnant women in the industry. Arce also mentioned that although the Nicaraguan labour law says that extra hours should always be voluntary, still in the factories workers are often obligated to work extra hours. At the same time, the normal working week from Monday to Saturday does not give a possibility for the workers to further educate themselves, which makes it more difficult to move forward to a better job. Also the risks of respiratory diseases in the industry should be better studied and addressed.

The situation has improved considerably during the years and Arce (interview 5.7.2014) and Quiroz (interview 11.7.2014) say that the organizations report less abuses of workers' rights today than a few years ago. In the early 21st century, there were many closures of factories in the FTZs and the closing companies did not pay the adequate salaries and compensations to their workers. After that, the labour movement and non-governmental organizations started to cooperate with the National Committee of Free Trade Zones in order to improve the situation.

Therefore, a job in an apparel factory may not serve as a way out of poverty, but for an individual worker it may be an improvement in comparison with another alternative, often an informal one. As proposed in table 1, also in Nicaragua the apparel industry often employs some of the most vulnerable people in the country. Work in a FTZ is better paid than many other industrial work in Nicaraguan factories, with theoretically better conditions and monitoring, although they are still criticized. A job in a factory in a FTZ can offer a better salary and conditions for the less educated, lowest paid workers in the country, but it does not necessarily give many opportunities to pull oneself out of poverty and to build a better future for the next generation. Relatively good but still low level of salary does not remove the necessity of children to work elsewhere since the salary of the adult workers is too low for approximate living costs of a family. This continues the vicious circle of low productivity when the children cannot fully concentrate on school. Both Kruger (interview 26.6.2014) and Arce (interview 5.7.2014) expressed the need of the workers to continue looking for a way to go forward from the basic apparel industry work, and Kruger stated that education could be an important way to the most competent workers to move forward.

Barrantes (interview 24.7.2014) stated that the western buyers and their customers in the western markets should take more responsibility of the quality and salary of the industry:

"...the clothes that they [Western brands] receive, and they know it, are paid miserably to the factory workers."

(Roger Barrantes, interview 24.7.2014.)

While employment in an apparel factory may be a better employment than another alternative for a Nicaraguan worker, the Western brands still try to keep the production costs and salaries low and to maximize their profits, while the Nicaraguan worker struggles to afford basic living costs. All the interviewees highlighted the importance of buying practices and the power of the international buyers and clients to define prices and practices. Also Bair and Gereffi (2013, 25) recognized the influence of global clients in the apparel industry. They emphasized the importance of global buyer's commitment to better practices in the industry, since this would be the most appropriate incentive for manufacturers to improve working conditions. For example, the Better Work Program can serve as a valuable opportunity in Nicaragua, but in order to really create incentives for the producers, clients should also be committed to improvements. The interviewees appealed to the global buyers to change the practices to be more reasonable. High pressures on prices and delivery times pose significant challenges for the producers in Global South. These pressures are transmitted to working conditions and salaries.

8 SUMMARY AND DISCUSSION

8.1 Summary

The aim of this thesis is to examine the apparel industry in Nicaragua, especially how the industry is linked to the global economy and at the same time to persistent poverty. The industry creates a lot of employment and attracts foreign investments to a country with limited economic resources. The key issue from the country's point of view is, whether it can attract foreign investments, create further employment and at the same time alleviate poverty. The topic was studied through two research questions which were:

- What is the role of apparel industry in Nicaragua?
- What challenges and opportunities does the externally originating apparel industry create as a source of employment and poverty alleviation in Nicaragua?

Answers to the research questions were sought partly through desk research and increased understanding was gathered from interviews. Earlier research and for example a publication of "Las trabajadoras(es) de la industria maquiladora en Centroamérica" (workers of maquila industry in Central America) of Maquila Solidarity Network (MSN) was used as a second hand source.

The experts represented a non-governmental organization that works with factory workers especially in apparel industry; a doctor of economics; a representative of ProNicaragua which aims to increase the number of foreign investments in the country; and a General Secretary of a workers' union. Therefore, the data collected by interviews gave micro- and macroeconomic insights into the phenomenon and included perspectives of workers and public policy-makers but also of the foreign investors. Visits to factories might have been interesting and informative but unfortunately they were not possible in this study. However, a long stay in the country made it possible to understand the Nicaraguan context more deeply than what would have been possible in a desk research or during a shorter visit in the country.

The literature review of this study consists of previously published studies of characteristics of global value chains and apparel industry, and the possibilities of employment and foreign investments to alleviate poverty. Earlier research provides a background and analytical lenses for the empirical part, that focuses on the apparel industry's characteristics in Nicaragua.

As main findings for the first research question *What is the role of apparel industry in Nicaragua?*, this study shows that the apparel production forms a significant part of the country's exports. Growing apparel manufacturing has served as a catapult for economic growth since the apparel boom started. However, the industry has also some challenges to meet in the following years. Nicaragua had a special trade benefit: Tariff Preference

Levels, that made it possible to import final products made of Asian raw material to U.S. duty-free. This advantage generated an important competitive advantage for a country with limited raw material production for apparel industry. Ending this benefit creates challenges to the industry and some of the companies were expected to flee the country.

As a brief answer to the second research question *What challenges and opportunities* does the externally originating apparel industry create as a source of employment and poverty alleviation in Nicaragua?, the foreign owned apparel factories create a significant number of the much needed formal jobs, that may be better jobs than alternatives. The working conditions are supervised and many factory workers belong to workers' unions and are covered by social security, which is expected to have a poverty reducing effect. The apparel industry in Nicaragua creates a significant number of low-skilled work, that is characterized as pro-poor, since it benefits mostly the lowest-skilled and poorest ones at the bottom of the income pyramid of Nicaragua. As a source of foreign investments, the industry could improve the learning possibilities and create linkages with the local factories, entrepreneurs and other actors.

8.2 Discussion

A job in a foreign owned factory may be better paid and it might have better working conditions than in an alternative work. However, an apparel factory job as such is not sufficient to lift an individual out of poverty, since the salary is typically not enough to cover the basic needs. Also, the long working hours do not leave any time for workers to educate themselves in order to move forward. Personal interest of a factory worker is to continue forward if anything better is available. Still, the maguila work can provide a possibility to raise one's living standards compared to for example an informal job in lowproductive service sector or agricultural work. The apparel industry creates better work in the country than what is traditionally available for the least educated Nicaraguans. On the other hand, the apparel industry and FTZs are highly concentrated in the western part of the country (figure 6), ignoring the whole eastern, mostly rural, part of the country. There are also some cities in the Caribbean side of the country, but there may be high geographical and cultural barriers to the people in the Caribbean side to get employment in the other part of the country. The apparel industry alone does not help a country or its citizens to raise out of poverty. In order to break the vicious circle of poverty, the industry should create more linkages to the local actors, and more productive employment, with living wages.

On the other hand, the study also showed that there are opportunities in the industry to combat poverty that are not yet taken advantage of in the country. Especially strengthening backward and forward linkages are shown to have poverty reducing impacts. In Nicaragua, there are possibilities for example in raw material production or in production of zippers and other accessories. Another question is, what are the environmental consequences of this kind of production and what kind of employment it could create. It would not reduce dependency on apparel industry either. However, raw material production could help the country's industry to improve its position after the expiration of TLPs. Upgrading in the value chain could improve the position of Nicaragua in the value chain.

The apparel industry is still growing globally and in Nicaragua and since it forms an important livelihood, it is important to continue improving the working conditions. The Tripartite Agreement is seen as an important mechanism for dialogue between the private interests, government, and workers' unions. It includes also other things than salary, such as production goals, subsidized food packages, and housing programs. In a Latin American country, it is rather typical to have social programs to cover the necessities of working poor. However, we can ask if it is reasonable that the workers cannot afford the basics with their salary but need to get housing and food subsidies to survive. The interviewees found it difficult to resolve these issues nationally, since one small country is not powerful enough to change the multinational conventions of the industry. The industry is highly dependent on the global value chain and international actors and buyers. In the production chain most of the value is added in the Global North and similarly most of the revenues end up in the North. Nicaragua has only a small part in the production chain and little power on determining the conditions of investments and trade. As most of the power in the value chain accumulate in the developed countries, the pressure on prices keep the producers' profits low and factory workers salaries even lower.

Based on the study, improvements on education and technology are essential to improve conditions in the industry. Workers' unions and private companies have possibilities to support the education system by providing additional training and education for workers. It is also in the interests of the companies to educate their workers because it can improve productivity. The improving conditions and productivity should extend to the local industry and factories outside the FTZs. In an ideal case, improving labour conditions, technological advancement and raising salaries would spill over to the locally owned factories. However, the spill over effect does not happen automatically, but needs to be encouraged systematically and by creating actual linkages and learning opportunities.

The results suggest that, foreign direct investments can boost the country's economy and development until some point, but as such the Nicaraguan apparel industry may not be the way out of poverty. Instead, investments directed at smaller companies and credits granted to small and medium-sized enterprises would reduce poverty more effectively, as proposed by one of the interviewees (Barrantes 24.7.2014). As apparel industry is one of the country's strategic industries, a program that boosts local small and medium-sized

enterprises in the industry could be a good investment. Since the international rules are given and the country has no opportunities to influence in the nature of the value chain, it is recommended to try to increase the ways that local entrepreneurs could benefit more from the industry.

Foreign companies in apparel industry in Nicaragua are located in FTZs that offer fiscal benefits for investors. One of the benefits is that the companies do not have to pay taxes for the first ten years in the country. The purpose is to attract foreign investments, but at the same time the industry does not strengthen the tax base of the country. Some of the companies do stay in the country after the benefits expire but many leave. Also the end of TPL benefits has created pressures for foreign companies to flee.

A stable business climate is definitely an important competitive advantage in Nicaragua. Health and business risks are few and the national economy is relatively stable. The current president and government have been criticized for authoritarian regime, which is definitely not supporting democracy, but may make the business environment more stable and more favourable for foreign investments. However, at the time of completing this thesis, the political situation in Nicaragua was unstable and different from earlier years. Mass demonstrations demand democracy and that president Ortega leaves the office. Therefore, the current fragile political situation may change the nature of the business climate during the next months and years. (Economist 2018.)

8.3 Suggestions and future research

The interviewed highlighted the power of global clothing brands and international agents in the global value chain. Nicaragua might be powerless to change the rules of global economy as such, but as justified above, there are issues that could be studied further to get more out of the apparel industry in the country. For example, a comprehensive investigation about the possibilities to create more linkages between the foreign investments and the local economy could serve to develop the industry and to create more learning and value added activities. Learning could include possibilities to improve Nicaraguans technological and managerial competences.

The credit program suggested by one of the interviewees could finance small and medium-sized local enterprises in the apparel industry. Another interviewee emphasized the importance of education to improve productivity. Would it be possible that the companies offered additional education and training for workers? Of course, long working hours should be taken into account when planning something extra for the workers, but this could be a possibility to improve productivity. As presented in this study, educating workers reduces turnover of employees and the company benefits from more motivated and productive workers and the industry improves its productivity. Possibilities to invest in

training programs and credit programs for local actors could be further investigated. Local and foreign actors should be encouraged to cooperate, since it can boost the technology and knowledge spill overs. Or, it might be possible to establish public-private cooperation to boost training, for example in a form of an educational institution or a think tank.

However, it could be useful for the country to investigate the possibilities of a wider production chain and local subcontracting in the industry: Are there any possibilities to meet these challenges and to create more forward and backward linkages to the local economy? Is there a way to support local entrepreneurship in the apparel industry? Supporting local entrepreneurship and reducing barriers to success could be useful. Clusters of local and foreign owned apparel firms could serve as inter-firm melting pots of design, production and sales. If this was possible, it would diversify the country's apparel industry and raise its position in the value chain. Further studies should research how to encourage linkages between local and foreign invested factories, in order to promote technological advancement, knowledge, productivity and better working conditions to spill over to other factories and industries outside FTZs.

As Johanna Arce (interview 5.7.2014) pointed out, the country and its people would benefit more if there were companies and investments coming to the country and offering employment from different industries with better opportunities and conditions. Indeed, a diversification of the economy remains as a challenge in Nicaragua. Several interviewees mentioned the rising wiring harness industry and its possibilities in the future. It could serve as a potential industry that could assist in poverty reduction in the country. Again, it is an industry that only processes a small part of the production chain in Nicaragua, but future studies should find out whether it has potential to create decent work and more productive employment than apparel industry, and eventually help to reduce poverty. Are the working conditions reasonable and healthy, and does the industry offer a living wage for its employees? What are the conditions the country offers to the investors? Does the industry create linkages to local entrepreneurs and investors?

Manufacturing and infrastructure is highly concentrated in the western part of the country. While the whole eastern part and most of the Caribbean side of the country are left out from infrastructural development and manufacturing, the possibly forthcoming canal might change the infrastructure and economic geography in the country. Will the communities in Caribbean and eastern side benefit from the canal that will evidently change their living environment? If the canal will be constructed, it will evidently change the logistics of the country.

Because of limited extent of this study, this research did not cover environmental consequences of the industry. Also many of the non-governmental organizations in the country concentrate on the social impacts of the industry and the environmental impacts have not had enough recognition. However, as seen in chapter 1 and in table 1, the fast growing industry inevitably has growing consequences on environment as well. In the

end, the growth of the industry arises partly from the increase of low cost fast fashion, in which the life cycle of a cloth is ever shorter. This creates high pressures on global and local environment as well. As the poorest are often the most affected by natural changes, there remains a need to study how the industry affects the nature, water systems and the living environment of Nicaraguans, including the poorest.

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APPENDIX 1 INTERVIEW GUIDE

Translated from Spanish to English

Maquila as a source of employment / opportunities and challenges

1. Raising from poverty

Is working in the maquila industry an opportunity for a Nicaraguan to rise out of poverty?

2. Working conditions

How do you see the working conditions in the apparel industry?

How do you see the labour law in Nicaragua?

Is labour law complied with?

3. Salary

How do you see the salary of a maquila employee?

4. Generator of employment in the country

How do you see the role of the apparel industry as a generator of direct employment in the country?

How do you see the role of the apparel industry as a generator of indirect employment in the country?

Maquila as a source of foreign investments / opportunities and challenges

1. Foreign investments in the apparel industry

How important are the foreign investments in the apparel industry for the country's economy?

Do you see the conditions of the foreign investments as beneficial for the country?

What do you think about the concept of Race to the Bottom, that all the countries are competing for the foreign investments no matter the conditions? Is it reality in Nicaragua?

What are the competitive advantages of Nicaragua in attracting foreign investments in the apparel industry?

2. Rising from poverty

Is the apparel industry an opportunity for Nicaragua to rise out of poverty? How do you see the connections of the apparel industry to the local economy? (Employment, materials, sourcing etc.)