

#### **R4D Working Paper 2017/05**

## Ghana's Participation in Global Value Chains: The Employment Effects

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This report present findings of the extent to which Ghana is participating in the Global value chain and attempts an estimation of its employment effects. The paper is in three main sections. The first examined the extent to which Ghana is participating in the global value chain. The second identified the characteristics of firms that are integrated into the global economy. The third examined the links between exporting and the quality of employment.

Overall, we find that Ghana has limited participation in the global value chain. Using aggregate trade data, we find that there is very little transformation to exports and imports implying minimal value addition and hence limited participation along the global value chain. In addition, we find that Ghana mainly exports primary products and imports mainly finished products indicating that Ghana's participation takes place at the initial part of the GVC.

For the characteristics of firms that are integrated into the global economy, our results show that the size of the firm, age of the firm, sales per worker, product and process innovation and foreign ownership all determine how frequently a firm will export. Specifically, we established that foreign ownership, the size of the firm and improving innovation and average sales have the tendency of increasing the frequency that a firm will export.









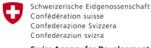
Finally, our investigation into the effects exporting on the quality of employment was in two fold. The first based on quantitative data, with employment quality measured using the ILO decent work provision, suggested a positive relationship between employment quality and exporting activity. The second, based on qualitative data obtained through case studies and analysed within the frameworks of Gereffi (2005) and Lakhani et al. (2013), suggested that firms that are inserted in global value chains with governance structures characterized by lead firms are more likely to have employment strategies that improve the quality of employment compared to firms that do not have links with lead firms. However, majority of Ghanaian exporting firms are not in these type of global value chains but in others without this important characteristics.

One important implication of the findings is that activities within the manufacturing sector need to be improved upon for some value addition to be created for the country to move up the global value chain. More important, the quality of labour can be improved if national legislations are effectively implemented and monitored.

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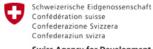
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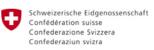


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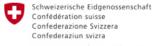




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### **Abstract**

This report present findings of the extent to which Ghana is participating in the Global value chain and attempts an estimation of its employment effects. The paper is in three main sections. The first examined the extent to which Ghana is participating in the global value chain. The second identified the characteristics of firms that are integrated into the global economy. The third examined the links between exporting and the quality of employment.

Overall, we find that Ghana has limited participation in the global value chain. Using aggregate trade data, we find that there is very little transformation to exports and imports implying minimal value addition and hence limited participation along the global value chain. In addition, we find that Ghana mainly exports primary products and imports mainly finished products indicating that Ghana's participation takes place at the initial part of the GVC.

For the characteristics of firms that are integrated into the global economy, our results show that the size of the firm, age of the firm, sales per worker, product and process innovation and foreign ownership all determine how frequently a firm will export. Specifically, we established that foreign ownership, the size of the firm and improving innovation and average sales have the tendency of increasing the frequency that a firm will export.

Finally, our investigation into the effects exporting on the quality of employment was in two fold. The first based on quantitative data, with employment quality measured using the ILO decent work provision, suggested a positive relationship between employment quality and exporting activity. The second, based on qualitative data obtained through case studies and analysed within the frameworks of Gereffi (2005) and Lakhani *et al.* (2013), suggested that firms that are inserted in global value chains with governance structures characterized by lead firms are more likely to have employment strategies that improve the quality of employment compared to firms that do not have links with lead firms. However, majority of Ghanaian exporting firms are not in these type of global value chains but in others without this important characteristics.

One important implication of the findings is that activities within the manufacturing sector need to be improved upon for some value addition to be created for the country to move up the global value chain. More important, the quality of labour can be improved if national legislations are effectively implemented and monitored.

Keywords: Global Value Chain, Employment, Exporting, Ghana











#### **CHAPTER 1: INTRODUCTION**

Ghana's international trade policy has, in the past few decades, been informed by its long-term strategic vision of becoming a middle-income country by 2012. This was to be led by the private sector for the country to become a leading agro-based industrial country in Africa. Indeed, by the year 2012, the country had achieved its middle-income status, largely due to the relative success by the government of Ghana in providing an enabling environment for the private sector, mostly through the stimulation of numerous private sector initiatives. More prominently, the intention of the country's trade policies was such that they strategically fit into other key national development programs such as the Ghana Poverty Reduction Strategy and the Private Sector Development Strategy. Appendix Table A1 outlines the major trade policies between 2003 and 2017.

Currently, the focus of Ghana's trade policy reforms is on improving export competitiveness and export diversification, investing in new infrastructure and removing barriers to trade and investment. The National Export Strategy for the Non-Traditional Export Sector (2012-16) and National Export Development Programme provide useful guidelines for the implementation of this trade agenda. The export promotion package contains several measures such as technical advisory services for product development and market access facilitation. The UNCTAD/WTO International Trade Centre in Geneva provides technical support to Ghana Export Promotion Authority (GEPA in its export development programme.

The globalisation process that has occurred in the past two to three decades has involved the breaking up of the production process among firms across national borders. Inter-firm relationships between firms have increased as firms find themselves in different positions along the global value chain. The emergence of global value chains has also changed inter-firm relationships with some firms, referred to as lead firms, driving the processes within the chain. As an increasing proportion of production is occurring in developing countries where working









conditions are of a lower quality than in industrial countries, there has been growing concern about the poorer working conditions and pressure to improve them.

For Ghana, the extent of domestic firms' integration into international production chains offers opportunities for export diversification not only in new products but in new processes that contribute to the global value chain. The 2014 trade policy review of the WTO points to the increasing attractiveness of Ghana as an investment location in sub-Saharan Africa in the downstream oil, gas and mineral processing sectors, agro-food processing and the energy and mining-related services sectors (Gyeke-Dako, Oduro, Twumasi Baffour and Turkson, 2015). Over the last decade, the Government of Ghana, industry stakeholders and development partners such as SECO and UNIDO have been in collaboration to support domestic firms remain competitive within the value chain (Gyeke-Dako *et al.*, 2015).

As part of government's plan to make firms producing non-traditional products become competitive and promote their integration into the domestic and international markets, Ghana launched the Trade Sector Support Programme (TSSP) in 2005 which is the implementation plan for the National Trade Policy. The TSSP mainly focused on improving structures of international trade negotiations, formulating and implementing trade negotiation strategies, ensuring fairness for all economic operators by having a transparent tariff regime, providing incentives to help boost domestic production, ensuring that goods are cleared quickly, making facilities at the port modern, efficient and adequate, creating a free port in Ghana. The expectation is that if domestic firms become competitive and are well integrated into global value chains it will not only increase export earnings but will also increase employment and thereby assure incomes and reduce poverty.

The importance of measuring the employment impact of domestic firms' integration into global value chains is underscored under one of the main pillars of this project. Indeed, one of the main aims of this project is to find out policy instruments (if they are in place) that may create and









sustain "good" jobs within developmental context by connecting local enterprises into international markets. To this end this report seeks to answer the following research questions;

- 1. To what extent are domestic firms integrated into international production/value chain.
- 2. What are the consequences (of a firm or a sector) integration into international production/value chain in terms of quantity and quality of employment?
- 3. Are the employment effects of integration identical across sectors, skills/education levels, firm sizes and other firm characteristics etc.?

In answering the above research questions, this report seeks to achieve three objectives. The first is to examine the extent to which Ghana is participating in the global value chain. The second is to identify the characteristics of firms that are integrated into the global economy. The third is to examine the links between exporting and the quality of employment. These objectives fit into the broader objective of one of the three pillars of the project

We find that Ghana has limited participation in the global value chain. Using aggregate trade data, we find that there is very little transformation to exports and imports implying minimal value addition and hence limited participation along the chain. In addition, we find that Ghana mainly exports primary products and imports mainly finished products, indicating that Ghana's participation takes place at the initial part of the GVC. For the characteristics of firms that are integrated into the global economy, we find firm size, age, productivity and innovation as very important. Finally, our investigations into the effects exporting activity of firms have on the quality of employment, measured using condition of service as outlined in line the ILO decent work provision, indicates a positive relationship between employment quality and exporting activity. Overall, the likelihood of better employment conditions is higher for exporting firms.

The next chapter presents evidence on the extent of Ghana's participation into the global value chain. This will be followed in chapter 3 by a discussion of the data and methods used to identify the characteristics of firm integration into the global value chain. The econometric results from section 3 are presented in section 4. In chapter 5, an investigation into the relationship between exporting and the quality of employment is presented. In chapter 6, we utilise case study material









to examine the relationship between the nature of integration into the global market and the quality of employment. Chapter 7 concludes the paper.

### CHAPTER 2: GHANA'S PARTICIPATION IN GLOBAL VALUE CHAINS USING GROSS TRADE DATA

#### 2.1 Background

Historically, Ghana, based on factor endowment and an inherited colonial economic system has exported mainly primary commodities and imported intermediate inputs and manufactures. As noted by Ackah et al (2014), the colonial regime was mainly interested in making the Gold Coast (Ghana) an extractive economy to supply raw materials to Britain while at the same time heavily dependent on imported manufactured products from Britain. Although various governments after independence (especially the Nkrumah-led Convention Peoples Party) made efforts to restructure the economy and reduce Ghana's dependence on imported manufactures through policies that emphasized import substitution, the pattern of trade has remained the same with some marginal value addition to exports and over-reliance on imported manufactures.

The importance of external trade to the Ghanaian economy has increased in the last decade since 2006. The contribution of external trade to GDP as measured by trade openness (export and imports as a percentage of GDP) shows that the size of Ghana's trade relative to GDP increased substantially after Ghana begun production and exporting of crude oil in 2011. From about 50 percent of GDP, Ghana's trade relative to GDP rose to 72.4 percent in 2011, peaking at about 75 percent in 2012 before marginally declining to 72.2 percent in 2014 and further to about 65 percent of GDP in 2015.

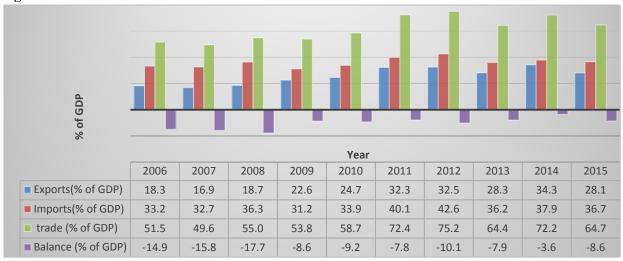








Figure 1: Trade Share of GDP



Source: Ghana Statistical Service Quarterly Reports

The trade balance which has always been in deficit in every year since 2006 (Figure 1) worsened marginally from about 15 percent of GDP to 15.8 percent of GDP in 2007. Indeed, apart from a dip in 2002 the trade balance worsened continuously from 2001 until 2008 when it peaked at 17.7 percent of GDP. The worsening trade balance can be attributed to the increased import bill as a result of the world food crisis in 2006/2007 and increased oil imports as a result of the record high increases in oil prices in that period. The total import -GDP ratio rose by 3.7 percent points between 2007 and 2008 with oil imports rising much faster than non-oil imports. Although exports did not do so badly with high commodity prices they only increased marginally by about 1.8 percentage points over the same period. The subsequent decline in the trade deficit in 2009 can be explained by the sharp decline in the import bill due to the sluggish domestic demand for imports, downward trend in oil prices and a lower volume of crude oil imports due to the increase in the hydro component of power generation by the Volta River Authority (VRA) in Ghana. The gains made in 2009 were gradually eroded as the trade deficit worsened to a deficit of 10.1 percent of GDP in 2012. Over the period between 2012 to 2014, there was a significant improvement in the trade balance by about 6.5 percentage points and this was on account of a marginal decline in imports (from 42.6 to 37.9 percent of GDP) against a marginal growth in exports from a share of 32.5 percent to 34.3 percent of GDP between 2012 and 2014 (Figure 1).











It should be noted that, the commercial exploitation of oil has marginal effect on the trade balance because Ghana has remained a net importer of oil ever since it began exporting crude oil in 2011.



Figure 2: Composition of Exports

**Source: Trademap** 

Ghana's exports can be classified into two broad categories: traditional and non-traditional. The major traditional export commodities continue to be precious metals (mainly gold), cocoa and cocoa processing, and timber. Altogether, these products have accounted for almost over 60 percent of total export revenue since 2001, peaking at about 79 percent of total export revenue in 2009 (as shown in Figure 2) on account of rising commodity prices on the world market. The contribution of the three traditional exports declined substantially to about 55 percent of export revenue when Ghana began exporting crude oil. This was further reduced to about 49 percent in 2013 and indeed has remained close to 60 percent as at end of 2015.

Though the declining importance of the traditional exports gives an impression of some extent of diversification, the export of crude oil which contributes over 60 percent of the contribution of non-traditional exports to export revenue makes Ghana a low value addition country with a relatively undiversified export base. Indeed, the Ghanaian economy continues to export mainly









primary products and at best simple manufactures. The implication is that Ghana's economic base remains vulnerable to the vagaries of world commodity prices and supply shocks. The evidence of limited diversification and value addition regarding Ghana's exports is confirmed in Table 1 as the traditional exports and oil contributed about 90 percent of export revenue in 2014 and 2015.

Table 1: Composition of Exports and Imports, 2014-2015

Duo duot		Export Shares (%)		hares (%)
Product	2014	2015	2014	2015
Animal & Animal Products, Raw Hides, Skins, Leather &Fur	0.5%	0.6%	3.4%	3.4%
Vegetable products and Foodstuffs	6.1%	7.2%	11.6%	10.8%
Cocoa and Cocoa Processing	23.2%	25.4%	0.1%	0.4%
Mineral, Rubber, Plastics, Chemical & Allied Products (including Oil)	33.3%	21.1%	34.9%	24.0%
Wood & Wood Products	2.9%	2.2%	1.9%	2.0%
Textiles, Footwear/Headgear	0.3%	0.2%	7.3%	9.5%
Stone/Glass, Metals (Including Gold and other precious metals)	30.8%	41.4%	22.2%	27.2%
Machinery/Electrical/Transportation	0.6%	0.7%	15.2%	18.2%
Miscellaneous and Service	2.3%	1.2%	3.6%	4.5%
All Products	100.0%	100.0%	100.0%	100.0%

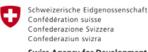
**Source: Trademap** 

Crude and refined oil imports increased continuously from 17.4 percent of the import bill in 2001 and peaked at 26 percent in 2007 (Figure 3) as a result of the record high increases in oil prices on the global market. Although oil import shares declined gradually to about a fifth of the import bill in 2011, it increased continually to about a quarter of the import bill in 2014, reducing marginally thereafter to 22.6 percent in 2015.

Table 1 further shows that the Ghana's imports in 2014 and 2015 have largely been minerals including oil and chemicals and allied products, stone/glass and other metals, machinery, electrical and transportation as well as vegetable products and foodstuffs. These items constituted about 80 percent of the total imports in 2014 and 2015 respectively.



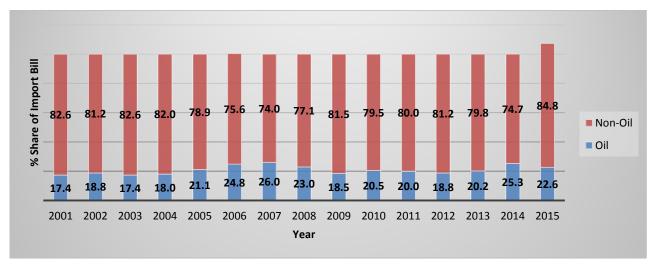




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**Figure 3: Composition of Imports** 



Source: Bank of Ghana Statistical Bulletin (Various Years)

Ghana's main trading partners in terms of the destination for its exports remained the European Union until the beginning of 2005 when Africa became the main destination of Ghana's export. Indeed, South Africa since 2009 has become the main destination of Ghana's exports of stone, glass, metals (including Gold and other precious metals) as well as intermediate goods and fuel. Data from the Ghana Statistical Service indicates that in 2010, South Africa received 52.3 percent of Ghana's exports and although this declined to about 25 percent in 2012 it contributes to making the sub-Saharan Africa an important destination for Ghana's exports. Concurrently, although the EU remains an important destination for Ghana's exports, its share of Ghana's export declined. Noticeably China, India and other emerging and developing countries have gradually become important destinations of Ghanaian exports as these are the only destinations that have recorded increases in their share of exports from Ghana at the expense of the United States, and the EU (see Figure 4).









Average % Share of Exports Other Emerging China India **United States** Africa European Union Other Advanced and Dev. Countries **Destinations** 2000-2005 1.5 0.8 51.3 5.1 4.5 15.2 21.6 **2006-2010** 1.2 2.3 2.4 52.5 25.8 8.7 7.2 2011-2015 4.0 12.3 2.0 33.0 24.7 10.2 13.8

Figure 4: Ghana's Export Destinations, 2000-2015

Source: IMF Direction of Trade Statistics, Yearbooks

Although the European Union continues to record the highest share of imports, this has substantially declined from over 40 percent in 2000 to about 24 percent in 2015. Over the period 2000-2015, Ghana's imports have increasingly been dominated by Chinese products mainly in the form of light manufactures. As shown in Figure 5, Chinese products made up about a fifth of Ghana's imports over the period 2006-2015, a substantial increase from about 9 percent over the period 2000-2005. In addition, there has also been an increase in the share of imports from India and other emerging and developing countries as shown by the trends in Figure 5.











50.00% 45.00% 40.00% 35.00% 30.00% 25.00% 20.00% 15.00% 10.00% 5.00% 0.00% 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2002 2004 China India United States Africa European Union Other Advanced Other Emerging and Dev. Countries ——All Others

Figure 5: Trends in Origin of Ghana's Imports, 2000-2015

Source: IMF Direction of Trade Statistics, Yearbooks

#### 2.2 Ghana's GVC Participation Using Gross Trade Data

Global value chains (GVCs) and the extent to which a country is integrated in to the GVC has assumed prime importance because of its immense contribution to economic and social well-being. In terms of economic well-being, Taglioni and Winkler (2016) indicated that GVCs impact on average living standards through employment creation, increased wages, improved work conditions and economic security. With respect to its social impact, GVCs promote wider social upgrading, distributional concerns, and nonmaterial factors such as democracy, labour rights, human rights, gender equality, environment, cultural issues, and respect for minority rights among other factors.











As noted by Taglioni and Winkler (2016), the main transmission channels for economic and social upgrading include forward links through the sale of GVC-linked intermediates to the local economy, and stimulating production and/or productivity in various downstream sectors; and backward links in the form of GVC-linked purchases of local inputs, spurring production and/or productivity in various upstream sectors. The transmission mechanism also occurs through technology spill overs, skills upgrading, market restructuring in the form of pro-competitive or demonstration effects and through the stimulation of investments in infrastructure that would otherwise not be profitable and that may spur local production in other sectors.

Various attempts have been made to measure the extent to which a country is integrated in a GVC at the aggregate trade level. Among these various measures Taglioni and Winkler (2016) identified three main ways, namely, capturing the extent of domestic value added in trade; network analysis of international trade and firm-level measures of direct links in GVCs. On the basis of available data this study made use of measures to capture the extent of value added in trade and firm level measures of links to GVCs. This subsection attempts the former.

At the aggregate level, a country's participation in a GVC can be measured by the country's domestic value added embodied in its gross exports (as a seller) and gross import (as a buyer). According to Taglioni and Winkler (2016), what matters for a country' participation in the global value chain (GVC) is the growth of the country's domestic value added embodied in gross exports, because a significant share of gross exports may consist of foreign value added (via imported inputs). Indeed, how much value addition is created within the domestic economy for gross exports clearly determines the extent of the country's integration into the GVC. Domestic value added consists of value added that is created in an industry (direct domestic value added), value added that is created in other sectors supplying the industry (indirect domestic value added), and re-imported intermediates.

Measures that seek to capture the extent of value added in trade include making use of gross import and export flows to gather some initial insights into a country's participation in GVCs,









"Buyer-Related Measures", "Seller-Related Measures" and the calculation of the GVC participation index, network metrics and their visualizations, the role of services in value added and firm-level links in GVCs. As noted by Taglioni and Winkler (2016), while the "buyer-related measures" covers indirect measures, such as the share of intermediates in gross imports based on combining gross trade data with informed classifications, and more direct quantifications of a country's position in GVCs, such as the foreign value added embodied in the country's gross exports, the "seller-related measures" cover indirect measures such as the share of intermediates in output or gross exports, or more direct, the domestic value added embodied in gross exports of third countries. This study makes use of these two broad measures in estimating the extent of Ghana's integration in the GVCs at the aggregate level.

Using the product-level HS Code, Ghana's most important export products between 2000 and 2010 have largely been precious metals (mainly gold and diamond), cocoa and cocoa products, as well as wood and articles of wood. More recently, the composition of the most important export products has slightly changed given the dominance of mineral products (mainly crude) over wood and articles of wood. Altogether, these export products constitute more than 80 percent of the country's overall export products. The importance of the rest of the products significantly decreases as they individually constitute less than 2 percent to overall exports, apart from vegetable products which contributes about 5 percent (Figures 6 and A1).

For imports, the most important products have been machinery and transport products (between 2000 and 2013), minerals and machinery (in 2014) and metals and machinery products (in 2015) (see Figures 6 and A1). These import products constituted between 35 percent and 40 percent of overall imports in 2015, with the rest of the other products having some substantial contributions. For instance, as shown in figure 6, only 3 products individually contributed less than 1% of overall imports, with the rest individually contributing between 2-10 percent.

Comparatively, Ghana's import products are more diversified over the product level defined in the HS Code than its export products, with the latter highly skewed towards two main products









(mainly, precious metals, cocoa and cocoa products) with very little value addition. The exports of such primary products with very little value addition implies that Ghana enters the GVC at the initial stages and gives an indication of low levels of integration into the GVC. In addition, fewer proportions of the country's most important export products are imported and fewer proportions of the country's most important import products are exported. For instance, about 2 percent of precious metal products were imported in 2015, though this same product was the country's most important export product (contributed about 39 percent of overall exports) (see Figures 6 and A1).

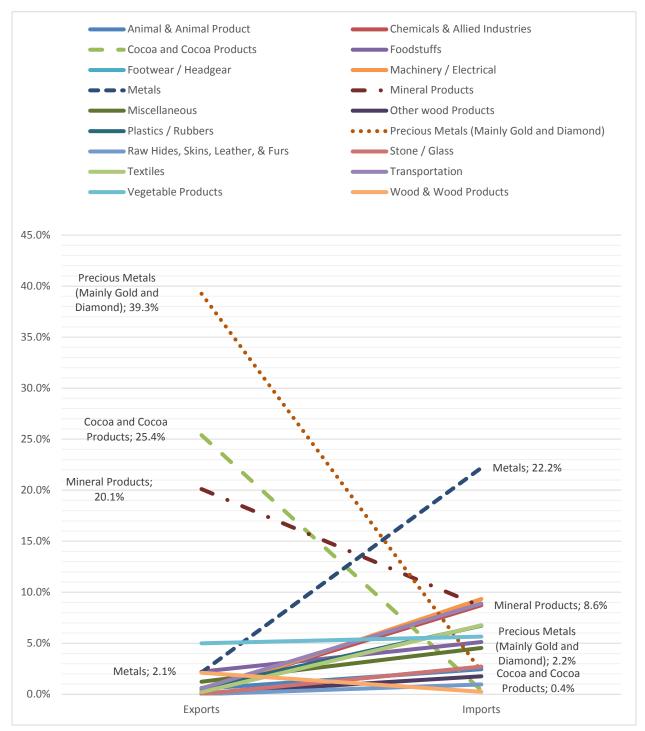








Figure 6: Ghana's Top Exports and Imports (Product Level HS Code), 2015

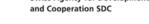


Source: Data Obtained from Trademap, 2015













Similarly, about 2 percent of machinery/electrical products were exported in 2015, though the same product was the country's most important import product (contributed about 22 percent of overall imports). This distribution appears similar for the previous years. This pattern indicates that there is little transformation to both major exports and imported goods. This fact seems to suggest Ghana's participation in the Global Value Chain may be marginal with little domestic transformation to the most important imported products and low value addition to main primary exporting products. This analogy also holds for the rest of the important imports.

The information in Figures 6 and A2 is further refined using the United Nations (2002) Broad Economic Categories (BEC) that focuses on final use and distinguishes between consumer goods, capital goods and intermediates (see Figures 7 and A2). As can be observed, the majority of Ghana's most important export products have basically been intermediate and consumer goods, mainly industrial supplies as well as food and beverages (both for consumption and intermediate purposes). It needs to be emphasized that in 2011, fuel and lubricants (an intermediate good) became one of the most important export products (see Figure 7). Conversely, the majority of the country's most important import products include both consumer, capital and intermediate goods: mainly, food and beverages and transport equipment, industrial supplies and capital goods (see Figures 7 and A2). For most of these intermediate goods the country exports more than it import, and for consumer and capital goods, the country imports more than it exports.

More interestingly, evidence from this refined classification seems to support the earlier finding that Ghana's participation in GVCs may be marginal. For instance, Figure A2 shows that not only are the country's intermediate and consumer goods the most important products, but they are also the most important exports and imports. This raises concerns about how much value added is provided, most importantly for re-exports.

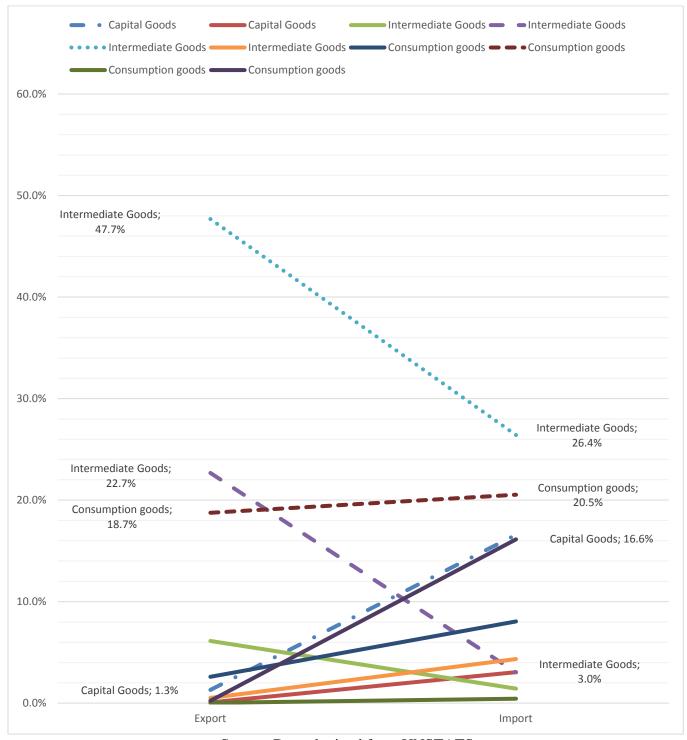








Figure 7: Ghana's Top Exports and Imports - Consumption, Intermediate and Capital Goods (BEC), 2013



Source: Data obtained from UNSTATS











#### 2.3 Conclusion

This section examined the extent to which Ghana is participating in the global value chain at the macro level. Using aggregate trade data, we find that there is very little transformation to exports and imports implying minimal value addition and hence limited participation along the chain. In addition, we find that Ghana mainly exports primary products and imports mainly finished products indicating that Ghana's participation takes place at the initial part of the GVC. In all, the results suggest that Ghana has limited participation in the global value chain.

#### **CHAPTER 3: DATA AND METHODS**

#### 3.1 Introduction

This section describes the data used in the report as well as the methods used to collect them. Basically two sets of data was used in the report. The first is a quantitative data obtained through an enterprise survey, and the second was a qualitative data obtained through case studies with firm owners or managers of some selected firms. The following sub-sections describes how the two datasets were collected and the descriptions of some key variables used in the analysis.

#### 3.2 Quantitative Data

The quantitative data was obtained from an enterprise survey for the project Employment Effects of Different Development Policy Instruments in Ghana, conducted by the Department of Economics, University of Ghana, in collaboration with the Swiss Programme for Research on Global Issues for Development and the World Trade Institute, Bern. The data is a randomly selected sample of firms registered with the Association of Ghana Industries (AGI) and the National Board for Small Scale Industries (NBSSI). Firms from these sources were used because of the absence of a more recent industrial census for the country (the most recent was conducted in 2003). The survey was conducted in two waves. The first was between July and September 2015 for 600 firms out of which 428 responded. The second was between August and September









2016 for the 428 already surveyed firms, out of which 364 responded. In 2015, data was collected for 2013 and 2014 and in 2016, data was collected for 2015.

The firms surveyed was conducted in seven administrative regions in Ghana: Ashanti, Brong-Ahafo, Western, Central, Eastern, Greater Accra and Volta regions. The other three administrative regions were not visited since firms in these locations were few, sparsely located and not significantly different from those in the other seven administrative regions. The survey obtained information on the firm's background, characteristics of owners/managers, production, inputs, revenue, profits, assets, exports, employment, technologies, innovations, foreign direct investments, finances and the broader business environment.

Table 2 presents a sectoral distribution of the firms surveyed in the two interview years (2015 and 2016). Broadly, a higher proportion of these firms are in the manufacturing sector (such as the food, beverages and tobacco sector as well as the textiles, leather and paper sector) as compared to the services sector. The distribution of the firms across sectors corresponds very well with the types of firms registered with both the AGI and the NBSSI. In addition, the distribution corresponds quite well to other surveys that have been reported in the empirical literature for Ghana (see for instance, the works Söderbom, 2001; Söderbom and Teal, 2000; 2004).









**Table 2: Sectoral Distribution of the Firms Surveyed** 

	20	15	20	16
	Freq.	%	Freq.	%
Manufacturing				
Food, beverages and tobacco	125	29.21	109	29.95
Textiles, leather and paper	66	15.42	60	16.49
Wood, construction materials and furniture	23	5.38	20	5.5
Metals	37	8.65	33	9.06
Chemicals, rubber and plastic products	70	16.35	51	14.01
Machinery, motor vehicles and transport	9	2.1	8	2.19
Office, electrical, communication and medical equipment's	22	5.14	20	5.49
Construction	24	5.61	21	5.77
Services				
Retail and repairs	10	2.34	7	1.92
Hotels and restaurants	8	1.87	7	1.92
Transport	9	2.11	9	2.47
Financial services	4	0.94	4	1.1
Business services	18	4.19	12	3.28
Wholesale	3	0.7	3	0.82
Total	428	100	364	100

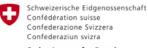
Table 3 presents the type of ownership structure for the firms. As can be observed from the table, most of the firms are either limited liability companies (53%) or sole proprietorships (43%). A few are foreign owned (16%), with the majority being local firms (84%).

**Table 3: Type of Ownership** 

	Freq.	%
Legal Status		
Limited Liability	224	52.34
Partnership	17	3.97
Sole Proprietorship	184	42.99
NGO	3	0.7
Foreign Ownership		
Yes	67	15.65
No	361	84.35
Total	428	100









In addition, most of the firms are either micro or small firms (i.e., have total employment not exceeding 19); this accounts for about 60% of the total sample (see Table 4). Not many large firms could be found in the data (about 13% in 2015 and 20% in 2014 and 2013). Changes in total employment over the years' account for the change in the size distributions over the periods.

**Table 4: Size Distribution of Firms (Total Employment)** 

		`		,		
	2013 2014		)14	1 20		
	Freq.	%	Freq.	%	Freq.	%
Micro (0-4)	100	23.36	81	18.93	96	25.78
Small (5-19)	153	35.75	171	39.95	156	44.19
Medium (20-49)	78	18.22	80	18.69	64	16.71
Large (>49)	97	22.66	96	22.43	48	13.31
Total	428	100.00	428	100.00	364	100.00

Particularly for this report, focus is mostly on the sections of the survey that ask questions relating to export and employment. On the average, about 13% of the firms exported in 2013 and 2014, with the remaining 87% producing for the domestic market (see Table 5). In 2015, the proportion of exporting firms was slightly higher, since fewer firms responded in the second wave. More importantly, most of the exporting firms are manufacturing firms (mostly in the food, beverage and tobacco sector and metals, chemicals, rubber and plastic products); very few services' sector firms export (mostly transport and business services firms export).









**Table 5: Exporting by the Surveyed Firms** 

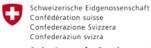
	20	13	20	14	20	15
	Freq.	%	Freq.	%	Freq.	%
Manufacturing						
Food, beverages and tobacco	16	4.40	18	4.21	15	3.50
Textiles, leather and paper	7	1.92	9	2.10	8	1.87
Wood, construction materials and furniture	5	1.37	5	1.17	3	0.70
Metals	8	2.20	7	1.64	11	2.57
Chemicals, rubber and plastic products	10	2.75	12	2.80	11	2.57
Machinery, motor vehicles and transport	3	0.82	2	0.47	2	0.47
Office, electrical, communication and						
medical equipment's	2	0.55	3	0.70	3	0.70
Construction	1	0.27	0	0.00	1	0.23
Services						
Retail and repairs	0	0.00	0	0.00	0	0.00
Hotels and restaurants	0	0.00	0	0.00	0	0.00
Transport	1	0.27	1	0.23	3	0.70
Financial services	1	0.27	0	0.00	0	0.00
Business services	0	0.00	0	0.00	1	0.23
Wholesale	1	0.27	0	0.00	0	0.00
Total	55	15.11	57	13.32	58	13.55

Note: Percentages are out of the Total Sample

Table 6 presents the distribution of firms by export status and their corresponding size distributions. Most of the exporting firms are large firms accounting for about 6% of the total sample. This is followed by the small sized firms in 2015 and medium sized firms in 2014 and 2013 respectively. Fewer micro firms are exporting. It needs to be emphasized that there seems to be a positive association between exporting and the size distribution of firms.









**Table 6: Distribution of Employment by Export Status** 

			Exportin	g Firms		
	2013		2014		2015	
	Freq.	%	Freq.	%	Freq.	%
Micro (0-4)	5	1.37	7	1.64	3	0.70
Small (5-19)	13	3.57	13	3.04	18	4.21
Medium (20-49)	15	4.12	14	3.27	10	2.34
Large (>49)	21	5.77	22	5.14	28	6.54
Total	364	100.00	428	100.00	428	100.00

Note: Frequencies are for Exporting firms and the Percentages are out of the Total Sample An attempt was made to define the quality of employment using the decent work framework of the ILO (see ILO, 1999). The framework involves the number of firms that offer their employees any of the following: contract, leave, medical insurance and pension. Table 7 presents the results of the distribution of the quality of employment measures in our sample. On the average, 37% of the firms offer contracts to their employees, 49% offer paid leave, 43% offer medical insurance and 46% offer pensions (see Table 7).

**Table 7: Distribution of Employment Quality Measures** 

Quality	Proportion
Contract	37%
Leave	49%
Medical	43%
Pension	46%

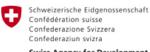
In total, about 33% of the firms do not offer any of these employment quality measures; 17% offer only one, 12% offer any two, 20% offer any three and 19% offer all four measures.

#### 3.3 Qualitative Data

To complement the quantitative data obtained from the surveys, case studies were conducted with some selected firm owners or managers within the context of understanding how local firms are integrated into the global market. The case studies were targeted mostly at the textile and garment sectors as well as the agri-food sector. The textile and garment sectors were chosen because it is expected that countries that want to industrialize will begin in these sectors. The









agri-food sector was chosen because it is one of the sectors targeted in the National Export Strategy.

In total, case study materials were collected from 14 firms: 4 textile firms, 6 garment firms and 4 agri-food firms. The firms were randomly selected from the list of exporting firms generated from our main survey. In terms of the characteristics of these firms, the proportion of output exported by these firms' range from about 10 per cent to 100 per cent. The firms employ a minimum of 8 workers to over 3,000 workers. Four of the firms have foreign ownership.

## CHAPTER 4: CHARACTERISTICS OF FIRMS INTEGRATION INTO THE GLOBAL VALUE CHAIN

#### 4.1 Introduction

Recent studies in international trade literature have suggested a number of reasons to explain why not all firms are engaged in international trade. These studies have emphasized that firms face huge start-up costs as they gather information they require to enter the international market, find markets and adjust their products to meet international standards. Graner and Isaksson (2002) emphasize that these costs may vary with firm age, firm size and ownership structure of the firm. According to Graner and Isaksson (2002), firm age affects firm's learning experience. Thus, if technically inefficient producers are taken out of the market, older firms are generally more competitive than younger firms on the international market (Roberts and Tybout, 1997). Foreign firms may also have better access to finance their sunk costs as they may find it easier to borrow from both the domestic markets in which they operate and also have access to financing from their parent companies. This makes it easier for them to participate in the export market. Bigsten et.al (1997) also note that exporting may require that firms incur marketing costs that are higher than selling on the domestic market, and as such the larger the firms the easier it is to enjoy economies of scale in the export market. Indeed, using data from different countries, Clerides et al., (1998); Bernard and Jensen (1999, 2004); Aw et al. (2000); Greenaway and









Kneller (2004) and Graner and Isaksson (2002) have all confirmed that firms that are more productive, larger and have foreign ownership are more likely to export. This section will focus on the firm level behaviour and ask the question, what determines how frequently a firm will export?

#### 4.2 Method for Econometric Investigation

We modify Roberts and Tybout (1997) theoretical model on the determinants of exports. In their model, a firm i's probability to participate in an exporting activity depends on firm level characteristics. Based on their objective, they used a binary version of the probit model. To achieve our objective of what determines how frequently a firm exports we use a random effect ordered probit model. Our modified version is thus given by:

$$Pr(outcome_i = i) = Pr(\kappa_{i-1} < \theta_1 x_{1i} + \theta_2 x_{2i} + \dots + \theta_k x_{ki} + u_i \le \kappa_i)$$
 (1)

We use this model because our dependent variable which is categorical and has more than two outcomes follows a certain order; does not export, exports once, exports two times and exports three times (i.e. for the 3 survey years). In an ordered probit, an underlying score is estimated as a linear function of the independent variables and a set of cut points. The probability of observing outcome i corresponds to the probability that the estimated linear function, plus random error, falls within the range of the cut points estimated for the outcome. Where  $u_j$  is assumed to have a normal distribution. For each outcome, we estimate the coefficients  $\beta_1, \beta_2, \ldots, \beta_k$  together with cut points  $K_1, K_2, \ldots, K_{I-1}$ , where I represents the number of possible outcomes.  $\kappa_0$  is taken as  $-\infty$ , and  $\kappa_I$  is taken as  $+\infty$ . The coefficients  $\beta_1, \beta_2, \ldots, \beta_k$  are coefficients of the firm level characteristics used in the model. Rather than using the different categories of size, age and sales per worker for our formal analysis, we use the logs of these variables. We also control for business cycle effects and fixed effects across sectors by including time dummies and sector dummies (manufacturing and services) respectively.

#### 4.3 Descriptives

Under exporting activity, we divide the firms into 4 main groups; firms that did not export in all three years, firms that exported only once in the three years, firms that exported twice in the three years and firms that exported all three years. This provides an in depth understanding into









the exporting behaviour of the different types of firms. Following Robert and Tybout (1997) and Greenaway and Kneller (2004), the explanatory variables used include, size, age, foreign direct investment, wage per worker, sales per worker and innovation. Since we have a panel, we make use of all the observations in the dataset. We measure size using the firm's total value of assets. Foreign Direct Investment is defined as a dummy equal to 1 if a firm is foreign and 0, otherwise. We define process innovation as a dummy equal to 1 if a firm has introduced a new or significantly improved method of production and 0, otherwise. Product innovation is also defined by a dummy equal to 1 if the firm has introduced a new product

Table 8 presents the descriptive statistics of the main variables used for the estimation. From Table 8, the average size of the firms as measured by the asset of the firm is 12.8 million. We also see that the average age of the firms is 18 years, while average sales per worker and average wage per worker are 85, 676 and 6, 469. On the average, 15% of the firms are foreign owned, 79% of the firms have introduced new product or significantly improved upon their products and 36% have significantly improved upon their processes of production.

**Table 8: Descriptive Statistics** 

Variable	Observations	Mean	Std. Dev.	Min	Max
Asset value	735	12.8m	143m	-	3,040,000,000
Age	1056	17.385	13.775	0.000	80.000
Sales per Worker	825	85675.910	378305.700	44.928	6240986.000
Wage per Worker	876	6468.267	86626.910	0.000	2505179.000
FDI	1056	0.145	0.352	0.000	1.000
Product Innovation	1056	0.791	0.407	0.000	1.000
Process Innovation	1056	0.356	0.479	0.000	1.000

#### 4.4 Discussion of Findings

Table 9 below shows the results of the marginal effects for the different outcomes of what determines the probability that a firm will export. From Table 9, we find that a 1% increase in the size of the firm will lead to a 1.4% lower probability of not exporting, a 0.2% higher probability that the firm will export once, a 0.5% higher probability that the firm will export twice and a 0.7% higher probability that the firm will export three times.











Table 9: Marginal Effects for the Different Outcomes of What Determines the Probability that a Firm Will Export?

VARIABLES	outcome 0	outcome 1	outcome 2	outcome 3
Log (Size)	-0.014***	0.002***	0.005***	0.007***
	(0.005)	(0.001)	(0.002)	(0.003)
Log (Age)	-0.041**	0.006**	0.014**	0.020**
	(0.017)	(0.003)	(0.006)	(0.009)
Log (Sales per Worker )	-0.028***	0.004***	0.010***	0.014***
	(0.01)	(0.002)	(0.004)	(0.005)
FDI	-0.081*	0.013*	0.021*	0.040*
	(0.045)	(0.007)	(0.016)	(0.022)
Product Innovation	-0.060*	0.009*	0.021*	0.029*
	(0.035)	(0.006)	(0.013)	(0.018)
Process Innovation	-0.062**	0.010**	0.022**	0.030*
	(0.030)	(0.005)	(0.011)	(0.015)
Log (Wage per Worker)	-0.005	0.004	0.002	0.003
	(0.012)	(0.002)	(0.004)	(0.006)
Sector	-0.161***	0.025***	0.056***	0.079***
	(0.042)	(0.007)	(0.016)	(0.022)
Observations	706	706	706	706

Notes: coefficients and standard errors are reported. Standard errors are reported in parentheses.

This means that the probability that a firm will export increases as it gets bigger. This finding is consistent with Bernard and Jensen (1999, 2004) for the US. We also find that a firm has a lower probability of not exporting as its average sales increases. However, the probability that a firm will export frequently increases as it becomes more productive. Specifically, if a firm's average sales increases by 1%, there is a 0.4% higher probability that the firm will export once, 1% higher probability that the firm will export twice and a 1.4% higher probability that the firm will export three times.

Our results from Table 9 further shows that older firms have a higher probability of exporting frequently compared to younger firms. In particular, we find that as a firm gets older, the probability that it will export once increases by 0.6%, the probability that it will export twice increases by 1.4% and the probability that it will export three times increases by 2%. Foreign firms also have a higher probability of exporting frequently than domestic firms. This is evident in Table 9 as the probability that a firm will export once is 1.3% higher if it is foreign, exporting









twice is 2.1% higher if it is foreign and exporting three times is 4% higher if it is foreign. Domestic firms' probability of not exporting is obviously higher. Firms that have introduced process innovation within the period have a higher probability of exporting frequently than firms that have not done any process innovation.

Although the estimates for product innovation are significant, their level of significance is marginal. Consistent with what literature suggests, process innovation is what matters for exports as firms would have to improve on their methods of production to meet international standards. Similar studies that have found these results include Wakelin (1997, 1998) and Ebling and Janz (1999).

#### 4.5 Conclusion

In this section, we have examined what determines how frequently a firm will export. Our results have shown that the size of the firm, age of the firm, sales per worker, product and process innovation and foreign ownership all determine how frequently a firm will export. Specifically, we have found that increasing foreign ownership, the size of the firm and improving innovation and average sales have the tendency of increasing the frequency that a firm will export.

## CHAPTER 5: EXPORTING AND THE QUALITY OF EMPLOYMENT: A QUANTITATIVE ANALYSIS

#### 5.1 Introduction

Growth in trade and foreign direct investment (FDI) in the global economy has in recent times received increased interest among policy-makers and the public in general with regards to their employment effects and attendant income distribution consequences. Pessimism however exists within the general public due to job losses out of increased import competition and the displacement of local firms by FDI. This notwithstanding, at the industry and firm levels, exporting is known to result in enhanced opportunities in the world market which when effectively exploited with the development of the needed expertise has significant effects on









production levels in the world market with positive ramifications on employment and the quality of jobs (Schank, et al., 2007). Thus, the benefits of globalization can equally be realised at the micro level. In contrast, economies and firms that are not endowed with the needed attributes suffer from the globalization process and may have to adapt and adjust to the new environment.

Most empirical studies based on firm-level data demonstrate a positive relationship between export status and the wage of employees (see Schank et al., 2007 for a review). As Flanagan and Khor (2012) note, modern discussions of labour conditions go well beyond monetary and nonmonetary working conditions. For over two decades, international organisations have consistently stressed on the advancement of a core set of labour rights as outlined in ILO decent work initiative (ILO, 1999), which provides a framework for development that promotes opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity.

Overall, due the lack of data and methodological challenges, empirical evidence on the impact of trade liberalisation and other domestic policies on employment are lacking (Jansen and Lee, 2007). Studies that exist on trade and quality of employment have mainly focused on the income effect of trade although quality of employment transcends beyond income including improvement in working conditions and the rights of workers that relates to decent work. As a result, there is increasing interest in whether trade, particularly exports advance or impede these rights. Of particular relevance is whether high productivity advantages of exporters are converted into benefits for workers in the form of better jobs.

The concept of decent work was introduced by the International Labour Organisation (ILO) in 1999 at the 87<sup>th</sup> Session of the International Labour Conference. The primary goal of the ILO in this regard is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equality, security and human dignity (ILO, 1999a, p. 3). According to the ILO (2016), decent work sums up the aspirations of people in their working lives in terms of the opportunities for productive work that delivers a fair income, security, and social protection in addition to the prospects for personal development and social integration, freedom to express









concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all. Most of the conditions outlined within the decent work framework can directly be related to the conditions attached to jobs offered at the firm level.

Using firm level quantitative data, we explore the relationship between exporting and the quality of employment (measured by decent work attributes), premised on the notion that there are associated gains with export markets in the domestic economy. Consequently, we seek to answer the question of whether exporting activity of firms have a direct effect on the quality of employment (working conditions). Employment quality is measured using conditions of employment which include the existence of employment contract, pension, medical insurance and paid leave, although this is not exhaustive with regards to the decent work conditions outline by the ILO, it is believed to be a good measure of quality of employment. AS noted by Rand and Torm (2011), labour contract status a worker holds represents the 'empowerment' of employees. Consequently, firms are categorized into three groups of those that do not offer any decent work condition, those that offer any one of the conditions and those that offer two or more decent work conditions (high quality jobs).

Table 10 presents the distribution of firms by export status and the quality of employment. Out of a total of 416 firms, 13% export with the remaining 87% producing for the domestic market. In all, a higher proportion of exporters have quality employment based on our decent work framework as 35% of non-exporters do not provide any of the decent work characteristic compared to 14% of exporters in that same category. In addition, firms that provide two of more of the decent work characteristics constitute a larger proportion of exporters (73%) compared to 47% for non-exporters. This signals a correlation between exporting activity of firms and employment quality which we interrogate further in our rigorous econometric model.









Table 10: Distribution of Decent work characteristics by Export Status

	None	One	Two or more	Total
Not Exporting	128	63	169	360
	35.5	17.5	47.0	1
Exporting	8	7	41	56
	14.3	12.5	0.73	1
Total	136	70	210	416
	32.7	16.8	50.5	100

Summary statistics of variables used are presented in Table A2 in the appendix. The differences observed between the variable by export status of firms further highlight the differences that exist between exporting and non-exporting firms. Overall, we observe that exporters on average are much older, have a higher concentration of FDI, hire more workers and pay higher wages. In addition, they provide more training and have a higher labour union activity compared to their non-exporting counterparts.

#### 5.2 Method for Econometric Investigation

Investigation into the effect of exporting on the quality of employment is carried out in a multivariate setting using a cross section of firms in our sample. Employment quality is measured within the decent framework identified in the data which include; the existence of employment contract, pension, medical insurance and paid leave. Here we estimate the probability that firm i will employ labour of no decent work attribute, at most one decent work attribute and at least two decent work attributes (quality of employment) (y\_i=1) using a latent variable model of the form:

$$y_i^* = \alpha E_i + \beta_0' X_i + u_i \tag{2}$$

Where  $y_i^*$  is the latent (unobserved) propensity that firm i will employ labour of a given quality (working condition).  $E_i$  is a measure of current export status of the firm,  $X_i$  are the set of exogenous firm level characteristics that are expected to influence employment of quality workers and  $u_i$  is a random error term with a standard normal distribution. Equation 2 is estimated in a multinomial probit model of employment quality. Consequently, our empirical









specification is presented as follows:

$$y_{i0} = \beta_0 + \beta_1 E x_i + \beta_2 firmage_i + \beta_3 FDI_i + \beta_4 Union_i + \beta_5 Training_i + \beta_6 Firmsize_i + U_i$$
 (3)

Where the dependent variable  $(y_i)$  is the probability of a firm employing quality labour, this is a discrete variable which takes a 1 if the firm provides any one of the decent work conditions and 2 if the firm provides at least two of the decent work conditions (these conditions include, the existence of employment contract, pension, medical insurance and paid leave) and 0 if a firm does not provide any. Our independent variables include: export participation  $(Ex_i)$  which is the variable of interest, is a dummy variable which takes a value 1 if the firm exports and 0 otherwise, this is expected to have a positive impact on the likelihood of employing quality labour. As noted by Milner and Tandrayen (2004), arguments for increased openness through trade liberalization in developing country contexts, have been premised on the fact that, exporting affects the skill structure of labour demand. For instance, through the change of production technology and the use of advanced capital goods, increases productivity and raises demand for labour of a certain quality. Export markets require high quality products based on standards of foreign customers which demands investments in modern technologies, managerial and technical expertise that may not necessarily be available to domestic firms.

Other independent variables are firm age which is measured as the number of years since establishment and firm size which we measure in terms of the value of assets. In addition, FDI is a dummy variable which takes a value 1 if the percentage of foreign ownership in the firm is above 10% and 0 otherwise. This is hypothesized to have a positive relationship with employment of quality labour due to superior technology associated with foreign investment. We also control for sector since the use of quality labour can be different across sectors, book keeping is similarly used to proxy the level of formality. Other firm level characteristics controlled for are; firm size which we proxy with the value of assets, a training dummy which is used to capture the effect of training at the firm and lastly a dummy variable which takes a value 1 for the existence of trade union and 0 otherwise. Equation (3) is subsequently estimated using









maximum likelihood probit.

# 5.3 Findings and Discussion

Table 11 presents estimates based maximum likelihood probit of quality of employment. Due to our focus, which is to investigate how exporting activity of firms influences quality of employment at the firm level, coefficients are presented with marginal effects (evaluated at the means of regressors) presented in Table A3 in Appendix.

Overall, after controlling for firm level characteristics, the results indicate a positive and statistically significant effect of exporting activity on quality of employment at the firm level although we do not find any statistical evidence of the effect of exporting on the employment of workers with one decent work condition.

**Table 11: Maximum Likelihood Estimates of Quality of Employment (Coefficients)** 

	Outcome (1) Outcome (2)		Outcome (1)	Outcome (2)
Export	0.503	0.812*	0.553	0.960**
	(0.425)	(0.418)	(0.437)	(0.450)
Firm age	-0.003	0.027**	0.003	0.041***
	(0.012)	(0.011)	(0.012)	(0.012)
FDI	1.488*	2.216***	1.576*	2.121**
	(0.844)	(0.833)	(0.919)	(0.931)
Training	0.468*	1.345***	0.439*	1.257***
	(0.243)	(0.238)	(0.251)	(0.262)
Firm size	0.498***	1.223***	0.460***	0.922***
	(0.157)	(0.158)	(0.167)	(0.173)
Union			-0.811	0.315
			(0.513)	(0.421)
Sector			0.295	0.765**
			(0.350)	(0.338)
Book keeping			0.258	2.282***
			(0.267)	(0.407)
Constant	-1.693***	-3.784***	-2.124***	-6.102***
	(0.345)	(0.393)	(0.532)	(0.674)
Observations	416		416	
Log likelihood	-298.04		-265.28	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Base outcome (0) is no decent work attribute, outcome (1) is one decent work attribute and outcome (2) is at least two decent work attributes.







and Cooperation SDC



Specifically, exports are found to increase the employment of worker with at least two decent work conditions. This is expected due to productivity gains associated with exports and standards exporting firms in particular have to meet in order to be able to start exporting and even maintain their exporting status. Rand and Torm (2011) argue that, labour contract status a worker holds represents the 'empowerment' of employees. As a result, the export activities of firms are observed to improve the empowerment of workers in our sample. These results are robust in all specifications as shown in columns 3 and 4 with the inclusion of other firm characteristics.

Other firm level characteristic including firm age, presence of (FDI), training, sector (manufacturing) firm size and book keeping are all found to positively influence the quality employment at the firm level. These results are robust and consistent for the most part in terms of sign and magnitude as shown in the marginal effects in appendix Table A3.

#### 5.4 Conclusion

Our investigations into the effects the exporting activity of firms have on the quality of employment, measured in using condition of service as outlined in line the ILO decent work provision, indicates a positive relationship between employment quality and exporting activity. Overall, the likelihood of better employment conditions was found to be higher in exporting firms than their non-exporting counterparts.

# CHAPTER 6: INVESTIGATING THE RELATIONSHIP BETWEEN EXPORTING AND QUALITY OF EMPLOYMENT USING CASE STUDIES

# 6.1 Introduction

It has been established in the previous chapter that exporting firms are more likely than non-exporting firms to provide some decent work conditions for their workers. This chapter uses case study material collected from 14 exporting firms in the textile, garment and agri-food sectors to examine how firms are integrated into the global economy and whether how firms are integrated









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into the global economy matters for the quality of employment or social upgrading. The quantitative analysis of the previous chapter identifies the characteristics of firms that provide decent work conditions. This chapter goes a step further to examine the factors that influence the variation in decent work conditions in exporting firms using case studies.

With the expansion of global value chains and development of inter-firm relationships across borders characterised by lead firms that control and influence supplier firms there is growing concern about the impact these types of relationships have on the supplier firms and in particular on their workers. It is recognised that participating in global value chains can result in economic upgrading. There is growing interest in whether economic upgrading is accompanied by social upgrading (Rossi, 2013). Social upgrading involves improvement in the working conditions and rights of workers leading to an improvement in the quality of employment (Barrientos et al., 2011). It comprises two components: measurable standards and enabling rights (Rossi, 2013). The first is easy to quantify and comprises wages, health, safety, working conditions and employment security. The second does not lend itself to easy measurement. It includes non-discrimination, freedom of association and collective bargaining. Rossi's study on firms in Morocco's garment industry finds that economic upgrading does not bring about social upgrading for all categories of workers. Social upgrading is evident among permanent workers, however, workers not hired on a regular basis are left out (Rossi, 2013).

The analysis of how firms are integrated into the global economy will be guided by the classification of governance structures developed by Gereffi (2005). This framework is appropriate because it incorporates inter-firm relationships which are of growing importance in international trade. Lakhani et al (2013) have developed a conceptual framework based on Gereffi's (2005) classification of governance structures to analyse what factors influence employment relations. Employment relationship is defined by the ILO as '...the legal link between employers and employees'. The employment relationship defines the spectrum of

http://ilo.org/ifpdial/areas-of-work/labour-law/WCMS CON TXT IFPDIAL EMPREL EN/lang--en/index.htm Accessed 28 April 2017.





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rights and obligations of employers towards their workers. The ILO describes employment relations as '...the main vehicle through which workers gain access to the rights and benefits associated with employment in the areas of labour law and social security'. We shall apply this conceptual framework to the case studies of 14 exporting firms to gain some insights into how the manner in which firms are integrated into the global economy influences employment relations and social upgrading and therefore, the quality of employment in Ghana. Although Ghana's participation in the global value chain is weak at best, some firms are participating in the global value chain and global production networks. This study will provide some evidence on how participation in the global value chain – though still in its nascent stages- influences the quality of employment.

# 6.2 The Conceptual Framework

Governance describes the inter-relationships between firms in the global value chain. Governance is important in global value chains because of the influence of lead firms on the distribution of profits and risks in an industry (Gereffi and Lee, 2016). Gereffi (2005) classifies governance structures in global value chains into five categories using three criteria. These are complexity of information that is transmitted between actors in the chain, codification of production information and the level of competence of suppliers. The first governance category is market governance. This is characterised by autonomous suppliers who have little interaction with buyers. There is little influence of a lead firm. The second is the modular governance structure. Products are made to buyers' specifications. However, the supplier is responsible for decisions concerning production and choice of technology. Relational governance involves much more frequent interaction between suppliers and buyers because the information to be transmitted is more complex. Lead firms have some control over suppliers. Lead firms wield considerable influence over suppliers in the captive governance structure. There is a high element of monitoring and control. Gereffi (2005, p. 42) states that 'the power asymmetry in captive networks forces suppliers to operate under conditions set by and often specific to,

<sup>&</sup>lt;sup>2</sup> http://ilo.org/ifpdial/areas-of-work/labour-law/WCMS\_CON\_TXT\_IFPDIAL\_EMPREL\_EN/lang--en/index.htm Accessed 28 April 2017.









particular buyers'. The final category is hierarchical governance. Firms in a vertically integrated relationship with lead firms are classified under this category.

Lakhani et al (2013, p. 447) argue that 'relationships and structures associated with different value chain configurations are... essential for understanding employment relations...' They argue that lead firm strategies and the national institutions within which supplier firms operate influence the employment relations of supplier firms. The different types of relations between lead firms and suppliers as typified by the governance structures developed by Gereffi (2005) will influence the nature of employment relations in supplier firms. Table 6.1 below replicates the expected relationship between governance and employment relations suggested by Lakhani et al (2013). They identify four criteria that will influence how employment relations vary across different governance structures. The first is the influence of lead firms. Lead firms can influence employment relations through voluntary codes of conduct (Gereffi and Lee, 2016). It is expected that the lead firm's ability to influence employment relations of supplier firms is indirectly related to the autonomy of the supplier firms. The second employment criteria that will influence employment relations is the skill and knowledge of workers. Firms with high skilled workers are likely to have employment strategies to maintain these workers. Firms in governance structures characterised by skilled workers will provide training for their workers. The third criterion is stability of employment. Firms involved in activities that require highly skilled workers because of complex tasks will develop long-term relationships with their workers and the workforce will comprise largely permanent workers. National laws may be considered as the minimum denominator that defines the scope of employment relations. The influence of national laws on supplier firms' employment relations is directly related to the influence of the lead firm on supplier employment relations. Where the influence of the lead firm is high it is expected that employment strategies will be influenced by both local and lead firm strategies and practices.









Table 6.1: Governance Structures and Employment Relations

Value Chain Configuration	Employment System Criteria					
	Lead firm influence on supplier employment relations	Skill and Knowledge of employees in the supplier firm	Stability of employment in the supplier firm	National institutional influences on supplier employment relations		
Market	Low	Low	Low	Local		
Modular	Low	Moderate	Moderate	Local		
Relational	Moderate	High	High	Local and Lead		
Captive	High	Low	Low	Local and Lead		
Hierarchical	High	High	High	Lead		

Source: Lakhani et al, (2013)

#### **6.3** Governance Structures

Using the Gereffi (2005) framework, five firms are classified as being in market governance structures. These firms do not have a relationship with a lead firm. This group of firms have a motley of relationships with buyers that include the sale of products to customers over an extended period of time to responding to walk in customers and ad hoc orders. All the firms classified as having a market governance structure are garment firms serving the Afrocentric market in Europe and the US. They are small firms with the largest of them not employing more than 30 workers.

Two firms are classified as having modular governance structures. One is a large garment firm employing about 250 workers and the other is a textile firm employing 8 workers. Two of the firms export to African regional markets and one firm exports mainly to the US.

Three firms can be described as having a relational governance structure. The firms sell to









wholesalers who distribute their products to supermarkets and retailers. They have long-term relationships with their buyers who provide them with specifications for their products. Two of the firms are agri-food exporters and the third is a garment exporter. They employ between 80 and 3,000 workers.

Four firms – two textile manufacturers and two agri-food firms- are subsidiaries of foreign firms and are thus classified under the hierarchical structure. The agri-food firms export their products to their parent companies. One textile producer exports to sister companies in sub-Saharan Africa whilst the other sells to distributors in African countries. They are large firms employing between 200 and 1,000 workers.

None of the firms sampled had the characteristics of firms in the captive governance system. The textiles and garments firms use imported inputs that are either imported directly or purchased in the domestic market. The agri-food firms obtain their inputs from the domestic market and from other countries. In their relationship with their suppliers they play the role of lead firms. They transmitted information on quality requirements to the farmers who supplied the raw materials and monitored the production process.

## 6.5 Governance Structures and Employment Relations

This section examines how governance structure interacts with the four criteria provided by Lakhani et al. (2013) to influence employment relations in the firms and thus the quality of employment of their workers.

#### 6.5.1 Market Structure

None of the firms in the sample classified as having market governance structure have lead firms, therefore as predicted in the Lakhani et al (2013) framework the influence of lead firms is low, or in this instance non-existent. The framework suggests that the national labour laws should influence their employment strategies. However, the Labour Act (Act 651) of 2003 has









limited impact on their employment strategies. Not all firms provide workers with paid leave or sick leave nor are the workers signed onto a pension scheme. In one firm workers are signed onto the third tier of the pension scheme.<sup>3</sup> Owners attribute the failure of their workers to enrol on the pension scheme to disinterest on the part of the workers.

You see we have had problem with that. We wanted to pay SSNIT<sup>4</sup> for them but they did not want their monies to be deducted.

In another instance the firm owner reports that

We have had a meeting on paying SSNIT. Some of the workers have a different understanding to issues. SSNIT has been here to educate us on the reason why they will have to pay. I am paying but it was difficult trying to get them. Eventually, I was able to get them, but these are workers you have today, tomorrow they are gone. So it has on and off.

Not all firms provide training for their workers. They tend to employ workers with the required skills. Only one firm reported training workers when a new product is introduced. Workers are paid piece rate and this is a reason why some firms do not provide training.

With this service, we always look for experienced people. We do not look out for novices because they are paid on piece work basis. If you go for inexperienced people and they are now going to be trained, then how would you get results?

Workers in these firms have very little security of tenure.

<sup>&</sup>lt;sup>4</sup> SSNIT is the acronym of the Social Security and National Insurance Trust. It is a non-bank financial institution with the responsibility for managing the first-tier of the three-tier contributory pension scheme schwiezerische Eidgenossenschaft





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<sup>&</sup>lt;sup>3</sup> Ghana has a three-tier contributory pension scheme which was introduced under the National Pensions Act, 2008 (Act 766). The Act provides for a mandatory basic national social security scheme, a mandatory fully funded and privately managed occupational pension scheme and a voluntary fully funded and privately managed provident fund and personal pension scheme. The third tier of the scheme is targeted at informal sector workers who are not covered by a retirement scheme under the mandatory part of the three-tier scheme. Employers are not required to pay contributions for workers on the third tier.



#### i. Modular Structure

These firms have more tangible and long-term relationships with their buyers. However, beyond providing information on product specifications the attention of buyers is not directed at the conditions of workers. Firms with the modular governance structure are similar to the market governance structure because of the limited influence of buyers on their employer relations but different from them because of the relevance of the Labour Act.

With our company the buyers do not give us their law but we go strictly by the labour law and by the practices that will benefit the company (Garment exporter).

Firms in the modular governance structure are more likely to provide their workers with paid leave, sick leave and days off when there is a holiday. Apart from national legislation and buyers, donors are external agents that can also impact the employment strategies of firms. A garment firm that received funding for training from a donor agency mentioned that

...we have various training sessions with the USAID and normally they have various codes like do not force someone to work or force someone to do an overtime. They occasionally come round to check.

Some firms have both temporary and permanent workers. Temporary workers are taken on as a strategy by the firm to cope with the seasonality of demand. They are not eligible to the same working conditions as permanent staff.

#### ii. Relational Structure

The employment strategies of firms with relational governance structures are influenced by their buyers. Since the 1990s firms in industrial countries have come under pressure from civil society organisations to improve the working conditions of labour in developing country supplier firms (Barrientos and Smith, 2007). The buyers have adopted standards that they require the supplier firms to adopt. In addition, supplier firms have signed on to voluntary codes. The agri-food firms sampled have signed on to Fair Trade, Ethical Trade, Europe Gap and Global GAP standards. These standards have influenced the working conditions of firms that have adopted them. An









agri-food exporter that had recently signed on to Global Gap said

Because of Global GAP for instance, there were certain things we had to provide.

The garments manufacturer reports that

They require when you pay them - things like Social security and health care. So these are the basic standards the buyer requires. Even the ventilation of the factory, the general ambiance, health, sanitation, safety.

In addition to the standards set by the buyer, employment relations are also informed by the National Labour Act (651).

We considered the Ghanaian standard to be the minimum requirement. For example, per the Ghanaian standard, there is a minimum wage to be paid to a worker (Garment Firm)

And

Oh, yes, we do more than the national labour laws. We are a law-abiding company and will continue to have that kind of wish among ourselves (Agri-food firm).

The firms have set up canteens where lunch is provided for workers. They also have clinics, provide maternity leave and national health insurance. Some firms provide the workers with transport allowance whilst others provide transport to and from the work place. Maternity leave is provided to women workers and one firm provides ante-natal services at the clinic.

Another influence on the employment strategies of these firms is the trade union. Some of the codes, for example Global Gap and Fair trade have provisions for collective bargaining. Trade unions participate in the review of salaries and overtime pay rates with other stakeholders.

Two of the firms use temporary and casual workers. The treatment of casual workers is not the same across the firms. One firm provides contracts to all categories of workers and casual workers benefit from almost all the decent work conditions provided by the firm. Casual workers









are usually taken to meet peak demand for labour.

#### iii. Hierarchical

Of the four firms, the textile producers report that their parent companies do not influence policies on the working conditions of employees. The two agri-food producers that export to the European market have signed up to Fair Trade and the Global Gap. Signing onto these codes has had a direct influence on their labour practices. An agri-food producer reports that

What we are practising now is because of the fair trade. We are changing the annual contract to permanent contract. So, we have changed casual contract to permanent contract.

Regarding the factors that influence employment strategies of the firms a quote by one of the agri-food seems to sum it up

First the idea is to meet the minimum requirement. Secondly certification is voluntary so we have that third party inspecting. It has not been a mandatory requirement but it is something we feel will be good so we are doing it internally. Then we have the union presence here. When the union came in about 3 and a half years ago, it has led to a lot of change. At first, we were working for 10 hours and now we are strictly sticking to 8 hours and it has increased our output.

And a manager of another agri-food firms states

They talk about labour issues, remember GAP doesn't talk about labour issues. Meaning the add – on standards, sorry the add – ons certification which is the fair trade or most about labour issues and child labour and all that. But then, you have also the National or country labour laws which you need to observe so it is not only for the meeting of the marketing or the .. standards but also to make sure you meet the requirements of the country that you are in terms of trade

The firms have permanent and casual workers. Casual workers are not eligible for all the









conditions available to permanent workers. In one firm for example casual workers are eligible for provisions available to permanent workers with the exception of maternity leave. In another firm, workers without a permanent contract are not eligible for sick leave and a pension.

The firms provide training to their workers. New workers are trained and training is provided to ensure that workers are kept up to breast with standards.

All the firms maintain that their workers are paid wages and salaries above the industry average.

# 6.5.2 Discussion

Firms with market and modular governance structures are part of the global production network insofar as they use imported inputs to produce final products that are consumed in external markets. These firms tend to have a large number of buyers such that the influence of any individual customer on their activities may be limited. These case studies are illustrative of the different ways in which Ghanaian firms are integrated into the global economy.

The evidence from the case studies finds that governance structure influences the employment strategies of firms and therefore the quality of employment. There are distinct differences between the employment strategies and therefore the quality of employment of firms with market governance and those with modular, relational and hierarchical structures. The working conditions of labour in the latter group of firms is better than those in the former groups. Workers in firms with modular, relational and hierarchical governance structures are eligible for paid leave, sick leave, maternity leave in the case of women workers, working hours that conform to the national labour law and are more likely to receive wages and salaries above the minimum wage. Compared to workers in firms with market governance structure, workers in firms with modular governance structure are more likely to have conditions of services as spelt out in the Labour Act, although they may not receive the full gamut of benefits. Workers in firms with relational and hierarchical governance structures are more likely than those in firms with









market and modular governance structures to have experienced some social upgrading. However, not all workers in the former category of firms have experienced social upgrading. Temporary and casual workers are not eligible for all the conditions of service of permanent workers. Workers in these firms are more likely to have experienced social upgrading in terms of the measurable dimensions than improvements in their enabling rights.

As suggested by the Lakhani et al (2013) framework, the presence of a lead firm influences the employment strategies of supplier firms. We find that firms in the relational and hierarchical governance structures that have influential lead firms also have quality of employment that may be described as superior to employment in firms with market and modular governance structures. In addition, in contrast to firms with market and modular governance structures, these firms tend to have very few buyers suggesting that the firms will be more responsive to the requests of these buyers. The positive impact of lead firms on the employment strategies of firms is premised on the influence of private standards and international codes which target the conditions of workers on the lead firms. We cannot state categorically by how much and to what extent the quality of employment of workers in firms in relational and hierarchical governance structures exceeds that of workers in other firms. For example, even though management of firms with relational and hierarchical governance structures claim that workers are paid more than the minimum wage, we have not been able to establish by how much more. Studies in other countries, have found that wages may exceed the minimum wage but may not be considered a living wage (Barrientos and Smith, 2007).

Where lead firms are absent, the framework suggests that national legislation should inform the employment strategy of firms. However, the impact of national legislation on employment strategies is mixed. Firms with modular governance structures have some of the elements of quality of employment prescribed in the National Labour Act whilst employment strategies of firms with market governance structure do not appear to be informed by the national laws. The national legislation is a standard that all firms must adhere to ensure that the quality of employment is of a decent minimum standard. Appendix 1 presents information on the









provisions contained in different codes and standards. It is clear that the National Labour Act contains provisions that could be considered a reasonable minimum, in terms of measurable indicators, if it is enforced. The failure of firms with market governance structures to adhere to provisions of the Labour Act points to a weakness in the monitoring and implementation of the Act. Firms in with market governance structures have a great deal of autonomy in determining the quality of employment of workers since there are no pressures from buyers nor from national institutions to conform to national standards.

The market the suppliers are exporting to has emerged as an important mediating factor. The response of an agri-food producer to a question on whether standards are required before a firm can export is illustrative:

It depends on where you are selling to. So if you are selling to the ethnic markets in Europe, they don't require standards, and also in Africa.

Very few of the textile and garment exporters targeting the Afrocentric market mentioned that their buyers or customers insisted on minimum standards for their workers. Indeed, two of the textile firms categorised as having hierarchical governance structures and exporters to the African market did not have employment strategies that were informed by private or international codes. Their standard is what is required by the Labour Act.

Another factor that influences the employment strategies of firms is the visibility of the firm. By visibility of the firm we refer to the firm's ability to stay under the radar screen such that it is not sanctioned for failure to adhere to provisions in the National Labour Act. Firm size and ownership will influence firm visibility. Large firms and foreign owned firms will find it almost impossible not to adhere to national laws.

The factors identified as important in defining the employment strategies of firms are not independent of one another. For example, the presence of a lead firm will require that the supplier firm signs up to some specific standard or code. The ability to successfully penetrate a









particular market, for example supplying to supermarkets requires that particular codes and standards must be adhered to. The visibility of the firm and adherence to the National Labour Act are linked. This is because large firms that are visible to government official and the general public will find it more difficult to ignore the provisions of the National Labour Act.

## 6.5.3 Conclusion

The evidence from the cases studies suggests that firms that are inserted in global value chains with governance structures characterised by lead firms are more likely to have employment strategies that improve the quality of employment of their workers compared to firms that do not have links with lead firms. However, majority of Ghanaian exporting firms are not in these type of global value chains. Markets vary in terms of the tastes, preferences and requirements of consumers and the pressures they will exert on suppliers to provide decent work conditions. The evidence presented suggests that the onus of improvements in the quality of employment lies with the effective implementation of the national legislation. It is imperative therefore for effective implementation and monitoring of the National Labour Act if the quality of employment of labour in the exporting sector to be improved.

#### **CHAPTER 7: CONCLUSION**

This study had three main objectives. The first was to examine the extent to which Ghana is participating in the global value chain. The second was to identify the characteristics of firms that are integrated into the global economy. The third was to examine the links between exporting and the quality of employment. These issues are topical in facilitating a better understanding of the role of the external sector in Ghana and how policies could be formulated to stimulate its potentials, both in terms of improving activity within the sector and its employment potential.











The main findings of the study are as follows. We find that Ghana has limited participation in the global value chain. Using aggregate trade data, we find that there is very little transformation to exports and imports implying minimal value addition and hence limited participation along the chain. In addition, we find that Ghana mainly exports primary products and imports mainly finished products indicating that Ghana's participation takes place at the initial part of the GVC.

For the characteristics of firms that are integrated into the global economy, our results have shown that the size of the firm, age of the firm, sales per worker, product and process innovation and foreign ownership all determine how frequently a firm will export. Specifically, we have found that foreign ownership, the size of the firm and improving innovation and average sales have the tendency of increasing the frequency that a firm will export.

Finally, our investigations into the effects exporting activity of firms have on the quality of employment was in two fold. The first employed quantitative data and measured employment using condition of service as outlined in line the ILO decent work provision. The results indicate a positive relationship between employment quality and exporting activity. Overall, the likelihood of better employment conditions is higher in exporting firms than their non-exporting counterparts. The second was based on qualitative data obtained through case studies and analysed within the frameworks of Gereffi (2005) and Lakhani et al (2013). The results suggest that firms that are inserted in global value chains with governance structures characterised by lead firms are more likely to have employment strategies that improve the quality of employment of their workers compared to firms that do not have links with lead firms. However, majority of Ghanaian exporting firms are not in these type of global value chains.

The evidence presented thus far suggests a lot needs to be done if Ghana's participation in the global value chain has to be improved upon and the onus lies much more on activities within the manufacturing sector. Some form of value addition is required at least in our exportable products for the country to move up the global value chain. Similarly, the task of improving the





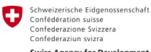




quality of employment lies with the effective implementation of the national legislations. It is imperative therefore for an effective implementation and monitoring of the National Labour Act, if the quality of employment of labour in the exporting sector must be improved.









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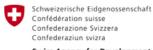




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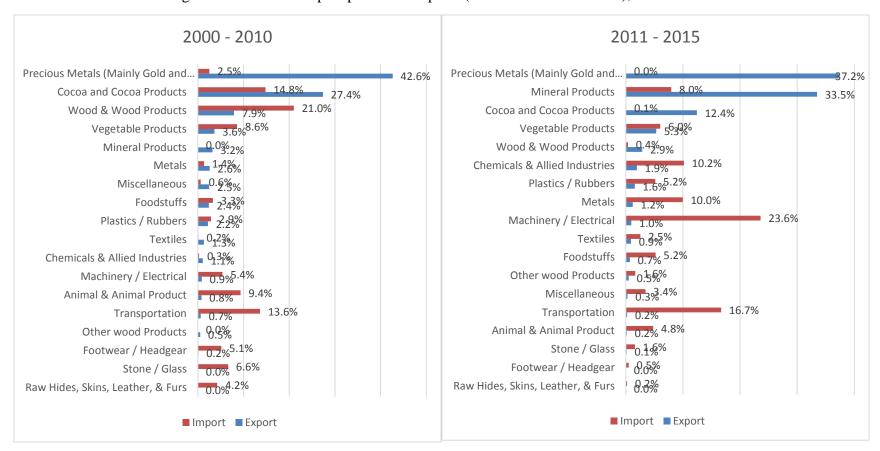






# **APPENDIX**

Figure A1: Ghana's Top Exports and Imports (Product Level HS Code), 2000 – 2015









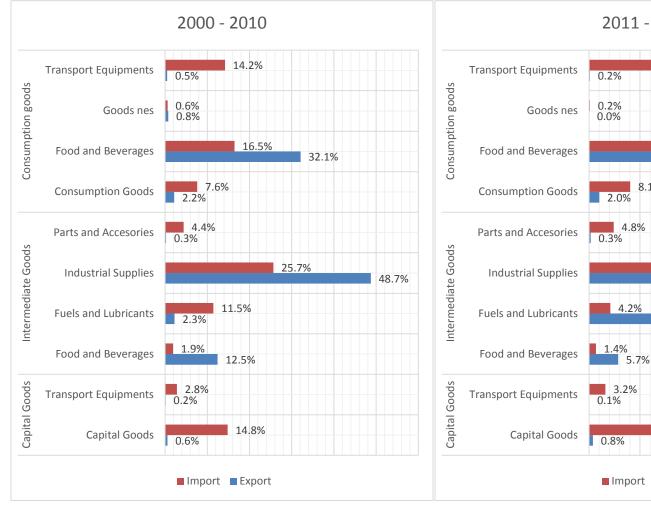
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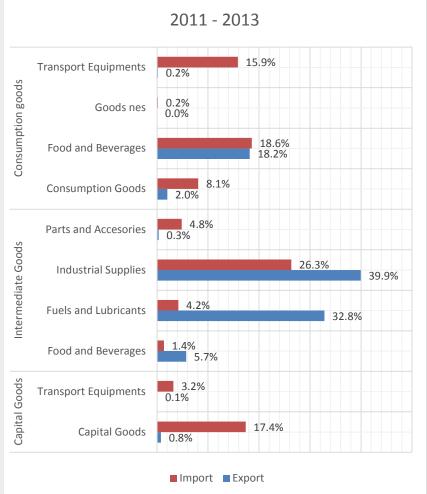


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Figure A2: Ghana's Top Exports and Imports – Consumption, Intermediate and Capital Goods (BEC), 1996-2013











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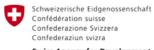


**Table A1: Trade Policy Matrix** 

Table A1. Trade 1 oney Matrix				
	Key Policies	Actions/Measures/Strategy		
2003 - 2005	1. Improve export competitiveness	1.1 Maintain competitive real interest rates		
		1.2 Improve import/export regime		
		1.3 Minimise incidence of dumping		
		1.4 Promote new areas of competitive Advantage		
	2. Diversify export base	2.1 Take full advantage of preferential access		
	2. Diversity export base			
2004 2000		to markets (AGOA, EU-ACP)		
2006 - 2009	1. Improve import Competitiveness	1.1 Maintain competitive real exchange rates		
		1.2 Improve the import/export regime		
		1.3 Minimise the incidence of dumping		
	2. Diversify and increase export base	2.1 Promote new areas of competitive advantage		
	1	2.2 Take full advantage of Preferential Access to		
		markets such as AGOA, EU-ACP		
		2.3. Engage fully in Multi-lateral Trade		
		negotiations		
	3. Institute mechanisms to manage	3.1 Maintain stable reserves		
	external shock			
	4. Accelerate economic integration with	4.1 Implement the WAMZ programme		
	· ·			
	other regional and/or sub-regional states	4.2 Work towards establishing a common customs union		
		4.3 Ensure that National Trade Policy reflects		
		ECOWAS protocols		
		4.4 Strengthen links between industrial and trade		
		policies		
		r		





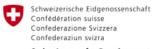




	Key Policies	Actions/Measures/Strategy			
2010 - 2013	1. Improve export competitiveness	1.1 Maintain competitive real exchange rates 1.2 Improve the import/export regime 1.3 Establish the Ghana International Trade Commission to deal with unfair international trade practices			
	2. Diversify and increase exports and markets	2.1 Promote new goods and services 2.2 Continue to take full advantage of Preferential Access to markets, such as AGOA, etc. 2.3 Continue to engage fully in Multi-lateral trade Negotiations 2.4 Negotiate the effective implementation of the ETLS with member countries			
	3. Accelerate economic integration with other regional and/or sub-regional states	3.1 Implement the WAMZ programme 3.2 Implement the ECOWAS Community Development Programme 3.3 Ensure that National Trade Policy reflects ECOWAS protocols 3.4 Strengthen links between industrial and trade policies			







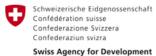


	Key Policies	Actions/Measures/Strategy			
2014-2017	1. Improve trade competitiveness	1.1 Ensure competitive real exchange rates 1.2 Improve the supply side capacity of import/export policy regime 1.3 Strengthen links between industrial and trade policies			
	2. Diversify and increase exports	2.1 Promote production of non-traditional export products 2.2 Take full advantage of Preferential Access to markets 2.3 Strengthen participation in Multilateral Trade negotiations 2.4 Ensure effective implementation of the ETLS with member Countries			
	3. Accelerate economic integration with other regional and sub-regional blocks and markets	3.1 Implement fully the WAMZ programme 3.2 Implement the ECOWAS Community Development Programme 3.3 Ensure that National Trade Policy reflects ECOWAS protocols 3.4 Strengthen trade relations with other regional blocks and markets			

Source: GPRS I, GPRS II, GSGDA I and GSGDA II









**Table A2: Summary statistics of variables** 

	Exporter		Non-Exporter	
	Mean	Std. dev.	Mean	Std. dev.
Log of wages	8.78	1.65	7.83	2.01
Firm age	21.39	13.25	17.08	13.21
FDI	0.28	0.45	0.11	0.32
Union	0.26	0.44	0.11	0.31
Book keeping	0.88	0.33	0.74	0.44
Training	0.63	0.49	0.56	0.50
Number of Manufacturing firms	56 (15.91%)		296 (84.09%)	
Number of Service firms	1 (13.32%)		75 (86.68%)	





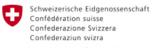




Table A3: Maximum Likelihood Estimates of Quality of Employment (Marginal effects)

	Outcome (1)	Outcome (2)	Outcome (1)	Outcome (2)
Export	-0.020	0.154*	-0.029	0.193**
	(0.073)	(0.089)	(0.078)	(0.098)
Firm age	-0.005**	0.008***	-0.006**	0.012***
	(0.002)	(0.003)	(0.003)	(0.003)
FDI	-0.060	0.320***	-0.019	0.303***
	(0.077)	(0.083)	(0.097)	(0.106)
Training	-0.089*	0.331***	-0.077	0.314***
	(0.049)	(0.059)	(0.054)	(0.065)
Firm size	-0.073**	0.295***	-0.031	0.214***
	(0.029)	(0.039)	(0.033)	(0.043)
Union			-0.192***	0.193*
			(0.062)	(0.103)
Manufacturing			-0.046	0.191**
			(0.068)	(0.086)
Book keeping			-0.220***	0.567***
			(0.072)	(0.066)
Number of observations	416	416	416	416

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Base outcome (0) is no decent work, outcome (1) is one decent work attribute and outcome (2) is at least two decent work attributes.





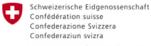




Table A4: Codes of Conduct and Employment Quality

Code	Training	Collective	Non-Discriminatory		No Child No Force		ed Contracts compliant		
	Opportunities	Bargaining	Empl	oyment Practice	Labor	Labor	with N	ational Laws	
International									
Fairtrade	Y	Y		Y	Y	Y		N	
SA 8000	N	Y		Y	Y	Y		N	
Global G.A.P. (GRASP)	N	Y		Y	Y	Y		Y	
<b>Ethical Trading Initiative</b>	N	Y		Y	Y	Y		Y	
BRC Standards	Y	N		N	N	N		N	
National									
Labour Act, 2003	N	Y		Y	Y	Y		N	
<b>Employment Policy</b>	N	Y		Y	Y	Y		N	
	Schooling fo		Wage/	Occupational	Regul		Worker	Complaints	
	Children Livi	· ·	/age	Safety and Health	n Working		Welfare &	Handling	
	Farms	Pre	mium			Hü	ıman Right		
International	».T		<b>T</b> 7	<b>3</b> 7	N		<b>X</b> 7	NT	
Fairtrade	N		Y	Y	N		Y	N	
SA 8000	N		Y	Y	Y		N	N	
Global G.A.P. (GRASP)	Y		Y	Y	Y		Y	Y	
Ethical Trading Initiative	N		Y	Y	Y		Y	N	
BRC Standards	N		N	Y	N		N	N	
National									
Labor Act, 2003	N		Y	Y	Y		Y	Y	
Employment Policy	N		Y	Y	N		Y	N	

Note: Y=Yes,N=No