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**GLOBALIZATION AND CONSUMER SAFETY
(A CASE STUDY OF CUSTOMS EXCISE AND PREVENTIVE SERVICE
OF GHANA)**

Globalizācija un Patērētāju Drošība

MASTER'S THESIS

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Annotation

The research aims to establish the effect of globalization on consumer safety by concertedly analyzing world merchandise of goods, services and counterfeiting and piracy activities, with a keen focus on the Ghanaian economy.

The research used primary qualitative data from Ghana Excise and Preventive Services (CEPS) to ascertain the degree of counterfeiting and piracy of goods and services in Ghana. This is a general research to determine the degree of counterfeiting from various economic sectors; foods, drinks, pharmaceuticals, chemicals, automobile, agriculture, etc. by analyzing expert opinions and observations through structured open and closed ended questionnaire design. The research methodology used both qualitative and quantitative approaches to enhance the validity and reliability of the findings and more importantly make generalization of the findings. The concept of globalization has permeated almost every country due to sharp reduction of barriers to trade and technological change. This has made the trading environment very competitive; firms striving to achieve economies of scale, increase of market share and expansion. However, a critical analysis shows how organized crime groups are using the gateway of globalization to dump unwholesome, counterfeit and pirated goods in emerging markets and even trying to penetrate well advanced and developed markets like the US/EU. Consumers suffer from national and international manufacturers who trade in goods that cause harm. The research highlights the need for international organizations policing globalization in consultation with governments to formulate stringent measures to mitigate the perennial problem of counterfeiting and piracy across the globe.

It is incumbent on national governments to set up institutions and formulate laws to combat the menace of counterfeiting and piracy. This drive can be efficient by coordinating with stakeholders to mitigate the activities of organized crime groups.

Key Words: globalization, consumer safety, counterfeiting and piracy.

Anotācija

Pētījuma mērķis ir noskaidrot globalizācijas ietekmi uz patērētāju drošību, saskaņoti analizējot pasaules preču, pakalpojumu un viltošanas un pirātisma darbības, koncentrējoties uz Ganas ekonomiku.

Pētījumā tika izmantoti primāri kvalitatīvie dati no Ganas akcīzes un profilakses pakalpojumiem (CEPS), lai noskaidrotu preču un pakalpojumu viltošanas un pirātisma pakāpi Ganā. Tas ir vispārējs pētījums, lai noteiktu viltošanas pakāpi no dažādām ekonomikas nozarēm; pārtikas produkti, dzērieni, farmācija, ķīmikālijas, automobiļi, lauksaimniecība uc, analizējot ekspertu viedokļus un novērojumus, izmantojot strukturētu atklātu un slēgtu anketu dizainu. Pētījumu metodoloģijā tika izmantotas gan kvalitatīvas, gan kvantitatīvas pieejas, lai uzlabotu secinājumu derīgumu un ticamību, un, vēl svarīgāk, vispārināt konstatējumus. Globalizācijas jēdziens ir izplatījies gandrīz katrā valstī, jo krasi samazinājās šķēršļi tirdzniecībai un tehnoloģiskām pārmaiņām. Tas ir padarījis tirdzniecības vidi ļoti konkurētspējīgu; uzņēmumiem, kas cenšas sasniegt apjomradītus ietaupījumus, palielināt tirgus daļu un paplašināties. Tomēr kritiskā analīze parāda, kā organizētās noziedzības grupas izmanto globalizācijas vārti, lai izgāztos neapstrādātas, viltotas un pirātiskas preces jaunattīstības tirgos un pat mēģinātu iekļūt labi attīstītos un attīstītos tirgos, piemēram, ASV / ES. Patērētāji cieš no valsts un starptautiskiem ražotājiem, kas tirgo preces, kas rada kaitējumu. Pētījumā uzsvērtā vajadzība pēc starptautiskām organizācijām, kas kontrolē globalizāciju, apspriežoties ar valdībām, lai izstrādātu stingrus pasākumus, lai mazinātu daudzgadīgo viltošanas un pirātisma problēmu visā pasaulē.

Valstu valdībām ir pienākums izveidot iestādes un izstrādāt tiesību aktus, lai cīnītos pret viltošanas un pirātisma draudiem. Šis risinājums var būt efektīvs, koordinējot sadarbību ar ieinteresētajām personām, lai mazinātu organizētās noziedzības grupu darbības.

Galvenie vārdi: globalizācija, patērētāju drošība, viltošana un pirātisms.

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LIST OF ABBREVIATIONS

ACT – Article

ACIST – The Anti-Counterfeiting Intelligence Support Tool

AFA – American Finance Association

AFRCD - Armed Forces Revolutionary Council Decree

ANEC - European Association for the Co-ordination of Consumer Representation in Standardization

BBC – British Broadcasting Corporation

B 2 B - Business to Business

B 2 C - business-to-consumer

B E U C - European Consumer Organization

BMUB - German Environment Ministry

BNI – Bureau of National Investigation

CEO – Chief Executive Officer

CEPOL – European Police College

CEPS – Customs Excise and Preventive Service

C I - Confidence Interval

C I I E - Committee on Industry, Innovation and Entrepreneurship

CPSC - Consumer Product Safety Commission

C2C – Consumer to consumer

ECOSOC - Economic and Social Council (United Nations)

EDB - Enforcement Database

E-NET - Ethernet

EU – European Union

EUIPO – European Union Intellectual Property Office

EUR - Euro

EUROPOL - European Police Office

FDA - The Food and Drug Administration

FDI – Foreign Direct Investment

FINCONET - International Financial Consumer Protection Organisation

FTZ – Free Trade Zone

GAO - Government Accountability Office

GATT - General Agreement on Tariffs and Trade

GIPC – Ghana Investment Promotion Council

GRA – Ghana Revenue Authority

GSA – Ghana Standard Authority

GMO - genetically modified organism

HACCP - Hazard Analysis and Critical Control Point

HHS - Health and Human Services

IACC – International Anti-counterfeiting Coalition

IGE - Intergovernmental Group of Experts

ID - Identity

IMF – International Monetary Fund

IP – Intellectual Property

IPC3 - Intellectual Property Crime Coordinated Coalition

IPC - International Patent Classification

IPR – Intellectual property Right

IS - Iceland

MGI - McKinsey Global Institute

M - Million

MS – Member State

NCA – National Communication Authority

NCAP - New Car Assessment Programme

NHTSA - National Highway Traffic Safety Administration

N - Number

NO - Norway

NSW - New South Wales

OCG – Organized Crime Group

OECD - Organization for Economic Co-operation and Development

OLAF - European Anti-Fraud Office

PNDC - Provisional National Defence Council

PPM – Parts Per Million

SFFC - Spurious/Falsely-Labelled/Falsified/Counterfeit

SME – Small and Medium Enterprise

THAAD - Theater High Altitude Area Defense

TM – Trademark

UK – United Kingdom

UN – United Nations

UNGCP - United Nations Guidelines on Consumer Protection

US – United States

USA – United States of America

VTC – Virtual Training Center

VZBV - Federation of German Consumer Organizations

WCO – World Customs Organization

WHO – World Health Organization

WIPO - World Intellectual Property Organization

WTO – World Trade Organization

10YFP – 10 Year Framework of Programmes

INTRODUCTION

Why has globalization-a force that has brought so much good-become so controversial. Opening up to international trade has helped many countries grow far more quickly than they would otherwise have done. International trade helps economic development when a country's exports drive its economic growth. Export-led growth was the centerpiece of the industrial policy that enriched much of Asia and left millions of people there far better off (Stiglitz 2002). There are a number of publications dealing with particular aspects of globalization. However, the growing complexity has increased the interrelatedness among all countries. Recurrent economic and political crises that have global repercussions demand new approaches (Jim Sheffield et al 2013). Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer (Smith 1776).

Research Topic

The research focuses on globalization and consumer safety, the effect on the economy of Ghana and world trade. The principal reason for this topic is to help Ghana achieve fair and equitable trade imports and exports with member countries as entrenched in the United Nations, Department of Economic and Social Affairs guidelines for Consumer Protection, World Trade Organization's standards and safety, World Customs Organization's policy for combating of counterfeit products and services and International Consumer Protection and Enforcement Network for dispute resolution and cooperation in cross border trade.

The research will help prevent counterfeit, defective and substandard products and services from arriving and departing the ports of Ghana. The findings from qualitative techniques employed in the data collection, analysis and interpretation, will confirm whether the port of Ghana is prone to defective, counterfeit and substandard products and services.

The research will also investigate into the above mentioned cases by reviewing quantitative secondary data from credible sources to enhance the generalization of findings. Thus, data from the United Nations, World Trade Organization, World Bank, World Customs Organization, International Consumer Protection Enforcement Network, and Customs Excise and Preventive Service of Ghana will be analyzed and interpreted for use by appropriate national and

international organizations to enhance and more importantly guarantee consumer safety in global trade.

Aim of the Research

This research will help Ghana achieve fair and equitable trade imports and exports with member countries and more importantly guarantee consumer safety. The research aims to establish the reasons for the prevalence of counterfeit and pirated goods and services on the Ghanaian market and its effect on the economy of Ghana. In this regard, it is essential to undertake the following tasks:

- To study the trend of counterfeit and pirated goods and services at the checkpoints of Customs Ghana
- To analyze the strategies used by organized crime groups to transport counterfeit and pirated goods and services into Ghana
- To analyze the effects of organized crime activities on the economy of Ghana
- To determine the main provenance of counterfeiting and piracy
- To analyze the impact of counterfeiting and piracy on international business
- To analyze the statistics of seizure of counterfeit and pirated goods and services at the EU/US external borders

The above tasks lay the foundation for the formulation of the research hypothesis to deepen the understanding and explain the menace of counterfeiting and piracy in Ghana. Globalization requires countries to be competitive and also adhere to trade agreements and resolutions approved by international organizations to offer optimum value to consumers. This requires stringent measures by governments to actualize fair and equitable trade and also combat the activities of organized crime groups. **The hypothesis of the research: To confirm that exports and imports from/to Ghana contain counterfeit, pirated, defective and substandard products and services as a result of globalization of production and market.**

Sources of Literature and Research Method

The researcher concentrated on scientific papers; theoretical books related to Globalization and Consumer Safety and more importantly reports from international organizations like the OECD, WTO, UN, EUIPO etc. The author analyzes literature from revered and renowned researchers like Stiglitz, Jim Sheffield et al, Smith, Hill, Guillen, Dunning, Holm and Sorenson, Ricardo, Cary Coglianesi et al, Barry and among others. The researcher also analyzed and made illustrations from secondary data on global merchandise and counterfeiting to ascertain the intensity of the problem; to know what has been done to mitigate the problem and the new approach to curb the problem. Primary research was conducted at Customs Ghana to establish the impact of the problem of counterfeiting and piracy, to achieve the research aims and also to accept or reject the hypothesis of the study. In addition, the literature review identified potential gaps in knowledge for policymakers, industry practitioners, businesses and the general public, and espouse a need for current and/or future research projects across the globe to prevent counterfeiting and piracy from the provenance countries.

Over the past decade, a number of scholars have debated the pros and cons of globalization and its future trajectory with keen focus on developing and emerging economies. The mixed research approach of qualitative and quantitative data analyses and interpretations will help to mitigate the dark side of globalization with keen focus on consumer safety and value. The detailed literature review enable the researcher to construct an informative questionnaire design to solicit first rate response from professionals (experts) of Customs to help alleviate the menace by advocating for a global preventive campaign on counterfeit and piracy. In addition, a quantitative data analysis was undertaken to establish the validity and reliability of the findings from the primary data.

The research made use of inferential statistical technique to establish the current trend and also ex ante the future trend of the problem. A good sample size was taken for the primary and secondary data collection. Time Series and Confidence Interval techniques were employed to outline the trend of the problem and also predict the parameters of the unknown counterfeit and piracy population in world trade and merchandise.

Limitation of the Research

The construct of globalization and consumer safety involves numerous international institutions and member countries. The potential limitation of this research study centers on, the researcher's use of a single case study approach of Customs Excise and Preventive Service of Ghana (CEPS). There are other institutions like Ghana Standard Authority, Ministry of Trade and Industry, Ghana Investment Promotion Council, Ghana Ports and Harbour Authority, Ghana Association of Importers and Exporters, and the likes. This is due to financial, time constraints as a result of respondents' delay, and geographical location. However, the set of questionnaire was submitted earlier to CEPS for consideration and also by virtue of the researcher's acquaintance to Mr. Eric Joseph Owusu, Chief Collector at the Tema Harbor, division of CEPS, facilitated the data response rate. The researcher is unable to carry out a quantitative data analysis to establish the correlation between globalization and counterfeiting in Ghana due to the lack of readily statistical data on the website of Ghana Revenue Authority, which is the parent company of Customs Ghana (<https://gra.gov.gh/index.php/customs/>) – [Accessed on 24.03.2019]. However, the findings of secondary data sourced from EU/US Customs Authority, will help to augment the validity and reliability of the research. This is believed to be beneficial for countries, institutions and organizations that engage in global business activities and small and medium scale businesses that aspire to grow to become a multinational enterprises in future.

Structure of the Research

The research is made up of three broad chapters. The first chapter comprises a detailed review of literature on globalization and consumer safety, current concepts, benefits and challenges of the construct. The concept of globalization and consumer safety is critically examined and international organizations like WTO and UN must endeavor to mitigate the unsavory practice of counterfeiting and piracy which is inflicting colossal loss to member countries and stakeholders. This chapter also presents the opening to discuss the global supply chain architecture.

The second chapter examines the practical trend of the theoretical framework of globalization and consumer safety to establish advantages and disadvantages to member countries and stakeholders. This is a general review to know the extent of the problems in the global economy. It also considers the digitalization of global business which is being used by organized crime

groups to merchandise counterfeit and pirated goods and services. The power of the digital globalization through the use of the e-commerce architecture is causing heinous damages and dissatisfaction to users. The concerns from consumer protection organizations are also examined on the premise for stringent measures and also sensitization of consumers. In addition, top provenance countries of counterfeit and pirated goods are also examined to emphasize the need for a robust mechanism to reduce this problem. Finally, there is statistical data presentations to help estimate the impact of the problem and the challenges for effective combating of the problem.

The third chapter explains the research design to accept or reject the hypothesis, after a mixed approach of qualitative and quantitative data analysis is done. It draws conclusion from the primary research on Customs Ghana and also secondary research of international organizations like WTO, OECD, and EU/US Customs. This helps to establish the validity and reliability of the research findings. The conclusion from the primary and secondary research affirms the significance of the study. The research design involves; sampling method, sample size, questionnaire design, data collection, analysis and presentation of findings. The outcome of the research helps to draw the conclusion and more importantly make strategic and action based recommendations to international organizations, member countries and stakeholders to solve the stated problem associated with globalization and consumer safety.

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1. GLOBALIZATION AND CONSUMER SAFETY – THEORETICAL FRAMEWORK AND CONCEPT DEVELOPMENT

Over three decades ago there has been a fundamental shift in world merchandise and economy. The business environment has witnessed a paradigm shift from a world in which national economies were restricted, protected from each other by trade and investment barriers; geographical location, time zones, differences in government regulation, culture and economic systems (Hill 2013, p. 4). The sheer force of shift is towards a world where cross-border trade and investment are diminishing; geographical location is not a factor due to innovative transportation and telecommunications technology; cultural convergence, national economies are interdependent, integration of global economic system. The process by which these occurrences are prevailing is referred as globalization

1.1 The term Globalization

In a generic term, globalization involves a paradigm shift towards an interdependent world economy (Hill 2013, p. 6). According to Holm and Sorenson (1995), globalization is best defined as “the intensification of economic, political, social and cultural relations across borders”. Guillen (2001) held the assertion that globalization is a process precipitated by incessant increase in cross-border flows of goods, services, money, people, information and culture. Globalization is defined as the incessant economic integration of all the countries of the world resulting from reduction in trade barriers and consequent increase in both the volume and the variety of international trade in goods and services, low cost of transport, the growing intensity of the movement of capital, the immense growth in labour mobility, and the accelerated worldwide diffusion of technology and innovation (The Council of Europe) – [Accessed on 24.02.2019]. According to the author, globalization can also be defined as the shift towards global production, finance, investment and market of goods and services. This helps international companies to explore new markets and product development to increase turnover and profit.

Generally, many economists affirmed that there are positive and tangible gains from globalization. These affirmations are significantly based on Ricardo’s theory of comparative advantage in international trade (1817), where countries turn to favour exporting of goods and services produced relatively more efficient than competitors, thereby resulting in expansion of

economic output, creation of jobs and price optimization. Globalization has several facades, including the globalization of markets and production:

The Globalization of Markets

The globalization of markets refers to the convergence of historically divergent national markets into a single global marketplace to communicate, convince and deliver value in the form of goods and services to consumers. The reduction in trade barriers have enable market penetration and development by delivering existing and new products. According to Hill (2013), it has been argued for some time that the tastes and preferences of consumers in different countries are somewhat converging on the global scale. This makes it feasible for the formation of a single market, a phenomenon which will lead to greater consumer preference, quality and economies of scale.

The Globalization of Production

The globalization of production refers to the mobilization of factors of production from different geographical locations across the global to benefit from national differences in the cost and quality of natural endowments (labour, land, capital). This strategic option will help multinational companies to attain cost leadership and harness the quality of the final products and services. Thus, achieving a sustainable differential competitive advantage (Dunning 1979).

Globalization is a very broad, multi-dimensional concept which impact is felt in the business environment. It has been (dis)credited with enormous positive and negative effects (European Commission. 2017 edition, globalization patterns in EU trade and investment).

Hill (2013); Dunning (1979), Erich Weede (2004) holds the assertion that globalization has made the world a congenial and richer place; wider access for market growth and expansion, higher standards of living (especially in emerging economies), eruption and diffusion of new technologies, optimum prices, greater consumer preference, information symmetry and improved consumer safety. Amoore (2002); Stiglitz (2002), and Coleman (2011) hold a divergent idea that globalization has in consideration of other factors resulted to income inequality (some regions and people are not easily susceptible to change and rivalry), lower wages, ad hoc health measure, compromised safety standards, usurping of national sovereignties by MNEs, vulnerability to

financial crisis due to irregular movement of capital, diminishing cultural uniqueness, environmental hazards, etc. The figure below outlines the dimensions of economic globalization.

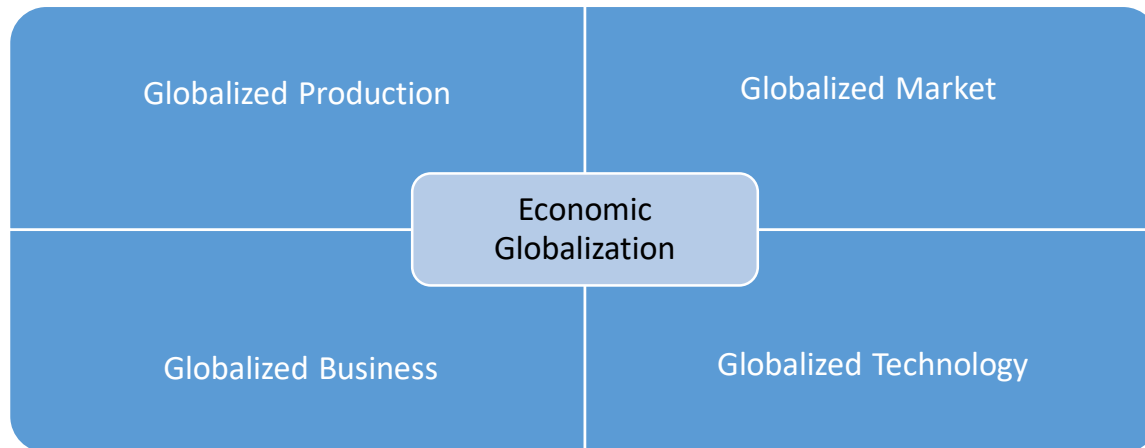


Figure 1-1: Economic Dimensions of Globalization

Source: Author's illustration based on data from European Commission, Globalization patterns in EU trade and investment 2017 ed.

The above figure shows the economic dimensions of globalization which have impacted world trade in terms of production and market expansion, especially, in emerging economies. The impact of these dimensions can be seen in three folds; offering consumers' with preference, quality products and services, competitive pricing. However, organized crime groups are taking advantage of the burgeoning market to merchandise counterfeit and pirated goods and services.

1.2 The Emergence of Global Institutions

The globalization of production and markets have precipitated the importance of international institutions to regulate and manage the market space and also influence signatory countries to endorse multinational trade treaties to govern the world trade (Hill 2013, p. 7). Historically, notably institutions have been set up to execute these mandate, including the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), the International Monetary Fund (IMF) and its sister institution the World bank and the United nations (UN). All these institutions were created as a result of voluntary heads of agreement between member countries. The functions of signatory countries are enshrined in the international treaties to expedite global business.

The essential responsibility of the World Trade Organization is to regulate and manage the world trading system and monitor the adherence of the rules and regulations spelt out in the treaties by signatory countries. As of 2011, there are 154 nations that make up 97 percent of world trade. This gives the organization a wide scope and influence (Hill 2013, p. 8). The WTO also acts in the facilitation process of establishing additional multinational agreements between signatory countries. The WTO has played a key role in the reduction of trade barriers in global trade and merchandise. The thrust of globalization of production and market would have been a mirage without the existence and role of the World Trade Organization.

1.3 Drivers of Globalization

There are two macro forces that have facilitated the growth in globalization (Hill 2013, p. 11). The first is the reduction in protectionism which has resulted in movement of goods and capital. The second force is the eruption of technological innovation in telecommunications, information processing and logistics. These forces have compelled MNEs and local companies to explore international opportunities through exporting and FDI.

The drivers of globalization can ideally be outlined into five groups:

Technology has shaped and harnessed globalization. The eruption of innovation in the transportation technology has strengthened the thrust of global supply chain of movement of raw material, semi-finished goods and the finished products to consumer in different geographic market segments. The dominant development is seen in the aeronautics and maritime industries in the late 1970s to 1980s. The innovation enhanced telecommunication and transportation at an optimum cost. The astronomical growth of the internet has ushered in digital globalization (Bauernfeind 2005).

Harmonized trading rules and free competition markets lead to country attractiveness for international trade and foreign direct investment (World Trade Organization, 1995). This boosts the regional competitiveness of countries benefitting from FDI and cross border trade.

The saturation of domestic markets limits the opportunities for growth. International market development is the only strategic option for organizations to increase sales and profitability. This helps organizations to penetrate and develop new markets which match the product offering by adaptation or standardization of marketing. Cost drivers also compels organizations to embrace globalization and explore opportunities of building global scale economies and cutting edge products (Ferrier, 2004). Globalization of production and market intensify the rivalry among

organizations, which forces others to develop new market niche gasping for survival. Harmonization of trade agreement among signatory countries and development of FDI opportunities also embraces this driver (Bauernfeind 2005). This will lead to economic prosperity for these countries as a result of investment in capital flows and trade.

1.4 The Concept of Consumer Safety and Model Development

The ultimate purpose of production of goods and services is consumption. It is therefore, essential for producers to make consumers the focal point in decision making and production to safeguard product quality and satisfaction (Smith, 1776). Consumer safety denotes safeguarding the interest, rights and responsibilities of consumer at the market space within and outside the geographical delineation of a country (www.studylib.net) – [Accessed on 24.02.2019]. In other diction, it means the policy actions instituted in consonance to the statutory provisions to protection, educate and inform consumers about deceitful and amoral practices by industry players and more importantly ensure a streamlined redress procedure. The rampant malpractices by industry players include:

- (a) Sale of adulterated products; of less quality which might harm consumers
- (b) Sale of spurious or counterfeit goods; the content can cause health problems
- (c) Sale of substandard products; non conformity to benchmark quality
- (d) Falsified weights of products, leading to loss of value to consumers
- (e) Shadow marketing and advertent hoarding of products to create artificial scarcity to cause inflation
- (f) Exorbitant pricing of products due to lack of competent institutions to control the manufacturer's suggested retail price
- (g) Sales of products containing defectives and variability
- (h) Deceptive offline and online advertisements; commercials with falsified customer promise.

This product performance failures have resulted in enormous financial and non-financial loss to consumers. This has left lasting negative impressions in the sub conscious minds of many consumers with respect to the experience with products. The government institutions and civil right organizations must pact a solid front in mitigating this menace to guarantee consumers access to benign products and services.

1.5 Import and Consumer Safety

Countries across the globe have somewhat accepted the inherent risk associated with products (Cary Coglianese, et al. 2009, p. 3 – 4). Consumers have accepted products like cigarettes and alcoholic drinks which have health risk. The important issue is about how consumers distinguish between a quality product and a bad product on the shelves of retail outlets. Many of the counterfeit products are similar in appearance to the original products. The retail outlets are often unable to check the sample products before placing orders to put on the shelves for sale. This situation poses heinous health and economic ramifications leading to erosion of brand equity and trust.

Globalization is interlocked with chronic quantitative and qualitative problems affecting the consumers across the globe. It is the earnest responsibility of governments to safeguard its citizens against hazardous products. Consumers are susceptible to product risk from national and international front. There is a strong assertion that the issue of import safety spans from jurisdictional, political, legal, economic, cultural and technological factors. The research will concentrate on the import safety risk, examine innovative solutions and address the ramifications on the national and international economies. It is important to state that this research takes a general view of the problem prevailing in different sectors of international trade. It is obvious that many countries across the globe has enshrined statutory provisions and designated institutions to mitigate the problem. However, the situation is escalating and this pre-empts for new measures to curb the menace.

1.5.1 The Import Safety Problem

There is a linear and convergent understanding of the problem of import safety in international trade. The principal goal of governments is to mitigate the inherent risk associated with importation of goods and services (Cary Coglianese, et al. 2009, p. 7 - 8). Organized crime groups incessantly device a way of infiltrating the system to market counterfeit goods.

The figure 1-2 outlines the series of activities on the import chain that results to consumer harm of accessing these products from industry players.

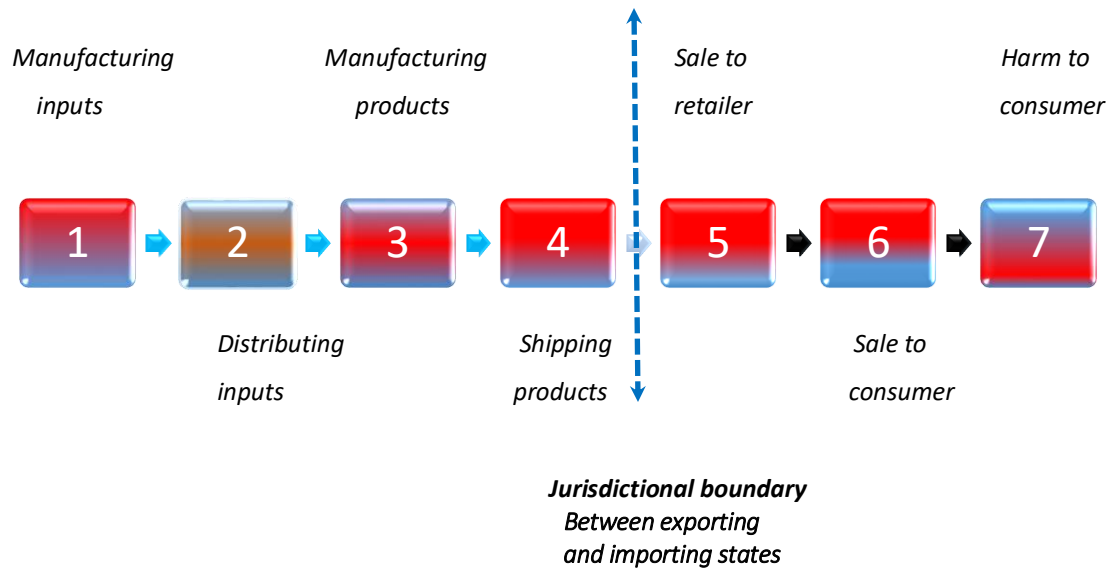


Figure 1-2: Causal steps to import safety problems association with globalization and trade liberalization.

Source: Author's illustration based on article: consumer protection in an era of globalization. Cary Coglianese, Adam M. Finkel and David T. Zaring, 2019. P. 8

On each segment of the import chain there is the tendency for adulterating the components which make up the semi-finished products or the finished products. This situation if not detected by the customs control makes way for these products to end up in retail shelves for consumption by households causing severe harm and health issues. The prevention of this situation involves a concerted approach by international stakeholders with the goal to create a safe consumption for all. It is important to state that there is a sophisticated and varied import chain in international business. The globalization of production and market can best explain this (Neef 2004). Fast moving consumable goods contain unique components sourced from different countries due to cost and availability. The global supply chain is very delicate and entangled across large geographic locations. The figure above was simplified to get a linear understanding of the problem. It is also important to note that the demarcation line in the figure can be positioned in different segment along the chain. This phenomenon further complicates the overarching situation. Foreign Direct Investment paves the way for an import state to manufacture products by importing only factors of production from overseas (Cary Coglianese, et al. 2009, p. 8). The vertical line in the figure delineates the qualitative problem associated with importation of

products. This spans from economic, legal to cultural dissonance. To avoid the defects in these supplies, MNEs' must resort to integration strategy which comes at a huge cost.

1.6 The Savvy Consumer

The table below outlines the rights and responsibilities of consumers to ensure that the safety guidelines from international organizations like UN, WTO, ISO, etc. are adhered to in the product adoption and decision making process. It is incumbent on state institutions and governments of countries to primarily, safeguard their citizenry against unwholesome products and services. More importantly, the Savvy Consumer, must exercise the duty of care when purchasing and using a product or service, to ascertain its authenticity, its effect to the environment, redress options, etc.

Table 1-1: Consumer Rights and Responsibilities

		Consumers Have the Right To:	Consumer's Responsibilities Include:
1	Safety	Protection from products and services that are hazardous to their health.	Use the product safely, following all safety instructions and remaining alert for future warnings.
2	Information	Have provided for them information that ensures all product statements are accurate and truthful.	Analyze and use information about products wisely.
3	Choice	A wide selection of goods and services at fair prices.	Choose carefully.
4	Be Heard	A voice in the creation of laws and the development of goods and services.	Express concerns to those who can help.
5	Redress	Request money or other benefits as fair compensation for a	Make the effort to seek compensation

		company's mistake.	for a wrong.
6	Education	Have access to programs and information that help make better buying decisions.	Learn about the changing nature of products - consumer education is a lifelong responsibility.
7	A Healthy Environment	Live and work in an environment that does not damage their health.	Make choices that minimize the environmental impact of your purchase on others.
8	Have Basic Needs Met	Fundamental right of access to food, water and shelter.	Consume sustainably, so as not to prevent others from meeting their own needs.

Source: Author's illustration based on data from Learning Seed. The Savvy Consumer, 2010
<http://www.socialstudies.com/pdf/LSC145DVG.pdf>

The table outlines clearly the rights and responsibilities of consumers in the exchange process of communicating and delivering of goods and services. It is important to note that this can only be achieved through the regulatory institutions monitoring companies in the business environment, whiles, communicating and educating consumers to fulfill their responsibilities enshrined in the consumer protection statute. This will mitigate vulnerability dimensions and optimize value to consumers in the exchange function of business.

1.7 Consumer Vulnerability Framework

The framework outlines the various dimensions that expose consumers to inherent risk of products or the likelihood of risk in accessing products. The term vulnerability is very rampant in emerging economies and it denotes the lack of bargaining power and intelligence to select products and services of premium quality to fully satisfy the needs without any excruciating circumstances. It also a situation where consumers are susceptible to defective and adulterated products (European Commission. 2016 report on consumer vulnerability). It is also most to note that consumer vulnerability is exacerbated as consumers are exposed to deceptive marketing gimmicks, power imbalance and information asymmetry in the business environment.

The Term Vulnerability

The term vulnerability has often been used in a generic sense and gives the opportunity for academic discourse and business discussions to really understand its scope and ramifications on national and international economies. In generic sense, it refers to predictive examination of the probability of an adverse outcome with respect to a particular encounter (Povel, 2009). Under a regulatory framework, this concept espouse the prospective adverse effect on consumers in the market space. The UK Financial Services Consumer Panel (2012), understands vulnerability as the likelihood of an adverse effect on consumers but its occurrence cannot be ascertained. Generally, consumer vulnerability can be seen in different scope with respect to academic discourse and business discussions. For the purpose of this research the concept is categorized into two broad definitions:

- Personal characteristics of consumer
- Composite situation of consumers

The first definition sees vulnerability as consumers who cannot decode the meaning of commercials, jingles and product effects (Ringold 1995, Baker et al. 2005). Smith and Cooper-Martin (1997) gave a synonymous and comprehensive definition, by seeing vulnerability as the proneness to economic, physiological and psychological detriment with respect to an encounter with market players. Burden (1998) understands vulnerability as an excruciating situation in accessing and decoding the needed information to make purchase decision and also tort liability as a result of purchasing defective and substandard products and services. Likewise, Overall (2004) asserts that a cross section of consumers might be vulnerable because of distortion in digesting information.

The second definition puts a wider lens on vulnerability with keen consideration to circumstances which entangles consumers. Andreasen and Manning (1990) asserts vulnerability as the detriment in the exchange function of marketing. The detriment are highly uncontrollable and out of the purview of consumers. Brenkert (1998) sees vulnerability in a concerted point of view as consumer's unique characteristics and marketing gimmicks employed by industry players to subdue consumers to make a purchase without recourse. Consumer Futures (2001)

understands vulnerability as peculiar situations which diminish consumer bargaining power, intelligence and subsequently erode the benefit of the exchange function. Baker, Gentry and Rittenburg (2005) sees vulnerability as the complete loss of bargaining power in the market space or in decoding a commercial to make a purchase decision. Hill and Kozup (2007) construe the Baker et al definition as the incessant weakening of the bargaining power of consumers by industry players to prevent them from accessing a mutually beneficial transaction. Finally, Stern (2012), sees vulnerability as situation the expose consumers to inevitable risk of buying a product or service at a greater cost and more importantly, not even satisfying the need for the purchase of the product and a request for a redress might further worsen the problem. The figure 1-3 shows the theoretical framework of the different causes of consumer vulnerability.

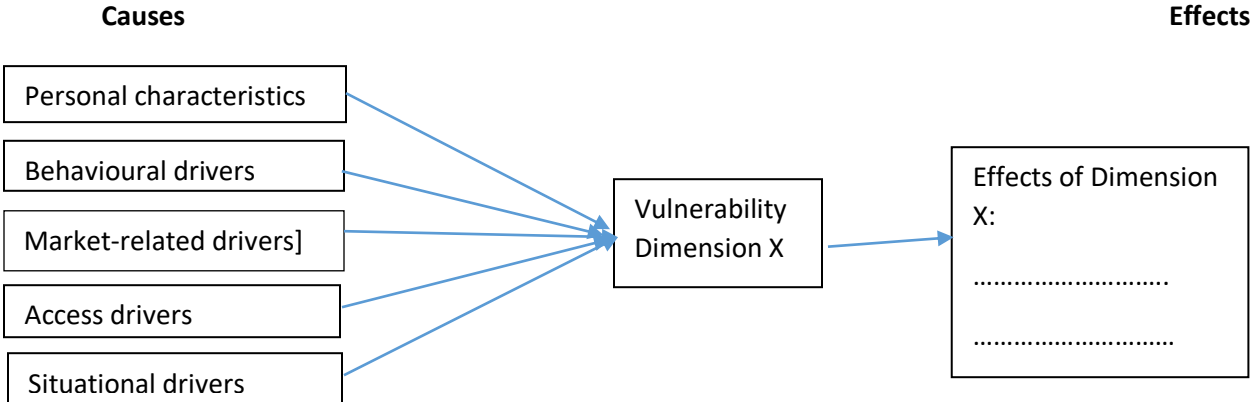


Figure 1-3: Theoretical framework of Consumer Vulnerability

Source: *Author’s illustration based on data from European Commission report on Consumer vulnerability across key markets in the European Union. 2016 p. 41, London Economics analysis of survey data.

The figure shows the various causes of consumer vulnerability with respect to the exchange process of communicating and delivering goods and services to a target market. This normally leads to consumer dissatisfaction and harm as a result of organized crime group’s activities in merchandise of counterfeit goods.

The effect on the vulnerability dimension include; poor quality of goods, delivery time and cost, difficulty resolving after sales problems, entering global online marketplace accidentally, etc. This leads to consumer dissatisfaction and loss of trust for globalization and e commerce. This

situation can push governments of countries to take stringent measures on trading partners like embargoes; revocation of bi lateral agreement, trade wars.

Novelty of the Research

The introduction of modern shipping containers with multiple doors on all sides of the containers for easy access of probabilistic sampling to scrutinize the quality of goods arriving and departing the shores of trading countries.

Publishing of academic books on globalization and consumer safety. And also reputable universities should introduce academic program on globalization with specialization in consumer safety.

The UN and WTO should prepare annual reports on consumer safety. And also should initiate annual regional and global consumer safety conferences to discuss the pertinent issues with respect to product and service quality.

The introduction of special court of justice on globalization and consumer safety issues in developing countries to adjudicate consumer harms from counterfeit and defective products and also prosecute the perpetrators of organized crime activities.

This chapter has provided a detailed review of theoretical framework on globalization and consumer safety, with regard to the benefits and pitfalls in exports and imports. The next chapter provides a detail analyses of current trends in globalization and consumer safety, with keen consideration to the theoretical framework. It also seeks to make suggestions to mitigate the problems of globalization and consumer safety.

2 ANALYSIS OF GLOBALIZATION AND CONSUMER SAFETY

The increasing trend of globalization and trade liberalization has made many countries to progressively remove restrictions to foreign direct investment and imports (Hill. 2013, p. 11).

The United Nations, states that, some 90 percent of the 2,700 changes made worldwide between 1992 and 2009 in the laws regulating foreign direct investment has guaranteed a more favorable and congenial environment for FDI and international trade among signatory countries. Such moves have been driving both the globalization of markets and the globalization of production. The flattening of barriers to international trade enables MNEs to explore opportunities in different market segments by exporting. It is important to note that, lowering of trade and investment barriers also allows MNEs to base production at the optimal location for that activity. Thus, a firm might design a product in one country, produce components in other countries, assemble the product in another country, and then export the finished product to different international markets (Dunning 1979).

The WTO statistical data (2010), states that, the volume of world merchandise trade has grown faster than the world economy since 1950. From 1970 to 2010, the volume of world merchandise trade has increased more than 30-fold, exceeding the expansion of world production, which grew close to 10 times in real terms (world merchandise trade includes trade in manufactured goods, agricultural goods, and mining products, but not services). Since the mid-1980s, the value of international trade in services has also grown strongly. Trade in services now accounts for about 20 percent of the value of all international trade. Increasingly, international trade in services has been driven by abrupt innovations in telecommunications and technology, which allow MNEs to outsource service activities to different locations around the globe. The phenomenon has helped emerging economies to grow faster than they could and also raised the living standard of consumers through employment creation, quality of goods and services, and varieties of brands to choose from. This has to some extent converged the taste and preference of consumers across the globe. Thus offering opportunities for product standardization and harmonized marketing campaigns to increase the market share of multinational enterprises. This also offers avenues for government to benefit through customs revenue collections at the various borders.

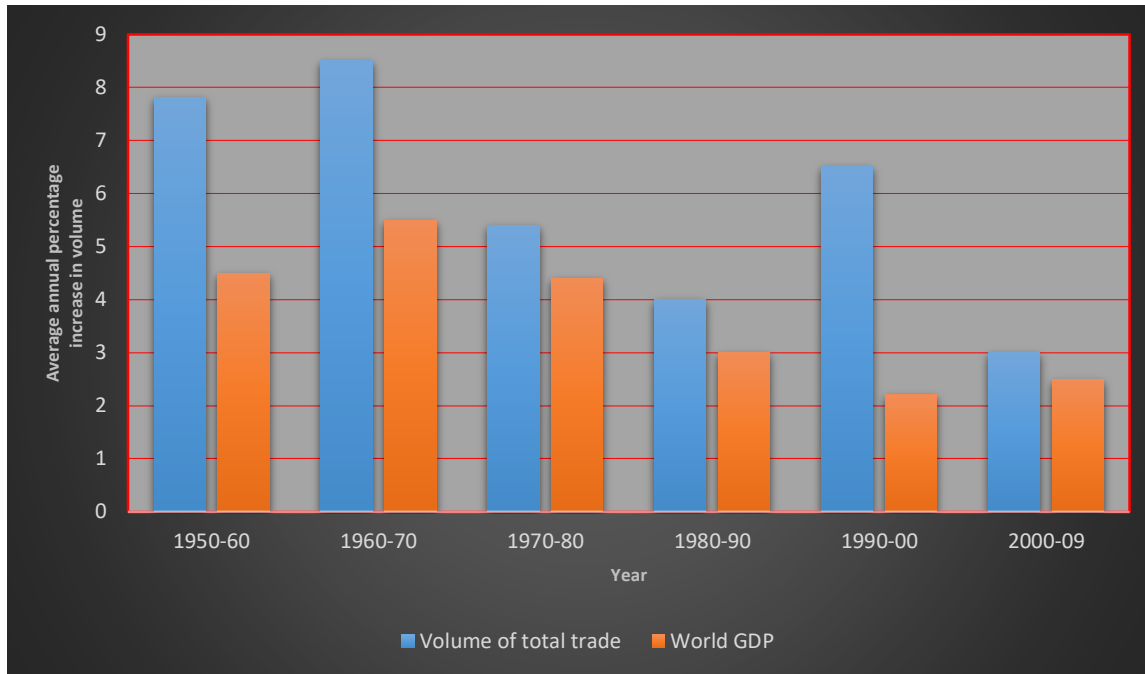


Figure 2-1: Average Annual Percentage Growth in Volume of Exports and World GDP, 1950-2009.

Source: Author's illustration based on data from * Hill Charles W. L. International business: competing in the global marketplace - 9th ed. (p. 35) and World Trade Organization, World Trade Statistics 2010.

It is essential to state that the comparatively low growth in trade between 2000 and 2009 seen in figure 2-1 reflects a sharp decline in world trade that occurred in 2008 and 2009. In 2009 the global economy recorded a negative variance of 2.3 percent as a result of the global financial crisis in the U.S. The volume of merchandised trade also declined by 12.2 percent in 2009, the largest free fall since WorldWar II.

The data above also supports the following assertions: First, many MNEs are exploring opportunities for market expansion and scale economies; assigning components production to different locations to reduce the cost per unit and also augment product quality (Dunning 1979). Second, the economies of the world are interlocking due to market expansion and product diffusion. Third, the world has witnessed an enormous growth in merchandise since 1950, and the ramification is that rising trade is the nervous system that has helped to consolidate the global economy.

2.1 The importance of Globalization

Globalization has changed the world economy and merchandise has grown exponentially over the last century (www.ourworldindata.org) – [Accessed on 07.02.2019]. The integration of the global economic system has been one of the most important developments of the last century. This process of integration, has been likened to globalization, which has consolidated the financial system of countries across the world. Figure 2-2 shows the value of world exports from 1800 to 2014. These estimates are in constant quotations (adjusted to account for inflation) and are indexed at 1913 values. The figure also displays an exponential growth in international trade over couple of centuries: Recent exports are more than 4,000-times larger than in 1913.

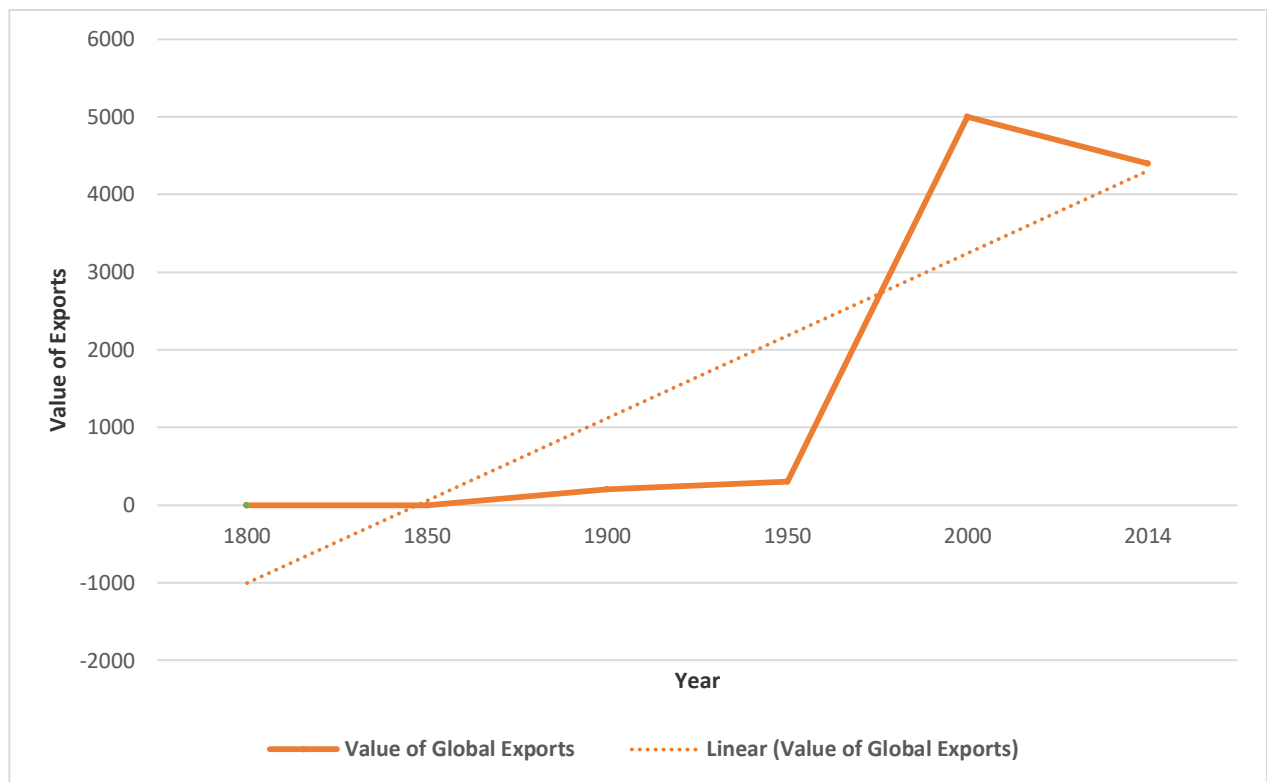


Figure 2.-2: Time series of value of world exports at constant prices, relative to 1913 (i.e. values correspond to world export volumes indexed at 1913=100)

Source: Author's illustration based on data from www.ourworldindata.org

Many countries in the quest to protect local manufacturers, instituted stringent barriers to international trade and foreign direct investment during 1920s and 1930s (Hill. 2013. p. 11). International trade usually boost export of goods and services to consumers in other countries. Foreign direct investment (FDI) also helps in job creation and raising of the living standard of people. Most of the barriers to international trade were in the form of high tariffs on imports of

goods. The rationale of such tariffs was to protect local manufacturers from foreign competition. One of the consequences of these behaviors by governments was the Great Depression of the 1930s. This bad experience prompted the developed nations to advocate for trade liberalization (Hill, 2013, p. 11). This goal was outlined in the General Agreement on Tariffs and Trade. During the existence of GATT, eight rounds of negotiations were executed among signatory countries to flatten barriers to the free movement of goods and services. The figure above shows the time series of global exports. It is obvious that, the establishment of GATT now the World trade organization, has impacted trade liberalization and globalization from the year 1950 to 2014. This is as a result of signatory countries significantly reducing tariffs and increasing export quotas. There has been an exponential growth in trade to GDP. Also, the figure above displays the recent trade values compared to a century ago.

Over the last centuries the world economy has experienced strong positive upswing. Therefore, comparing these changes in trade to GDP offers an intriguing outlook. The Figure 2-3 below outlines, the value of trade in goods relative to GDP; that is value of merchandise trade as a share of global economic output (www.ourworldindata.org) – [Accessed on 24.02.2019].

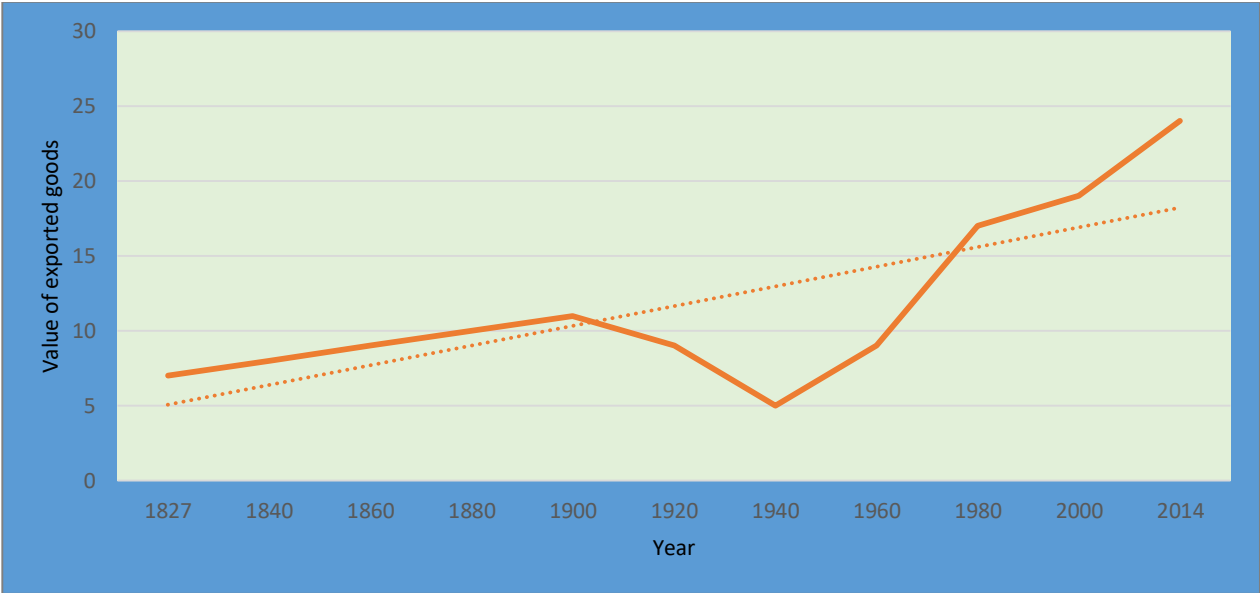


Figure 2-3: Time series of value of exported goods as share of GDP (estimates correspond to merchandise exports-to-GDP ratios)

Source: Author’s illustration based on data from www.ourworldindata.org

The value of worldwide exports was below 10% of global output as at 1870. In recent time, the value of world’s exports is close to 25%. This strongly shows upward movement in the economy

that over the last hundred years. This is as a result of member countries building consensus on GATT’s negotiations of trade liberalization and greater globalization.

2.2 The Influencing Factors of Economic Environment on Globalization

About 30 years ago, emerging and developing countries have adopted democratic forms of government; free market system, and stringent legal systems that safeguard property rights protection of enterprises. This policy actions have harnessed strong economic development across the world and have also created a conducive environment for international business (www.transportgeography.org) - [Accessed on 24.02.2019]. This is evident in figure 2- 4:

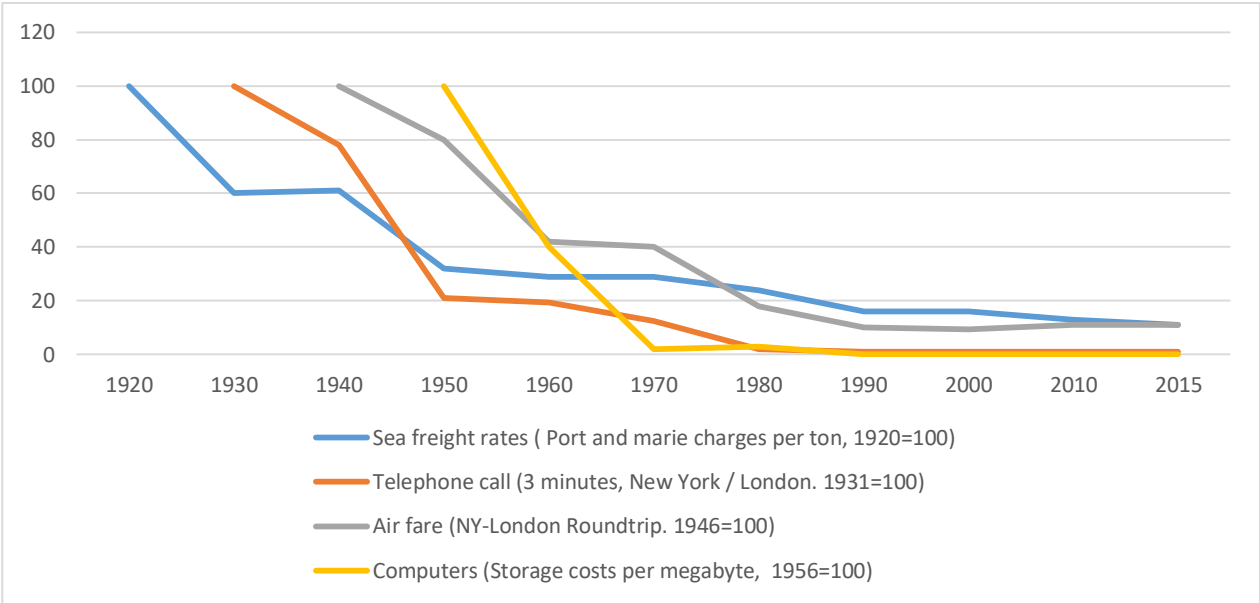


Figure 2-4: Transport and Communication Costs Indexes, 1920-2015

Source: Author’s illustration based on data from *www.transportgeography.org. Airfare data from various web sources (full economy airfare). Computer storage data from John C. McCallum. Sea freight rates data from The Eddington Transport Study (2006) and from UNCTAD (after 1980). Telephone call data from various sources.

Analyzing the global economic environment to assess business growth and opportunities. The impact of changes in EU, US and the global economic environment on strategic and operational decisions have harnessed international trade. This is evident by increase in merchandise (export and import), FDI and capital flows, proliferation of global brands, and reduction of protectionist measures. In addition, the falling transport and communication costs (1930 – 2015) also facilitated globalization of production, supply chain activities and market expansion.

Transport and communications costs have significantly declined during the 20th century. This is as a result of abrupt technological innovations and the application of economies of scale - (www.transportgeography.org) - [Accessed on 24.02.2019]. With fiber optic cables, telecommunications are accessible throughout the world, particularly through the internet, which has made long distance communication close to free and ubiquitous. It is essential also to state that, the modern transport infrastructure and containerization have enable MNEs to undertake smooth operations of global supply chain and logistics by the use of enterprise resource planning system.

2.3 Digital Globalization: the New Era of Global Flows

The significant growth of international trade and finance in the 20th century have declined exponentially since 2008 (McKinsey Global Institute. Digital Globalization; the new era of trade flows. 2016, p.8). However, globalization is not losing its leverage. Digital businesses are increasing — dissemination of information, ideas, and innovation across the world. The world is more interlocked than ever. Historically, emerging economies are counterparts on more than half of global trade flows. Although, the movement of goods and finance have reduced, cross-border digital usage has grown significantly since 2005. It is expected to upswing in five years as digital movements of commerce, information, searches, video, communication, and intra company traffic increases. Digital platforms change the trend of doing business across borders, reducing the cost of international dialogues and transactions. This creates market space with global scale consumers.

Small scale enterprises are burgeoning into “new-multinationals” with the usage of digital domains such as eBay, Amazon, Facebook, and Alibaba to generate lead with customers and suppliers in across the world. A tech-based startups survey showed 86 percent of some sort of cross-border transactions.

Consumers are directly connected to the e commerce platform, search for product information, business opportunities, etc. It is estimated that 900 million people have international connections on social media, and 360 million take part in cross-border transaction.

For the past 10 years digital business has increased the world GDP by some 10 percent; this value totaled \$7.8 trillion in 2014 alone. Digital business now accounts for a larger share of this impact than global trade in goods. Digital business generate economic growth primarily by raising productivity, and countries benefit from both inflows and outflows.

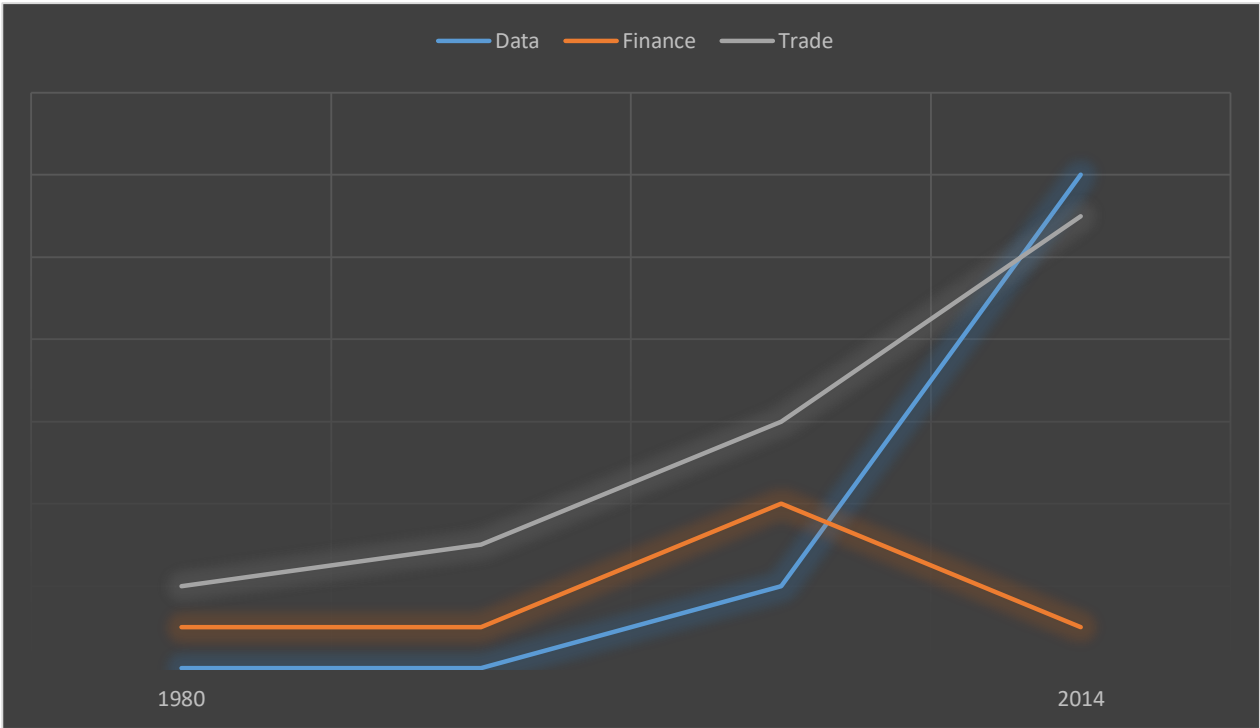


Figure 2-5: Time series of value of global flow of trade, finance and data (45X growth in data flows 2005-2014)

Source: Author’s illustration based on data from McKinsey Global Institute

Digital innovations have caused a new paradigm shift in global business transactions in the world (McKinsey Global Institute. Digital Globalization; the new era of trade flows. 2016, p.9). The global economy has witnessed an astronomical increase in the use of digital technologies within the period of 2000 to 2014. Large MNEs certainly attain global stature by expansion into new markets, signing of agreement with new suppliers, new strategic option and acquisition of assets. SMEs also benefit from digital platforms as a result of attracting new customers and efficient suppliers across the globe. It is important to state that, Facebook is estimated to have 50M subscribers, 10M on Alibaba, 2M on Amazon, etc. Recently, about 80% of startups are tech-

based with a huge global reach to foreign customers, financing and efficient suppliers from the onset.

2.4 Global Counterfeit Trade

Counterfeiting is not a novel business phenomenon and has been affecting trade for at least 2,000 years. Pliny the elder termed counterfeit coins as popular collector's items for Romans

(Barry 2007). Counterfeiting and piracy, usually includes products / services that are dangerous to the health and safety of consumers. It is essential to state that substandard and defective goods also causes heinous harm to consumers and households (EUROPOL. 2015 Situation Report on Counterfeiting in the European Union). Due to the illegal nature of counterfeiting, it is important to consider quantitative and qualitative data from case studies, experts, authorities and stakeholders. Counterfeiting is seen by criminals as a burgeoning market with huge growth and opportunities. This ever-increasing and lucrative business sees organized crime networks produce and distribute counterfeit products across the globe, by benefiting from innovations in technology and the shift towards e-shopping and e-commerce.

This illegal activity gives higher returns than drug trafficking and other criminal activities (OECD & EUIPO. 2016 report on counterfeit market and criminal activities). The production and distribution of counterfeit goods are usually reckoned as a cross border burden. This inference is as a result of the huge seizures make by customs around the world.

The leading countries involved include China, which remains a major source, India specialize for medicines, Egypt for foodstuffs, and Turkey for perfumes and cosmetics). It is important to note that, transit points for transportation of goods across the world, which serves as hubs for container traffic to facilitate free trade zones (FTZs) and supply chain operations, have also turned into significant haven for counterfeit activities. FTZs facilities are used as locations to alter and relabel documents on container loads, not only concealing the place of origin of the consignments but also completing the manufacturing process by inserting trademarks or packaging. Organized crime groups are deemed the main abusers of the world infrastructure of 3000 FTZs in 135 countries, including 82 in the European Union.

At the other hand, a new pattern has exhumed, with indication of domestic EU production of counterfeit goods, which is regarded a better, lucrative option with lesser risks of detection by customs and has lesser transportation costs.

2.4.1 Product counterfeiting

Product counterfeiting is an endemic problem, one that can be traced to long years. Trademarks date back to ancient times. Organized crime groups started counterfeiting activities as a tool to make easy money from vulnerable consumers (www.springer.com). Although attempts have been made to fight the problem. It seems the activities are expanding across global markets. The critical action is to determine the size of the counterfeit market. However, assessing the extent of this illicit trade is a difficult task. There is no direct measurement of counterfeit trade, since by definition it is an illegal activity. Therefore, customs seizures represent a small percentage of overall trade which is impossible to draw conclusions from the statistics. Many organizations, such as, the US General Accountability Office (2010), have endeavored to estimate the size of the counterfeit market and encountered major flaws in the methods employed.

2.4.2 Measuring the Counterfeit Market

The value of counterfeit and pirated goods are approximately half trillion Dollars a year, or 2.5% of global imports, with US, Italian and French brands experiencing the most hit and many of the profits are channel into organized crime groups (OCGs). According to a new report by the OECD and the EU's Intellectual Property Office, on 18th April, 2016. "Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact" puts the value of imported fake goods worldwide at USD 461 billion in 2013, compared with total imports in world trade of USD 17.9 trillion. Almost 5% of goods imported into the European Union are counterfeits. Most coming from middle income or emerging countries, with China the top producer in the world.

In 2008, the US government projected the global market value of the counterfeit industry at \$500 billion which makes up a growth rate of 1,700% over the past 10 years (U.S. Customs and Border Protection 2008). The estimates of the size of global counterfeit goods market seem to have coalesced around \$600 billion annually. In 2012, the IACC stated that counterfeiting is a

\$600 billion a year problem. In fact, it's a problem that has grown over 10,000% in the past two decades, partly fueled by consumer demand. However, investigating behind this estimate reveals a crucial problem. Estimates of the counterfeit market ranges from a low of \$200–600 billion to a high of \$1trillion. There is slight converging on definitions and serious problems of measurement, it is obvious to state that the exact value is unknown.

Attempting to measure the global value of counterfeit products is excruciatingly difficult. This is understandable given the illegal nature of this activity. The only matching data are replacement indicators such as seizures of products by police or customs authorities. In addition, there is also, no consensus on factors that should be taken into consideration for the calculation of counterfeiting. Should the estimation include sales lost by specific brands and at what quotation, loss to brand equity, total sales of counterfeits, or some combination of these factors (Green and Smith 2002). The recent effort to measure the counterfeit goods market was completed by the US government's General Accountability Office (GAO).

Counterfeit products crop up in everything from handbags and perfumes to machine parts and chemicals (www.oecd.org) – [Accessed on 26.02.219]. Footwear is the most-copied item though trademarks are infringed even on strawberries and fast moving consumer goods. Counterfeit goods endanger lives of consumers – auto parts that fail, pharmaceuticals that harm people, toys that harm children, baby formula that retards growth and medical instruments that deliver false readings. The organized crime groups infringe trademarks, design rights and patents. And also merchandise these tangible pirated products which breaks copyright laws to consumers who fall prey to information asymmetry and marketing gimmicks due to personal characteristics and purchasing power parity.

It is factual to state that, the European Union and United States of America are the greatest hits in terms of intellectual property rights violations. These crimes are committed mainly by emerging economies like China, Hong Kong and among others. This situation has abruptly increased the market size of counterfeiting and piracy across the global. It is therefore, very essential for international organization to formulate a common strategy to combat and mitigate this heinous menace enrooted into the concept of globalization which in principle should offer consumers with preferences, quality of goods and optimum value.

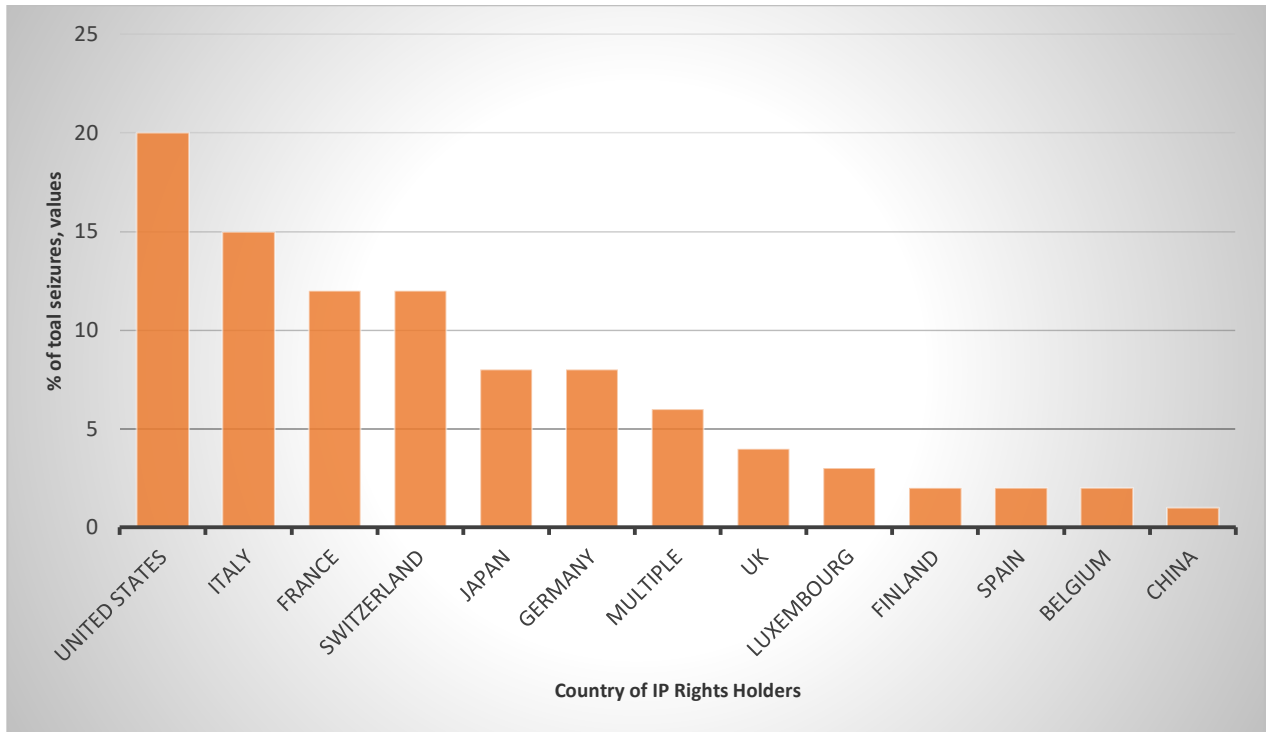


Figure 2-6: Seizures of counterfeit and pirated goods; top economies of origin of right holders whose IP rights are infringed (pooled dataset) in % of seizures' value from 2011 to 2013.

Source: Author's illustration based on data from www.oecd.org.

The figure above shows intellectual property rights of countries being violated with United States being the most affected and China to say the least. This phenomenon has a strong negative correlation on these countries in terms of revenue generation through sales, corporate tax, expansion project due to increase in demand, employment, research and development, etc. It is also essential to establish that colossal damage caused by the use of counterfeit products by sundry consumers over burden governments in terms of yearly health care and subsidy. These funds would have been invested into infrastructural and capital budgeting projects to enhance the livelihood of citizens.

The figure below outlines the seizures of counterfeit and pirated goods from top provenance economies in the world as of 2013. It's obvious that the counterfeit market is burgeoning. This is as a result of consumer vulnerability and regulatory gap created by national and international authorities in world merchandise.

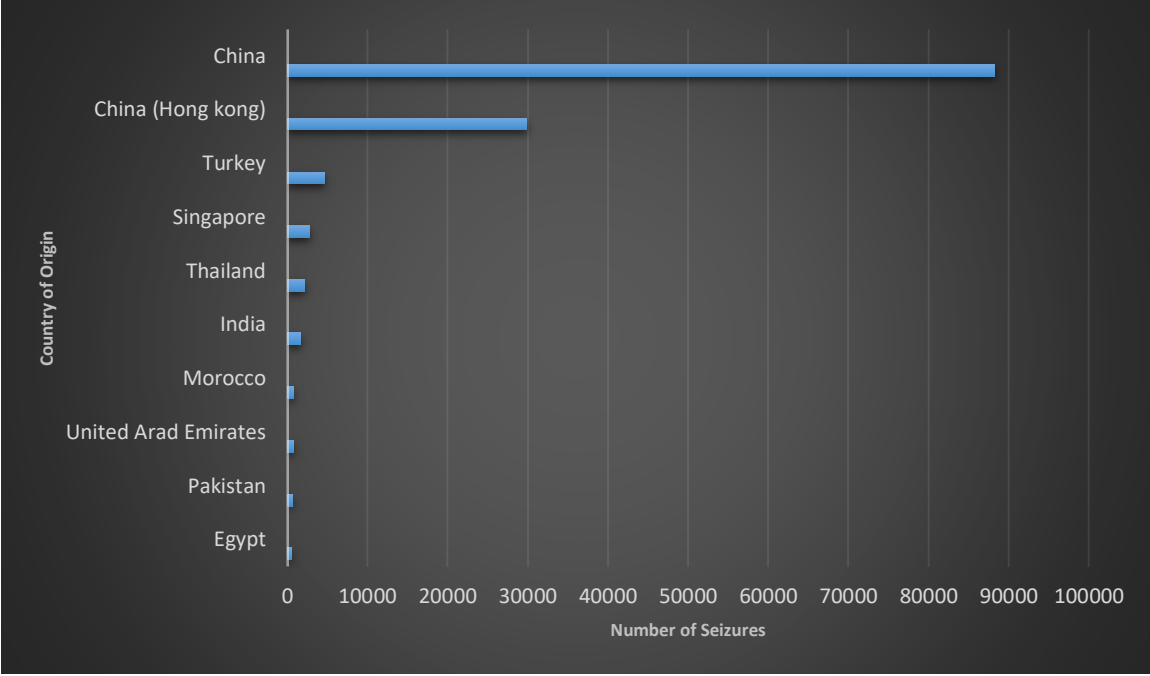


Figure 2-7: Seizures of counterfeit and pirated goods; top provenance economies (2013).

Source: Author’s illustration based on data from www.oecd.org.

The figure above outlines intellectual property right being violated by organized crime groups whose goods have been intercepted by the surveillance of customs. All these would have represent real financial losses to the original companies and more importantly cause harm to consumers since these goods have to be certified by the regulatory authorities. From the graph China recorded the highest counterfeiting and piracy activities and Egypt the least. The trend of this illicit activities is burgeoning. The WTO, UN and other international organizations must help to mitigate this problem through stringent regulatory framework and sanctions. This will push the government of China to take more proactive measures to alleviate the chronic problem.

The figure below shows the top categories of articles detained by customs. It spans from foodstuffs to clothing. This is as a result of consumers demand for cheaper products and trade intermediaries’ crucial quest for higher margin on fast moving consumer goods (FMCGs).

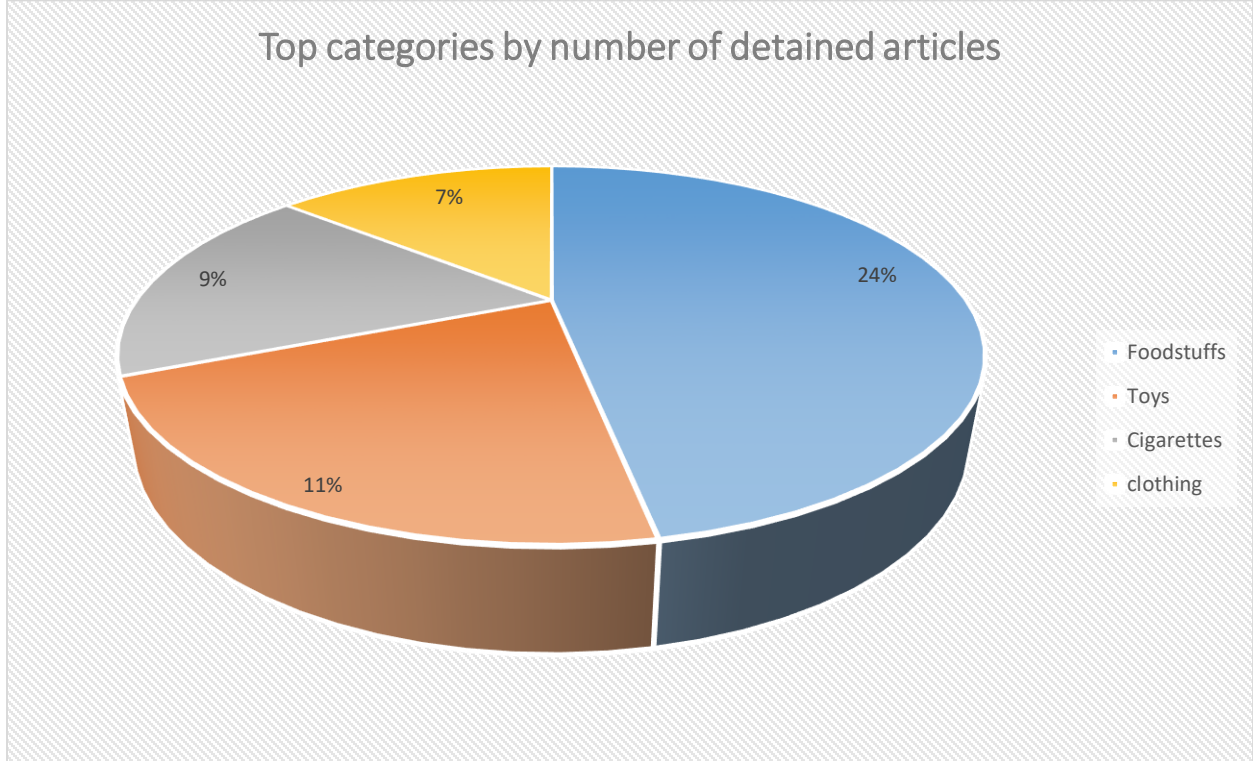


Figure 2-8: Top categories by number of detained articles for the year end 2017

Source: Author's illustration based on data from www.ec.europa.eu (statistics based on 2017 data transmitted by member state of EU in accordance to Article 31 of Regulation No. 608/2013 of European Parliament and Council)

The figure above shows the top categories of items being detained at the external borders of member states by customs authorities. These are fast moving consumable goods with incessant demand across the European market. The top provenance of these seizures are China and Hong Kong. The EU market is targeted by organized crime groups because of its market size, growth and attractiveness. This milestone is achieved by the stringent, effective and efficient security and coordinated border control management by member states and more importantly investment in infrastructure, research and staff training. It is clear that, the European Union market is one of the safest in the world. There is also a periodic research on counterfeiting activities across the European Union market and consumer vulnerability ratings. This helps to combat counterfeiting at the external and internal borders of the European Union. All these items could have ended up in retail outlets and households causing harm and loss of value to companies, governments and consumers. This also affects the environment and the society as a whole.

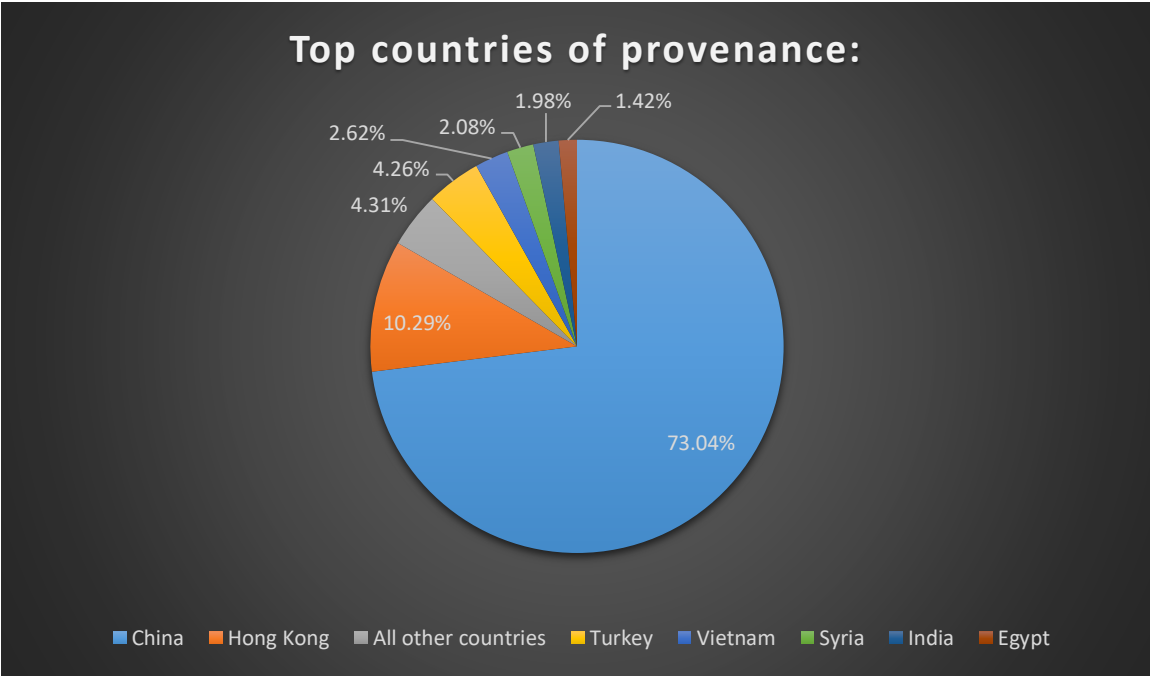


Figure 2-9: Top countries of provenance of counterfeit goods for the year end 2017
 Source: Author’s illustration based on data from www.ec.europa.eu (statistics based on 2017 data transmitted by member state of EU in accordance to Article 31 of Regulation No. 608/2013 of European Parliament and Council)

The figure above showcase the statistical data on the number of seizures of counterfeit goods in the European Union market. It can be inferred that China is ranked first, followed by Hong Kong (China) etc. It is obvious that goods coming from these regions contain counterfeits and various customs and border control authorities must scrutinize consignments to prevent these fake articles from entering retail outlets and households to cause harm to people.

The magnitude of violations of law in terms of types of intellectual property rights by organized crime groups are as follows:

- a. Trademarks - 95%
- b. Copyright - 2%
- c. Design rights - 2%
- d. Patents - 1%

These infringements have strong negative effects on enterprises across the European Union.

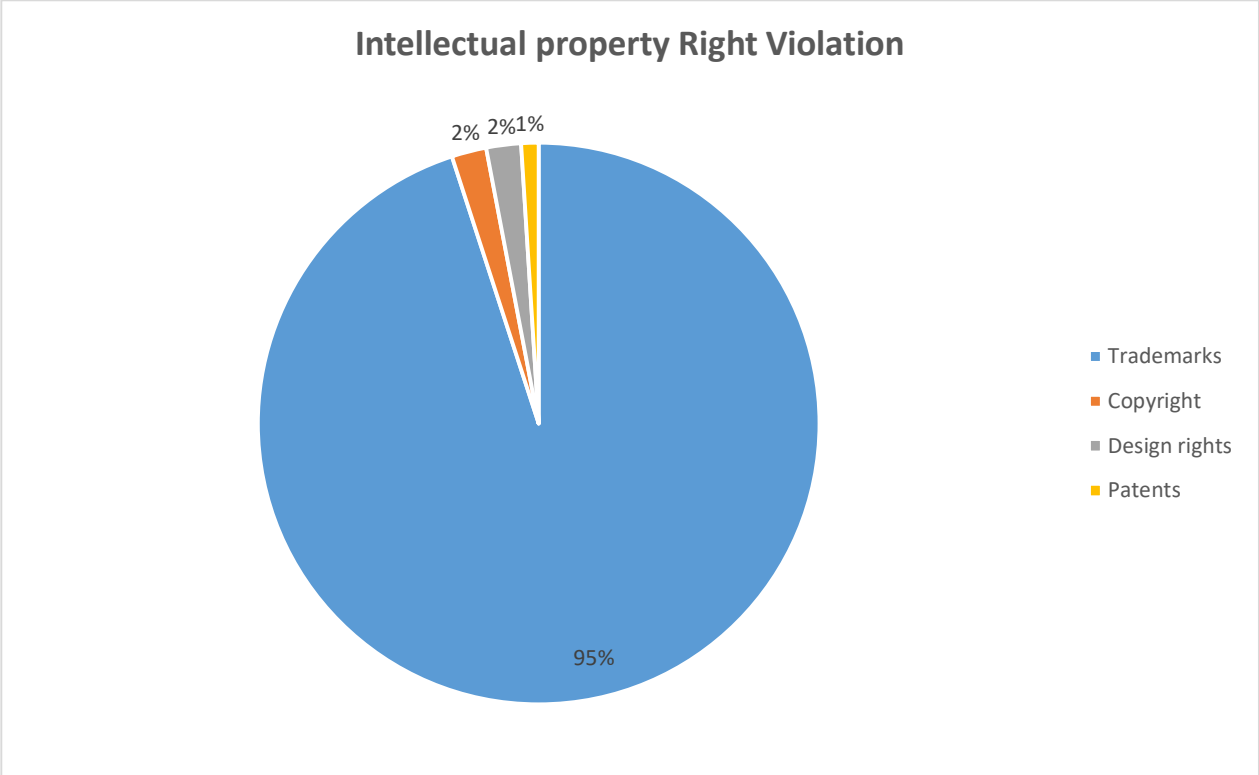


Figure 2-10: Intellectual property right violation

Source: *Author’s illustration based on data from OECD and EUIPO report, 2016, www.medium.com.

The figure gives the breakdown of the various intellectual property rights being violated, ranging from trademarks to patents. Due to the brand equity of these intellectual property rights, some counterfeits are able to pass through customs checkpoints as a result of the trust associated with these brands. This affects the turnover and sales of these enterprises. It also erodes the tax revenue of governments as these activities are mostly illegal and manifested in the shadow economy. It also affects research and development and future innovations as huge funds invested into research are hard to recover due to loss of sales.

Comparative Analysis of Counterfeiting and other Crimes

It is essential to compare the counterfeit market with other types of criminal activities to ascertain the thrust of the menace on a global scale and the steps to combat and mitigate it.

The comparative statistical analysis of counterfeiting and other criminal activities by organized crime groups revealed the following; counterfeit products \$461 billion, prostitution \$186 billion,

marijuana sales \$141 billion, illegal gambling \$140 billion, cocaine sales \$85 billion, heroin sales \$68 billion, oil theft \$37 billion, and human trafficking: \$32 billion.

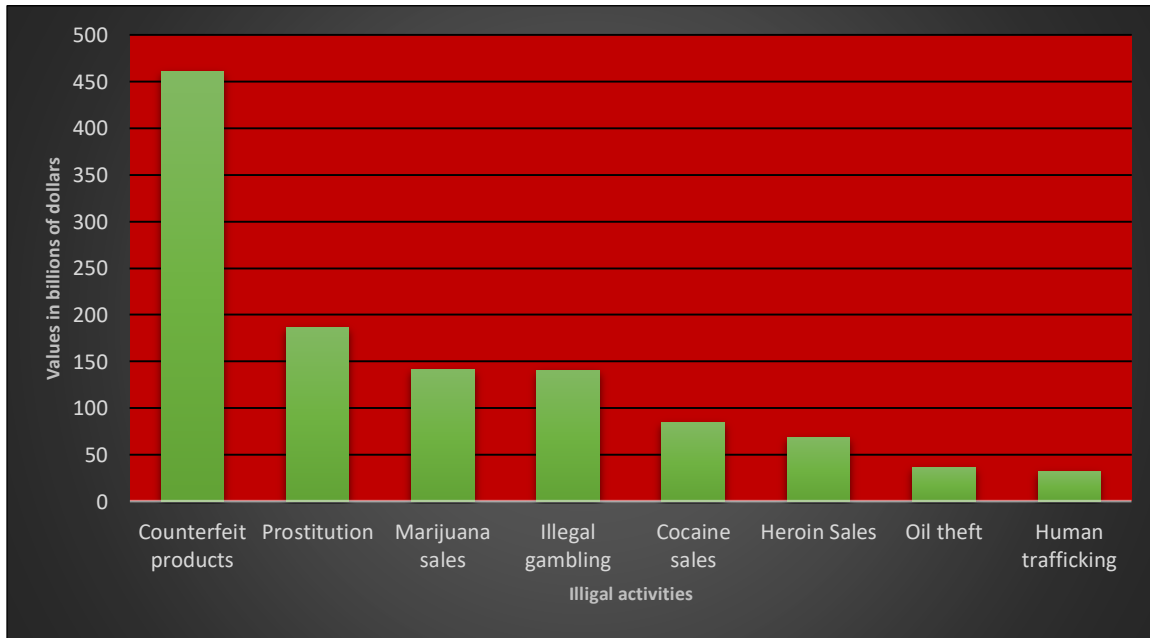


Figure 2-11: Comparison of the counterfeit market with other types of criminal activities
 Source: *Author’s illustration based on data from OECD and EUIPO report 2016, www.medium.com.

The figure above shows the value of illicit activities by organized crime groups. It is clear that, the burgeoning counterfeit and piracy of goods and services scored the highest monetary value of \$461 billion. This will affect the world’s merchandise as a result of intellectual property rights violation, revenue loss, environmental and consumer safety issues. The trend of these activities are on the increase and stringent measures should be taken to reduce the ex-ante effect on world’s merchandise.

2.5 Counterfeit Goods in the EU

Scale and impact of counterfeiting

The 2011-2013 period of marginal performance and recovery from the economic crisis, major enterprises in Europe remained strong and contributed positively to total external trade, that is (86% of import value and 93% of export value) and to GDP (42%). This shows a solid evidence

of immense contribution by major enterprises to the EU economy (EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.11). The value of contribution by these enterprises, and the low sanctions associated with IPR crime in some countries, has led to rampant counterfeiting and related infringements on global enterprises.

From retail marketing as a result of e commerce to the huge quantities of illegal products traded by organized international networks, have a strong negative impact on EU imports to the tune of approximately 5 % in 2013, equivalent to EUR 85 billion (EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.11). The counterfeit products mainly originate from different geographical demarcations and economies, constituting close to 2.5 % of all global trade, which has a monetary value of USD 461 billion in 2013.

The direct negative economic impact of IPR infringements on the EU are revenue loss for the affected enterprises, low sales volumes and unemployment. There are a number of indirect consequences and ramifications that are less obvious. IPR infringements in the EU affects all stakeholders connected to global business. One important effect of revenue losses for enterprises is the impact on financial resources that could have been reinvested in research and development projects. Counterfeiters tend to copy products with high market share and future growth opportunities. The pharmaceutical industry in particular, has made earnest concerns about the rampant counterfeiting which is causing very serious harm to the sector. This problem if not curb will disenchant enterprises from future research activities which can affect growth opportunities, revenue generation and health care

.

2.5.1 External Border Seizures

The strength of defense at the various borders of EU is regarded beyond just detaining items that are in transit (EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.12). In the 2014-2015 period, despite a dip in cases of seizures, the total counterfeit products detained at the EU external borders increased in value. This specifies the interception of higher units per cases over the period, and is a sign that OCGs continue to ship large volume of consignments, usually as marine container transportation.

There is confirmation of the ongoing use of large-scale cargo shipments by OCGs. Since 2012, the mainstream external border seizures have been recorded at postal traffic. Such a technique of conveyance does not usually turn to large-scale shipments in terms of units (ibid 13).

The basic process for small packages enshrined by Regulation (EU) No 608/2013 may permit for many EU customs procedures to become less onerous. Counterfeit goods has a negative impact on the total EU imports to the tune close to 5 % in 2013, equivalent to EUR 85 billion. The application of this 5 % ratio to the 2015 legitimate statistics on import in comparison with the 2015 statistics on seizures shows that the total results of customs IPR enforcement at the borders of the EU represents a low percentage of counterfeit goods entering the EU by value. It is important to note that, postal consignments comprised 70 % of cases in 2015 but only accounted for 2 % of the number of detained articles, an indication that bulk cargo remains the main threat in terms of the volume and value of counterfeit goods in the EU economy.

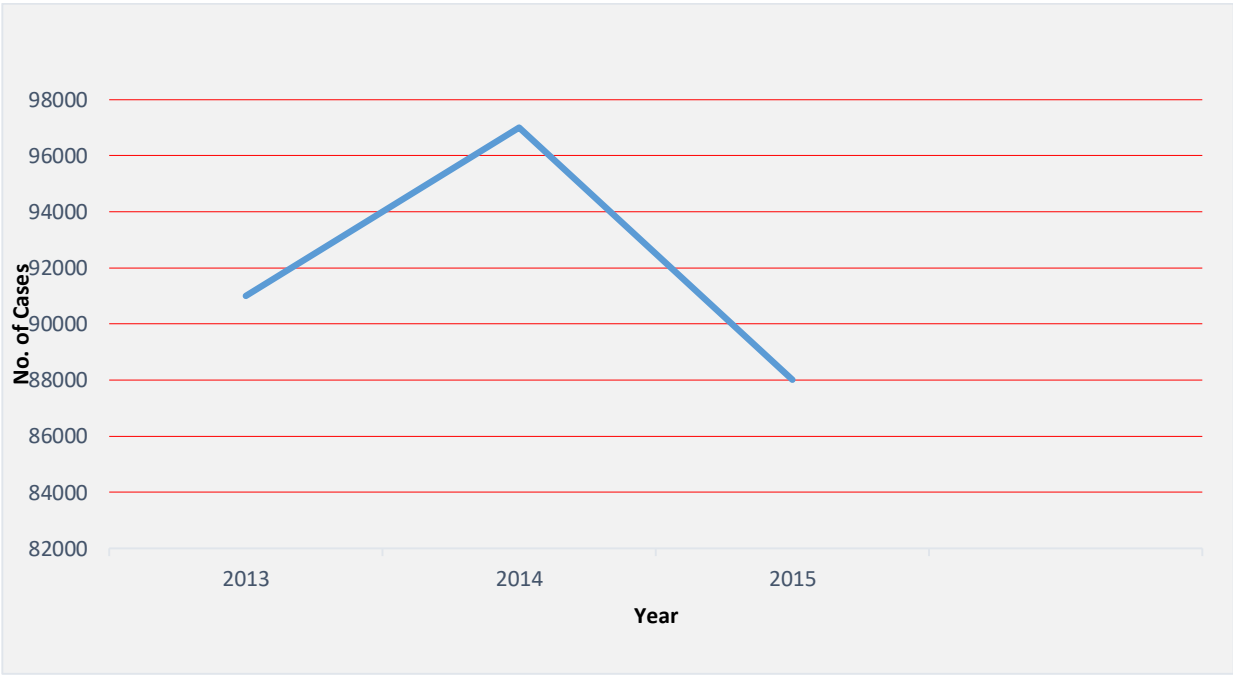


Figure 2-12: External border cases 2013 - 2015

Source: Author’s illustration based on data from EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.12 – 13).

The figure above shows the external border cases with a peak in 2014 and a sharp decline in 2015. The increase in cases could be attributed to stringent surveillance by Customs and related institutions in combating the counterfeit menace. On the other hand, the sharp decline could be attributed to organized crime groups using ingenious ways to conceal the consignments from Customs radar. This assertion is as a result of counterfeit goods on the rise in the EU and US markets.

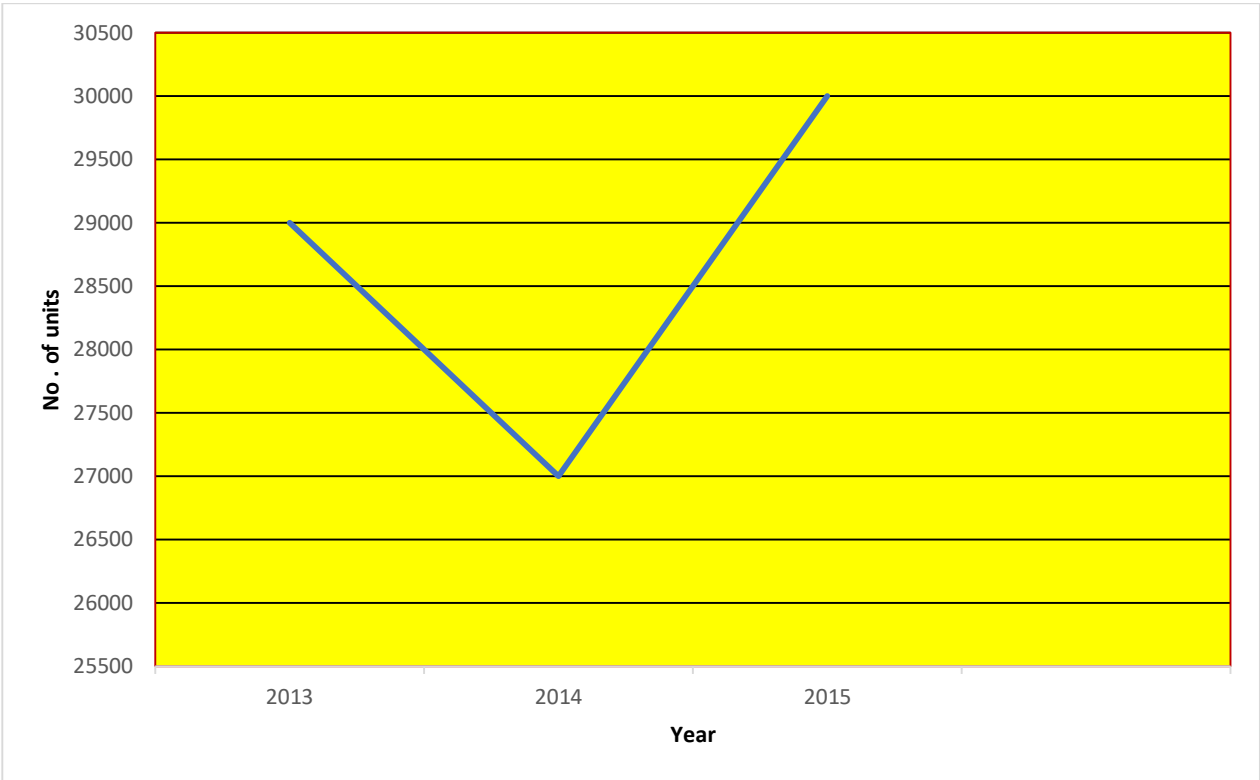


Figure 2-13: External border units 2013 - 2015

Source: Author’s illustration based on EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.13

The figure above shows external border units intercepted by Customs of EU, with a decline in 2014 and a sharp increase in 2015. The increase in cases of units could be attributed to stringent surveillance by Customs and related institutions in combating the counterfeit menace. On the other hand, the sharp decline could be attributed to organized crime groups using more crafty ways to conceal the consignments from Customs radar. This assertion is as a result of counterfeit goods increasing in the EU and US markets.

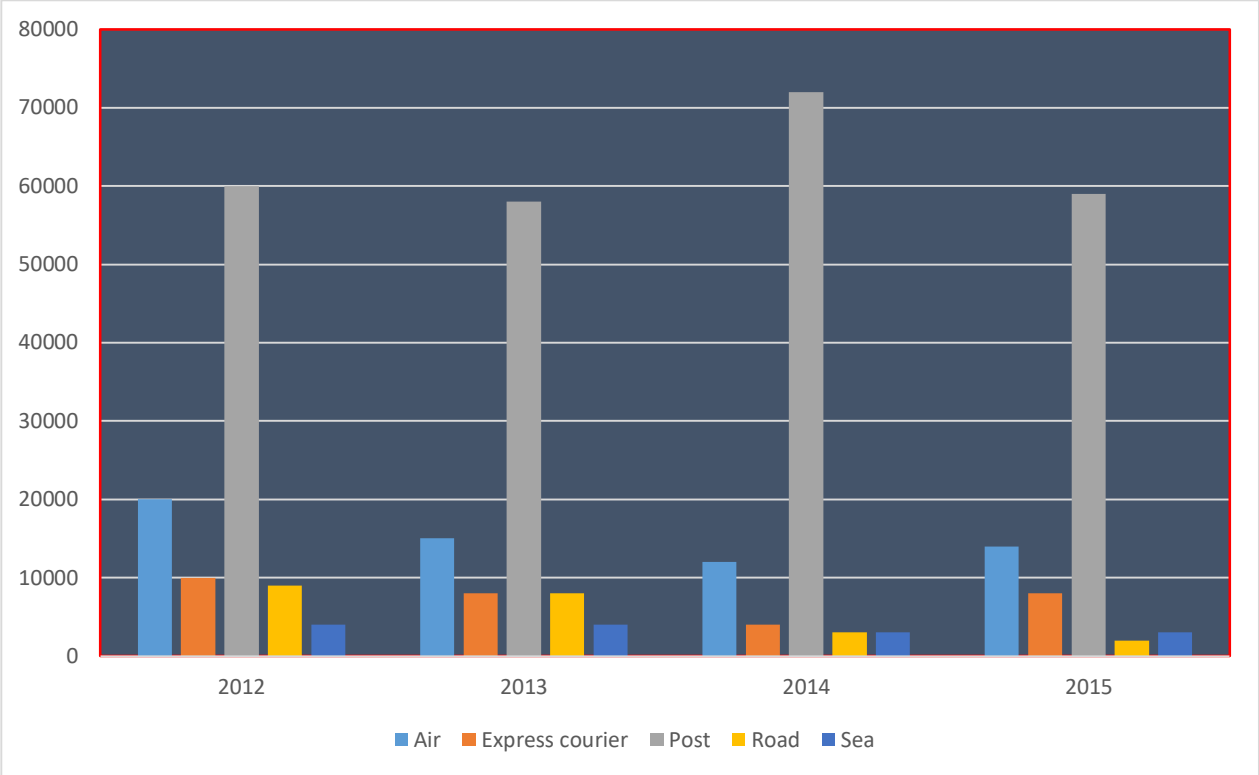


Figure 2-14: External border cases by transport method 2012 - 2015

Source: Author’s illustration based on EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. P.14).

The figure above shows various routes used by the organized crime groups in carting goods to the EU market. It is clear that the OCGs have shift to postal and air modes. This is because of the stringent surveillance at the various sea ports of EU – member states. Besides, the OCGs are taking advantage of digital globalization – e commerce and merchandising counterfeit goods to B2B and B2C and using mostly air and postal modes for deliveries, usually in scanty consignments as a way to deflect attention from border control. It is worth stating that, complains from corporate and individual consumers have pre-empt border control authorities to increase scrutiny and examination of consignments to prevent the counterfeit goods from entering the markets and households.

2.6 The Need for Consumer Protection in Ghana

The Ministry of Trade and Industry in Ghana, reveals that, the Uruguay Round of multilateral trade negotiations in 1994 and the establishment of the World Trade Organization (WTO) in January, 1995 has caused a significant increase in world trade of merchandise and service among member states arising from the trade liberalization negotiated (Research report on consumer protection in Ghana. 2014, p. 13 – 14).

The trade liberalization, globalization and e-commerce has exposed the Ghanaian market to intense competition and ensuing influx of goods and services, and counterfeiting problem. This situation has exposed consumers to health and safety issues, and hence the paramount need to safeguard consumers.

Ghana is also a member of the United Nations, which formulated the United Nations Guidelines for consumer protection (UNGCP). The document was prepared by ECOSOC and approved by the General Assembly in 1985 by Resolution A/C.2/54/L.23. This document is regarded as one of the most important documents on consumer protection and it is imperative for signatory countries to protect the citizens with its stringent implementation.

Consequently, the formulation of a consumer protection policy was made an essential component of the Ghana Trade Policy. It is also important to note that the current draft policy was drafted with reference to UNGCP. The aim of the consumer protection policy is to establish a framework for legal, institutional, and social infrastructure that will boost the welfare, health, safety and economic interest of consumers and also empower assertions of rights in the marketplace.

2.6.1 Current Regime of Consumer Protection in Ghana

The current consumer protection system comprises legal and regulatory provisions dispersed in numerous legislation. A transitory examination of the system with regard to policy, legal and institutional framework reveals huge gaps and lapses which can affect consumer safety. This menace can be linked to numerous factors, the most essential is the nonexistence of a comprehensive policy and statutory provision on consumer protection in Ghana.

Other broad features of the current system are the nonexistence of an effective institutional enforcement authority aimed precisely at upholding the interest and prosperity of consumers, the

gross lack of awareness on the part of consumers and unregulated market players. The current consumer protection laws in Ghana are limited to the Sale of Goods Act of 1962, Food and Drugs Board Law of 1992, General Labeling Rules of 1992, Public Utility Regulatory Commission Act of 1997, National Communications Authority Act of 1996 and the Standards Decree of 1973 among others. (Research report on consumer protection in Ghana. 2014, p. 14 – 15). As a result, reference must be made to several existing laws and regulations to establish the framework for protecting the interest and welfare of consumers in Ghana. According to the draft policy, the current legal and institutional setup for protecting consumers exhibit four important shortcomings:

- a. Gaps in the law and regulatory framework
- b. Lack of adequate and effective legal system
- c. Lack of effective and relevant institutions with the mandate to protect consumers.
- d. Lack of stress-free and cost effective redress mechanisms

Furthermore, in the current environment, there is the broad perception by consumers about travesty of justice on grievances. These grievances, in view of the gaps and fragmented nature of the current consumer protection system, make it crucial to design and establish a more effective and cohesive consumer protection framework. It is in this course that the Ministry of trade and industry called for the preparation of comprehensive policy to create a well-coordinated protection for the consumers in Ghana.

2.6.2 Existing Laws of Consumer Protection in Ghana

The existing laws deal with consumer protection with regard to domestic and international business. The call for review is very important. This is because the United Nations Guidelines for Consumer Protection (UNGCP) choose Physical safety of goods and distribution facilities as one of its major focus segments. It also entreated that countries should make it that in ‘advancing consumer interests, particularly in developing countries, governments should give priority to areas of essential concern for the health of the consumer, such as food, water and pharmaceuticals (Research report on consumer protection in Ghana. 2014, p. 17 – 21).

The table 2-1: Outline of the Existing Consumer Protection Laws in Ghana:

<p>a. Laws Regulating Banking and Financial Services</p> <ul style="list-style-type: none">• Banking Act, 2004 (Act 673)• Long Term Saving Scheme Act, 2004 (Act 678)• Insurance Law, 1989 (PNDC L227)• Securities Industry Law, 1993 (PNDC L333)• Venture Capital Trust Fund Act, 2004 (Act 680)• Electronic Banking Act• Non- Banking Financial Institutions Law, 1993 (PNDC L328)
<p>b. Laws Regulating Contracts and Goods</p> <ul style="list-style-type: none">• Contract Act, (Act 25)• Sale Of Goods Act, 1963 (Act 137)• Hire Purchase Act, 1972 (NRCD 292)• Standards Authority Act, 1973 (NRCD 175)• Foods And Drugs Law, 1992 (PNDC L 305b)• Weights And Measures Act, 1975 (NRCD 326)• General Labeling Rule, 1992 (Li 1541)• Protection Against Unfair Competition Act, 2000 (Act 589)• Export And Import Act, 1995 (Act 503)• Export And Import (Amendment)Act, 2000 (Act 585)

Source: Author’s illustration based on data from Consumer International, 2014. Research report on consumer protection in Ghana. pp. 17 – 21.

Table 2-1: Outline of the Existing Consumer Protection Laws in Ghana:

c. Laws Regulating Transactions in Immovable Property

- Mortgages Decree, 1972 (NRDC 96)
- Conveyancing Decree, 1973 (NRCD 175)
- Home Mortgage Finance Law, 1993 (PNDC L329)
- Rent Control Law, 1986 (PNDC 138)
- Rent Control Law, 1986 (Amendment) Act (PNDC 138)

d. Laws Regulating Public Utilities (Electricity, Water and Tele-Communication Services)

- Water Resources Commission Act, 1996 (Act 522)
- Energy Commission Act, 1997 (Act 541)
- National Communications Authority Act, 2008 (Act 769)
- National Information Technology Act, 2008 (Act 771)
- Electronic Communications (Amendment) Act, 2009 (Act 786)
- Electronic Transmissions, Act, 2008 (Act 772)
- Electronic Communication Act, 2008 (Act 775)
- Electronic Communications Regulations, 2011(L.I. 1991)
- Public Utilities Regulatory Commission Act, 1997 (Act 538)

Source: Author's illustration based on data from Consumer International, 2014. Research report on consumer protection in Ghana. pp. 17 – 21.

Table 2-1: Outline of the Existing Consumer Protection Laws in Ghana

<p>e. Laws Regulating Health Delivery and Services</p> <ul style="list-style-type: none">• Traditional Medicine Practice Act, 2000 (Act 575)• Ghana Health Services And Teaching Hospitals Act, 1996 (Act 525)• National Health Insurance Act, 2003 (Act 650)• Pharmacy Act, 1994 (Act 489)• Medical And Dental Decree, 1972 (NRCD 91)• Private Hospitals And Maternity Homes Act, 1958 (No. 9 Of 1958)
<p>f. Laws Regulating Hospitality Service</p> <ul style="list-style-type: none">• Accommodation And Catering Enterprises Regulations, 1979 (L.I. 1205)
<p>g. Laws Regulating Professional Services</p> <ul style="list-style-type: none">• Chattered Accountants Act, 1963 (Act 170)• Professional Bodies Registration (Restoration) Decree, 1979 (AFRCD 27)• Legal Profession Act, 1960 (Act 32)

Source: Author’s illustration based on data from Consumer International, 2014. Research report on consumer protection in Ghana. pp. 17 – 21.

From the table above, it is unequivocal to affirm that the Food and Drugs Law 1992, (PNDC LAW 305B), amended and called Food and Drugs (Amendment) Act, 1996 is one of the important laws in Ghana with regard to consumer protection. The Act polices the standard, quality and safety of goods in Ghana (ibid p. 19– 23).

Section 1 of the Food and Drugs Law 1992 (PNDC LAW 305B) amended and called Food and Drugs (Amendment) Act, 1996, forbids the sale of unwholesome food; it states that a person commits an offence by sales or offers for sale a food, that has in it a poisonous or harmful substance, consists in whole or in part of a filthy, putrid, or diseased substance, adulterated, injurious to health, not of the nature, substance not prescribed by standards. It further states that

in determining whether an article of food is injurious to health, regard should be given not only to the probable effect of that article on the health of a person consuming it, but also on the probable cumulative effect of articles of substantially similar composition on the health. Section 3 of the Act, made provisions specifically on the deception of consumers and says that a person who manufactures, labels, packages, sells or advertises food in a manner that is false, misleading or deceptive as regards its character, nature, value, additives, substance, quality, composition, merit or safety, commits an offence (Research report on consumer protection in Ghana. 2014, p. 23).

2.7 United Nations Guidelines for Consumer Protection

United Nations guidelines for consumer protection (2003), takes into account the interests and needs of consumers in all countries, with special focus on developing countries; recognizing that consumers often face imbalances in economic terms, educational levels and bargaining power. It is a statutory requirement for consumers to have the absolute right access benign products, as well as the right to promote just, equitable and sustainable economic and social development and environmental protection. These guidelines of consumer protection have the following objectives:

- (a) To assist countries in achieving or maintaining adequate protection for the people and consumers
- (b) To facilitate production and distribution patterns responsive to the needs and desires of consumers
- (c) To encourage high levels of ethical conduct by industry players engaged in the production and distribution of goods and services to consumers
- (d) To assist countries in curbing offensive business practices by all enterprises at the national and international levels which adversely affect consumers
- (e) To facilitate the development of independent consumer groups
- (f) To strengthen international cooperation in the field of consumer protection
- (g) To encourage the development of market conditions which provide consumers with greater choice at more affordable prices

(h) To promote sustainable consumption.

General principles of consumer protection

1. United Nations guidelines for consumer protection (2003), requires that governments should develop or maintain a strong consumer protection policy, with consideration to the guidelines set out below and relevant international agreements. In so doing, each government should set its own priorities for the safeguard of consumers in accordance with the economic, social and environmental circumstances of the country and the needs of its population, bearing in mind the costs and effects of the proposed measures.

2. The legitimate needs which the guidelines are intended to meet are the following:

(a) The protection of consumers from hazards to health and safety goods and services

(b) The promotion and protection of the economic interests of consumers (consumer value)

(c) Access of consumers to adequate information to enable informed choices according to wishes and needs

(d) Consumer education, including education on the environmental, social and economic impacts of consumer choice

(e) Availability of effective consumer redress institutions

(f) Freedom to form consumer and other relevant groups or organizations and the opportunity of such organizations to present the views in decision-making processes affecting consumers

(g) The promotion of sustainable consumption patterns.

3. Unsustainable patterns of production and consumption, particularly in industrialized countries, are the major cause of the continued deterioration of the global environment. All countries should strive to promote sustainable consumption patterns; developed countries should take the lead in achieving sustainable consumption patterns; developing countries should seek to achieve sustainable consumption patterns in the development process, having due regard to the principle of common but differentiated responsibilities. The special situation and needs of developing countries in this regard should be fully taken into account.

Policies for promoting sustainable consumption should take into account the goals of eradicating poverty, satisfying the basic human needs of all members of society, and reducing inequality within and between countries. (United Nations guidelines for consumer protection 2003).

Governments should provide or maintain adequate infrastructure to develop, implement and monitor consumer protection policies. Special care should be taken to ensure that measures for consumer protection are implemented for the benefit of all sectors of the population, particularly the rural population and people living in poverty.

All enterprises should obey the relevant laws and regulations of the countries in which they do business. They should also conform to the appropriate provisions of international standards for consumer protection to which the competent authorities of the country in question have agreed. The potential positive role of universities and public and private enterprises in research should be considered when developing consumer protection policies.

2.8 Contemporary Issues on Consumer Safety across the World

The problem of hazardous products such as food, beverages, pharmaceuticals and consumer durables synchronized with goods considered by consumers to be genuine has in recent times become widespread as a result of the burgeoning global trade (Cary Coglianese et al. 2009, p.3). For instance, in the span of two years, consumers in various countries have suffered series of health crises as a result of products imported from the Far East country China:

In 2006, Panama imported from China cough syrup remedy that contained diethylene glycol—a chemical agent for antifreeze—instead of glycerin. Over 250,000 bottles of cold medicine were manufactured with the harmful syrup composite, which fatally poisoned over 100 consumers (Bogdanich and Koster 2008). Bogdanich and McLean (2007), revealed that, the venomous ingredient used for the manufactured of cough syrup formed part of the composite of 6,000 tubes of toothpaste imported and merchandized in Panama.

According to Story (2007), the multinational toy manufacturers retrieved tens of millions of toys. This was a service recovery action to the detection of lead paint / harmful magnetic parts on

many popular toys on display at Barbie, Thomas the Tank Engine and other part of the world were manufactured in China.

According to Bradsher (2007), toy product made in China, exported and merchandized in United States branded “Aqua Dots” and in Australia “Bindeez” was detected to contain beads produced with glue, which when swallowed is harmful, putting many children into comas.

According to the African Press Organization (2015), a survey on counterfeit electrical products revealed major provenance; China 34%, other Asian countries 31%, Middle East 13%, Europe 3%, Brazil 0.2% and Maghreb 1%. These fake products caused heinous damages such as electrocution, death, accidents, loss of value and fire outbreak in households and commercial facilities in Africa.

The press statement by the Ghana Standards Authority in September, 2018, confirmed that, seven out of the sample size of 204 electrical articles examined by the Authority at Opera Square and “Zongo” Lane in Accra were in conformity to the certified standards (www.ghanabusinessnews.com.) - [Accessed on 07.11.2018]. The examination of the imported electrical items, included; wire cables, switches, bulbs and extension boards, in August, 2018 and the failure rate amounted to 96 per cent. In the same survey, 127 pieces of counterfeit footwear were detained, with seven of them conforming to good quality. The articles seized was as a result of a survey codenamed “Quality Police” embarked upon by the GSA, in collaboration with the Bureau of National Investigations (BNI), the Customs Division of the Ghana Revenue Authority (GRA) and the Ghana Investment Promotion Centre (GIPC).

The European Union (EU) in 2014, was in the process of putting embargo on a number of non-traditional exports (NTEs) from Ghana because of contamination of poisonous chemicals, including aflatoxins. The EU issued a number of food safety notifications to the Ministry of Trade and Industry in 2013 in connection with products such as peanut butter (groundnut paste), “agushi” and maize meals, for containing aflatoxin, which causes cancer.

Salmonella presence in cotton seeds, Sudan IV dyes in palm oil, and poor hygienic state of dried fish were detected by the EU to be unwholesome. The European Union (EU) remains the largest export market for the country’s non-traditional products.

The World Bank Group has notified the government of Ghana to strengthen its consumer protection standards to sustain the health, safety and security of consumers. This was published by “The Business and Financial Times” newspaper in Ghana in February, 2017. According to the World Bank Group’s Senior Director of Global Practice on Trade and Competitiveness, Anabel Gonzalez, Ghanaian authorities must commit stern consideration to eliminate the country’s market of fake and substandard goods / services to safeguard the well-being of citizens and foreigners living in Ghana (www.modernghana.com) - [Accessed on 15.11.2018]. The remark was an earnest call for the need to have consumer protection standards conformed to and thinks it is very pertinent to promote the health, safety, security of the consumers.

In 2008, milk and milk products from China, including infant formula, were detected to have of melamine component, a chemical agent for fire retardant had been included as a thickening agent to increase the protein content of diluted milk. The melamine contamination resulted in hundreds of thousands of infections and numerous deaths in China. This led to a substantial product recalls across Asia, the Americas, and Europe (Oster et al. 2008). According to Nestle (2008), a similar case in 2007 involved the importation of pet food contaminated with melamine.

According to Powell (2008), approximately 150 deaths occurred across the world from the contamination of Chinese-manufactured heparin, a blood thinner used for patients undergoing certain types of kidney dialysis and cardiovascular surgeries. The heparin manufactured in China was detected by the U.S. Food and Drug Administration (FDA) to contain a lower cost substance—excessive chondroitin sulfate—that mimics the anticoagulant effects of pure heparin but poses dangerous side effects.

It was estimated that 100,000 homes across United States has the tendency of containing Chinese-manufactured drywall linked to indoor air pollution— specifically “rotten egg” odors— and also the corrosion of copper piping and air-conditioner coils (CPSC 2009; Lee and Semuels 2009; Schmit 2009). Residents and public health authorities are anxious about eye, skin, and respiratory hazards, as well as other health and safety risks, including the probability of fire or shock by corroded piping and wiring.

China is not the only source of alarm about dangerous products. Governments throughout the world have raised safety alarms about products imported from different countries. According to

Dooren and Favole (2009), the U.S. FDA in 2008, barred the importation of over thirty generic drugs produced by Ranbaxy Laboratories Ltd., an Indian pharmaceutical manufacturer.

The need to safeguard consumers from hazardous food, drugs, and other products is very crucial and not limited to imported products. As with the Chinese deaths resulting from the recent melamine contamination of milk products, the citizens of countries that export dangerous products can be affected as those in the importing country (Powell 2008). Furthermore, national regulatory framework for scrutinizing domestic producers to some degree have been in place in different countries for the last century to address the same risks that arise from dangerous imports (Vogel 2007). Even in developed countries with robust regulatory regimes, domestic products can be as dangerous as import (Moss and Martin 2009). The intensity of market rivalry and consumer demands for more affordable goods may lead some producers to compromise safety standards of products made at home or abroad: the extensive recall of peanut-based products throughout the United States in early 2009, for instance, targeted a Georgia-based processing facility of the Peanut Corporation of America (Zhang 2009). When in 2007 the U.S. National Highway Traffic Safety Administration (NHTSA) wanted to recall faulty tires manufactured in China. Aeppel (2007), the main alarm was not different from when NHTSA acted in 2000 against the U.S.-based Firestone Company for faulty tires manufactured at a plant in Decatur, Illinois.

However, the task of protecting consumers from dangerous imports needs special and rigorous analysis in the era of increasing globalization. The safety crises from imported goods are likely to increase as a result of international trade (Cary Coglianese et al. 2009, p. 5 - 6). The world's recovery from recent economic downturn has increased the flow of goods moving across borders. The U.S. economy hinges on over \$2 trillion worth of imported goods yearly, closely 50 percent from Canada, China, Mexico, Japan, and Germany (HHS 2007a). The sheer volume of international trade creates a vast and complex network of the sources of safety problems. Over 825,000 different exporting companies cart products into the United States through over 300 airports, seaports, and border crossings (HHS 2007a), burdening the capacity of national regulatory authorities to scrutinize products at the borders and screen facilities at the site of manufacture.

The profits of international trade are very noticeable: the flattening of trade barriers creates new market expansion opportunities and enhances standard of living by offering more affordable products to consumers. However, global trade also poses some degree of vulnerabilities. The Indian pharmaceutical company cited by U.S. regulating authorities in 2008 for safety problems was also the sole supplier of children's antibiotic to the New Zealand health system (Das 2008). Even a country such as the United States, which has long placed restrictions on the importation of drugs produced from outside its borders (ostensibly for safety reasons), recently relies on imports for over 80 percent of the active pharmaceutical ingredients used by its pharmaceutical companies (GAO 1998). According to Leavitt (2008), the problem of import safety requires a well-crafted policy actions and decisions. The former U.S. Secretary of Health and Human Services, Michael Leavitt, noted that "just as the volume of trade has changed, so must the strategies to regulate safety. Simply scaling up our current inspection strategy will not work".

2.8.1 New Directions in Domestic Regulatory Strategy

The prevailing menace of counterfeiting of virtually most products with high market demand leaves both importing and exporting countries at a dilemma (Cary Coglianese et al. 2009, p. 12). Mitigating the import safety prevalent problem requires innovative concepts. It also calls for stringent analysis of the modus operandi of organized crime groups' activities. It is important to state that import safety is a menace with is beyond the ambit of the regulatory framework; it's a trade problem, a domestic problem and at large a global problem.

The current strategy by national and international organizations to salvage the situation will not yield the expected results because these organizations usually respond to threats rather than finding threats. A cross section of countries usually improve the enforcement framework with the limited resources instead of instituting a preempt action. Even the premise of encouraging consumers to exercise due diligence with respect to product examination such as better labeling on products; risks, origins, and ingredients are very difficult to comply with due to various dimensions of vulnerability. Stringent policies will require crafty and competent regulatory institutions to embark on a thorough campaign to mitigate the problem. In the United States, this kind of institutional morale is usually elusive due to the discrete works by agencies with overlapping and imperfect jurisdictions (GAO 2007; O'Reilly 2004). Virtually a number of

different entities at the federal level bear responsibility for food safety alone (GAO 2008a). The general precepts for restructuring might include: centralization of authority (e.g., the same agency should inspect “the entire pizza,” not just the cheese underneath the pepperoni), establishment of robust and shared databases and integrated communications systems and separation of organizational units that promote and subsidize industries from those that manage risks.

The cartload, heterogeneity, and varying nature of products that enters the global trade network make it almost impossible for governments to control products through stringent and conventional methods (Cary Coglianese et al. 2009, p. 13). Thus, imposing mandates or liaising with importers to set up a secondary regulatory system to safeguard consumers.

2.8.2 Toward a Global Consumer Protection System

The issue of import safety with regard to trade liberalization and globalization presents an ambiguity. Trade imports can originate from every side of the globe, the objective is to provide safety goods to consumers and also build lasting relationship with suppliers (Cary Coglianese et al. 2009, p. 13 - 14). Starting this from the scratch to a multinational status is a hard tussle. However, doing this with cognizance to cross cultural literacy and fostering product safety make consumers to embrace the brand (Esty 2006). The introduction of national products into global markets poses a daunting task due to distinct business environment. The most effective solution is for governments and private organizations to work concertedly to achieve excellence. This is because the organized crime activities are perpetuated by the private individuals. Despite, the likely lapses in this cooperation, it is believed to achieve a high national and international success. Subsequently, in a world of food defects, drug poisonings, and producers who are to some extent not held liable to the harm inflicted on consumers, due to gaps in regulatory framework in marketplace does little to safeguard consumers.

The development of regulatory frameworks to import safety problems, must keep a balance between the goal of global free trade and the safety demanded by domestic consumers. The WTO was setup to boost free trade among member nations (Nedzel 2008), but the setting up of domestic safety requirements on imported products would seem opposing to the organization’s tenets. It is the responsibility of the WTO to reconsider that its assertion that countries have vast

differences in risk management (WTO 2000–2001) with the emphasis on harmonization of regulatory standards so as to facilitate international trade (WTO 1994). It must also make provision to help member countries in combating counterfeiting and piracy.

The global coordination by member states to mitigate this menace must into account the various steps in the supply and value chain which leads to consumer dissatisfaction and harm. While detention at the customs checkpoints appear to be effective, it does not really alleviate the problem. As a result some reputable international institutions have started to prevent the manufacture and dissemination of dangerous products from the base, even at international borders. The United Nations Technical Capacity Program is a classic example for the design and development of abilities in the developing world (WHO 2003).

Other concerted attempts to solve the problems of import safety result in using the resources to enhance domestic reactions to hazardous imports. For example, law application and collaboration does not need international harmonization; it rather enables the ability of governments to supervise the safety of importations and also to pursue reported cases beyond the jurisprudence. The United States has ardently fostered this cooperation with Chinese government; legal understanding on food, drug, medical device, and animal feed treaties in the past decade (HHS 2007b). Some importing countries have developed a strong legal agreement with regulators of exports in foreign jurisdictions. For instance, the FDA communicated and educated foreign food inspectors on safety standards. This is epitomized in the case of China (Fan 2008). This enables member countries to build lasting consensus on product specifications, standards and harmonization.

The optimize use of international networks is a very significant approach to augment the control measures of domestic inspectors. This coordinated management efforts helps to share experience on prevailing issues and vital information to achieve a common goal of safeguarding consumers (Slaughter 2005). There are different types of regulatory networks mandated to mitigate import risks. A classic example is the Codex Alimentarius Commission (international organization in charge of global food safety standards) and the International Consumer Product Safety Caucus - (a transnational organization with members from domestic inspectorates) (DeWaal and Brito 2005). These networks, and other legal heads of agreements and harmonized governments' policies, to some extend helps to curb the menace of import safety thought there are some

challenges (Abbott and Snidal 2006). The international strategies to safeguard consumers who are exposed to global business outlines some essential queries: the issue of efficacy and the effectiveness of the strategies in the business environment. When apply international absolute or binding law. When is it appropriate to use soft, nonbinding law and concerted governance? Under what condition is domestic reactions deemed appropriate than international actions, and vice versa. The concern of equity on the outcome. How will the negotiated pie be shared between the domestic and international networks in terms of benefits and losses? How to merge the demands of the developed countries with the realities of the developing countries. The other concern has to do with accountability; defining the market segment that will benefit from the international import safety system.

2.8.3 Advancing Excellence in Global Consumer Protection

The UN Guidelines for Consumer Protection over the years have facilitated the adoption of consumer protection frameworks in different countries (www.consumersinternational.org) – [Accessed on 01.03.2019]. Consumers International from 2012 through to 2015 has made enormous input to the maiden amendment of the Guidelines which was finally approved by the UN General Assembly. Consumer International is actively pushing for the implementation of the Guidelines across the globe. In 2016, it collaborated with members to encourage the Intergovernmental Group of Experts (IGE) which was set up after the review and also monitor the progress of the implementation. It is the responsibility of governments to create the awareness of consumer safety with emphasis on rights and responsibilities. In this vein, it launched a fresh campaign in 2016 that requested for the United Nations to endorse World Consumer Rights Day.

Consumer International is striving to mitigate the heinous problems associated with globalization and consumer safety. Below are cross section of essential concerns flagged by the institution for ardent consideration by national governments, international organizations and private companies;

Antibiotics off the Menu

By 2050, Consumer International has predicted that 10 million people will die yearly as a result of infections from drug resistant. This is as a result of the abuse of antibiotics in agriculture. Approximately two-thirds of the world's antibiotics are given to farm animals, to facilitate the

growth period and to mitigate traumatic and unhealthy farm conditions, rather than to treat disease.

In 2016, CI campaigned for three of the world's biggest restaurant chains, KFC, Subway and McDonald's, to make pragmatic efforts to halt sourcing meat from animals routinely given antibiotics mentioned on the World Health Organization's data of important antimicrobials.

In 2016, CI secured a further three years' sponsorship (2017- 2019) from the German Environment Ministry (BMUB) to push the UN's 10YFP Consumer Information Programme for Sustainable Consumption and Production. Consumer International coordinates with governments, enterprises, educational institutions and civil societies to create awareness of product safety and sustainability. It also aided the execution of projects in 15 countries, and reported on product durability and behavioural science. A campaign goal was attained in 2016 when Nissan publicized the specific time it would stop the manufacture of Tsuru, a car that had received zero star safety rating (www.consumersinternational.org) – [Accessed on 01.03.2019]. The Tsuru is manufactured in Mexico. Consumers International and its members initiated a campaign on zero star cars, including the Tsuru, in 2015, in partnership with Latin New Car Assessment Programme (NCAP) and Global NCAP.

During that time, CI members in USA, India and across Latin America, requested global car manufacturers, including Nissan and General Motors, to modify the practices, and also created awareness for consumers to know the danger of zero star cars. It also pushed the campaign for a new UN declaration calling on countries to adopt UN car safety standards.

In 2016, CI welcomed two significant achievements in its campaign to sojourn inappropriate sales motivation packages for banks' marketing staff, as these packages can lead to sales deception of financial services. The campaign was initiated in 2015 with the publication of a new report 'Risky Business: the case for reform of marketing and sales motivation packages in banks' which comprised international research from regulators, banks and consumer organizations. This raised the alarming situation for the formulation of new guidance from the European Banking Authority and FinCoNet, the international network for financial consumer protection, which encourage banks to review such packages to avoid future loss to consumers of financial services.

Boeing executives have offered a scanty explanation for the company's best-selling plane in the world, the 737 MAX 8, went down twice in the past several months, leaving Jakarta, Indonesia, in October and then Addis Ababa, Ethiopia, in March. Executives claimed Wednesday, March 27, 2019, that the root cause was a software problem — and that a new software upgrade fixes it (<https://www.vox.com>) – [Accessed on 31.03.2019]. However, this explanation contradicts what seasoned reporters in the aviation press have discovered since Asia, Europe, Canada, and then the United States grounded the 737 MAX 8 planes.

The effective approach to enhance products and service quality to guarantee consumer safety and satisfaction is to consolidate public - private partnership. This will serve as a robust strategy and also a balance system to mitigate product failures at the prototype and certification stages.

2.9 Negative Effects of Counterfeit Goods

The prevalence of counterfeit market across the globe is very disturbing and inimical to globalization. It is important to analyze the strong negative effect on the global economy. Certainly, many consumers have suffered financial and non-financial losses by inadvertently purchasing counterfeit products. This harm can be small as the loss of a few euros and unsatisfactory product effect and in worse case irreparable injury to physical well-being or death. The World Health Organization (WHO Fact Sheet No. 275) made the assertion that a high percentage of medicines merchandise in Africa, parts of Asia and Latin America are synonymous to Spurious/falsely labeled/falsified/counterfeit (SFFC) medicines. The US Center for Disease Control states that the global estimates of drug counterfeiting are uncertain, depending on region. However, estimations range from 1% of sales in developed countries to over 10% in developing countries. Green (2011), claims that, in specific regions in Africa, Asia, and Latin America, likelihoods of purchasing a counterfeit drug can be above 30%. In 2010, the United Nations Office on Drugs and Crime drew the world's attention on the growing anxiety about counterfeits products getting to consumers. This deception is widespread—consignments which were to be unloaded to 140 countries were detained in 2008. United Nations Office on Drugs and Crime (2010), states that, the packaging of a product cunningly, guarantee's implicit quality assurance and a legal line of accountability that consumers have taken for granted. The figure 2-15 outlines the negative effects of counterfeiting on the global economy.

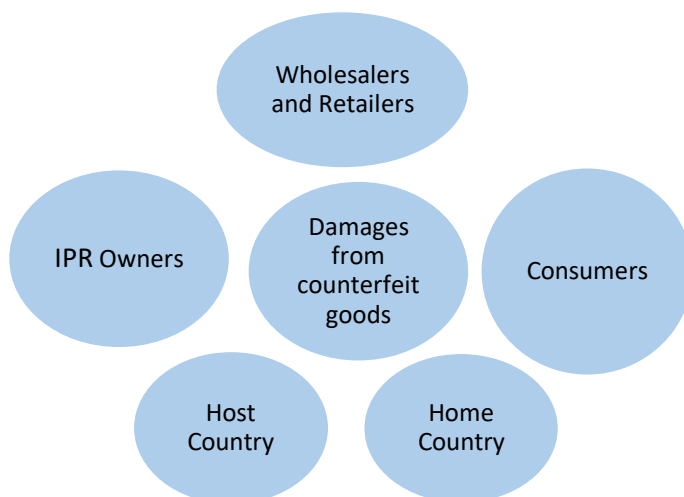


Figure 2-15: Damage from counterfeit goods market

Source: Author's illustration based on data from United Nations Office on Drugs and Crime 2010, p. 10).

The figure above outlines the various damages caused by OCGs involved in counterfeit goods. It spans from IPR losses to consumer harm. It's clear that governments are losing revenues and at the same time allocating huge subsidy to health care of the citizenry caused by counterfeit goods. The decline in turnover of legitimate businesses and slow sales trend of wholesalers and retailers.

In recent years, negative news from China highlighted that the problem of counterfeit is very heinous. About a week cough syrup comprising ethylene glycol was identified as liable for the deaths of hundreds of people in Panama and the Dominican Republic, toothpaste contaminated with the same chemical was found on three continents (Castle 2007), and an explosion of mobile phone killed a young man in western China. Phone manufacturers, Motorola and Nokia, blamed counterfeit batteries (Barboza 2007). These episodes followed the contaminated pet food problem which surfaced in the United States in 2007.

The problem of counterfeiting runs through luxury products to virtually every product with a high demand across the globe. US senate Armed Services Committee (2012), reported that the US military has had incidence of counterfeit goods. There was a case of suspicion of electronic components procured to the military for several weapons systems, such as military aircraft C-17

and the Marine Corps' CH-46 helicopter, as well as the Army's Theatre HighAltitude Area Defence (THAAD) missile defense system.

Home countries (provenance of counterfeiting) and companies are usually struck with the menace of counterfeit products, exports seizures, taxes, and loss of employments. Though host countries may experience certain short-term benefits but will ultimately become unattractive for Greenfields investment and international business. There is a growing concern that exports should be reduced from countries identified for defective and counterfeit goods especially for pharmaceutical products (OECD 2007d). Host countries also suffers tax losses and extra costs for combating counterfeiting activities. The home and host countries are susceptible to environmental effects; the destruction of pirated goods, strong negative effects on consumers. A good incidence, is the use of counterfeit fertilizers which resulted in serious damage to harvests areas in China, Russia, Ukraine, and Italy (OECD 2007b). Various effects of counterfeit products can cause risks to consumers and loss of confidence in the governments.

2.10 Challenges in Fighting Product Counterfeiting and Piracy

The move online

The swing to online commerce in counterfeit goods pushes new problems for governments. The internet permits organized crime groups to employ international operating methods (2017. Situation report on counterfeit and piracy in the EU. p.42). This increases the task for cross-border examinations and prosecutions in multiple jurisdictions. Products sold online are normally shipped or delivered in parcels via mail services. This makes it difficult to identify counterfeit goods in the traffic of parcels. Organized crime groups identify this opportunity and exploit the benefit. In sending counterfeit goods, criminals use fraudulent characters. This confounds functional and monitoring activities such deliveries and examination by law enforcement.

Techniques

In recent years, criminal groups perpetuating IPR crime have become aware of the law enforcement techniques. They succeed in the use of mainly customary countermeasures. This is done by securing communications frequently changing contact numbers, the use of international SIM cards or pay mobile cards, and encrypted communication devices. They occasionally also

communicate with different languages or codes. This reduces the degree of suspicion by law enforcement authorities. For example, OCGs often separately import and transport different parts of counterfeit products to be assembled in a different location. Counterfeit goods are also shipped in combination with genuine products. To further obscure the dubious activities, criminals regularly change vehicles, often hired or leased using fraudulent documentations, and rely on cash settlements to avoid traces.

Powers

In some MS and countries, the respective authorities have limited powers to successfully tackle counterfeiting (2017. Situation report on counterfeit and piracy in the EU. p.43). Under the criminal procedures, seizure of counterfeit goods or investigations into IPR crime cannot be made without the right holder's verification of the IPR infringement. IPR holders might also choose a civil procedure. A small number of criminal examinations may result in a disjointed intelligence picture of IPR crime. The restricted enforcement powers within the FTZ is very challenging. Lack of modern resources also hinder the efforts of law enforcement to combat these crimes.

Acceptance

In recent years, consumers of counterfeit goods have high level of tolerance towards these products. This is as a result of alleged low financial damage and obvious cultural acceptance of the phenomenon, sometimes consumers avoid reporting these events to the appropriate authorities for sanctions and remedy. Subsequently, these cases persist not examined. This is because of limited satisfactory enforcement authorities and lack of testimonials combined with low sanctions for IPR crime.

Priorities

The danger and stoppage of terrorist acts in many forms, as well as addressing other serious organized crimes, have overshadowed the menace of counterfeiting. IPR criminality leads the chart as the most lucrative criminal enterprises, and proceeds generated have been wired to other organized crime activities (ibid. 43).

Customs focus

The number of total detentions at the external borders has been stable in recent years, an indication that customs will be working close to optimum capacities assigned to IPR enforcement. But, the inadequate customs resources, and the challenge of processing increasing numbers of packages, could cause counterfeit products entering the EU to remain stable (2017. Situation report on counterfeit and piracy in the EU. p.44 - 45).

Penalties

Criminal sanctions for trademark and copyright infringements are currently under the jurisprudence of countries and member states and the measures for applying these sanctions differs. The average years that a defendant can be jailed for trademark infringements is four years. The average maximum fine (from 12 MS) is approximately EUR 126 691. For copyright offences, the maximum jail term on average is four years and the maximum average fine is EUR 120 183 (ibid. 44).

Storage and destruction

Upon seizure of IPR-infringement, the consignment which contains the counterfeit products be destroyed, after is has been stored for investigations and display as evidence in court judgment. More than 90% of the seizures made by EU customs in 2015, the counterfeits were either destroyed, and in extreme circumstance the rights holder pursued a court case to register IPR infringement, eventually ending in destruction, and financial penalty (ibid. 44).

The destruction of counterfeit and pirated goods after a court proceedings are borne by member states. However, when the case of counterfeiting is within the mandate of customs the enterprise whose intellectual right is infringed bears the costs of both storage and destruction. European Union's Regulation No 608/2013 endeavored to mitigate the disparity in storage and destruction costs and procedures.

2.10.1 Current Measures Formulated to Mitigate Counterfeiting and Piracy

In spite of the multifaceted challenges of counterfeiting, the EU has put in place innovative measures to alleviate the situation (EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.46 - 47).

The productive launch of the combined OECD-EUIPO report on Trade in Counterfeit and Pirated Goods (the 2016 Study), has generated the attention of stakeholders. Complementary themes which were scrutinized within 2017 to 2018 included; the task of FTZs in the development of counterfeiting, mail and courier/express delivery streams, and analysis of counterfeiting via e commerce. In addition, a sample of detailed quantitative inspections in counterfeiting and pirated products were conducted. The results from the inspections were helpful to closing the intelligence gaps of IPR.

Europol Intellectual Property Crime Coordinated Coalition (IPC3) and EUIPO enforcement tools: sustaining the effort enforcement authorities to mitigate the menace of counterfeiting and piracy online and offline platforms. The IPC3, situated at Europol and financed by the EUIPO, offers functioning and practical support to enforcement authorities and related partners in the EU and across its borders. It also enables and directs cross-border investigations, controls and reports digital crime trends and evolving modi operandi, generate awareness and delivers training to enforcement officials on combating of counterfeiting. Presently, the IPC3 supports over 50 IPR-infringement cases, all categorized as high priority.

Enforcement Database (EDB)

The EDB is erected on prevailing EUIPO databases, such as TM view for trade mark authentication and Design view for registered Community designs. It is sanctioned by the European Commission, which has decided to bond it to the EU customs' secure network. Customs organizations of the 28 MS presently use the EDB, as well as national police authorities. MS can retrieve information and product particulars, making it stress-free to detect counterfeits. The database is joined with the EU law enforcement agency, Europol, and the European anti-fraud office, OLAF. Enterprises from various sectors of industry doing business in the EU have signed unto the database — from small businesses to multinational corporations.

Anti-Counterfeiting Intelligence Support Tool (ACIST)

The EUIPO, coordinates with EU enforcement organizations to launch best practices in data pool across the EU (EUROPOL/EUIPO, 2017. Situation report on counterfeit and piracy in the EU. p.46 - 47). ACIST changes the collected data into a harmonized format for ease of comparison and aggregation. Presently, ACIST provides detailed information on counterfeiting and pirated goods held at all EU MS borders. In addition, it delivers information on the national markets of 17 Member States. ACIST is a worthy source of information to present a complete picture of IPR infringements across the EU.

Virtual Training Centre (VTC) on Intellectual Property Right

This is grounded and situated on the CEPOL e-net, as of October 2017, the VTC on IPR delivers learning content and other valuable material delivered by EUIPO and related partners. It is intended for students from law enforcement authorities of the EU Member States enforcing IP rights at national and local level (police and customs officers, prosecutors, judges and market inspectors). The learning content is organized in knowledge zones and stages: basic, intermediate and advanced. The VTC on IPR also have a part committed to teaching the trainers. The learning content also offers; e-learning segments, live and recorded webinars, presentations and video materials.

2.11 Consumer Vulnerability across Key Markets in the European Union

This presents reviews of incidence of a number of vulnerability indicators reflecting 5 different vulnerability dimensions, namely:

Dimension 1: Heightened risk of negative outcomes or impacts on well-being.

Dimension 2: Having characteristics that limit ability to maximize well-being.

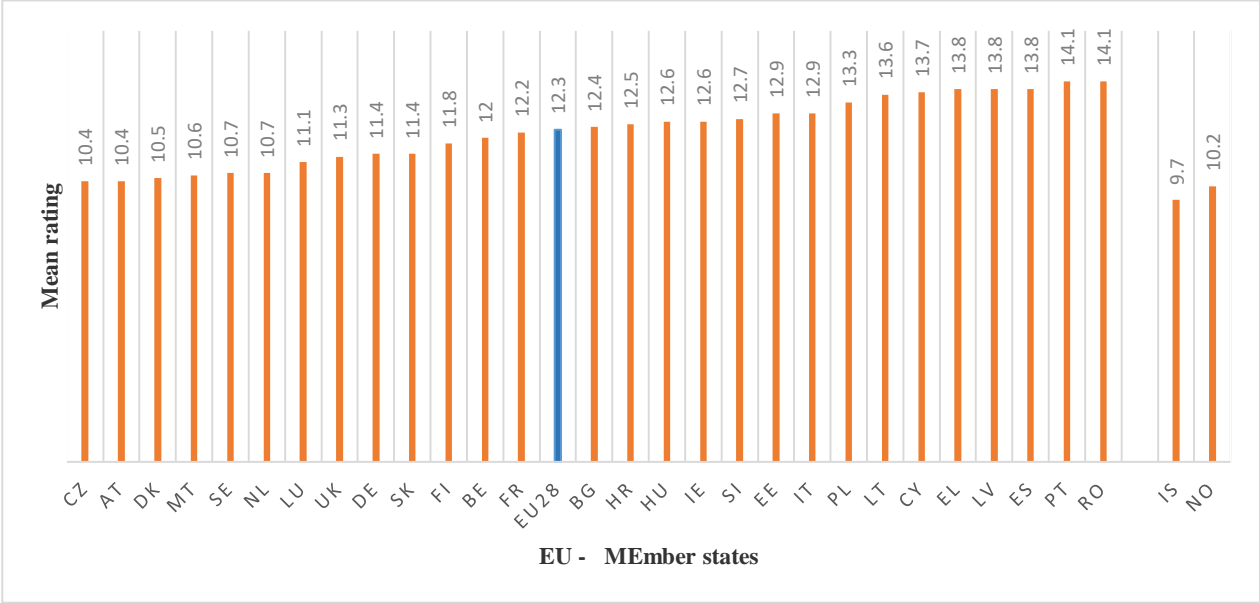
Dimension 3: Having difficulty in obtaining or assimilating information.

Dimension 4: Inability or failure to buy, choose or access suitable products.

Dimension 5: Higher susceptibility to marketing practices.

Analysis of overall incidence of vulnerability – all vulnerability dimensions EU28 MS and Norway and Iceland. This provides for each of the indicators a snapshot of the share of vulnerable consumers in the EU28 MS population, and an overview of the extent to which

vulnerability incidence varies across Member States. The figure 2-18 below outlines the Mean combined rating of extent to which consumers feel vulnerable - EU28 Member States and IS and NO:



Note: Results weighted using cross-country weights for the EU28 measure and country weights for the country measures. EU28 + NO and IS N = 26,653.

Figure 2-16: Mean Combined Rating of Extent to which Consumers Feel Vulnerable - EU28 Member States and IS and NO

Source: * Author’s illustration based on data from European Commission report on Consumer vulnerability across key markets in the European Union. 2016 p. 111, London Economics analysis of survey data.

The figure above shows the alarming trend of consumer vulnerability of EU member states as of 2016. The dimensions of vulnerability spans from; limited consumer access, consumer dissatisfaction, negative consumer experience, ad hoc after sales service and redress, information asymmetry to health issues. This phenomenon is experienced by consumers in every economic sector that is education, agriculture, manufacturing, engineering, health, service, etc. It is also clear that the digital globalization trend has exacerbated these problems.

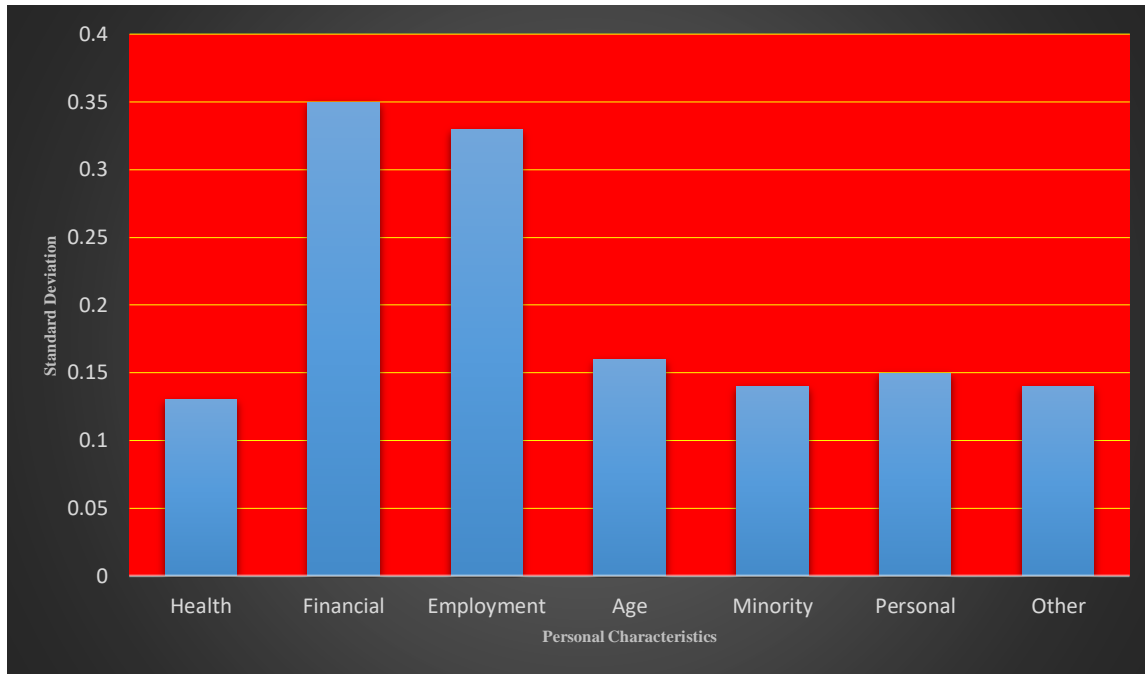


Figure 2-17: Standard Deviation of vulnerability Perception Factor (rated on a scale of 1 to 4) by Personal Characteristics – EU28 Member States

Source: * Author's illustration based on data from European Commission report on Consumer vulnerability across key markets in the European Union. 2016 p. 110, London Economics analysis of survey data.

The figure above confirms the confidence level of consumer vulnerability of EU member states as of 2016. The values of standard deviation from health to personal consumer vulnerability to other dimensions of vulnerability makes a real claim that consumers are prone to dimensions of vulnerability spanning from; bargaining power, limited consumer access, consumer dissatisfaction, negative consumer experience, ad hoc after sales service and redress, information asymmetry to health issues.

2.12 Discussions on Globalization and Consumer Safety

The problems associated with globalization and consumer safety are very heinous with inimical ripple effects on the world's economy. The following are measures to mitigate the prevailing problems:

Firstly, stringent monitoring of digital globalization (e commerce). Global standard regulatory procedure for digital globalization. This will help to prevent organized crime groups who takes

opportunity of the digital technology to cause harm to consumers. Secondly, international organizations that championed the trade liberalization drive must take stringent measures to curb the menace of counterfeit goods by coordinating with appropriate authorities in the provenance of counterfeit products. Thirdly, The need for more research and development in green marketing to mitigate the phenomenon of climate change. Fourthly, World Customs Organization must draft a global standard operating procedure for all countries to mitigate the problem. In addition there should be a central database for all customs jurisdictions in the world to have a more accurate data on the prevalence of counterfeit products worldwide. Fifthly, Strong and unique security features on all products (packages) for various regional blocks to help authentication of product quality and safety. Sixthly, there should be a robust supply chain monitoring system to detect substandard, defective and adulterated components. Seventhly, sanctions to shippers and freight forwarders who transport defective and counterfeit products.

Eighty, display of organic and inorganic labels on products to enable consumers to have a profound information (information symmetry) on what they are buying. Ninthly, International organizations like UN, WHO, WTO must roll out a policy action plan to control the use of excessive chemicals and other antibiotics in products to help reduce perennial health issues.

Tenthly, severe sanctions on manufacturers, distributors and retailers who deal in counterfeit and defective products. Eleventhly, there should be a quarterly consumer research on products in trade, retail outlets and warehouses to confirm the sampling parameters of the population of products certified by various Customs checkpoints in the world. Twelfthly, all manufacturing companies must keep proper record of components supplying companies to help regulatory authorities to mitigate unwholesome raw materials and semi process goods moving through the supply chain.

The first chapter has provided a detailed review of literature on globalization and consumer safety and the effect on the world's economy and environment. This chapter has analyzed current data and events on globalization and consumer safety prevailing on the world economy, the next chapter will provide a detailed description of the methodology for the research, establish the logical deduction to test the hypothesis. It will also outline the main data gathering instruments for the primary data.

3. RESEARCH METHODOLOGY, DATA ANALYSIS AND PRESENTATION

This chapter presents the primary and secondary data collection, analysis and presentation of the findings on globalization and consumer safety. The findings from the data analyses will help the author to make conclusions which will prove/disprove the hypothesis of the research. The author used a purposive sampling method to draw a sample size of thirty (30) respondents comprising ten (10) management and twenty (20) operational staff of customs Ghana for the questionnaire response. The author sent the well-structured, closed and open-ended questionnaire to Customs Ghana, via the email to collect the primary data to affirm the degree of counterfeit and pirated goods that are being merchandized on the Ghanaian market as a result of globalization and trade liberalization agreements signed with the World Trade Organization and also bilateral agreements with other countries across the world. The negative effects of these products and services on consumers, environment and government were also analyzed. To establish a strong validity and reliability of the findings from the qualitative data analysis, the author, used a probabilistic simple random sampling to collect secondary data on global merchandise (exports) and counterfeiting (2008-2018) from World Trade Organization (WTO), OECD, EU and US customs and analyzed to make generalization and justification. The author employed the following statistical techniques; Time Series and Confidence Level techniques in the data analyses to accept or reject the null hypothesis of the research at 5% level of significance or 95% confidence interval. The historic data (2008-2018) from World Trade Center will help to display the movement of counterfeiting vis-à-vis world merchandize (export) and more importantly, make some informed forecast based on the trend line.

3.1 Research Methodology and Design

The aim of the research is to establish whether the ports of Ghana are prone to counterfeiting and pirated goods as a result of globalization and trade liberalization. The findings from this research will shape future decisions, policies and procedures with regard to globalization and consumer safety in Ghana and across the globe.

In a research study a quantitative, qualitative or mixed-methodology approach can be employed to enhance the reliability and validity of the findings to make a generalization (Creswell, 2002; Saunders et al, 2003). Quantitative approach centers on the custom of numerical data analysis; detailed quantitative data analysis aims to establish the relationships/trends of events to test the

hypotheses. At the other hand, qualitative approach, centers on intuitive judgment based on observation and experience of events. In addition, qualitative data provides the opportunity for comprehensive perspectives of a phenomenon under research study (Saunders et al, 2003). The qualitative approach usually gathers data via observations, interviews, and administration of open-ended questionnaires. This approach of data analysis usually employs coding and classification of responses based on the similarity and content. With respect to this research, a template analysis (Brooks and King, 2014) was employed for the analysis of data; under this type of analysis, qualitative data is organized and analyzed using pre-determined themes in order to ease the convergence/divergence of responses. As the research seeks to provide answers to the problem statement and also prove/disprove the stated hypothesis, the author made use of these themes for analyzing and presenting the collated data. Against this background, the author employed a mixed-methodology approach for the research. This implies the use of both qualitative and quantitative methods for the data collection and analyses of the research; the benefit of this approach is the combination of the strength and advantages of quantitative and qualitative methodology which makes the findings more reliable and the ease of generalizations (Creswell, 2002). To form a strong foundation to validate the findings from the qualitative analysis the author employed inferential statistical techniques; Time Series and Confidence Interval techniques to analyze the secondary quantitative data to establish the degree of counterfeiting and piracy on the EU/US markets.

The research design of qualitative and quantitative methods for the data collection is outlined before:

Table 3-1: Primary and Secondary Research Framework

Qualitative Method	
Purpose	To prove or disprove the hypothesis of the research
Research Tool	Structured questionnaire (open and closed ended)
Type of Data	Primary qualitative data from Customs, Ghana
Sampling Technique	Purposive (non-probabilistic) sampling

Sample Size	Thirty (30) staff (operational and management) of Customs Ghana
Data Analysis	Thematic Analysis (Kings, 2014)
Quantitative Method	
Purpose	To augment the outcome of the qualitative data and more importantly help in generalization of the findings
Research Tool	Online database search
Type of Data	Secondary quantitative data of world's exports from WTO and counterfeit seizures in EU/US External Borders
Sample Size	World's export and EU/US (2008-2018)
Sampling Technique	Simple Random samplings
Data Analysis	Inferential Statistics; Time Series, Confidence Interval
Triangulation	Comparison of findings from primary qualitative and secondary quantitative data
Discussions	The findings; findings from previous research, journals, academia and the future research direction. What could be done to mitigate the problem?

Source: Author's illustration based on data from <http://www.socialresearchmethods.net>

The table below outlines the trustworthiness of findings from qualitative and quantitative research method:

Table 3-2: Trustworthiness of quantitative and qualitative research methods

Quantitative Research	Qualitative Research
Internal Validity	Credibility
External Validity	Transferability
Reliability	Dependability
Objectivity	Confirmability

Source: Author’s illustration based on data from <http://www.socialresearchmethods.net>

The trustworthiness of the qualitative data analysis will give a detailed perspective of the research problem. This will infer for a quantitative research to ascertain the magnitude and effects of the problem. Hence, the findings from both methodology will inform stringent policy actions and statutory amendments to mitigate problem.

3.2 Secondary Data Analysis, Hypothesis Testing and Presentation

The Time Series statistical technique, was used to outline the trend of global merchandise (exports) and counterfeiting goods seized at the EU/US borders by customs authorities. In addition the confidence interval technique was employed to establish the parameters of the unknown population of counterfeit goods worldwide. Based on the graphical presentation, it is clear that the phenomenon of counterfeiting is growing rapidly and it’s likely the trend will increase. In this regard, international organizations should foster a common purpose and outline stringent measures to mitigate this menace enrooted in globalization.

Table 3-3: The Value of World Merchandize (export) and No. of Seizures at the EU/US External Borders by Customs Authorities (2008 - 2018)

World Export (X) ('000)	No. of Seizure of Counterfeit and Pirated goods in EU/US (Y) ('000)	X² ('000'000)	Y² (000)	XY ('000)	(X - \bar{X})	(X - \bar{X})²
24325.8	64.37	591744.55	4143.49	1565.85	-33.34	1111.56
20044.5	58.41	401781.98	3411.73	1170.79	-39.3	1544.49
23466.5	99.07	550676.62	9814.86	2324.83	1.36	1.85
27645.2	116.05	764257.08	13467.60	3208.23	18.34	336.36
27996.3	113.32	783792.81	12841.42	3172.54	15.61	243.67
28896.7	111.22	835019.27	12369.88	3213.89	13.51	182.52
18757.0	118.33	351825.04	14001.98	2219.52	20.62	425.18
16303.0	109.96	265787.80	12091.20	1792.67	12.25	150.06
15828.0	94.74	250525.58	8975.67	1499.54	-2.97	8.82
17516.0	91.58	306810.25	8386.89	1604.12	-6.13	37.57
$\sum x = 220779.1$	$\sum y = 977.06$	$\sum x^2 = 5102220.98$	$\sum y^2 = 99504.72$	$\sum xy = 21771.98$		$\sum (x - \bar{x})^2 = 4042.08$

Source: Author's illustration based on quantitative research data from * <https://www.wto.org>, <https://www.cbp.gov>, <https://www.ec.europa.eu>.

The above table outlines the computations employed to establish the *confidence interval* based on the number of seizure at the EU/US external borders by customs authorities (2008-2018).

Table 3-4: Confidence Interval Analysis of Counterfeit and Pirated Goods Seizure at the EU/Us External Borders by Customs Authorities (2008 – 2018)

Confidence Interval		
Counterfeit and Pirated Goods	Confidence Interval (CI)	Counterfeit and Pirated Goods
	Confidence Interval (CI)	P [78.080, 117.340]
	Level of Significance 5% (t-distribution)	2.78
	Mean	97,710
	Standard Deviation	21,190
	Standard Error	7,063.33
	Margin of Error	19,636.06
	n	10

Source: Author’s illustration based on quantitative research data from * <https://www.cbp.gov>, <https://www.ec.europa.eu>.

The table above shows the confidence interval of the number of seizure in the EU/US external borders by customs authorities. The secondary data from the EU/US was employed due to the delay, completeness and accuracy of data from Customs, Ghana. This statistical analysis can help to envisage the counterfeiting activities prevailing at the various checkpoints / ports in Ghana and also across the continent of Africa. It is also essential to state that, the scope of the research required analysis of counterfeiting across the largest economies in the world.

Interpretation of Results

The confidence interval analysis (5% significance level) of counterfeit and pirated goods at the EU/US customs showed **(78,080 and 117,340) detention cases**. This gives a strong indication to the validity and reliability of the findings from the primary data collected at customs Ghana.

This means that, the researcher is **95%** confident that the true value of μ (**population mean**) of counterfeit and pirated goods lies between **78,080 and 117,340 detention cases** at the EU/US external borders. It is therefore, factual to state that the activities of counterfeiting and piracy is growing at a fast rate. This requires robust and coordinated management to combat the menace.

Table 3-5: Time Series Analysis (3-year moving average) - no. of seizure of Counterfeit and Pirated Goods at the EU/Us External Borders by Customs Authorities (2008 – 2018)

Year	US no. of counterfeit cases	EU no. of counterfeit cases	US 3-year moving average	EU 3-year moving average
2008	15000	49381	-	-
2009	15000	43572	16666.67	57355
2010	20000	79112	20000	71,312.67
2011	25000	91254	22500	86946.33
2012	22500	90473	24000	89527
2013	24500	86854	23166.67	90840.33
2014	225000	95194	25333.33	87715.33
2015	29000	81098	27686.67	79825.33
2016	31560	63184	31567.67	67238.33
2017	34143	57433	-	-

Source: Author's illustration based on quantitative research data from * <https://www.cbp.gov>, <https://www.ec.europa.eu>.

The table above shows the 3-year moving average of counterfeiting and pirated article detained at the external borders of EU/US by customs authorities. This will enable appropriate organizations to forecast the trend of organized crime activities and more importantly the modus operandi used to process and transport these items. It will also enable generalization of the phenomenon across other emerging economies like Africa.

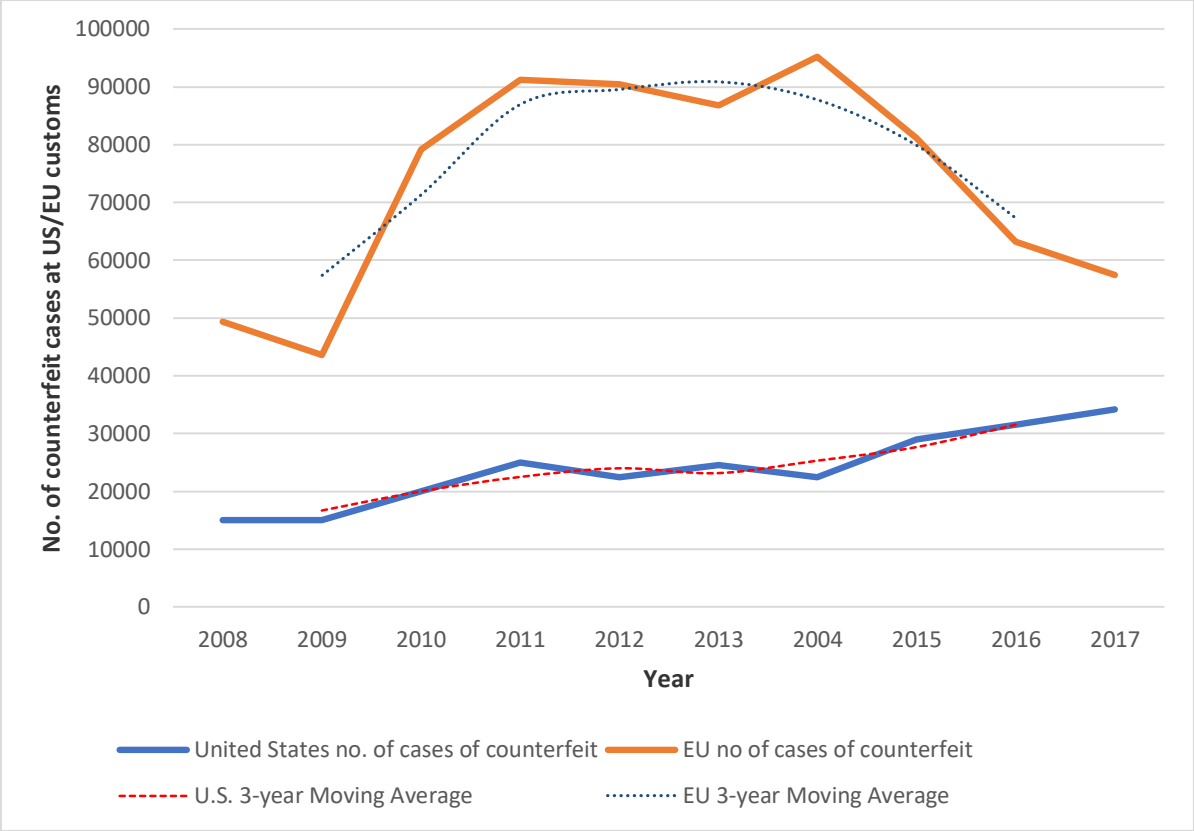


Figure 3-1: Seizure of counterfeit and pirated goods by no. of cases at the EU/US External Borders by Customs Authorities (2008 – 2018).

Source: Author’s illustration based on quantitative research data from [*https://www.cbp.gov](https://www.cbp.gov), <https://www.ec.europa.eu>.

Interpretation of Findings from Secondary Data Analysis

The import of counterfeit goods are worth nearly half a trillion dollars or 2.5% of global imports with US and EU economy being affected the most. The value of counterfeit import in the world trade is at \$461 billion, compared with total import of 17.9 trillion in 2013. *(OECD & EUIPO 2016).

From the trend analysis presentation the counterfeit activities have escalated in the US and EU under the period of review. This is confirmed by a 1.9% of counterfeit imports to EU in 2008 to 5% in 2013. The inferential deductions from the above trend forecast an increase in the counterfeit and piracy activities by organized crime groups.

Caution to Interpretation

The value of the counterfeit activities across the globe is unknown since these activities are illegal by statutory enactment. In addition, the error of customs authorities not being able to intercept counterfeit goods at the various borders across the globe, make these articles to end up in retail outlets and households for sale and consumption. However, the analysis gives a strong and accurate estimation of the menace across the EU/US external borders.

3.2.1 Primary Qualitative Data Collection and Analysis, Test Hypothesis and Presentation

Procedures for Data collection

Respondents of Structured Questionnaire

The author sought permission from Customs, Ghana for a cross section of the staff to take part in the survey. Customs, Ghana was selected for the primary qualitative data collection because it's one of the key authorities regulating export and import activities in Ghana. This will help to receive accurate and detailed responses. The criteria for staff participation are;

- a) Staff of Customs works at the various ports of Ghana
- b) Staff has vast experience with respect to import/export activities
- c) Staff of Customs is part of the management

The demographics of the respondents are; gender, position at Customs, department, role and years at Customs. It is important to state that purposive sampling (non-probabilistic) technique was used to draw the research sample because of the nature and scope of the research question and objectives. A well-structured open and closed ended questionnaire were sent to thirty (30) staff of customs via the email, due to the geographical location of the author. The structured questionnaire will help to establish the relationship of research objectives; research questions and responses which will help to make strong deductions.

Data Collection Tool

According to Hill et al., (2005) a well-designed questionnaire will help provide answers to problem statement that cannot be found in comprehensive literature. The author designed an open and closed ended questionnaire which was submitted to the supervisor of the research for review and approval for administration to Customs, Ghana. The questionnaire is made up of three (3) sections (A,B and C) and contains 25 closed end questions and 5 open questions. The questionnaire was sent via the email to Customs, Ghana to be answered by the participants of the research. A copy of the questionnaire is attached to the appendix 1.

In other to generate the interest of participants, the author used a captivating section Headings to give a general overview of the questions in the various sections.

Research Ethics

The respondents willingly accepted to be part of the research by answering the structured open and closed ended questionnaire. Brief information about the author of the research; purpose, confidentiality and restriction of responses was outlined in bolded and italic caption on the page one (1) of the questionnaire. The questionnaire contains no column to link the respondents to the responses. Thus, anonymity of responses to avoid intimidation of respondents from stakeholders of divulge of information. To further strengthen the anonymity of respondents the demographical information on page one (1) of the questionnaire was not integrated into the data analysis and presentation. A generalization of the responses from respondents will be made.

Primary Qualitative Data Analysis

According to Brooks and King (2014). Template Analysis is a method of thematic analysis of textual data which employs hierarchical coding but maintains flexibility to achieve the purpose of a given research. The underlying principle of this technique is the formulation of a coding template based on a single transcript, and further applied to the sample data under study. This approach is flexible with regard to the style and format of the template to be developed by the research. In contrast to other thematic approaches, there is no suggestion of sequential coding levels. However, it promotes the development of themes to match the purpose of the research. The data involved in Template Analysis are often interview transcripts (Goldschmidt et al. 2006; Lockett et al. 2012; Slade, Haywood & King 2009; Thompson et al. 2010). However, textual data, such as focus groups can be analyzed (Kirkby-Geddes, King and Bravington 2013; Brooks

2014), diary entries (Waddington & Fletcher 2005), and questionnaire responses (Dornan, Carroll & Parboosingh 2002; Kent 2000). With regard to the research, the author employed the integral steps outlined by King (2012) for the Template Analysis.

The final analysis was formulated in four (4) themes, core idea and category. This is outlined in table 3-6.

Table: 3.6 Template Analysis of Qualitative Data from Customs Ghana

S/N	Themes		Core Idea	S/N	Category
I	Globalization	A	Free Market	1	Database of counterfeiting
				2	Mode of transport of counterfeiting
				3	Database of all importers/exporters
				4	E-platform for information sharing
				5	Smuggling activities
				6	Coordinated border activities
				7	Report on Customs activities
II	Consumer Safety	B	Product/Service Quality	1	Laboratories to examine consignments
				2	Specialized consignment examination
				3	Examination of free zones consignments
				4	Facility to confirm trademark and patents
				5	Sampling method and sample size of consignments
				6	Strategic consumer safety plan
				7	Training program on counterfeiting

III	Dangers of Trade	C	Intellectual Property Right, Consumer Risk and Vulnerability	1	Intellectual property right infringements
				2	Transshipment
				3	Corruption
				4	Counterfeit products/services
IV	Fair Trade	D	Good Trade Practices; Creating, Communicating and Delivering Consumer value	1	Quality of Products/Services
				2	Ergonomics and Logistics for Operations
				3	Staff Competence
				4	Accurate Manifest (Bill of Lading) Declaration
				5	Wrong Labelling, Concealment of goods and demurrage of consignment
				6	Information Symmetry and rapid information from ports of origin
				7	Streamline Clearance Procedure

Source: Authors illustration based on data from the questionnaire design

Interpretation of Data Analysis

The results from the qualitative data analysis was grounded on transparency and devoid of any element of bias throughout the research process. The findings will be used to prove or disprove the hypothesis of the research and more importantly make strong recommendations to mitigate problems uncovered in the study to enhance the economy of Ghana and world trade activities. The research findings are presented.

Findings

The qualitative study provided answers to the main research questions;

- 1) Does Customs Ghana have *modern laboratories* and requisite infrastructure at the various checkpoints/ports to undertake examination of consignments?
- 2) What is the *degree of smuggling* activities in Ghana?
- 3) Does *corruption* in Customs harness the *dark side of globalization* e.g. clearance of counterfeit and pirated goods/services
- 4) Does Customs Ghana have a *strategic consumer safety plan* to mitigate consumer vulnerability?
- 5) What can Customs *do differently* to improve the situation at the checkpoints?

The analysis of responses to the questionnaires administered to Customs Ghana were **characterized into four (4) Themes, core ideas and categories**. The categories highlighted the positive and negative characteristics of globalization and consumer safety in Ghana.

The results is presented through the frequency of responses from respondents (Customs Ghana officials). The author administered thirty (30) questionnaires via the email to experts of Customs Ghana. However, only twenty-four (24) questionnaires were filled and returned to the author via the internet. The response and completion rates of the questionnaire were 80% and 95% respectively. With respect to the response frequency distribution, the **responses that occurred the most are labelled high tide, responses that occurred five (5) or more are labelled medium tide and responses that occurred between the ranges of one (1) to four (4) are labelled low tide.**

Table 3-7: Summary of Research Findings from Primary Data Analysis

S / N	Themes	Core Idea	S / N	Category / Classification	No. of Frequency	Interpretation
I	Globalization	A Free Market	1	Database of counterfeiting	13	High tide
			2	Modes of transport of counterfeiting (sea, air and land)	22	High tide
			3	Database of all importers/exporters	20	High tide
			4	E-platform for information sharing	13	High tide
			5	Smuggling activities	18	High tide
			6	Coordinated border activities	19	High tide
			7	Report on Customs activities	17	High tide

II	Consumer Safety	B	Product/Service Quality	1	Laboratories to examine consignments	2	Low tide
				2	Specialized consignment examination	14	High tide
				3	Examination of free zones consignments	9	Medium tide
				4	Facilities to confirm trademark and patents	4	Low tide
				5	Sampling method and sample size of consignments	8	Medium tide
				6	Strategic consumer safety plan	12	High tide
				7	Training program on counterfeiting	18	High tide
III	Dangers of Trade	C	Intellectual Property Right, Consumer Risk and Vulnerability	1	Intellectual property right infringements	17	High tide
				2	Transshipment problems (diversion and falsification of manifest)	20	High tide
				3	Corruption	13	High tide
				4	Counterfeit	18	High tide

					products/services		
I V	Fair Trade	D	Good Trade Practices; Creating, Communicating and Delivering Consumer value	1	Quality of Products/Services	4	Low tide
				2	Ergonomics and Logistics for Operations	5	Medium tide
				3	Staff Competence	5	Medium tide
				4	Accurate Manifest (Bill of Lading) Declaration	2	Low tide
				5	Wrong Labelling, Concealment of goods and demurrage	18	High tide
				6	Information Symmetry and rapid information from ports of origin	5	Medium tide
				7	Streamline Clearance Procedure	10	Medium tide

Source: Authors illustration based on findings from primary research conducted at CEPS

Interpretation of Findings from Primary Data Analysis

Based on the analysis of the primary data, the following interpretations were made:

- Globalization of production and market is harnessing counterfeiting and piracy in Ghana. This deduction is made due to *high tide response* of the prevalence of counterfeiting and pirated products and services on the Ghanaian market and also by customs interception at the various borders across the country. There is also a *high tide response* in smuggling activities in Ghana and the modes of transport are mainly sea, air and land. Although, Customs Ghana undertake a coordinated border management with neighbouring countries and also has an e-platform for sharing information, this is not enough to combat the activities of organized crime groups, thus resulting in the rampant array of the fake products on the market causing heinous harm to consumers, government and intellectual property right holders (enterprises).

- Consumer safety in Ghana is compromised and also endangered. This is proven by the *low tide response* from respondents of the questionnaire. It is confirmed that Customs Ghana lacks modern laboratories, infrastructure and electronic aided devices to scrutinize / examine the wholesomeness of consignments entering or departing the borders of Ghana. Although, there are specialists at customs to ensure the quality of goods and services adhere to the certified standards by appropriate government authorities, the lack of laboratories derails these efforts.
- It is confirmed by *medium tide responses*, that free zones consignments are not always subjected to checks and also there is no regular sampling method and sample size of consignments. Thus creating the probability for counterfeits getting to the market. Although, there were high tide for strategic consumer safety plans and training programs for staff at customs, these have not reduced the prevalence of the menace. This is evident by high tide responses on: intellectual property rights infringements, transshipment problems (falsification of documents and diversion of goods), and perennial corruption in customs. This has raised the level of danger of trade and consumer vulnerability in Ghana.
- It is also confirmed that there is disparity in trading among marketers and consumers. This is as a result of *low tide response* on quality of goods and services on the Ghanaian market and also customs interception of poor quality goods at the borders. This situation is manifesting due to:
 - Ergonomics and logistics issues at customs and Ghana Ports and Harbour Authority
 - Staff competence to detect: counterfeit / defective goods, falsified bill of lading (manifest), wrong labelling and concealment of goods by importers.
 - Information asymmetry from port of origin (provenance country) to enable proper examination, ratification and confirmation of manifests / related documents
 - Dogmatic clearing procedure and lack of synergy among government authorities regulating international business activities.

Hypothesis Testing with Findings from Primary Data Analysis

The primary qualitative data findings showed a *high tide (frequency) of counterfeiting*, pirated, defective and substandard products and services on the Ghanaian market. This concern has articulated by national and international organizations like The World Bank, BBC, European Union, Ghana Standard Authority, etc.

Based on these findings the hypothesis of the research is accepted (proven to be positive) that exports and imports from/to Ghana contain counterfeit, pirated, defective and substandard products and services as a result of globalization of production and market.

Therefore, it is the responsibility of the Government of Ghana, Customs Authority, Ghana Standard Authority with support from international organizations to mitigate / combat the menace to ensure fair and equitable trade in Ghana and across the continent of Africa.

3.2.2 Triangulation of Findings from Qualitative and Quantitative Data Analyses

Triangulation is a universal approach for convergence, complementary and dissonance of findings on related research questions, acquired from diverse methodological approaches, sources and theoretical perspectives. It is essential to note that, research findings are enhanced if different approaches to data collection and analysis produces coherent results.

(www.ncbi.nlm.nih.gov) – [Accessed on 19.04.2019]. There are basically four types of triangulation:

- Methodological triangulation; two or more methodological approaches are employed for the data
- Data triangulation; data are source from more than one respondent group/sources
- Investigator triangulation; two or more researchers are employed for the research and integrative analysis
- Theoretical triangulation; different theoretical perspectives are employed to test the hypothesis.

With respect to the research, the author employed methodological and data triangulation to prove or disprove the hypothesis of the research. Triangulation was employed in the research due to the nature and scope of the topic and more importantly to enhance the findings (validity and reliability) for generalization. The terminology integration was used to describe the convergence

of findings from quantitative and qualitative approaches. In this regard the findings from the research confirmed the heinous problem of counterfeiting and piracy on the Ghana market. Synonymously, the analysis of quantitative data from different institutions webpage; *<https://www.wto.org>, <https://www.cbp.gov>, <https://www.ec.europa.eu> also confirms the existence of the problem of counterfeiting and piracy at the EU/US borders. Thus, the findings of the research is accurate, valid and reliable for generalization across the sub region of Africa and as a strong basis for future academic study, research, statutory reforms and policy actions by the governments to mitigate the endemic problems associated with globalization and trade liberalization.

3.3 Discussions: Comparison of the Research Findings to Existing Literature Findings

Interpretation and discussion of the findings of the research with reference to previous research findings, journals and articles on globalization and consumer safety by academia, national and international organizations across the globe. This also gives a new insight into the problem. The main aim of the thesis is to help prevent counterfeit, defective and substandard products and services from arriving and departing the ports of Ghana.

Overview of Findings from Primary and Secondary Research

The triangulation of the findings from the primary qualitative data from Customs Ghana and secondary quantitative data from EU/US markets indicate the intensity of counterfeiting and piracy in the world merchandise. The primary qualitative data findings showed a high frequency of counterfeiting and pirated products on the Ghana market. This concern has been articulated by national and international organizations.

Ghana has moved two places up on the ‘Trading Across Borders’ in the latest World Bank Ease of Doing Business Report, an indication that the paperless port clearance system initiated by the government is already paying off (<https://www.wto.org>) – [Accessed on 04.01.2019]. However, a press release by the Ghana Standards Authority on 4th September, 2018, indicates that, only seven (7) out of the two hundred and four (204) electrical items tested by the Ghana Standards Authority (GSA) at Opera Square and “Zongo” Lane in Accra conform to the authority’s standards. The GSA inspected and tested the imported electrical items, including wire cables,

switches, bulbs and extension boards, in August, 2018 and the failure rate amounted to 96 per cent. The items were seized in an operation codenamed “Quality Police” embarked upon by the GSA, in collaboration with the Bureau of National Investigations (BNI), the Customs Division of the Ghana Revenue Authority (GRA) and the Ghana Investment Promotion Centre (GIPC) <https://www.ghanabusinessnews.com> – [Accessed on 07.11.2018]. In the same operation, 127 pieces of footwear were seized, with only seven of them turning out to be of good quality. The findings from this market surveillance showed a very high degree of counterfeiting and piracy in Ghana.

The European Union (EU) in 2014, threatened to ban a number of non-traditional exports (NTEs) from Ghana because they contain poisonous chemicals, including aflatoxins. The EU issued a number of food safety alerts (threats to ban) to the Ministry of Trade and Industry in 2013 against products such as peanut butter (groundnut paste), “agushi” and maize meals, such as “banku mix”, for containing aflatoxin, which causes cancer (<https://www.myjoyonline.com>) – [Accessed on 24.01.2019]. Salmonella presence in cotton seeds, Sudan IV dyes in palm oil, as well as poor hygienic state of dried fish all received threats of ban from the EU. The European Union (EU) remains the largest export market for the country’s non-traditional products.

It is important to note that The World Bank Group has called on the government of Ghana to, as a matter of urgency, tighten its consumer protection standards to promote the health, safety and security of consumers in Ghana. This was published by “The Business and Financial Times” newspaper in Ghana on 14th February, 2017 (www.modernghana.com) - [Accessed on 15.11.2018]. According to the World Bank Group’s Senior Director of Global Practice on Trade and Competitiveness, Anabel Gonzalez, Ghanaian authorities must dedicate serious attention to clearing the country’s market of fake and substandard goods / services to safeguard the well-being of citizens and foreigners living in Ghana. She remarked that, there is the need for a country to have consumer protection standards and thinks this is very relevant to promote the health, safety, security of consumers.

It is also essential to note that, in the State Of The Nation Address “RAISING GHANA TO THE NEXT LEVEL” By H.E. the late Prof. John Evans Atta Mills President Of The Republic Of Ghana, 17th February, 2011. He remarked, “About a fortnight ago, Ghanaians watched a shocking expose of corrupt activities and practices involving revenue collection at the Tema Port. Last year, there was a similar expose on cocoa smuggling along the country’s borders. He remarked that the Ghana Revenue Authority must relentlessly pursue people who fail to, or, under-declare incomes simply to avoid paying taxes because the principle of equity demands that the burden of tax should be shared among all citizens (<https://nyamaah.wordpress.com>) - [Accessed on 15.11.2018]. Again it is expected that the management of the Ghana Revenue Authority and Customs Excise and Preventive Services (CEPS) for that matter to act without delay to restore public confidence in the organization”.

Business associations like the AGI, PEF, GUTA and GCCI have raised several concerns over the influx of sub-standard goods onto the Ghanaian market and they have asked for serious attention from government and all well-meaning Ghanaians to stop the practice (<https://thebftonline.com>) - [Accessed on 15.11.2018]. A cross section of Ghanaians being observed and subjected to an informal interview were resentful over the influx of substandard, fake and pirated goods and services on the market and have called for the government of Ghana and responsible authorities to mitigate this chronic problem.

According to Open Society Initiative for West Africa – OSIWA in partnership with Consumer Advocacy Center (2014). Research Report on Consumer Protection In Ghana: A Review of Consumer Protection in the Mobile Telecommunication Sector in Ghana. The objective of the research was to review the prevailing laws on Consumer Protection in Ghana and have a general discussion of the thematic areas of the Draft Consumer Protection Policy to confirm the adequacy of protecting the Ghanaian Consumer vis a vis enacted law. The researcher makes the recommendation on the case of telecommunication sector. Hence, the need for consumer forums, strong public awareness creation on significant issues in the sector, NCA performance evaluation and among others.

According to the BBC news focus on Africa, in January (2010). Africa has become the dumping grounds of counterfeit, pirated and world's unwanted products. This confirms the assertion by the World Health Organization (WHO) that, 30% of medicines merchandised in developing countries are counterfeit and the heinous problem is that high numbers of drugs ordered by the government for public hospitals are being illegally obtained and sold for a markup in the private sector (<http://news.bbc.co.uk>) – [Accessed on 28.04.2019]. According to Roberto Manriquez, who is a criminal intelligence officer in Interpol intellectual property crime unit, counterfeit medicines ranks number one priority of the world's biggest police organization. In addition, the escalating direct trade routes between the continent of Africa and China, toppled with permeable border management, nonoperational legislation and feeble enforcement machineries, have made the continent become playing ground and burgeoning market for counterfeiters activities - and the economic recession has worsen the deplorable situation (<http://news.bbc.co.uk>) – [Accessed on 28.04.2019]. This has heightened the consumer vulnerability and product dissatisfaction.

"Africa has become a dumping ground for the world's unwanted goods," says Darren Olivier, head of brand enforcement and a director at Bowman Gilfillan attorneys in Johannesburg, South Africa. This statement is as a result of prevalence of counterfeiting activities in every province of the continent, a situation which is inimical to the growth and prosperity of the continent. As manufacturing techniques have become increasingly sophisticated, almost every article from electrical appliances to software and antibiotics can be counterfeited (<http://news.bbc.co.uk>) – [Accessed on 28.04.2019]. It is therefore, important for governments across the continent to formulate a uniform strategy and common front in combating the menace.

According to the Inter-Governmental Action Group against Money Laundering in West Africa (2017). Research report on case studies and occurrences on money laundering arising from electronic counterfeiting and intellectual property infringement in West Africa revealed the incidence of production and distribution of electronic products; literary works, counterfeiting and IP infringement and ML arising from the proceeds of these illegal activities (<https://www.giaba.org>) – [Accessed on 28.04.2019].

According to the African Press Organization (2015). A survey conducted on counterfeiting of electrical products in eleven (11) African countries including Ghana, on behalf of Schneider Electric revealed a very high frequency distribution (high measures of central tendencies; mean, median, mode) of counterfeiting, a situation which is inimical to the growth of these economies and contributes gruesome harm to consumers (www.apo.mail.org) – [Accessed on 27. 04.2019]. Although, the Government of Ghana and stakeholders have endeavored to mitigate the problem of counterfeiting, the researcher strongly contend that, there have been widespread of fake, substandard and pirated goods and services on the Ghanaian market in recent times, due to lack of modern laboratory facilities, competent human resource, stringent and concerted measures at the various ports of Ghana, superintendent by the Customs Authority. This generalization is based on the concerted findings from the primary and secondary data analyses. Counterfeiting is a growing problem worldwide. As products arrive at international borders, Customs officers are confronted with the puzzle of how to best detect and seize counterfeit products, services and also how to facilitate the clearance of genuine ones. As counterfeiters become more and more sophisticated, so must the procedures of detection in order to prevent these products from entering households.

Significance of the Research

The aim of the thesis is to help prevent counterfeit, defective and substandard products and services from arriving and departing the ports of Ghana.

The significance of the research are outline below:

- To aid implementation of certified standards by Int. organizations for exports / imports of goods and services
- To enhance the competence of the human resource at the port of Ghana
- To enhance the Technical competence of the human resource
- To alleviate financial malfeasance and corruption
- To reduce bureaucracy in the workflow and process of consignments
- To harness inter agency relationship to reduce the waiting time at the port.
- To prompt Government of Ghana to make investments in modern laboratories and pristine equipment to facilitate trade and more importantly prevent substandard, fake

and pirated goods and services from entering/departing the country. Thus harness the compliance of Ghana to become competitiveness in global practices.

Implications of the Research

The findings from the research has revealed operational lapses in Customs Ghana. This is because of lack of conceptual, technical and required experience to prevent counterfeiting and piracy. It is also clear that, Customs Ghana lacks the requisite modern infrastructure and devices to combat counterfeiting and organized crime. It is also obvious, that Customs Ghana is overly concerned with the customs and excise duties on consignments than certified quality of consignments. The issue of corruption is a major problem in combating counterfeit activities in Ghana, since importers have officials within Customs to expedite clearance of substandard goods to the Ghanaian markets. Customs Ghana must engage all stakeholders and intensify downstream and upstream patrols to clamp down on organized crime groups. It is also important for the government of Ghana to take stringent measures to reduce this problem. The organize crime group's activities are tax evasive and also diminish the sales of original goods by legal enterprises in Ghana. From the above it is clear that most consumers in Ghana are highly vulnerable, susceptible and at risk to the marketing gimmicks of distributors and retailers of counterfeit and pirated goods cleared from the various entry ports of Ghana. This makes consumers to spend a lot of money to buy replacement products, health harms and poor savings due to unwarranted expenditure

Cardinal Directions for Future Research and Academic Study

The research took a general view of the menace of counterfeiting and piracy in Ghana by analyzing qualitative data from Customs Ghana. It is important to undertake a quantitative research to determine the intensity of the counterfeiting across all the sectors of the economy of Ghana. It is also possible to undertake a research to establish the econometrics of the use of counterfeiting products; on consumer health, mortality rate, government subsidy on health and employees' productivity at the workplace. Again a research can be conducted to determine the level of consumer vulnerability in Ghana and the roles of appropriate institutions in achieving high results to guarantee consumer safety in Ghana.

Thus, the findings of the research is accurate, valid and reliable for generalization across the sub region of Africa and as a strong basis for future academic study, research, statutory reforms and policy actions by the governments to mitigate the endemic problems associated with globalization and trade liberalization.

Conclusions and Recommendations for Management Decision Making

The conclusions and recommendations are based on reviewed literatures, empirical findings from primary and secondary data analyses. The author believes, the recommendations will offer strong solutions to the widespread menace of counterfeiting and piracy in Ghana, across Africa and more importantly, eradicate or minimize its thrust on the global landscape.

Conclusions Based on Theoretical Literature Review

Based on the reviewed literatures the following conclusions are made:

1. There is a correlation between globalization and consumer safety. This situation is worrying due to the reduction in trade barriers and the increase of digital globalization of products and services. This has caused consumer vulnerability as counterfeit, pirated, substandard and defective goods are marketed.
2. Although, there are efforts by international organizations to combat counterfeiting and piracy, statistics from OECD, EU and US external border authorities show an alarming increase in the seizure of these products and services. It is therefore, very important to formulate a more proactive and stringent measures across the globe to mitigate the menace.
3. The policy action on green marketing is not harmonized across the globe. It is clear that, pollutions and environmental degradation from emerging economies are on the increase, member countries should be tasked to start the campaign on this essential agenda to reduce consumer vulnerability and also safeguard the environment.
4. There is no standard operating procedure on customs activities across the continent of Africa. Member states are left with the discretion to how customs clearance will be executed. This situation derails the border coordination management to combat counterfeiting and piracy.

5. There are no strong and unique security features on products and services traded by reputable enterprises to facilitate detection of counterfeiting and piracy at the various borders and checkpoints. This is because, almost every original brand is being counterfeited and mostly permeable to emerging markets like Africa.
6. There is no annual research on globalization and consumer safety, to establish the level of consumer vulnerability of harmonized products and services merchandized across the globe and more importantly, to authenticate the population parameters of consignments examined and cleared by the various customs authorities in the world. This confirms the absence of annual research on globalization and consumer safety in Ghana and Africa.

General Conclusions of the Research

1. Based on the findings from the primary research, it is confirmed that Customs, Ghana does not have modern laboratories and infrastructure at the various checkpoints / ports to undertake examination of samples of consignments to detect counterfeit, pirated, substandard and defective goods and services entering and departing the territory of Ghana.
2. It is confirmed that, Customs does not have a standard sampling method in examination of consignments. This phenomenon creates irregularities in the import/export clearance procedure. This leads to counterfeit, pirated, substandard and defective goods and services entering and departing the shores of Ghana.
3. It is confirmed that, Customs mostly does not inspect the wholesomeness of free zones consignments. And also does not have facilities to confirm the trademarks and patents issued by World Intellectual Property Organization on consignments and the confidence interval of offline examination is very low. This lacuna creates the opportunity for organized crime activities.

4. The findings from the primary research confirmed that globalization has precipitated counterfeiting and piracy in the Ghanaian market. Thus causing heinous harm to consumers (health and optimize value of product usage); government (tax losses, expenditure on health subsidy and combating of the menace) and business enterprises across the globe (reduction in turnover).
5. It is confirmed that, corruption in Customs harness the activities of counterfeiting and piracy in Ghana, as these organized crime groups give bribes to Customs officials to clear the unwholesome consignments and also Customs hardly undertake factory or warehouse inspection of these suspected enterprises.
6. It is confirmed that, Customs Ghana experiences ergonomics, logistics and staff competence problems. This situation has created huge opportunity for the widespread of smuggling activities in Ghana and across the sub region. The mode of transport of these illegal activities are mainly; air, sea and road. It also leads to high frequency of Intellectual Property Right (IPR) infringements by organized crime groups. Thus affecting the sales trend and brand equity (value) of reputable enterprises with substantial market share.
7. The degree of vulnerability among consumers in Ghana is very high due to personal characteristics and information asymmetry. Thus resulting in dissatisfaction in marketing and the exchange function of goods and services of perceived value (benefits) to consumers (household, enterprise and government). This phenomenon has left many consumers in Ghana with lasting negative service experience encounters.
8. The cost of combating these illegal activities by organized groups is very high to the Government of Ghana. This has resulted in the burgeoning/rampant of counterfeiting and piracy across the country. The assertion is made because these fake goods and services can be found in all the regions of Ghana.

9. The high frequency of death and low mortality rate in Ghana can be attributed to counterfeiting and piracy of premium brands on the Ghanaian market, i.e. rampant sickness; fire outbreaks caused by fake electrical/gas appliances, architectural collapse due to inferior building materials, etc. In addition, the low employee productivity as a result of incessant and chronic illness caused by the frequent consumption of counterfeit and pirated goods merchandised to Ghanaians by organized crime groups. The Government of Ghana's expenditure on healthcare has increased substantially. This is as a result of Ghanaians being exposed to defective and counterfeit goods and services causing gruesome harm to sundry consumers.

10. The players in the channel of distribution embark on marketing gimmicks and penetrating pricing strategy to lure vulnerable consumers (personal characteristics) to purchase these riff raffs (counterfeit products). This leads to health hazards; psychological illness and economic loss as the perceived benefit does not match the ex post value of the products. In addition, the low financial savings and investment trend among Ghanaian households as a result of recurrent economic cost to replace defective and counterfeit products purchased.

11. The Ghanaian market is loosely regulated by the government. As a result, setting the stage for unscrupulous activities. This quagmire confirms the clarion call on the Government of Ghana by national and international organizations to take stringent steps to mitigate this menace. Besides, the Ghanaian economy (market) lacks robust consumer safety institutions for service/product failure recovery, incentive and streamline legal actions against organized crime groups. Thus, leaving sundry consumers with heap pile of complaints without cogent remedies. This deplorable situation has diminished the bargaining power of consumers. The inadequacy of civil society activities on consumer safety in Ghana. This situation has also increased the bargaining power of suppliers and new entrants to play to the gallery to capture the heart and mind of vulnerable consumers.

12. The border of Ghana is very permeable and susceptible to counterfeiting. Besides, there are few or no robust government institutions to undertake periodic market surveillance and warehouse inspection to confirm the accuracy of customs examination of consignments at the various checkpoints / ports in Ghana. Since the market surveillance is weak, it has resulted in the growing trend of counterfeiting and piracy in Ghana and the sub region.
13. Clearly, there is lack of synergy among government institutions responsible for combating counterfeiting and piracy in Ghana. The customs clearing procedure is ambiguous, and there is lack of concerted strategic framework to undertake a preempt action to mitigate the problem.
14. It is factual, there is frequent seizure of counterfeit and pirated goods at the external borders of EU and US by Customs Authorities, consignments mainly from Far East with China and Hong Kong being the top provenance. This milestone is achieved as a result of stringent, effective and efficient external border security management and also huge investment in human resource infrastructure and modern technologies to combat the menace.

Recommendations Based on Research Findings

The deductions from the research showcase the prevalence of counterfeiting activities in Ghana, Africa and seizure across the world. The author makes the following recommendations to Customs Ghana, Government of Ghana and also National and International Organizations to help combat and mitigate the menace:

Recommendations to Customs Ghana (CEPS)

1. The Customs, Ghana must formulate a standard operating procedure across its jurisdictions in Ghana. It is also important to adopt a probability sampling technique and collect a good (representative) sample of consignments at the various ports to confirm

whether they meet the quality standards set in Ghana, before they are cleared to the market.

2. Education and training of customs staff and stakeholders on combating counterfeiting and piracy activities in Ghana. These should be a periodic seminar, conference and workshop to learn about new trends of organize groups' activities, the degree of counterfeiting and ingenious ways to confirm the authenticity of trademarks and patents.
3. The customs, Ghana should have a toll free service for the public to easily inform about organized crime activities in the country. And also consumer protection institution should have a toll free service and e format for complaint registration and redress of product and service failure. This will help to reduce the widespread of counterfeiting.
4. Ghana Customs in consultation with appropriate authorities must set a threshold of antibiotics acceptable in poultry products imported / exported to / from Ghana in conformity to the UN consumer protection guidelines. This measure will help to eradicate unwholesome goods circulating in the country.
5. Ghana Customs should undertake a strong coordinated border management with regional and international blocs to mitigate counterfeiting and smuggling activities. It should also advocate for the establishment of African Customs Organization to help streamline ports activities across the continent.
6. Ghana Customs should introduce customs stamps on imported products to enable consumers to easily detect benign and counterfeit products on the market. This policy action can be initiated on products with high frequency of seizure at the various ports in Ghana and across the continent of Africa.
7. Ghana Customs should request importing and exporting enterprises to put labels to differentiate between organic and inorganic products imported/exported to/from the

country for consumption. This will improve information symmetry and also able consumers to make well informed decision and choice of products and services.

8. Ghana Customs should confirm the origin of goods imported to Ghana by authentication of the original bill of lading (manifest) to prevent clearance of onboard packaging and relabeling of goods. This can be achieved by establishing a common e platform with trading countries to share information about scheduled consignments. This will help to detect and detain smuggled consignments onboard scheduled to berth at the port.
9. Ghana Customs should have its own website and upload statistical data on counterfeiting and piracy to be easily accessible to stakeholders and international organizations. Again, Customs should publish annual report on consumer safety, counterfeiting and piracy in Ghana. It should also preempt the general public about the modern techniques used by organized crime groups.

Recommendations to Government of Ghana (GoG)

1. The Government of Ghana must provide modern facilities and technological infrastructure at the various checkpoints / ports in Ghana to expedite consignment examination and accurate confirmation of product and service quality.
2. The Government of Ghana in consultation with the Ministry of Trade and Industry, related institutions and international organizations should create harmonized security features on all products in the various regional blocks. This will help customs to easily detect counterfeiting by sighting the unique security feature on a product package, before it is confirmed with electronic devices or laboratory test.
3. Sanctions to countries engaging in counterfeiting and pirated goods. This will help to reduce the menace of counterfeiting, since embargo will be placed on these frequent provenance of counterfeiting. Specifically, on goods frequently detained at the external

borders by customs. This is justifiable in the UN resolution for safe and healthy products and services and fair and equity trade agreement by WTO with member states.

4. Improvement, research and development in information technologies to combat counterfeiting and piracy by organized crime groups. The government should create a defined virtual communication channel for Customs, Ghana like other security enforcement services to timely access and disseminate vital information across its jurisdictions. The government should also improve the workstation of customs with high speed computers, electronic devices and internet facilities.
5. Stringent Government's regulation on importing, exporting and domestic manufacturing / processing activities in Ghana. The government can achieve this by tasking the Ministry of Trade and Industry to collaborate with related institutions and stakeholders to fine tune these activities in a more structured and formal fashion. This will enable a discrete delineation of these activities to be well supervised, monitored and evaluated to boost Ghana's competitiveness and more importantly, safeguard consumers.
6. Severe sanctions and penalties to importers and exporters engaging in counterfeiting and piracy of goods. With this, the Government of Ghana must inform all parties through the appropriate ministries that any entity found to engage in activities not conforming to the certified standards and regulations will be severely punished with jail terms, revocation of trading licence and liquidation of business. There should also be sanctions to distributors and retailers who deal in counterfeit and defective goods. The Government of Ghana should task member countries to blacklist exporting companies overseas that merchandise counterfeit and pirated goods and services.
7. There should be a robust supply chain monitoring system to detect counterfeit, substandard, defective and adulterated components. And also, all manufacturing companies must keep proper record of components supplying companies to help regulatory authorities to mitigate unwholesome raw materials and semi processed goods moving through the supply chain architecture.

8. The Government of Ghana should advocate for green marketing products and services to reduce environmental degradation, pollution and climate change. This will help to sustain the ecosystem and also offer enhance product value for consumption.
9. The introduction of special chamber in the high court of justice on globalization and consumer safety issues in Ghana to adjudicate consumer harms from counterfeit and defective products and also prosecute the perpetrators of organized crime activities.

Recommendations to International Organizations policing Global Trade

1. The World Trade Organization must request for operating framework/procedure of member states for assessment and make due recommendations to protect consumers. The World Trade Organization should also prepare an annual report on steps taken to help member states curb abusive trade practices at national and international levels.
2. Introduction of modern containers with multiple doors on all four (4) sides to enable a good and representative sample selection for inspection and examination by customs and related authorities at the port of origin and destination. This will reduce the timeline in the examination of consignments, mitigate concealment of goods, and more importantly enhance the accuracy of sample results in estimation of population parameters.
3. Stringent monitoring of digital globalization (e commerce). The global standard regulatory procedure for digital globalization should be adhered to across the globe. This will help to prevent organized crime groups who takes opportunity of the digital technology to cause harm to consumers by merchandising fake products.
4. International organizations that championed the trade liberalization drive must take stringent measures to curb the menace of counterfeit goods by coordinating with appropriate authorities in the provenance of counterfeit products of which China and Hong Kong tops the list.

5. World Customs Organization must draft a global standard operating procedure for all countries to mitigate the problem of counterfeiting. In addition there should be a central database for all customs jurisdictions in the world to have a more accurate data on the prevalence of counterfeit products worldwide. There should also be a modern manifest (bill of lading) ratification, verification and confirmation with trading countries to combat falsification and wrong labelling of documents.
6. International organizations like UN, WHO, WTO must roll out a policy action plan to control the use of excessive chemicals and other antibiotics in mainly poultry products to help reduce perennial health issues arising in the consumption of these products.
7. There should be a global research on counterfeiting and piracy of goods and service. And also a periodic global consumer report on products in trade, retail outlets and warehouses to confirm the sampling parameters of the population of products certified by various customs checkpoints in the world. This will help to mitigate the heinous menace of counterfeiting enrooted in globalization.

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Appendix

Appendix 1: Questionnaire Design for primary data collection

RESEARCH QUESTIONNAIRE

My name is Bishop Dadoo Amponsah, a final year graduate student at the University of Latvia (LU), Latvia. I invite you to participate in a survey on Globalization and Consumer Safety. The aim of the survey is to establish the correlation between Globalization and Counterfeiting of goods/services and more importantly, how this affects the people, environment, economy of Ghana and world trade. The survey is for academic purposes only and your response will be confidential and restricted to the research. Kindly, respond by ticking or filling in where appropriately. Thank you in advance for your candid and first-rate response!

SECTION A – DEMOGRAPHICAL INFORMATION

- 1) Gender of respondent: Male Female
- 2) Position at Customs: Senior-level Middle-level
 Junior-level
- 3) How long have you worked at Customs: Less than 1 year 1 - 2years
 3 - 4 years 5 years and over
- 4) Department:
- 5) Brief description of your role:
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SECTION B – GLOBALIZATION AND CONSUMER SAFETY AT CUSTOMS GHANA

Questions in this section seek to gain an understanding of the correlation between globalization and counterfeiting of goods/services. Kindly provide answers to the questions below:

- 6) Does Customs Ghana have **modern laboratories** and requisite infrastructure at the various checkpoints/ports to undertake examination of consignments? Yes
No
- 7) What type of **sampling method** is used in the examination of consignments?
 Probability sampling Non Probability sampling
- 8) What is the required **sample size per consignment** under examination in a day?
 0-10 10-20 20-30 30-40 40-50 50+
- 9) Does Customs have **database on counterfeit activities** e.g. no. of seizures at checkpoints, importers/manufacturers warehouse or organized crime groups? Yes No
- 10) What is/are the mode/s of transport of counterfeit consignments to/from Ghana?
 Air Sea Rail Road Express consignments River
- 11) Does Customs have a **centralized data** on all importers and exporters in Ghana?
 Yes No
- 12) What is the **degree of smuggling** activities in Ghana?
 High Medium Low
- 13) Does Customs undertake a **Coordinated Border Management** (CBM) with neighbouring countries to **mitigate smuggling** to/from Ghana? Yes No
- 14) Does **corruption** in Customs harness the **dark side of globalization** e.g. clearance of counterfeit and pirated goods/services? Yes No
- 15) Does Customs have **specialist/s** in consignment examination and clearance?

Yes No

16) Does Customs issue quarterly/annual reports on inbound and outbound activities in Ghana?

Yes No

17) Does Customs examine the wholesomeness of free zones consignment?

Yes No

18) Does Customs Ghana have a strategic consumer safety plan to mitigate consumer vulnerability?

Yes No

19) What is the frequency of import seizure of counterfeit and pirated goods at the Customs checkpoints in Ghana from 2008 - 2018? High Medium Low

20) What is the frequency of Export seizure of counterfeit and pirated goods at the Customs checkpoints in Ghana from 2008 - 2018? High Medium Low

21) Does Customs organize training programs on modern trends of counterfeiting and organized crime groups' activities for staff? Yes No

22) Does World Customs Organization have a central e-platform for sharing information on case studies /current techniques employed by organized crime group Yes
No

23) Does Customs Ghana have the facility to confirm trademarks and patents on consignment from World Intellectual Property Organization? Yes No

24) What is the confidence interval of offline examination of trademarks and patents on consignment at Customs checkpoints? 99% 95% 90% Other

25) There is a correlation between globalization and counterfeiting of goods and services in Ghana? Yes No. **If yes, answer the next question.**

26) What is the intensity of the correlation?

Strong Weak

SECTION C – CHALLENGES OF GLOBALIZATION AT CUSTOMS

27) What problems have been associated with imports / exports over the years?

- a.
- b.
- c.
- d.
- e.

28) What are the problems associated with transshipment consignments in Ghana?

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29) What has Customs done to address the identified problems?

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30) What can Customs do differently to improve the situation at the checkpoints?

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Thank you!!!

NB: Thank you translated to Latvian language means Paldies!!!

Appendix 2: Calculation of Confidence Interval of Counterfeit Seizure in EU/US External Borders

Confidence Interval Statistical Technique

To calculate the confidence interval of counterfeit goods with respect to the above sample data, the notation of $\sum y$ in the above table is **changed to $\sum x$** . This is because of the default formula used for the calculation. Where $\sum x$ is equal to the summation of the no. of counterfeit seizure (2008 – 2018), and n is equal to the no. of observations in years (2008-2018):

$$\text{The Mean} = \frac{\sum x}{n} = \frac{977.06}{10} = 97.71$$

$$\text{The Standard Deviation} = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}} = \sqrt{\frac{4042.08}{9}} = 21.19$$

$$\text{The Standard Error} = \frac{s}{\sqrt{n-1}} = \frac{21.19}{\sqrt{9}} = 7.06$$

95% level of significance, from t – table 95% = 2.78

$$\text{The Margin of Error} = 7.06 \times 2.78 = 19.63$$

$$\begin{aligned} \text{The Confidence Interval} &= \bar{x} \pm t \frac{s}{\sqrt{n-1}} = [97.71 - 19.63, 97.71 + 19.63] \\ &= [78.08, 117.34] \end{aligned}$$

Appendix 3: Aerial Photograph of Tema Harbour, Ghana

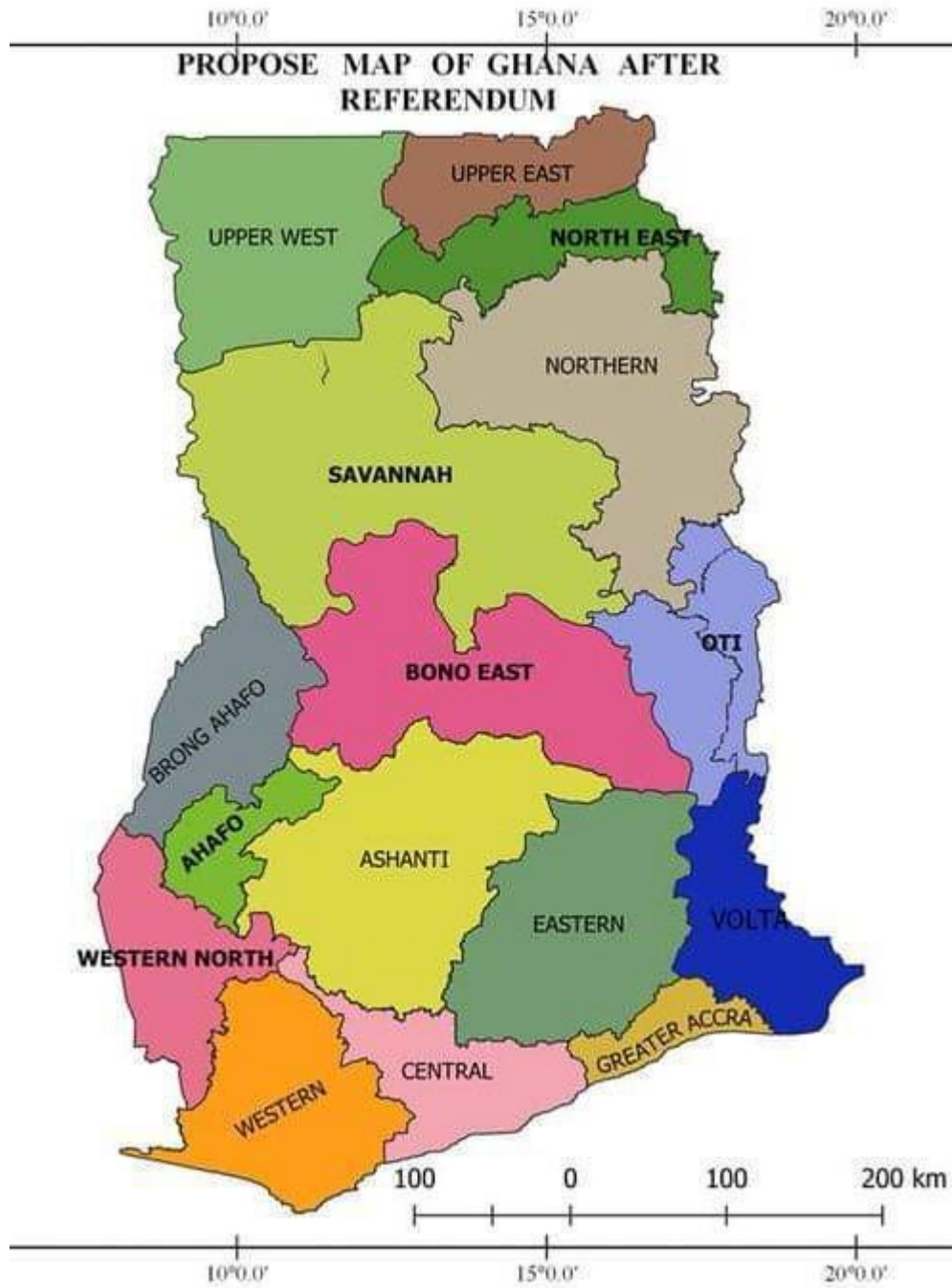


Appendix 4: Consignments Offloaded from Berthed Vessels





Appendix 5: The Map of Ghana



Appendix 6: Map of Africa with location of Ghana



The master's thesis "GLOBALIZATION AND CONSUMER SAFETY (A CASE STUDY OF CUSTOMS EXCISE AND PREVENTIVE SERVICE OF GHANA)" is worked out at the faculty of Business, Management and Economics of University of Latvia in the professional MBA program "International Business".

With my signature I certify that the research is made by myself, the information sources shown in the work are truly represented and the electronic copy corresponds to printed version.

Author: Bishop Amponsah _____ . _____. 2019
(Name Surname) (Signature) (Date)

I recommend / I do not recommend the work for the presentation

Supervisor: Prof. Dr. oec. Baiba Savrina _____ . _____. 2019
(Acad. Degree Name Surname) (Signature) (Date)

Reviewer: Professor, Dr. oec. V. P. Karnups

The work is submitted at the Study Center on _____. _____. 2019

Person authorized by Dean: Astra Zalkalne _____ (Signature)

Work is presented in the meeting of master's final probation committee

_____. _____. 2019. Protocol N. _____

Secretary of committee: _____ (Signature)