Second-Hand Clothing in the Developing World:
A Saving Grace or Lasting Burden?

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Abstract

With the continued evolution of the textile and garment industry over the 20th and 21st centuries, along with consistently decreasing prices, more developed country consumers than ever before purchase clothing on a consistent basis, many of whom spend a significant portion of their monthly disposable income on such items as sweaters, dresses, shirts, tennis shoes, etc. These items are cheaper than ever before and have become part of everyday life in the 21st century in developed Western countries. However, this glut of garments in the average consumer's daily life presents acute challenges for how to dispose of these items when not wanted any longer. This paper attempts to describe some of the advantages and disadvantages of prodigious amounts of Second-Hand Clothing (SHC) being exported to the developing world on a consistent basis. Statistical analysis is offered to determine the impact of SHC. A Stakeholder Model is also put forth as well as practical policy recommendations.

Keywords: Environmental economics; economic impacts of globalization; welfare, well-being, and poverty; developing country; economic development.
JEL Codes: F01; F02; F18

1. Introduction

With the continued evolution of the textile and garment industry over the last fifty or so years, more developed country consumers than ever before are purchasing clothing on a consistent basis, in many cases spending a significant portion of their monthly income on such items what is generally classified as "textiles". These items are cheaper than ever before and have become an ubiquitous part of everyday life in the 21st century in developed countries such as the US, Canada, Great Britain, Australia, etc.

Because these clothing items are cheaper than ever before, consumers feel as if they can dispose of them once they have been used beyond a certain degree, slightly damaged, or are simply tired of them. In recent years, many times consumers (due to the ongoing presence of social awareness, "green" movements, etc.) choose to donate their used/second-hand clothing (hereafter referred to as SHC) to charities and thrift stores instead of disposing of them in the traditional sense. However, according to some studies, only a relatively small percentage of donated clothing is ever purchased in thrift stores in the donor's own country. The vast majority of this clothing, thousands of tons every year, ends up in the developing nations of Africa, Latin America, and Eastern Europe.

Historically, the importation of SHC is not a new concept. It has been occurring since roughly the 1970s but has been increasing at what seems to be an exponential pace since the inception of "fast

fashion", which has essentially, among other things, dramatically reduced the price of clothing. It also has impacted consumers' purchasing habits by pressuring them (via social media, advertising, etc.) to buy clothing throughout the year (versus only twice or three times a year upon the changing of the seasons, etc.). This has created a glut of SHC in many Western countries of the world. As previously mentioned, although some of this used clothing is sold via second-hand shops, consignment stores, etc., many recent studies indicate that this is a relatively small percentage of SHC and that the vast majority is collected, sorted, repackaged, and sent overseas to be sold at open air markets and/or by weight in bulk.

This paper explores some of the advantages and disadvantages of this amount of clothing arriving in the developing world on a consistent basis from a holistic Stakeholder Perspective. It also attempts to statistically quantify the effects that SHC has had in developing countries around the world. On the one hand, locals in these countries have an increasing amount of cheap, used clothing from which to choose (many times sold in open-air markets), thereby satisfying a basic human need which otherwise may go partially unmet. It also helps consumers in developed nations to dramatically reduce their environmental footprint. On the other hand, the sheer quantity of clothing arriving in developing country markets anecdotally seems to be eliminating the need for local production of clothing and is perhaps driving down the overall cost of wages, eliminating certain industries (such as textiles), etc. (although the causal relationship is still somewhat unclear). It also presents the challenge of how to dispose of thousands of tons of textiles in developing countries once these clothing items reach the end of their "second lives", with much of it now eventually ending up in developing country landfills. Lastly, imported SHC from the West could potentially lead to a loss of national cultural identity via adoption of Western clothing standards at the preclusion of national/regional attire. Thus, although in the developing world we may see this phenomenon as a boon to the general populations of these countries, perhaps there is a human cost involved.

2. Previous Research
2.1. The History of Second-Hand Clothing, the Rise of Capitalism, and "Progressive

Obsolescence"

SHC has a history that is as long as clothing itself, dating back to the ancient world, even serving as currency at different points throughout history (Lemire, 2005). Additionally, donating SHC to charities has been around since at least the 1830s, with such organizations as "the Ladies of the New York Clothing Society for the Relief of the Industrious Poor" (Strasser, 1999). This type of arrangement provided the upper and middle classes of that time with an outlet for disposing of unwanted clothing while not having to directly interact with the undesirable underclass and/or criminal elements associated with the "rag trade" of that era (Brooks, 2012).

With the inception of modern capitalism, "accelerating (or 'progressive') obsolescence" became a key idea among marketers and has been in active use since the 1920s. As B. Earl Pickett, a leading US-based clothing retailer, stated in the early 1950s, "Basic utility cannot be the foundation of a prosperous apparel industry. We must accelerate obsolescence" (Brooks, 2012). However, after WWI, industrialization spurred the growth of consumerism as an integral part of the economy (Claudio, 2007).

Moreover, since the early 1970's, developed countries have exported SHC to countries of the developing world. The extent of this phenomenon has been such that many developing nations have at one point or another banned SHC imports in an effort to protect their own textile industries, which can generate up to one-third of the total manufacturing employment in these nations.

2.2. The Modern SHC Trade

2.2.1. Environmental Concerns and the SHC Industry

Textile waste can be classified into either "pre-consumer" or 'post-consumer". Post-consumer textile waste is the used clothing that is being disposed of by the last user in the consumer market and can include such materials as cotton, polyester, denim, wool, and linen. In the US, more than 2000 textile recycling companies deal in post-consumer textiles, most of which are small, family-owned enterprises of 35-50 employees. According to the Council for Textile Recycling, approximately 35% of used clothing in the US ends up being exported to developing nations. In terms of the process referred to as End-of-Life Management, "Re-use and Reselling" is the largest of four categories for disposing of textile waste, with clothing being collected via charities or private collection agencies, sorted, graded, and then ultimately bundled and shipped to their destination markets (Roznev et al, 2011). Moreover, according to Paras et al (2018), there are six primary drivers of the reuse-based clothing value chain, among them being redesignability, price, legislation, and consumer attitude.

Generally, SHC sells for 10-20% of what new clothes would cost. The top five exporters—the US, Germany, Netherlands, Belgium, and Japan—supply over 90% of the world's SHC exports, with the US alone supplying roughly 45%. Among the top importers of SHC, most come from the African continent (Sub-Saharan and Northern Africa), Asia, and Eastern Europe (Haggblade, 1990). According to a 2004 Fiber Economics Bureau statement, the per capita consumption of fiber in the US is around 84 pounds per year, with over 40 pounds per capita being discarded per year. However, perhaps more surprisingly, a recent report shows China having surpassed the US, making that country the world's largest consumer of fiber. Currently, Americans throw away almost 70 pounds per capita of clothing and textiles each year, which represents around 4% of municipal solid waste. In the UK, around 1.5 million tons of unwanted clothing ends up in landfills each year (Sinha et al, 2009). Nevertheless, despite this glut of consumption, the textile recycling industry in the US salvages approximately 10 pounds per capita, or 2.5 billion pounds total per year from the post-consumer waste stream (Hawley, 2008).

Worldwide, the scope of the textile industry is huge—over $1 trillion per year, ranking as the second largest global economic activity in terms of intensity of trade. However, the apparel and clothing industry does leave a large pollution footprint. For example, polyester, one of the most widely used materials, is made from petroleum. Cotton, the other largely used material, accounts for 25% of the pesticides used in the US (the largest exporter in the world) and is largely subsidized by the US government (Claudio, 2007). Unfortunately, much of this ultimately ends up in landfills of developed nations whose consumers originally purchase the items.

However, the above is also counterbalanced by issues of ethicality surrounding the subject. Recycling SHC is argued to be the "right thing to do", is culturally framed as waste, and has powerful redemptive qualities for donors and recyclers (Norris, 2016). Additionally, according to research, the reuse of clothing causes the least impact on energy use and appears to be the most environmentally and socially friendly way of disposing of undesired textiles (Madsen et al, 2007). Woolridge et al (2006) found that "for every kilogram if virgin cotton displaced by second hand clothing approximately 65 kWh is saved".

In addition, in partial response to the environmental challenges previously described, some manufactures are turning to what has been dubbed "eco-fashion". Part of this endeavor entails the use of sustainably grown cotton, hemp, bamboo, and other fiber crops that require less pesticides, irrigation, and other inputs. Organic cotton, for example, is now grown in at least 12 countries and its sales continue to climb annually. However, it currently only represents a small fraction of the cotton sold annually on a global scale. Other trends, spearheaded by such companies as Patagonia Outerwear, include encouraging consumers to buy their products used. Moreover, national trends are emerging, such as the French national program of Extended Producer Responsibility, which has led to a three-fold increase in the collection and recycling of post-consumer textiles since 2006 (Bukhari et al, 2018). Although such trends are encouraging, the biggest impacts for increasingly sustainability ultimately

rest with the consumer. Consumer behaviors such as using detergents in colder water (vs. hot), extending the life of clothing, purchasing fewer (but perhaps higher quality) garments, etc. would all contribute to increasing sustainability (Claudio, 2007). However, this is more difficult than it seems at first glance. According to Harris et al (2016), a focus on sustainability alone will not drive the necessary changes in consumers' clothing purchase, care and disposal behaviour for several reasons, among them being that the issue of sustainability is too complex, consumers are too diverse in their ethical concerns, and clothing is not an altruistic purchase.

2.2.2. Export Markets- the US, UK, and other Developed Markets
Over 500,000 tons of used clothing is exported from the US each year, with some of the largest importers being African countries such as Kenya, Mozambique and Zimbabwe (Brooks, 2012). Charitable organizations are the primary option for most people who wish to donate or recycle their used clothing. However, the supply of SHC vastly exceeds the demand for it within thrift shops, consignment stores, etc. These charities tend to cull the massive amounts of donations to determine which items are saleable at the local resale shops and then bale the remainder and sell them to "rag dealers" at $.05-.07 per pound. These dealers will then further process the used clothing to attempt to determine the remaining value added (i.e. which can be sold to developing countries and which should be converted to industrial material, etc.). It's estimated that only around 40% of the donated clothing ultimately is saleable as clothing. Once sorted, the goods are again compressed into large bales (usually 600 to 1000 lbs.), wrapped, and warehoused until an order from a broker is received for a certain type of clothing (Hawley, 2008).

The US alone exports more than 7 billion pounds annually. About 45% of this is exported to one of more than 100 countries around the world in 100 pound bales of mixed clothing ultimately purchased by small, local entrepreneurs (Claudio, 2007). In fact, Industry Insider (2004) reported that "used apparel serves as the largest export from the United States based on volume". On a positive note, this seems to be one potential way in which the SHC industry can help to ease the environmental burden in developed countries.

2.2.3. Import Markets- Africa, Latin America, and Eastern Europe
Consumption in the "global South" (i.e. the developing world) is very different from developed country consumption in the sense that relative poverty frames all decision making. SHC can satisfy a basic human need of clothing for warmth and protection (Field, 2000). SHC provides the major source of garments in many sub-Saharan nations; for example, in Uganda it accounts for roughly 80% of clothing purchases. Moreover, the importation of SHC from developed countries tends to be concentrated within a few African nations. Together, the nations of Ghana, Benin, Tanzania, Kenya, and Uganda account for roughly 60% of sub-Saharan Africa's SHC imports (Brooks, 2012). While most SHC from the US does go to sub-Saharan Africa or Latin America, some smaller markets do exist in parts of Asia also. Furthermore, most SHC from wealthier European countries is sent to countries of Eastern Europe or North Africa.

Western clothing is a highly-prized commodity in the countries in which it is found and serves as perhaps the only source of affordable clothing in places where the income level is so low. Although issues of damaging infant industry and perhaps destroying cultural identity do exist and are valid in some context, it not only provides affordable clothing for millions of people but also provides micro-entrepreneurial opportunities for tens of thousands of other of these nations' citizens (Hawley, 2008). Moreover, it has been argued by researchers such as Rivoli (2009) that the SHC industry provides an avenue for Africans from many walks of life to benefit from globalization, also providing opportunities for entrepreneurs (see Kapstein, 2009 and Turok, 2010). Moreover, entrepreneurship has been offered as a solution to African poverty (Van Deth, 2003).

In addition, African buyers of SHC are also becoming increasingly sophisticated. According to a Recycling International Report, "Today, selling used clothes to Africa is almost like running a boutique" (2006). However, unfortunately, one counterpoint to this argument is that exporters in some

cases are shipping clothing that is beyond wearable condition, even for the second-hand export markets and thus over time convert these importing countries into a type of dumping ground. SHC has been shipped to Africa for years, but perhaps at this point standards should be established regarding the quality of SHC that is shipped to this part of the world.

The sheer amount of SHC has been such that as of the early 2000s, 14 countries in Africa as well as some in Latin America and the Caribbean banned (at least temporarily) clothing imports or placed bureaucratic barriers that effectively prevented its importation (Dupin, 2003).In January 2005, the African countries of Tanzania, Uganda, and Kenya placed an import tax increase of nearly 300% on SHC in an attempt to shut down the SHC industry, citing protectionist measures for their own emergent textile industries. This led to large protests from millions of small business owners who survive by selling used clothing (which, it should be noted, also provides income to the host-country government in the form of taxes). This led to the taxes being reversed in 2006 (Hawley, 2008).

Furthermore, in the case of Tanzania, SHC began to be imported into this nation before independence in 1964. During the economic crisis of the early 1980s, SHC became popular with all categories of people in that country and was even smuggled in from neighboring countries (Kinabo, 2004). Many consumers in this nation even now prefer SHC to new clothing in terms of comfort (i.e. breathability and sweat absorption) and strength. The industry has created employment for many people and brings in significant government income—a 35% import tax and 20% VAT—which dissuades the government from placing a ban on SHC importation (Sinha et al, 2010).

In Tanzania, similar to other African nations, the "middlemen" buy bales of SHC to be resold to retailers in the market areas. A bale contains between 200 and 1000 articles of clothing and may be classified according to garment type (Sinha et al, 2010). Similarly, in Mozambique, the opening of a new bale is considered a *lottery* ("totobola" in the local language) because of the element of chance involved. A high-quality bale of clothing can led to a doubling or tripling of the initial investment by the micro-entrepreneur/market trader, but a low-quality bale (with a high percentage of unwearable/unsellable clothing) can lead to a loss of their investment. In other words, the bales are not homogeneous commodities; however, it's treated as such due to the absence of information about their potential use and exchange value (i.e. no one knows what each bale contains since they are packaged in the West). A bale's contents are only determined once it is opened and parsed out into single items (Brooks, 2012).

Perhaps ironically, new clothing items and SHC are not mutually exclusive. In the case of Mozambique, for example, new clothes are widely sold and local tailors also produce garments. Most well-to-do Mozambicans prefer to buy new clothing or have their clothing tailored and model their fashion aspirations after Western standards (although premium SHC is sometimes preferred by the well-to-do over cheap Asian imports). Most impoverished Mozambicans, on the other hand, buy SHC for the functionality of the clothing itself (in the country capital, SHC was found to be roughly 37% of the price of comparable new imported clothes). According to Ferguson, although many impoverished Africans do also respond to "manipulated desires" driven by Western marketers, these desires are distant, aspirational, and overly unachievable (1999; 2007).

Moreover, in the case of Mozambique, some SHC is desired among consumers, particularly those of high physical quality (and may be preferred to new imported clothing in some instances). Most Mozambicans have their own aspirations for local fashions and styles, including high quality new clothing articles. Clothing customers in this region seem to care most about price and the physical quality of clothing, while "style" is a distant second consideration. Furthermore, the livelihoods of tailors in the capital of Mozambique (Maputo) are intertwined with the SHC industry. The majority of their business transactions involved altering second-hand garments and making new garments from second-hand material. Tailoring is a skilled profession and the tailors are generally self-employed and possess their own equipment. This work is typically done at the behest of customers who have already purchased a second-hand garment, although it can also be done for retail clients who seek to increase the value of a particular garment before it's put for sale (Brooks, 2012).

Lastly, SHC is now increasingly competing with cheap new imports in low and middle income countries in Africa. This has led to a decrease in the price consumers in this region are willing to pay for SHC. However, perhaps ironically, in some cases (especially for "vintage" clothing or clothing with a premium label), SHC is not cheaper than comparable Asian imports. Moreover, in many African countries, there seems to exist a widely-held perception that SHC is of higher quality than new clothing, simply because it has been "proven" and will most likely not begin to deteriorate after three of four washings (as may be expected with cheap imported garments) (Brooks, 2012).

In sum, the international trading of SHC beings cheaper garments to developing markets because "reproducing" used clothing costs less in labor than manufacturing comparable new garments. SHC represents a very efficient way of supplying clothing to markets in developing regions of the world.

2.2.4. The Decline of the Textile Industry in Developing Markets

Since the 1980s, there has been a general tendency of developing country deindustrialization, which includes a long-term trend of clothing manufacturing decline. However, it is actually unclear if the importation of SHC has caused local clothing sectors in developing countries such as Haiti, Tanzania, and Kenya to close. Although there is an intuitive argument that imports are forcing the manufacturing sector to contract, this might not be a causal relationship. The relationship in reality needs to be questioned and thoroughly investigated in order to understand the real connection (if any) between these two phenomena. Perhaps they are both independent systems of the economic liberalization policies of the late 1980s and early 1990s. It is intuitive to believe that the volume of SHC into regions of the world such as sub-Saharan Africa has depressed the local garment/textile industries in the respective countries. However, this is a much more complex analysis than it may seem on the surface. There are methodological difficulties in attempting to assess a causal relationship. In fact, they may be correlating trends, both independent symptoms of the economic liberalization process towards free trade in Africa during the 1980s and 1990s (Brooks, 2012).

Furthermore, economic reform and failed development policies may have more to do with the decline or failure of local textile industries than simply the importation of SHC itself. In Mozambique, for example, clothing production was first marginalized during the colonial era (under Portugal) and has faced repeated structural difficulties since that time (independent of the SHC industry). Other factors that impacted the domestic garment industry have been civil war, destabilization, economic liberalization, domestic barriers to business, and rent-extraction from local elites. What's more, this long-term trend of the decline of local clothing manufacturing has not been uniform across Africa; in fact, some nations of the region have actually experienced growth in this sector in recent years (Traub-Merz, 2006). African clothing products are generally not competitive regionally or globally, as their labor and production costs tend to be higher than their Asian competitors (Phelps et al, 2009).

2.2.5 Additional Positive and Negative Impacts of the SHC Industry

As with any complex issue, there are both positive and negative impacts associated with the SHC process. To wit, there is currently increasing pressure from cheap Asian imports in nations such as Tanzania since the phasing out of quota restrictions with the expiration of the Multi-Fiber Agreement in 2005. Perhaps ironically, much of these SHC will end up in landfills in countries such as these (along with the Asian imports) at the end of their "second" life (Sinha et al, 2012). Furthermore, according to Sinha et al (2010), increased cheap imports (generally from Asia) have exasperated the problem of increased land-filling in the export markets.

According to Wetengere (2018), most people in the developing nations of East Africa, for example, use SHC because they are cheaper, perceived to be of good quality, and seen to be fashionable. The SHC industry in these countries also helps to generate employment in the form of entrepreneurship, tailoring/altering of clothing, wholesaling, etc. However, it can be seen to hamper the current initiative to revive the textile and leather industries in these nations. Lastly, there has also been evidence of contracting skin diseases from SHC, damaging of self-esteem of the locals, and conflicting

with traditional values. In light of all this, the author suggests the following: a.) any phase-outs of SHB be very gradual and implemented over a time frame of five to ten years, b.) effective policies against the price competition of Asian imports be put into place, and c.) that the government introduce a conducive business and investment environment that could give rebirth to the growth of new domestic industries.

3. Model of Sustainable Stakeholder Equilibrium

With the above analysis in mind, the following model may be considered with regard to sustainable equilibrium between all the stakeholders involved in the SHC industry. It is an extremely intricate dynamic with many different players on a global scale. The implication is to strike a balance between the importation of SHC, local artisan and entrepreneurial involvement, government (and the subsequent taxes collected), reduction of landfill waste in both the exporting and importing countries, etc.

Model 1: Sustainable Stakeholder Equilibrium Overconsumption in Developed West
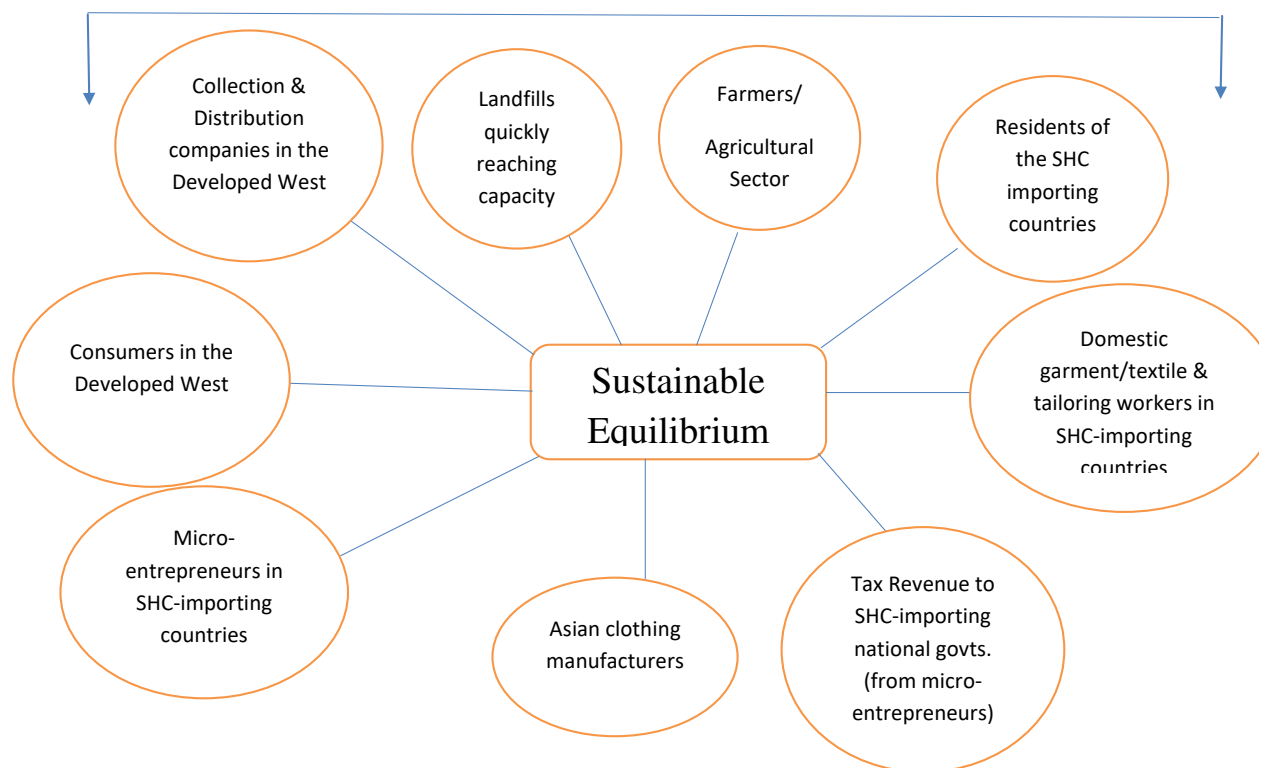
4. Methodology, Data, & Hypotheses

Based on the above literature review and theoretical backing, the hypotheses put forth here are the following:

H1: Domestic manufacturing is inversely correlated to SHC importation in less-populated developing countries.

H2: There is no statistical relationship between domestic manufacturing and SHC importation in more-populated developing countries.

H3: There is no statistical relationship between domestic manufacturing and SHC in developing countries possessing more economic liberalization.

H4: Domestic manufacturing is inversely correlated to SHC importation in developing countries that have experienced civil war.

The methodology utilized in will be ARCH and GARCH regression performed through SPSS and will use data primarily from the World Bank. Countries will be examined in regional format (i.e., all Asian countries considered together, Latin American countries considered together, etc.) and then as a whole. Regression analysis, according to Gujarati (2003), is one of the most useful econometric techniques in practice. The basic regression will take the following form**:**

SHC Impact (as represented by domestic manufacturing) = $= \alpha + \beta1$ Country Population + $\beta2$ Amount of SHC Imported + $\beta3$ Amount of New Imports (from other parts of the world) + $\beta4$ Size of the Domestic Economy + $\beta5$ Average Tariffs on New Imports + $\beta6$ Civil War + $\beta5$ Economic Liberalization + $\beta6$ Population Density

The methodology will follow an event study type format in which pre-SHC and post-SHC periods will be examined for the countries located in the developing world that have been involved in the importation of Second-Hand Clothing. A period of 11 years was examined for each country—five years prior to the beginning of importation of Second-Hand Clothing, the year SHC is considered to have begun, and five years after the beginning of importation of Second-Hand Clothing. "Civil War" will be considered a dummy variable (with values of 0 and 1, respectively) depending on whether or not the particular country experienced such an event in a given year and is used to classify this data into mutually exclusive categories. "Country Population" will be considered a dummy variable, taking values of 0, 1, or 2, depending on whether the population is under 3 million ("0"), between 3 and 8 million ("1"), or over 8 million ("2"). "Economic Liberalization" will be represented by the Economic Freedom Index as put forth by the Heritage Foundation for the 11 year period in question for each country.

Countries included in this study are the following:

Figure 1: Countries Examined

Africa	Latin America	Eastern Europe	Asia
Mozambique	Panama	Ukraine	Pakistan
Sierra Leone	Costa Rica	Poland	India
Tanzania	El Salvador	Lithuania	Thailand
Kenya	Guatemala	Belarus	
Ghana	Honduras		
	Nicaragua		

5. Results & Interpretation

The following tables are the raw data results. Only variables that are correlated and statistically significant at the 1% level are listed. Control (dummy) variables are not listed. The interpretation will follow.

Table 1:   results for H1 may be seen

Area	*Significant Variables*	*Total R^2*
Africa	Country Pop., Pop. Density	.372, .179
Latin America	---	.291
Eastern Europe	---	.124
Asia	Pop. Density	.136
Total	**Country Pop.**	**.243**

Table 2: results for H2 may be seen

Area	*Significant Variables*	*Total R^2*
Africa	Econ. Liberalization	.157
Latin America	---	.201
Eastern Europe	---	.118
Asia	---	.184
Total	---	.156

Table 3: results for H3 may be seen

Area	*Significant Variables*	*Total R^2*
Africa	---	.208
Latin America	New Imports	.146
Eastern Europe	---	.177
Asia	New Imports	.201
Total	---	.199

Table 4: results for H4 may be seen

Area	*Significant Variables*	*Total R^2*
Africa	SHC Imported, Civil War	.346, .298
Latin America	Civil War	.113
Eastern Europe	---	.194
Asia	---	.172
Total	---	.203

Regarding Hypothesis 1, both Country Population and Population Density are both statistically significant (albeit only in Africa and Asia), indicating strong support for the supposition that domestic manufacturing is inversely correlated with SHC importation. However, it seems that this is highly dependent on the area of the world, leading one to believe that there are other factors at play. As echoed in the literature review above, it seems that perhaps in smaller countries, a country's overall population, as well as population density (i.e. the number of people in the respective country's major cities) would indeed be a large influence in terms of whether or not the importation of SHC has an effect on domestic manufacturing.

This idea seems to be corroborated in the results obtained testing Hypothesis 2, as there seems to be almost no statistically significant variables connecting domestic manufacturing and SHC in countries of higher population. The only exception is Africa, in which Economic Liberalization seems to play a larger role in this category of country.

Thus, overall, there could be considered to be strong support for the idea of a country's population being a strong determinant of whether or not SHC importation affects a nation's domestic manufacturing.

Regarding Hypothesis 3, as can be seen above, there was no statistically significant evidence found to support a relationship between domestic manufacturing and SHC in developing countries possessing more economic liberalization. However, as perhaps could be expected, there was found to exist a statistically significant relationship between "New Imports" (i.e. imports of newly produced clothing) and domestic manufacturing in countries considered to be more open economically. Thus, the amount of new clothing brought into the country could perhaps be considered more of a "threat" to domestic manufacturing than the importation of SHC in more economically open developing countries.

Regarding Hypothesis 4, there was found to exist a statistically significant relationship between the importation of SHC and domestic manufacturing in countries of both Africa and Latin America that have experienced civil war. These two areas of the world, likely more than any other, have experienced multiple civil wars over the last several decades among differing countries of the region, so perhaps

this is no surprise. Civil war, perhaps more than any other factor imaginable, can wreak severe havoc on a country's economy.

6. Policy Recommendations

Given the preceding qualitative analysis, model framework, and quantitative statistical analysis, the following are specific recommendations for achieving both stakeholder equilibrium and positive country outcomes regarding the importation of Second-Hand Clothing:

a. Raise the standards of SHC quality coming into developing nations (i.e. don't allow these countries to ultimately become the "landfill of last resort".

b. Continue to incentivize micro-entrepreneurship in importing countries.

c. Continue to support the local garment industries in these countries. Perhaps try to focus on "climbing the economic ladder" to begin production of higher value-added goods and/or services.

d. Continue to emphasize the message in developed countries (i.e. "exporting" countries) that consumers must reduce their environmental footprint. Both consumers and producers must be on-board. The model of a company such as Patagonia Outdoor Wear (i.e. to buy their products used in the West) is revolutionary and may be one to emulate.

e. Governments of SHC-importing nations must be aware of the economic benefits of Second-Hand Clothing importation and supportive of this endeavor. Among other benefits, it not only provides jobs for micro-entrepreneurs, it also generates tax revenue for the governments themselves and promotes an environment of open trade.

f. Aspire to raise wages and working standards in Asian production markets. This would not only benefit the workers in these countries, but would also push the cost slightly upward in the African markets, making them less likely to undercut/directly compete with the SHC market.

g. Less-populated developing countries may want to limit the amount of SHC that is being imported if the protection of domestic manufacturing is a cause for concern. However, this should be evaluated on a country-by-country basis, as some nations' domestic manufacturing specializes in unique and/or culturally distinctive clothing designed for the local population.

h. Countries should realize not only the social malady of civil war, but also the ravaging economic effects of civil war, and do everything possible to avoid this type of conflict.

7. The Future of Second-Hand Clothing

From both empirical and anecdotal evidence, it appears that the textile industry serving the developed West (including the continued dominance of "fast fashion") will continue to have tremendous influence. In all likelihood, unless an unforeseen phenomenon occurs, the exportation of SHC to developing countries (including those highlighted in this study) will continue unabated. The big unknown in this scenario is how this will impact both the general economies as well as the domestic textile industries of these countries.

8. Conclusion

The modern textile industry has provided Western consumers with the ability to purchase clothing at an increasingly affordable cost. However, this improvement in this aspect of quality of life of Westerners has resulted in a vast increase of clothing that is either simply thrown away (many times ending up in developed country landfills) or is exported to developing countries of Africa, Latin America, and Eastern Europe in the form of second-hand clothing. This phenomenon has undoubtedly provided affordable clothing for millions of people in these regions of the world. However, there have been potential repercussions, which includes the domestic garment industries in the respective countries, an increase in garments ending up in landfills within these importing countries, etc. This

paper examined the SHC trade in detail and attempted to balance the vast array of opposing forces involved in this multifaceted, global process. Hypotheses with statistical analysis was offered, along with a Sustainable Stakeholder Equilibrium model and practical policy suggestions.

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