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FAST FASHION: AN URGENT GLOBAL CHALLENGE

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ABSTRACT

This research aims to explore why the fast fashion industry keeps growing despite growing knowledge about its environmental and social costs. The clothing industry is among the most unsustainable sectors in the global economy, accelerated by the fast fashion business model, and major changes in the industry are needed to be able to reach the Sustainable Development Goals (SDGs). In recent years, the industry and the public have become more aware of its negative impacts. However, the industry is still growing, and, with the current production and consumer patterns, this can have catastrophic outcomes for the planet. This research explores the real cost of fast fashion by looking at the negative externalities of the industry. Moreover, the study identifies the drivers of the market growth focusing on consumers, companies, and policy makers - three main actors in the sector.

Keywords: Fast fashion, sustainable development, drivers of supply and demand, government intervention

RESUMEN

Esta investigación tiene como objetivo explorar por qué la industria de la moda rápida sigue creciendo a pesar del creciente conocimiento sobre su costo social y medioambiental. La industria de moda es uno de los sectores menos sostenibles en la economía mundial, acelerado por el modelo de negocio de la moda rápida. Cambios importantes en la industria son necesarios para poder alcanzar a los Objetivos de Desarrollo Sostenible (ODS). En los últimos años, las empresas y el público se han vuelto más conscientes del impacto negativo de la industria. Sin embargo, la industria sigue creciendo, y, con los patrones de producción y consumo actual, esto puede provocar consecuencias catastróficas para el planeta. Esta investigación explora el costo real de la moda rápida al observar las externalidades negativas de la industria. Además, el estudio identifica los impulsores del crecimiento del mercado centrándose en los consumidores, las empresas y los políticos – tres actores principales del sector.

Palabras-clave: Moda rápida, desarrollo sostenible, impulsores de oferta y demanda, intervención gubernamental

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ACRONYM	English	Spanish
EC	European Commission	Comisión Europea
ECLAC	The United Nations Economic Commission for Latin America and the Caribbean	Comisión Económica para América Latina y el Caribe (CEPAL)
EP	European Parliament	Parlamento Europeo (PE)
EU	European Union	Unión Europea (UE)
ITO	In terms of	En términos de
SDGs	Sustainable Development Goals	Objetivos de Desarrollo Sostenible (ODS)
SCP	Sustainable Consumption and Production	Producción y Consumo Responsables
UEM	European University of Madrid	Universidad Europea de Madrid
UN	United Nations	Naciones Unidas (NU)
UNEP	United Nations Development Programme	Programa de Las Naciones Unidas para el Medio Ambiente (PNUMA)
US	Unites States	Estados Unidos (EEUU)
WCED	World Commission on Environment and Development	Comisión Mundial sobre Medio Ambiente y Desarrollo
WTO	World Trade Organization	Organización Mundial de Comercio (OMC)

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1. INTRODUCTION

The fashion industry is one of the most unsustainable sectors in the world (The World Bank, 2019). The unsustainable practices of the industry have accelerated with “fast fashion” – a term referring to mass production of cheap and trendy clothes (EC, n.d.). The fashion industry is a huge business, generating much money and providing jobs for hundreds of millions of people across the world (Ellen MacArthur Foundation, 2017). With the fast fashion business model, consumers benefit from easy access to affordable fashion pieces (Mikolajczak, 2019), which has led to overproduction and overconsumption of clothes. The industry thus has a high social and environmental cost. In recent years, companies and consumers have become more aware of the negative impacts of the industry (Patwary, 2020). Nevertheless, the industry is still growing, and current trends can lead to catastrophic outcomes for our planet in the future (UN Alliance for Sustainable Fashion, n.d.).

1.1 Research Question and Sub-Objectives

The research question of this paper is the following: **“Why is the fast fashion industry still growing despite growing knowledge of its environmental and social costs?”**

This paper aims to explore why the fast fashion industry is expected to grow over the coming years despite governments, companies, and consumers becoming more aware of its environmental and social costs. The research question will be answered by looking into the following sub-objectives: 1) To explore the environmental and social costs of fast fashion, 2) to explain the drivers to produce and buy more fast fashion, 3) to research if the consumers of fast fashion also are interested in taking care of the environment, and in that case, to identify the reasons for why they still choose to buy fast fashion, 4) to explain what governments are doing about the issue.

1.2 Justification

The fashion industry is one of the least sustainable sectors in the world (EC, n.d.), and it is one of the largest sectors in the global economy (The World Bank, 2019). The industry concerns all human beings as everyone need and wear clothes, and clothes thus play an essential role in people's everyday life (Ellen MacArthur Foundation, 2017). The industry's supply chain takes place in different parts of the world, where production tends to happen in developing countries where labor is cheap, it is then mostly shipped to and sold in Western countries (Meier, 2021). After use, it is mostly exported back to developing countries, such as countries in Africa or Asia, where it ends up in landfills or informal waste streams (EC, n.d.).

Most of the clothes that are bought today are fast fashion clothes (Mikolajczak, 2019). Fast fashion, which dominates the fashion industry, is a global and urgent problem due to its high environmental and social costs. According to the Ellen MacArthur Foundation, the fashion industry contributes to atmospheric pollution accounting for about 1.2 billion tonnes of greenhouse gases annually. This is more than the airline and maritime industries are causing combined. Due to underutilization and lack of recycling, an estimated US\$ 500 billion in value is lost annually. Moreover, many textiles release microplastic when washed, and by that also contributes to the pollution of the ocean. The social cost is high as many workers face bad working conditions with many work hours and low payment (Ellen MacArthur Foundation, 2017).

We are currently facing an urgent global climate crisis, which makes this topic highly relevant today. Significant changes in the fashion industry are needed to be able to reach the Sustainable Development Goals (SDGs). If production and consumption patterns in the fashion industry are not changed, the social and environmental costs will continue (UN Alliance for Sustainable Fashion, n.d.). For the fashion industry to become sustainable, the industry must change from a linear fashion industry to a circular fashion industry. This paper will therefore explore why the industry is still growing, so that it becomes clearer what is needed to make the industry more sustainable and achieve a circular fashion industry. First when we know the roots of the problem, we can find solutions to it.

1.3 Delimitation

This paper aims to explore the reasons why the fashion industry keeps growing despite growing knowledge of its environmental and social costs. According to the UN Alliance for Sustainable Fashion, fashion refers to clothes, leather, and footwear made from textiles and related materials (Meier, 2021). Since there are many reasons for the continuous growth of the industry, the main focus of this paper will be on the variables determining increasing growth of sales and production based on the basic model of supply and demand, and on concepts from environmental economics. The purpose of using the supply and demand model is to understand the drivers of the market, the effects of government intervention, and to understand key concepts from environmental economics that are connected to it, such as externalities and the tragedy of the commons. These are included to be able to look at the issue at the level of consumers, suppliers, and governments. The paper is written from an international relations perspective, and the focus of the paper will therefore be based on economic concepts but not on economic calculations. Due to the scope, time, and word limit of the thesis, this research paper will not be able to go in-depth but will give some idea of the challenges and contribute to further investigation of the topic.

1.4 Structure

This paper is divided into four parts. The first section, in addition to this introduction, presents the methodology used in the research. The second section of the paper will provide the conceptual-theoretical framework, including the theory of supply and demand and the tragedy of the commons, and the concepts of fast fashion, sustainable development, externalities, and government intervention. The third section is the research development which consists of four parts. The first part will explain the negative externalities of fast fashion. The second part examines companies and their drivers to produce more clothes. Following this, the paper looks at consumers and why there is a high demand for fast fashion products. The last part of the research development covers what role governments play in the industry. Finally, the conclusion will answer the research

question and provide a reflection offering recommendations for possible solutions to the problem.

1.5 Methodology

The method used in this research paper will be provided in detail in this section. Firstly, the choice of exploratory, qualitative research will be explained, and why it is appropriate to use qualitative method to answer the research question. Furthermore, this section will explain how the data has been collected and what methods have been used to analyze the data. Lastly, the validity, reliability, and limitations of the methodology will be described.

This paper aims to explore why the fashion industry keeps growing despite growing knowledge of its social and environmental costs. To achieve this objective, it has been used exploratory, qualitative research based on primary and secondary sources. Qualitative research aims to explore a social phenomenon and “is used to understand people's beliefs, experiences, attitudes, behavior, and interactions.” (Pathak, Jena, & Kalra, 2013, p. 1). Thus, the methodology chosen in this paper is of qualitative nature because the research question aims to explore the reasons behind the continuous growth of the fashion industry.

The first stage of the methodology explored available data about the topic. Data was collected by searches in the online university library and internet searches with relevant keywords such as “fast fashion”, “sustainable development”, “costs of fashion” and “consumer behavior”. Relevant data and literature have been reviewed, including recent reports about the costs of the fashion industry, publications by NGOs, academic articles, statistics, news articles, books, and legislative proposals to address the issues related to the industry.

The second stage of the methodology was to analyze data. Thus, information and statistics were compared to one another to make sure that the information was correct or to identify if different factors were leading to different data. At this stage, the perspective

of different actors or stakeholders, and how this might affect their view on the topic, has been taken into account.

Both primary and secondary sources have been used to sustain the analysis. The primary sources used are the report *A New Textiles Economy: Redesigning Fashion's Culture* by the Ellen MacArthur Foundation, and the *World Trade statistical Review 2022* published by the World Trade Organization (WTO). For the theoretical framework, books and reports from relevant authors have been used. This includes sources from the subject "Environmental Risks and Climate Change" at UEM, such as the book *Environmental Science* by Botkin and Keller. Following this, the research for the analysis was divided into four parts: 1) negative externalities of fast fashion, 2) consumers, 3) companies, and 4) policymakers.

Statistical data and information about the consequences of the fashion industry are collected from reports, such as the *Synthesis Report on United Nations System-wide Initiatives related to Fashion* by the UN Alliance for Sustainable Fashion, the report by the Ellen MacArthur Foundation, and the report by the WTO. Moreover, the paper is based on official sources, such as the World Bank and the United Nations Development Programme (UNDP). These sources are used throughout the research to ensure correct and credible data and to provide figures and tables. The part concerning companies and consumers are, in addition to the reports and official sources mentioned, based on academic articles. Lastly, the part concerning governments is mostly based on official sources and documents published by international organizations, such as the UN and the European Union (EU). Among the sources provided by the EU, especially relevant for the analysis, is *The EU Strategy for Sustainable and Circular Textiles* provided by the European Commission (EC). Furthermore, additional sources, such as news articles, are also used to sustain the analysis.

The research is based on the most recent data available about the topic to ensure validity. For the research concerning consumers specifically, both recent and previous studies were used to see if consumer behavior has changed in recent years. The data

obtained from research concerning consumer behavior is limited to the participants of the investigations of these authors. Thus, this data does not represent the world population but gives an idea worth further investigation. Moreover, as this research paper is based on bibliographical revision, this research is limited to the information available and the quality of these sources.

2. THEORETICAL-CONCEPTUAL FRAMEWORK

This section presents the relevant concepts and theory for the analysis. The conceptual framework sets the basis for the analysis of the research paper, which will be based on sustainable development, fast fashion, the drivers of supply and demand, externalities, and the tragedy of the commons. Firstly, this section will provide a definition of sustainable development and its connection to the SDGs, as the fashion industry needs to change to be aligned with these. Secondly, this section will explain what fast fashion is and look at its characteristics. Moreover, the basic supply and demand model will be provided to explain how the market works and what factors determine whether we buy and sell more. Following this, this section will explain what externalities are, and lastly explain the phenomenon of the tragedy of the commons, which are important concepts in environmental economics.

2.1 Sustainable Development

There are many ways to define sustainable development, but the most used definition is provided by the report *Our Common Future*, also known as the Brundtland Report, from 1987 (IISD, n.d.). In this report, sustainable development is defined as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.” (WCED, 1987) The Brundtland Commission integrated social and economic concerns with environmentalism, and sustainable development thus requires an approach that considers both economic development and environmental concerns (UN, n.d.).

Many treaties, norms, and institutions have been established with the concept of sustainable development at its core (Dauvergne, 2004). In 2015, all United Nations (UN) member states adopted the 2030 Agenda for Sustainable Development. The agenda sets out the Sustainable Development Goals (SDGs), which are defined by the UN as “a universal call to action to end poverty, protect the planet, and improve the lives and prospects of everyone, everywhere.” The initiative consists of 17 goals and a timeframe of 15 years to achieve them. Although progress has been made, action towards the goals is not taken at the pace required to be able to meet the goals within the current timeframe (UN, n.d.). Actors in the fashion industry have a crucial role to play to be able to achieve the SDGs (UN Alliance for Sustainable Fashion, n.d.) because the way the fashion industry is conducted is directly or indirectly related to all 17 of the SDGs. The 12th goal, Sustainable Consumption and Production (SCP), is among the directly related goals. SCP refers to the ability of current and future generations to use services and goods that respond to basic needs and life quality. At the same time, it should minimize emissions not to cause irreversible damage to the environment. This goal is important to be able to sustain the livelihood of people today and in the future. Our level of consumption has never been higher than it is now, and it is currently exceeding the earth’s capacity taking into consideration future generations (UN, n.d.). The fast fashion industry is a significant contributor to this (UN Alliance for Sustainable Fashion, n.d.).

2.2 Fast Fashion

Fast fashion dominates the clothing industry and is a business model based on fast-changing trends, fast production, fast sale and delivery, and fast use (Crumbie, 2023). Hence, fast fashion refers to low-cost clothing collections that copy current fashion trends from luxury brands and celebrities (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). The concept started to develop in the late twentieth century and has since gained a large market share in the global economy (Pennstate University Libraries, 2023). Over the past decades, the phenomenon has revolutionized the fashion industry (McNeill & Moore, 2015) with a constant supply of new styles and trends, a higher number of collections offered annually and low prices (Ellen MacArthur Foundation, 2017). Trends are now

changing faster than ever, workers are pressed to produce more and at a lower cost, and consumers are influenced to follow the latest trends (Crumbie, 2023).

Previously, the fashion brands offered fewer products, and the pace of changing trends was relatively slow. Today, with the phenomenon of fast fashion, brands are focused on responding as rapidly as possible to a constantly changing consumer taste (Crumbie, 2023). From the time a clothing piece is seen on the catwalk to it is offered in the stores, a process that used to take about 6 months, now only takes a couple of weeks (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). The clothes are often made of cheap synthetic fabric to keep costs low, and the pieces are not made to last. According to estimates, the average time a clothing item is used is only 14 times (Crumbie, 2023). The industry is operating in a linear way, meaning that products move in one direction, from raw material to waste. This system is also known as take-make-dispose (Ellen MacArthur Foundation, n.d.). In the fast fashion industry, a large amount of non-renewable resources are used in the production. After purchase, the clothes are usually used for a short period of time, and instead of being recycled, most of it end up being dumped or incinerated (Ellen MacArthur Foundation, 2017).

Some of the leading fast fashion retailers are companies such as Inditex (owner of Zara) and the H&M Group. However, it is worth mentioning that the fashion industry has become faster in general, and some companies are considered faster than others (Crumbie, 2023). The pace of some fast fashion brands has led to the newest concept within fast fashion, called ultra-fast fashion, with Shein being the leading brand. Shein daily releases between 700-1000 new products, and it only takes the company 5-7 days from a clothing piece is designed to it is offered in store. For other companies, such as Zara, the same process takes about three weeks (Bennett, 2022).

The challenges of the fast fashion industry are connected to sustainability. The way the fast fashion industry operates today is unsustainable as it has major environmental and social costs (UN Alliance for Sustainable Fashion, n.d.). The fast fashion industry has adopted increasingly unsustainable production techniques to meet consumer demand and

increase profit. However, in response to the growing global interest for sustainability, some fast fashion brands have also started to offer “sustainable options” in their range of products (McNeill & Moore, 2015). Several companies have also set goals to reduce carbon emissions. However, the fast fashion industry is expected to continue growing in the coming years. Thus, major changes in the business are needed to prevent further negative consequences of the industry (Ellen MacArthur Foundation, 2017).

2.3 Supply and Demand

Supply and demand are the forces behind the market economy (Mankiw, 2018). The model of supply and demand is widely used in microeconomics to explain market behavior and what happens when governments intervene in the market (Pindyck & Rubinfeld, 2005). Gregory Mankiw, in his book “Principles of Economics”, explains how the model of supply and demand helps us understand how sellers and consumers behave and interact with each other. The sellers determine the supply of the product, while the buyers determine the demand. The market economy consists of many different types of markets, meaning “a group of sellers and buyers of a particular good or service” (Mankiw, 2018, p. 66). However, the supply and demand model is used to analyze competitive markets. These are markets where the sellers offer similar products and consist of many buyers and sellers, to the extent that each buyer and seller has no real impact on the market price (Mankiw, 2018).

2.3.1 Quantity Supplied

The quantity supplied in a market can be defined as “the amount of a good that sellers are willing and able to sell” (Mankiw, 2018, p. 75). This is determined by four variables: price, input prices, technology, and expectations (Mankiw, 2018).

Price: The price of the product affects how much the seller will supply. If the product has a high price, the business is more profitable, while if it has a low price, the business is less profitable, and the seller will supply less. This dependency is also called the law of

supply, meaning that, other things equal, if the price of a good increase, the supply also will increase (Mankiw, 2018).

Input prices: Input prices are all the costs that are necessary for the production of the good. These costs can be such as materials, working force, and rent of building. The supply goes down if the input prices rise because producing the product will be less profitable (Mankiw, 2018).

Technology: Advancements in technology can increase the supply of a good. These advancements can, for instance, reduce the amount of labor force necessary for production, which means that the production costs are reduced. Moreover, it can make the production more efficient (Mankiw, 2018).

Expectations: The last variable is expectations, which means that if the seller expects to be able to sell the products for a higher price in the future, he or she might supply less now (Mankiw, 2018).

As these variables affect the quantity supplied by each seller, they also affect the market supply, which is the sum of all individual supplies in a market. In addition to the four variables, the market supply also depends on how many sellers there are in the market. More sellers meaning more supply (Mankiw, 2018).

2.3.2 Quantity Demanded

The behavior of buyers determines the quantity demanded. The quantity demanded is the amount of a good that consumers are willing and able to buy. Several variables determine the quantity demanded of a good, and these are the following: price, income, prices of related goods, tastes, and expectations (Mankiw, 2018).

Price: The quantity demanded is negatively connected to the price because if the price goes up, the consumers buy less. This dependency is known as the law of demand,

which means that, if all other variables are assumed to be constant (other things being equal), the quantity demanded of a product falls when the price goes up (Mankiw, 2018).

Income: Consumer's income affects the quantity demanded because less income usually means less money to spend on goods. However, this depends on whether the good is normal or inferior. On the one hand, if the good is considered normal, the demand for the good increases if income increases and falls if income falls. On the other hand, if the good is considered inferior, the demand for the good increases if income falls and decreases if income rises. An example of an inferior good given in the book is bus rides. Bus rides is an inferior good because as the salary of a person increases, this person is likely to buy a car or take a taxi instead of taking public transportation (Mankiw, 2018).

Price of related goods: This variable comprises both substitutes and complements. Substitutes are goods satisfying similar desires, where an increase in the price of one product results in a higher demand for the other product, or a decrease in the price leads to less demand for the other product. An example of substitutes could be a fall in the price of a Mac, leading to higher demand for Mac and less demand for Huawei laptops. However, if the decrease in price of one good leads to an increase in demand of another good, the products are complements. Complements are goods that are used together, such as cars and gasoline, and hamburger and fries (Mankiw, 2018).

Tastes: This is an essential variable determining the demand for a good. Depending on how much a person likes a good will determine to what extent that person is willing to buy it. Tastes are also based on historical and psychological forces that go beyond the scope of economics (Mankiw, 2018).

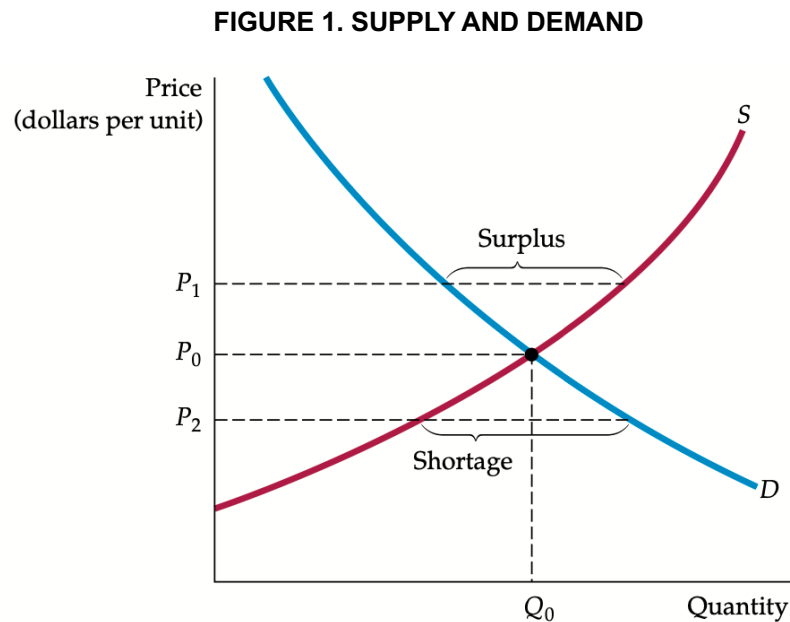
Expectations: People's expectations about the future may determine the current demand for a good. One example of this is if the price of the good is expected to fall soon, some might be less willing to buy it now. However, if the price is expected to increase, the buyers might be more willing to buy it today. Another example is that if some consumers

expect to receive a good salary next month, they might be more willing to use some of their savings to buy the product today (Mankiw, 2018).

As these variables affect the demand of each consumer, they are also determining the market demand, which is the sum of all individual demands for a good. The market demand also depends on how many buyers are willing and able to buy the product (Mankiw, 2018).

2.3.3 The Supply and Demand Graph

The supply and demand can be represented in a graph. The supply and demand graph consists of two curves: the supply curve and the demand curve. The supply curve represents the quantity producers are willing to sell at a given price, holding all other variables that can affect the supply constant. At the same time, the demand curve represents how much of a good buyers are willing to buy depending on the price (Pindyck & Rubinfeld, 2005).



Source: (Pindyck & Rubinfeld, 2005)

In Figure 1, the supply and demand are put together in a graph. The price of a good is represented by the vertical axis, while the quantity is represented by the horizontal axis. The point where the demand and supply curves intersect is called the equilibrium of the market (Pindyck & Rubinfeld, 2005). At this point, the quantity that sellers are willing to supply matches the quantity that buyers are willing and able to buy. This means that both sellers and buyers are satisfied. The price where the curves intersect is called the equilibrium price, and the quantity where the curves intersect is called the equilibrium quantity. The market naturally moves towards the equilibrium. Otherwise, there would be a surplus or shortage of goods, and the sellers would adjust the price to reach the equilibrium (Mankiw, 2018). In Figure 1, P1 and P2 represent if the price was higher or lower than the equilibrium price, demonstrating the shortage or surplus this would cause.

In this graph, all variables were held constant except for the price. Thus, any changes in the other variables that could affect the supply would lead to a shift in the supply curve as the quantity supplied at any price rises or falls. While a change in the price represents a movement along the demand curve, a change in any of the other variables represents a shift in the demand curve, either increasing or decreasing the quantity demanded at every price (Mankiw, 2018).

2.3.4 Externalities

According to Daniel B. Botkin and Edward A. Keller, an externality is an indirect cost or benefit that is not included in the market price of a product. Sellers usually do not recognize the externality as a part of their cost or benefit, and it is thus usually not included in the cost-revenue analysis (Botkin & Keller, 2005). Externalities can be negative or positive. It is considered positive if it gives an additional benefit, such as in the case of education. Education is a service provided for an individual, but it will also benefit the society. On the other hand, an externality is seen as negative when it gives an additional cost, such as air pollution from factories, as this is damaging to people and the planet (Lessenich, 2019).

Most economists agree that consumers can only make a rational decision if they are comparing the true cost, including externalities, with the benefit the consumer obtains. However, there are several problems connected to externalities. One problem is that it is difficult to measure the real cost. Moreover, it is difficult to determine who is responsible to bear the burden of these indirect costs (Botkin & Keller, 2005). Economists disagree on whether responsibility for externalities belongs to the market economy or the state. Some say that the solution would be more transparency regarding the “real cost”. In contrast, others argue that government regulation is needed to make the producers calculate the real costs in the market price (Lessenich, 2019). Some suggest that these costs should be included in the cost of production by imposing fees or taxation. Others propose that the whole society should bear the costs through general taxation (Botkin & Keller, 2005). In any case, the negative externalities have to be borne somewhere and by someone (Lessenich, 2019).

2.3.5 Government Intervention

The model of supply and demand also helps us understand what happens when governments regulate the market (Pindyck & Rubinfeld, 2005). Government intervention and regulation in markets are common and can be done in several ways to try to reduce the quantity demanded or quantity supplied of a good. Firstly, policymakers can try to change people’s tastes. This can be done through policies such as public service announcements raising public awareness, mandatory warnings on products, and prohibition of advertising the product. Secondly, policymakers could increase the price of the product, which can be done by adding a tax to the production of this good. This would increase the input prices of production, and the supply would thus go down because producing the product would be less profitable. In that case, the companies could pass much of this extra cost on to the consumers by increasing the price of the product. The quantity demanded would decrease as higher prices encourage people to buy less (Mankiw, 2018). Critics of direct taxation say it is bad for the economy and does not work (Botkin & Keller, 2005).

2.4 The Tragedy of the Commons

The Tragedy of the Commons is an economic theory that refers to how individuals with access to a shared resource or good (also called a common) tend to behave based on individual needs without taking into consideration the negative impact this may have on others. The theory was conceptualized by William Forster Lloyd in 1833 and is commonly known from Garrett Hardin's famous article *The Tragedy of the Commons* published in *Science* in 1968 (Spiliakos, 2022). The phenomenon explains that when people share a resource, the share of personal gain from the exploitation of the resource tends to be larger than the share of the personal loss (Botkin & Keller, 2005). This results in depletion or degradation of the resource, such as in the case of overfishing. In some cases, individuals believe that others will not behave in the best interest of the group, and thus uses this to justify their own behavior. Potential overuse of a common good also usually leads individuals to act based on short-term interest rather than long-term interest. This results in the use of unsustainable products and degradation of the environment (Spiliakos, 2022).

It is important that individuals, companies, and governments become aware of the tragedy of the commons so that they can seek to find solutions and make more sustainable choices (Spiliakos, 2022). The tragedy of the commons can be prevented by implementing punishment for overconsumption and encouraging underconsumption (Kareva, Morin, & Karev, 2013). Without transparency or regulation, individuals lack the motivation to refrain from acting in self-interest. Hence, regulation, transparency, and money are incentives that can make people more aware of the long-term impacts of their short-term actions and benefit people and the planet (Spiliakos, 2022).

3. RESEARCH ANALYSIS

3.1 Externalities: The Real Cost of Fast Fashion

There is a cost behind each piece of clothing that many people do not think about when they go shopping: the environmental and social costs. The environmental and social

costs of fast fashion are negative externalities of the fashion industry. The social cost is high due to the exploitations of workers, and the environmental cost is high because the industry operates in almost a completely linear way (see Figure 2).

In this linear industry, every stage of the life cycle has a negative impact on the environment (Patwary, 2020). The linear fashion system results in a significant economic loss and leads to pressure on resources, pollution, and degradation of the environment (Ellen MacArthur Foundation, 2017). The materials that are commonly used, such as polyester and cotton, are not sustainable. The production of polyester requires a large amount of fossil energy and non-renewable resources, and the production of cotton needs a large amount of fertilizer, pesticides, and water (Ellen MacArthur Foundation, 2017). The industry consumes around 215 trillion liters of water annually, and is responsible for up to 8% of the total greenhouse gas emissions on the planet (UN Alliance for Sustainable Fashion, n.d.). The total greenhouse gas emissions of the fashion industry account for more than international flights and maritime shipping combined (The World Bank, 2019) and are expected to grow more than 60% by 2030 (Ellen MacArthur Foundation, 2017).

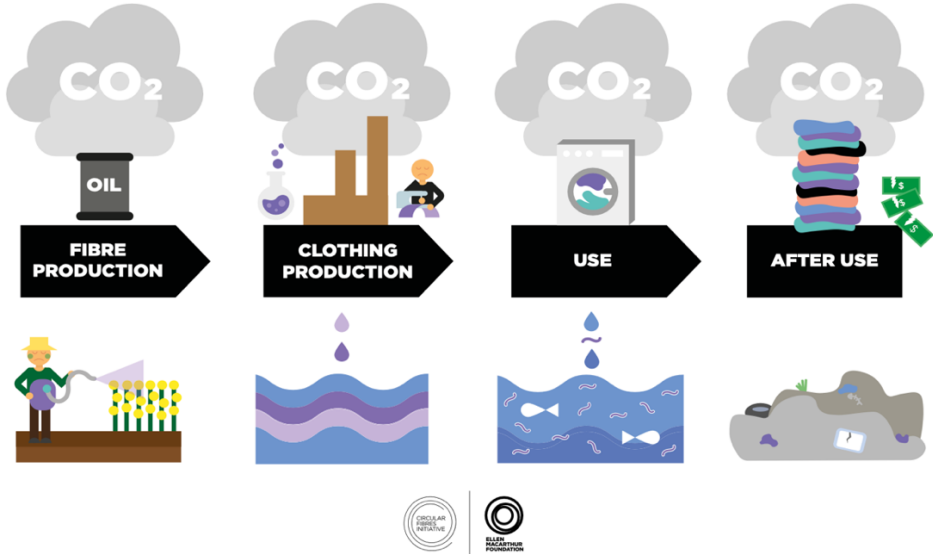
Moreover, it accounts for about 9% of microplastic losses into the ocean (UN Alliance for Sustainable Fashion, n.d.), and is thus contributing to the pollution of the ocean (Ellen MacArthur Foundation, 2017). Microplastic cannot be removed from the water and may spread into the food chains (The World Bank, 2019). Furthermore, according to the Ellen MacArthur Foundation, an estimated truck of clothes is dumped in landfills or incinerated every second, accounting for 73% of all discarded clothes (Ellen MacArthur Foundation, 2017). Globally, less than 1% of clothes are recycled into new clothes (European Parliament, 2022). These environmental damages have a negative impact on societies on a local, regional, and global level (Ellen MacArthur Foundation, 2017).

Furthermore, the social cost is related to the exploitation of workers. Workers in clothing factories around the world are subject to serious labor exploitation due to non-compliance with labor legislation and standards (Meier, 2021). For instance, in 2013, a

factory known as Rana Plaza in Bangladesh collapsed, and about 1100 workers lost their life and thousands were injured. Now, ten years later, significant improvements have been made in Bangladesh, but several challenges remain unsolved (Biswas, 2023). In general, many garment workers in the fashion industry are subject to unsafe working conditions, long hours, low wages, and verbal or sexual harassment (Mikolajczak, 2019). Cases of child labor and slavery have also been documented (Ellen MacArthur Foundation, 2017).

The social and environmental costs of fast fashion are currently not included in the price of the products. It is difficult to measure the exact economic value of the negative externalities of the fashion industry. However, estimates show that if the environmental and social costs were addressed, the world economy could benefit about US\$192 billion in 2030 (Ellen MacArthur Foundation, 2017). Thus, although fast fashion seems cheap by looking at the price tag, the real cost of fast fashion is high.

FIGURE 2. NEGATIVE EXTERNALITY OF THE FASHION INDUSTRY ITO. THE ENVIRONMENT

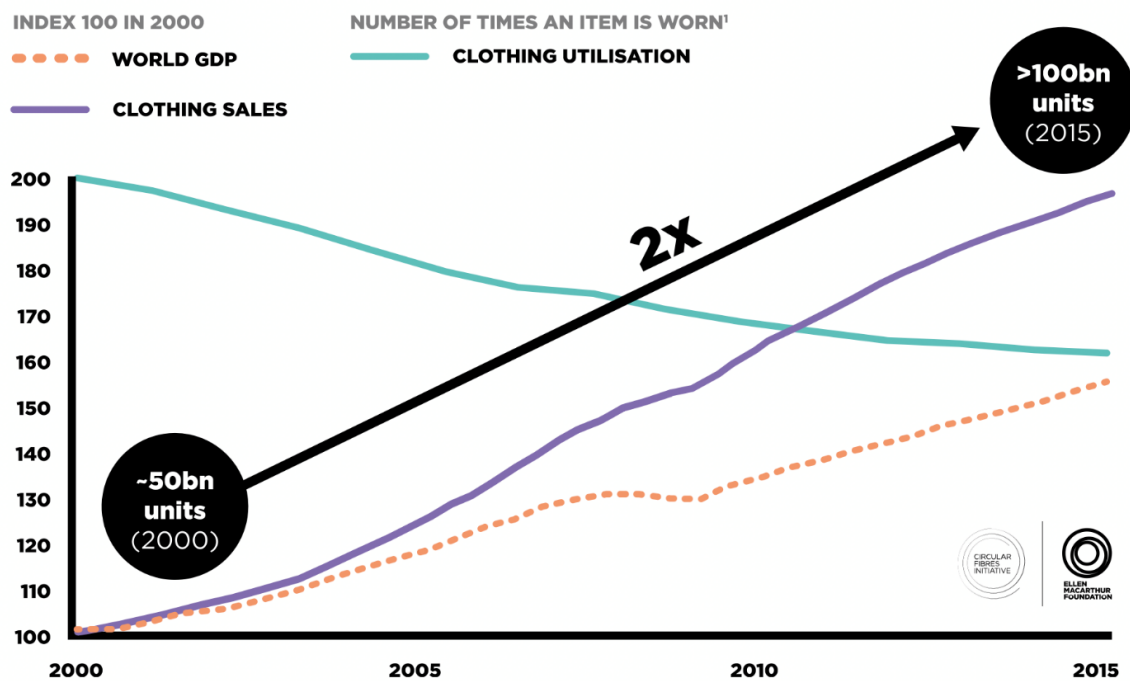


Source: (Ellen MacArthur Foundation, 2017)

3.2 Companies: Large Business

The fashion industry is one of the largest sectors in the global economy, after the automobile and technology industries (The World Bank, 2019). The annual production of clothes approximately doubled from 50 billion pieces in the year 2000 to 100 billion pieces in 2015 (See Figure 3). If the growth continues as expected, this will also increase the industry's negative social and environmental impacts (Ellen MacArthur Foundation, 2017).

FIGURE 3. GROWTH OF CLOTHING SALES BETWEEN 2000 AND 2015



Source: Euromonitor International Apparel & Footwear 2016 Edition (volume sales trends 2005–2015); World Bank, World development indicators – GD (2017)

According to the Ellen MacArthur Foundation, the clothing industry provides employment for more than 300 million people along the value chain (Ellen MacArthur Foundation, 2017), and approximately 80% of the garment sector workforce are women (Meier, 2021). In some developing countries, the production of cotton alone accounts for nearly 7% of all employment (Ellen MacArthur Foundation, 2017).

Some researchers have identified that the global economic importance of the industry has protected it from criticism of its environmental consequences and unethical practices. Thus, this has contributed to slowing down the process towards a sustainable change in the industry and is used to justify unsustainable practices in the global market (McNeill & Moore, 2015). In recent years, the industry has become more aware of the environmental and social costs of the current business model, and some leading brands have answered the call for sustainable production and consumption and are working on finding solutions such as alternative fibers and eco-friendly processes (The World Bank, 2019). H&M, for instance, has committed to only using 100% sustainable and recycled material in their production by 2030 (Gueye, 2021). However, companies are still selling fast fashion products, driven by profit maximization, cost minimization, and technology.

3.2.1 Price and Input Prices

Although fast fashion is known for its low prices, the industry is highly profitable. For instance, Shein, the leading ultra-fast fashion company, was in 2022 valued 84 billion pounds alone (Channel4, 2022). According to the UN Alliance for Fashion, the fashion industry generates about US\$2,4 trillion in revenue yearly (UN Alliance for Sustainable Fashion, n.d.).

Geopolitical tensions and inflation are currently affecting the industry. This led to a decrease in growth rate in the second half of 2022, which is expected to continue in 2023. Inflation has led to increasing input costs for the companies, and the war in Ukraine has disrupted trade routes and provoked an energy crisis that also is affecting the industry (Amed, Balchandani, André, Berg, & Rölkens, 2022). However, the economic slowdown is affecting the industry in the short term, and the industry is still expected to grow in the long term (The Business Research Company, 2023).

The companies minimize their input costs with low labor costs and cheap materials (ECLAC, 2023). In the 1980s, brands and retailers started to search for new cheap locations for production in developing countries to benefit from cheap costs and lack of environmental regulation (Patwary, 2020). This led companies to offshore production and

brought the business to Asia. Asia is the world's largest exporter of clothes, and the leading suppliers in Asia are China, Bangladesh, Vietnam, India, Malaysia, and Indonesia. China is the leading exporter and accounted for 32.8% of world export of clothes in 2021 (See Table 1) (World Trade Organization, 2022).

TABLE 1. TOP 10 EXPORTERS OF CLOTHING, 2021

	Value	Share in world exports/imports				Annual percentage change			
	2021	2000	2005	2010	2021	2010-21	2019	2020	2021
Exporters									
China (1)	176	18.2	26.6	36.6	32.8	3	-4	-7	24
European Union	151	26.4	29.3	26.9	28.1	4	1	-9	20
Extra-EU exports	43	8.1	8.6	7.5	8.0	4	3	-13	14
Bangladesh (2)	34	2.6	2.5	4.2	6.4	8	0	-17	24
Viet Nam (2)	31	0.9	1.7	2.9	5.8	11	7	-9	11
Türkiye	19	3.3	4.2	3.6	3.5	4	1	-6	22
India	16	3.0	3.1	3.2	3.0	3	4	-24	24
Malaysia	15	1.1	0.9	1.1	2.7	13	-2	72	49
Indonesia	9	2.4	1.8	1.9	1.7	3	-4	-12	23
Hong Kong, China	9	...	...	...	...	-9	-11	-33	4
Domestic exports	0	5.0	2.6	0.1	0.0	-12	-9	240	-15
Re-exports	8	...	...	...	...	-9	-11	-34	5
Pakistan	8	1.1	1.3	1.1	1.6	7	7	-3	37
Above 10	460	64.1	74.0	81.6	85.6	-	-	-	-

(1) Includes significant shipments through processing zones.
(2) Secretariat estimates.
(3) Imports are valued f.o.b.

Source: (World Trade Organization, 2022)

The primary focus in the factories is to be fast and to lower costs (Chakraborty, Yiu, & Hoang, 2022). Many garment workers are, therefore, suffering from bad working conditions, such as low wages, overtime, and lack of safety and protection (Mikolajczak, 2019). Although cheap labor lower input costs for fashion brands, the way workers suffer from poor working conditions leads to inefficiency in the industry (The Business Research Company, 2023).

Moreover, many fast fashion brands minimize production costs by mass-producing clothes using cheap and mostly fossil-fuel-based synthetic materials (ECLAC, 2023). The products are of low quality and are designed to be disposable (EC, n.d.). The industry can also do other production shortcuts to minimize costs such as low-quality seam work. The

low quality of the final product is also a factor that contributes to the low utilization of clothes, as some clothes fall apart after some use or in the wash (Chakraborty, Yiu, & Hoang, 2022).

Today, the companies that are genuinely making efforts to become sustainable are facing unfair competition due to lack of regulation. According to the Chief Operating Officer of Textile Exchange, Claire Bergkamp, companies prioritizing sustainability have higher input costs due to more expensive materials or processes (Paton, 2022). These companies are thus at a disadvantage compared to companies only prioritizing profits.

3.2.2 Technology

Technology is contributing to accelerating fast fashion (Patwary, 2020). Companies are using technology to anticipate market demand and to respond rapidly with designs and styles. Thanks to technology and e-commerce, the costs of starting a fashion brand have decreased significantly (CB Insights, 2022). Many fast fashion brands have online stores where they can easily reach out to consumers who can now renew their wardrobe in just a few clicks. Moreover, social media and its influencers have created a great business opportunity for brands (Mikolajczak, 2019). Many companies use social media and influencers to advertise their new products and reach people anywhere and at any time. Platforms, such as Instagram, have also introduced a “See now, buy now” tool, which makes consumers able to instantly buy the product they are exposed to on social media (CB Insights, 2022). Thus, using technology leads to higher sales and more profit for the companies (Davies, 2020). As the companies can have higher profits, they also supply more. Fashion technology is currently advancing at a fast pace, and companies are looking for ways to use technology to minimize the environmental and social impacts of the industry along the value chain (CB Insights, 2022). For instance, a new concept called “digital fashion” is currently intended to solve the problems related to the growing trend of buying clothes just to show them once on social media. This invention allows consumers to purchase clothes from a digital collection where a digital design can be applied to a photo. People are now able to buy and publish photos with new clothes without owning the physical clothing piece (Gueye, 2021).

3.2.3 Expectations

The fast fashion industry is expected to continue growing (The Business Research Company, 2023). However, changing consumer patterns and possible upcoming regulations are affecting the companies. Consumer patterns are changing, with more people demanding sustainable fashion, and governments are starting to respond to the pressure (Gueye, 2021). Hence, companies know that regulations might be approved in the upcoming years, which may make the input costs more expensive for clothing companies in the future (Chakraborty, Yiu, & Hoang, 2022). However, the fact that the industry is still growing reflects that the companies are taking advantage of current consumer demand and lack of regulation, while figuring out how to adapt to a possible stricter regulated market and changing consumer demand in the future.

Fast fashion production can also be seen as an example of the tragedy of the commons. The fashion industry is currently characterized by overproduction and companies exploiting the environment to maximize profit (EC, n.d.). Overproduction and the degradation of the environment reflect that the personal gain for companies is perceived as higher than their share of personal loss. It also reflects that brands will continue to sell fast fashion clothes as long as there is a lack of regulation, and it is profitable for companies. These trends are preventing the industry from being able to succeed in the long term (Gueye, 2021). This means that companies might not be able to sell fast fashion products in the future, either due to needed regulation or, in the worst case, due to catastrophic outcomes for the planet.

3.3 Consumers

Clothing is used by almost all people on the planet, which makes people direct consumers of the fashion industry (Ellen MacArthur Foundation, 2017). Furthermore, although many consumers are increasingly caring about unethical issues, this attitude does not necessarily translate into action (McNeill & Moore, 2015). The average person today buys 60% more clothes than in the year 2000 (Ellen MacArthur Foundation, 2017), while the clothes are only kept for half as long (UNEP, 2022). At the same time, other

business models, such as circular fashion, clothing rental, and second-hand clothing are gaining popularity among consumer groups (Patwary, 2020). An increasing number of consumers want to make purchasing decisions that align with their values (Gueye, 2021). However, the demand for clothes is still growing and clothing sales are expected to reach a total of 160 million tonnes in 2050, an amount that is three times higher than today's demand (Ellen MacArthur Foundation, 2017).

Understanding the consumer drivers for buying fast fashion products despite growing knowledge of the industry's environmental and social costs is complex. In this section, these drivers will be explained based on the following factors from the theory of demand: price, income, taste, price of related goods, expectations, and number of consumers in the market. The main drivers of the demand for fast fashion are low prices, trendy styles, social media, lack of knowledge, a growing middle-class population, expensive sustainable options, and a growing young population. Lastly, the continuously growing demand for fast fashion products will also be explained by the tragedy of the commons.

3.3.1 Price

Low prices are among the most obvious determinants for the increasing demand for fast fashion (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). During the past two decades, the price of clothes has fallen due to offshore production and the use of low-cost materials. For instance, in the EU, the price of clothes, relative to inflation, decreased by 30% between 1996 and 2018 (EC, 2022). Cheap clothes may be perceived as giving a higher benefit to the consumer in the short term and might be the only option for people in difficult economic situations (Cross, 2022). Lower prices mean that consumers buy more clothes more often (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). The low price of fast fashion also tends to justify buying clothes the consumer does not really need (Mussett, 2020), and makes the consumer see the garment as a disposable good (Gustafson, 2015). This is encouraging overconsumption (EC, n.d.) and leading to higher demand.

3.3.2 Taste

Taste is an essential determinant of fast fashion. Clothes provide security and comfort but have also become an important tool for expressing oneself (Ellen MacArthur Foundation, 2017). Knowledge, social media, trends, and influencers are common factors influencing our taste in clothes. Taste as a driver is also determined by psychological forces on the individual level that goes beyond the scope of this paper.

Lack of knowledge concerning the social and environmental cost affects how people think about fast fashion. The negative environmental and social impacts of the fashion industry have attracted international attention in recent years, and NGOs are providing awareness of the negative impacts of the industry (Ellen MacArthur Foundation, 2017). The media has uncovered several unethical practices and the environmental damage caused by the industry. However, there is a general lack of knowledge of the exact environmental and social costs of the industry among consumers. According to James and Montgomery, consumers have minimal knowledge of the clothing supply chain and the origin of the clothes (James & Montgomery, 2017). Research done by Birtwistle and Moore supports this view, as their study found that consumers generally lack knowledge about how clothes are made and the process of their disposal. Furthermore, artificial fibers and intensive cotton cultivation, causing environmental degradation, were poorly understood concerns among the participants. The participants also believed that lack of media coverage was the reason for this and stated that if they knew more about the practices and their consequences, they would probably change their consumption patterns (Birtwistle & Moore, 2007).

Although this study was made over ten years ago, the current situation indicates that there has been little progress since then. Another research shows that fast fashion especially appeals to young female consumers, who have little knowledge of the environmental and social costs and have the highest demand for new clothing pieces (McNeill & Moore, 2015). Moreover, a study from 2020 found that many companies lack providing information about their social and environmental impacts (Andreassen & Rønningsbakk, 2020). Lack of information makes it difficult for consumers to take rational

actions. The minimal consumer knowledge influences their socially responsible purchasing behavior, and how consumers can become more informed remains a challenge (James & Montgomery, 2017). Some consumers are more aware of the negative impacts of the industry than others, and an increasing number of people want their purchasing behavior to match their values (Gueye, 2021).

Nevertheless, there is often a gap between the attitude and behavior of the ones showing increasing concerns around the environmental and social cost. This group of people may make more ethical choices in their daily life but still meet barriers to fully becoming sustainable, such as price and low awareness concerning sustainable options (McNeill & Moore, 2015). This means that people who care about the environment may continue to buy fast fashion due to barriers to sustainable options and the weight of the other drivers of fast fashion.

Today it is difficult for consumers to understand the many labels that are made to rate the environmental impact of products and companies. Only in the EU, more than 200 different sustainability labels are in use. Many labels are misleading and make products seem more sustainable than they really are. This practice is known as greenwashing, making it challenging for consumers to see if they really are making sustainable choices (EC, n.d.). Several of the popular fast fashion brands have been accused of greenwashing. For instance, in 2019, H&M launched a clothing collection named "Conscious," claiming the clothes to be sustainable and made of organic cotton and recycled polyester (Robinson, 2022). The retailer was criticized by the Norwegian Customer Authority and investigated by the Netherlands' Authority for Consumer Markets for misleading marketing (Deeley, 2022). The practice of greenwashing may capture consumers that want to purchase sustainable products but instead contributes to a higher demand for fast fashion. Research by McNeill and Moore found that participants of their study saw the need for information about sustainability and ethical production to be more precise and more in detail (McNeill & Moore, 2015).

Fast fashion encourages consumers to constantly buy the latest trends. Although fashion brands are reacting to consumer demand, they also contribute to it (Crumbie, 2023). The business model takes advantage of the consumers' instant desire for newness by increasing the number of fashion seasons during the year. More collections during the year keep customers coming back and increase the demand, as there are constantly offered new and more desirable clothes. Hence, the norm has been to focus on the speed of the design and production rather than on sustainability. Many companies are offering pieces designed to be worn less than ten times. For many, the desire to be up to date with the trends seem to outweigh the desire to make ethical decisions. Even if the consumers would buy clothes that are considered sustainable, the ongoing throwaway culture, where items are underutilized, would still make the practice unsustainable as the desire for new and trendy clothes generates waste (McNeill & Moore, 2015). The high frequency of new trends is also connected to expectations. New collections are usually in the market for a limited period of time before new products will replace them. Limited availability of products creates a feeling of "limited edition" and encourages the consumers to buy the clothing pieces now, or they might risk that the pieces will be sold out (Joy, Sherry, Venkatesh, Wang, & Chan, 2012).

Moreover, social media affects our taste and thus affects the demand for fast fashion. Consumers are exposed to fast-changing trends through social media and influencers (Birtwistle & Moore, 2007). Advertisements of new products can reach consumers from all over the world at any time of the day, making it almost impossible not to be exposed to fast fashion marketing. Furthermore, social media influencers play an important role in marketing products and influencing their followers to constantly buy new items. Moreover, people feel pressured to appear in a certain way on social media, and the fear of appearing with the same clothes several times makes people buy more fast fashion (Lin, 2022). This phenomenon is especially evident among the younger generation (Cross, 2022).

3.3.3 Income: Growing Middle-Class Population

Income is an important driver of the consumption of fast fashion. Although fast fashion could be considered an inferior good as it is a cheap alternative to more expensive alternatives (Cook, 2021), the market shows that fast fashion works as a normal good up to a certain level of income. The main markets for the fast fashion industry are in developed countries (Meier, 2021), and per capita sales in these countries have increased in recent years (Ellen MacArthur Foundation, 2017). In 2021, the US, the EU, and Japan remained the top three importers of clothes, accounting for 57,2% of global demand (See Table 2) (World Trade Organization, 2022).

TABLE 2. TOP 10 IMPORTERS OF CLOTHING, 2021.

	Value	Share in world exports/imports				Annual percentage change			
	2021	2000	2005	2010	2021	2010-21	2019	2020	2021
Importers									
European Union	195	32.7	37.4	37.6	34.1	3	-1	-7	16
Extra-EU imports	97	16.4	19.4	21.2	16.9	2	-1	-9	12
United States of America	106	33.1	28.7	22.1	18.5	2	0	-14	29
Japan	27	9.7	8.1	7.2	4.6	0	-2	-12	1
United Kingdom	23	7.5	8.7	7.1	4.0	-1	-1	0	-12
China (1)	12	0.6	0.6	0.7	2.1	16	8	6	30
Canada (3)	12	1.8	2.1	2.2	2.1	3	4	-6	14
Korea, Republic of	11	0.6	1.0	1.2	2.0	9	2	-12	17
Russian Federation (3)	9	0.1	0.3	2.0	1.6	2	4	-5	17
Switzerland	9	1.6	1.6	1.4	1.6	5	2	4	11
Australia (3)	9	0.9	1.1	1.3	1.5	5	0	1	18
Above 10	414	88.5	89.6	82.9	72.2	-	-	-	-

(1) Includes significant shipments through processing zones.
(2) Secretariat estimates.
(3) Imports are valued f.o.b.

Source: (World Trade Organization, 2022)

Furthermore, a growing middle-class population across the globe is contributing to the increasing demand (Ellen MacArthur Foundation, 2017). According to the Foresight Team of the European Commission, the size of the world's middle class increased from 1,8 billion people in 2009 to 3,5 billion people in 2017 (EC, 2018). Furthermore, it is expected to reach about 5 billion people by 2030 (EC, 2023). More people moving into the middle class means that more people can afford more clothing. The increasing

demand for clothes is mainly driven by emerging markets, especially in Asia and South America (Ellen MacArthur Foundation, 2017).

There is also a link between buying more clothes and lower utilization of clothes (times a garment is used before it is discarded). According to the Ellen MacArthur Foundation, the average number of times a garment today is used on a global scale decreased by 36% from 2000 to 2015. Thus, by throwing away clothes that one could still be using, consumers lose about US\$ 460 billion yearly. Some pieces are estimated to be used only seven to ten times. Although clothing is currently very underutilized in general, there is a relatively high rate of utilization in low-income countries compared to the rest of the countries (Ellen MacArthur Foundation, 2017). This reflects that the more clothes people can afford, the less the clothes are used.

3.3.4 Price of Related Goods

Sustainable fashion, also called slow fashion, can be considered a substitute for fast fashion because they satisfy similar desires. However, there are several barriers to sustainable fashion which often make people choose the option of fast fashion instead. Among the barriers to sustainable fashion is the price, as sustainable products tend to be more expensive. Several of the participants in McNeill & Moore's research expressed a desire to become more sustainable but saw the financial cost as too high. Other identified barriers to the consumption of sustainable fashion were limited knowledge and availability of these products (McNeill & Moore, 2015).

3.3.5 Rising Young Population

Lastly, the current growing population is a key driver in increasing the consumption of fast fashion. According to the UN, the world population is expected to increase by approximately 2 billion people during the next thirty years (UN, 2022). This is likely to increase consumption and pressure on natural resources with the current production and consumption patterns. Where population growth is highest are usually poorer countries with lower carbon footprints per capita. Hence, population growth does not necessarily

mean higher consumption and use of resources. However, population growth will be highest in countries with young populations (UN Environment, 2019), and according to the UN, the number of youths is estimated to grow by 7%, reaching 1,3 billion people by 2030 (UN, n.d.). The young population, with a growing demand for affordable, clothing is a major driver of the fast fashion market (The Business Research Company, 2023). Also, migration is likely to move many people born in low carbon footprint countries into countries with higher carbon footprint. Moreover, the world population is living longer, which probably will lead to a higher carbon footprint per capita (UN Environment, 2019). Hence, there will be more buyers in the market, which means the demand will increase.

3.3.6 Tragedy of the Commons

Fast fashion consumption is a clear example of the tragedy of the commons. The fashion industry is currently characterized by overconsumption, which is causing the degradation of the commons - the environment. The current personal gain from buying fast fashion products is to quickly be able to renew the wardrobe with cheap and trendy clothes, while the personal loss is the degradation of the environment and possible catastrophic outcomes for the planet in the future (Mikolajczak, 2019). The fact that the industry keeps growing reflects that the share of personal gain is currently larger than the share of personal loss, or at least that it is currently perceived in this way by consumers. While taking care of the common good is in the best interest of society, overconsumption is in the interest of each individual (Kareva, Morin, & Karev, 2013). People tend to act with a short-term mindset, prioritizing personal desires, instead of acting with a long-term mindset, considering the future of our planet (Cross, 2022). People consume way more clothes than they need. In Germany and China, a study shows that 60% of the population admits to owning more clothes than they need (Ellen MacArthur Foundation, 2017). Overconsumption reflects that although preserving the environment, meaning buying less fast fashion products, would be in the world's best interest in the long term; overconsumption is in the interest of each individual in the short term.

Complete freedom of action to exploit a common resource will eventually lead to its destruction (Botkin & Keller, 2005). Therefore, government intervention or other

initiatives in the fashion industry are necessary to prevent it from destroying our planet, such as punishment for overconsumption or encouraging underconsumption. According to the founder of the Sustainable Fashion Academy, Michael Schragger, as long as the industry is cheap and fast, consumers will prioritize their own gain over sustainability (Paton, 2022). Many people are not willing to give up the personal benefits they gain from fast fashion for the environment (Hoang, 2022). Consumers should, therefore, not have the responsibility to change the industry without help from regulations.

3.4 Policy Makers

The fashion industry is poorly regulated. Governments from various countries around the globe have implemented some regulations to address the environmental and social issues related to the fashion industry, but the effectiveness of the current regulation varies, and still much must be done. As more people are engaging in the debate and demanding change, policymakers have started to feel pressure to take action (Gueye, 2021). However, the current lack of regulation and lack of compliance with already established regulations is making it challenging for the industry to become sustainable, and the industry is far from achieving the level of sustainability needed to reach the SDGs (Patwary, 2020).

According to the UN Alliance for Sustainable Fashion, making the fashion industry sustainable is challenging due to inconsistent legal, commercial, and ethical standards and non-compliance with already established labor standards and regulations (Meier, 2021). Also, the complexity of the fashion value chain makes it challenging to address its sustainability and human rights dimension. The value chain involves actors from all market segments and is located all around the world. For instance, the sourcing map of one of the fast fashion retailers involves about 750 manufacturing suppliers that make clothes in 1400 factories, across 41 countries, for its eight global brands. The clothes are then sold in about 5000 stores in 75 countries, and in 52 countries through its online store. The value chain's scale, sometimes informality, and lack of traceability make it challenging to detect non-compliant suppliers and to make impactful interventions (Meier, 2021).

Companies have historically made sustainable promises voluntarily, and their progress has been self-reported. Thus, non-compliance with the goals has not been met with punishment. Policymakers seem to start realizing that the industry is not going to make the green transformation by itself at the pace required to combat climate change. This also reflects that the responsibility not only lies in the hands of the consumer (Paton, 2022) and that government regulation is necessary to be able to change the industry.

Policymakers have started implementing relevant regulations to start the process of changing the industry to become more sustainable (Patwary, 2020). Among these initiatives is the UN Alliance for Sustainable Fashion. In 2018, several UN organizations met at the event *Fashion and the SDGs: What Role for the UN* in Geneva, Switzerland, to discuss a common approach to tackle the environmental and social challenges related to the fashion industry. Representatives recognized that there was a lack of knowledge about how the UN was addressing these problems and a lack of coherence among the different organizations (Meier, 2021). On the 14th of March 2019, the UN Environment Assembly launched the UN Alliance for Sustainable Fashion. The initiative consists of UN agencies and allied organizations and was established with the aim of reducing the environmentally and socially damaging practices of the fashion industry (UNEP, 2019). The Alliance works to coordinate action between UN bodies in the fashion sector and to promote initiatives and policies needed to achieve the targets of the SDGs. The UN has committed, through the Alliance, to change how the fashion industry operates, halt its negative environmental and social cost, and make fashion a driver to achieve the SDGs (UN Alliance for Sustainable Fashion, n.d.).

Many new legislations have been proposed in the past two years. In the United States (US), bills such as The Fabric Act and The Fashion Act are currently awaiting assessment (Paton, 2022). These will protect the rights of garment workers and hold companies accountable for their environmental and social impact. Also, the EU has recognized the need to move the fashion industry from a linear economy into a circular economy (European Parliament, 2022). On the 30th of March 2022, the European Commission adopted the Strategy for Sustainable and Circular Textiles, aiming to make

the textile sector sustainable by 2030. The strategy lays out a set of visions, including requirements for products to make them durable, repairable, and recyclable. It also aims to make producers responsible for their products along the value chain (EC, n.d.). This year, on the 26th of January, the European Commission also launched a campaign called Reset the Trend, which aims to encourage people to fight the fast fashion business model and raise public awareness about EU's strategy to address the issue (EC, 2023).

Moreover, on the 22nd of March, the European Commission proposed a common criteria against greenwashing and misleading environmental claims. The proposal aims to implement rules on environmental claims and to provide a prohibition of misleading information so that consumers will be better informed about the actual sustainability level of the product and protected from misleading information (EC, 2023). At present, there is a lack of regulation regarding companies making green claims. This lack has led to greenwashing and uneven competition in the European market. Sustainable clothes are, therefore, currently at a disadvantage compared to fast fashion products that are labeled with misleading information. The EU proposals are subject to approval by the European Parliament and the Council and are thus not in force (EC, 2023). According to the Financial Times, the EC predicts this will happen in 2024 (Chakraborty, Yiu, & Hoang, 2022).

Regulations in the West can have a significant impact on the whole sector. Europe and the US are the main markets for the fashion industry (Meier, 2021), so proposals in the West could improve working conditions and minimize environmental impact. For instance, although the proposals put forward by the EC only concern the EU member states, these regulations could have a significant impact on the whole industry and contribute to the achievement of the SDGs. As the EU is among the world's largest importers of clothes (World Trade Organization, 2022), companies would therefore have to adjust to meet EU standards to be able to sell their products in the EU market. In other words, the profit motive would probably force them to adopt to EU standards.

The proposals would also increase the cost of fashion. Asian factories expect the cost of fashion to increase under the new recommended EU rules. By shifting from low-

cost materials to certified recycled materials, some estimates suggest that the price of clothes will increase by as much as 50% (Chakraborty, Yiu, & Hoang, 2022). According to the law of demand, an increase in price will lead to lower demand, which can contribute to fighting the current pattern of overconsumption. However, implementing new legislation might be challenging. An uncertain geopolitical landscape, global economic recession, and resistance from companies are factors that may complicate the implementation of new regulations. Moreover, the new proposed regulations can lead to confusion and delays along the value chain (Chakraborty, Yiu, & Hoang, 2022). Lastly, changing the business model from fast fashion to a circular fashion industry is not an easy task, and it will be expensive (Paton, 2022).

4. CONCLUSION

This paper has explored why the fast fashion industry is expected to grow over the coming years despite governments, companies, and consumers becoming more aware of its environmental and social costs. The environmental and social costs of the industry are negative externalities, making the real cost of fast fashion high. It is hard to estimate the exact cost of the negative externalities, and they are currently not included in the price tag of the products. The environmental cost is high because the industry operates in a linear way, where every stage of its life cycle is affecting the environment negatively. The fast fashion business model leads to pressure on resources, atmospheric- and water pollution, and degradation of the environment. Simultaneously, the social cost is high because many garment workers face serious labor exploitation, such as unsafe working conditions, long hours, low wages, and harassment. As the industry is expected to grow, so are its negative impacts.

There are many reasons why the fast fashion industry is growing. Firstly, there are various drivers to sell fast fashion products. The fashion industry is one of the largest sectors of the global economy and provides employment for hundreds of millions of people worldwide. The industry is, therefore, a key sector for economic development. Some researchers have identified that the global economic importance of the industry has protected it from criticism and has halted the process toward a sustainable transition.

Moreover, the fast fashion industry is highly profitable. Companies are minimizing their input costs with low labor costs and cheap synthetic materials. Most of the production is, therefore, moved to countries where labor is cheap, and the leading suppliers of clothes are located in Asia. Today, companies genuinely making efforts to become sustainable have higher input costs and are facing unfair competition compared to unsustainable brands. Lastly, technology is contributing to accelerating the pace of fast fashion. Companies use technology to copy new trends rapidly and constantly advertise their new products through social media and influencers. Technology thus leads to more sales and more profit for companies.

There are also many drivers for the increasing demand for fast fashion products. Firstly, the low price of the clothes leads consumers to buy more clothes more often. Moreover, consumers are constantly encouraged to buy the latest trends, as the companies have significantly increased the annual amount of collections launched. Constant supply of new styles encourages a throwaway culture, as many garments are only worn a couple of times before new trends come, and the previous is seen as out of fashion. Moreover, consumers feel pressured to buy instantly to not miss out as most products only are in the market for a limited period. Social media and its influencers are also affecting the demand. Consumers are exposed to new products anywhere and at any time, and many feel pressured not to be seen with the same outfit twice on social media. Moreover, a growing global middle-class population is contributing to increasing demand as more people can afford more clothing. Lastly, a growing young population with a growing demand for affordable clothing is also an essential driver of the market as there will be more buyers in the market.

Although, in general, consumers are becoming more aware of the negative impact of the industry, many consumers still lack knowledge about the clothing supply chain, the process of clothing disposal, and its consequences. Some consumers are more informed than others, and an increasing number of people want to purchase ethically. However, many people within this group still tend to buy fast fashion products due to barriers to sustainable products, such as high price and limited availability. Greenwashing is also an

important factor encouraging fast fashion consumption, where unsustainable products can be labeled as sustainable. This is misleading consumers and contributes to unfair competition.

The fashion industry is an excellent example of the tragedy of the commons. Consumers and producers are behaving based on individual needs without taking into consideration the negative impacts this has on others. The fashion industry is characterized by overproduction and overconsumption, and this is causing degradation of the environment. As long as the personal gain of consumers and producers is perceived as higher than the personal loss, the industry will continue exploiting the environment. This is limiting the industry to succeed in the long term, and government intervention is, therefore, important so that the industry can change into a circular economy and minimize its environmental and social costs.

Lack of regulation and lack of compliance with already established regulations is leading to unfair competition in the market and is making it challenging for the industry to become sustainable. The effectiveness of current regulation varies, and more regulation is needed. Policymakers are starting to respond with initiatives such as the UN Alliance for Sustainable Fashion. In the West, proposals concerning issues related to the industry are awaiting assessment and are aiming to transform the industry into a circular economy. As Western countries are the main markets for clothing, these regulations can have a significant impact on the whole industry. However, the new proposed regulation is still not in force, and implementation of new regulations may be complicated due to an uncertain geopolitical landscape, global economic recession, and resistance from companies.

Significant changes in the industry are needed to be able to achieve the SDGs. To obtain these changes, not only does the industry need new purchasing behavior – it needs a system change along the whole value chain. For the industry to become aligned with the SDGs, the industry needs to shift into a circular economy. The goal is not to stop the industry nor to stop economic development but to achieve sustainable growth. However, the challenge is how to achieve economic growth without harming the environment and,

at the same time, improve conditions for workers. To achieve this, the industry will have to change from a take-make-dispose model to a model based on recycling. This will generate growth, help companies meet a changing consumer demand, and preserve the environment. Furthermore, the current production and consumption patterns must change. To change this, the quality of clothes must be improved so they last longer, can easily be repaired, and can be recycled after use. Technology and innovation will play a key role in the green transition. Although technology and innovation today are contributing to accelerate fast fashion, they will also play an important role in terms of finding recycling methods and exploring new materials and digital solutions. Social media can be used to promote sustainable fashion and share information about the negative impacts of the fast fashion. Moreover, the industry needs to become transparent and put an end to greenwashing so that consumers can make responsible purchasing decisions based on correct information. Achieving a circular fashion industry can benefit society, business, and the environment.

To be able to achieve this, all actors must take responsibility, including consumers, companies, and governments. Consumers have a crucial role to play in contributing to the green transition by changing the consumption pattern, meaning the way they shop. They can contribute by buying second-hand clothing instead of fast fashion, recycling their clothes, thinking twice before buying something new, and trying to become more informed about the issue. Consumers can play a key role in changing the industry because companies adapt to meet consumer demand. However, how companies operate also contributes to the high demand, and they also have a great responsibility to make the industry change. Companies must take responsibility for how they operate and ensure transparency across the value chain to raise awareness about the negative impacts of the industry. Moreover, governments must provide regulations to prevent the industry from exploiting people and the environment. The industry needs regulation to generate pressure and incentives to facilitate the green transition. Regulation is also needed to create fair competition in the fashion market, improve transparency, stop greenwashing, and ensure decent working conditions for garment workers.

5. BIBLIOGRAPHY

- Andreassen, H. F., & Rønningsbakk, I. (2020, January 10). *Textile companies lack information about their various impacts*. Retrieved May 2023, from Sustainable Market Actors for Responsible Trade. Accessible at: <https://www.smart.uio.no/news/textile-companies-lack-information-about-their-var.html> [Last access date: 15/05/2023].
- Bennett, B. (2022, November 1). *Shameless Shein*. Retrieved April 2023, from Green America: <https://www.greenamerica.org/blog/shameless-shein> [Last access date: 15/05/2023].
- Birtwistle, G., & Moore, C. (2007). Fashion clothing – where does it all end up? *International Journal of Retail & Distribution Management*, 35(3), 210-216. DOI 10.1108/09590550710735068
- Biswas, P. (2023, April 24). *Bangladesh's Garment Industry, a Decade After Rana Plaza Collapse*. Retrieved May 2023, from The Diplomat. Accessible at: <https://thediplomat.com/2023/04/bangladeshs-garment-industry-a-decade-after-rana-plaza-collapse/> [Last access date: 15/05/2023].
- Botkin, D. B., & Keller, E. A. (2005). Dollars and Environmental Sense: Economics of Environmental Issues. In *Environmental Science: Earth as a living planet, 8th edition* (p. 127-143). John Wiley & Sons.
- Channel4. (2022). *Inside the Shein Machine: Untold*. Retrieved May 2023. Accessible at: <https://www.channel4.com/programmes/inside-the-shein-machine-untold/on-demand/73730-001> [Last access date: 15/05/2023].
- Cook, J. (2021, November 22). *What are normal and inferior goods?* Retrieved May 2023, from Study.com. Accessible at: <https://study.com/learn/lesson/normal-vs-inferior-goods.html> [Last access date: 15/05/2023].
- Cross, R. (2022, November 28). *Fast Fashion Is Terrible, So Why Does It Keep Growing?* Retrieved May 2023, from Impakter. Accessible at: <https://impakter.com/fast-fashion-is-terrible-so-why-does-it-keep-growing/> [Last access date: 15/05/2023].
- Crumbie, A. (2023, April 12). *What is fast fashion and why is it a problem?* Retrieved April 2023, from Ethical Consumer. Accessible at:

- <https://www.ethicalconsumer.org/fashion-clothing/what-fast-fashion-why-it-problem> [Last access date: 15/05/2023].
- Dauvergne, P. (2004). History of global environmentalism. In *Globalization and the Environment*. Retrieved May 2023. Accessible at: https://www.ucg.ac.me/skladiste/blog_2606/objava_89908/fajlovi/peti%20čas.pdf [Last access date: 15/05/2023].
- ECLAC. (2023, April 27). *The role of international trade in circular fashion: challenges and opportunities*. Retrieved May 2023. Accessible at: <https://unece.org/info/Trade/events/377783> [Last access date: 15/05/2023].
- Ellen MacArthur Foundation. (2017). *A new textiles economy: Redesigning fashion's future*. Retrieved January 2023. Accessible at: https://emf.thirdlight.com/file/24/uiwtaHvud8YIG_uiSTauTIJH74/A%20New%20Textiles%20Economy%3A%20Redesigning%20fashion's%20future.pdf [Last access date: 15/05/2023].
- Ellen MacArthur Foundation. (n.d.). *What is the linear economy?* Retrieved May 2023. Accessible at: <https://ellenmacarthurfoundation.org/what-is-the-linear-economy#:~:text=The%20linear%20economy%20linear%20economy,extracted%20to%20make%20products%20that> [Last access date: 15/05/2023].
- European Commission. (2018, September 27). *Developments and Forecasts of Growing Consumerism*. Retrieved May 2023. Accessible at: https://knowledge4policy.ec.europa.eu/foresight/topic/growing-consumerism/more-developments-relevant-growing-consumerism_en [Last access date: 15/05/2023].
- European Commission. (2023, February 16). *Growing consumption*. Retrieved May 2023. Accessible at: https://knowledge4policy.ec.europa.eu/growing-consumerism_en [Last access date: 15/05/2023].
- European Commission. (2023, March 22). *Consumer protection: enabling sustainable choices and ending greenwashing*. Retrieved May 2023. Accessible at: https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1692 [Last access date: 15/05/2023].

- European Commission. (2023). *EU strategy for sustainable and circular textiles*. Retrieved May 2023. Accessible at: https://environment.ec.europa.eu/strategy/textiles-strategy_en [Last access date: 15/05/2023].
- European Commission. (n.d.). *How is the EU making fashion sustainable?* Retrieved May 2023. Accessible at: https://environment.ec.europa.eu/topics/circular-economy/reset-trend/how-eu-making-fashion-sustainable_en [Last access date: 15/05/2023].
- European Parliament. (2022, April 26). *The impact of textile production and waste on the environment (infographic)*. Retrieved May 2023. Accessible at: <https://www.europarl.europa.eu/news/en/headlines/society/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infograp> [Last access date: 15/05/2023].
- Gueye, S. (2021, June 22). *The trends and trailblazers creating a circular economy for fashion*. Retrieved May 2023, from Ellen MacArthur Foundation. Accessible at: <https://ellenmacarthurfoundation.org/articles/the-trends-and-trailblazers-creating-a-circular-economy-for-fashion> [Last access date: 15/05/2023].
- IISD. (n.d.). *Sustainable Development*. Retrieved April 2023. Accessible at: <https://www.iisd.org/mission-and-goals/sustainable-development> [Last access date: 15/05/2023].
- James, A. M., & Montgomery, B. (2017). Connectivity, Understanding and Empathy: How a Lack of Consumer Knowledge of the Fashion Supply Chain Is Influencing Socially Responsible Fashion Purchasing. In *Textiles and Clothing Sustainability* (pp. 61–95). Springer Singapore. Retrieved May 2023. Accessible at: https://link.springer.com/chapter/10.1007/978-981-10-2131-2_3 [Last access date: 15/05/2023].
- Joy, A., Sherry, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands. *Fashion Theory: The Journal of Dress, Body and Culture*, 16(3), 273-295. Accessible at: <https://doi.org/10.2752/175174112X13340749707123>

- Kareva, I., Morin, B., & Karev, G. (2013, February 14). Preventing the Tragedy of the Commons Through Punishment of Over-Consumers and Encouragement of Under-Consumers. *Society for Mathematical Biology*, 565-588. Accessible at: DOI: 10.1007/s11538-012-9804-3
- Lessenich, S. (2019). *Living well at others' expense: The hidden costs of western prosperity*. Polity Press.
- Lin, A. (2022, August 25). *Driven to shop: The psychology of fast fashion*. Retrieved May 2023, from EARTHDAY.org. Accessible at: <https://www.earthday.org/driven-to-shop-the-psychology-of-fast-fashion/> [Last access date: 15/05/2023].
- Mankiw, G. (2018). The Market Forces of Supply and Demand. In *Principles of Economics* (p. 65-89).
- McNeill, L., & Moore, R. (2015). Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 212-222. Accessible at: doi: 10.1111/ijcs.12169
- Meier, L. (2021). *Synthesis Report on United Nations System-wide Initiatives related to Fashion*. UN Alliance for Sustainable Fashion. Retrieved May 2023. Accessible at: https://unfashionalliance.org/wp-content/uploads/2021/10/UN-Fashion-Alliance-Mapping-Report_Final.pdf [Last access date: 15/05/2023].
- Mikolajczak, C. (2019, September 17). *Six things you didn't know about the true cost of fast fashion*. Retrieved May 2023, from United Nations Development Programme. Accessible at: <https://www.undp.org/blog/six-things-you-didnt-know-about-true-cost-fast-fashion> [Last access date: 15/05/2023].
- Patwary, S. (2020, September 11). Clothing and Textile Sustainability: Current State of Environmental Challenges and the Ways Forward. *Textile & Leather Review*, 3(3), 158-173. Accessible at: <https://doi.org/10.31881/TLR.2020.16>
- Pennstate University Libraries. (2023, January 31). *Fast Fashion Research*. Retrieved April 2023. Accessible at: <https://guides.libraries.psu.edu/fastfashion/introduction> [Last access date: 15/05/2023].
- Pindyck, R., & Rubinfeld, D. (2005). The Basics of Supply and Demand. In *Microeconomics, 6th Edition* (p. 43-86). Pearson Education.

- Robinson, D. (2022, July 17). *10 Companies Called Out For Greenwashing*. Retrieved May 2023, from EARTH.ORG. Accessible at: <https://earth.org/greenwashing-companies-corporations/> [Last access date: 15/05/2023].
- Spiliakos, A. (2022, August 17). *Tragedy of the commons: What it is and 5 examples*. Retrieved April 2023, from Harvard Business School Online. Accessible at: <https://online.hbs.edu/blog/post/tragedy-of-the-commons-impact-on-sustainability-issues> [Last access date: 15/05/2023].
- The Business Research Company. (2023). *Fast Fashion Global Market Report*. Retrieved May 2023. Accessible at: <https://www.thebusinessresearchcompany.com/report/fast-fashion-global-market-report> [Last access date: 15/05/2023].
- The World Bank. (2019, September 23). *How Much Do our Wardrobes Cost to the Environment?* Retrieved May 2023. Accessible at: <https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente> [Last access date: 15/05/2023].
- UN Alliance for Sustainable Fashion. (n.d.). *What is the UN Alliance for Sustainable Fashion?* Retrieved April 2023. Accessible at: <https://unfashionalliance.org> [Last access date: 15/05/2023].
- UN Environment. (2019). Chapter 2: Drivers of Environmental Change. In *GEO 6*. Cambridge University Press. Retrieved May 2023. Accessible at: <https://www.cambridge.org/core/books/global-environment-outlook-geo6-healthy-planet-healthy-people/drivers-of-environmental-change/45121195F6CF617FD1229E62575A5269> [Last access date: 15/05/2023].
- UN. (2022). *Population*. Retrieved May 2023. Accessible at: <https://www.un.org/en/global-issues/population#:~:text=Our%20growing%20population&text=The%20world%27s%20population%20is%20expected,billion%20in%20the%20mid%2D2080s> [Last access date: 15/05/2023].
- UN. (n.d.). *Sustainability*. Retrieved April 2023. Accessible at: <https://www.un.org/en/academic-impact/sustainability> [Last access date: 15/05/2023].

- UN. (n.d.). *Sustainable consumption and production policies*. Retrieved April 2023. Accessible at: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-consumption-and-production-policies> [Last access date: 15/05/2023].
- UN. (n.d.). *The Sustainable Development Agenda*. Retrieved April 2023. Accessible at: <https://www.un.org/sustainabledevelopment/development-agenda/> [Last access date: 15/05/2023].
- UN. (n.d.). *Youth*. Retrieved May 2023. Accessible at: <https://www.un.org/en/global-issues/youth#:~:text=Today%2C%20there%20are%201.2%20billion,cent%2C%20to%20nearly%201.3%20billion>. [Last access date: 15/05/2023].
- UNEP. (2022, September 30). *Why you should rethink your next fashion purchase*. Retrieved May 2023. Accessible at: <https://www.unep.org/news-and-stories/story/why-you-should-rethink-your-next-fashion-purchase> [Last access date: 15/05/2023].
- WCED. (1987). *Our Common Future: Report of the World Commission on Environment and Development*. Retrieved April 2023. Accessible at: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> [Last access date: 15/05/2023].
- WTO. (2022). *World Trade Statistical Review 2022*. World Trade Organization. Retrieved May 2023. Accessible at: https://www.wto.org/english/res_e/booksp_e/wtsr_2022_e.pdf [Last access date: 15/05/2023].