

## FAST FASHION AND SECOND HAND CLOTHES BETWEEN ECOLOGICAL CONCERNS AND GLOBAL BUSINESS

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**Abstract:** *The paper presents the concept of the fast fashion and how these lead to an excessive consumption of clothes and as result a growth of the worn products market. The paper also aims to establish how fast fashion is influencing not only the economy also the environment. The fast fashion model can also damage developing economies with a low household income, which are not the necessary most important markets of these companies. Our study has identified the influences in increased purchase behavior and focused especially of the positive relationship between income and clothing expenses. We found out that it is a large gap between the European countries regarding clothing expenses in year and Romania is for far the lowest consumer. It is presented the second hand clothes import-export trade during 2007-2012 and we found out that there is an inverse relation between the balances sheet of import-export of textile products between the developed and developing countries. The authors conclude that the Romania is the largest European importer of second hand clothes but has no large scale recycling. Since collection is done on a voluntary basis it can be confusing for population to know how and where to discard used clothing therefore it is recommended a focus on collection systems of second hand clothes. The methodology used for this paper has mainly been a literature study where both scientific literature, such as scientific articles and reports, and popular science articles have been studied. We also use official information provided from National and International statistical Offices. Academic research on the effects of redirecting used clothing from the waste stream is still in its infancy; however this paper provides some insights into the phenomenon which may add to the emerging literature.*

**Key words:** *fashion, environment, consumption expenditure, worn clothing trade, textile recycling, Romania.*

### 1. FAST FASHION AND CONSUMER EXPENDITURE ON CLOTHES

Fashion is defined as an expression that is generally accepted by a group of people over time and has been characterized by several marketing factors such as low predictability, high impulse purchase, shorter life cycle, and high volatility of market demand [1]. More than ever, fashion means fast and becomes unfashionable in a relative short period of time and make consumers to buy new clothes to feel fashionable. That leads to a new industrial trend, the fast fashion concept, which refers to the concept of shortening lead time and offering new products to the market as fast as possible. The increase of fast fashion is causing an important increase in the volume of clothing consumed especially in the developed countries of the world. According a FAO and ICAC [2] survey while the consumption increase in recent years is greater in developing countries 20% between 2004 and 2007, the consumption is also increasing in developed countries with only 8% during the same period. Fast fashion characterizes the speed of today's clothing production and consumption: clothing is designed to be cheap, easy, and rapid to produce, and is created to be distributed, sold, and consumed in ever-increasing quantities [3].

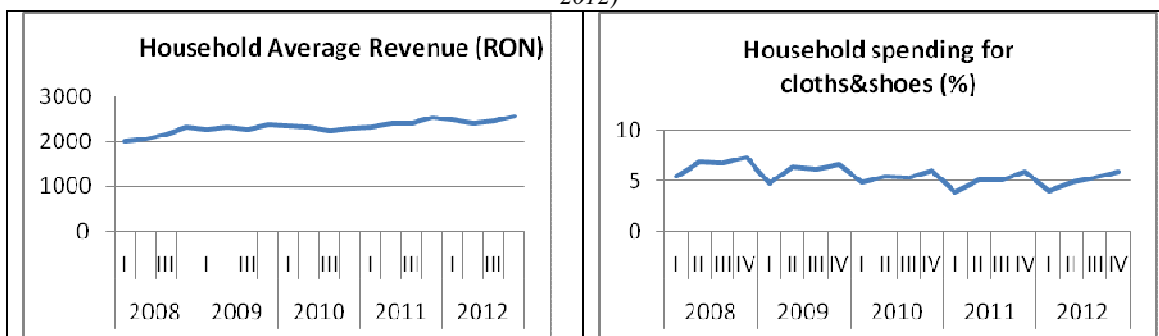
Today's fashion system, on its entire value chain, is complicit in the current ecological crisis, compromising both environmental and human well-being. The conversion of raw textile fiber to finished fabric and final products draws on cheap labor, air pollution, depleting water resources and the use of harmful chemicals [4]. Since these resources take the same amount of time to grow and regenerate, regardless of the product speed to market and waste disposal, the increased rate of

production and consumption of fast fashion is aggravating the garments industry's negative impacts. Therefore the consumption growth has implications both in terms of increased textile waste flows and in terms of the environmental impacts related with production, use and end-of-life management of textiles. Most of the studies about environmental burden of clothing focus on the energy consumption, chemicals or toxicity aspects, pay little attention to the effects of redirecting used clothing from the waste stream. In this paper we refer only to the implications of increased textile waste flows on the environment, in terms of the use and end-of-life management of clothes.

The main stream of fast fashion literature indicated following key variables that are related with the consumer behavior: renewal cycle, price, quality and supply [5],[6],[7] to which we add sustainability concerns. The big fast fashion stores like H&M, Gap, Zara, C&A, and United Colours of Benetton etc. have made clothing so affordable that it has led to an overconsumption of unsustainable clothing. In the case of fast fashion, clothes are often discarded due to not being fashionable anymore. The fast fashion model can also damage developing economies with a low household income, which are not the necessary most important markets of these companies. The weight of household income as a determinant of household expenses has been proven many times in consumer expenses research [8],[9].

There is a positive relation between income and clothing expenditure according to investigations of total disposable income, specific sources of income, and total consumption spending.[10] Clothing and footwear expenditure fluctuated around 370 billion Euros, which means 5.3% of total household consumption. Italy, Germany and the UK are Europe's largest fashion markets in terms of consumption. Average spending on Fashion in the EU-27 is about 700 Euro[11] per year per capita with national averages ranging from under 50 Euro per person in Romania to 1200 Euro per person in Italy. In 2013, the average monthly consumption of a family was 38,51RON (8,5Euro), considering that in urban areas, the members of the households spent a month on clothing, 45,69RON (10 Euro), and in the countryside, 29,15 RON (6,5 Euro)[12]. Chart no.1.shows the household average revenue in Romania and the household spending for clothes in the period 2008-2012.

*Chart 1. The Household Average Revenue and Household spending for cloths and schoes in Romania (2008-2012)*



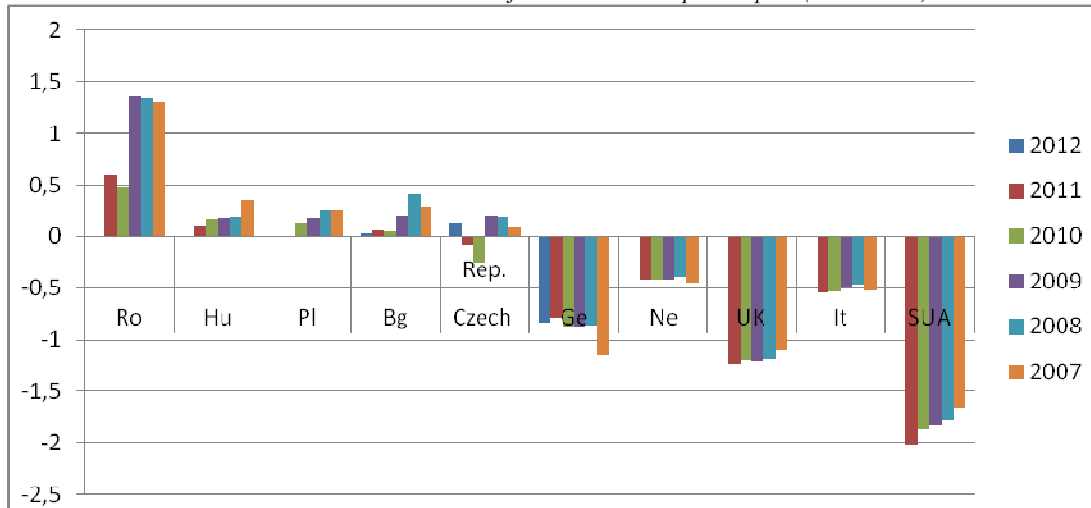
Source: INNS(2008-2012)

## 2. WORN CLOTHING TRADE IN THE USA AND EU COUNTRIES (2007-2012)

This cheap, second hand clothing is often bundled and sold in developing nations with poor structured distribution channels for transnational clothing corporations and is instead peddled in markets for a small amount. Exporting used clothing products to developing economies for further consumption, a concept usual called “global reuse”, provides utility to peoples in developing countries but it can have negative also economical and ecological consequences.

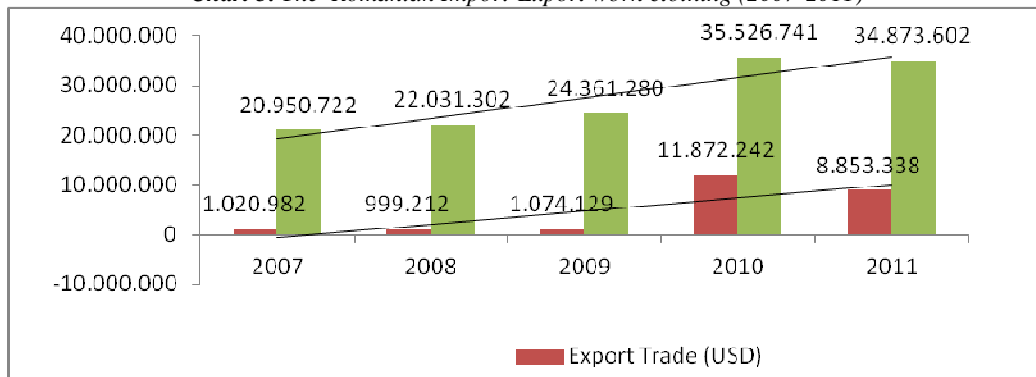
The chart no.2 shows the comparative situation of imports and exports of worn clothing from countries with high consumption of fashion compared to countries with low-level buying, ie countries where household consumption items of clothing is low. Presentations of data are in the logarithmic scale to reduce the wide range of value to a more manageable size. It was also introduced the USA, although it is not an EU member, because it is the world leader in the worn clothes trade. There is an inverse relation between the balances of import-export of textile products between the developed and developing countries. A special case appears to represent Romania, where the import of second hand clothes had a dramatic increase compared to countries of the former communist bloc. Chart 3 present the positive trend of imports and exports of second hand products in Romania.

*Chart 2. The balance sheet of worn clothes import-export (2007-2012)*



Source: own calculation based on OTEXA, COMTRADE database

*Chart 3. The Romanian Import-Export worn clothing (2007-2011)*



Source: own calculation based on COMTRADE database

### 3. ECONOMIC AND ECOLOGICAL IMPLICATIONS OF WORN CLOTHING TRADE

From an economic perspective, a significant import of second hand textile products may decrease production for its own market, the decline in sales of new products with cheap, widely available clothes, and last but not least may increase tax evasion. While the supply of fashion (design, manufacture, production and marketing) is well documented, about how the second hand clothing is distributed once it arrives in the destination market it is less known. In Romania there is no nationally organized textile waste collection, nor systematic statistics about it.

From the ecological point of view, worn products also generate waste which, due to lack of proper disposal technologies in developing countries get to pollute more the environment. Although second hand clothing has become a fashion in itself, there is still a widespread opinion that second hand clothing are „dirty” and for those who cannot afford new clothing. That also leads to landfill.

Even as it is estimated that the textile recycling industry recycles approximately 1,9 billion tons of post-consumer textile waste each year, this only accounts for approximately 15% of all textile waste, leaving 85% in the landfills so that textile waste occupies nearly 5% of all landfill space. Only within UK the annual textile waste is 2.3 million tonnes, of which only 24% is recovered for reuse and around one million tone of textile waste ends up in landfill every year [13]. In the USA an estimated 14.3 million tons of textiles were generated in 2012, or 5, 7% of total municipal solid waste generation. [14]

According to the European Environment Agency (EEA) [15] recycling level in 2011 in Romania was only 1% of municipal waste, lowest among the EU-27 states. Recycling was most

common in Germany (45% of waste treated), Ireland (37%), Belgium (36%), Slovenia (34%), Sweden (33%), the Netherlands (32%) and Denmark (31%). Although „municipal waste consists to a large extent of waste generated by households, but may also include similar wastes generated by small businesses and public institutions and collected by the municipality; this part of municipal waste may vary from municipality to municipality and from country to country, depending on the local waste management system.” we consider this report suggestive, because textile waste resulting from household consumption are included here.

#### 4. CONCLUSIONS

Fast fashion is a concept that will continue to influence the apparel industry over the next years and will have a direct effect on the way consumers purchase and also discards their used or useless clothes. Romania is one of the biggest beneficiaries of secondary trading of worn clothing with both positive and negative consequences. As results from our studies, Romania is by far the largest European importer of second hand clothes. Because such large volumes of second hand clothing are constantly being imported and consumed, large volumes re-worn clothing held by the consumer are discarded. It creates a large waste stream at the end of the functional life of clothes, which are finally disposed of in landfills but Romania has no large scale recycling. Since collection is done on a voluntary basis and not necessarily in cooperation with municipal waste management it can be confusing for population to know how and where to discard used clothing therefore it is recommended a focus on collection systems of second hand clothes. The recycling of textile waste brings benefits to all three aspects that define sustainability: economical, social and environmental, especially in solving the numerous ecological problems and boosting new economy sectors [16]. Research on recycling techniques are also needed, both in the area of separation and production based on recycled fibres.

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