



universität
wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

**„ Value Capture and Distribution in
Second-Hand Clothing Trade
The Role of Charity Discourses,
Commercial Strategies and Economic and Political Contexts “**

verfasst von / submitted by

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angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Arts (MA)

Wien, 2020 / Vienna, 2020

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on
the student record sheet:

UA 066 589

Studienrichtung lt. Studienblatt /
degree programme as it appears on
the student record sheet:

Masterstudium Internationale Entwicklung

Betreut von / Supervisor:

Ass.-Prof. Mag. Mag. Dr. Cornelia Staritz, PhD

Acknowledgements

I would like to express my gratitude for the University of Vienna, who provided me with a short-term grant through the KWA programme, without which it would have not been possible to conduct the empirical research needed for this thesis. Moreover, I would like to thank my supervisor, Ms. Cornelia Staritz for her thoughtful comments and feedback. Her dedicated support and guidance, as well as expert advice have been invaluable throughout all stages of this thesis.

Furthermore, I like to pay my special regards to all the interviewees in Austria, Germany and Morocco, who have willingly shared their precious time and valuable experiences and insights during the process of interviewing, and whose assistance was a milestone in the completion of this thesis.

Finally, I want to express my profound gratitude to my family and friends for providing me with unfailing support and constant encouragement.

Abstract

The thesis analysis the second-hand clothing trade, portraying the role of charitable and commercial actors and how value is captured and distributed in global second-hand clothing production networks. Given the lack of research on the second-hand clothing trade, the empirical research presented in this thesis contributes to understanding the initial stages of the trade with used clothes in the Global North and particularly in Europe. A specific focus is put on the role of Austria, Germany and Morocco given their different positions in second-hand clothing production networks with empirical analysis based on semi-structured interviews unveiling interlinkages between actors and activities in these countries. The thesis portrays the processes of collection, sorting and grading, and redistribution on local or export markets that offer opportunities for charitable and commercial actors and how different value is captured and distributed. By stretching the Global Production Network (GPN) theoretical approach to discarded goods, much attention is paid to the institutional and regulatory framework, the social, political and economic context in which second-hand clothing trade is embedded, as well as the role of societal and network embeddedness, and how this is linked to how power is exercised by different actors. The thesis emphasizes the remaining importance of charity discourses and the increasing role of commercial strategies to comply with textile waste management regulation on the one hand, and with the impacts of prevailing fast fashion consumer models on the other hand. It portrays how actors apply commercial strategies in order to redistribute donated clothes on global markets by transforming intangible value into tangible, monetary value. In doing so, the thesis sheds light on fast fashion dynamics, environmental concerns and ethical controversies that arise due to the perception of used clothes as charitable donations, and the blurred line between charitable and commercial actors in the trade with used clothes.

Kurzfassung

Im Rahmen dieser Masterarbeit wird der Handel mit Altkleider, die Rolle von karitativen und kommerziellen Akteuren sowie die Erfassung und Verteilung von Wertschöpfung in globalen Produktionsnetzwerken für Altkleider analysiert. Angesichts des Mangels an Forschung über den Handel mit Altkleider, trägt die in dieser Arbeit vorgestellte empirische Forschung zum Verständnis der ersten Stufen des Handels mit Altkleider im globalen Norden, insbesondere in Europa, bei. Ein besonderer Schwerpunkt liegt auf der Rolle Österreichs, Deutschlands und Marokkos, angesichts ihrer unterschiedlichen Positionen in den globalen Produktionsnetzwerken für Altkleider. Die empirische Analyse basiert auf teilstrukturierten Interviews, die die Verflechtungen zwischen Akteuren und Aktivitäten in diesen Ländern aufzeigen. Die Masterarbeit porträtiert Prozesse der Sammlung, Sortierung sowie des Vertriebs von Altkleidung auf lokalen oder Exportmärkten, welche Chancen für karitative und kommerzielle Akteure bieten, Wert aus Altkleider zu schöpfen. Aufbauend auf den theoretischen Forschungsansatz globaler Produktionsnetzwerke (GPN), der für den Zweck dieser Masterarbeit für gebrauchte Güter erweitert wird, behandelt die zugrundeliegende Analyse den institutionellen und regulatorischen Rahmen, sowie den sozialen, politischen und wirtschaftlichen Kontext in den der Handel mit Altkleider eingebettet ist. Zudem wird die Verankerung der Akteure in der Gesellschaft sowie in den Produktionsnetzwerken analysiert, und wie dies mit deren Machtausübung zusammenhängt. Die Masterarbeit betont die weiterhin bestehende Bedeutung von Wohltätigkeitsdiskursen und die zunehmende Rolle kommerzieller Strategien zur Umsetzung der Regulierungen der Textilabfallwirtschaft einerseits und der Auswirkungen der vorherrschenden Fast-Fashion-Konsummodelle andererseits. Durch die durchgeführte Forschung wird veranschaulicht, wie Akteure kommerzielle Strategien anwenden, um gespendete Kleidungsstücke auf globalen Märkten zu vermarkten, indem sie immateriellen Wert in materiellen, monetären Wert umwandeln. Dabei beleuchtet die vorliegende Arbeit Dynamiken von Fast Fashion, ökologische Bedenken und ethische Kontroversen, die sich aus der Wahrnehmung von Altkleidung als wohltätige Spende ergeben, sowie die verschwommene Unterscheidung zwischen karitativen und kommerziellen Akteuren im Handel mit Altkleider.

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List of Abbreviations

AMS	Public Employment Service Austria
BIR	Bureau of International Recycling
BMLFUW	Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
BVSE	German National Recycling Association
CCK	Clean Clothes Campaign
EAC	East African Community
ECO TLC	The Eco-Organization for Textiles, Linen and Footwear
EPR	Extended Producer Responsibility
EU	European Union
EuRIC	European Recycling Industries' Confederation
GCC	Global Commodity Chain
GPN	Global Production Network
GVC	Global Value Chain
UK	United Kingdom
OECD	Organization for Economic Co-operation and Development
OTEXA	Office of Textile and Apparel
SGS	General Society of Surveillance
TESS	Textiles with Ethical Sustainability and Solidarity
TRA	Textile Recycling Association
UN	United Nations
US	United States
WITS	World Integrated Trade Solution
WRAP	Waste and Resources Action Program

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1 Introduction

The trade of used clothes is an immense profitable, however an insufficiently studied global commodity circuit connecting a wide range of different actors, in which charitable organizations used to be the largest single source of second-hand clothes (Hansen 2000). Nowadays, the collection activity of used clothes is becoming more and more commercialized and professionalized and “the lines are becoming blurred between charity and commerce in the second-hand clothing sector” (Brooks 2015: 89). How value is distributed between the different actors in the complex global network, reaching from charities, textile recyclers, exporters in the Global North as well as importers and local dealers in the Global South, is largely undocumented (Norris 2015).

The reported value of the global second-hand clothing trade has steadily risen. According to UN statistics, the trade value of total exports rose from USD 0,75 billion in 1990, to USD 1,53 billion in 2001 and USD 4,2 billion in 2018. The top three exporters in 2018 were the USA, the UK and Germany (UN COMTRADE 2019). In order to understand the rise of the global trade with second-hand clothes, two driving dynamics have to be considered. On the one hand, the rapidly growing trade in used clothes is linked to the unsustainable production and consumption of high turn-over fast fashion. Hence, second-hand clothing supply is not driven by demand but by a vast surplus of used clothing (Brooks 2015). On the other hand, with a growing amount of discarded clothes, activities such as recycling and exporting evolved as essential parts of the management of textile waste in Europe (Arenas et al. 2015). Various policies have been adopted at the European Union (EU) level to enhance separate collection of discarded textiles and transformation towards a circular economy. An approach that fosters circular economy strives to reduce waste by keeping materials within the loop of consumption and production as long as possible and hence increasing their life cycles (European Union 2019). Countries such as Austria and Germany have extensive nation-wide collection scheme in place in order to safeguard the separate collection of discarded clothes. Due to these developments, second-hand clothes evolved from traditionally being a “charitable currency” (Lemire 2012), to being considered as “secondary resources” (Gregson and Crang 2015).

Today, the second-hand clothing trade in Austria and Germany, and other countries of the Global North is dominated by various charitable and commercial actors, which perform collection, sorting, and redistribution processes in order to recharge used

goods with a new value. Most of the value-added activities remain in those countries (Hansen 2000). The activities are dependent on the institutional and regulatory framework on a global and national level. The implemented regulations and measures taken by industry actors and policy makers towards circular fashion, as well as the labour market and wage policies and environmental regulations importantly influence the processes within the second-hand clothes trade. Due to a rise in labour costs in countries of the Global North, and the subsequent increase in sorting costs, there has been an emergence of offshore reprocessing centres of discarded clothes, based on cheap labour sources (Crang et al. 2013). “While cheap semi-skilled labour and tariff-free export zones attract international recyclers to establish sorting facilities, so does proximity to restricted markets across porous borders” (Norris 2015: 184). Morocco is one of those countries, as it offers suitable locations for commercial actors due to its proximity to the European market, its special economic trading zone in the North and its cheap, semi-skilled labour force (Böhmer 2011). The trade with used clothes links questions about markets, materiality and morals by exposing complex connections as used clothes are commodified by charities and commercial actors in the Global North and sold as a resource on the international market (Norris 2012).

Against this background, it can be seen that the production network of second-hand clothes connects countries in the Global North and the Global South with regards to offshoring of labour intensive activities, in order to benefit from cheaper wages and less stringent environmental regulations. On the other hand, the second-hand clothing trade connects countries through the continuously growing trade with used clothing commodities. There exist two opposing set of ideas on the impact of the second-hand clothing trade on countries of the Global South. One is that it is hindering the development of the local economy by disrupting the domestic clothing industry. The other one is that second-hand clothing exports lead to new markets and strengthen livelihoods by creating jobs and constituting a supply of quality-cheap clothes (Hansen 2004). It lies outside the scope of this investigation to analyse this relationship (see Abimbola 2012; Brooks 2012b; Brooks & Simon 2012; Hansen 1994, 2000, 2004; Hütz-Adams 1995; Norris 2015; Rivoli 2009). The purpose of this thesis is to investigate value capture and distribution in the interrelated second-hand clothing trade in Austria, Germany and Morocco, as well as the role of charity discourses, commercial strategies and economic and political contexts.

Throughout the production network of second-hand clothes there are various types of value captured. In addition to the value perceived in monetary terms, actors capture other types of intangible value, such as environmental and social value. The value of second-hand clothes is conceptualized in the Global North through a positive environmental framing, the concept of charitable donations and a provision of a market-based solution of the management of the textile waste stream, which appears to benefit everyone (Norris 2012). In this way, donors, charities, commercial actors and increasingly retailers are part of a discourse on textile waste management practices, raised by emerging public policy debates in the Global North around the environmentally as well as socially sustainable use of textile resources and waste (Norris 2015). Complex reverse value chain activities, such as collection, sorting and redistribution offer opportunities to recharge used clothes with a new value (Sandberg et al. 2018, Brooks 2015). The geographical segmentation of those activities as well as the trade patterns of discarded clothes are influenced by the embeddedness and power position of charitable and commercial actors as well as various social, economic and political contextual factors in the end markets, and relationships between exporters and importers (Hawley 2006; Brooks & Simon 2012). However, up to now there is very few in-depth analysis as well as empirical evidence on the global production network of used clothes. What is more, Norris (2012) stresses that much more research on value creation, political issues of power, governance and sustainability between countries of the Global North and the Global South is needed. This leads to the relevance of this thesis and the following research question:

How is value captured and distributed in second-hand clothing trade in Europe and what is the role of charity discourses, commercial strategies and economic and political contexts?

In order to answer the research question, various sub-questions arise, such as:

What are the key processes in second-hand clothing production networks in Europe and which roles do Austria, Germany and Morocco play in these networks?

What is the role of charitable and commercial actors in the second-hand clothing trade in Europe and what are the interlinkages between these actors in Austria, Germany and Morocco?

Which social, political and economic contextual factors influence the trade with second-hand clothes as well as value capture and distribution within and between Austria, Germany and Morocco?

How is economic, social and environmental value captured and distributed at the initial stages of the trade with used clothes in Europe and particularly in Austria, Germany and Morocco?

The paper assesses the dynamics of the second-hand clothing trade in Europe, focusing on the processes and actors in and the institutional and regulatory framework of these production networks. Specific attention is put on the cases of Austria, Germany and Morocco, due to their different roles in the production network of second-hand clothes. Austria and Germany were chosen as case studies for export countries, given their nation-wide collection schemes and diversity of commercial and charitable actors. The analysis of the countries offers different insights in the capture and distribution of value of used clothes, as the processes performed within the national production networks differ. Whereas Austrian actors mainly perform collection activities and outsource the majority of the sorting processes to Eastern Europe, Italy, Germany or North Africa, German actors also perform sorting processes within the country and hence directly serve a number of end markets in the Global South. Morocco was chosen as a case study for a re-exporting country, as it offers a suitable location for sorting facilities of discarded clothes, due to its proximity to the European and African markets, its special economic trading zone in the North and its cheap, semi-skilled labour force. Through the focus on Austria, Germany and Morocco, interlinkages in the global production network of used clothes, as well as implications on the capture and distribution of value within and between the countries are unveiled which also portrays crucial insights on the role of charity discourses, commercial strategies and economic and political contexts.

The Global Production Network (GPN) approach constitutes the theoretical framework for this thesis. The nature of used goods however poses some flaws to the framework assumptions (Crang et al. 2013). Therefore, the GPN approach is stretched through an empirical analysis of the three intertwined characteristics of the GPN approach, namely value, power, and embeddedness (Henderson et al. 2002), complemented with insights portrayed by advocates from Discard Studies. A quantitative trade data analysis using the World Integrated Trade Solution (WITS) software offers first insights

into the trade with second-hand clothes. Additionally, empirical qualitative analysis in the form of semi-structured interviews with actors in the production network in Austria, Germany and Morocco portray interlinkages between processes and actors, and insights on different possibilities for economic, social and environmental value capture and distribution. Additionally, the second-hand clothing trade in Austria and Germany is analysed through a GPN mapping, using primary and secondary resources. Altogether, 22 semi-structured interviews were conducted in Austria, Germany and Morocco between March and September 2019.

The following chapters give closer insights into the research approach, by first introducing the theoretical framework of this analysis, the GPN approach (chapter 2). Chapter 3 outlines the methodology. For the intention of this analysis, a quantitative trade data analysis, which offers first insights on the trade with used clothes, is complemented with more qualitative approaches, largely drawing on semi-structured expert interviews. The next part (chapter 4) presents a literature review of the second-hand clothing trade. First, the rise of the trade with used clothes is portrayed. Second, the second-hand clothing value chain is described, followed by a discussion about the blurred line between charity and commerce. The subsequent chapters highlight the empirical findings. Starting with a brief overview of the global second-hand clothing trade (chapter 5). Chapter 6 analyses the European trade with used clothes, based on the institutional and regulatory framework, the actors, their power and embeddedness. The following chapter (7) portrays the capture and distribution of economic, environmental and social value in second-hand clothing trade in Europe. Chapter 8 concludes with the key findings from this analysis and illustrates why it is important to conduct further research on the topic with a perspective from the Global South.

2 The Global Production Network Approach

Understanding and conceptualizing the complex contemporary global economy is a challenging and at the same time a significantly important task. Since the early 1990s different chain and network approaches have emerged, following a shared interest of analysing the organisation and governance of processes in global production and international trade, and their implications on different sectors and regions (Hess 2009). The main chain and network approaches are Global Commodity Chains (GCC) (see Gereffi 1995), Global Value Chains (GVC) (see Gereffi et al. 2005), and Global Production Networks (GPN) (see Henderson et al. 2002). Those concepts differ with

regards to key questions, theoretical perspectives and methods. Whereas GCC and GVC approaches focus on the role of firm actors and inter-firm networks, GPN approaches broaden the focus to also analysing non-firm actors and institutional frameworks. Hess (2009) highlights that “GPN analysis aims at going further than GCC and GVC concepts in that it sees development through value generation, enhancement and capture as being driven not only by lead firms shaping the governance structures within the chain, but crucially includes states, non-state organisations and civil society as important drivers of the process of accumulation and the resulting uneven development” (Hess 2009: 27f). Such a multi-actor and multi-layered approach to transnational production is especially for this research from fundamental importance and is the reason, why the GPN approach forms the theoretical framework for this investigation.

The GPN approach constitutes a heuristic framework attempting to capture complex economic and social processes as well as interrelationships between various actors involved that shape the global economy (Coe et al. 2008). In doing so, the analytical framework of GPN gives insights into the global, regional and local economic as well as social dimensions in which production processes are embedded. Henderson et al. (2002) outline that the GPN approach is based on three principle elements - first, value, with regards to creation, enhancement and capture; second, power in its corporate, collective and institutional dimensions; and third, various dimensions and aspects of embeddedness, more precisely territorial and network embeddedness. By focusing on these three conceptual categories, analyses using GPN approaches have offered valuable insights into governance, coordination as well as location of globally dispersed value chains (Henderson et al. 2002). Nevertheless, the global exchange of discarded goods is a neglected field in prevailing conceptual frameworks, such as the GPN approach. Crang et al. (2013) argue that the global exchange of used goods is a crucial facet of the global economy and hence requires additional attention.

2.1 The Global Production Network of Discarded Goods

Various authors highlight that prevailing political-economic approaches to trade flows often solely focus on the flow of goods from production to consumption. Subsequently, they fail to address the global exchange of discarded goods for reselling or reprocessing of their materials (Crang et al. 2013, Brooks 2012a). Lepawsky and Mather (2011) conducted research on electronic waste and propose that the end of life

of goods in one GPN is simultaneously always the beginning of a new life in a different network. What is more, Gregson et al. (2010) investigated goods after final consumption, in their case ships in Bangladesh. The authors unveiled an ongoing process of use and transformation, which happens after a GPN analysis would have already ended. Subsequently, Gregson et al. (2010) stress that it is crucial to pay attention to the back-end of production networks as the transformation of discarded goods into new commodities is an often neglected, however crucial field.

Nevertheless, the nature of used goods poses some flaws to the frameworks' assumptions. Crang et al. (2013) determine three potential areas in which the trade with used goods challenges key assumptions of GPN approaches. First, the production network of discarded goods is determined by different logistics of supply and demand. Supply of used goods is inelastic and not determined by demand, but by the conditions of the global economy and markets. Hence it is conditional on other chains and networks. Furthermore, the supply of discarded goods is heterogeneous, as it is influenced by various patterns of use, wear and potentially repair or maintenance. Second, inter-firm governance, as opposed to large transnational companies, intermediaries characterized by a high level of different forms of network embeddedness play a crucial role in the flow of used goods. Third, the trade with used goods challenges concepts of value, since the capture of value is strongly dependent on processes determining the material quality of goods after disposal. The authors highlight that more research of those areas would qualify prevailing GPN approaches and would advance those concepts for better understanding the global trade with discarded goods (Crang et al. 2013).

Processes of value creation, enhancement and capture are a core part of GPN analysis. Henderson et al. (2002) portray some mechanisms for creating value. Namely, brand rents, created by product distinctiveness, technological rents, organizational rents, created through superior processes of firms, relational rents, due to inter-firm relationships and linkages with other firms, as well as trade-policy rents, created through institutional barriers. Nevertheless, Crang et al. (2013) stress that the importance of the different mechanisms for capturing value, portrayed by Henderson et al. (2002), are different in GPNs of used goods. This is mainly due to the fact that capture of value of used goods mainly depends on assessing their material quality. The process of recharging them with a new value is not solely a process of adding value until reaching consumption stage but rather an ongoing process of value capture

distributed across various destinations after final consumption (Crang et al. 2013). Hence, for analysing the capture and distribution of value from discarded goods, a more holistic approach is needed.

2.2 Discard Studies

Discard Studies broaden the view and regard the wider systems, structures and cultures of waste and wasting. Acknowledging that while there is a connection of people and places by flows of commodities and goods, there is also one by flows of waste and remainders (Moore 2012). Moreover, there is a socially, politically and economically generated process that arises at the end of a life of a product (Gregson and Crang 2010). In order to analyse the end of life of discarded clothes for the purpose of this paper, the GPN approach is stretched by looking at waste through the lens of Discard Studies.

In view of this, Gregson and Crang (2010) give a historical perspective on waste policy and the process of how waste has become a resource. According to the authors, in the period at the end of World War One, waste policy has diminished the importance of landfill and has promoted recycling, increasingly re-use. However, disposal technologies that have been established in the past, are not one-off interventions in governing waste. They are rather politically stabilized technologies, which strive for reproduction and normalization of specific disposal practices, at a household, community, municipality, regional or even national state level (Gregson and Crang 2010). Schlitz and Laser (2019) emphasize that these solutions to a so-called waste problem, more particular, capital- and technology-intensive infrastructures from incinerators to “high-tech” recycling systems, are not touching the actual problem and are not efficient with regards to prevention of waste in the first place. Moreover, such proposed solutions are often focusing on household and post-consumer waste, while failing to acknowledge waste that is produced during industrial practices at the production stage (Schlitz and Laser 2019).

In this sense, Liboiron (2015) argues that the current form of the recycling system “is not a net environmental good even though it is constantly represented as such. Recycling is not even a circular economy” (Liboiron 2015: 3). The author stresses that material that is actually recyclable is rare. Moreover, the process of recycling currently produces materials, which are less robust than their original forms. In case their market prices drop, which makes materials less economically viable, they can be easily

abandoned, shipped overseas to countries of the Global South, buried or burned, consequently having a crucial negative impact on receiving countries. Furthermore, the author outlines that recycling programs are often supported by industry, as they generally entail a continuation of the growing production of disposables (Liboiron 2015). “In short, the moral imperative to recycling is an economic good premised on growth rather than an environmental good premised on a circular economy or steady-state” (Liboiron 2015: 3). Moore (2012) highlights that these developments led to a growing importance of waste in academia over the last decade, which corresponds to new geographies of waste, implicating a billion-dollar industry in trading with hazardous waste (Moore 2012).

Additionally, Moore (2012) analyses different concepts of waste based on emerging literature on relationships between waste and society. For the purpose of this thesis the focus is put on the following characters of waste. First, waste as a resource. When considering waste as a resource, it acknowledges the multiple ways discarded items can be recovered through re-entering new production cycles or be re-used in informal systems. Moreover, viewing waste as a resource sparks of a reformation of waste management in terms of efficiency and environmental responsibility. It broadens the view of only regarding economic value, to perceiving social consequences material has, while it traverses the production network from production, to distribution, consumption, reclamation and annihilation stage. Moore also outlines that in the transformation of waste into value, geography plays a crucial role. As first, the international division of labour is decisive and second, the perceptions on materiality is dependent on the context, meaning the “transformation of what is waste in one place into what is value elsewhere” (Moore 2012: 6). The second categorization, namely, waste as a (non-Marxian) commodity, has some similarities to the definition of waste as a resource. The difference however is that this category also gives insights on patterns and processes that are involved in the trade of waste, especially between nations. Regarding waste as a commodity that can be exchanged in order to create wealth and economic growth within as well as between countries, highlights the market value of waste, which is the incentive for the growing industry in waste trade. The third category views waste as a manageable object, meaning that waste is an object that has to be managed as well as governed at different scales. This category is used in discussions about different facets of municipal waste management in megacities, EU Member States or in the context of new regulations, for instance enhanced producer

responsibility (EPR). Viewing waste as a manageable object however raises questions about effects of supra-local regulation on municipal waste management, issues of governance between state and non-state actors and privatization (Moore 2012). As Moore outlines “the ways that different views of what waste is, as material, are productive of many forms of scholarship that have the potential to disturb certain taken-for-granted ideas about values, politics, and the sociospatial order more generally” (Moore 2012: 14). By focusing on social relations as well as political-economic processes that are concealed or revealed in waste, intra- and interdisciplinary engagement is needed, which uses as a framework not a particular concept or definition of waste but rather a holistic perspective (Moore 2012).

2.3 The Global Production Network of Second-Hand Clothes

The second-hand clothing trade is an understudied field within political-economic approaches to trade flows (Brooks 2012a). Second-hand clothes are post-consumer goods with a low value and high volume. They circulate widely within globally dispersed destinations (Crang et al. 2013). Discarded clothes challenge former assumptions of GPN analysis, particularly with regards to three areas, namely logistics of supply of used goods, inter-firm governance as well as value capture and materiality. Against this background, Paras et al. (2018a) introduce a conceptual framework for a re-use-based clothing value chain and define its key characteristics. According to the authors, system, product design, product price, information, government legislation and consumer attitude have a crucial impact on the economic success of a re-use-based clothing value chain. Further investigations of the proposed factors can broaden the perspective in order to get closer insights on the GPN of second-hand clothes (Paras et al. 2018a). What has to be noted however is that the authors mainly focus on the economic value of second-hand clothes.

For the purpose of this thesis the focus is broadened through an investigation of the three intertwined characteristics of the GPN approach, namely value, power and embeddedness (Henderson et al. 2002), complemented with an analysis of the proposed factors by Paras et al. (2018a), and further considering insights portrayed by advocates from the Discard Studies. Based on this foundation the following categories have been chosen for the analysis; institutional and regulatory framework, actors involved, power, embeddedness and value capture within the production network of second-hand clothes. This should shed more light on the three areas in which used

goods challenge key assumptions of GPN approaches, namely supply of discarded goods, inter-firm governance as well as value capture and materiality (Crang et al. 2013).

2.3.1 Institutional and regulatory framework

Contextual factors of the institutional and regulatory environment play a decisive role when analysing the GPN of second-hand clothes. By widening the research beyond only focusing on actors of the production chain, to all actors operating within the social and institutional context that is surrounding and influencing the GPN, a more holistic analysis is possible (Henderson et al. 2002). The institutional and regulatory environment determines patterns and processes as well as the role of actors involved in the trade with used clothes. Ultimately, it influences the extent to which actors are able to extract value out of discarded clothes. In a broader sense, those contextual factors influence how trade with discarded clothes connects the Global North and the Global South (Brooks 2012a; Crang et al. 2013). For this study, the institutional and regulatory framework of the GPN of second-hand clothes is analysed by focusing on three dimensions that shape the framework on a local, national as well as international level, namely political, economic, and social contextual factors. It has to be noted however, that those factors are all intertwined.

The political context that shapes the GPN of second-hand clothes can be differentiated in the local and the global political framework. The local political framework considers collection activities of actors, state support, or local and national waste policies. This can be influenced by governments in various ways, such as through new regulations with regards to textile waste management such as EPR, which holds producers or sourcing companies responsible for their goods after use. Another way would be through monetary benefits in the form of tax exemptions, or education and awareness programs, which can increase information about textile waste and its separation, consequently promoting proper disposal practices. On a local level, municipalities play a crucial role in the promotion of collection of used textiles. The global political framework on the other hand takes contextual factors on a broader level into account, such as conditions and policies that consider the trade of textile waste between nations. Among others, those are classification of materials and their standards, which can prohibit the movement of waste or can determine waste as a resource (Crang et al. 2013). In this context, Brooks (2012a) outlines the impact of import bans on the second-hand clothing trade, which have been implemented in various countries in the

Global South, such as Nigeria and South Africa, in order to protect domestic industries. Summing up, while the global political framework considers contextual factors that affect processes and activities between countries, and also influences the connection between the Global North and South, the local political framework analyses conditions and policies, which concern the handling of a product's end of life on a municipal level. The economic context is shaped by contextual factors regarding demand and supply of second-hand clothes, such as prices, export markets or fast fashion dynamics. Economic activities and the role and behaviour of actors within GPNs are greatly influenced by the social context in which they operate. "GPNs do not only connect firms functionally and territorially, but also they connect aspects of the social and spatial arrangements in which those firms are embedded and which influence their strategies and values, priorities and expectation of managers, workers and communities alike" (Henderson et al. 2002: 451). Hence, economic factors are strongly influenced by the social context in which the GPN of second-hand clothes is embedded in. The social context is shaped by factors relating to awareness of environmental and social concerns with regards to textile waste, social relations between actors and the perception of second-hand clothes within a society. Driven by growing environmental and social concerns, topics related to increased consumption and discard of clothes are slowly moving up the political agenda in the Global North. The value of second-hand clothes is conceptualized in the Global North through a positive environmental framing, the concept of charitable donations and a provision of a marked-based solution of the management of the textile waste stream (Norris 2012). Analysing factors that shape the economic and social context in which the second-hand clothing trade is embedded in, gives closer insights into the institutional and regulatory framework of second-hand clothing GPNs, which influences the role of actors involved and the extent to which they are able to extract value out of discarded clothes.

2.3.2 Actors

The second-hand clothing trade connects a variety of different actors in the Global North and the Global South. Those actors can be divided into two broad categories, namely charitable and commercial actors.

A charity is defined as any organization established for and giving effect to charitable purposes, as defined by the Preamble to the Statute of Charitable Uses 1601, also known as the Statute of Elizabeth, of the Parliament of England, which formed the

basis for the definition of charitable purposes (O'Halloran 2012). O'Halloran (2012) defines charitable actors and highlights that traditionally, charitable actors occupied the space between the public and the for-profit sector on the basis that they provide supplementary services and socioeconomic contributions to the core public service provision. According to the author, charitable actors build up trust and specialized knowledge in acting as an intermediary between the giver and the recipient place, hence occupying a strategic position between state and market. For the services they provide, they are often granted tax-exempt status or get governmental subsidies. Therefore, there is a connection between the state and charities. In addition, charities are connected to society through donations. Altruism lays at the basis of this relationship. According to the author, donors have a sense of awareness of belonging to a community and of social responsibility when donating to charities. The author portrays that this "gift connection" between charities and the state on the one hand, and donors on the other hand, is the reason why "in essence, "profit" and "charity" were worlds apart" (O'Halloran 2012: 4). However, in recent years, there was an increasing need for charitable actors to generate income in order to respond to diminishing flows of governmental funding. Consequently, charities increasingly entered into commercial for-profit activities (O'Halloran 2012).

These developments led to more complex structures in the GPN of second-hand clothes and changed the actor level. While in the 1960s and 1970s the second-hand clothing market was controlled by charities, starting in the 1980s, profit oriented actors started to appear (Yalcin-Enis et al. 2019). The emergence of commercial actors with new forms of embeddedness and value capture in the trade with second-hand clothes, led to a greater complexity as well as commercialization of activities in the GPN of used clothes (Paras et al. 2018a, Norris 2012).

Against this background, the differentiation between charitable and commercial actors in the second-hand clothing trade is difficult. For the purpose of this thesis however, the following broad framework (Table 1) was chosen to differentiate between actors. Throughout this paper, charitable and commercial actors are classified based on prevailing characteristics in the following broad categories;

Table 1 Differentiation charitable and commercial actors

	Charitable Actors	Commercial Actors
Mission	Non-profit	For-profit
Main Value Captured	Social Value	Economic Value
Funding	Donations and grants	Market rate capital
Labour	Volunteers and subsidized jobs	Employees at market-based compensation
Main supply of goods	Donations	Through suppliers who charge market rate

Source: own representation

Empirical research shows that there are mixed forms and interlinkages between actors, which often entail different degrees of dependence. Hence, analysing the power position and embeddedness of actors within the production network of second-hand clothes gives closer insights on the structure and composition of the actor level.

2.3.3 Power and Embeddedness

The source of power and the different ways in which it is exercised is a decisive factor influencing value capture within GPNs. Henderson et al. (2002) argue that there are three forms of power, namely its corporate, collective and institutional dimension. Whereas these categories can be distinguished, they cannot be fully separated when analysing the GPN of second-hand clothes. Further, the degree of institutional power exercised by public actors is strongly dependent on the institutional and regulatory framework and other actors active in the production network of second-hand clothes, which highlights the strong connection between the categories of analysis. There is added complexity of the power dimension due to its strong interlinkages with the embeddedness of actors. The GPN of second-hand clothes is highly dependent on globally established networks and strategic collaborations (Hawley 2006). Increased embeddedness minimizes cost and enhances profitability (Paras et al. 2018b), which increases the power position of actors within the production network. Accordingly, power and embeddedness cannot be separated when analysing capture and distribution of value out of used clothes. In this thesis, the corporate and collective dimension of power are used in order to analyse power positions of various actors. To which extent public actors exercise power is analysed in chapter 6.1 and 6.2. Embeddedness of actors in the GPN of second-hand clothes is analysed in two

dimensions, namely the degree of embeddedness within the network and within society.

Corporate power means the capability to which various actors in the GPN are able to influence decisions and resource allocations, as well as other actors in the network (Henderson et al. 2002). In this regard, Crang et al. (2013) highlight that when investigating flows of discarded goods, power is displayed through the possibility to extract value out of heterogeneous materials through access to information. Corporate power is therefore influenced by the possibility to assess the material quality of discarded clothes. The quality of materials of products as well as the possibility for their transformation into new products in different places is essential to consider at every stage of analysis. Therefore, the authors highlight that when analysing flows of discarded goods, effects of their materiality as well as cultural practices of valuing this exact materiality has a crucial effect on governance and power within GPNs of discarded goods (Crang et al. 2013). In this sense, the degree of centrality and hence embeddedness of actors is important, as this impacts the capability to which actors have access to information and are able to influence decision making in the GPN. The higher the degree of embeddedness, the greater the control over information flows, which enhances their power position within the network (Walther 2015). This outlines the connection between power and embeddedness in the second-hand clothing trade. Ultimately, the more corporate power a member of the GPN has in relation to other members, the more value can be captured (Sandberg et al. 2018).

Collective power refers to the form of power carried out through the actions of collective agents, such as trade unions, employers' associations as well as organizations that seek to advance particular economic interests, increase their influence in GPNs and hence their power position, or are concerned with advancing a specific topic such as human rights or environmental issues. Such agencies can be nationally or locally organized, in certain cases they act on an international level. Under some circumstances, collective agents are engaged in countervailing power directly on particular firms or groups of firms, or indirectly on national governments or international organizations (Henderson et al. 2002). The degree of collective power is strongly connected to the embeddedness of actors within the production network of second-hand clothes.

Network embeddedness strongly influences capture and distribution of value out of used clothes, as the second-hand clothing trade is characterized by a lack of transparency due to unavailability of information between all actors in the network (Paras et al. 2018a). Abimbola (2012) portrays the problem of information asymmetry between exporters in the Global North and importers in the Global South. As mentioned before, information may be used as a source of power. In order to increase access to information, network embeddedness is crucial. Embeddedness within the network favourably impacts information management, which ensures that the content of the bales of second-hand clothes that are traded matches requirements of export markets with regards to quality, material, style and purchasing power. Abimbola (2012) highlights two ways in order to reduce information asymmetry. First, maintaining a personal relationship based on repetitive cooperation. Second, enhanced reputation, which is embodied in the brand name of the exporter. Watson et al. (2016) argue that throughout the value chain of second-hand clothes, trust is a key issue and has a crucial impact on network embeddedness. Such as trust that payment is made in time or that partners deliver the right quality of products. In some cases, a code of conduct is put in place for assurance. Umbrella organizations often administer information flow and maintain bonds between actors (Watson et al. 2016), which highlights interlinkages between network embeddedness and collective power. The higher the degree of network embeddedness, the greater the power position of actors and consequently, the capability to which actors are able to capture value out of discarded clothes.

In addition to network embeddedness, societal embeddedness plays a decisive role. Embeddedness within a society refers to relationships and social ties actors in the GPN have established within local communities. It encompasses trust and reputation actors have gained in society, laying the social foundation for their local operations. Societal embeddedness increases local influence as well as visibility of actors, which leads to building a reliable image, and improved relations with other stakeholders in the GPN and ultimately to a greater possibility for sustainable development (Fengru and Guitang 2019). It plays a crucial role in this aspect that used clothes are morally charged products, as they are perceived as charitable donations and the recycling of old clothes is recognized as environmentally sustainable (Norris 2012). The gift connection between charities and donors favourably impacts social embeddedness. According to research from Bianchi and Birtwistle (2010), which was targeted at women in Scotland

and Australia, there is a linkage between recycling behaviour of consumers and the perceived image of used textiles as charitable donations. Paras et al. (2018a) argue that this charitable perception has a positive impact on the economic success of the second-hand clothing trade. Commercial actors in the second-hand clothing trade often try to increase their social embeddedness by entering into partnerships with charitable actors. Collaborations between commercial and charitable actors create opportunities for both sides, as charities gain economic value and commercial actors improve their brand image through the positive perceived image of used clothes as charitable donations (Paras et al. 2018a), which leads to greater social embeddedness. It is crucial to understand this “extra-charity” connection between actors, as it is an important factor in the determination of governance and power in the second-hand clothing trade (Brooks 2012a). In this sense, the degree of embeddedness within society, which is often stimulated by charity discourses, is a crucial factor for value capture.

2.3.4 Value

In view of the before mentioned, it can be seen that the institutional and regulatory framework, the role of actors, their power position, as well as their societal and network embeddedness have a crucial impact on the GPNs of second-hand clothes, and influence the possibility to which extent actors are able to extract value out of discarded clothes. While value can be perceived and measured in monetary terms, Sandberg et al. (2018) argue that analysis focusing on capture of value in the trade with second-hand clothes need to consider different regimes of tangible and intangible values. The authors conducted research on the process of value creation and appropriation in the second-hand clothing value chain. Their findings suggest that in addition to economic value, environmental and social values need to be observed (Sandberg et al. 2018).

Environmental value is created on the one hand through environmental performances of “green” processes and products, such as reduction of waste or recycling. On the other hand, through a “green” sustainable image towards society in general. Schenkel et al. (2015) outline that this “green” sustainable image companies try to preserve is often triggered by existing environmental regulations, and complying with those in order to maintain business legitimacy. Social value is generated through the contribution to the long-term wellbeing of either individuals, communities or society in general (Sandberg et al. 2018, Schenkel et al. 2015). Economic value is generated through cost reduction, additional revenue generation and risk reduction (Schenkel et

al. 2015). The main categories in which economic value manifests itself in the second-hand clothing GPN are described in the following.

The main factors that influence capture of economic value are the processes that occur within the GPN. Various processes, namely collection, sorting, and the redistribution of second-hand clothes occur in order to recharge used clothes with a new value. The efficiency of those processes is an important determinant for capture of value (Sandberg et al. 2018), as the underlying goal is the generation of maximum economic value (Fleischmann et al. 2004). For an efficient transformation of waste into economic value, Paras et al. (2018a) highlight the importance of pricing, with regards to costs throughout the production network as well as an alignment with current market conditions. Determining factors of economic value are among others, the power position of actors in the GPNs of second-hand clothes, which influences the possibility for negotiations (Walther 2015). Sandberg et al. (2018) outline that a foundation for a solid negotiation power position is the isolation mechanism a member has for the protection of the value it created from being captured by other actors. In a broader view, this factor has also been regarded in the context of damaging local industries in countries of the Global South. As locally produced clothes have to compete with cheaper clothes offered by second-hand clothing traders. Therefore, the monetary price influences the GPN of second-hand clothes with regards to saleability of products both on the domestic and global market (Paras et al. 2018a).

Throughout all processes that take place in order to recharge used clothes with a new economic value, labour is an important factor to consider. Given the fact that there is a difference between use value and exchange value. This discussion about use value and the social determination of value is according to Brooks (2015) important, as it helps understanding how value is captured in second-hand clothing commodities. Use value, on the one hand, is a subjective measure, determining the quality of the item in relation to customers' needs and hence refers to customers' "perceptions of the usefulness of the product on offer" (Bowman & Ambrosini 2000: 15). Exchange value, on the other hand, constitutes the monetary price, thus "the amount paid by the buyer to the seller for the use value" (Bowman & Ambrosini 2000: 15). Marx (1887) highlights that commodities always hold use values. However, an item with use value only becomes a commodity if it contains socially indispensable labour time, through which exchange value is created and realized as soon as the commodity is sold on the market (Marx 1887). By traversing various labour processes from collection to reselling of

goods, discarded clothes are transformed into new resources. Hence, labour is a key determinant of capture of economic value throughout the GPN of second-hand clothes (Sandberg et al 2018).

Following the notion of the Discard Studies, the perception on materiality, and if and how much value can be extracted from discarded clothes, is dependent on how value is perceived in a given social and geographical context (Moore 2012). In this regard, use value is an indicator for the quality of the item, as it refers to the individual perception of the usefulness of the product (Bowman & Ambrosini 2000). Thus, economic value of discarded clothes is on the one hand influenced by different perceptions of materiality. On the other hand, the capture of monetary value is dependent on material durability and quality, which is crucial to consider especially in the current age of fast fashion. Sunhilde and Tripa (2014) outline that the fast fashion concept is characterized by shorter lead times and an exponential increase in supply of new products with less material durability and quality, leading to a constantly growing amount of discarded clothes.

Additionally, interrelations between the three types of tangible and intangible values are crucial when analysing capture and distribution of value out of discarded clothes. The dominant value captured and distributed throughout the production network of second-hand clothes is economic value. Whereas economic value is captured through the efficiency of processes, materiality, and labour, actors in the GPN of second-hand clothes can instrumentalize environmental and social value in order to obtain economic value. In this sense, economic value is built on social value on the one hand, as used clothes are perceived as charitable donations. On the other hand, economic value can be captured through interlinkages with environmental value, due to a rising awareness of ecological aspects and environmental policy approaches towards optimizing textile waste management. In this sense, empirical research portrays interlinkages between the three value types and how social and environmental value is instrumentalized by various actors in the production network of second-hand clothes.

Summing up, value in discarded clothes can be perceived and measured in different ways. While used clothes hold a tangible monetary value, they also hold intangible values, which are created through environmental or social activities. The dominant value captured from second-hand clothes is economic value. Its capture is influenced by the efficiency of processes throughout the GPN of second-hand clothes, labour and

materiality. Additionally, interlinkages between the different types of value are crucial. How value is captured and distributed by various actors in second-hand clothing trade is described in detail in the following chapters.

2.3.5 Stretching the GPN Approach for the Second-Hand Clothing Chain

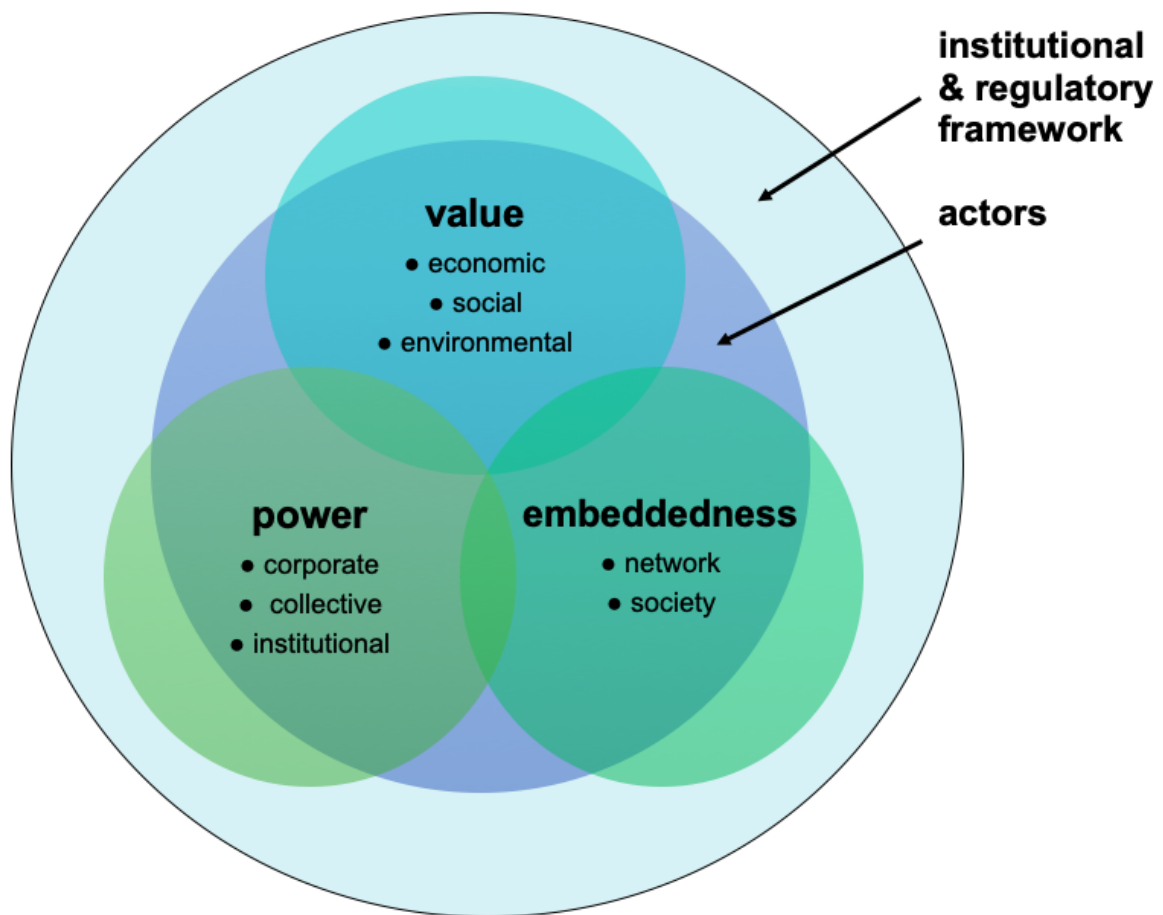
Based on the described concepts the GPN approach is stretched for the research purpose of this thesis, revealing a complex process sparking off various possibilities for value creation of discarded goods and their materials throughout the trade with second-hand clothes. Brooks (2012a) mapped the trade pattern of the second-hand clothing industry in the United Kingdom (UK) and outlines that stretching the GPN approach enriches the theoretical framework and provides a valuable tool for the investigation of power distribution, value creation as well as embeddedness within second-hand clothing networks.

The theoretical framework of this thesis (Figure 1) is used to extend the GPN approach and to investigate the following examples of:

- a) the institutional and regulatory framework;
- b) the role of charitable and commercial actors;
- c) the distribution of power within the GPN of second-hand clothes;
- d) the network and societal embeddedness of various actors involved;
- e) and the capture and distribution of value within the GPN of second-hand clothes.

For the purpose of this thesis the portrayed three characteristics of the GPN approach, namely value, power and embeddedness are analysed, considering also their interconnectedness and inclusion in the institutional and regulatory framework. What is more, the role of actors in the GPN of used clothes, and the extent to which they are able to extract value out of discarded clothes, is strongly influenced by the institutional and regulatory framework on the one hand, and the three characteristics of the GPN approach on the other hand. Ultimately, the theoretical framework portrayed in Figure 1 provides a baseline for analysing the highly unpredictable and complex trade with used clothes.

Figure 1 Theoretical Framework



Source: own representation

3 Methodology

The intention of this paper is not to make general formulations or to make universally valid statements about the second-hand clothing trade. Rather, the aim of this investigation is to form middle range theories by describing relationships, which are valuable under certain circumstances. According to Mayring (2007) such formulations are called context specific statements. The intention is to develop an understanding of value capture and distribution and to add to the existing body of literature in this area. This is done through explorative research based on a qualitative case study approach. Such an approach provides depth and closer insights into a little known phenomenon and is used to understand how the context of a specific phenomenon affects the outcomes (Ellram 1996). Due to the lack of research on the value capture in the second-hand clothing trade (Sandberg et al. 2018), the case study approach is suitable to address the research questions in a detailed and thorough manner.

3.1 Brief remark on definitions

Throughout this thesis the term “used textiles” is applied to refer to textiles donated to charitable or commercial actors, until the point of detailed sorting. The term therefore includes used clothing as well as household textiles, as they make up the core of the used textile industry. The term “original” is often used for unsorted textiles sold on global markets in their original condition (Ljungkvist et al. 2018).

After the sorting process, domestically or abroad, used textiles are sorted into fractions matched to their quality and destination. Following the detailed sorting process, used textiles are therefore either considered as suitable for re-use, recycling or characterized as waste for incineration or landfill. When suitable for re-use, the terms “used clothing” or “second-hand clothing” are used throughout this thesis (Watson et al. 2016). According to the Directive 2008/98/EC of the European Parliament and Council, “re-use means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived” (European Parliament, Council of the European Union 2008: 10). Textiles which are not suitable for re-use can either be recycled, downcycled, incinerated, landfilled or otherwise. When referring to recycling in this thesis, it includes all ways of material recovery, such as mechanical or chemical recycling to obtain textile fibres and among other things, the processing into industrial rags or insulation. If the final product after the recycling process has a lower quality than the original, it is indicated as down cycling (Watson et al. 2016).

3.2 Trade Data Analysis

A quantitative trade data analysis, using the World Integrated Trade Solution (WITS) software, was conducted to give first insights into the trade with used textiles. The analysis includes calculations of the trade value of exports (in USD). However, it does not provide an in-depth investigation of end destinations for these textiles. Used textiles are generally categorized in two ways, the HS code 6309 is used for worn textiles and clothing, while 6310 implies for sorted and unsorted used rags and textile scraps. In general, the HS code 6309 is given to textiles which can be re-used. However, due to the fact that a major part of used textiles is exported without prior sorting, meaning as “original” and still recorded under 6309, this category may also contain textiles, which are not suitable for re-use (Watson et al. 2016). By using the WITS software, the following analysis for worn textiles and clothing (HS code 6309) was carried out:

- Top global export and import markets in 2010 and 2018
- Trade value of global and EU27 exports from 2010 – 2018
- Share of EU27 exports in global exports from 2010 – 2018
- Top EU27 export markets in 2018
- Internal trade between EU27 countries in 2018
- Moroccan imports and exports between 2010 – 2018

Even though the trade data analysis offers a crucial overview of the trade with used textiles, an underestimation of the total market size is likely (Brooks 2015). Brooks and Simon (2012) argue that international databases such as the United Nations Comtrade, which is also used in the WITS software, have many missing data sets as they do not record all used clothing trade practices. Among other things, it is not possible to precisely track the flow of used textiles from exporting countries to intermediate countries where they are sorted and afterwards re-exported again to importing countries (Watson et al. 2016). All data and graphs used to portray exports in this thesis only display the first destination of worn textiles and clothing exports (HS 6309). Norris (2012) highlights that due to the complex network of global re-exporting hubs and special economic trading zones, tracking of used clothing exports is extremely difficult. In countries that ban the import of used clothes, substantial black markets as well as cross-border smuggling is widespread. Therefore, it is impossible to accurately map the global trade, as a crucial part of the trade with second-hand clothes is undocumented (Norris 2012). For the purpose of this thesis quantitative trade data must be compared with the following qualitative approaches.

3.3 GPN Mapping

Paras et al. (2018a) outline that due to the higher complexity of reverse value chains as opposed to forward value chains, separate mapping of all actors involved is necessary. As there exists no universal channel through which used clothes are recharged with a new value, in-depth analysis is required (Paras et al. 2018a, 2018b). In order to understand how value is accumulated at different stages of the GPN of second-hand clothes, it is essential to critically reflect labour activities occurring at each stage (Brooks 2012a). This is done by analysing the second-hand clothing trade through a GPN mapping. For the purpose of this thesis, the GPN mapping is implemented on different extraction levels. First, with secondary resources a more generic mapping of firm and institutional actors, as well as geographical scope and

main labour activities is generated (Figure 2). This descriptive analysis offers a first overview of the network structure, by presenting interrelations of charitable and commercial actors in the production network of used clothes. The second GPN mapping focuses on the specific cases of Austria (Figure 10) and Germany (Figure 11). It presents, in a more descriptive sense, charitable and commercial actors in the given countries and their labour activities and embeddedness in the production network of used clothes. These mappings lay the ground for the analysis presented in chapter 7, which portrays specific activities and processes used by actors to capture value from used clothing commodities. While the first GPN mapping is based on secondary resources, the GPN mappings of Austria and Germany are based on primary resources from semi-structured interviews.

3.4 Semi-structured Interviews

Empirical qualitative investigation in the form of semi-structured interviews with actors in the GPN of second-hand clothes offers insights on potential forms of value creation, relationships of governance and power, the institutional and regulatory framework as well as on the actors' societal and network embeddedness in the second-hand clothing production network. The interviewees were selected through a theoretical sampling, which, according to Mayring (2007), is used for case study approaches. This form of data collection is developed in the framework of Grounded Theory. Through theoretical sampling, secondary resources are collected and analysed. The emerging data is examined and explored in order to decide which further material is needed to elaborate on the theory (Mayring 2007). When selecting interview partners, it was taken into consideration that charitable and commercial actors at different points of the second-hand clothing production network are represented. The conducted interviews depended on availability of interviewees as well as on available resources. Interviews were conducted personally, by phone, skype or mail. The overview of the interviewed actors, including geographic location and main type of activity are listed in Annex I. Some actors perform multiple activities, such as collecting as well as sorting and redistribution of used textiles. In such cases, actors are classified based on their core activity.

Ultimately, the interviews are analysed using the qualitative content analysis of Mayring (2000), which offers a high transparency of the research process as it processes the raw material step-by-step into categories and reduces them to a final

category system. At the end of processing the raw material of the interviews, an inductive category system was created (Mayring 2000). In order to answer the research question(s) of this thesis, the qualitative data derived from the interviews is analysed based on the theoretical framework portrayed in Figure 1.

3.5 Limitations

The limitations of the quantitative trade data analysis have already been discussed in chapter 3.2. In addition, the empirical results reported herein should be considered in the light of some limitations. The second-hand clothing trade is still an understudied field, while this presents an opportunity to identify literature gaps, simultaneously there is a lack of previous empirical studies. For the purpose of this thesis, the GPN theory is applied and adapted to the specific case of the second-hand clothing production network. Further, the limited empirical studies are extended by qualitative investigation focusing on the initial stage of the production network in Europe.

What is more, the second-hand clothing trade is geographically widely dispersed, connecting a broad range of different actors in the Global North and the Global South. During the stage of research there was limited ability to gain access to actors covering the whole geographic scope and valuable type of participants within the trade of second-hand clothes. This results in limitations of this research, as interviewees who responded may not truly represent a random sample. However, the focus of this thesis is on Austria, Germany and Morocco, and the analysis represents the views as well as experiences of actors in those three countries. With regards to the research in Morocco, it has to be noted that second-hand clothing imports in Morocco fall under import restrictions, hence the import of second-hand clothes is illegal. This should be kept in mind when interpreting the results. The results of this research represent a first glimpse into capture and distribution of value at the initial stage of the second-hand clothing production network in Europe. In order to obtain a comprehensive understanding of the entire GPN of second-hand clothes, complementary research on the further production stages and perception of actors in the second-hand clothing network in the Global South is necessary.

Concerning the qualitative research performed, generalizing is particularly difficult as the empirical findings are unintentionally and inevitably influenced by the researcher's perception and personal bias. These deficiencies could have been minimized through a cooperation with additional researchers, this however was not envisaged and would

have exceeded the resources of this thesis. To sum up, the results presented do not make general formulations or generally valid statements about the second-hand clothing trade. Rather, they describe relationships, which are valuable under certain circumstances.

4 The Second-Hand Clothing Trade

The following chapter gives a literature overview about the second-hand clothing trade, by portraying its historical evolution and highlighting its two main drivers, namely fast fashion dynamics, as well as ecological aspects. Consequently, the second-hand clothing value chain is mapped, as well as processes that transform discarded clothes into second-hand clothing commodities. Further, portraying main actors in the second-hand clothing trade, namely charitable and commercial actors, and the blurred line between this classification.

4.1 The Rise of the Second-Hand Clothing Trade

Lemire (2012) portrays the evolution of the second-hand clothing trade and outlines its relationship to the rise of capitalism. According to the author, the trade with used clothes played a crucial role in the economic, cultural and material reshaping of Europe between 1600 and 1850. As cloth and clothing constituted one of the most important and costly purchases for generations, which characterized patterns of preservation and re-use. “The second-hand trade was a unique micro-enterprise vehicle, as well as growing commerce for entrepreneurs. It stimulated retailing and featured in international trade” (Lemire 2012: 145). In accordance, Norris (2012) argues that the structural relationship of the second-hand clothing trade to a capitalist production and consumption is nothing new. From a historical view, it can be seen that the development of the second-hand clothing trade rises along the development of early capitalism in Europe (Norris 2012). Through dynamics and reshaping of economies, sparked off by industrial expansion, as well as the expansion of colonial trade routes, the scope of the second-hand clothing commerce expanded enormously on a global scale (Lemire 2012).

The nineteenth century was characterized by an evolvement of clothing manufacturing as well as a rapid development of North America and Europe. This was the starting point of an increased availability of new clothing and consequently an enhanced distribution of second-hand clothes, which became a new type of charitable handout

(Brooks 2015). Lemire (2012) argues that discarded clothes were a charitable currency, which connected households, religious organizations, colonial projects as well as international trade. Organizations, such as the Salvation Army in the US, evolved extensive networks for collection and distribution of discarded clothes. Later, in the second-half of the twentieth century, various different charity and thrift shops expanded a retailing network for used clothes at cheap prices (Brooks 2015). In the 1940s, the Red Cross as well as Oxfam started their first charity shops in the UK. In 2015, Oxfam had over 700 stores in the UK, and the Salvation Army had over 1200 in the US (Arenas et al. 2015). Lemire (2012) outlines that while clothing had long been a means of charity, crucial developments in the light of the emergence of a capitalist economy tightened the connection between charity and the commercial trade with second-hand clothes.

The formation of global networks of trading used clothes was both an outcome as well as a response to the change of industrial garment manufacturing and the rise of capitalism (Brooks 2015). While in much of the Global North second-hand clothing makes up niche markets, the trade with used clothes in countries of the Global South has constantly been rising since after the Second World War. With the export of surplus army clothing, the profitable potential of trade in second-hand clothes to colonial Africa was discovered (Hansen 2000). Brooks (2015) argues that after the Second World War, the decrease in clothing prices and the growth in consumer purchasing power triggered rapid cycles of acquisition and discard and led to growing donations of still wearable clothes to charities (Brooks 2015). What is more, a correlation between falling costs of garments in the 1980s as well as an increase in supply and the liberalization of markets, boosted the export of second-hand clothes (Norris 2012) and led to a fundamental shift in the distribution of used clothes from charity to commerce (Hansen 2000). Yalcin-Enis et al. (2019) highlight that while in the 1960s and 1970s the second-hand clothing market was controlled by charities, starting in the 1980s, profit-oriented actors started to appear. Subsequently, the expansion of the second-hand clothing trade is a result of rising surplus of used clothes in the Global North on the one hand. On the other hand, Hansen (2000) argues that socioeconomic transformations led to a constantly growing desire and need for clothes in the Global South. "In the 1990s, on an ever expanding scale commercial operators began exporting clothes to Africa, Eastern Europe, Latin America, the Middle East and Asia

in what has since become a highly lucrative wholesale international trade” (Brooks 2015: 92).

However, little attention is paid to the scale of the global trade with second-hand clothes, its geographical distribution and social and economic impact on importing countries (Norris 2015). There are some countries that already imposed some kind of prohibition on the importation of second-hand clothing, such as import bans, licensing requirements, special tariff rates or less-interventionist measures. This is done in order to regulate the import of used clothes for health reasons and the protection of local manufacturers and sales people from outside competition (Hansen 2004). Two opposing set of ideas exist on the impact of the second-hand clothing trade on countries of the Global South. One is that the freely-traded clothing exports lead to new markets and strengthen livelihoods by creating jobs and opportunities for traders as well as other actors in associated occupations. Furthermore, Hansen (2004) stresses that by analysing the impacts of second-hand clothes, local perceptions about availability of quality-cheap, affordable second-hand clothes need to be taken into account. In this regard, Hansen (1994) portrays an example of Zambia, by highlighting that clothing consumption is shaped by income, availability of clothes and individual perceptions on clothes and desire for style. The author highlights that “given the limited availability of affordable clothing in the past, it is not surprising that in 1992 Zambians were aggressively shifting through piles of used clothing in local markets, in order both to satisfy basic clothing needs and pursue individual desires” (Hansen 1994: 96). Clothing trends are spread through globalized society, and northern-dominated new fashion systems of provision influence trends in the Global South. This highlights the unequal distribution of power portrayed through the consumption of discarded clothes from people in the Global North by people in the Global South (Brooks 2015). The opposing idea is that the global trade with used clothes is hindering the development of local economies by disrupting domestic clothing industries. It is crucial to consider the effects on actors within the second-hand clothing production network, with regards to labour rights and protection systems. Moreover, environmental aspects of increased textile waste in receiving countries of second-hand clothes need to be acknowledged and the cultural impact of a so called “low-cost westernization” (Arenas et al. 2015).

Several authors discussed how second-hand clothing imports directly undermine local textile industries, resulting in a crucial loss of employment, and a lack of possibility of industrial upgrading (see Frazer 2008; Webster 2003). Investigations about economic

impacts of second-hand clothing imports on countries in the Global South often use official data sets, which have many missing records (see chapter 3.2). Brooks and Simon (2012) argue that the complexity of the second-hand clothing trade for countries in the Global South becomes visible when looking beyond export figures. Empirical case studies performed in countries of the Global South provide a more nuanced picture of the impact of second-hand clothing imports on economies and peoples' lives (see Abimbola 2012; Brooks 2012b; Hansen 1994, 2000, 2004; Norris 2015; Rivoli 2009). Rivoli (2009) analysed the involvement of Mohammed Enterprises Tanzania Limited, one of the largest private companies in Tanzania, in the second-hand clothing trade after trade liberalization in 1985. Additionally, the case study of Abimbola (2012) outlines how through structural linkages between reproduction of used clothes in the Global North to retail in the Global South, actors gain opportunities for capital accumulation due to their specific knowledge of local marketplaces, which is beneficial in sorting processes. The case studies investigate processes through which donated clothes are reproduced as a commodity and portray beneficial opportunities for upgrading for actors in the Global South that are successfully embedded in the second-hand clothing production network (Abimbola 2012, Rivoli 2009). Brooks (2012b) analysed the ability of self-employed vendors to profit from selling second-hand clothes on markets in Maputo, Mozambique. The author highlights that opportunities to profit from the used clothing trade differ to those case studies documented in Nigeria (Abimbola 2012) or Tanzania (Rivoli 2009), as second-hand clothing vendors in Maputo are "constrained in their ability to become embedded in more profitable processes of capital accumulation" (Brooks 2012b: 224). Against this background, it can be seen that the global second-hand clothing trade has complex and contradictory impacts on actors in the Global South. "The used-clothing trade is more than a chain of economic transactions extending from the Global North to the Global South; it also forms part of a system of provision of clothing commodities which is dependent upon, and interlinked with, the liberalization of African economies, existing international geographies of commerce and cultural transformations in dress within Africa" (Brooks & Simon 2012: 1276).

4.1.1 Fast Fashion

The portrayed evolution of the global trade in second-hand clothes is a counter current to the flow of new garments. Hence, its emergence can only be understood when considering the rise of the fast fashion industry (Brooks 2015). Supply is not driven by

demand but by a vast surplus of used clothes (Paras et al. 2018a), sparked off by fast fashion consumption patterns in the Global North. The EU highlights that the business model of fast fashion is “epitomized by the multinational retail chains, it relies on mass production, low prices and large volume of sales” (European Union 2019: 2). Fast fashion is considered as a strategy of retailers aimed at expanding profits through increased consumption in saturated markets. The expansion of GPNs increased the role of lead firms and particularly retailers, advancing sourcing practices related to shorter lead times, high flexibility, increased speed of production, low costs and high quality (Plank et al. 2012). “At the heart of the fast fashion strategy lies a business model that is based on increased variety and fashionability and on permanently shrinking product life cycles that requires bringing new products to markets at an increasing pace and in shorter time spans” (Plank et al. 2012: 4). The spread of fast fashion is due to increasingly liberalized clothing markets. Through relaxed quotas and controls, which were part of market liberalizations in the 1990s and early 2000s, markets in the Global North have been inundated with affordable clothing imports (Brooks 2015). While clothing prices continued to decrease, more precisely around 36 percent between 1996 and 2012 (European Union 2019), clothing consumption boomed. Subsequently triggering rapid cycles of acquisition and discard of clothes (Brooks 2015).

One key driver responsible for such quicker cycles of acquisition and discard are shorter production lead times, which enable clothing brands to introduce new production lines on a more frequent basis (Brooks 2015). In a report of the EU (2019) the example of the retailer Zara is highlighted, which manages up to 24 new clothing collections per year. Consumer respond to this greater variety of clothing complemented with lower prices by purchasing more items. Hence, consumption of clothing grew substantially within the last decades. The EU (2019) estimated that EU citizens purchased 6.4 million tonnes of new clothing in 2015, this accounts for around 13 kilograms per person, per year. Moreover, between 1996 and 2012, the total volume of clothing purchases per person in the EU increased by 40 percent, according to statistics of the European Environment Agency (European Union 2019). On a global level, clothing production has doubled between 2000 and 2015 (Ellen MacArthur Foundation 2017). The boom in fast fashion leads to greater disposal of clothes, which sets the international trade with used clothes in motion (Brooks 2015).

Moreover, due to a deterioration in quality of clothes, owing to the dynamics of the fashion industry, the life cycle of textiles diminished extensively (Yalcin-Enis et al. 2019). According to the Ellen MacArthur Foundation (2017) the average number of times a garment is worn before being discarded, decreased by 35 percent between 2000 and 2015. The rate of clothing utilization was higher in low-income countries, compared to the US where clothes were only used around a quarter of the global average. In the same time span, the clothing utilization rate has decreased by 70 percent in China (Ellen MacArthur Foundation 2017).

Against this background, it can be seen that one key driver of the rapid expansion of the second-hand clothing trade, are fast fashion dynamics. The consumption of new clothes at an exponential rate creates the preconditions for the second-hand clothing system (Brooks 2015). At the same time, the GPN of used clothes is changing due to diminishing life cycles of textiles, based on poor quality and fast fashion trends. Hence, even though fast fashion dynamics are seen as key reason for the existence of the trade with used clothes (Brooks 2015), they also spark of numerous challenges (Yalcin-Enis et al. 2019). What is more, overconsumption of clothes in the Global North has crucial negative impacts on the environment as well as society (Koszewska 2018). Norris (2015) argues that while European policymakers are working on ways to improve credibility and transparency of charitable collecting activities as well as sustainable systems of textile re-use and recycling on a regional level, the trade with used textiles still poses a challenge to its ethical legitimation (Norris 2015).

4.1.2 Ecological Aspects

Due to the fast fashion model mentioned above, world textile production has been increasing on an exponential rate in recent years, which lead to enormous quantities of textile waste. In general, textile waste can be divided into three main types. First, post-industrial waste or production waste, which is generated on the manufacturing stage. Depending on the manufacturing process the types of waste vary, however, fabric cut-offs, fabric roll ends as well as fabric defects constitute a major amount of post-industrial waste. Second, pre-consumer waste, which are unsold products, damaged or inferior quality products in the retail sector. Pre-consumer waste is not completely valueless for retailers, as it can be sold to third parties or to their own outlet stores. Third, post-consumer waste, which are discarded clothes by consumers (Koszewska 2018; Yalcin-Enis et al. 2019). All three types have been consistently increasing in recent years. Yalcin-Enis et al. (2019) argue that even though in general

around 35 percent of the former input is discarded during production and pre-consumer stages, before the product reaches the consumer, scholars, practitioners as well as national governments preliminary focus on post-production waste (Yalcin-Enis et al. 2019). This point is also mentioned by Schlitz and Laser (2019), who highlight that even though there are various regulations with regards to the recycling of waste, waste production, or even waste prevention is rarely touched upon. According to the authors, this is problematic as while the focus is put on household or post-consumer waste, most of the waste is produced in the manufacturing process (Schlitz and Laser 2019).

Various countries are working on ways to increase the amount of recycling and re-use (European Union 2019). On a global scale, the 3R (reduce, re-use, and recycle) approach to waste management has been established as one of the vital concepts towards a more sustainable society (Yalcin-Enis et al. 2019). The EU (2019) for instance, has proposed ways to address the stressing issue of rising textile waste and improve collection and recycling. One approach is the transformation towards a circular economy, or more specific circular fashion. Koszewska (2018) outlines that the circular economy model has recently become popular among scientists, authorities and business on a global scale. This approach strives to reduce waste by keeping materials within the loop of consumption and production as long as possible and hence increase their life cycles. One way to achieve this is by extending the collection scheme of discarded clothes. Another way is to work on adapting the design of clothing in order to ensure multiple life cycles. This can be enabled through improving the recycling process of textiles by designs, which are suitable for disassembly (European Union 2019). Various authors however highlight crucial limitations of such approaches. In order to safeguard an efficient transition towards a circular economy, production as well as consumption patterns need to change (Koszewska 2018). The second approach is to hold producers and importers legally responsible for safeguarding that discarded clothes are re-used and recycled. This can be achieved through EPR and in-store collection, meaning that companies can either arrange their own collection programs or alternatively provide financial contribution to an accredited collectively responsible organization (European Union 2019). According to the Organization for Economic Co-operation and Development (OECD) EPR is “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle” (OECD 2016).

With rising environmental awareness, governments are working on ways to optimize textile waste management and meet circular economy targets (Ljungkvist et al. 2018; Yalcin-Enis et al. 2019). Nowadays, prevention as well as elimination of waste throughout the product life cycle is one of the biggest challenges the textile and clothing industry is facing on a way towards a transition to a circular economy (Koszevska 2018). “In the past, people gave their clothing for donation with the intention that another person can wear it. This intention has diluted over time because of waste management concepts driven by policy makers with the aim to reduce mixed household waste for landfilling or disposal. So, separately collected textiles are seen increasingly as resources in general, first for re-use and secondly for recycling” (BOER Group, cited in Ljungkvist et al. 2018: 22).

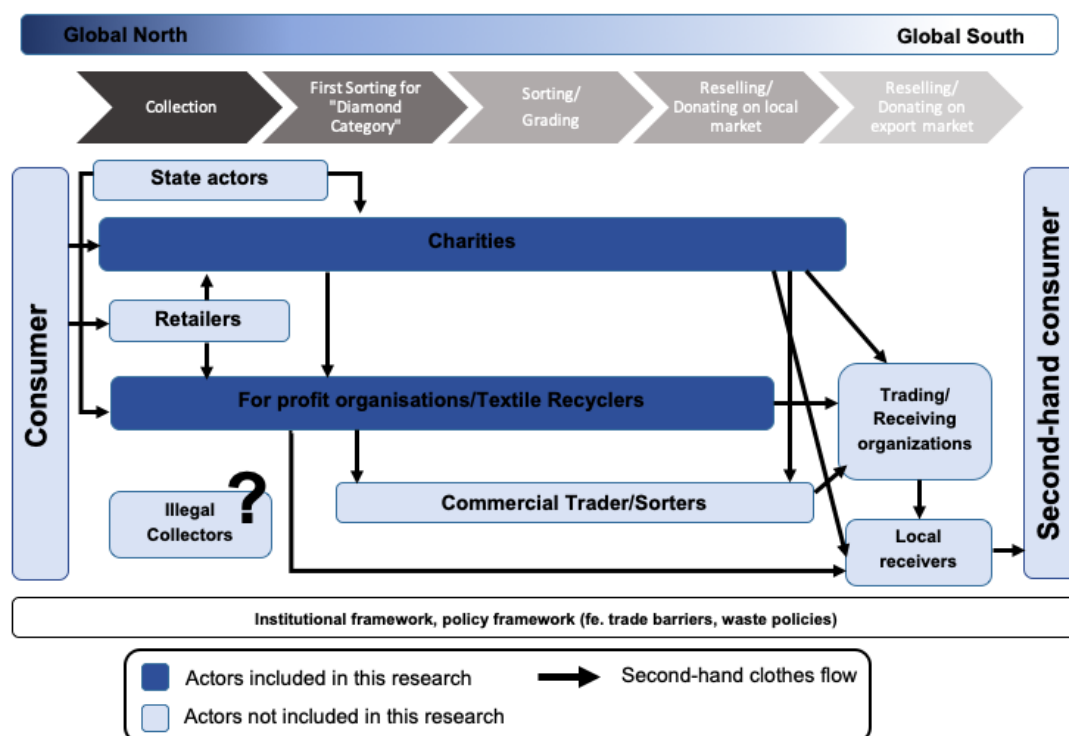
4.2 The Second-Hand Clothing Production Network

The complexity of the second-hand clothing industry has increased substantially due to the rise in global production, distribution and consumption of clothing. What is more, there is no universal channel for recovery of clothes after use (Paras et al. 2018b). Through a series of reverse value chain activities that are sparked off after clothes are discarded, the second-hand clothing value chain connects a variety of different charitable and commercial actors in the Global North as well as intermediaries, local traders and end consumers in the Global South (Crang et al. 2013).

Figure 2 gives an overview of the second-hand clothing production network, which has the following characteristics. First, it includes various types of different actors, such as charitable and commercial actors, retailers, public actors and illegal collectors (Brooks 2012a). Second, the production network is globally stretched due to offshoring of labour processes and export of used clothes (Norris 2012; Sandberg et al. 2018). Third, it is influenced by various different contextual factors such as the institutional and regulatory framework (Paras et al. 2018a). Fourth, the network and societal embeddedness of actors varies substantially and they are characterized by different relationships, which influences value capture (Brooks 2012a). Fifth, five key processes have been identified in the GPN of second-hand clothes, which are performed by various charitable and commercial actors to different extents (Hawley 2006; Fleischmann et al. 2004). Namely, first collection or acquisition of used textiles. The collected textiles can only partly be re-used, which is why the initial process for value capture is followed by a series of sorting and grading processes. The first one is sorting

for diamonds, those goods with the highest profit margin (Hawley 2006). In the following step, the collected textiles are sorted and graded based on material quality and their export destination (Botticello 2012). After the sorting process, there are various selling and donating processes to ensure that the collected clothes get to the appropriate receiving organizations or end-consumers. One is targeted on the local market, the other one on the global market (Fleischmann et al. 2004; Sandberg et al. 2018). Sixth, the GPN of second-hand clothes yields three types of value for actors involved. Namely, economic benefits in the form of monetary value. Further, it yields social value, as re-use and recycling activities create jobs and employment for socially disadvantaged population groups or have a wider benefit for society. Additionally, environmental value can be harvested as natural resources are conserved and greenhouse gases as well as landfills are reduced (Arenas et al. 2015). Hence, throughout the GPN there are different mechanisms of value capture and different forms of embeddedness (Sandberg et al. 2018).

Figure 2 An overview of the second-hand clothing production network



Source: own representation

4.2.1 Collection

The initial stage of the second-hand clothing value chain is the collection of discarded clothes, which is mainly performed by actors in the Global North (Crang et al. 2013). There are different strategies applied for collection of discarded clothes. Empirical

investigation has shown that the collection of discarded clothes is predominantly performed through container collection. Schmidt et al. (2016) argue that container collection is an efficient way for actors to collect an average quality of discarded clothes. Containers are typically positioned close to supermarkets, municipal parks, waste collection sites of either municipalities or recycling sites. Some organizations also use acquisition points, where people can hand over old clothes, or fee-based pick-up services. Additionally, the Waste and Resources Action Programme (WRAP), a charity based in the UK, highlights that clothes can also be collected through retailer in-store collections or door-to-door charity bag collections (WRAP 2016). While some organizations perform collection activities themselves, others outsource the process to an external actor. Once collected, discarded clothes are transported to sorting facilities or bagging locations, where textiles are either sorted for various redistribution options or immediately exported as originals to sorting facilities abroad.

4.2.2 Sorting and Grading

The collected clothes can only partially be reused, hence in a following labour step, they are sorted into different categories. The sorting and grading process determines whether they can be re-used, recycled or incinerated. Hence, it is the process that estimates the value of each discarded item. Paras et al. (2018b) outline that the whole sorting process is subjective in nature. The sorting and grading is predominantly performed manually, the characterization of the product is therefore mainly based on the skill of the person that is performing the sorting (Paras et al. 2018b). The sorting process is essential for the economic success of the trade with used clothes (Hawley 2006).

Furthermore, the sorting of collected clothes determines the length of the life span of textiles. The more precise the process and the better it is tailored to specific needs of markets and customers, the more goods can enter the stream of redistribution in an efficient way, ideally as second-hand clothes (BVSE 2015). In general, sorting processes are context specific, influenced by demands of customers, climatic conditions of export markets, relationships between exporters and importers as well as trade policies for used textiles (Botticello 2012). “What takes place in the second-hand clothing reprocessing factory, then, is a process of reproduction for re-consumption, through recognition of the material qualities of the garments and their potentials to be revalued in new ways for different destination contexts” (Botticello 2012: 168).

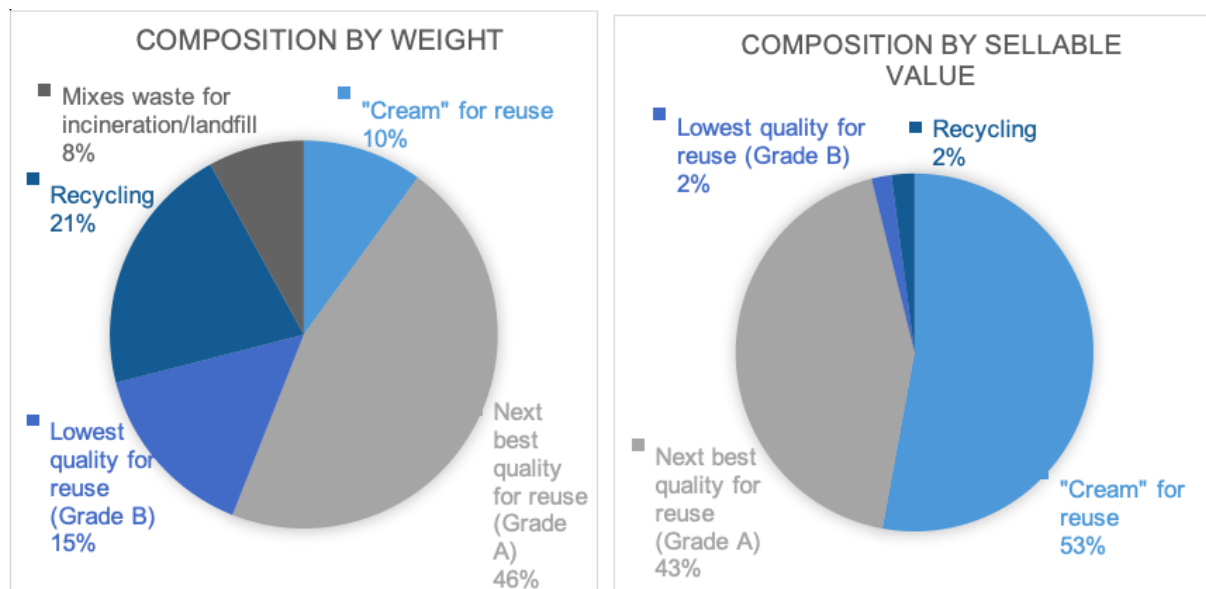
The process of sorting and grading is very labour intense and without sufficient capabilities and resources, this step may become a financial burden (Sandberg et al. 2018). Due to an increase in labour costs and the consequently high cost of value adding activities in the Global North, sorting and grading is mainly outsourced. Gregson and Crang (2015) outline that labour intensive operations are performed in the Global South in order to generate more precise sorting of materials and hence supply a much broader range of markets. Moreover, this multiple circuits of material sorting lead to a more efficient resource recovery and greater exhaustion of value (Gregson and Crang 2015). This led to a rise of offshore reprocessing centres and an emergence of crucial re-exporting hubs of discarded clothes, which are based on cheap labour sources (Crang et al. 2013). Paras et al. (2018b) highlight that whereas low operation cost, skilled work force, business knowledge and location are internal success factors, favourable government legislation and domestic recycling markets are external factors that contribute to the success of second-hand clothing value chains if decisions about the sorting and grading process are made appropriately.

Not all sorting and grading processes are outsourced or offshored to countries in the Global South. Watson et al. (2016) highlight that some organizations carry out minor or even more thorough sorting processes. The grade of sorting depends on the resources of the collecting organization (Watson et al. 2016). Such organizations typically have shops in the collecting country and hence perform sorting processes in order to have a sufficient share of high quality textiles with a high profit margin for redistribution in domestic shops (Hawley 2006). The percentage of this share depends on the size and quantity of shops and the amount of clothes collected, in general however around 10 to 20 percent are suitable for in shop sales. After removing the portion for own sales as well as non-textile waste, goods are sold on the global export market as pre-sorted textiles (Watson et al. 2016). Figure 3 outlines the typical composition of discarded clothes by weight and sellable value, based on research conducted by Watson et al. in four Nordic countries, namely Denmark, Finland, Norway and Sweden in 2014 (Watson et al. 2016).

As can be seen in Figure 3, in general there are five fractions in a sorting process, namely the cream category, which is the highest quality of re-use, the next best quality (grade A), the lowest quality for re-use (grade B), the portion that goes to recycling and mixed waste for incineration and landfill. While the highest quality of re-use only represents 10 percent of the weight of original collected clothes by Nordic collectors, it

accounts for 53 percent of its value. Hence, skimming off a few high quality items has a significant impact on sales value for sorters. Textile waste accounts for 8 percent of the weight, its value on the other hand accounts for -0.5 percent, as sorters have to pay to eliminate textile waste that can neither be re-used nor recycled and therefore gets incinerated or landfilled. Watson et al. (2016) argue that “since waste treatment typically costs the sorter around EUR 0.05 per kilogram the waste is sorted into sellable fractions as far as possible” (Watson et al. 2016: 69). Against this background, it is notable that sorting and grading is of fundamental importance for the GPN of second-hand clothes and affects economic profitability, export quantities and composition of goods in recycling, re-use and textile waste (Wagner 2017).

Figure 3 Typical composition of discarded clothes by weight and composition of sellable value



Source: Watson et al. 2016

4.2.3 Redistribution on Domestic and Export Markets

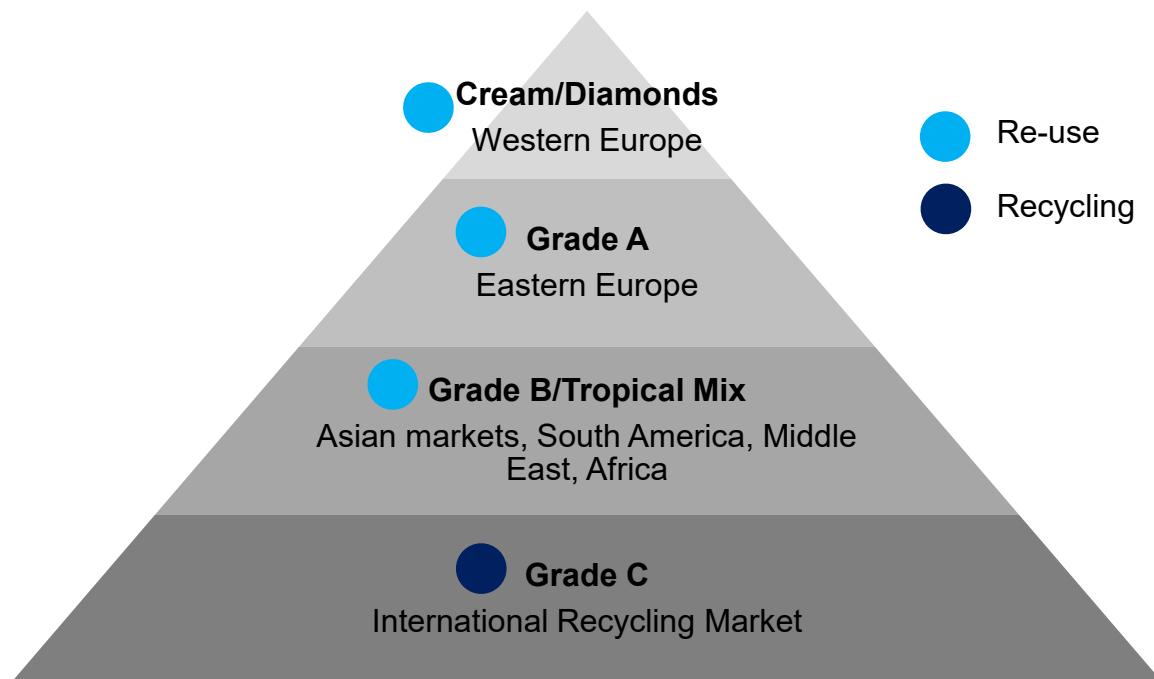
After used textiles are sorted, various selling processes are performed in order to ensure that second-hand clothes are sold to appropriate receiving organizations or consumers on either local or export markets. Through the outlined activities discarded textiles are recharged with a new value for new customers. Customer of those “new” commodities range from high-street vintage clothes customers to charities and consumers in countries of the Global South (Sandberg et al. 2018). According to research of Hawley (2006), who investigated markets for post-consumer textiles, the largest volume of discarded textiles is sorted for second-hand clothing markets, primarily for export markets in the Global South. Arenas et al. (2015) outline that there are three channels for redistribution. Namely, first redistribution in the own shops,

where only the highest quality clothes are sold. Second, redistribution to the international market of second-hand clothes, according to the authors this fraction accounts for 80 percent of all clothes collected. Depending on the quality of clothes, demand of wholesalers and sales export representatives as well as end destination, prices generally range between EUR 0.3 to EUR 1.6 per kilogram. Third, redistribution to the international market for recycled textiles, where prices range from EUR 0.05 to EUR 0.15 per kilogram (Arenas et al. 2015). Figure 4 portrays the destination of post-consumer textiles after the sorting process. What has to be taken into account however is that different actors may use different terminology for classifications.

The highest quality clothes, cream or shop quality clothes, often remain in the sorting country, which is mainly Western Europe (Ljungkvist et al. 2018). One fraction of this category are so called diamonds. Hawley (2006) points out that diamonds account for around 1 percent of the total volume of post-consumer textile waste. On that basis, the author found out that volume in the second-hand clothing trade is inversely proportional to value. While the largest volume of used clothes is sold for USD 0.50 to 0.75 per pound, the rarest finds, diamonds, are sometimes worth several thousands of dollars per item. Items that are characterized as diamonds in the second-hand clothing trade include branded clothes, trendy vintage items, antique items and luxury fibres (Hawley 2006).

Grade A represents clothes which are primarily sold in Eastern European markets. The next classification, grade B, have a lower re-use quality and are sold on the international market for second-hand clothes, mainly in low-income countries in Eastern Europe, South-East and Central Asia, South America of Middle Eastern countries. Sub-Saharan countries are among the world's largest importing countries of used clothing. One fraction of these medium quality textiles is the so called "tropical mix" category, which is not necessarily of lower quality than those clothes which are sold on Eastern European markets, but comprises a mix of lightweight clothing which is better suitable for warm climates. The lowest quality clothes, Grade C, those which are classified as non-reusable textiles, either remain in the sorting country, where they undergo various recycling processes, mostly downcycling, or are sold on the global recycling market, primarily in Pakistan or India (Arenas et al. 2015; Ljungkvist et al. 2018; Watson et al. 2016).

Figure 4 Categorization of postconsumer textile waste and its destination



Source: own representation

Schmidt et al. (2016) highlight that the economic value of used textiles depends almost entirely on the re-usable component. This can also be seen in Figure 3, while clothes that are considered for the recycling market after sorting processes account for 20 percent of the total amount by weight, they only constitute 2 percent of its value. What has to be taken into account however is that categories demanded and end destinations of used textiles are under constant development as economies progress (Watson et al. 2016). Additional factors that influence the choice of export markets are transportation costs, local political contexts or increased trade barriers, which are implemented by governments to protect domestic clothing industries (Brooks 2012a).

4.3 Blurred Line between Charity and Commerce

Since the Second World War, the evolution of the second-hand clothing export trade has mainly relied on collection activities of charities. Such charitable organizations have a long and varying engagement with supplying second-hand clothing for both local and export markets (Hansen 2000). According to Hansen “charitable organizations are the largest single source of the garments that fuel today’s international trade in second-hand clothing” (Hansen 2000: 250). Moreover, charities effectively stimulate clothing donations by using various different ethical narratives and images. “Sustaining this picture is an integral part of the system of provision and the

material culture which surround the donation and consumption of used clothing” (Brooks 2015: 84).

Norris (2012) outlines that clothing collection is often the core activity of charitable organizations, hence their main source of income. Due to often limited technical and managerial skills of charitable organizations, activities beyond the collection of clothes surpass their abilities (Paras et al. 2018a). Partly also because in order to distinguish valuable clothing from waste in the sorting process, textile, fabric as well as product knowledge is crucial (Botticello 2012). These circumstances led to an emergence of commercial actors with new forms of embeddedness and value capture (Paras et al. 2018a; Norris 2012). Nowadays, the collection activity of used clothes is becoming more and more commercialized, which marginalizes revenues of historically and socially embedded charities in collection of second-hand clothes (Brooks 2012a).

While the role of charitable organizations in the supply of used clothes has been decreasing, the collection of clothes has become increasingly competitive and complex. Today, the second-hand clothing production network in countries of the Global North is dominated by charitable organizations and commercial actors. The financial relationship between the actors involved is rather opaque and according to Hansen (2000) has predominantly eluded public scrutiny. The majority of charities sell a large proportion of their collected clothes to commercial actors, around 40 to 75 percent, as the amount of donations simply surpasses demand on the domestic market (Hansen 2000). Further, Norris (2012) points out that “outsourcing clothing collection to commercial recyclers has become a convenient, professionally-organized way for them to make money” (Norris 2012: 185). In 2011, based on research conducted in the UK, the average paid to charities for stock collected in textile banks was GBP 275 to 349 per ton. Textile recyclers, who were using the logo of charities for collection activities, were paying GBP 50 in royalties per kilogram clothing to charitable organizations. More and more commercial actors have started doing business with exporting second-hand clothes and nowadays are controlling the export trade (Norris 2012).

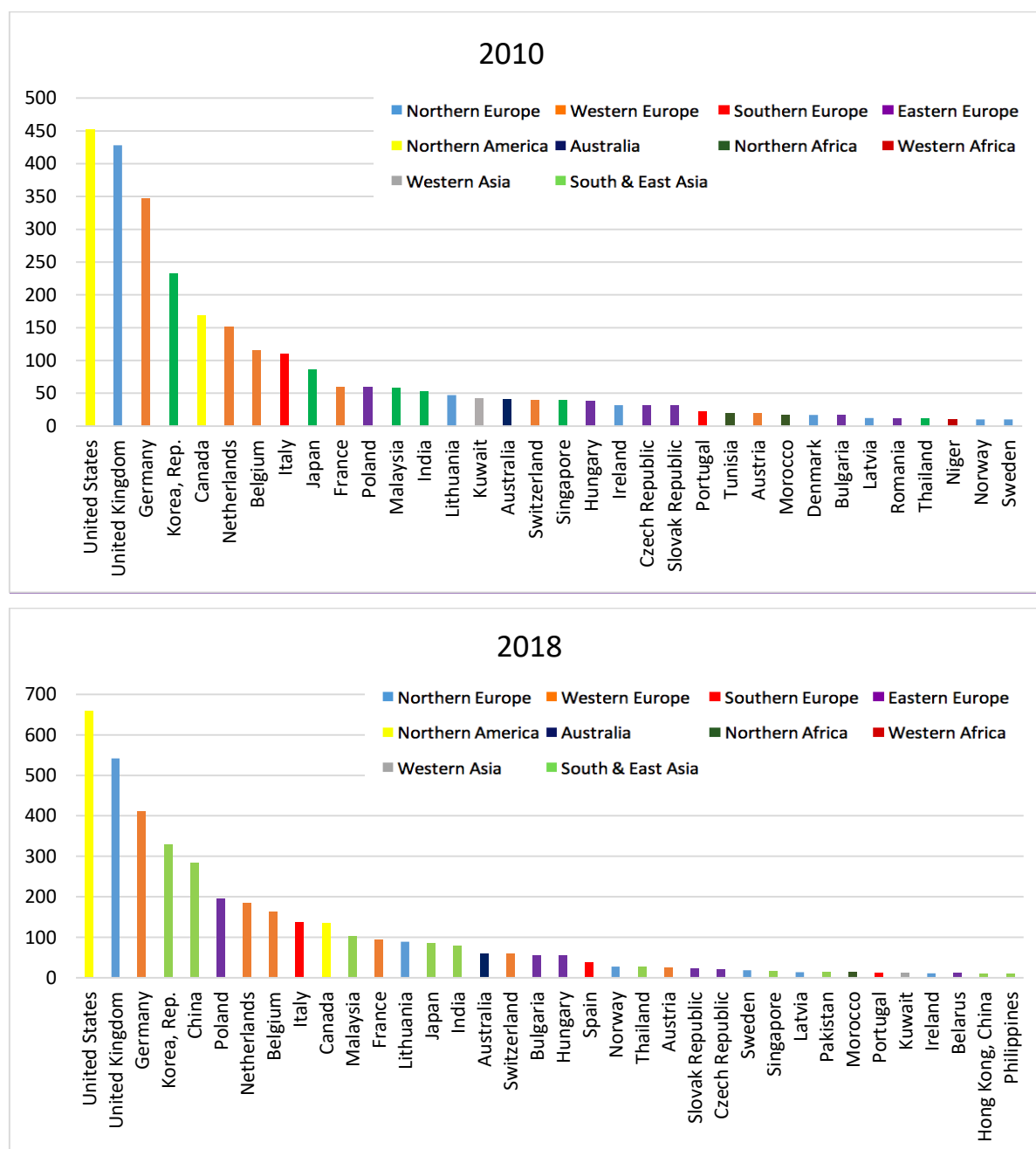
Another tie that evolved within the last years is the one between charities and retailers. Fashion retailers are increasingly donating garments in unsold stock or out-of-season to charities. Arenas et al. (2015) portray one example of a Spanish charity Roba Amiga, where donations of fashion retailers account for around 5 percent of total clothes

collected. The authors highlight that for fashion retailers, such donations have crucial benefits. With regards to the financial side, donations of used clothes to charities are tax-deductible and simultaneously save costs on waste management. On the environmental side, their left-over stock is donated to charities and therefore no longer considered as waste, hence, they are able to report significant waste reduction (Arenas et al. 2015). Collaborations between charities and retailers have opened up new aftermarket opportunities in which new forms of embeddedness and value capture have emerged (Paras et al. 2018a). However, up to now, there is very few in-depth analysis as well as empirical evidence on value capture and distribution of different actors in the second-hand clothing trade (Brooks 2015) as well as on the impact of those new forms of relationships on actors in the Global South.

5 The Global Second-Hand Clothing Trade

The global trade of second-hand clothes is characterized by a surplus of discarded clothes collected mainly in the Global North and sold to countries in the Global South. What is more, most of the value-added activities remain in countries of the Global North, as the initial stage of the trade is the surplus generation of second-hand clothes in the Global North, by reproducing used clothes as a commodity, which can be sold on the international market (Hansen 2000). As can be seen in Figure 5, the countries on top of the list, exporting more than USD 10 million worth of used clothes, were the same in 2010 and 2018. Namely, the US followed by the UK and Germany. More precisely, countries that exported more than USD 100 million in 2010 were two Northern American (US, Canada), five European (UK, Germany, Netherlands, Belgium, Italy), and one East Asian (the Republic of Korea) country. In 2018, two Northern American (US, Canada), six European (UK, Germany, Poland, Netherlands, Belgium, Italy), and three South and East Asian (the Republic of Korea, China, Malaysia) countries exported more than USD 100 million worth of used clothes (WITS 2019). Thus, while historically used clothing collection was limited to countries in the Global North, with Europe having a crucial role (Lemire 2012), this is no longer the case, as increasingly countries in the Global South, mainly South and East Asian countries, are positioned among the top exporting countries of used clothes.

Figure 5 Countries that export more than USD 10 million worth of used clothes in 2010 and 2018

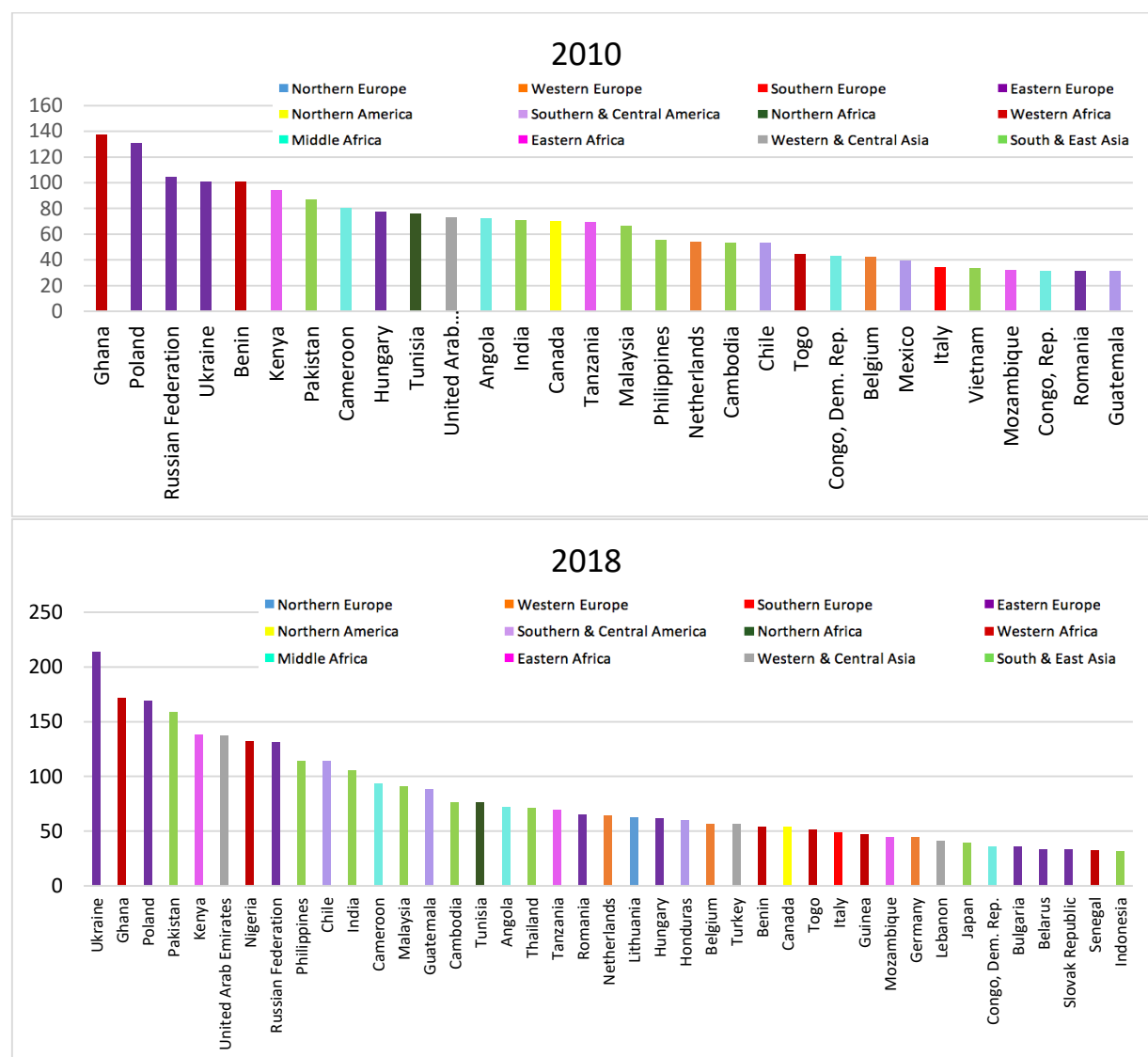


Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)
Source: WITS (wits.worldbank.org)

What has to be noted, is that the export value increased considerably. While in 2010 the US exported USD 452 million worth of used clothes, in 2018 US exports accounted for USD 660 million. In total, global exports of used clothes accounted for around USD 4,2 billion in 2018. This shows a massive increase compared to 2010, where the export value accounted for approximately USD 2,9 billion (WITS 2019).

Figure 6 displays countries that imported more than USD 30 million worth of used clothes in 2010 and 2018. The number of countries increased within the time frame, and the country distribution changed, which is an indicator for the complexity of the global market of used clothes. What can be seen is that in 2010, two Western European countries, namely the Netherlands and Belgium were importing more than USD 30 million. In 2018, those two countries were accompanied by Germany (WITS 2019). Those are countries having a number of large sorting facilities, which may represent interim destinations for second-hand clothes (Interview 13, 15, 17, Watson et al. 2016).

Figure 6 Countries that import more than USD 30 million worth of used clothes in 2010 and 2018



Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)
Source: WITS (wits.worldbank.org)

Various authors present determinations about final export destinations of second-hand clothes (Arenas et al. 2015; Watson et al. 2016; WRAP 2016). TEXAID, one of the leading textile recycling companies in Europe, who is present in Switzerland, Germany, Austria, Bulgaria, Hungary and Morocco, portrayed its export numbers in a sustainability report. In 2017, the majority of collected clothes were sold to Eastern European countries (34.9 percent), 27.8 percent to African countries, 26 percent to countries in Western Europe, the remaining part was distributed to countries in the Middle East (2.8 percent), Far East (6.9 percent), North and South America (0.4 percent), and 1.2 percent was sold in their own shops in Germany (TEXAID 2017). According to UN statistics, in 2010, two Western African (Ghana and Benin), and three Eastern European (Poland, the Russian Federation, Ukraine) received more than USD 100 million worth of used clothes (Figure 6). In 2018, 11 countries were importing more than USD 100 million, among them the same three Eastern European countries than in 2010, two Western African (Ghana, Nigeria), three South-East Asian (Pakistan, Philippines, India) countries as well as Kenya, Chile and the United Arab Emirates (WITS 2019).

5.1 Country Classification

My empirical investigation based on the conducted interviews (see Annex I: Overview of Interviewees) shows that countries can be classified in the GPN of used clothes in the following ways. First, a classification based on main activities is possible in exporting, re-exporting and importing countries. In 2018, the top exporting countries based on UN statistics were the US, UK, Germany, South Korea and China (Figure 5). The top importers were Ukraine, Ghana, Poland, Pakistan and Kenya (Figure 6). With regards to re-exporting countries, the classification is more difficult. Norris (2015) argues that significant re-exporting hubs are situated on every continent. Watson et al. (2016) investigated exports of used textiles from four Nordic countries, namely Denmark, Finland, Norway and Sweden. Their results showed that 75 percent of all used textiles exported from those countries were categorized as 'original' (meaning unsorted) and exported for detailed sorting to Eastern European countries, Baltic States, or to a smaller extent to special economic zones in non-European countries. This can also be seen in Figure 6, where Eastern European countries make up a considerable part of countries that receive more than USD 30 million. One of the interviewees mentioned that the majority of collected clothes by their organization are primarily sold to sorting plants in countries in Western Europe, Eastern Europe and

Italy (Interview 8). A report of WRAP (2016) gives an example of the UK market and highlights that there exist a lot of partnerships to overseas-based organizations, in countries where labour costs are lower, and hence, additional sorting can take place at lower costs than in the UK. Following sorting processes, sorted second-hand clothes that do not find a market in the sorting country, are re-exported to other countries, depending on demand. Against this background, it can be seen that apart from exporting and importing countries, classifying re-exporting countries is crucial in the trade with second-hand clothes.

Second, countries can be classified with regards to their historical geo-political relations and their access to markets. Accordingly, Hütz-Adams (1995) stresses the intensive relations from France, Belgium and the Netherlands to African markets, which is mainly due to their colonial past, but also due to their access to the sea. This point was also mentioned by interviewees, as Belgium and the Netherlands would profit from their historical connections to sales markets in Africa. Especially actors in the Netherlands have a competitive advantage to operate overseas goods due to a greater proximity to ports, better relationships with shipping agents and less logistical costs (Interview 13, 15).

Third, importing countries can be classified based on the demanded quality of second-hand clothes, correlating to the level of purchasing power of the local population (Interview 15, 17, 22). In this regard, Hütz-Adams (1995) highlights an example of second-hand clothes originating from Germany in 1995, which could not be sold in a lot of African markets, such as Mozambique, as they were too expensive and hence did not meet the local demand (Hütz-Adams 1995). In this sense, Watson et al. (2016) highlight that the flow of used clothes has a tendency to follow the market according to the price. Supply and demand is rapidly changing due to the development of global economies. Whereas at the beginning of the millennium Poland was still one of the biggest import markets for lower quality clothes, overall purchasing power has been increasing and those textiles which were consumed in Poland before, are now exported to countries such as Ukraine or Russia, where they are still in demand. (Interview 13).

Fourth, one of the interviewees mentioned the importance of cultural aspects that have to be considered when categorizing countries in the second-hand clothing trade. As the perception of waste, and hence the attitude towards second-hand clothes differs

greatly between countries and determines the demand for second-hand clothes. According to the interviewees, purchasing used clothing at second-hand shops is perceived quite differently around the globe. In Eastern Europe second-hand clothes are accepted by a greater majority of the population than for example in countries like Germany where second-hand clothes are less accepted by the middle income-group (Interview 15, 21). Conversely, second-hand fashion has completely different effects in countries of the Global South. For some people in Europe and the US, second-hand clothes have become a statement for sustainable and conscious consumption, which is accompanied by a desire for alternatives to the fast fashion industry (CCK 2019b) and as a way to have distinctive looks (Brooks 2015). “Second-hand fashion is therefore en vogue” (CCK 2019b: 5). This rising acceptance for second-hand clothes in countries of the Global North however mainly concerns the highest quality of second-hand clothes, meaning branded or trendy vintage items (Interview 2, 6), which is crucial to consider as this is a much smaller amount compared to the Global North-South trade.

Summing up, these four ways of classifying countries gives greater insights into value capture and distribution in trade with second-hand clothes and can serve as a baseline for analysing the role of specific countries in the GPN of second-hand clothes.

5.2 Market Developments

The second-hand clothing market is under constant development. Various interviewees highlighted that a few years ago, there was still a lack of supply of used clothes to meet its high demand on the market. This situation however has changed as a result of economic growth, fast fashion dynamics and a changing institutional and regulatory framework in countries of the Global North (Interview 3, 4, 9). Nowadays, there is a surplus of used clothes, a drop in demand in exporting countries and an increase in trade restrictions. These developments have led to a global decrease in prices of used clothes (Watson et al. 2016).

5.2.1 Decreasing Profit Margins

Profit margins in the second-hand clothing trade have been decreasing within the last years. This is mainly due to the fact that the quantity of discarded clothes has been rising as well as the share of lower quality used clothes, which led to an increase in sorting costs. As supply increases, demand for second-hand clothes is stagnating, and global markets are starting to become more saturated. This is especially true for the

international recycling market (Ljungkvist et al. 2018; Watson et al. 2018). Among other things, these developments have an effect on the diversity of actors in the global trade with used clothes. Watson et al. (2016) conducted research in Poland and portray that only more effective and established sorters and wholesalers were able to cope with the drop in prices for used clothes, and generally the number actors diminished significantly.

What is more, narrow profit margins might also affect wage policies, acting as a driver in pressing down wage levels for people employed in the sector (Watson et al. 2016). Additionally, Arenas et al. (2015) point out that due to the competitiveness on the market, especially commercial actors increasingly outsource sorting processes to countries of the Global South, which have less regulated labour markets and very poor wages (Arenas et al. 2015). Additionally, Watson et al. (2016) highlight the case of Pakistan, where “international watchdogs have expressed concern over workers’ condition and workers’ rights, for example to be represented by unions” (Watson et al. 2016: 82). Under such circumstances it is crucial to guard against excessive work hours, child labour, health and safety, impingements of the right to be represented as well as low wages. Various collective organizations are working on increasing transparency and social as well as environmental standards in trade with second-hand clothes (Interview 17, 19, 20, 21).

5.2.2 Trade Barriers

The global market for used clothes is affected by national trade regulations as well as international trade agreements, the variety of such restrictions is developing rapidly. There are different import restrictions that can apply for used clothing imports. Namely, first, prohibitions or bans, which can cover used textiles in general or certain groups of products. Second, tax tariffs or import duties, on imports outside of a free zone. According to Watson et al. (2016) the tax level can be very high such as 60 percent of the product value or expressed as a fraction of the quantity such as USD 0.2 to 5 per kilogram of used textiles. Third, some countries require health certifications, such as fumigation certificates or certificates for disinfection. Fourth, high bureaucratic walls such as customs bureaucracy or the need for companies that perform special inspection represent additional restrictions (OTEXA 2018; Watson et al. 2016).

Trade barriers are implemented by countries in the Global South to protect local industries, as local textile and fashion businesses are often unable to compete with the

second-hand clothing market and low-quality clothes that are imported from China. While second-hand clothes create local trading industries, they simultaneously suppress the evolution of local independent industries (CCK 2019b; Hansen 2000). This is the reason why since 2015, the East African Community (EAC) has been discussing an import ban on second-hand clothes. Those countries form a crucial export market for second-hand clothes, especially for the US, which annually exports around USD 124 million to the EAC. Member states Kenya, Uganda, Tanzania, Rwanda and Burundi decided to ban imports starting in 2019. Following countries like Ghana, Ethiopia and Egypt, who already imposed import bans. However, countries in the Global North, such as the US, responded immediately to this development, and threatened to take countermeasures. Consequently, with the exception of Rwanda, the EAC countries did not impose the import ban for second-hand clothes (CCK 2019b). With regards to recent developments, “the market situation for export of second-hand clothes to Africa is becoming more challenging and future regulations can have great impact on the market balance for used textiles” (Watson et al. 2016: 55).

Apart from protecting domestic economies, various authors outline possible negative effects of trade barriers. Arenas et al. (2015) highlight that restrictions on used clothing can lead to cross border smuggling. The author stress that this is already happening in countries such as Nigeria, Morocco or South Africa. Illegal pathways imply an associated loss of revenue with regards to import duties for the countries in question (Arenas et al. 2015). In this regard, Watson et al. (2016) highlight that government revenues collected from the trade and retail of second-hand clothes depend on a variety of factors, namely total quantities of import and export, level of profit for companies in the sector, taxes and tariffs level, proportion of sales taken by the informal economy and levels as well as collection rates of value-added tax (VAT). An exact estimation of the total amount of government revenues from the trade with used clothes is difficult due to the wide variety of regulations and the large informal sector (Watson et al. 2016).

Regarding cross border smuggling of second-hand clothes, Brooks and Simon (2012) outline the crucial role of countries like Benin, Togo, and Rwanda, in transshipments. As according to research of the authors in 2012, Nigeria imposed quantitative import restrictions on second-hand clothing products in order to protect domestic manufacturing, Benin and Togo on the other hand, had no restrictions in place, thus cross-border smuggling to Nigeria was common (Brooks & Simon 2012). In the view

of this, Brooks (2015) portrays that “a greater quantity of used clothes are imported than register in official statistics, as the large differences in import policies in neighbouring countries provides an impetus for smuggling” (Brooks 2015: 155). This can also be seen in Figure 6, where in 2010, Benin was on rank 5 of top importers of second-hand clothes, with an import value of USD 101 million, and Togo was on rank 21, importing USD 44 million worth of used clothing. There is a number of West African countries having disproportionally high volumes of used clothing imports relative to their population size (Brooks 2015). When looking at data of 2018 (Figure 6) on the other hand, Nigeria appeared on the top 10 list of importers, on rank 7. Simultaneously, Benin only imported half of the amount that was imported in 2010, accounting for USD 54 million. However, as of 2018, according to the Office of textile and Apparel (OTEXA) under the US International Trade Administration, which is a key source of information regarding national restrictions of second-hand clothing imports, Nigeria still imposed tariffs on worn textiles and clothing (HS code 6309) as well as on sorted and unsorted used rags and textile scraps (HS code 6310) of 20 percent. Further, imports are still subjected to a ban (OTEXA 2018). Brooks and Simon (2012) highlight that government bans in Nigeria are not implemented effectively, which might be the reason for Nigeria’s position under the top importers in 2018. These developments portray that “firms in the Global North are complicit in this illegal system of provision as they are fully aware that the mass exports sent elsewhere in West Africa filter through to Nigeria with its huge population of 160 million” (Brooks 2015: 155). What has to be noted is that in official statistics, illegal transshipments are not recorded, which increases the difficulty of mapping the GPN of second-hand clothes based on quantitative data (Watson et al. 2016).

5.2.3 Emerging South-South Flow

Another development in the market of second-hand clothes is an emerging South-South material flow. As the number of urban, middle class consumers in economies of the Global South has been growing, which also contributes to the growing amount of discarded goods (Gregson and Crang 2015; Interview 21). This can be seen in Figure 5 where in 2018, three South and East Asian countries were among the top exporting countries, with an export trade value of more than USD 100 millions of used clothes, namely the Republic of Korea, China and Malaysia. In addition to those three countries, seven other South and East Asian countries exported more than USD 10 million (Japan, India, Thailand, Singapore, Pakistan, the Hong Kong Special Administrative

Region of the People's Republic of China, the Philippines), accounting for a total of USD 955 million, which is 23 percent of all the used clothes exported in 2018.

Those exported used clothes from countries of the Global South, challenge the previously dominating role of European and US exports. According to Ljungkvist et al. (2018) this is especially noticeable in African markets. While in 2010, China's share of used clothing imports to Kenya only accounted for 1 percent, in 2016 the share went up to 34 percent. Gregson and Crang (2015) argue that for that reason, collection activities are no longer restricted to the Global North, "there is not only evidence of networks of Chinese traders in Africa but also African traders in China" (Gregson and Crang 2015: 31). This emerging South-South material flow can affect the global trade with used clothes on various aspects, such as enhanced competition for export markets due to an increase of supply of used clothes (Gregson and Crang 2015).

6 The European Second-Hand Clothing Trade

The European second-hand clothing trade still forms a crucial part of the global trade with second-hand clothes, even though its importance has been diminishing for the past decade (Lemire 2012), due to among other things, an emerging South-South flow and a growing importance of new countries, especially from South-East Asia (Figure 5; Figure 6). Nevertheless, when looking at the European share of the global trade in the timeframe of 2010 until 2018 (Table 2), the percentage of EU27 exports in global exports only slightly changed from 54 percent in 2010 to 52 percent in 2018. The trade value of EU27 exports of used textiles and clothing (HS code 6309) rose from around USD 1,7 billion in 2010 to USD 2,1 billion in 2018 (WITS 2019).

Table 2 Exports of used textiles and clothing from 2010-2018 (trade value in million USD)

Trade Value in million USD	2010	2011	2012	2013	2014	2015	2016	2017	2018
All countries	2,960	3,800	3,930	4,350	4,340	3,910	3,730	4,050	4,150
EU27	1,600	1,880	2,020	2,280	2,220	1,910	1,900	2,050	2,140
% of EU27 in global exports	54%	49%	51%	52%	51%	49%	51%	51%	52%

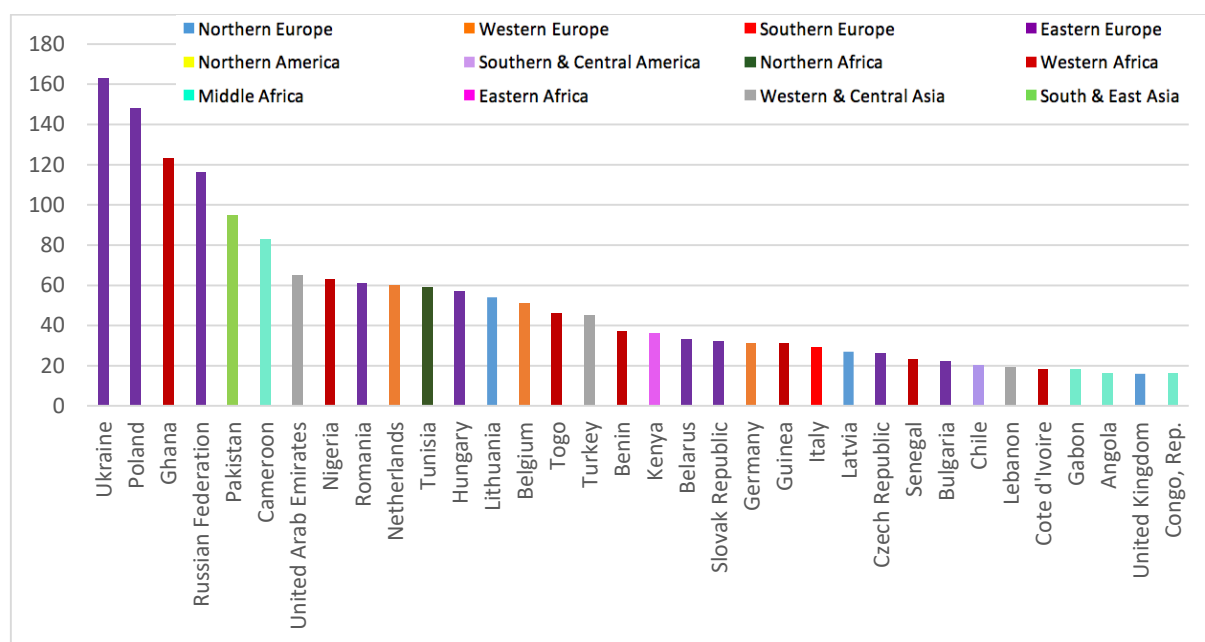
Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)

Source: WITS (wits.worldbank.org)

Figure 7 displays the top EU27 export markets with a value of over USD 15 million in 2018. When looking at the data, it can be seen that Intra-European trade is crucial, as

nearly half of the EU27 export markets with a value of over USD 15 million in 2018, namely 16 out of 34, are European countries. More precisely, nine Eastern European (Ukraine, Poland, the Russian Federation, Romania, Hungary, Belarus, Slovak Republic, Czech Republic, Bulgaria), three Western European (Netherlands, Belgium, Germany), three Northern European (Lithuania, Latvia, UK) and one Southern European (Italy) country (WITS 2019).

Figure 7 EU27 Exports markets with a value of over USD 15 million in 2018 (trade value in million USD)

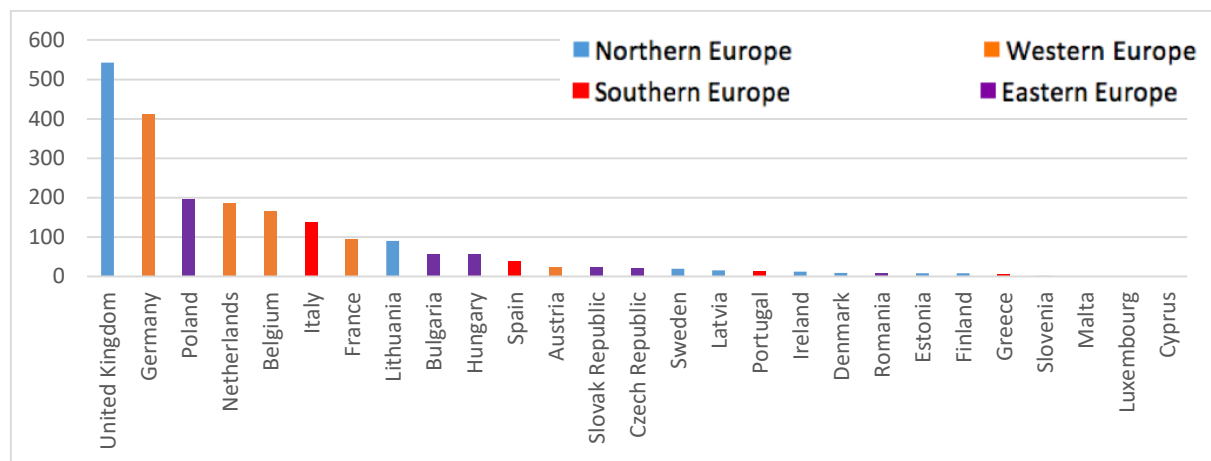


Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)

Source: WITS (wits.worldbank.org)

Figure 8 shows the value of exports of each of the EU27 countries, it can be seen that the countries' export values vary widely. While the UK exports the greatest amount of used clothes in 2018, which accounts for one fourth of all exports from the EU27, with a trade value of USD 543 million, Cyprus is the country exporting the least, with a trade value of USD 421 thousand. What can also be seen in Figure 8, is that among the top 5 exporting countries of the EU27, there are three Western European countries, namely Germany, the Netherlands, and Belgium. In total, exports from Western European countries accounted for 41 percent of total exports of EU27 countries in 2018. Exports from Northern European countries for 33 percent, Eastern European countries for 17 percent and exports of used clothes from Southern European countries constituted 9 percent (WITS 2019).

Figure 8 EU27 exports in 2018 (trade value in million USD)



Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)
Source: WITS (wits.worldbank.org)

6.1 Institutional and Regulatory Framework

Contextual factors of the institutional and regulatory environment play a decisive role when analysing the GPN of second-hand clothes in Europe. The institutional and regulatory environment determines patterns and processes as well as the role of actors involved in the trade with used clothes. Ultimately, influences the extent to which actors are able to extract value out of discarded clothes. The next part portrays the institutional and regulatory framework in the production network of second-hand clothes in Europe, by focusing on political, economic and social contextual factors.

6.1.1 Political Context

Textile waste has become a growing concern within the EU, where most of the clothes are still thrown away in municipal waste, burned, or end up in landfill. Hence, the EU proposed various ways to address the stressing issue of rising textile waste and improve collection and recycling. One approach is the transformation towards a circular economy, or more specific circular fashion. The Circular Economy Package was adopted by the EU in 2018, and requires Member States, for the first time, to collect discarded textiles separately (European Union 2019). In doing so, European environmental policy seeks to sequester all waste within the boundaries of the EU, considering waste as secondary resources to be recovered for European manufacturing (Gregson and Crang 2015).

In this regard, the Waste Framework Directive (Directive 2008/98/EC) constitutes the legislative framework for handling waste within the EU. Some fundamental principles established are; the obligation for handling waste in such a way to protect the

environment as well as human health, and the principle of the waste hierarchy. The waste hierarchy applies as a priority order in waste prevention and management legislation and policy, starting with prevention, preparing for re-use, recycling, other recovery (such as energy recovery), and disposal. Another principle of the Directive is the polluter-pays principle, which requires that costs of disposal of waste are borne by the holder of waste, meaning by previous holders or by producers (Jacometti 2019). Under the Waste Framework Directive, Member States are required to set up mandatory collection schemes for discarded textiles by 2025. More precisely, it sets targets for general municipal waste re-use and recycling, given the fact that textiles fall under the definition of municipal waste, it impacts collection of discarded textiles. By 2025, 55 percent of municipal waste has to be re-used or recycled, 60 percent by 2030 and 65 percent by 2035 (European Union 2019). By the end of 2024, the European Commission has to consider to set re-use and recycling targets specifically for textile waste. As it appears to be fundamental to ensure that discarded clothes are collected and handled correctly in order to maintain their value through re-use or recycling activities (Jacometti 2019).

Against this background, the EU published the Circular Economy Action Plan in 2020, in which textiles are flagged as one of the priority product groups to be addressed. In order to respond to challenges posed by the complexity of the textile value chain, the European Commission proposes a comprehensive EU Strategy for Textiles, comprised of inputs from industry and other stakeholders. Among others, the strategy aims at boosting the EU market for sustainable and circular textiles, which includes the market for textile re-use. The Circular Economy Action Plan outlines a comprehensive set of measures, which tackle the GPN of second-hand clothes in various ways. Such as guidance by the European Commission in order to achieve high rates of separate collection of textile waste, which has to be ensured by Member States by 2025. Further measures are; boosting access to re-use and repair services for businesses and private consumers as well as increasing sorting, re-use and recycling of textiles, through innovation, encouragement of industrial applications as well as regulatory measures, with EPR as one example. The EU “encourages Member States to adopt or update their national circular economy strategies, plans and measures in the light of its ambition” (European Union 2020: 24).

6.1.1.1 Implementation of Waste Framework Directive in Member States

With regards to the application of the Waste Framework Directive, the European Commission encourages countries to use economic instruments and other measures for the provision of incentives for applying the waste hierarchy specified earlier. Such instruments or measures can be; charges or restrictions for landfilling and incineration of waste, sustainable public procurement in order to encourage better waste management and re-use and recycling of products and materials, fiscal measures to increase re-use and recycling, incentives for local authorities to enhance waste prevention and to promote separate collection schemes, or EPR (Jacometti 2019). At this moment, empirical investigation shows that Member States are still discussing, which measures should be implemented in order to comply with the Waste Framework Directive. One interviewee highlighted that especially in countries with low collection rates, EPR schemes are the obvious solution to finance the system, as there is a general lack of infrastructure suitable for collection of discarded textiles. In countries that already established a nationwide well-functioning collection scheme, it would be advantageous to support the existing system and actors (Interview 21).

Various European governments have been trying to stimulate collection rates of used textiles in order to reduce negative impacts associated with textile consumption. The collection rate however varies widely between EU countries. According to a study by the Textile Recycling Association (TRA), in 2005, only between 15 and 20 percent of discarded textiles were collected for re-use or recycling in the UK. While in 2015, Italy collected 11 percent of discarded clothes, Germany collected more than 70 percent in 2011 (European Union 2019). According to Watson et al. (2016) the collection rate in Sweden reached 22 percent while the one in Denmark stood at 46 percent. Apart from Denmark, who has a relatively high collection rate of textiles, which is mainly due to the presence of historically well embedded charities as well as some well-established private collectors, the collection rate in Nordic countries is still considerable low compared to other countries. Thus, the Nordic Action Plan for Sustainable Fashion and Textiles was introduced in 2015, with the goal of increasing collection, re-use and recycling of used textiles in Nordic countries (Watson et al. 2016, 2018).

The idea of EPR has been considered as one of the strategies for a more sustainable management of textile waste by a number of European countries (Watson et al. 2018). It is in accordance with one of the principles of the EU Waste Framework Directive, the polluter pays' principle. In order to comply with EPR obligations, producers have to pay

financial contributions, which also take factors such as durability, reparability, re-usability, and recyclability of products into account (Jacometti 2019). However, until now only one of the EU Member States adopted a mandatory EPR for textiles, namely France (European Union 2019). Through adoption of the law, producers and importers of clothing, linen and footwear are held responsible for the arrangement of post-consumer collection and processing. The scheme introduced requirements for organizations who carry out these responsibilities on behalf of producers and importers. The EPR regulations require that 50 percent of all clothing, linen and footwear, which is put on the market, is collected separately after post-consumption. Out of this 50 percent, 95 percent must be re-used or recycled and only a maximum of 2 percent is allowed to go to landfill (Watson et al. 2018). Since 2006, L'Éco-Organisme du Textile, du Linge, de la Chaussure (Eco TLC) is the sole responsible organization accredited by public authorities in France to organize and handle the continuously increasing quantities of discarded clothing, linen and footwear (European Union 2019). Around 97 percent of all producers and importers of clothing, linen and footwear are members of Eco TLC and have to pay a fee, in accordance to the quantity of textiles and footwear they put on the market per year. The organization uses the fees, among other things, to support sorting companies in order to stimulate the market, to increase awareness through communication campaigns, or to fund research and development of recycling processes for non-reusable textiles. The adoption of EPR has led to substantial increases in textile collection, which posed challenges for local municipalities and cities. According to Watson et al. (2018), Paris tackled these challenges with innovative collection approaches as well as wide spread communication campaigns. With regards to the Circular Economy Package introduced by the EU, it is really likely that EPR systems for textiles are also introduced in other Member States, which have to comply with requirements set by the Waste Framework Directive (Jacometti 2019).

6.1.1.2 Challenges sparked of by the Waste Framework Directive

The Waste Framework Directive implies various challenges, which depend on the country context, and already existing measures for separate collection of discarded textiles within the Member States. The collection rate is already high in some European countries, such as Austria, Germany, Switzerland (Interview 8). However, interviewees issued the concern that in order to meet targets of the Waste Framework Directive, countries with a low collection rate, especially Eastern European countries, still need

to build up necessary infrastructure. Empirical investigation shows that the increased collection rates implemented throughout Member States, in the light of the Waste Framework Directive, will have the following consequences. First, the quantity of discarded clothes will increase and the challenge will be to cope with the increased amount of used clothes on the market, with regards to building up necessary infrastructure for sorting. Second, there is a widespread believe among interviewees that the quantity of inferior quality goods will increase. As all discarded textiles in Member States must be collected separately. Nowadays, there is still a lack of awareness of separate disposal of textiles. Collection containers in countries such as Austria and Germany are predominantly associated with donating clothes, therefore clothes which are considered to have no further value for re-use, still land in residual waste. With the mandatory separate collection of all discarded clothes however, those inferior quality clothes have to be discarded in collection containers. A further reason for the rise of inferior quality goods is that countries with lower purchasing power have to increase their collection rates (Interview 3, 8, 15, 20). Purchasing power varies widely among European countries, if for example Romania, a country which is considered as an export market for second-hand clothes, increases the collection rate of discarded clothes, the amount of inferior clothes will increase. This has a potential negative effect on world market prices for second-hand clothes, consequently sorting will no longer be financially viable (Interview 17).

Interviewees outlined one potential solution to tackle this problem of a rise in quantity with a simultaneous hike in inferior quality textiles. Namely, a separate collection of textiles that are recyclable and re-usable. This would save resources in sorting facilities, as only those discarded textiles suitable for re-use would require further sorting for the market of second-hand clothes. The textiles disposed in recycling containers could be sold to the international recycling market, without prior sorting. This however would require extensive awareness campaigns in order to assure that people are able to distinguish and assess the quality condition of discarded textiles (Interview 20, 21). One of the interviewees highlighted that such a measure “cannot be implemented overnight, it is rather a long process to ensure a separate disposal of recyclable and re-usable textiles” (Interview 3). In general, it is crucial to implement supporting measures that tackle the rise in quantity of non-reusable and inferior quality goods. Some interviewees highlighted that it is important that those challenges are

considered by policy makers, highlighting the importance of lobby and advocating activities (Interview 13 17, 20, 21).

Some interviewees outlined challenges with regards to EPR schemes. The implementation of EPR schemes would depend on the country context and on existing actors on the market. Nevertheless, there would be a general threat of underrepresentation of charitable and social enterprises, as industry actors, who are financing the system in an EPR scheme, are mostly driven by economic incentives, rather than social and environmental ones (Interview 17, 21). What is more, the topic of re-use is often overlooked in the current political debate, which focuses more on increasing sustainability of consumption and recycling (Interview 20, 21). Especially producers are more interested in promoting recycling rather than re-use. In general, EPR schemes do not solve the problem of rising quantities of textile waste and the capitalist structures in which those are produced. What has to change are current fast fashion dynamics and the attitude of people towards consuming less (Interview 19, 20, 21). In order to improve social and environmental factors, it is crucial to promote re-use and support actors that follow such objectives (Interview 3).

6.1.1.3 Political Context in Export Markets

Apart from the Waste Framework Directive and the Circular Economy Action Plan that influences the GPN of second-hand clothes in various ways, global developments with regards to the political context in export markets also influences trade patterns of second-hand clothes. Two of the interviewees mentioned the example of the Ukraine, where the market for second-hand clothes collapsed due to political unrests in 2014. Such developments have a crucial impact on actors in the GPN, as in the case of the Ukraine, an important export market was no longer available. Consequently, affecting world market prices and relationships between different actors in the GPN of second-hand clothes (Interview 4, 13).

Furthermore, trade barriers and import restrictions regarding second-hand clothes influence the GPN of discarded clothes. Those are either prohibitions or bans, tax tariffs or import duties, requirement of health certificates or high bureaucratic walls (Watson et al. 2016). One example for increased import requirements was given by a charitable actor in Austria. Before goods are cleared and delivered to Kenya, which is an important export market of the sorting facility, they are checked and inspected by the Société Général de Surveillance (SGS) on behalf of the destination country. This is done in order to ensure that import requirements have been fully complied with, more

precisely, papers are checked, bales of second-hand clothes are opened and samples are taken (Interview 3). A representative of the German textile recycling association outlined that such import restrictions have a crucial impact on actors in the GPN of second-hand clothes, as they either imply a high bureaucratic burden or a loss of export markets. Their role therefore is to assist their members in networking and research activities, in order to provide necessary information of export markets. Further, they are working together with BIR in order to advocate the interest of their members in this regard on an international level and increase collective power (Interview 13).

6.1.1.4 Local Political Context

In addition to the global political context, actors in the GPN of second-hand clothes are influenced by the local political context they are embedded in. This concerns state support granted for actors in the GPN of second-hand clothes. It has been mentioned by representatives of social and charitable collectors in Austria and Germany that their collection and sorting activities strongly depend on government subsidized jobs (Interview 1, 2, 3, 4, 20). A sorting plant run by a charitable actor in Austria, employs long-term unemployed people through jobs subsidized by the state (Interview 3, 20). More precisely, the charitable actor finances 50 percent of its working places through state support and 50 percent through self-generated income (Interview 3). Another charitable actor in Germany highlighted their strong dependence on subsidies from the city of Munich, as every single job in collection, sorting and resale has a subsidy (Interview 4). Empirical investigations show that especially for social and charitable collectors, the current political situation in Austria and Germany is challenging, as there has been a cutback on state support for subsidized jobs. The cutbacks vary within the country; in Austria the range lies between 5 to 20 percent in 2019 (RepaNet 2019a). It has also been highlighted by actors in Germany that state support regarding employment and integration of long-term unemployed people or socially disadvantaged people in the workplace has been decreasing (Interview 4, 17). Additionally, one of the actors in Austria mentioned that one of their big customer groups are minimum income recipients, who receive vouchers from the state to shop in their second-hand stores. However, state subsidies for minimum income recipients have been declining in recent years, which impacts the charitable actor with regards to decreasing profits (Interview 3). Due to labour intense activities, and lack of resources of charitable actors, it would be difficult to finance the labour steps

necessary to recharge discarded clothes with a new value, without state support (Interview 2, 3, 4).

Further, national waste policies are a crucial factor influencing collection activity of used clothes on a municipal level. Due to changing institutional and regulatory frameworks within Europe, public actors have been becoming more involved in collection of second-hand clothes, and exercise institutional power. The degree of involvement of public actors in different countries in Europe differs considerable. According to the regulatory framework, in a lot of countries, for example Germany and Austria, municipalities are legally bound to administer textile waste within their municipality (Interview 17, 20). Hence, municipalities administer container places and authorize collection activities (BMLFUW 2017; RepaNet 2015; Interview 17, 20). There is a rising tendency that municipalities exercise this institutional power position by charging established collectors a fee for collection on public land, often by charging a fee per container. More and more municipalities are setting up tender processes for collection permits, this is happening among others in Austria, Denmark, Germany, Sweden, or the Netherlands (Ljungkvist et al. 2018). Austrian and German interviewees highlighted that such tender processes not only differ between European countries, but also differ widely within the country (Interview 3, 4, 6, 13). Some municipalities include social and environmental factors in addition to economic criteria, such as reporting and traceability requirements, or service quality (Ljungkvist et al. 2018). Empirical investigation however shows that municipalities often only consider economic criteria in tender processes. Such bidding processes trigger a competition based on the price collectors are willing to pay. The right to collect is in most cases sold to the highest bidder (Ljungkvist et al. 2018). One of the interviewees highlighted that “who bids the most decides in 99 percent of the cases who wins the tenders” (Interview 4). Some respondents outlined that in some cases, municipalities no longer receive application for collection permits at their requested prices. This is especially true for regions with lower purchasing power, which in most cases, leads to less favourable collection rates, in terms of high quality grades for sorters (Interview 3, 4, 9). According to interviewees, this is already happening in Germany (Interview 9) and Austria (Interview 3).

In this respect, charitable actors highlighted the importance of setting up a legislative control mechanism, which ensures that apart from economic criteria, social and environmental criteria are taken into consideration when issuing permissions for

collection of discarded clothes on public land (Interview 4). This has also been highlighted by one of the representatives from a sorting facility, who stressed the importance of awareness building that “in addition to economic criteria, ecological and social criteria are important in the tender process, and should be decisive for the choice of the partner” (Interview 8). An example for municipalities, which already take environmental and social criteria in tender process into consideration is Vorarlberg, Austria. In the province, municipalities work together with the environmental association, which acts as an advice and service centre for municipalities, and regulates how they can act more sustainable. All tender processes are administered by the environmental association, which decides who receives the tender based on social, environmental and economic criteria (Interview 3).

6.1.2 Economic Context

The economic context in which the European second-hand clothing trade is embedded, is influenced by factors that determine demand and supply of second-hand clothes. Supply and demand is rapidly changing due to changes in the global economy and markets, related to factors such as fast fashion dynamics, purchasing power of local populations or trade barriers for second-hand clothing imports. What has to be noted however, is that supply is not driven by demand but by a vast surplus of discarded clothes, sparked off by fast fashion consumption patterns in the Global North (Paras et al. 2018a). While supply of second-hand clothes in European countries has been increasing within the last years, demand has been stagnating (Interview 13).

6.1.2.1 Supply of Second-Hand Clothes

The supply of discarded goods is inelastic and not determined by demand. Rather by conditions of the global economy and markets, such as current fast fashion dynamics (Crang et al. 2013). Some of the interviewees highlighted the increase of inferior quality clothes with a shorter lifespan on the German market due to an increase of shops of low-cost providers, such as Primark (Interview 1, 17). Further, a representative of a sorting facility in Germany stressed that the quantity of waste in collection containers has been rising. “It even happens that there are 70 percent waste and only 30 percent re-use in the collection containers” (Interview 9). These developments increase resources needed for the sorting process and have a downward effect on prices, as there is currently not enough demand on the international recycling market for the continuously rising quantities of non-reusable textiles (Interview 5, 9, 13, 17).

An indicator for the quality of clothes and hence the percentage of waste in collection containers within a region or municipality, can be the local purchasing power. While purchasing power can be used as a classification of different countries in the GPN of second-hand clothes, which has been discussed in chapter 5.1, purchasing power is also an indicator to classify regions within a country based on the quality of clothes donated. One interviewee highlighted that the local market can be analysed on the basis of purchasing power, and this is an indicator when selecting a tender issued by a municipality for the collection of discarded clothes (Interview 15). The great differences between the quality of discarded clothes donated in the North and East or the South of Germany, has been highlighted by one of the representatives of a charitable actor based in Munich. The interviewee outlined their advantage with regards to prices that are paid from commercial actors for their collected goods, as the quality of discarded clothes in Munich is still high compared to other regions in Germany (Interview 4). Representatives of both charitable and commercial collectors highlighted that vast amounts of time and resources are spent on the selection and search of suitable container locations. This is done in order to reduce the amount of waste in the collected quantity, and increase profit margins (Interview 4, 6, 9).

Another factor that influences supply and impacts processes and activities within the GPN is the donation behaviour of the local population. Various interviewees highlighted that supply of second-hand clothes varies greatly within a year. The donation behaviour of people shows that in general, summer clothes are donated in autumn, while winter clothes are donated in spring (Interview 1, 2, 3). According to one of the interviewees collection rates are twice as high in January and August, which makes it difficult to adjust processes and capacities to fluctuations in supply (Interview 5). In order to cope with this, interviewees stressed the importance of storage facilities (Interview 1, 4, 5). Such facilities however imply extra costs and resources, which charitable actors often lack (Interview 4).

Further, technological advancements with regards to increased digitalization have an impact on supply of second-hand clothes. Within recent years, more and more online platforms have started offering high quality second-hand clothes, so called cream goods, through their websites. The leading online marketplace for second-hand clothes is the US-based company thredUP, which delivers to over 44 countries, among others Germany and Austria. The organization receives up to 100,000 pieces daily, and has automated sorting, processing and distribution using sophisticated algorithms that

assign a custom resale value to each newly arrived piece. Similar companies are active in the European market, such as the brand Ubup, Germany's largest second-hand online shop, employing 1,300 employees and operating through five warehouse locations (CCK 2019b). According to some of the interviewees, people increasingly sell branded clothes to such online providers instead of donating them. Thus, the original consumer of clothes captures value. This has a crucial impact on actors in the GPN of second-hand clothes, as cream goods are the product group from which they can extract most profit. Hence, interviewees outlined that such online platforms constitute a crucial competition, which importance potentially even increases in the near future (Interview 5, 13, 22). One of the representatives of a sorting facility in Germany outlined that their organization responded to these developments by launching an online shop for high-grade luxury goods, in order to diversify the customer base and increase profit margins (Interview 9).

6.1.2.2 Demand of Second-Hand Clothes

Contextual factors that affect demand of second-hand clothes are influenced by the availability of export and local markets. Increased trade barriers on the global market of second-hand clothes influence the European used clothing market (Interview 2, 3). While exports of used clothes from countries in the Global South increase, especially South-East Asian countries (Figure 5), at the same time, some of these countries, such as China, have banned imports of different waste streams from Europe, including used textiles (Ljungkvist et al. 2018). These developments affect the European production network of second-hand clothes, as on the one hand, the quantity of second-hand clothes is increasing, on the other hand, export markets are diminishing due to a rise in trade barriers and import restrictions (Interview 13, 15).

Another factor influencing demand of second-hand clothes is the economic development of export markets. Due to an increase in purchasing power, the role of many export markets for second-hand clothes within Europe has been changing (Ljungkvist et al. 2018). Various interviewees have mentioned a rise in demand of higher quality by customers in established markets, such as Eastern European and African countries. This is due to a rise in purchasing power as well as the fact that actors are aware of the market situation with surplus supply of discarded goods and not enough demand. This leads to the fact that a rising share of still re-usable clothes is sold on the international recycling market, as there is simply no demand for low grade used clothes (Interview 3, 9; Ljungkvist et al. 2018).

Empirical investigation shows that demand on the market for used textiles strongly differs from demand on the second-hand clothing market. In general, there is a greater demand for sorted clothes than original goods, as the European market is flooded with unsorted goods (Interview 3). Further, there is a huge price difference between sorted clothes, and unsorted goods. The more precise the sorting process and the better the categories are matched to export markets, the greater the profit margins for actors. Conversely, unsorted goods are sold based on world market prices, which makes them more exposed to market fluctuations (Interview 3, 5). Against this background, various interviewees highlighted that they had to increase the efficiency of their sorting processes in order to cope with current market developments (Interview 3, 4, 5, 9).

Summing up, it can be seen that various institutional factors influence the economic context with regards to supply and demand of second-hand clothes. They have an impact on the ultimate destination of used clothes and have a crucial effect on prices, and capture and distribution of value (Watson et al. 2016). It is clear however that there is no correspondence between supply and demand of second-hand clothes, as sourcing is dependent on an uncontrolled donation of clothes. This donation can be stimulated by actors, and charity discourses as well as the historic embeddedness of actors within society plays a key role. Hence, economic activities and the role and behaviour of actors within GPNs are greatly influenced by the social context in which they operate (Henderson et al. 2002).

6.1.3 Social Context

There are various institutional factors that influence the social context in which the European trade with second-hand clothes is embedded in. Empirical investigation shows that those mostly concern the perception of second-hand clothes, awareness of the value of discarded clothes and social relations between various actors involved.

It is crucial to understand the perception on materiality within a society, in order to investigate how waste is perceived in a given social and geographical context (Moore 2012). For society to perceive second-hand clothes as a valuable resource, rather than waste, people need to understand and value the resources that go into the production of clothes. Interviewees highlighted a general lack of awareness of the negative effects of current fast fashion dynamics (Interview 1, 9). In order to increase the perceived value of second-hand clothes, a charitable organization in Germany organizes education campaigns and workshops around the topic of sustainability. This should

raise awareness of sustainable use of resources and the option of buying second-hand clothes as an alternative to fast fashion (Interview 1). A representative of an advocacy group in Germany outlined that since its foundation in 1994, the perception of second-hand clothes in Germany has changed from a negative perception to a greater acceptance, mainly among the younger generation. According to the interviewee, this is due to two reasons. First, social factors with regards to rising poverty levels in certain population groups. This factor will become an increasingly important issue in the future due to impoverishment of pensioners. Even though at the moment, second-hand clothes are still not widely accepted by the older generation in Germany, as opposed to Eastern European countries, where pensioners are one of the target groups of second-hand shops. The second reason why the perception of second-hand clothes has been slowly changing is conscious sustainable consumerism, which results from some population groups becoming increasingly aware of the negative impacts of fast fashion dynamics. Apart from the slow change in perception portrayed by one of the interviewees (Interview 17), others highlighted that second-hand fashion still plays a subordinate role in Germany. Awareness campaigns and lobby activities would be necessary in order to increase the positive image of second-hand clothes and attract the middle class. If this would be achieved, the perception of second-hand clothes would change, leading to a positive transformation of the whole sector (Interview 15).

Additionally, the lack of awareness within society with regards to proper disposal practices influences processes in the GPN of second-hand clothes. According to investigations of Wagner (2017), there is still a lot of textiles in residual waste in Austria. Empirical investigation showed that there is a need to raise awareness in order to address and strengthen sustainable textile waste disposal practices in Austria. This has also been mentioned by interviewees, who stressed the importance of awareness campaigns with regards to proper disposal of used clothes (Interview 6, 7). A representative of an advocacy organization for sorting facilities in Germany stressed that it is crucial to increase awareness of municipalities to apply the waste hierarchy as a priority order in waste management, starting with prevention, preparing for re-use, recycling, other recovery (such as energy recovery), and disposal (Interview 15). This would be crucial to decrease the amount of clothes in residual waste (Interview 6, 7). Additionally, in order to preserve the quality of discarded clothes, more awareness is necessary with regards to how to dispose used clothes correctly. One of the charitable actors in Austria produced a series of communication material highlighting how to

donate used clothes correctly to preserve their quality (Interview 3). Rising awareness of disposal practices of used clothes would be beneficial for activities of actors in the GPN of second-hand clothes, as the quality of clothes would be preserved, leading to higher profit margins (Interview 3, 9).

Another factor having an impact on the social context are relations between actors involved in the GPN and society. From empirical investigation it can be seen that especially charitable actors have strong ties to society in which they operate. Those are built up either through trust and reputation organizations have gained due to their historical presence (Interview 1), or their engagement within society (Interview 2, 3, 4). Another finding shows that current developments that require solidarity, can strengthen ties between actors and society. One of the charitable actors in Germany highlighted that the increased migration flow in 2014 strongly influenced their work. As the charitable organization was commissioned to provide primary care with clothes. As a result, the quantity of collected clothes increased rapidly, as well as the funding, voluntary services, awareness of the organization was rising and at the request of the city, the second-hand clothing stores were significantly expanded at the end of 2014 (Interview 3). Another example has been mentioned by a charitable organization in Vienna. Each year the organization opens a Pop Up store, where donated winter clothes are given out for free to homeless people, and people in need (Interview 2).

Summing up, political, economic and social institutional factors influence the GPN of second-hand clothes in various ways. The global and local political context greatly influences the structure of the actor level, and the role different actors have in the production network of second-hand clothes in Europe. Economic factors shape demand and supply of used clothing and influence the extent to which actors can extract value out of discarded clothes. The awareness of society in which actors are embedded in, and the prevailing perception of second-hand clothes, impacts activities and processes performed by actors in the GPN in Europe.

6.2 Actors

There is a variety of different actors directly or indirectly involved in the European production network of second-hand clothes reaching from charitable to commercial actors, and interlinkages between those. The involvement of actors is strongly influenced by the institutional and regulatory framework, which has been discussed in the previous chapter. Various developments, such as fast fashion dynamics, rising

environmental concerns (Chapter 4.1), as well as the amendment of waste treatment policies in European countries, has led to new forms of embeddedness and interlinkages and the emergence of new actors.

In a lot of European countries, charitable actors are still the dominant force, such as in France, where two charitable actors, namely Emmäus and Le Relais, have a 70 to 80 percent market share (Interview 17). The second-hand clothing trade in the UK is also mainly dominated by charities, due to its historic tradition. In Greece, the collection of clothes is mainly performed by the church (Interview 21) and in Sweden, charities are responsible for nearly 90 percent of total collection of used clothes (Watson et al. 2016). Conversely, Germany is characterized by more decentralized structures, with a lot of charitable and commercial actors active in the production network of second-hand clothes (Interview 21). This situation is similar in Austria, where charitable and commercial actors are sharing the market. The collection of discarded clothes in Austria has a really long tradition and crucial connection to charitable donations, which is still prevailing (Interview 20). Nevertheless, it has been outlined by interviewees that charitable organizations are often dependent on commercial partnerships, as they have a lack of resources and knowledge with regards to efficient sorting processes and redistribution of collected clothes (Interview 4, 9, 22).

A few years ago, charities and some commercial actors still dominated collection of discarded clothes in European countries, recently however, other actors appeared. In addition to commercial and charitable actors, social businesses are involved in the GPN of second-hand clothes. According to one of the interviewees, those can be categorized as follows: First, they are non-profit organizations, meaning that value-added is invested in activities of the organization and is not remunerated to shareholders. Second, social businesses follow a principle of democratic participation, meaning that employees take part in decision making. As a third characteristic the interviewee highlighted that social businesses try to adjust their workplaces to current developments and hence protect them as much as possible (Interview 5). Additionally, a representative of an advocacy group for social businesses highlighted that the most crucial differentiation to commercial actors is that social businesses use their generated value-added for social causes and try to keep their generated profit in the local economy, through social projects or creation of jobs for long-term unemployed or socially disadvantaged people. What is more, social businesses as opposed to commercial actors have a stronger focus on re-use, as they are generally more

interested in capture and distribution of social and environmental value (Interview 21). Empirical investigation in Austria and Germany shows that there is a strong correlation between charitable and social businesses in the GPN of second-hand clothes.

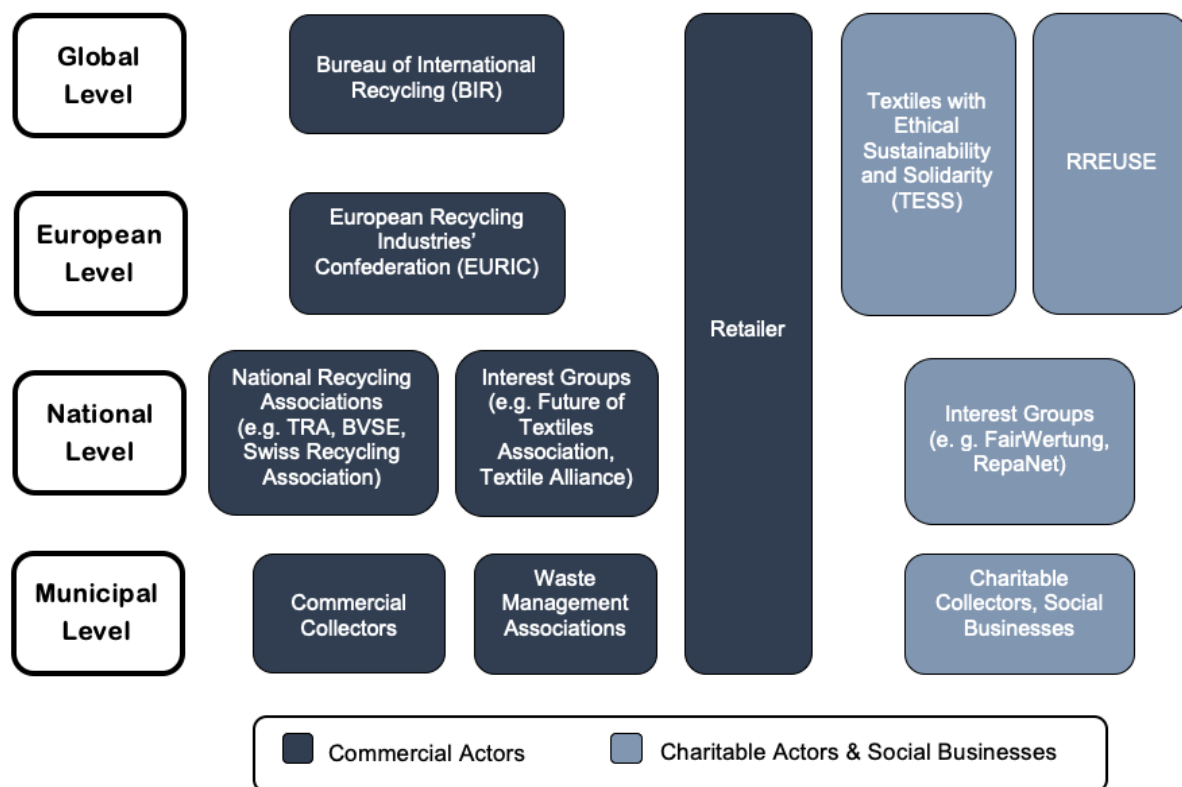
Additionally, due to changing institutional and regulatory frameworks within Europe, public actors, more precisely municipalities, have started to emerge as crucial participants in the production network of second-hand clothes and exercise institutional power. This is due to the fact that municipalities, in a lot of European countries, have the primary responsibility for discarded clothes (Watson et al. 2018). The degree of involvement of public actors in different countries in Europe differs considerably. What has to be noted however, is that municipalities provide increased competition to existing actors in the European production network of used clothes. In Germany, municipalities started to appear in response to the amendment of the national Waste Management and Recycling Act in 2012, which changed the institutional and regulatory framework as well as the market structure, as discarded clothes were declared as residual waste (Interview 13, 15). Even though municipalities in some cases perform collection of discarded clothes themselves through waste management associations, they are dependent on commercial actors to perform sorting and redistribution of collected goods (Interview 13).

Another actor group that started participating in the European production network of second-hand clothes are retailers. This is due to various reasons. One is the increasing awareness and focus of governments and industry itself on negative impacts of the textile industry (Ljungkvist et al. 2018). There is a general trend towards circular economy and brands are driven by increased public awareness to find solutions for negative effects of the textile industry and their overstock. Retailers have been starting to test different business models, ranging from collection of used clothes in their shops, or selling their overstock to sorting facilities (Interview 21). The take-back systems of different retailers greatly influenced the structure of the actor level in the European second-hand clothing trade (Interview 17).

Figure 9 portrays a representation of actors involved in the GPN of second-hand clothes on a global, European, national and municipal level. It shows the presence of another group of actors, namely collective organizations, which can pursue very different interests. Some seek to advance specific concerns and raise awareness about topics related to the trade with second-hand clothes, such as the Future of Textiles

Association, who advocates for sustainable use of textiles and their high-quality collection, sorting and processing in Germany (Future of Textiles Association 2020). RepaNet is promoting and anchoring re-use and repair in Austrian politics, as well as in European politics through their connection to RREUSE (RepaNet 2020). A representation of social enterprises, who are active in re-use, repair and recycling, acting on a global level, advocating among governments to move from the sole promotion of recycling and waste management to putting re-use first on the agenda (RREUSE 2020). Others seek to increase the influence of their member organizations in the GPN of second-hand clothes, and represent specific groups of actors ranging from charitable, to social businesses or commercial actors. The German Fair Recycling Federation, FairWertung, is the umbrella organization for non-profit organizations and social enterprises in Germany, which are active in collection of discarded clothes (FairWertung 2020). The Bureau of International Recycling (BIR) is the sole international recycling industry federation, representing 800 companies and 35 affiliated national recycling associations, such as the Swiss Recycling Association, or BVSE, the German national recycling association (BIR 2020). The Textile Recycling Association (TRA) is the trade association for collectors, sorters, processors and exporters of used clothing and textiles operating throughout the United Kingdom (TRA 2020). According to one of the interviewees, the TRA is the only national trade association, which collaborates with both commercial and charitable actors on the development of universally valid standards (Interview 17). Some of the interviewed organizations were nationally or locally organized, while in addition to a national representation, others also represent their member organizations on a European or international level. The European Economic Interest Grouping, called Textiles with Ethical Sustainability and Solidarity (TESS) brings together European actors in the social and solidarity-based economy, which are active in the trade with second-hand clothes. While it consists of European players, the interest group has partner organizations on a global level (TESS 2020). In view of this, it can be seen that actors in the GPN of second-hand clothes are intertwined with each other through collective organizations, increasing the visibility of individual actors to a wider representation on a national, European or even international level.

Figure 9 Actors involved in the GPN of second-hand clothes



Source: own representation

Empirical investigation shows that current developments with regards to the implementation of the Waste Framework Directive stimulate the emergence of new collective actors, advocacy and lobby groups. There is a greater demand for interest groups, and associations on a European level who represent and advocate for the interest of the different charitable and commercial actors (Interview 13, 15, 17). The BIR is the only recycling industry federation active on a global level, which also puts a focus on textiles. On a European level, the European Recycling Industries' Confederation (EuRIC) is advocating for the interests of the recycling industries, and is divided into different branches. Until now however, there is no separate branch for textiles. According to one of the interviewees however, the EuRIC already issued plans for a textile recycling association, whose focus will be the implementation of a separate collection scheme in all Member States (Interview 13).

The distribution of actors involved in the second-hand clothing network, and the role they take over depends on the institutional and regulatory framework. Additionally, the power position and embeddedness of actors determines the position they occupy in the global trade with used clothes and hence the extent to which they are able to extract value out of discarded clothes.

6.3 Power and Embeddedness

The distribution of power, meaning the extent to which actors are able to transform waste into commodities, is strongly influenced by the different dimensions of the GPN of second-hand clothes portrayed in Figure 1. Especially, network and societal embeddedness of actors have a crucial influence on their power position and extent to which actors are able to extract value out of discarded clothes. For the purpose of this thesis, the corporate and collective dimension of power as well as the network and societal embeddedness are analysed in the following, also highlighting crucial connections between power and embeddedness.

6.3.1 Corporate Power

Actors in the GPN of second-hand clothes exercise corporate power through influencing decisions and resource allocations, as well as other actors in the network. The degree of corporate power is influenced by an actor's capability to extract value out of heterogeneous materials (Crang et al. 2013). The extent to which they are able to do so, depends on their embeddedness as well as various other contextual factors. One of the interviewees highlighted that their historical presence ensures their power position, as the organization already exists for 150 years and is the largest charitable clothing collector in Germany (Interview 1). A representative of a sorting facility in Switzerland on the other hand outlined that their professional processes with regards to sorting and recycling offers them a greater power position (Interview 8). Other interviewees outlined that the greater their embeddedness within the network, which is safeguarded through increased influence in the value chain due to a greater extent of processes performed, the better the control, access to information and ultimately their power position (Interview 4, 6, 19).

It is notable that the institutional and regulatory framework has a crucial impact on the corporate power position of actors. This can be seen by an example of a charitable actor in Austria. Due to its partnership agreement with an environmental association, which coordinates supra-local environmental tasks of municipalities in the federal province Vorarlberg, the actor has a monopoly position on collection of second-hand clothes in the whole region. This increases its power position as the organization does not have to compete for container locations and municipalities do not charge a fee for the placement of collection containers. Further, the charitable organization receives financial support from the Public Employment Service Austria (AMS) for parts of its wage costs. Consequently, the charitable actor is able to run a sorting facility, and

redistribute second-hand clothes on the local and export markets (Interview 3). This charitable actor exercises a great corporate power position due to its performance of multiple processes in the GPN, from collection to redistribution of second-hand clothes. However, one of the interviewees highlighted that in general, charitable actors have a greater dependence on other actors in the network, due to the fact that they often lack professional sorting processes and knowledge about export markets (Interview 4).

Empirical investigation shows that an uneven distribution of corporate power in the European production network of second-hand clothes manifests itself in dependence relationships between actors. “Non-profit collectors often have a disadvantage on the market because they lack professional sorting and are therefore dependent on external partners to achieve fine sorting” (Interview 4). This can lead to disadvantageous situations for collectors, such as inferior negotiating power when setting prices. One of the interviewees in Germany outlined how commercial sorting facilities exploit their power position in situations of uncertainty in export markets. One example was given regarding the market collapse in the Ukraine, which led to delays in pick-up of collected goods. In this way, price pressure is transferred from commercial sorting facilities to charitable collectors. In order to cope with such situations, the interviewee highlighted that it is crucial to differentiated the customer base, and work together with different sorting facilities (Interview 4). In this regard, one of the representatives of a sorting facility in Germany described their power position as follows; “we are in the middle, between the collectors and the buyers” (Interview 9). However, prices are determined by customers. If prices change their own strategy has to change, either through buying collected clothes from different collectors, diversifying the customer base through their own shops, or increasing price pressure (Interview 9).

Empirical investigation shows that performing a greater extent of processes within the production network favourably influences the degree of corporate power. One example in which this connection manifests itself is through redistributing collected goods in local shops (Interview 17, 20). One of the interviewees from an advocacy group outlined that there is less dependence on other actors and on world market prices, if clothes are sold in local shops. Their member organizations sell 15 percent of collected clothes in their own shops, which accounts for 50 percent of all revenue generated (Interview 20). Additionally, one of the organizations who established sorting facilities in Germany, Switzerland, Eastern Europe and Morocco outlined that it is crucial for the organization to have all processes from collection to redistribution in their own hands.

This would enable the organization to increase information flow, knowledge of processes and activities within the production network, and secure transparency. Consequently, increasing the quality of products in sorting plants and building trust between partners, customers and retailers, which increases the corporate power position of the organization (Interview 8).

6.3.2 Collective Power

The representation of collective organizations in the GPN of second-hand clothes is displayed in Figure 9. Representatives of collective organizations interviewed for this thesis have stated various reasons for their foundation. Among the most stated was the need for increasing the power position of single actors on a policy level, strengthening their negotiation power and raising awareness on activities and the role of actors in the GPN of second-hand clothes.

Empirical research shows that actors in the GPN of second-hand clothes try to increase awareness about activities they perform to transform waste into resellable commodities. For the first time in 1994, Südwind Institute Germany published a study on negative impacts of second-hand clothing exports to countries in the Global South. This study shed more light on the second-hand clothing trade and its lack of transparency. What is more, it disclosed financial relationships between actors involved, and outlined prices charitable actors received for selling their logo to commercial actors. Hence, it raised awareness of the false believe that donated clothes are charitable donations to countries of the Global South (Hütz-Adams 1995). According to the representative of an association for non-profit collectors in Germany, this study strongly influenced the production network of second-hand clothes in Germany. Not only did it increase public awareness of the market with second-hand clothes, it also gave an impulse for actors to reflect their own activities, which were embedded in a highly opaque value chain. Since then, it has become increasingly important for charitable and non-profit organizations to distinguish themselves from so called pseudo-charitable associations, commercial organizations who pretend to act in the general social and environmental interest, however only pursue economic targets and goals. These developments led to the foundation of the association for non-profit collectors in 1994, to establish a collective platform in order to increase recognition of non-profit collectors through a logo on collection containers, to increase transparency throughout the value chain, and to increase consideration of social and environmental criteria in the production network of second-hand clothes in Germany (Interview 17).

This point has also been mentioned by a European network of social enterprises active in re-use and repair, whose representative highlighted that one of their missions is to increase awareness about the role of social businesses in the GPN of second-hand clothes. Clearly communicating the difference between social business and for-profit organizations would be especially crucial in the communication with municipalities, which decide about the tender process for collection of discarded clothes (Interview 21). The actions described strive to increase the influence of a specific group of actors in the GPN of second-hand clothes, by clearly separating their activities from those of other actors. In the portrayed cases, the one of charitable and social businesses from commercial actors.

Changes in the institutional and regulatory framework concerning waste treatment policies, together with rising challenges with regards to fast fashion dynamics, lead to an emergence of collective organizations in the form of different advocacy and interest groups (Interview 13, 15). On the one hand, such organizations try to strengthen awareness on current changes of political, economic and social contextual factors, through provision and dissemination of knowledge and best practice examples throughout their member organizations (Interview 13, 15, 17, 20, 21, 19). One of the interest groups in Austria highlighted that their work concerns strengthening the power of social enterprises, active in re-use and repair activities. In order to achieve this, the interest group performs lobby activities and provides information on changes in the institutional and regulatory framework in Austria (Interview 20). This Austrian collective organization is itself a member of a wider initiative, which is active on an international level. One of their representatives outlined that their member organizations receive analysis of legislations, which concern the production network of discarded clothes. Further, the umbrella organization acts as a networking platform, which should increase network embeddedness and collective power. Ultimately, strengthening the power position and competitiveness of social enterprises as well as the legal framework in which they are embedded in (Interview 21), which portrays interlinkages between power and embeddedness. A representative of a German textile recycling association outlined that they offer different services to its members, among others, a knowledge platform for exchange of best practice examples and new research, assistance with legal matters through their own legal office, and networking between the member organizations in order to strengthen network embeddedness (Interview 13). Against this background, it can be seen that collective actors act as a platform for advice and

dissemination of knowledge with the goal of increasing competitiveness and the power position of their member organizations, additionally having a positive influence on their degree of network embeddedness.

On the other hand, collective organizations try to advance specific concerns and raise awareness about problems related to the European production network of second-hand clothes on a policy level. One of the representatives of an interest group for European social- and solidary based enterprises, active in the trade with used clothes outlined that “the reason for its foundation was to create a platform, which has a power of negotiating with more powerful actors in the trade with used clothes” (Interview 19). Single actors active in the GPN of second-hand clothes would have very limited negotiation power, especially on an international level (Interview 19). One of the representatives of an interest group for textile sorters stressed that in order to strengthen negotiating power of their members, it would be crucial to provide decision makers with necessary knowledge of their activities. Their mission is to provide expert knowledge to municipalities and decision makers, as those actors decide over tender processes. Hence, have a crucial influence on activities of sorters (Interview 15). Providing expert knowledge to decision makers is also one of the focus areas of the umbrella association for recycling and re-use of European social enterprises. The representative of the organization outlined that their focus lies on advocacy towards the European Commission in order to provide expert knowledge of social enterprises working in the field, so that their interest is represented on a European level (Interview 21). In this way, collective power is exercised through a uniform public appearance with the goal of increasing negotiation power of single actors in the network.

6.3.3 Social Embeddedness

Empirical research shows that actors established different relationships and social ties within their local communities, which increases their power position and has a positive influence on their possibility to capture value out of discarded clothes. To which extent actors interviewed for this thesis are embedded in society depends on various factors, such as the implementation of waste treatment policies by municipalities, power position of actors, the network in which actors are embedded in, or activities that are performed in the local context.

Since discarded clothes were declared as residual waste in a lot of European countries, the importance of municipalities in the GPN of second-hand clothes

increased. One representative of an Austrian collector highlighted that maintaining partnerships with municipalities is a decisive factor for collection activities. In order to achieve this, the collector is in constant exchange with municipalities, and provides them with statistics about the collected amount of discarded clothes within their municipalities on a quarterly basis. This builds trust and increases social embeddedness of the actor, as data provided is important for municipalities and used among other things for awareness campaigns (Interview 6). The importance of maintaining relationships with municipalities has also been mentioned by collectors in Germany and Switzerland (Interview 1, 4, 8). Municipal collections of discarded clothes changed, leading to more competition of container places, a drastic change in the actor level and an increased importance of social embeddedness (Interview 1, 4).

While commercial actors try to maintain relationships with municipalities and continuously take part in tender processes in order to secure container locations, charitable actors often lack resources to pay a fee for container locations on public places and rather build on trust and social ties within local communities. One of the interviewees highlighted that due to the high degree of trust from the local population, which is mainly build on the historical presence of the charity, after authorization of the proprietor, most of their collection containers were established on private grounds (Interview 2). The trust and reputation actors have gained from society lay the foundation for their local operations and the extent to which they are embedded in local society (Fengru and Guitang 2019).

Moreover, social embeddedness of actors in the GPN of second-hand clothes is strongly influenced by charity discourses. One of the representatives of a charity in Germany outlined “the collection of old clothes historically originated through appeals in parishes, and it is also maintained in this way” (Interview 1). The largest charitable actor has a cooperation with over 4.500 parishes throughout Germany. Clothes collected by the church still forms the largest share of their collection quantity. The organization is completely dependent on volunteer services of parishes. Maintaining this relationship to church communities, which is built on trust and personal contact, is crucial for the organization and portrays its high degree of societal embeddedness (Interview 1). The importance of church community networks has also been highlighted by another charitable actor. Due to the amendment of the Waste Management and Recycling Act in Germany in 2012, one sole waste management association is allowed to place containers on public spaces in Munich. The interviewee however highlighted

that compared to other actors in the market, they have not suffered from major losses due to policy changes. This was mainly due to the high degree of social embeddedness enabled through an extensive network of around 60 church communities. Maintaining this relationship and networking with parishes is therefore crucial for the charitable actor. It requires personal contact to secure container sites, and trust is of capital importance (Interview 4).

In addition to the strong ties to church communities, another way to increase societal embeddedness is through activities performed within the local community. Interviewees highlighted that charities are concerned with the greater good, which lays the foundation of trust and reputation they have gained from society. Charitable actors in the European production network of second-hand clothes often employ long-term unemployed people or socially disadvantaged population groups and invest their value-added in the local community through social projects (Interview 1, 2, 3, 4). One of the charities in Austria highlighted that most of the profit, more precisely two third of all revenue is reinvested in the region, either through support of social projects or employment of socially disadvantaged, or long-term unemployed people. This has a positive effect on donation behaviour of people, as the organization has a reputation of being a responsible and trustworthy partner, who ensures that added value remains in the region (Interview 3). This has also been highlighted by a representative of a charitable actor in Germany, who outlined that trust the organization gained from the local community can be attributed to their high degree of transparency of activities (Interview 4). Thus, social ties actors have established within the local community, positively influences their social embeddedness. Ultimately, a high degree of societal embeddedness strengthens local influence as well as visibility and enhances the power position of actors, increasing their capability to perform value-added activities in the GPN of second-hand clothes.

6.3.4 Network Embeddedness

In addition to embeddedness within society, embeddedness within the network, hence the degree of collaboration and interaction with other actors involved in the trade with second-hand clothes is crucial. The higher the degree of network embeddedness, the greater access to information, and hence position of power (Paras et al. 2018a). Additionally, factors that favourably influence network embeddedness, according to the conducted empirical research are; building and maintaining a global sales network, which is functioning on the basis of trust, long-term partnerships and quality, increasing

access to information in export markets (Interview 3, 6, 8, 9), connecting to collective organizations (Interview 3), safeguarding charitable connections (Interview 1, 2, 3, 4), providing professional experience (Interview 8, 9), and geographic location of actors (Interview 1, 21).

The global sales network is built on trust that the quality is right. Especially for sorters, it is crucial that they have a good reputation. "Sorters have no interest in delivering poor quality, if they do, they are out of the market and lose their long established partnerships" (Interview 17). In order to achieve a good reputation based on quality, one of the representatives of a sorting facility in Austria outlined that buyers, wholesalers and agents from export markets, come to their sorting plant to discuss and adjust sorting criteria according to demand of their markets. There is a constant exchange regarding suitable sorting categories between sorters and buyers in the trade with second-hand clothes. The interviewee highlighted that it requires extensive resources to build up a stable global sales network, and hence a high degree of network embeddedness (Interview 3).

Second-hand clothes are traded in huge quantities and buyers in export markets cannot assess the quality of goods beforehand. Hence, building and maintaining relationships built on trust is crucial (Interview 6, 17). Many of the interviewees stressed the importance of market knowledge and linkages to local actors in importing countries. What is more, sorters need to constantly stay informed about changing market conditions, and possibilities for expanding export markets (Interview 3, 6, 8, 9). One of the representatives of a sorting facility in Germany highlighted that in order to get greater access to information in export markets, they have agents located in various regions in Africa, Eastern Europe and the Middle East. The sorting facilities of the commercial actor, which are located in Germany, Switzerland, Eastern Europe and Morocco, serve a huge customer spectrum and each facility has its own distribution network, based on logistical factors, and quality requirements. The representative outlined that there is a certain degree of uncertainty and risk involved. Their main partners are wholesalers, as requirements of the commercial actor, which reach from prepayments to certain certifications and authorizations, are difficult to fulfil by small entrepreneurs in export markets. Building long-term partnerships is a key point, and oversea agents are of great importance when it comes to sustaining a high degree of network embeddedness (Interview 9).

Especially charitable actors highlighted that networking with other actors to exchange market know-how, current development as well as best practice is crucial in order to increase the degree of network embeddedness (Interview 1, 3, 4). Collective organizations are an important factor in this regard, as they provide member organizations with information on market changes, regarding the institutional and regulatory framework, development in export markets, reliability of actors, and quality requirements. Moreover, they provide a platform to increase networking among actors in the European production network of second-hand clothes, leading to an increase in access to information, ultimately having a favourable impact on network embeddedness of actors by increasing their collective power position (Interview 13, 17, 19, 20, 21).

Network embeddedness is interconnected with societal embeddedness, as the charitable perception of second-hand clothing donations has a positive impact on the economic success of trade with used clothes, and collaborations between actors involved create opportunities for both sides (Paras et al. 2018a). One of the German charities portrayed advantages of their partnership to commercial actors. The charity sells its logo to commercial actors if the distance to collection containers exceeds their logistical resources. While this licensing charitable branding would increase network embeddedness, with regards to the geographical scope, the commercial actor would benefit from the good reputation of the charity, and would get increased access to container locations (Interview 1). Further, empirical research has shown that various charitable collectors built up loose and sporadic partnerships with retailers, from which they gain economic value as goods they receive are often unsold stock which can be sold with high profit margins in their own shops (Interview 1, 2, 3, 4). An interviewee of an Austrian collector outlined that the amount of clothes donated by retailers will potentially grow in the future, as there are stricter regulations in place regarding handling of unsold stock (Interview 2).

For this reason, commercial actors in Germany and Switzerland offer custom-made solutions for retailers, and actors in the textile industry (Interview 8, 9). One representative outlined that regulations as well as consumer awareness concerning the end-of life of textiles is increasing. Due to their professional experience the commercial actor built up an extensive infrastructure and global sales network to offer various solutions to retailers. The services they offer depend on specific needs and individual ideas of retailers and brand manufacturers, cover however a crucial part of

the reverse value chain from overstock operations, online returns, to store leftovers and take-back returns. Retailers have precise ideas about the end-of life of their goods, some brands require the commercial actor to cut out the label before the goods are resold on the market, others do not want their clothes to be sold on certain export markets, others, often luxury brands do not want any traces of their goods on the second-hand clothing market and require the commercial actor to down-cycle the goods as cleaning rags or insulation material (Interview 9). One of the interviewees outlined that “the unsold goods must be unlabelled before they are resold, as retailers do not want their brand to be publicly traded on the second-hand clothing market” (Interview 9). Due to increased regulations concerning the end-of life of textiles on a European level, also with regards to EPR, cooperation with retailers are becoming increasingly important in the future (Interview 17).

Another factor that has a positive influence on the degree of network embeddedness is the geographical location of actors. One of the charities highlighted its advantageous geographical location in Germany, in a region where a lot of textile manufacturers are located. This offers the organization a unique baseline for its relationships with retailers, who donate new clothes to the charitable organization, which are really popular among their customers (Interview 1). The benefit of their geographic location has also been mentioned by one of the representatives of an umbrella association for recycling and re-use of European social enterprises. Through their office in Brussels they are in exchange with various non-governmental organizations, such as Zero Waste Europe. What is more, the European Environmental Bureau is located in Brussels, which offers them a unique position to gain access to information, exchange knowledge and increase their visibility on an international level (Interview 21).

This chapter portrayed the strong interlinkages between the various dimensions of power and embeddedness in the GPN of second-hand clothes. It can be seen that the European production network of second-hand clothes is highly dependent on established networks, strategic collaborations between actors involved and a high degree of embeddedness within society. Connections and personal ties within the GPN of second-hand clothes strongly influence the power position of actors, and hence the extent to which they are able to capture and distribute value. What is more, these interlinkages between power and embeddedness explain the strong connection between charitable and commercial actors in the second-hand clothing trade.

7 Value Capture and Distribution in Second-Hand Clothing Trade

Throughout the production network of used clothes, there are various types of value captured, depending on the institutional and regulatory framework, power position as well as embeddedness of actors involved. Sandberg et al. (2018) argue that value can be perceived in different ways, in addition to the perception of value in monetary terms, actors in the GPN of second-hand clothes also capture other types of intangible values such as environmental or social values. One of the interviewees highlighted value capture as follows; “it works on a win-win-win principle, first economic value is created, second, value creation for society through taking over the recycling of old clothes, third, the participation in the second-hand clothing trade finances social projects in Austria” (Interview 7). The next chapter presents capture and distribution of various types of tangible and intangible values in the European second-hand clothing trade. According to Schenkel et al. (2015), various categories of values benefit actors in very different ways. Furthermore, they are interlinked and often have a positive influence on each other. Additionally, this chapter portrays case studies of Austria, Germany and Morocco, highlighting their role within the GPN of second-hand clothes, and portraying the dominant processes for value capture performed in the countries.

7.1 Economic Value

The dominant value captured from discarded clothes is economic value. The leading online market place for second-hand clothes thredUP published a report based on research and data from GlobalData, a retail analytics firm. The report portrays that in the last three years the market for second-hand clothes has been growing 21 times faster than the market for newly produced goods. Moreover, according to the report, trade with second-hand clothes is expected to generate USD 64 billion by 2028 (thredUP 2019). This portrays the continuous growth rate of the second-hand clothing market, enabling actors to capture monetary value. Economic value is captured through the power a member of the reverse clothing value chain has in relation to other members. Sandberg et al. (2018) outline that a foundation for a solid bargaining power position is the isolation mechanism a member has for the protection of value it created from being captured by other actors. Factors that have been identified in empirical research as favourable influence of such isolation mechanisms are; the efficiency of processes, materiality, and labour.

7.1.1 Processes

Various processes, namely collection, sorting and grading, and redistribution of second-hand clothes occur in order to recharge used clothes with a new value (Chapter 4.2). The efficiency of those processes is an important determinant for capture of value, as the underlying goal is the generation of maximum economic value (Fleischmann et al. 2004; Sandberg et al. 2018).

7.1.1.1 Collection

Empirical investigation shows that there are various ways actors can enhance value creation through a more efficient clothing collection, such as by more suitable container locations. In order to determine the most effective location, extensive market research is conducted by collectors (Interview 1, 4, 6, 8, 9). Further, as discussed in chapter 6.1.1, waste policies influence collection of used clothes on a municipal level. To secure container places, social and network embeddedness is a crucial determinant and collectors have to maintain relationships with municipalities (Interview 3, 4, 6, 7, 8, 9). Also, optimizing the logistical process of container emptying to save resources and ensure the quality of discarded goods is crucial for capture of value. Some charitable actors outsource logistical processes to external partners, due to a lack of resources (Interview 1, 2, 3). One of the charitable actors in Germany outlined that maintaining and emptying containers through their own employees and vehicle fleet forms a large cost factor, however would increase trust from partners and ensure an efficient and regular emptying of containers, which leads to greater quality of collected textiles (Interview 4). Additionally, marketing activities are crucial to enhance visual differentiation to other collectors and increase value capture. This point has predominantly been mentioned by charitable actors, who outlined the importance of container branding (Interview 2, 4). Another charitable actor increases its visibility through giving out donation bags. On the one hand, this increases awareness within the region, due to distinctive features of the bag. On the other hand, people benefit from donating used clothes in donation bags, as residual waste disposal in Vorarlberg is paid per bag, and disposal through donation bags of the charity is free of charge (Interview 3).

Conversely, charitable actors who outsource collection activities to an external actor capture economic value through selling their logo. One of the charitable actors in Austria outlined the reason for this relationship. Initially, the actor performed collection of discarded clothes with the help of volunteers. However, the growing amount of

collected clothes exceeded the capacities of the charity and there was a growing need for professional processes with regards to recycling and environmentally friendly processing, as well as market know-how, which could not be met. According to the interviewee, the organization benefits from its cooperation with the commercial actor, as apart from the volatile market, which presents great risks, the commercial actor pays a yearly fee, calculated on the quantity of collected clothes. “It is more profitable to work with an external partner as the paid fee can be invested in social projects” (Interview 7). In this regard, the commercial actor outlined that “this money is used to finance charitable projects; the former donation in kind becomes a monetary donation” (Interview 10). In return, the commercial actor would benefit from the good reputation of the charity and would get greater access to container locations (Interview 7).

7.1.1.2 Sorting and Grading

Empirical research has shown that in order to extract the maximum value out of discarded clothes, the sorting process has a crucial importance, especially workers’ abilities to reclassify used textiles. The most important factor influencing the sorting process are sorting categories, which are context specific and not only defined by material quality but also by current trends, brands and specific contexts of export markets (Interview 3, 6, 8, 9).

Charitable actors predominantly only perform the first step, sorting for diamonds (Interview 1, 2, 4). As soon as the actor performs a more precise sorting, the process is based on different categories, chosen by the sorter in cooperation with their buyers and matched to export markets (Interview 3, 8). One of the sorters outlined that their value added process has been optimized due to extensive investments increasing the efficiency of sorting processes, their strategy is a deep sorting into 200 categories. However, the interviewee outlined that compared to the biggest textile recycler in Germany, this is still a small amount of categories, as the sorting process of the textile recycler would include around 400 categories (Interview 3). One of the sorters in Germany outlined that their sorting processes is based on five stages and around 280 categories; “at the end of the sorting process, clothes are sorted so precisely that they can exactly be chosen based on the requirements of customers” (Interview 8).

The sorting and grading of discarded clothes is very labour intense and due to an increase in labour costs, often outsourced or offshored to countries with cheap semi-skilled labour (Norris 2015). European collectors mainly outsource sorting to Eastern European countries. One of the interviewees highlighted that “Eastern Europe is a very

popular location for sorting plants, due to its cheap labour and geographical proximity to collection countries” (Interview 9). Empirical investigation shows however that Germany is also an important location for sorting facilities.

7.1.1.3 Redistribution

After sorting, various activities take place in order to redistribute clothes to suitable markets. One of the interviewees highlighted that “charitable and commercial organizations serve different end markets” (Interview 9). While in France and Belgium, charitable actors are active in export of second-hand clothes, this is not the case in Austria and Germany. As in most cases charitable actors in those countries lack resources and market know-how, are therefore not engaged in export activities, and outsource those to external, commercial actors (Interview 17). There are some exceptions, such as one charitable organization who runs a sorting facility in Austria, is active in export of second-hand clothes, and has successfully built up strong ties to countries in Africa and Asia (Interview 3). According to one of the interviewees however, this charitable actor benefited from knowledge transfer from an external partner, one of the prestigious actors in the German market, who assisted in building up the sorting facility (Interview 17). One of the representatives of the Austrian sorting facility stressed that “the organization profits from the knowledge of the long-standing partnership with the German sorter, with regards to knowledge about prices, market developments and customs clearance on the one hand, and from its large customer base and distribution network to agents in Africa and Eastern Europe on the other hand” (Interview 3). Conversely, the sorter in Germany would benefit from the good reputation of the Austrian sorting facility, as precise and fine sorting is performed, which offers them an above market average quality (Interview 3). Hence, the capability of actors in the GPN of second-hand clothes to serve local or export market strongly depends on embeddedness, power position and available resources.

The best quality clothes are distributed on the local market. Selling collected clothes on the local market constitutes a better opportunity for actors than redistribution on the global market, as it provides them with a higher profit margin and ensures less dependence on world market prices (Interview 2, 3, 20). Empirical investigation shows that while in Austria mainly charitable actors are running second-hand clothing shops, the market of second-hand shops in Germany is more diverse, and there are also commercial actors that run second-hand shops. One of the interviewees from a

German commercial collector outlined that from all the collected clothes, 5 percent is sold in their own 49 second-hand shops throughout Germany (Interview 9).

Various factors are decisive and influence capture of value of used clothes sold on the local market, such as the price strategy. According to empirical investigation, there is no general pricing policy. Prices in second-hand shops are set by employees, which implies that capture of value depends on workers' ability to determine how much consumers are willing to pay. In order to ensure that employees set prices right, trainings and workshops on price setting are provided on a regular basis. Prices are based on current trends and the quality of clothes (Interview 2, 3, 4, 6). In order to reach a broad local customer base and hence ensure a maximum capture of value, market research is needed and a broad assortment to best respond to customers' needs (Interview 2, 3, 4, 6). One organization in Austria who runs multiple second-hand shops sets different foci in their shops in Vienna and differentiates between family shop, vintage shop and shops with a selection of traditional clothes (Interview 6).

While it is mostly charitable actors that sell clothes on the local market, it is predominantly commercial actors that are active in the global context. The capture of value of used clothes sold on export markets is influenced by various different factors. The most important one is embeddedness within the global sales network. This requires to mobilize network as well societal embeddedness. Actors have to foster long-term partnerships within global sales networks in order to build trust in the quality of supply, reduce uncertainty and ensure fair prices. This is especially challenging as according to empirical investigations, there is a high fluctuation of buyers, traders and intermediaries in the global market, which makes it difficult to foster relationships (Interview 3, 6, 8, 9). In order to increase capture of value from selling goods on export markets, brand value is from crucial importance, this is especially ensured through continuously delivering good quality goods, perfectly sorted for requirements of export markets (Interview 3, 9). The charitable sorter in Austria outlined that the organizations has a really good reputation with regards to its high quality clothes due to its unique way of packaging the goods in a layered structure in transparent bags. Those 25 kilogram bags are sold to second-hand shops, wholesalers or retailers and the price per bag can go up to EUR 100 (Interview 3). An additional factor crucial for value capture on export markets are collective organizations, who provide information on market development, prices, wholesalers and traders (Interview 2, 3, 4, 9).

7.1.2 Materiality

The materiality of discarded textiles, their design and quality, has a crucial effect on processes within the GPN of second-hand clothes as it influences the possibility to which extent actors can extract economic value out of discarded clothes. Crang et al. (2013) outline that the quality of material of products as well as the possibility for their transformations into new products in different places is essential to consider at every stage of analysis. To which extent actors are able to capture economic value, depends on their capability to extract value out of heterogeneous materials. The following market developments however pose challenges for actors.

There was a mutual consent among all interviewees that the share of high quality clothing has considerable decreased within the last years. The share reported by collectors and sorters differs, it is mainly in the range between 9 to 11 percent of original being cream (Interview 2, 3, 4, 5, 6, 8, 9). Further, it has been outlined by some interviewees that there are indications that global export markets for originals are starting to become saturated (Interview 3, 4; Ljungkvist et al. 2018) and empirical investigation shows that there has been a drop in prices for originals. The price to which originals can be sold on the market differs not just between countries but even between regions. It is strongly influenced by the embeddedness of actors, their power position and reputation (Interview 3, 4, 5, 6, 9). A further challenge concerning materiality of discarded clothes is that trade with non-reusable clothing is not lucrative, as prices on the international recycling markets are low and barely pay for logistics and transport. The most common forms of recycling mentioned by sorters is downcycling into industrial rags, low-grade blankets or insulation materials (Interview 3, 9). Recent policy initiatives on a European level are beginning to tackle this issue. With recycling and circular economy becoming more prominent in the textile industry, interviewees highlighted that there might be some improvements in the near future (Interview 21). Against this background, it can be seen that actors in the GPN of second-hand clothes are facing various challenges with regards to materiality of discarded clothes, which have a strong influence on capture of economic value. The coping strategies differ among actors.

Materiality and assessing the quality of heterogeneous materials is a crucial determinant for economic value. Material knowledge, the embeddedness of actors and their power position are significant components, affecting the extent to which actors are able to respond to current developments of decreasing materiality. In addition,

assessing material quality of discarded textiles and safeguarding their quality is highly dependent on employees, which portrays the importance of the factor labour in the capture of economic value.

7.1.3 Labour

By traversing various labour processes from collection to redistribution, discarded clothes are transformed into new resources. The economic success depends on cost efficiency of those processes, in which labour is a key determinant (Sandberg et al 2018). Gregson et al. (2014) argue that the emphasis within European waste management is put on technological possibilities for resource recovery as well as environmental outcomes. Consequently, little or no attention is paid to the factor labour in value creation. “Not only does this render these labour processes within the EU invisible, but that omission also allows for a portrayal of European resource recovery as clean and green” (Gregson et al. 2014: 6). This point has also been mentioned by Brooks (2015) who highlights that labour activities throughout the GPN of second-hand clothes are hidden in contemporary society. Empirical research shows that labour is a crucial factor to consider when analysing value capture and distribution in the GPN of second-hand clothes. There is a great difference between the labour force of commercial and charitable actors. In general, factors having an impact on the factor labour are; knowledge and skills of employees, political contexts, and labour costs.

Interviewees highlighted the crucial importance of their employees, as due to their experience in sorting, maximum value could be captured (Interview 2, 3, 6, 9). In this sense, Botticello outlines “reprocessing the clothes of some, to make them useful for others, is a very labour-intense process, requiring personal contact, both with the clothing and with its potential buyers” (Botticello 2013: 49). The author highlights that how much value is extracted from discarded clothes depends on skills and knowledge of people, with regards to materiality and cultural understanding of export markets (Botticello 2013). Empirical research shows that actors invest crucial time and resources in training employees. Depending on the size of sorting facilities, employees have to undergo an intense training for several months to be able to sort clothes into needed fractions (Interview 2, 3, 4, 5, 6, 9). Actors in Austria outlined that they provide trainings and workshops with experts, such as fashion students, to employees on a regular basis. Those trainings mostly focus on current trends and on determining the condition of clothes (Interview 2, 6). One interviewee highlighted that they sent their employees to a partner organization in Germany, which is known for their precise

sorting process, in order for them to learn and collect experience (Interview 3). In addition to training for sorting processes, interviewees highlighted that employees receive training in order to set prices right in local shops (Interview 2, 3, 6). “There are 4,000 unique pieces in the second-hand shops, defining the right price is a crucial determinant for the generation of profit” (Interview 6). All of those trainings aim to efficiently categorize clothes and hence ensure maximum profit.

When analysing the workforce of the used textiles sector, Gregson et al. (2014) highlight that “resource recovery in the Northern EU Member States is work which local labour force is often unwilling to do, it is often migrant work, it is highly gendered” (Gregson et al. 2014: 6). The majority of workers in sorting facilities are women. Watson et al. (2016) outlined that “it is universally accepted within the branch, whether true or not, that men cannot be trained into highly skilled sorters” (Watson et al. 2016: 84f). This has also been mentioned by some sorters, who outlined that they were hiring men before, women however would have a greater sense and understanding of fashion and materials, and hence would be more suitable for sorting used textiles into the various categories (Interview 3). European environmental policy aims to sequester all textile waste within the boundaries of the EU, by considering waste as a secondary resource to be recovered by European manufacturing. This requires an extensive workforce, especially regarding the rise in quantity and separate collection of discarded textiles, which is mandatory in all Member States under the Waste Framework Directive by 2025 (European Union 2019). Until now, there is still a lack of research on how those European waste management policies effect the workforce as well as working conditions for employees in resource recovery (Gregson et al. 2014). Additional research on this topic in the future is crucial.

The local political context strongly influences actors with regards to labour processes throughout the production network of used clothes. Empirical research shows that charitable and commercial actors are differently effected. While charitable actors mainly work with state subsidized jobs, or with volunteers (Interview 1, 2, 3, 4), commercial actors employ their workforce at market-based compensation. Charitable actors are influenced by the political context with regards to government spending on subsidized jobs. Interviewees outlined that due to labour intense activities and lack of resources of charitable actors, without state support it would be difficult to finance the labour steps necessary to recharge discarded clothes with a new value (Interview 2, 3, 4). Commercial actors on the other hand are influenced by the political context with

regards to wage policies. In 2009, Germany included waste management in the Employee Secondment Act (AEntG), the objectives of which include the creation of fair minimum working conditions and fair competition. Consequently, a minimum wage applies to companies in the waste management industry. The collective agreed minimum wage is mandatory for domestic and foreign employers in the waste management sector (BVSE 2015). As of 1st October 2019 the minimum wage is EUR 10 per hour (EUWID 2019). It is highlighted in the report of the German national recycling association that the German minimum wage leads to more intense competition, especially for sorting facilities that are located close to the border, as tender processes for municipal collection are predominantly made on the basis of the highest price (BVSE 2015).

Local sorting in Western European countries is economically marginal, due to high labour costs (Watson et al. 2018). This is supported by empirical research, while in Austria the majority of sorting operations are outsourced due to economic reasons (Wagner 2017), Germany performs parts of their sorting processes within the country (BVSE 2015). One of the interviewees outlined that while their sorting facilities in the Global South are largely based on manual labour, due to the large amount of clothes sorted in the facility in Germany, processes are as far automated as possible. Conversely, their sorting facilities in Morocco and Eastern Europe depend on manual labour (Interview 8). In this regards Gregson and Crang (2015) highlight that countries in the Global South play a key role, as due to cheap labour costs and less stringent environmental regulations, actors from the Global North are able to extract more value from resource recovery. "Dirtier, more labour intensive operations in developing countries spend more time sorting, separating and segregating materials to generate highly differentiated grades of materials and thus supply a much wider range of markets" (Gregson and Crang 2015: 30). This however involves physical handling of discarded textiles, either directly by hand or through tools and machinery. For employees in sorting facilities, this means physically demanding work, as well as working closely with dirt, dust, and contaminated textiles. In this sense, Gregson et al. (2014) stress that while European policy is promoting resource recovery within Europe as clean and green activities crucial for the creation of sustainable economies, low paid, dirty, monotonous as well as physically demanding jobs are prevailing in resource recovery (Gregson et al. 2014).

With regards to working conditions, no general overview could be obtained for employees in the used textile industry, especially with regards to processes outsourced to countries in the Global South. Charitable and social actors, who are part of RepaNet in Austria or FairWertung in Germany, have to meet standards for workers' conditions. Commercial actors in Germany outlined that they comply with working conditions that are set for the waste management industry. For processes outsourced, Watson et al. (2016) highlight an example of Poland and stress that if conditions for workers in the used textile sector are similar to the wider textile industry in the country, employees are likely to suffer from low wages and lack of union representation. This is important to consider as especially more labour intense operations, such as sorting and grading, are outsourced to countries in the Global South (Gregson and Crang 2015).

7.2 Environmental Value

Environmental value is added value for society, ensured through efficient environmental performance, such as recycling activities or through a green image towards society (Schenkel et al. 2015). Fundamental principles established by the EU and defined in the Waste Framework Directive are the obligation for Member States to handle waste in such a way to protect the environment as well as human health. The waste hierarchy applies as a priority order in waste prevention and management legislation and policy, starting with prevention, preparing for re-use, recycling, other recovery (such as energy recovery), and disposal (European Union 2019; Jacometti 2019). In order to determine environmental value captured by various actors, the waste hierarchy is used as a framework for analysis. Whereas used clothes hold environmental value by saving resources throughout various steps of the waste hierarchy, environmental value can be instrumentalized by actors to capture economic value. An example for such a convergence between values is the growing "green fashion" movement, where fashion designers and retailers are applying the waste hierarchy of reduce, reuse and recycling, in order to create new valuable pieces in response to the growing awareness of the need for environmental sustainability in the Global North (Norris 2012). The interlinkages between economic and environmental value in the GPN of second-hand clothes are discussed in detail in chapter 7.4.

With regards to the first step of the waste hierarchy, prevention of waste, empirical research shows that some charitable actors organize awareness campaigns, workshops or talks to increase consciousness about negative impacts of fast fashion

and consequential problems with textile waste. Those mostly focus on post-consumer waste (Interview 1, 3, 4, 6). Apart from awareness raising within society there are no activities performed by actors involved in the GPN of second-hand clothes that tackle the prevention of textile waste in the first place. This has been stressed by advocates from the Discard Studies, who outlined that current solutions to a so called waste problem are not tackling the actual problem and are not efficient with regards to prevention of waste (Schlitz and Laser 2019). Interviewees from advocacy groups for social business stressed that what has to change are current fast fashion dynamics and the attitude of people towards consuming less (Interview 19, 20, 21).

According to the Directive 2008/98/EC of the European Parliament and Council, “Re-use means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived” (European Parliament, Council of the European Union 2008: 10). The importance of the re-use category in the GPN of second-hand clothes is portrayed in Figure 3, where it can be seen that used textiles classified as re-use (cream, grade A, grade B) represent 98 percent of the sellable value of original collected clothes by Nordic collectors (Watson et al. 2016). Considering the weight composition, according to empirical investigation, the re-use category ranges between 50 to 65 percent of the collected quantity (Interview 2, 3, 4, 5, 6, 7, 8, 9). Actors are striving to increase the re-use component of the quantity of discarded textiles, so that economic as well as environmental value is safeguarded.

The third and fourth stage of the waste hierarchy concerns non-reusable textiles, which are either recycled or recovered. Empirical research has shown that due to an increase in collection quantity and a decreasing demand for lower grade re-usable clothing, actors find it increasingly hard to find markets for non-reusable textiles. Ljungkvist et al. (2018) argue that some of re-usable clothing has been sold on the recycling market rather than on the second-hand clothing market, this led to a drop in prices on recycling markets as they have become saturated. According to research from Watson et al. (2016), used clothes classified for the recycling market, only account for 2 percent of the sellable value. Empirical investigation shows that with regards to quantity, interviewees highlighted that around 20 to 35 percent are sold on international recycling markets, depending on the local context (Interview 13). One of the interviewees outlined that material which is recycled today has a positive ecological impact, however is often not economically viable. The strategy of the sorter is to

cooperate and invest in research institutions to define a sorting category that perfectly meets requirements for raw material for post-consumer textile waste, meaning to define the composition of a material that can be efficiently processed further into new clothing. Ultimately, this should lead to greater efficiency in recycling processes based on high economic and environmental value added (Interview 9). Recycled material that can be processed further into new clothing, and hence closes the loop in a circular economy is still rare. The Ellen MacArthur Foundation highlights that nowadays “less than 1 percent of material used to produce clothing is recycled into new clothing” (Ellen MacArthur Foundation 2017: 20). This point has also been highlighted by one of the representatives of a multi-stakeholder initiative for sustainable textiles, who outlined that they have an expert group working on researching sustainable and recyclable fibres. The interviewee highlighted that environmental concerns regarding the textile industry, and end-of life of clothes, have gained importance in recent years and will increase in importance in the future, also with regards to EPR (Interview 18). One of the advocates of the Discard Studies highlights that recycling processes currently produce materials, which are less robust than their original forms. In case their market prices drop, which makes materials less economically viable, they can be easily abandoned, shipped overseas to countries of the Global South, buried or burned, consequently having a crucial negative impact on receiving countries. Furthermore, the author outlined that recycling programs are often supported by industry, as they generally entail a continuation of growing production of disposables (Liboiron 2015). This has also been highlighted by interviewees, who outlined that the topic of re-use is often overlooked in the current political debate, which focuses more on increasing sustainability of consumption and recycling (Interview 20, 21). In view of this, it can be seen that while recycling process create an environmental value for actors in the Global North, there are possible negative effects of the international recycling market on countries in the Global South. What is more, the increase of efficiency in recycling processes does not solve the problem of rising quantities of textile waste.

The last step of the waste hierarchy is disposal of textile waste, which presents a financial burden to actors. The treatment of textile waste generally costs sorters around EUR 0.05 per kg waste, as sorters have to pay to eliminate used clothes that can neither be re-used or recycled and therefore get incinerated or landfilled (Watson et al. 2016). Hence, empirical investigation shows that commercial and charitable actors are sorting used textiles into sellable fractions as far as possible. “It is crucial to create a

market for everything, so that there is as little waste remaining as possible and we have to pay as little as possible for the disposal" (Interview 9). The sorter outlined that textile waste has been rising in recent years due to fast fashion dynamics and accounts for around 7 percent of the total collected amount (Interview 9). Considering the environmental impact of disposal of textile waste, Watson et al. (2016) outline that waste treatment in the EU is strongly guided by regulations, "it can be assumed that any waste resulting from sorting processes in EU Member States will be treated responsibly" (Watson et al. 2016: 69). However, offshoring sorting processes to countries with lax regulations with regards to social and environmental standards has been increasing (Watson et al. 2016). One of the sorters highlighted that there is an internal and external audit in their offshore sorting facilities in Eastern Europe. In Morocco however, the audit focuses on social compliance, environmental issues are currently not considered, however are on the agenda. The interviewee outlined that what happens with textile waste in sorting facilities depends on local regulations. With regards to the sorting plant outside of Europe, in Morocco, the sorter stressed their compliance with local waste disposal regulations (Interview 8). Debates on the flows of waste from the Global North to the Global South are framed by the environmental justice paradigm. In this regard, Gregson and Crang outline that "the waste of profligate western consumers and of the throwaway consumer societies of the Global North are a form of neo-colonialism as they are dumped on the peoples and environments of the Global South" (Gregson and Crang 2015: 5). In economic terms, the authors highlight that environmental costs of the Global North are externalized to the Global South. As opposed to the environmental justice approach, which sees waste as an environmental bad, hazardous, toxic and potentially harmful, another string of research on global recycling highlights the importance of considering different perceptions of waste and its materiality. It portrays a complex global trade in secondary resources, and the transformation of waste to resources in countries of the Global South (Gregson and Crang 2015). Currently, there is still a lack of research with regards to environmental impacts of the trade with second-hand clothes on countries of the Global South and further research is crucial, especially with regards to the increasing quantity of non-reusables (Watson et al. 2016).

Summing up, charitable as well as commercial actors in the GPN of second-hand clothes create environmental value in various ways. Following the prioritization according to the waste hierarchy, empirical investigations shows that especially

charitable actors try to promote the prevention of textile waste. With regards to preparing for re-use, actors perform collection and sorting activities in order to sell reusable clothing on the second-hand clothing market. The higher the re-use category, the greater the environmental value added for society. Non-reusable textiles are sold on the international recycling market to be processed further and recycled. Used textiles which cannot be recycled, are sold further for energetic recovery. While there is still a lack of research concerning environmental impacts of the GPN of second-hand clothes on countries in the Global South (Watson et al. 2016), empirical research shows that actors in the European production network of second-hand clothes create and distribute environmental value for society, through their performed activities of collecting and sorting discarded textiles for redistribution on the second-hand clothing market, or the international recycling market.

7.3 Social Value

Social value is generated through the contribution to the long-term wellbeing as well as resilience of either individuals, communities or society in general (Sandberg et al. 2018; Schenkel et al. 2015). According to RepaNet (2015) the most important social benefit that can be created by actors involved in the second-hand clothing trade is prevention of poverty. This can be achieved through either job creation for socially disadvantaged people within the GPN of used clothes, through distribution of quality-cheap clothes to people with low incomes in local second-hand shops, through donations of clothes to the most deprived or through the use of profits for social integration measures for disadvantaged people or other poverty reduction and prevention measures (RepaNet 2015). This is in line with empirical investigation, which shows that in a broad sense, social value in the European production network of second-hand clothes is created and distributed through various poverty reduction and prevention measures, reinforcing the role of charity discourses in the trade with used clothes. Various actors try to portray their social engagement with standards, quality labels and certification schemes. In order to expand capture and distribution of social value, different social organizations of countries in the Global North have made attempts to internationalize their businesses through exporting social models to countries in the Global South. Additionally, some actors in the second-hand clothing trade in the Global North stimulate clothing donations by using different ethical narratives and images, claiming that they collect clothes for people in need and victims of poverty in Africa or other countries of the Global South, thereby hiding the lucrative

business entailed in the second-hand clothing trade. Analysing the complexity of this false image of used clothing donations to countries in the Global South however lies outside the scope of this thesis (see Hütz-Adams 1995). The following chapter portrays different factors that influence capture and distribution of social value in the European production network of used clothes. Further, there is a strong connection between social and economic value, as social value can be instrumentalized by actors within the production network of used clothes to create economic value, especially with regards to the prevailing importance of charity discourses. This is discussed in more detail in chapter 7.4.

7.3.1 Creation and Distribution of Social Value

First, actors in the European production network of used clothes, mainly charitable actors, capture and distribute social value through creation of jobs for socially disadvantaged and long-term unemployed people. All of the charitable collectors interviewed outlined that they receive financial support from the state, which enables them to employ socially disadvantaged, or long-term unemployed people (Interview 1, 2, 3, 4, 5). One of the charitable actors in Germany highlighted that the primary objective of their organization is the employment and integration of socially disadvantaged people through the creation of jobs in the second-hand clothing business (Interview 4). What is more, one of the charitable actors in Austria highlighted that its profits are used for social integration measures for disadvantaged people, more precisely, to accompany long-term unemployed people to reintegrate into the regular labour market (Interview 3).

Second, social value is captured through donating second-hand clothes within the local society. Especially charitable actors donate clothes to people in need. One of the charities active in Vienna outlined that out of their yearly collected 1,400 tons, they donate 150 tons (Interview 2). Charities make in kind donations in reaction to emergency situations, such as the increased migration flow in 2014 (Interview 4, 7), provide homeless people with winter clothes (Interview 2), or distribute clothes to people in need in clothing stores (Interview 4). According to RepaNet (2015) in 2015, ten social enterprises in Austria were donating 2 percent of all collected clothes, those in kind donations were mainly given to local or geographically nearby markets.

Third, charitable actors capture social value through supporting social projects. One of the charitable actors who sells its logo to a commercial actor in Austria, uses the

generated profit to finance social facilities for among others, women and children in need, people with social or psychological problems, or people with disabilities (Interview 7). Another Austrian charity assists socially disadvantaged families in various ways, such as learning aid for children or various integration measures. Further, the charity operates a café where people get assistance with repairing services for technical devices (Interview 3).

Summing up, it can be seen that social value is mainly captured and distributed by charitable actors in the GPN of second-hand clothes. This is in line with O'Halloran (2012), who outlines that traditionally, charitable actors occupied the space between the public and the for-profit sector on the basis that they provide supplementary services and socioeconomic contributions to the core public service provision (O'Halloran 2012). As portrayed, charitable actors use their profits for social integration measures or other poverty reduction and prevention measures. In this way they perpetuate the connection between the used clothing trade and charity, and reinforce the role of charity discourses within the production network of used clothes.

7.3.2 Standards and Certifications

Standards and certifications are used by actors in the GPN of second-hand clothes to display their adherence to environmental and social standards. Empirical research has shown that there are no standards and certification schemes on the Austrian market for second-hand clothes. Even though, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management presented the review of the creation of a label for sustainable textile collection and recycling as one of the measures of the waste prevention program in the Federal Waste Management Plan, published in 2017 (BMLFUW 2017). RepaNet (2019b) is currently developing a uniform label for clothing collection performed by Austrian social enterprises, which should generate a clear orientation for donors of discarded clothes and guarantee an ecological and social handling of clothing donations (RepaNet 2019b).

Different actors in the European production network of second-hand clothes use such standards, quality labels and certification schemes to guarantee their ethical and social engagement and hence create social value. According to Watson et al. (2016), Nordic collectors increasingly impose standards for collection and sorting within their countries, such as decent wages for employees, good reporting practices as well as increased transparency. The authors argue that if such mechanisms are in place,

working conditions and health and safety standards are being maintained. A certification of collectors and sorters is according to the authors one possibility to introduce standards, such as the voluntary certification scheme, which has been developed by the Nordic Textile Reuse and Recycling Commitment in 2013 (Watson et al. 2016). One of the representatives of an interest group for textile sorters outlined their objective is to achieve the best value and high-quality treatment of used textiles following the prioritization according to the waste hierarchy. The interest group tries to raise awareness about requirements for fulfilling sorting processes according to the waste hierarchy. The representative stressed that sustainable use of discarded textiles must be ensured through qualitative requirements. A technical basis and unified regulations for all stakeholders active in the market are required, which would serve as a guideline for decision-makers and actors active in collection and sorting. Those guidelines would specify and standardize tender processes of municipalities, involving qualitative requirements for collection and recycling of used textiles, create greater transparency throughout the production network, a legal certainty of tender processes and standardize the implementation and guidance for audits (Interview 15).

The following two certification schemes were found on the German market. FairWertung is the umbrella organizations for non-profit actors in Germany, who are active in collection of discarded clothes. In 2017, the organization developed a binding code of conduct and control system for charitable collectors based on social and environmental criteria in order to increase accountability and transparency. The organization stresses “FairWertung is setting a new benchmark, thereby formulating comprehensive ecological and social standards for the used textiles market – from collection to sorting” (FairWertung 2017). Actors who collect in accordance to the code of conduct are able to use the name and symbol of FairWertung to advertise their clothing collections. Around 130 organizations have joined the umbrella organization. An independent, external auditor performs audits based on the code of conduct (FairWertung 2017). The name and symbol of FairWertung are according to CCK (2019a) to be introduced in Austria. The second standard and certification scheme on the German market is the quality label of the national recycling association, which was created in 2013. However, not all of their member organizations, which are predominantly commercial actors, have the quality label. The organization claims that the quality label ensures increased transparency and traceability, and protection of the environment. Organizations that apply for the quality label document their operating

procedures and are regularly checked by an external and independent expert (BVSE 2020). One of the interviewees however outlined that the auditing mechanism is rather opaque and member organizations of the national recycling association do not have to comply with social and environmental standards (Interview 17).

While standards and certifications can provide more transparency and assist people and decision makers in disposal practices, they can lead to misleading information if their implementation is not regularly monitored and enforced. Especially in the textile industry, there is a wide range of standards and certifications schemes in place (Brad et al. 2018). As retailers are increasingly involved in second-hand clothing trade, this is crucial to consider. Often, these schemes are used to display environmental and social engagement of companies, “at their best, they represent an easy way for consumers to identify responsibly manufactured products and more sustainable services without having to become experts on each and every problematic issue in a given supply chain” (Brad et al. 2018: 15). This range of labels or industry-wide initiatives are often false promises and companies are failing to improve production standards or practices, leading to or intensifying already existing environmental and social problems (Brad et al. 2018).

7.3.3 Export of Social Models

As a response to mitigate negative effects on exporting markets and expand capture of social value, social organizations of countries in the Global North have made attempts to internationalize their businesses through exporting social models to countries in the Global South. An umbrella organization of European socio economic enterprises active in collection of discarded clothes is trying to stretch its value chain from the Global North to the Global South through building up local infrastructure and supporting creation and development of sorting facilities in the Global South. More precisely, a representative outlined that their attempt is to deliver slightly pre-sorted clothes collected by socio economic enterprises in the Global North to countries in the Global South, where fine sorting processes should take place. Only goods characterized as re-use are sent to sorting facilities in the Global South. There is already one sorting facility build up in Burkina Faso, and plans in place for a pilot project in Uruguay. In the future, the umbrella organization plans to expand its value chain throughout Africa and South America. The aim is to expand the idea of socio economic enterprises into markets in the Global South and to share and exchange best practices. “One of the objectives is to guarantee ethics and transparency throughout the entire

chain” (Interview 19). This should be accomplished through yearly external audits, which are already performed in the European member organizations, in order to verify if all social economy criteria are met (Interview 19).

In addition to the example of the umbrella organization of European socio economic enterprises, other social enterprises are stretching the value chain from the Global North to the Global South through setting up sorting facilities. Examples are the pilot project Frip Ethique, which was launched by Oxfam in Senegal in 2005. Or Le Relais, a network of French companies active in collecting, sorting and recycling of second-hand clothes, who extended their value chain to countries such as Burkina Faso, Senegal and Madagascar. While organizations claim that their ultimate aim is to mitigate negative effects, through fostering social inclusion and to boost benefits for destination countries of second-hand clothing exports (Arenas et al. 2015), the impact of the internationalization of such business models in the GPN of second-hand clothes is generally not well understood (Interview 3, 15).

In order to analyse how value is captured and distributed through such exports of social models, future in-depth research is crucial. Especially also in light of developments with regards to commercial actors, which increasingly outsource sorting processes to countries in the Global South in order to benefit from poorly regulated labour markets and very low wages. According to research of Arenas et al. (2015), one of the representative of Le Relais outlined the following reason for setting up a second-hand clothing sorting facility in countries of the Global South; “our programs in Africa help us to stay competitive in the global market. That is because sorting costs in France are always higher than in Africa and that pushes up prices of our products faster than the local population’s purchasing power” (Arenas et al. 2015: 33). In Burkina Faso, Le Relais was considered as a crucial social player and received tax breaks, overall creating 700 direct jobs and 3,500 indirect jobs through the establishment of a sorting plant, which the organization calls “positive offshoring” (Arenas et al. 2015). Against this background, it can be seen that export of social models to countries in the Global South creates social value for the organizations in the Global North. Further, such business models are a way to get more control over the second-hand clothing value chain. The impact on countries of the Global South however is generally not well understood and requires further investigation and empirical research.

7.4 Interrelation Between Different Types of Values

The previous chapters portrayed how used clothes hold environmental and social value, which allows actors to capture and distribute those intangible values. In addition, environmental and social value can be instrumentalized by actors to capture economic value. Norris (2012) describes this interrelationship between different types of values as “a network of mutually reinforcing values that appear to be supported through recycling old clothes. It is believed to be more environmental sustainable [...] and the charity can create exchange-value to be used for its “good works” (Norris 2012: 12). The following chapter outlines the rising importance of commercial strategies in order to comply with textile waste management regulations on the one hand, and with impacts of prevailing consumer models resulting in challenges with regards to increasing amount of textile waste on the other hand. As a response to a growing awareness of ecological concerns in the Global North, environmental value is instrumentalized by actors to capture monetary value (Norris 2012). Furthermore, this chapter emphasizes the historical and remaining importance of charity discourses, which portrays the convergence of economic with social value.

7.4.1 Role of Commercial Strategies

Due to developments on the second-hand clothing market, activities and processes throughout the GPN have become more and more commercialized. Brooks (2015) defines this as a “hidden professionalism to the used-clothing trade” (Brooks 2015: 98), as actors have highly organized corporate business models in order to sell their goods on the global market by transforming intangible value into tangible, monetary value. Donors however, are often unaware of activities that take place, as donating used clothes is still perceived as a charitable donation (Brooks 2015). Empirical investigation shows that the importance and optimization of commercial strategies in trade with used clothes increased due to a decrease in share of high-quality clothes, a drop in prices for originals, and a lack of demand on the market for non-reusables (see chapter 7.1.2). Actors in the European production network have different strategies to increase efficiency of processes and cope with such challenges concerning materiality of collected textiles, which are portrayed in the following.

Due to rising quantities and decreasing qualities of collected clothes, efficiency of collection and sorting processes is becoming more important, safeguarding capture of environmental and economic value. Interviewees had different perceptions with regards to their ability to adjust processes to changing circumstances and price levels.

On the one hand, smaller actors believe that they can adjust their logistical process by for example emptying containers more regularly in order to respond to actual emptying rates or reducing driving distances (Interview 1, 4). A charitable actor in Germany highlighted that loss of quality is compensated through increased collection volumes. In order to achieve this, the organization spends extra resources in search for new container locations, and maintenance of existing relationships to municipalities or parishes. In doing so, the organization has managed to increase competences and consequently decreased its dependence on commercial partnerships (Interview 4). Larger actors on the other hand outlined that they are trying to improve sorting processes as efficiently as possible, by more precise sorting and an increase in sorting categories (Interview 3, 6, 9). A charitable actor in Austria highlighted that despite current fast fashion dynamics, the percentage of textile waste disposed after sorting has been minimized through an optimization and improvement of value-added activities. First, this has been achieved due to more precise sorting processes. Second, the charitable actor intensified training for employees, in order to ensure more efficient processes (Interview 3).

The uncertainty about key export markets requires actors to search for a broader range of sustainable end markets. It is no longer economically viable to only sell cream and high quality goods. There is a need for diversification of export markets in order to sell lower quality goods, despite lower profit margins that can be made from these categories. Interviewees outlined that maximum value of used clothes has to be extracted as efficiently as possible in order to finance sorting (Interview 3, 6, 8, 9). One of the interviewees outlined that there is no strict separation of re-usables and non-reusables within the sector, it depends on the market and on the capability of sorters to find demand for goods (Interview 17). This outlines the importance of broadening the range of export markets as well as continuously searching for new export markets in order to sell a broader fraction of products and squeeze every possible profit out of used textiles (Interview 9). One of the representative of a sorting facility in Austria outlined “it is incredibly important to find a market for every single article, in order to increase the re-use rate” (Interview 3).

Additionally, one of the sorters outlined that the composition of the content of bales is decisive. On the one hand, the sorting facility has to meet expectations of buyers and comply with their own brand value and reputation. On the other hand, profit has to be maximized. While it is crucial that there is a constantly equal amount of high quality

clothes in bales, it would not be possible to sell bales that contain only the highest quality. The representative referred to high quality clothes the sorting facility receives from partner organizations in Munich. Those goods, however, have to be mixed with other inferior stock, meaning unpopular items or lower-quality clothing, before selling to buyers. This is done in order to not increase buyers' expectations for future orders (Interview 9). In this way, power is exercised by actors in the Global North, who are maximising profit by having ascendancy over buyers in the Global South (Brooks 2015). Field (2000) performed research in the UK and quoted a statement of an exporter as follows "If you do the grading properly than there is not vast profits. Whereas if you put things in that people will just about accept without complaint then there is more money to be made and obviously you get a lot more for it." (Field 2000: 160, cited in Brooks 2015: 150). While such commercial strategies performed by actors in the Global North increase their profits and monetary value, they simultaneously decrease possibilities for buyers in the Global South to accumulate profit through importing second-hand clothes (Brooks 2015).

7.4.2 Role of Charity Discourses

The collection of discarded clothes has traditionally been a non-profit domain, dominated by charitable organizations, as people wanted to give old clothes to charities. This charitable connection is still prevailing building on a general trust from society in charitable actors (Interview 17), which strengthens the convergence of social and economic value in trade with second-hand clothes. Watson et al. (2018) present a survey conducted in Gothenburg, which shows that consumers' recycling attitude is a direct driver of charitable donations. The results portray that citizens are concerned about who benefits from their donated clothes and rather bring good quality clothes to charity shops than using provided containers, hence maintaining a personal relationship. More specifically, 60 percent of those citizen who donate their clothes, are motivated by social or humanitarian reasons, while 15 percent donate clothes in order to save resources and hence the environment (Watson et al. 2018). Empirical investigation has shown that clothes that are handed over personally to charitable actors at drop off points, have a better quality and can be sold for higher profit margins by actors. This is especially true for donations to charities, as people want to support charities with old clothes (Interview 17), highlighting how economic value is built on social value. This has also been mentioned by one of the representatives of a charitable sorter in Austria, who outlined that people are donating higher quality goods

because they want to donate and give something to society (Interview 3). Charity discourses greatly influence social ties actors have established within the local community and influence trust and reputation they have gained. This in turn helps actors in the GPN of second-hand clothes to strengthen their local influence as well as visibility, and social embeddedness. Thus, charity discourses are a strong driver for the capture of social value and consequently economic value in the GPN of second-hand clothes.

In this regard, Lemire (2012) highlights that discarded clothes were a charitable currency, which connected households, religious organizations, colonial projects as well as international trade. Empirical investigation shows that most of the interviewed charitable actors still have some kind of affiliation to religious organizations (Interview 1, 2, 3, 4, 7), which portrays second-hand clothes as charitable currency, as outlined by Lemire (2012). Moreover, charities effectively stimulate clothing donations by using various different ethical narratives and images. This charitable connection is also used by commercial actors to increase capture of social and economic value and stimulate donations. Retailers use the image of used clothes as charitable donations for in-store collections, one example is the multinational retailer C&A, who is in a cooperation with a charitable actor, and is spending 50 percent of its profits to the charity. In addition, the retailer is handing out vouchers to people who donate clothes in their stores, in order to encourage consumption. The Clean Clothes Campaign (2019a) outlines that while take-back schemes of retailers are criticized as competition for charitable collectors, they also promote and support the current fast fashion system of consumption and discard (CCK 2019a).

While the provision of used clothing had long been a means of charity, crucial developments in light of the emergence of a capitalist economy tightened the connection between charity and commercial actors in trade with second-hand clothes (Lemire 2012). This highlights the convergence between social and economic value, which leads to a blurred line between commercial and charitable actors in the second-hand clothing trade (Brooks 2015).

7.5 Case Studies

This chapter portrays the different roles Austria, Germany and Morocco play in the GPN of second-hand clothes. The analysis of the case studies offers different insights into the complex structure of the GPN of second-hand clothes, as processes performed

within the production network differ. Whereas the dominant process performed in Austria is collection of used clothes, German actors also perform a crucial part of sorting processes within the country and hence serve a number of end markets in the Global South. Morocco was chosen as a case study for a re-exporting hub, as it offers suitable locations for sorting facilities of discarded clothes. Through the focus on Austria, Germany and Morocco, interlinkages in the GPN of used clothes, and implications on capture and distribution of value within and between the countries are unveiled.

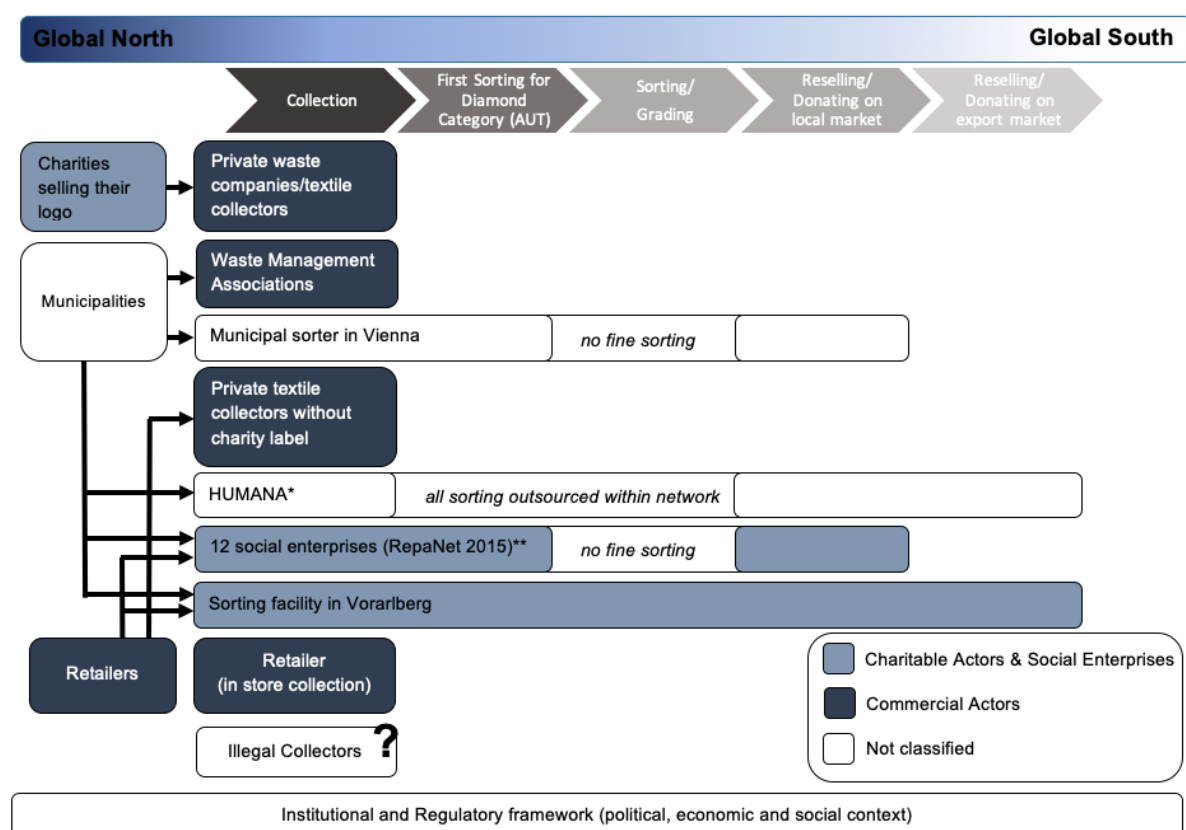
7.5.1 The Role of Austria in the Second-Hand Clothing Trade

The core activity of actors in the second-hand clothing trade in Austria is collection of discarded clothes. The supply on the market greatly outweighs demand (CCK 2019a). Hence, Austria can be classified as an export country within the GPN of second-hand clothes. In 2018, Austria exported USD 24 million worth of worn textiles and clothing. Representing a share of 0.6 percent in the global, and 1.6 percent of the European export market. The main export markets of Austria are situated in Europe. Between 2000 and 2016 they stayed somehow constant, with Italy and Germany being among the top three (WITS 2019). Those countries also have a great number of sorting facilities, hence are not considered as final export destinations of second-hand clothes. In 2016, Germany was on rank three of global exports of second-hand clothes, with a global export value of USD 395 million. Italy on the other hand was the tenth largest global exporter of second-hand clothes with a value of USD 119 million (WITS 2019).

The core activity of the second-hand clothing sector in Austria is collection of clothes, there is a nation-wide collection scheme in place. Second-hand clothing collection was traditionally performed by charities. However, empirical investigation shows an emergence of commercial, for profit organizations with new forms of value capture and different forms of embeddedness in the production network. Figure 10 portrays the Austrian second-hand clothing production network. RepaNet (2017) outlines that collection of used clothes in Austria is performed in seven different forms. In a broad sense, the organization differentiates between commercial actors and social enterprises. More precisely, the collection of used clothes is performed through, first, municipalities collecting for themselves. Second, social enterprises, which comply with the social, economic and ecologic sustainability criteria of RepaNet (2015). In 2019, there were 12 social enterprises active in Austria, which were members of RepaNet, and one social enterprise in Tirol, which was not a member of the umbrella

organization. The remaining part is collected on a purely commercial basis, namely by third, private waste companies using known charity labels. Fourth, private textile collectors using known charity labels. Fifth, private textile collectors without charity labels and sixth, illegal collectors (RepaNet 2015, 2017). Illegal container collection is performed by commercial collectors who place containers without permission from authorities (CCK 2019a). As a seventh form, RepaNet states HUMANA, due to its non-classifiable structure (RepaNet 2015, 2017).

Figure 10 Mapping of the Austrian second-hand clothing production network



* classified by RepaNet (2015) as such, due to non-classified structure

** social enterprises, which comply with the social, economic and ecologic sustainability criteria of RepaNet (2015).

Source: own representation

Collection is predominantly performed through container collection. According to RepaNet (2015), from all clothes, which were collected by ten social enterprises in 2015, 84 percent came from containers and 16 percent from acquisition points. Additionally, some collectors have collaborations with retailers, which supply them with parts of their left-over stock (Interview 2, 3). Empirical investigation shows that some retailers perform their own in store collection of used clothes. In cooperation with textile recyclers, collection containers are set up in their shops. As a return, retailers distribute vouchers to customers who hand in their clothes. The dominant textile recycler

performing in store collection for retailers in Austria is a subsidiary of the biggest textile recycler in Germany. Hence, in a next step, collected clothes are commonly transported to sorting facilities in Germany (CCK 2019a).

As can be seen in Figure 10 with regards to sorting, first sorting for diamonds is predominately the only step performed in Austria. High quality goods can be sold in local shops for high profit margins. In Austria, it is mostly charitable organizations that sell second-hand clothes in their local shops. Additionally, HUMANA Austria established 12 second-hand shops (HUMANA Austria 2017), and in 2015 one municipal sorter opened a second-hand shop in Vienna. This municipal sorter however only has a yearly collection quantity of around 2 tons, which constitutes a small share of the total collection amount of 10,000 tons in Vienna (CCK 2019a). According to RepaNet (2018), 1,689 tons of second-hand clothes were sold in Austria by their member organizations and 9,975 tons were exported in 2017. Social enterprises in Austria sell 15 percent of all their collected clothes in local shops, which accounts for 50 percent of their revenue (RepaNet 2018).

In Austria, only one sorting facility performs in-depth sorting, which is run by a charitable actor and works with government subsidies jobs. The collected clothes are sorted based on 200 sorting categories. The amount of collected clothes in Vorarlberg however, exceeds the resources of the sorting facility, which is why half of the collected clothes are sold as originals to wholesalers with long partnerships mainly located in Eastern Europe (Interview 3). Sorting processes from other actors in the production network of second-hand clothes in Austria are outsourced to sorting facilities in Eastern Europe, Italy, Germany or North Africa (Interview 6, 7, 9, 10). Wagner (2017) highlights that the majority of the sorting operations from Austrian collectors are outsourced due to economic reasons.

Most of the charitable organizations sell collected clothes as originals or deprived goods, which are collected clothes without cream goods, to wholesalers or sorting facilities (Interview 2). Based on data presented by RepaNet in 2015, ten social enterprises in Austria sold 63 percent of deprived goods to wholesale, 23 percent directly to wholesale, meaning without any prior performed sorting process, 9 percent to local shops, 2 percent of collected clothes were donated and 3 percent classified as waste (RepaNet 2015). While most of the actors in Austria are embedded in the GPN of second-hand clothes, connecting a variety of different actors in the process of

recharging discarded textiles with a new value, HUMANA is present on a global level and has an extensive network of sorting facilities and shops located throughout Europe. All clothes collected by the organization in Austria are outsourced to sorting facilities within its global network. There is a daily transport of used clothes collected in Austria from the headquarter in Vienna to sorting plants, which are located in Slovakia, Bulgaria and Turkey. Around 40 percent of collected clothes are sorted in other sorting facilities of the HUMANA network. The clothes are sorted and matched to 12 shops in Vienna, in which the organization sold around 3,34 million pieces in 2016 (HUMANA Austria 2017, HUMANA 2018).

With regards to the market share of commercial and charitable actors in Austria, according to research conducted by RepaNet (2015), around 30 percent of the collection of used clothes in 2015 has been provided by 12 member organizations, the rest is collected on a purely commercial basis. Regarding the amount of clothes collected by single actors, one of the charitable actors active in Vienna operates 300 collection containers (Interview 2), the charitable actor who operates a sorting facility in Vorarlberg has 400 collection containers placed throughout the province (Interview 3). The biggest private textile collector in Austria established 5,000 collection containers in Vienna and East Austria, and collects around 6,000 to 7,000 tons annually (CCK 2019a). The commercial actor cooperates with charitable actors in Austria and pays a fee for using their logo (Interview 7, 10). In comparison, HUMANA Austria had 2,253 clothing containers in place and collected around 7,000 tons of discarded clothes in 2017 (HUMANA Austria 2017). According to Wagner (2017) each year around 13.4 kilograms of textiles are discarded per person in Austria. As can be seen in Table 3, in total more than 115,000 tones of used textiles are discarded in Austria every year. From which around 70,000 tons directly land in residual waste and only around 40,000 tons are collected (RepaNet 2015).

Table 3 Quantity of discarded and collected textiles in Austria

Textiles in Residual Waste	71,000 t
Illegal Collection	8,800 t
Commercial Collectors*	19,500 t
Charitable/Social Collectors	15,500 t
Total Amount	114,800 t
Total/Per Head	13.5 kg

* Including commercial actors using a charity label, including HUMANA Austria
Source: CCK 2019; RepaNet 2015; Wagner 2017

Summing up, in the exporting focused country Austria, both charitable as well as commercial actors are active in collection of clothes. Predominantly charitable actors perform the first sorting for diamonds, which are sold for high profit margins in local shops. Collected clothes are sold to commercial sorting facilities in Eastern Europe, Italy, Germany or North Africa. With the exception of the sorting facility of a charitable sorter in Vorarlberg, which performs all of the activities in the production network of second-hand clothes from collection to redistribution on local and export markets. Against this background, it can be seen that Austria predominantly exports collected textiles without prior sorting, except of the sorting facility in Vorarlberg. HUMANA Austria has a different production network, as sorting processes are outsourced within the HUMANA network, however not performed in Austria due to high labour costs. Even though there is a nation-wide collection scheme in place, a huge quantity, more than 60 percent of used textiles still land in residual waste (Table 3).

7.5.2 The Role of Germany in the Second-Hand Clothing Trade

Germany's role in second-hand clothing trade is crucial due to the large quantities of second-hand clothes collected through nation-wide collection schemes. In 2011, Germany had a 70 percent collection rate, which was above average within European Member States (European Union 2019). The country has a great number of sorting facilities and empirical research as well as trade data shows that due to its sorting capacity, the country is able to serve export markets in the Global South. As opposed to Austria, which predominantly exports originals or deprived goods, as there is only one sorting facility who performs fine sorting matched to the export markets in the Global South. In 2018, Germany's share in the global export market for worn textiles and clothing was estimated to account for 9.9 percent, with a trade value of around USD 411 million. As can be seen in Figure 5, Germany was the third largest exporter of second-hand clothes in 2018 and 2010. The Netherlands and Poland were the main two export markets between 2010 and 2018. Exports to Sub Saharan African countries accounted for around 19 percent in 2018, while in 2010 the share was higher, estimated at 29.8 percent. Germany exported second-hand clothes worth of USD 185 million to EU27 countries, accounting for a share of 44.9 percent of all German exports in 2018 (WITS 2019). Empirical investigation shows that while a great number of clothes collected in Germany are sorted within the country. The rising collection quantity, however exceed capacities of sorting facilities, which is why used textiles are exported without prior sorting to sorting facilities abroad.

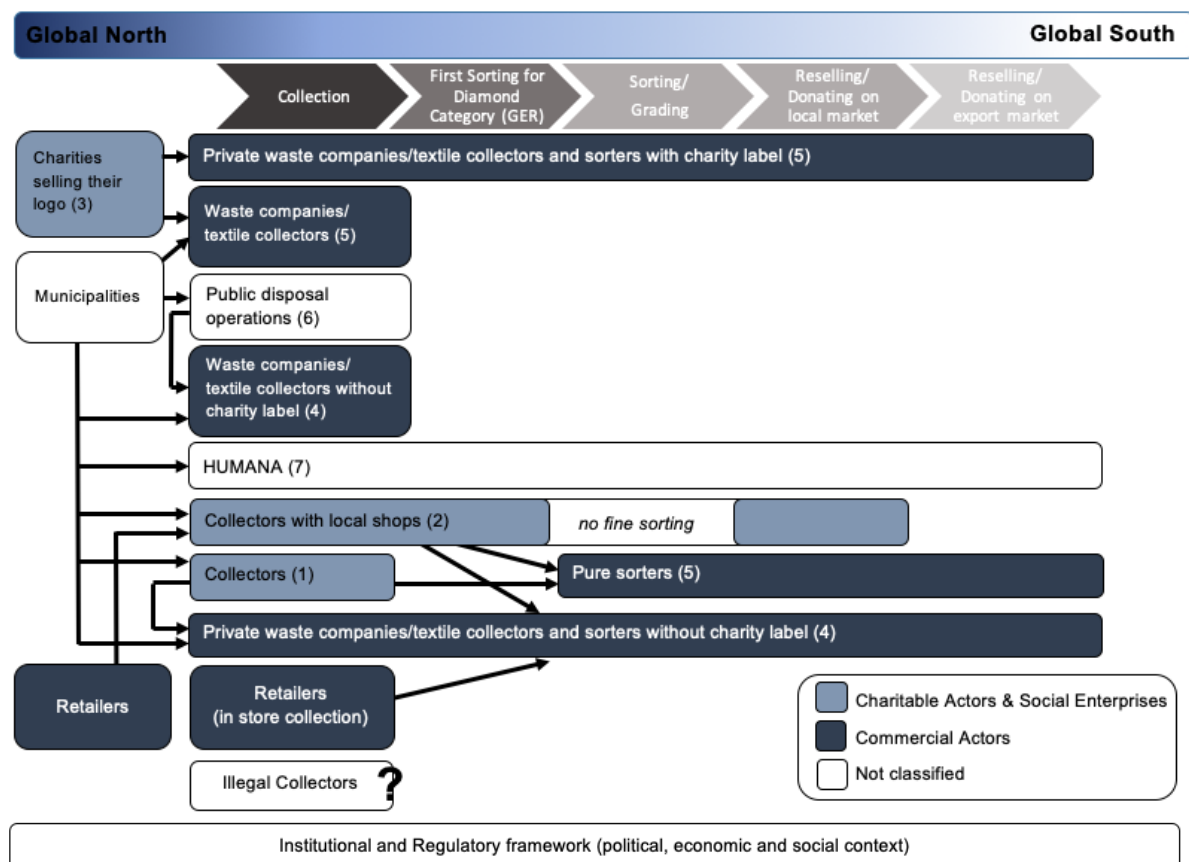
Germany plays a crucial role in the GPN of second-hand clothes, due to its sorting capacity. The sorting facilities greatly differ concerning their capacities, according to one of the interviewees there is three major players in the market, sorting around 50 tons a day in peak times, further there is a large number of medium-sized companies processing around 5 to 7 tons a day, and various small-sized sorting companies (Interview 17). One of the interviewees from an interest group for sorters highlights that Germany has a long history in second-hand clothing trade, and actors build up extensive knowledge and skills over the years. The interest group represents the six biggest sorting facilities in Germany, which, including their affiliated sorting companies, represent the vast majority, namely around one third, of the domestic sorting capacity. Among the six shareholders is the biggest sorter with a yearly amount of sorted textiles of 90,000 tons. The sorting facilities however have different capacities, and some are also present in other European countries (Interview 15). The German national recycling association has around 130, predominantly commercial member organizations, which are active in collection, sorting and redistribution of used clothes (CCK 2019a). In a study published by the national recycling association, with data based on their member organizations, in 2013, around one million tons of used textiles were collected. This number increased from 750,000 tons in 2007. Out of those collected clothes, 93 percent are sorted in the EU, 66 percent of these in Germany (BVSE 2015).

As can be seen in Figure 11, the German production network of second-hand clothes is characterized by various interlinkages between commercial and charitable actors. One of the representatives of an advocacy group in Germany outlined that considering the following differentiation would give more insights on degree of dependence, and hence the power position of actors. Charitable organizations can be classified based on; first, the scope of clothing collection; is it just a side business for the organization or does it constitute the main business, meaning that the organization's exclusive field of activity is collection of old clothes and used articles, such as electronic waste. Second, which processes take place; does the organization redistribute collected clothes without prior sorting (1), or does the organization perform its own sorting processes and redistributes parts of collected and sorted goods in its own shops (2), meaning that the organization prepares discarded goods for re-use. Third, does the organization perform its own collection or does it sell its logo to another actor (3) (Interview 17). Empirical research shows that charitable organizations are

predominantly collectors, some also sort discarded clothes for redistribution in their local shops.

Commercial actors on the other hand can be classified based on whether they perform their own collection (4), or are in a cooperation with charitable actors (5). Hence, either purchase quantities of original goods from charitable actors, or perform collection of clothes under the name of a charitable actor (Interview 17). According to the national recycling association, around 63 percent of commercial actors are in a cooperation with a charitable actor (BVSE 2015). Further, commercial actors can be differentiated based on which processes they perform, such as if they are active in collection, sorting or redistribution of second-hand clothes on export markets or local markets, through their own shops (Interview 17). Additionally, empirical investigation shows that the number of commercial actors that operate online shops for second-hand clothes, predominantly cream goods, increased in recent years. Those actors can be associated with category (4) textile collectors and sorters without charity label, and are an important category to consider.

Figure 11 Mapping of the German second-hand clothing production network



Note: (7) classified by RepaNet (2015) as such, due to non-classified structure
Source: own representation

Additional actors in the German production network of second-hand clothes are municipalities, who either perform collection themselves through public disposal operations (6), or outsource activities to external actors. Collections are classified as illegal, if the collector does not comply with national waste policies, nor rights of owners of private or public properties (BVSE 2015). Retailers form another actor group, they either perform their own in-store collection or distribute unsold stock to charitable or commercial actors (Interview 1, 4, 9). Empirical investigation showed that sorting facilities in Germany provide different kind of services for retailers to handle the end-of life of their products (Interview 9). The biggest sorter in Germany has a subsidiary, which is active on a global level and performs in-store collection for multinational retailers such as H&M, C&A, Levi's or Forever 21 (CCK 2019a). Further, HUMANA (7) is also active on the German market, and runs a sorting facility and around 21 second-hand clothing shops (HUMANA 2018).

Due to the complexity of the market in Germany, there are no exact numbers about the market share of commercial and charitable actors (Interview 13, 17). The umbrella organization for non-profit collectors in Germany has around 130 member organizations. The national recycling association also counts 130 members (CCK 2019a), from which 90 percent are located in Germany. The biggest commercial collector in Austria is also a member of the German recycling association (Interview 13). It is noticeable that charitable actors are predominantly active in collection of used clothes (BVSE 2015). The largest charitable collector in Germany has a yearly collection rate of 10,000 tons (Interview 1). Commercial actors on the other hand, as opposed to Austria, also perform sorting processes within Germany and in general have bigger collection quantities than charitable actors. One of the interviewed sorters outlined that they collected around 80,000 tons of discarded clothes, having 15,000 collection containers in place, which are predominantly placed in Germany (8,000) and Switzerland (6,000), in addition to collected clothes they receive from charities. In the sorting facility in Germany, around 23,000 tons are sorted annually (Interview 8).

Summing up, Germany plays a crucial role as an exporting country in the GPN of second-hand clothes, ranked on the third place of top exporters in 2010 and 2018 and exports second-hand clothes to countries of the Global South (WITS 2019). Similar to Austria, the country is characterized by a nation-wide collection scheme with charitable and commercial actors sharing the market. The role of municipalities and retailers has gained in importance, increasing competition on the market. The rising quantity of

collected goods however, exceeds sorting capacities which is why used textiles are exported without prior sorting to sorting facilities abroad, highlighting the crucial role of re-exporting hubs in the trade with used clothes.

7.5.3 Morocco's Role in the Second-Hand Clothing Trade

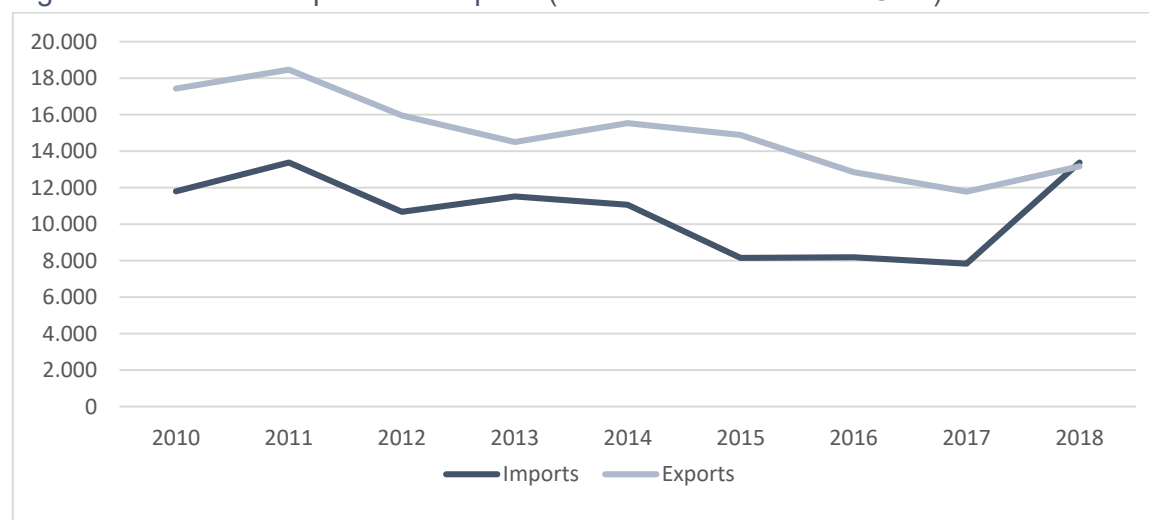
Morocco can be classified as a re-exporting country of second-hand clothes. The country offers suitable locations for commercial actors due to its proximity to the European market, its special economic trading zone in the North and its cheap, semi-skilled labour force (Böhmer 2011). International as well as European sorters established sorting facilities in the North of Morocco (Norris 2015; TEXAID 2018). One of the representatives of a sorting facility highlighted that the geographic proximity to the African market is one of the reasons why they offshored sorting processes to Morocco. They would benefit from the proximity to sales markets and can actively influence the value chain (Interview 8). The advantages of Morocco for offshoring sorting processes has also been mentioned by a German sorter, who outlined that geographical proximity used to be the main reason for its favourable location. Due to a rise in labour costs in Europe however, the main reason nowadays is its cheap labour force. According to the interviewee, labour costs in their Moroccan sorting facility are by far cheaper compared to sorting facilities they run in Eastern European countries. The interviewee outlined that mainly actors from Belgium, the Netherlands and Germany established sorting facilities in the special economic trading zone (Interview 9). One of the interviewees summarized the strategic importance of Morocco as a location for sorting facilities as follows. First, due to its geographical importance and its proximity to the ports, Morocco functions as a transshipment hub between Europe and West Africa. Second, the special economic zone offers European actors duty-free imports. Third, the institutional and regulatory framework is beneficial for sorters, with regards to a cheap-semi-skilled labour force and less strict regulations concerning recycling of textile waste, the proportion of clothing that is not suitable for second-hand clothing markets (Interview 14).

Since 2017, according to import statistics of the Moroccan government, the country did not register any imports or exports of second-hand clothes. According to the Moroccan customs and tax authorities, second-hand clothing imports are subjected to 30 percent duty tax, 25 percent parafiscal import tax and 20 percent value-added tax on imports (ADiL 2020). As of 2018, according to OTEXA, an import certification is required, which is not granted however due to health and safety reasons and to protect the local

market. Hence, OTEXA outlines that import prohibitions for second-hand clothes apply for Morocco (OTEXA 2018). This has also been supported by representatives of an organization, who runs a sorting facility in the special economic trading zone in Northern Morocco. The interviewees outlined that due to strict import restrictions, used clothes are directly re-exported to Western African markets from the sorting facility, and do not enter the Moroccan market (Interview 8, 9). According to import statistics provided by the Moroccan government, until 2017, Germany, Belgium, the UK and Spain were the main exporter of second-hand clothes to Morocco (ADiL 2020).

As opposed to information provided by the Moroccan government, when looking at trade data published by UN COMTRADE, Morocco has still been registering imports and exports of worn textiles and clothing (HS 6309). This can be seen in Figure 5, where Morocco is positioned on rank 26 of export countries with a trade value of around USD 17 million, just after Austria (rank 25) and before Denmark (rank 27). In 2018, the country was on rank 30, exporting around USD 13 million worth of used clothes. Figure 12 portrays imports and exports of used clothing from 2010 until 2018, showing that used clothes have still been imported and exported on a rather consistent basis (WITS 2019). According to information obtained by various interviewees, second-hand clothes still enter Morocco and are sold on markets throughout the country. The interviewees however outlined that second-hand clothes only enter the market through smuggling via Spanish enclaves in the North (Interview 11, 14). This point has also been highlighted by Arenas et al. (2015), who portray that imposed restrictions on used clothing led to cross border smuggling in countries such as Morocco.

Figure 12 Moroccan imports and exports (trade value in thousand USD)



Notes: Received data shows major discrepancies with mirror data, this is mainly due to factors such as cross-border smuggling or illegal transshipments (Brooks & Simon 2012)

Source: WITS (wits.worldbank.org)

As outlined in chapter 5.1, countries in the GPN of second-hand clothes can also be classified based on cultural aspects. In Morocco, second-hand clothes are mainly sold on local markets, so called “Souks”. The interviewees in Morocco stressed that the image of buying second-hand clothes at Souks is often really negative, associated with low quality, dirty clothes. Generally, the middle class and people with greater economic resources are not the target group of traders on local markets. Empirical investigation however showed that as observed in Austria and Germany, where second-hand clothing shops have been starting to attract younger population group, this is also the case in Morocco (Interview 11, 14). One of the interviewees in Morocco opened a second-hand shop in 2017, to respond to demand for second-hand fashion from young population groups of the middle and upper class. The existence of second-hand shops in Morocco is a rather recent phenomenon. “The target group of the second-hand shops here is mainly the younger population, who want to buy branded items and follow the latest fashion trends” (Interview 11). In general, however, empirical investigation showed that among the actors interviewed in Germany and Austria, Morocco has not been mentioned as a popular export market for second-hand clothes.

Summing up, the role of Morocco in the GPN of second-hand clothes as a re-exporting hub for second-hand clothes and a suitable location for sorting facilities is a result of the country’s proximity to the European and African markets, its special economic zone in the North, cheap-labour force and less strict environmental and social regulations. All of these factors offer benefits for actors, which establish sorting facilities in Morocco, due to greater efficiency of process and labour, ultimately enabling capture and distribution of economic value.

8 Key Findings and Conclusion

This thesis has analysed value capture and distribution in second-hand clothing trade from the perspective of Europe, focusing on three countries namely Austria, Germany and Morocco given their different position in the GPN of second-hand clothes. The analysis provided in this thesis is one attempt to stretch the GPN approach, a framework that is initially derived in relation to primary production, to comprise goods which return to commodity form. In order to analyse the end of life of discarded clothes, the GPN approach is stretched by looking at waste through the lens of Discard Studies. In doing so, it emphasizes the historical and remaining importance of charity discourses and rising necessity of commercial strategies to comply with increasing

environmental concerns and measures taken on a policy level on the one hand and with negative impacts of prevailing consumer models encompassed by fast fashion dynamics on the other hand. The key findings from the empirical research can be summarized as follows.

What are the key processes in second-hand clothing production networks in Europe and which roles do Austria, Germany and Morocco play in these networks?

The GPN approach has been used to analyse the organization and governance of processes in the second-hand clothing trade. The GPN mapping of the key processes shows that the global trade with second-hand clothes is characterized by a surplus of discarded clothes collected mainly in the Global North, reproduced as a commodity and sold on the international market. The key processes within the European production network of second-hand clothes are collection, first sorting for diamonds, more precise sorting based on material quality and export destinations, and redistribution on local or export markets. The geographical segmentation of those processes and trade patterns of discarded clothes are influenced by the embeddedness and power position of actors and institutional and regulatory frameworks. Most of the value-added activities however remain at the initial stages of the trade with used clothes in Europe. This leads to an uneven capture of value and economic growth within and between countries, as well as between actors involved.

The key processes performed in Austria, Germany and Morocco differ, and the countries occupy different roles in the production network of used clothes. Austria and Germany are considered as export countries of second-hand clothes, given their nation-wide collection schemes. The dominant process performed by Austrian actors is collection of discarded clothes. Mostly charitable actors in Austria perform first sorting for diamonds, for redistribution in their local shops. The remaining part of the collected textiles are exported as originals or deprived goods to sorting facilities or wholesalers in countries in Eastern Europe, Italy, Germany or North Africa. There is only one sorting facility run by a charitable actor in Austria, which performs fine sorting matched to local and export markets. Conversely, German actors also perform sorting processes within the country and hence directly serve a number of end markets. The rising collection quantity, however, exceeds capacities of sorting facilities, which is why used textiles are also exported without prior sorting to sorting facilities abroad. Germany was the third largest exporter of second-hand clothes in 2018 (WITS 2019).

Morocco on the other hand can be considered as a re-exporting country, functioning as a transshipment hub between Europe and West Africa, due to its geographic importance and its proximity to the ports. The country cannot be considered as an import market, as Morocco imposed import prohibitions for second-hand clothes. Officially used clothing is only entering the country through the special economic zone in the North, where commercial actors are running sorting facilities, and benefit from the cheap, semi-skilled labour force and less strict social and environmental regulations concerning recycling of textile waste. After the sorting, used clothes are re-exported to predominantly Western African markets. The different role of the three countries in the GPN of second-hand clothes offers insights into the complex structure of the trade with discarded clothes, and portrays interlinkages within and between countries that are crucial for the capture of value out of used clothes.

What is the role of charitable and commercial actors in the second-hand clothing trade in Europe and what are the interlinkages between these actors in Austria, Germany and Morocco?

The initial stages of the second-hand clothing trade in Europe are dominated by various charitable and commercial actors, which perform different process to recharge discarded clothes with a new value. Historically, charitable actors were the dominant force in the European production network of second-hand clothes (Lemire 2012). This is still the case in a lot of European countries, such as France or Greece. Although, collection of discarded clothes in Austria and Germany has a really long tradition and crucial connection to charitable donations, which is still prevailing, the countries are characterized by more decentralized structures, with a lot of charitable and commercial actors sharing the market. From a social perspective, the role of charitable and commercial actors in the GPN of second-hand clothes differs. As opposed to commercial actors, charitable actors predominantly reinvest economic value that is captured into the local community. Hence, charitable actors in the second-hand clothing trade in Europe play a key role as they occupy a space between the public and for-profit sector on the basis that they provide supplementary services and socio economic contributions to core public service provision. This is mainly done through job creation for socially disadvantaged population groups, and long-term unemployed people, distribution of quality-cheap clothes to people with low incomes in local second-hand shops, and supply of clothes to the most deprived people.

With regards to the environmental perspective, various developments such as fast fashion dynamics, rising environmental concerns and the amendment of waste treatment policies changed the actor level in the second-hand clothing production network in Europe. The role of charitable actors expanded from their ethical and social responsibility of handling clothing donations, to playing an essential role in textile waste management. However, due to a lack of resources and knowledge with regards to professional sorting processes and knowledge about export markets, activities beyond collection of discarded goods often surpasses the capabilities of charitable actors. Hence, charitable organizations are often dependent on commercial actors, as they provide greater resources and expertise with regards to handling of textile waste, and are better integrated into global sales networks. The Waste Framework Directive is the binding legislative for handling waste within the EU, which together with the adopted Circular Economy Package sets targets for handling textile waste within the Member States. In this regard, actors in the second-hand clothing sector fulfil a crucial role in textile waste management, by following a joint interest of implementing activities based on prioritization of the waste hierarchy.

The trade of second-hand clothes is highly dependent on established networks, and strategic collaborations between actors involved. On the one hand, charitable and commercial actors in Austria, Germany and Morocco are interlinked through export of used clothes. The higher the degree of embeddedness of actors in the global sales network, the greater their possibility for value capture. On the other hand, actors in Austria, Germany and Morocco are connected through outsourcing of labour processes. Austria and Germany have high collection rates of used textiles. However, local sorting in Western European countries is not economically viable, due to high labour costs. Outsourcing of labour-intense processes to countries in the Global South enables actors in the Global North to extract more value from resource recovery, due to cheap labour costs, and less stringent environmental regulations. Morocco is one of those countries, which institutional and regulatory framework is beneficial for actors in the Global North. Hence, it is noticeable that interlinkages between actors in the GPN of second-hand clothes are essential for capture and distribution of value. In this regard, the international division of labour is a crucial determinant of the transformation of discarded clothes into value. Actors at the initial stages of the GPN in Europe are able to extract more value from resource recovery, which leads to uneven power distribution and value capture between countries in the GPN of second-hand clothes,

sparking off questions with regards to impacts on countries in the Global South, in this case Morocco, with regards to working conditions, and environmental concerns.

Which social, political and economic contextual factors influence the trade with second-hand clothes as well as value capture and distribution within and between Austria, Germany and Morocco?

There is a complex connection between disposal practices, waste management, donations and environmental acts. Second-hand fashion and recycling systems have a greater visibility in the Global North, than second-hand clothing exports to countries of the Global South. The intertwined social, political and economic contextual factors, which are embedded in the institutional and regulatory environment, determine patterns and processes as well as the role of actors involved in trade with used clothes. Ultimately, they influence the extent to which actors are able to capture and distribute value out of discarded clothes, and influence how the flow of used clothes connects Austria, Germany and Morocco.

Social contextual factors are shaped by perceptions of second-hand clothes and materiality, awareness of the value of discarded clothes and proper disposal practices. In this sense Moore (2012) highlights that local perceptions about materiality determine “transformation of what is waste in one place into what is value elsewhere” (Moore 2012: 6). Further, social factors concern relations between actors involved in the GPN of second-hand clothes and society. In this regard, charitable discourses play a crucial role and impact embeddedness as well as power positions of actors, and consequently processes performed by those actors in Austria, Germany and Morocco.

The global and local political context influences the structure of the actor level, and the role different actors have in the GPN of second-hand clothes. Local political contextual factors in Austria and Germany concern the implementation of waste policies, collection activities of actors, and state support with regards to government subsidized working places, which predominantly influences charitable actors. Local and national waste policies in Germany and Austria are bound by the Waste Framework Directive, which constitutes the legislative framework for handling waste within the EU. Further, the global political framework takes contextual factors on a broader level into account, such as conditions in export markets and policies that consider trade of textile waste between nations. Among others, the classification of materials and their standards, which can prohibit movement of textile waste or can determine textile waste as a

resource. This is especially important in the case of Morocco; as second-hand clothing imports are subjected to import restrictions. Due to cheap-semi skilled labour force and less strict environmental regulations, however, commercial actors from countries in the Global North established sorting facilities in Morocco. Hence, further political contextual factors influencing capture and distribution of value within and between Austria, Germany and Morocco are regulations regarding wages and environmental policies.

Economic factors shape supply of discarded and donated clothes in Austria and Germany, and demand of used clothing on the market. Therefore, influencing the capture and distribution of value. The supply of discarded goods is inelastic and not determined by demand, but by developments of the global economy and markets, such as current fast fashion dynamics and the strive towards a circular economy, supported by policy makers and industry stakeholders. Further, technological advancements with regards to increased digitalization have an impact on supply of second-hand clothes. Demand on the other hand is influenced by availability and development of export and local markets. Increased trade barriers on the global market influence capture and distribution of value from discarded clothes. Economic contextual factors have an impact on ultimate destinations of used clothes and have a crucial effect on prices, hence the extent to which actors can extract value out of discarded clothes.

How is economic, social and environmental value captured and distributed at the initial stages of the trade with used clothes in Europe and particularly in Austria, Germany and Morocco?

Throughout the production network of second-hand clothes, various types of value are captured and distributed. Both charitable and commercial actors strive to realize latent value in discarded clothes and distribute them for a maximum value. Consequently, a used clothing system of provision at the initial stages of the trade in Europe evolved, connecting charitable donations to efficient commercial actors in order to maximize profits from the trade with second-hand clothes. Initially, the predominant value captured from used clothes was an intangible, social value and charitable actors were the dominant force on the market in a lot of European countries, such as Germany and Austria. Nowadays, however, discarded textiles are increasingly seen as a resource, containing different economic, social and environmental values, tightening the connection between charitable and commercial actors. Against this background, Crang

et al. (2013) stress that capture of value from used goods challenges key assumptions of GPN approaches. The empirical findings provided in this thesis therefore qualify prevailing GPN approaches and can be used to better understand the global trade with second-hand clothes.

The dominant value captured from discarded clothes is economic value, which is captured through the power of an actor in relation to other actors in the GPN (Sandberg et al. 2018). Economic value of used textiles depends almost entirely on the re-usable component. While charitable organizations in Austria and Germany predominantly capture economic value through redistribution of high-quality goods in local second-hand shops, commercial actors capture value through redistribution of used clothes on export markets. Due to a lack of resources, charitable actors in Austria and Germany often depend on commercial actors to perform processes that outweigh their capacities in order to increase capture of economic value. The economic success of processes throughout the GPN depends on efficiency and capability of actors to extract value out of heterogeneous materials, in which labour and materiality are key determinants. Due to changing developments with regards to decreasing material quality and an increase in labour costs in European countries, offshore reprocessing centres for sorting discarded clothes, which are based on cheap labour sources have increased (Crang et al. 2013). Morocco is one of the countries in which sorting facilities are set up by commercial actors striving to increase value capture from resource recovery due to cheap labour costs and less stringent environmental regulations.

Mainly charitable actors capture and distribute social value, and hence reinforce the role of charity discourses at the initial stages of the production network of used clothes. The tradition of the second-hand clothing trade in Europe, and especially Austria and Germany, as a socially significant means of charity still has a crucial influence on the development of the present system of used-clothing provision and is a strong driver for capture of value. Actors at the initial stages of the GPN in Europe effectively stimulate clothing donations by using different ethical narratives and images. On the one hand, discarded clothes hold social value as re-use and recycling activities create jobs and employment for socially disadvantaged population groups, and profits are often used for social integration measures for disadvantaged people or other poverty reduction and prevention measures. On the other hand, actors try to hold on to prevailing charity discourses, and are instrumentalizing social value to capture economic value. In this

way, commercial actors benefit from a cooperation with charitable actors, which portrays the convergence of economic with social value.

Environmental value is captured by charitable and commercial actors through environmental performances, following the prioritization of the waste hierarchy. The higher the quantity classified as re-use, the greater the environmental value added. In this way, actors capture environmental value by saving resources through processes of collecting and sorting discarded textiles for redistribution, hence preparation for re-use, recycling, other recovery, and disposal. Charitable actors in some cases capture environmental value through activities directed at promoting prevention of textile waste in the first place. Further, Schenkel et al. (2015) highlight that environmental value is captured through a “green” sustainable image towards society in general. This “green” sustainable image actors try to preserve is triggered through a rising importance of sustainability and ecological aspects of fast fashion dynamics. In this way, actors in the GPN of second-hand clothes, predominantly commercial actors, are instrumentalizing environmental value in order to capture economic value. This unveils how actors apply highly organized commercial strategies in order to redistribute their goods on local and export markets, by transforming intangible value into tangible, monetary value.

Given the lack of research on the second-hand clothing trade, the empirical research provided in this thesis along with other studies such as Brooks (2012a) may be used to stretch the GPN approach in order to analyse neglected end points of the international trade with used textiles. Primarily, the thesis contributes to understanding the initial stages of the production network of used clothes in the Global North and particularly Europe. By giving closer insights on value capture and distribution, power relations, governance and sustainability between countries of the Global North and the Global South, it provides an important contribution to the field of Development Studies. However, the empirical research strongly focuses on Europe, and more particularly on Austria, Germany and Morocco. In order to avoid such a bias towards the Global North and obtain a comprehensive understanding of the entire second-hand clothing trade, further research is necessary. In particular, there is a need for complementary investigation into implications and external effects of second-hand clothing exports to countries of the Global South. More detailed examination is necessary with regards to

local environmental impacts of imported textiles for second-hand clothing markets, as well as in regions where sorting facilities are set up, which normally have lax regulations with regards to social and environmental standards. Additionally, more research is needed on how European waste management policies affect labour and working conditions for employees in resource recovery within the production network of second-hand clothes, and through outsourcing of labour intense processes in countries of the Global South. Further in-depth research will offer a better understanding of the scope of agency emanating from countries in the Global South and portray ways in which they are inserted in the GPN of second-hand clothes. Ultimately, complementing empirical findings on the initial stages of the production network of second-hand clothes portrayed in this thesis and shedding light on the wider impact of the second-hand clothing trade with regards to political, social and economic concerns.

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10 Annex

Annex I: Overview of Interviewees

No	Activity	Actor	Presence	Date
# 1	Collectors	Charitable Actor	Germany	Aug. 13, 2019
# 2		Charitable Actor	Austria	April 12, 2019
# 3		Charitable Actor	Austria	July 13, 2019
# 4		Charitable Actor	Germany	July 30, 2019
# 5		Charitable Actor	Belgium	Sept. 24, 2019
# 6		Mixed Form	Austria	March 14, 2019

# 7		Charitable Actor	Austria	March 26, 2019
# 8	Sorters & Wholesalers	Mixed Form	Switzerland	Sept. 13, 2019
# 9		Mixed Form	Germany	Aug. 7, 2019
# 10		Commercial Actor	Austria	May 29, 2019
# 11		Commercial Actor	Morocco	Sept. 16, 2019
# 12	Industry Organizations	Textile Association	Morocco	Sept 26, 2019
# 13		Textile Recycling Association	Germany	Aug. 15, 2019
# 14		Foreign Trade Office	Morocco	Sept. 12, 2019
# 15		Interest Group for Textile Sorters	Germany	Aug. 20, 2019
# 16		Free Trade Zone	Morocco	Sept. 15, 2019
# 17	Advocacy/Interest Groups	Umbrella Organization for Non-profit Collectors	Germany	Aug. 6, 2019
# 18		Multi-Stakeholder Initiative – Partnership for Sustainable Textiles	Germany	Aug. 22, 2019
# 19		Interest Group for European Social- and Solidary Based Enterprises	Global	Sept. 24, 2019
# 20		Re-use and Repair Network for Social Enterprises	Austria	May 17, 2019
# 21		Umbrella Association for Recycling and Re-use of European Social Enterprises	Global	Sept. 13, 2019
# 22		Research Institute for Economy and Ecumenism	Germany	Aug. 19, 2019

Source: own representation

Annex II: Questionnaire

Questionnaire for Representatives of Collectors and Sorters

Interview partner:

Date & Place:

Duration of the interview:

Thanking for the willingness to interview

Clarifying the purpose of the interview and explaining the benefits of the data

Assure **anonymity**

Notes/Recording

Important: critical statements are also possible (anonymity is guaranteed)

General questions about the organization

1. How would you position [*name of organization*] in the second-hand clothing production network?
2. What are the main activities of [*name of organization*]?

Value creation process

3. Which labour processes are performed in order to transform used clothes into re-sellable commodities?
4. Which processes are outsourced?

Collection activities

5. How do you proceed to collect old clothes?
6. How many containers are placed by [*name of organization*] and where? / How many tons do you collect annually?
7. How do you work together with the municipalities to secure the container locations?

Sorting (if performed)

8. Where do you sort the collected clothes?
9. Based on which characteristics do you sort the clothes?
10. What is the percentage that is sorted in your facilities, how much is resold as original?

Trade

11. What are the first export countries/partners and buyers?
12. Which actors are involved on a national and international level?
13. Based on which criteria/standards do you choose your partners?

Network

14. How is [*name of organization*] globally and nationally networked?
15. How are the interests of [*name of organization*] represented on a national and international level?

Challenges/advantages

16. What are the main challenges?
17. How did your strategies change since the foundation?

General questions about the trade with used clothes

Role of countries

1. How would you position [*name of the country the organization is active in*] in the trade with used clothes? This role change?
2. How would you cluster countries based on their role in the second-hand clothing trade?

Actor level

3. Who are the actors involved in the trade with second-hand clothes?
4. How would you describe the role of charitable enterprises and social businesses in the second-hand clothing trade?
5. How would you describe the role of commercial actors in the second-hand clothing trade?
6. How did the actor level change since the foundation of [*name of organization*]?

Framework conditions

7. Which external factors influence the trade with used clothes?
8. How do changes on a European Union policy level influence the work of [*name of organization*] (especially with regards to the Waste Directive Framework)?

Future developments

9. What are current developments regarding the trade of second-hand clothes?
 10. What is the position of [*name of organization*] with regards to Extended Producer Responsibility?
-

Open questions

Questionnaire for Representatives of Advocacy/Interest Groups or Industry Associations

Interview partner:

Date & Place:

Duration of the interview:

Thanking for the willingness to interview

Clarifying the purpose of the interview and explaining the benefits of the data

Assure **anonymity**

Notes/Recording

Important: critical statements are also possible (anonymity is guaranteed)

General questions about the organization

1. How would you define the role of [*name of organization*] in the trade with used textiles?
2. What is the reason for the foundation of [*name of organization*]?
3. How does [*name of organization*] pursue its goals?

Member organizations

4. Who are the member organizations?

5. Which criteria do organizations have to meet in order to become a member?
6. How does [*name of organization*] represent the interest of their members?
7. In which countries is [*name of organization*] present?

Network

8. How is [*name of organization*] globally and nationally networked?
9. How are your member organizations represented on a national and international level?

Development

10. What are the challenges [*name of organization*] is facing when representing its member organizations in the GPN of second-hand clothes?
11. Which external factors influence the work of [*name of organization*]?
12. How did strategies change since the foundation of [*name of organization*]?

General questions about the trade with used clothes

Role of countries

1. How would you position [*name of the country the organization is active in*] in the trade with used clothes? How did this role change?
2. How would you cluster countries based on their role in the second-hand clothing trade?

Actor level

3. Who are the actors involved in the trade with second-hand clothes?
4. How would you describe the role of charitable enterprises and social businesses in the second-hand clothing trade?
5. How would you describe the role of commercial actors in the second-hand clothing trade?
6. How did the actor level change since the foundation of [*name of organization*]?

Framework conditions

7. Which external factors influence the trade with used clothes?
8. How do changes on a European Union policy level influence the work of [*name of organization*] (especially with regards to the Waste Directive Framework)?

Future developments

9. What are current developments regarding the trade of second-hand clothes?
 10. What is the position of [*name of organization*] with regards to Extended Producer Responsibility?
-

Open questions