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„Organizational Legitimacy of International Business. An Analysis focusing on Location Strategy, European Environmental and Social Standards“

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## Abstract

Organizational Legitimacy is seen as a fundamental resource for corporations to justify their entrepreneurial activities in society. Different types of Organizational Legitimacy are distinguished, namely cognitive, pragmatic, moral and regulative legitimacy. All these subgroups have different spheres of action and are interrelated through interactions.

With the internationalization of companies, negative side effects of this international entrepreneurial activity have been described in the literature due to lower production standards in the new offshore production countries. These side effects have an environmental or social character and severely damage organizational legitimacy. In this thesis, the influence of these side effects on Organizational legitimacy was measured against the background of European environmental and social minimum standards. For this purpose, a choice-based conjoint analysis was conducted.

**Key words:** Organizational Legitimacy, International Production, Manufacturing, Environmental Production Standards, Social Production Standards, offshoring, reshoring, unintended side effects

## Abstract in German

Die Organizational Legitimacy gilt als grundlegende Ressource für Unternehmen ihre unternehmerischen Handlungen in der Gesellschaft zu rechtfertigen. Dabei werden verschiedene Arten von Organizational Legitimacy unterschieden, nämlich die kognitive, die pragmatische, die moralische und die regulative Legitimität. Alle diese Untergruppen haben unterschiedliche Wirkungsbereiche und stehen durch Wechselwirkungen miteinander in Verbindung. Durch die Internationalisierung von Unternehmen wurden in der Literatur negative Nebeneffekte dieses internationalen unternehmerischen Handelns durch schlechtere Produktionsstandards in den neuen Produktionsländern beschrieben. Diese Nebeneffekte haben dabei umweltlichen oder sozialen Charakter und schaden der Organizational Legitimacy massiv. Diese In dieser Masterarbeit wurde nun vor dem Hintergrund umweltlicher und sozialer europäischer Mindeststandards dieser Einfluss auf die Organizational Legitimacy gemessen. Zu diesem Zwecke wurde eine Choice Based Conjoint Analyse durchgeführt

**Schlagwörter:** Organisationslegitimität, Internationale Produktion, Manufacturing, Umweltproduktionsstandards, Soziale Produktionsstandards, offshoring, reshoring, Unbeabsichtigte Nebeneffekte

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## Abbreviations

|      |                                                 |
|------|-------------------------------------------------|
| CA   | Conjoint Analysis                               |
| CBCA | Choice Based Conjoint Analysis                  |
| CI   | Credibility Intervals                           |
| CRS  | Consumer Reshoring Sentiment                    |
| DPP  | Digital Product Pass                            |
| EAPs | Environment Action Programs                     |
| EDG  | European Green Deal                             |
| EPS  | Environmental Production Standards              |
| SPS  | Social Production Standards                     |
| EPSR | European Pillar of Social Rights                |
| EU   | European Union                                  |
| HB   | Hierarchical Bayesian                           |
| LS   | Location Strategy                               |
| MNCs | Multi-National Companies                        |
| OL   | Organizational Legitimacy                       |
| PS   | Production Standards                            |
| SDGs | Social Development Goals                        |
| TFEU | Treaty on the Functioning of the European Union |
| WTP  | Willingness To Pay                              |

# 1 Introduction

When we talk about companies, their internationalization, their processes, their behavior and their strategic decisions, we often make the seemingly natural assumption that it is the task of companies to create value for themselves and their stakeholders. In this context, the focus is often on the principle of profitability, to which companies orient themselves within the framework of rules set by legislators and society (cf. Palazzo Scherer 2006:72). In the course of such considerations, it is often forgotten that companies always exist in a context in which they constantly have to maintain and manage their own Organizational Legitimacy (hereafter referred to as OL) in different ways. One of the most important perspectives is moral legitimacy, which is formed in public discourse and cannot be manipulated or counterfeited, but must be gained by participating in and adopting essential ideas from a public discourse (cf. Suchman, 1995). It is precisely this public discourse that is a double-edged sword, because on the one hand it allows companies to represent themselves and their goals and values, but on the other hand it can also serve society in holding companies accountable for misconduct (cf. Zajak, 2015). Particularly in the context of corporate internationalization, environmental and social grievances emerge as side effects of international production methods. These are referred to in the literature as "unintended side effects" (Palazzo and Scherer, 2006, p. 77) and are included in this public discourse. They result from production standards that differ from market to market. This makes it very difficult for companies to maintain and manage their legitimacy.

Numerous scandals involving human rights violations or the involvement of corporations in ecological abuses in production countries in the global South have led to a serious social debate about international production methods and their environmental and social impacts. This includes the questioning of strategic processes about the meaning and purpose of corporations and the methods to achieve this meaning and purpose. These debates about corporations, their role in public life and their place in society demonstrate the extent to which the demands and expectations placed on corporations, especially those that operate globally, have changed. One of the taken-for-granted assumptions about corporations is their character as private actors in public life. But it is precisely this character that is undermined by environmental and social unintended side effects that have public consequences for the general public as an outgrowth of private, corporate strategic decisions,

and it is precisely this character that is the linchpin of this public discourse. For many companies, this is a major problem, because such fundamental criticism of international corporate processes represents a decline in OL and signals the need for changes in the corporate structure.

### 1.1 Research gap, research aim and research question

This master thesis is located at the intersection of international location strategies and OL. The literature on the former is extensive and detailed, and especially offshoring as a strategy has been analyzed primarily in terms of its benefits for companies. However, an analysis of the legitimacy of these benefits and of the strategy in general has been lacking.

The literature on the latter is also extensive and deals with many problems and influences of OL on economic and social life. However, it remains theoretical and abstract, although legitimacy as a concept has a very fundamental and practical importance for companies, especially in the context of their internationalization and the location strategies they adopt. Indeed, if a company does not manage its legitimacy adequately, it may, depending on the scenario, face social and/or legal sanctions that can fundamentally affect its ability to function (cf. Suchman, 1995).

While Palazzo and Scherer (2006) have already established a theoretical link between these two issues, a practical link between location strategies and OL in the context of corporate internationalization has yet to be established. This master thesis aims to fill this research gap by adding a practical, company- and strategy-related aspect to the discussion of OL.

This leads to the following research question:

*How do corporate strategies that promote or constrain environmental and social unintended side effects influence the maintenance and management of Organizational Legitimacy of multinational companies?*

### 1.2 Methodical implementation

In order to answer this research question comprehensively, a two-stage methodological approach was chosen. First, an intensive literature review of the existing literature on OL was conducted, including a discussion of its linkage to location strategy and European institutions in the context of

corporate internationalization. This served to identify those criteria that were essential for the second methodological step, the empirical data collection and analysis.

Second, based on the results of the literature analysis and discussion, an attempt was made to measure a strategies influence on OL. In this context, the author is not aware of any study that has neither measured such an influence quantitatively nor defined parameters for a possible measurement. However, such parameters could be derived from the literature through the analysis performed in the first stage.

Subsequently, a Choice Based Conjoint Analysis (hereafter referred to as CBCA) was conducted, in which OL itself was measured via the proxy of Willingness to Pay (hereafter referred to as WTP). The CBCA is particularly well suited to answering the research question because it is the best way to measure the different influences of attributes on WTP and thus on legitimacy. However, a CBCA always requires a concrete product with different attributes at different levels. The parameters derived from the literature meet these requirements. Following the theoretical discussion on OL, a product from the apparel industry was chosen as a concrete example for data collection, namely a simple white T-shirt. This industry is well suited for this purpose, as its production has often been strategically offshored in order to generate more legitimacy in the eyes of stakeholders through lower prices and higher profits. At the same time, international production in this industry is also associated with significant environmental and social side effects (cf. Dickenbrok and Martinez, 2018). These circumstances make it possible to attribute to a T-shirt those attributes that are also critical to organizational legitimacy.

Participants in the study were confronted with realistic trade-off scenarios by assembling different product alternatives through various combinations of different attribute levels. In total, they were presented with 15 scenarios and had to choose one of the alternatives. Through this process, the utility and importance of each level and the influence of each attribute on the choice and thus on WTP and OL could be determined.

### 1.3 Structure of this Thesis

This master thesis is divided into a theoretical and an empirical part, with the theoretical part laying the groundwork for the empirical part. First, the basics of OL are discussed in chapter 2. This includes the definition, the different types of OL and how they are related. In this context, OL is

also discussed against the background of the internationalization of companies and the resulting unintended side effects, as well as the public discourse they cause.

Chapter 3 discusses the motivations behind the location strategies of "offshoring" and "reshoring" and looks in more detail at their many connections to the different types of OL.

In Chapter 4, the impact of the resulting public discourse on the European Union (hereafter referred to as EU) is examined in more detail and illustrated by several new legislative acts related to environmental and social production standards at the European level. Particular attention is paid to the European instruments through which companies as well as citizens can influence the European legislative process and thus reflect a changing perception of environmental and social aspects of production.

Chapter 5 discusses the methodological approach and explains how the data for this master thesis was collected and analyzed. CBCA is discussed in detail, as well as Hierarchical Bayesian estimates and its operationalization.

The results of this analysis are presented in chapter 6. In addition to the sample description, the impact assessment of the attributes and their interactions, the focus is on the desirability and importance according to the Hierarchical Bayesian estimates as well as the choice simulator.

Chapter 7 contextualizes and interprets the results of the analysis in terms of the OL debate discussed in chapters 2, 3, and 4. This chapter also answers the hypotheses of this thesis and the research question.

Finally, the conclusion summarizes the master thesis and reiterates its main findings. Finally, the scientific contributions, managerial implications, limitations, and future research of this master thesis are presented.

## 2 The Theory of Organizational Legitimacy in a Globalized World

This chapter lays the theoretical groundwork for my master thesis, which is an interesting intersection between OL and strategic corporate internationalization. Central to this intersection is the concept of OL, which was first theorized in 1975 by John Dowling and Jeffrey Pfeffer (1975) and has been discussed in the academic debate ever since. The concept of OL was particularly expanded by Suchman (1995), who summarized the contents discussed up to that point and theoretically linked and expanded them. Both Dowling and Pfeffer (1975), as well as Suchman

(1995), repeatedly raise the question of how legitimacy can be manipulated and effectively used as a resource. Part of these discussions is always the question of what can be done about a potential loss of legitimacy.

Contrary to Dowling and Pfeffer (1975) and Suchman (1995) hypothetically dealing with a lack of legitimacy, Palazzo and Scherer (2006) argue for a real loss of legitimacy of multinational companies (hereafter referred to as MNCs) due to their internationalized activities. According to them, this loss is caused by “unintended side effects” (cf. Palazzo and Scherer, 2006, p. 77), that can be of environmental or social nature.

This chapter is therefore structured as follows. First, OL is defined in more detail. Different definitions are compared and discussed in depth. This is followed by a closer look at the different types of OL and a theoretical anchoring of each. In the third subchapter, the link between legitimacy and the internationalization of companies is debated and the problems associated with this are examined. Exactly those problems are discussed in another subchapter and are connected to Environmental and Social Production Standards on different markets.

## 2.1 Definition of Organizational Legitimacy

Legitimacy as a concept has been widely discussed in various disciplines ranging from sociology, politics, and jurisprudence. Management theories have often portrayed organizations as rational, almost completely autonomous entities, largely detached from their surrounding environment (cf. Suchman, 1995). However, with the establishment of open system theories, which basically postulate an enormous influence of the environment on the organization (cf. Scott and Davis, 2015), and institutional theories (e.g. Powell and DiMaggio, 1991) this dominant view changed. Considering the environment of an organization therefore means that certain forces and constraints from outside the organization inevitably affect it. These can come from different environmental actors and can also have different effects on the organization. With this paradigm shift in management theories, the principle of OL also moved into the focus of the academic debate and is still an essential part of it today (cf. Suchman, 1995).

The foundational basis for understanding OL was laid in Max Weber’s “Wirtschaft und Gesellschaft” (Weber, 1985), which was first published in 1922 and has been reprinted again and again in revised editions, as the one cited here. Parsons (1960) connected legitimacy, organizations,

and social systems in terms of organizations being seen as legitimate by a social system through resource utilization (cf. Parsons, 1960). Terreberry (1968) follows a similar line of argument, by focusing on resource exchange between various organizations as the legitimacy creating factor (cf. Terreberry, 1968). Building on that, John Dowling and Jeffrey Pfeffer (1975) developed their Theory of Organizational Legitimacy but shifted their focus from economic resources to the societal environment, namely to “values and norms prevalent in a society” (Dowling and Pfeffer, 1975, p. 124). Following this, they defined OL as “(the) congruence between the social values associated with or implied by (the organizational) activities and the norms of acceptable behavior in the larger social system of which (the organizations) are part of” (Dowling and Pfeffer, 1975, p. 122). Hence, there are two basic set of value systems. The first one can be characterized as an internal, organization related system that is generated by the organization itself, through its activities and actions. The second one, however, is a value system that is shaped and formed by society. If they are congruent, an organization obtains OL. The introduced concept of concurring value systems is of great importance and is a cornerstone of my theoretical derivation.

Their definition of OL primarily focuses on the cognitive element of legitimacy, which means that organizations obtain legitimacy if their actions are objectively comprehensible, e.g. when their behavior complies with the societal expectation<sup>1</sup> (cf. Suchman, 1995). Resulting from a lack on a process-evaluative element in this definition, Suchman (1995) adopts a much broader view by including both elements into his definition of OL. For him, “Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions” (Suchman, 1995, p. 574).

Compared to Dowling and Pfeffer (1975), Suchman’s definition has several advantages. Legitimacy here is seen as a broader, more generalizable concept that can but is not necessarily depended on singular events endangering it. Also, it is defined as a perception or an assumption, which in turn focuses on the recipient of this very legitimacy, e.g. the consumer. This is especially important, as it highlights the subjectivity of legitimacy. Hence, it may differ from individual to individual, however, this perception still fits in a larger societal value system, as legitimacy is socially constructed. This, in turn, connects legitimacy again to the important concept of congruence of this very value system. Only because OL may be perceived subjectively, it does not mean that this process happens detached from a broad social system of norms, values, believes and

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<sup>1</sup> The cognitive element is represented in Suchman’s (1995) typology as the *cognitive legitimacy*.

definitions. Congruence between organizational value systems and the societal value systems therefore remains a central concept.

Suchman's definition of legitimacy, especially in connection to the organization, is much more broader and fluid compared to the one of Dowling and Pfeffer (1975) and is therefore followed in this master thesis.

Further, Suchman (1995) describes Dowling and Pfeffer's understanding as a strategic approach towards OL due to their mostly managerial perspective, because Dowling and Pfeffer (1975) see legitimacy as a constraint to organizational behavior by essentially focusing on the consumer, but from the organization's point of view. They do so by identifying three core determinants of OL, in whose triangular relationship a potential competition between rivaling organizations is decided. These three are the organization's method of operation, its output and its goal or domain of activity. Such a competition can occur if societal norms and values change and therefore create a lack of congruence between the two value systems. In that case, it is up to the consumer to decide which organization adapted best to this change regarding the determinants mentioned above (cf. Dowling and Pfeffer, 1975).

To become legitimate, organizations have three possible options: First, they make their internal, organization related value system congruent with the societal value system by adopting their operation methods, outputs, and goals to the dominant societal values. Second, and most difficult, they try to do it the other way round and make the societal value system fit the organization's one by altering the societal value system through communication. Third, organizations can pursue to be identified with highly legitimate symbols, values, or institutions. This is usually done through communication as well (cf. Dowling and Pfeffer, 1975).

This managerial perspective of perceiving legitimacy as a constraint is essentially characterized by manipulation to foster congruence of social value systems. Within this process, according to Suchmann (1995), legitimacy becomes "an operational resource that organizations extract (...) from their cultural environments and that they employ in pursuit of their goals" (Ashforth and Gibbs, 1990, as cited in Suchmann, 1995, p. 576).

Contrasting to that managerial, strategic tradition, other authors, such as DiMaggio and Powell (1991), Meyer and Rowan (1991) or Zucker (1987) follow an institutional approach in which legitimacy is not seen as a resource, but rather used synonymously with this process. Therefore, the institutional tradition rather adopts an external perspective of society looking at organizations

and entire sectors, while the strategic tradition adopts an internal perspective of organizations looking at society (cf. Suchman, 1995).

## 2.2 Types of Organizational Legitimacy

In the current academic discussion, several types of OL, that are all based on the concept of congruence but differ in their dynamics, have been agreed on. In this subchapter, they are summarized and theoretically explained.

The first and most organizationally focused type of OL is *pragmatic legitimacy*. Congruence must occur between the stakeholder's interests towards the organization and the organization's value system. In this case, stakeholders are narrowly defined, as persons mutually related to the company, for example employees or shareholders (cf. Zajak, 2015). Suchman (1995) highlights the importance of exchanges, influences, and dispositions in pragmatic legitimacy. Legitimacy therefore can either be created in exchange for the expected benefits, or by granting stakeholders influence over their policy-making process in order to serve the stakeholder's larger interest (cf. Suchman, 1995).

The second and most fundamental type of OL is *cognitive legitimacy*, as it presumes congruence between an organization's set of internal values and the generally accepted idea in society of how an organization is obliged to act. It is also the only type of legitimacy, which is not rooted in evaluation, but rather in cognition. This means, that legitimacy is not based on emotional assessment, but rather on analytical observation and perception. This can work either by comprehensibility or through a taken-for-granted approach. This means that the idea of how a company should behave is so deeply ingrained in society on a subconscious level that there seems to be no alternative (cf. Palazzo and Scherer, 2006). However, this understanding of legitimacy can be problematic, as both cultural models and explanations are fundamentally linked to real life experiences of audiences, which can hinder a legitimate perception of necessary innovation. Contrasting to that, the taken-for-granted approach stresses the establishment of certain environmental determinants, which are perceived as naturally given and therefore automatically impede alternatives. Hence, certain organizational actions are seen as legitimate because they are perceived to be the only possible option (cf. Suchman, 1995, pp. 582–584).

Either way, this very broad and basic societal value system is both a curse and a blessing: Fundamental rules are usually not questioned by society and therefore leave little room for attack

on an organization's legitimacy. However, such rules and values are also very difficult to manipulate or to work with in general. It is this very characteristic that also plays a role in the understanding of how exactly society thinks an organization must act. Following Meyer and Rowan (1991), Zajak (2015) suggests, that organizations embedded in a capitalist economic system are expected to act rational by generating profit and economic growth (cf. Zajak, 2015, p. 160). As will be shown later, it is also precisely this unconscious social assumption about the right behavior of companies that can become a legitimacy problem.

The third type of OL is *moral legitimacy*. With the change of generally accepted fundamental rules and values in society, Palazzo and Scherer (2006) claim it to be "the most decisive source of societal acceptance of corporations" (Palazzo and Scherer, 2006, p. 74). Moral legitimacy assumes a congruence of the generally accepted moral standards in a society with an organization's method of operation, output, general goal but also with the people publicly associated with the organization, for example its managers, owners, or leading employees. An organization is evaluated whether all its actions are morally right or wrong (cf. Suchman, 1995; cf. Zajak, 2015).

Finally, the fourth type of OL is *regulative legitimacy*, which postulates that an organization is perceived as legitimate, if its actions comply with governmental laws and regulations (cf. Kostova and Zaheer, 1999). Hence, regulative legitimacy opts for a very narrow understanding of legitimacy and, contrasting to the other types, does not offer a grand, cross-societal explanation of organizational legitimacy. For this reason, regulatory legitimacy plays a subordinate role in this master thesis.

However, the different types of legitimacy are not separate from each other but are related to and complement each other. It can also happen, for example, that an organization loses pragmatic legitimacy and tries to compensate for this loss with another type of legitimacy. The next subchapter is devoted to this phenomenon.

## 2.3 The internationalization of the corporation and the concept of "Organizational Legitimacy"

In their article "Corporate Legitimacy as Deliberation: A Communicative Framework", Palazzo and Scherer (2006) describe the process of legitimacy change under the influence of the internationalization of a corporation. They apply the theory of OL concretely to companies and therefore also speak of corporate legitimacy. The different types of legitimacy are in a triangular

relationship with each other there therefore partly complement or build on each other. This is especially true for the interaction between cognitive legitimacy and pragmatic legitimacy.

Cognitive legitimacy is fundamental to the process described by Palazzo and Scherer (2006). This primarily concerns fundamental structures and processes at the level of the organization. According to Suchman (1995), as discussed in the previous subchapter, it is grounded in the general, often unconsciously assumed and expected patterns of organizational behavior. Determinants that therefore dominate this type of legitimacy are seen as having no alternative and are therefore perceived as natural. One such determinant is, for example, the assumption that the purpose of an organization is to create value, or that the society addressed by organizations has a background homogeneous in cultural values and norms. Suchman's frame of reference of cognitive legitimacy is the homogeneous nation (cf. Palazzo and Scherer, 2006).

Building on cognitive legitimacy is pragmatic legitimacy. According to Suchmann (1995), this comes about when affected stakeholders benefit from the company - but they only do so if the company also appears cognitively legitimate, i.e. behaves as one would expect a company to behave. The groups of stakeholders that comes into question for this can be different and should always be defined for the individual case. Possible stakeholders are, for example, owners, employees, consumers, but also society as a whole (cf. Suchman, 1995). This leads to a dual character of pragmatic legitimacy. On the one hand, it is essential for the legitimacy of a company due to its very group-specific focus. On the other hand, it seems too narrow to guarantee the legitimacy of a company on its own, precisely because of its narrow circle of addressees. Thus, pragmatic legitimacy is at any rate the weakest of the legitimacy types (Palazzo and Scherer, 2006). In the long run, the legitimacy of an organization can only be maintained with cognitive and moral legitimacy.

According to Scherer and Palazzo (2006), internationalization of companies causes problems precisely with regard to these two types of legitimacy, as it gives rise to unintended side effects. These are mainly based on private, corporate decisions with consequences of public concern. Companies, through their actions, respectively through activities along their international supply chain, cause conditions that are of public, collective interest and are perceived as problematic. Prime examples of such unintended side effects are environmental and social conditions, that are caused by international manufacturing. Precisely because of this publicizing of the consequences of private decisions, the unintended side effects also lead to a politicization of the actually private companies and as a result, MNCs become "quasi-public actors" (Palazzo and Scherer, 2006, p. 77)

with great political power. This power in particular triggers public concern about MNCs and the environmental and social unintended side effects that accompany them, which leads to a public discourse. By leaving their societal assigned role due to becoming the above mentioned quasi-public actors, MNCs experience a harsh decline cognitive legitimacy. As a result, there is no longer any congruence between the actual behavior of the company and what is expected in society. Cognitive and pragmatic legitimacy are no longer sufficient for the legitimacy of a company (cf. Palazzo and Scherer, 2006).

The possible way out of this dilemma is the already triggered public discourse, which is generated by the public concern about the unintended environmental and social side effects and the corresponding power of the MNCs. It is at this point that moral legitimacy now ties in. According to Suchman (1995), moral legitimacy emerges from "public discussion" (Suchman, 1995, p. 585) through conscious, moral judgments of corporate processes and activities, as well as through the evaluation of justifications for certain behavior (cf. Suchman, 1995).

Public discourse thus plays an important role in a globalized world in terms of organizational legitimacy, because it is not only caused by the side effects, but also generates moral legitimacy. Communication itself has also become globalized, further facilitated by the digital revolution and especially by the rise of social media platforms like Facebook and Twitter. These not only enable information to be communicated globally within seconds, but also to reach potentially millions of people within the same amount of time. Especially this development creates social interdependencies on a global level, which in turn generates a growing awareness of global problems (cf. Clark, 1997). This has fundamental implications for the perceived moral legitimacy of organizations and their behaviors. When the information communicated indicates a deviation of the organizational value system from the societal value system and therefore triggers above mentioned public concern, the organization's legitimacy is threatened. Hence, through these global and social interdependencies, malpractices are communicated worldwide and placed in the center of societal awareness. Since cognitive and pragmatic legitimacy alone are no longer sufficient, organizations need moral legitimacy as a new, additional source of legitimacy. As already described, moral legitimacy always centers on the publicly discussed justification of an entrepreneurial activity or a process, which is established through public, societal discourse. Thus, moral legitimacy is always socially constructed (cf. Suchman, 1995). However, a social negotiation of moral standards also means that it is not possible to ultimately define what is or is not morally legitimate. This gives moral legitimacy a conceptual fuzziness, making the concept difficult to

operationalize. According to Suchman (1995), the only way to gain moral legitimacy is through the direct and active participation of organizations in the public debate that constitutes moral legitimacy (cf. Palazzo and Scherer, 2006). The public element is thus central to moral legitimacy. However, this is precisely what protects it from manipulation by organizations. The goal is to persuade through intelligible arguments rather than through manipulation.

In summary, the three types of legitimacy described by Suchman (1995) are interrelated and complement each other to varying degrees. Unintended side effects arise from the internationalization of entrepreneurial activities and processes. They may be environmental or social in nature and affect the public as an outgrowth of private decisions. This leads to two processes: On the one hand, the affected companies leave their assigned roles and become quasi-public actors. As a result, they lose cognitive legitimacy. On the other hand, a discourse is stimulated in society that assesses and morally evaluates these environmental and social side effects. Against the background of the decreasing cognitive and pragmatic legitimacy of companies due to their internationalization in a globalized world, moral legitimacy is therefore of great importance. Moral legitimacy, as mentioned many times before, is created through public discourse. Due to this social construction, it is difficult to measure or define. Still, mostly because of the growing awareness of malpractices in manufacturing countries due to the quick and global communication also moral legitimacy is not a matter of course.

This summary shows that the theoretical field of organizational legitimacy, especially against the background of the internationalization of corporations, is very wide and complicated due to the interdependent types of legitimacy. This thesis therefore focuses on one aspect of this field that poses a challenge to corporations in maintaining and managing their legitimacy in the global marketplace: the unintended side effects. Exemplary for these are environmental and social unintended side effects as mentioned by Palazzo and Scherer (2006). Of course, other unintended side effects are also possible, but this master thesis follows the example given and therefore considers impacts of corporate internationalization on environmental and social aspects. Those are elaborated on in the next subchapter

In Table 1, these processes are summed up:

| <b>OL</b>                    | <b>Created by</b>                                                 | <b>stakeholder</b>                     | <b>Rooted in</b> | <b>Relation to internationalization and unintended side effects</b>                |
|------------------------------|-------------------------------------------------------------------|----------------------------------------|------------------|------------------------------------------------------------------------------------|
| <b>Cognitive Legitimacy</b>  | Compliance with subconscious idea of how a corporation should act | society                                | cognition        | leaves assigned private role and become quasi-public actors → <b>decline</b>       |
| <b>Pragmatic Legitimacy</b>  | Compliance with stakeholder demands and mutual benefits           | Narrowly defined individuals or groups | evaluation       | Stakeholder's (e.g. consumer's) demand changes; if non-compliance → <b>decline</b> |
| <b>Moral Legitimacy</b>      | Public discourse and compliance with moral standards              | society                                | evaluation       | Triggers public discourse; immoral perception → <b>decline</b>                     |
| <b>Regulative Legitimacy</b> | Compliance with legislative acts                                  | Government/ legislative body           | evaluation       | legislative standards differ significantly over markets                            |

*Table 1: Characteristics of OL, its four subtypes and its relation to internationalization*

## 2.4 Unintended Side Effects of Internationalization and their link to Environmental and Social Production Standards on the global market

Unintended side effects as a consequence of the internationalization of companies are, even if they are illustrated with examples in Palazzo and Scherer (2006), a conceptually broad and vague term. Even a concretization into environmental and social effects is still conceptually too broad. In this subchapter, therefore, this problem will be evaluated in more detail and the significance of unintended side effects for this master thesis, especially in relation to production standards, will be discussed.

As already described in chapter 2.3, unintended side effects are a phenomenon accompanying the internationalization of entrepreneurial activities and processes. Their roots lie in private entrepreneurial action, but their consequences occur in the public sphere. In the context of this

master thesis, the entrepreneurial activity, the public sphere and the consequences must be explained and limited. Entrepreneurial activity and processes are limited to the international manufacturing of products.

Concerning the public sphere, the actual impact can vary greatly and depends on a particular effect. The affected public can therefore be local, regional, national but also global. In this master thesis, not only in relation to the public sphere, but also in connection with the internationalization of companies, the Global North and the Global South are useful terms of reference in this context. The former represents the industrialized countries usually located in the northern hemisphere, first and foremost the countries of the EU and North America. The latter is used to describe the developing and newly industrializing countries that are usually located in the southern hemisphere. Goods for the Global North are produced in the Global South (cf. Brand and Wissen, 2017). Depending on the particular effect, unintended side effects can occur in Global South, as well as the Global North, but as most of these environmental and social effects are bound to the location where the entrepreneurial activity takes place, they are usually occurring in the Global South (cf. Brand and Wissen, 2017).

Concerning the consequences of unintended side effects, they are always seen as detrimental to the public sphere due to the lack of corporate intent. From this disadvantageousness comes the possibility of concreteness. When, as in Palazzo and Scherer (2006) and in this master thesis, unintended environmental or social side effects are discussed, this defines the dimension in which the consequences of the effects occur. Following this, environmental consequences of international manufacturing are phenomena that are directly detrimental to the well-being of nature and the ecological environment and thus contribute either to the destruction of human and animal habitats in the Global South or to global warming (and thus also affect the public sphere of the Global North). These consequences include, for example, air pollution, groundwater contamination by toxic chemicals, or resource exploitation and wastage.

In contrast, social consequences of international manufacturing are the direct consequences of the mode of operation on the individual human being. These include, above all, the economic, financial and social exploitation of workers, as well as child labor. Of course, environmental side effects through the destruction of human habitat also have social consequences. However, in the understanding of this master thesis, these are interpreted as indirect consequences, since they do not arise directly from entrepreneurial action, but rather from its environmental consequences.

It is important to note, however, that environmental and social side effects of manufacturing always occur where manufacturing is placed. In order to prevent the detrimental consequences of the side effects state actors can define production standards under which manufacturing may take place. Such legal remedies can be interpreted as an attempt by the state to re-privatize the publicized social costs of actually private corporate action by forcing companies to comply with standards and thus curb harmful behavior. However, the internationalization of business provide an arbitrage opportunity for companies, as most countries in the Global South do not use production standards as a legal remedy for fear of economic disadvantage (c.f. Li and Zhou, 2017).

Therefore, due to the increase of legal standards for manufacturing in environmental and social aspects in their home country, e.g. in the Global North, companies shift their production activities to countries, where production can be carried out according to the former standards, as production is then able to remain cheap. These are often low-wage countries in the global South, which also offer the advantage of cheap labor (cf. Kinkel and Maloca, 2009; Ancarani *et al.*, 2015; Di Mauro *et al.*, 2018).

The connection between internationalization or international relocation of manufacturing and environmental and social aspects has also been theoretically conceptualized with the help of the “Pollution Haven Hypothesis” (Taylor, 2005, p. 1; hereafter referred to as PHH). The PHH claims that pollution intensive production will be relocated from high income countries with comparatively strict environmental regulations to countries with low income and low environmental regulations. This is further facilitated by ongoing global trade liberalization (c.f. Taylor, 2005). The PHH has been empirically proven and especially at firm level, Li and Zhou have advanced it "by pointing out an important mechanism of strategic adjustment" (Li and Zhou, 2017, p. 2312). They stated that firms go green in their developed home countries by transferring carbon intensive production to the Global South. The products produced offshore are then imported back to the home country (c.f. Li and Zhou, 2017). However, the legitimacy of this behavior is questionable. This strategy is admittedly cost saving and thus can be seen as a natural behavior of a company. Therefore, it is cognitively legitimate. Also, some stakeholders are benefitting from the cost savings, but relocating manufacturing always means the loss of value creation in the regions affected. Since workers and society as a whole can be stakeholders of a company as well and are affected negatively by it, the pragmatic legitimacy of this strategy is not fully given. In addition, the relocation of production also triggered an intense social and academic discourse, which, however, was not directed against the lack of compliance and the migration of companies -

which could be understood as cognitively legitimate - but against the standards introduced, which were described as obstacles to the competitiveness of the affected companies (cf. Li and Zhou, 2017).

The example of PHH also shows that different markets or regions of the world place different legal demands on production. On the one hand, this can be an advantage for companies in the internationalization process, but on the other hand, it also poses challenges to moral legitimacy, as corporations become actors on multiple markets with highly varying production standards. This means, that the maintenance and management of OL becomes difficult. This shall be shown in the following chapter by debating two important locations strategies, namely offshoring and reshoring, against the background of the OL debate .

### 3 The Organizational Legitimacy of offshoring and reshoring as a strategy of MNCs

While offshoring has been one of the most widespread internationalization strategies since the early 1990s (cf. Di Mauro *et al.*, 2018), reshoring is still a relatively recent phenomenon, gaining popularity in the years before the Covid-19 pandemic (cf. McIvor and Bals, 2021).

Offshoring refers to the "cross-border (re)location of the firm's value chain activities (...) that were once performed somewhere collocated (...) to distant locations to serve global rather than local demand" (Schmeisser, 2013, p. 390). Reshoring is the exact opposite and is described as "relocation of value creation tasks from offshore to geographically closer locations (...) irrespective of the ownership mode" (Foerstl, Kirchhoff and Bals, 2016, p. 495).

By definition, there is a link between these two actions: First, the offshoring of a process takes place, followed by reshoring if needed. It is precisely this connection in relation to OL that this chapter deals with.

This chapter is therefore structured as follows: In a first step, the two phenomena are contextualized and defined in more detail, and the exact connection between offshoring and reshoring is discussed. In a second step, a connection of offshoring and reshoring to OL is discussed.

### 3.1 Motivations for an offshoring strategy

Offshoring is the relocation of certain activities abroad. Often, this involves production units of companies, but this is not always the case. In the context of OL and the negative unintended side effects of international production however, this essentially involves manufacturing units that are offshored to the Global South.

Furthermore, offshoring should not be confused with outsourcing. In contrast to offshoring, outsourcing means no longer having an activity performed by one's own company, but entrusting another company, at least partially, with the operationalization of that activity (cf. Dolgui and Proth, 2013). In outsourcing per se there is not international component, the entrusted company does not necessarily have to be located abroad. In the offshoring definition, this situation is accounted for with "irrespective of the government mode" (Foerstl, Kirchoff and Bals, 2016, p. 495): offshoring thus concerns both cases in which an offshoring company continues to operate the activity concerned abroad itself, and cases in which the company also outsources the activity concerned.

The decision of a company to relocate certain activities to foreign countries can have various drivers. These in turn depend on a variety of determinants, such as which activity is to be offshored, how labor-intensive this activity is, or what goal is to be achieved with the outsourcing of the activity.

One of the drivers most often mentioned in the literature is the ability to save costs. Most important in this regard is low-cost labor (cf. Kinkel and Maloca, 2009; Ancarani *et al.*, 2015; Di Mauro *et al.*, 2018). Especially in relation to the associated productivity, the cost of labor is the most important reason for offshoring: In the 1990s, the cost of labor in the Global North was high at low production levels and thus companies faced increasing competitive pressure from offshore competitors. The strategic response was to offshore and manufacture cheaper and benefit from the global labor market. This gave MNCs a major competitive advantage (cf. Gylling *et al.*, 2015). Also from the perspective of Internationalization Theory (cf. Rugman and Hodgetts, 2000) or Dunning's Eclectic Paradigm (cf. Dunning, 1980, 1988), two theoretical approaches often used for the analysis of off- and reshoring, offshoring of manufacturing units in low-wage countries makes sense. In this context, labor-intensive processes tend to be offshored, while capital-intensive activities tend not to be relocated, since labor is usually expensive in comparison in the home country (cf. Kinkel and Maloca, 2009).

Another motivator for an offshoring decision is the improvement of quality through the availability of a better production context. This seems contradictory to the first motivator, but in this case a different production context is to be expected. Here, the aim is not to achieve a competitive advantage through cheap production, but, for example, through particularly good or refined product quality. This is achieved either by more competent workers or by better developed technologies (e.g.: Arlbjorn and Lüthje, 2012). The former applies particularly often to offshored services (cf. Mykhaylenko *et al.*, 2015), but also when local knowledge or the so-called made-in effect play a role. According to Slepunov *et al.* (2013), it is precisely the combination of these factors that is crucial for this motivator. A made-in effect is the “country-of-origin bias” (Diodato, Malerba and Morrison, 2018, p. 298) by which a consumer attributes higher quality to a product based on its country of origin (cf. Diodato, Malerba and Morrison, 2018). This effect is very strong, especially for high quality products, such as Swiss watches, Italian clothing or Japanese electronics (cf. Godey *et al.*, 2012).

Furthermore, the opening of a new market is itself a motivator, as is the potential proximity to foreign customers (cf. Kinkel, 2012).

### 3.2 Motivations for a reshoring strategy

As already mentioned in this chapter’s introduction, the term reshoring refers to the retrieval of formerly offshored value-creating tasks (cf. Foerstl, Kirchhoff and Bals, 2016).

Reshoring is a recent phenomenon. Only in the last decade has the scientific debate on this strategy gained momentum and discussed it from different perspectives. The focus has been on attempts to define the phenomenon, and on its drivers. Reshoring has been viewed from similar theoretical perspectives as offshoring, namely from Internationalization Theory (cf. Casson, 2013), Dunning's Eclectic Paradigm (cf. Dunning, 1980), as well as Transaction Cost Theory (cf. Williamson, 2008) and the Resource-Based View (cf. Teece, Pisano and Shuen, 1997).

In this context, the term reshoring has often been used in different ways, which has also led to a variety of definitions. Specifically, there are three terms involved, namely reshoring, backshoring and nearshoring. Here, reshoring serves as an umbrella term for the general phenomenon and, according to Foerstl, Kirchhoff and Bals (2016) is defined as "the relocation of value creation tasks from offshore to geographically closer locations (...) irrespective of the ownership mode" (Foerstl, Kirchhoff and Bals, 2016, p. 495). However, reshoring is per definition subject to a certain

geographical blurriness and can be split into two further sub-concepts, namely backshoring and nearshoring. "Backshoring" refers to "the relocation back to the home country" (Di Mauro *et al.*, 2018, p. 108) and "nearshoring" refers to "the relocation to a location closer to (but not within) the home country" (Di Mauro *et al.*, 2018, p. 108). In this master thesis, however, the focus is on the EU as a single entity. Therefore, both the definitions of "backshoring" and "nearshoring" are too narrow. This is because the reshoring activity should not be limited to the home country but should not exclude it in the same. Therefore, for this master thesis, the general definition of reshoring from Foerstl Kirchoff and Bals (2016) is adopted and adapted to the focus on the EU. The definition of reshoring used in this master thesis is therefore as follows: Reshoring is the relocation of value creation tasks by a European corporation from offshore to a location within the EU irrespective of the ownership mode and irrespective of whether the reshored activity completely or partially replaced the previously offshored entity.

Di Mauro et al (2018) point out that reshoring per se should be understood as a very "heterogeneous phenomenon" (Di Mauro *et al.*, 2018, p. 110). This means that a reshoring decision is a potential response to a variety of different situations that require immediate action. Following this, they point to a failure vs. strategy approach in their explanations of the different motivators for reshoring. According to this approach, a reshoring decision either results from correcting a failure of the offshoring process or is the outgrowth of a change in strategy in response to exogenous or endogenous changes (cf. Di Mauro *et al.*, 2018). In the literature, especially the former point is analyzed in more detail. Again, similar to offshoring, the focus is mainly on costs and resources. Especially cost-based drivers, which are the primary motivation for offshoring, appear contradictory as reshoring motivation. The explanation for this can be understood in terms of the failure vs. strategy scheme: Mistakes may have been made in the implementation of offshoring, for example financial miscalculations may have happened (cf. Kinkel and Maloca, 2009; Gray *et al.*, 2013). Thus, the adaption of a reshoring strategy is a reaction to failure of the offshoring strategy. However, a reshoring strategy can also be understood as a reaction to changes in the environment and take on a strategic character. These changes can be endogenous, i.e. coming from within, or exogenous, i.e. coming from outside. Endogenous changes associated with cost-based drivers for reshoring are, for example, increased costs for transportation and logistics (cf. Kinkel and Maloca, 2009; Dachs and Kinkel, 2013). Endogenous changes are, for example, an increase in wage levels in the host countries to which offshoring took place (cf. Kinkel, 2012; Kinkel and Zanker, 2013)

or a change in the economic situation in the company's home countries that makes reshoring cheaper compared to offshoring (cf. Nujen, Halse and Solli-Saether, 2015).

Finally, global political events can also increase the risk associated with offshoring and thus increase costs.

Resource-based drivers, also similar to offshoring decisions, are due to product quality and employee competence. In this case, however, these drivers are directly related to the most important offshoring motivation, namely low labor costs. Indeed, with low-cost production, product quality often suffers, and relocation to a country with more competent workers appears to make sense (cf. Canham and Hamilton, 2013; Ancarani *et al.*, 2015). Such a decision can also be understood as a correction of an offshoring decision. However, competent workers are not the only resource that can be tapped through reshoring. Access to suppliers, material resources or customer networks can also be decisive (cf. Ellram, Tate and Petersen, 2013; Martínez-Mora and Merino, 2014). This driver can also be understood either as a correction of a failure or as a conscious strategy in response to endogenous or exogenous environmental changes. In the case of resource-based drivers, however, it is difficult to generalize, as reasons can differ greatly from case to case.

Grappi, Romani and Bagozzi (2018), however, introduce another reshoring driver not otherwise discussed in the literature, namely demand. Demand-based drivers assume that an impulse emanates from the consumer side which can represent a motivator for companies to reshore. For this purpose, the three authors developed the Consumer Reshoring Sentiment (hereafter referred to as CRS), which can be defined as "an appraisal structure of consumers formed by relevant, generalized, long-term positive beliefs connected to reshoring" (Grappi, Romani and Bagozzi, 2018, p. 72). In their study, they also showed, among other things, the relevance of CRS for strategic management, in which they proved that consumers are also willing to reward relevant companies for a reshoring activity by buying their products (cf. Grappi, Romani and Bagozzi, 2018).

The reshoring decision of a company, in which, among other things, an explicit demand on the part of the consumer is followed, can be defined as deliberately strategic in the sense of Di Mauro *et al.* (2018), especially in conjunction with the demonstrated higher willingness to pay.

Based on these motivators, it can be concluded that the drivers for offshoring and reshoring are fundamentally different. While offshoring was mainly motivated by savings in labor and production costs while increasing output, reshoring appears to find a more sophisticated approach, which is in any case strategy-based and entails a supply chain redesign (cf. Di Mauro *et al.*,

2018). Even if cost savings are consistently the goal of reshoring strategies, probably the biggest difference in motivations between offshoring and reshoring is that in reshoring the value-creation-component exerts a much greater influence than cost-efficiency-component (cf. Fratocchi *et al.*, 2016).

Nevertheless, reshoring drivers are always individual and depend on many factors. The actual reasons differ from industry to industry and partly from company to company. The most affected industry in the EU between 2015 and 2018 was the wearing apparel sector with around 11% of all cases analyzed by the European Reshoring Monitor, which has been a project between Eurofund and several Italian Universities (cf. Eurofund, 2019)

It remains to be said that external factors, i.e. influences from a sphere that the company itself cannot control, are of greater importance than internal factors (cf. Ellram, Tate and Petersen, 2013; Fratocchi *et al.*, 2016). These include global crises, such as an economic or health crisis, as well as new regulations or product standards enacted by a state that have a direct impact on the supply chain of affected companies.

### 3.3 Organizational Legitimacy in relation to offshoring and reshoring

In this subsection, offshoring and reshoring as strategies are linked with the theory of OL.

Offshoring and reshoring are analyzed from all three types of legitimacy according to Suchman (1995).

The drivers for offshoring are very rational and consistently relatable. Companies relocate their activities abroad in order to benefit from cheaper manufacturing conditions or better worker skills. The resulting increase in profits or improvement in the quality of the finished product can be described as good and correct entrepreneurial behavior, as it helps a company to generate a competitive advantage. This is exactly the kind of behavior one would expect from a company. Offshoring can therefore be seen as a natural step in a company's internationalization strategy; thus, offshoring can be seen as cognitively legitimate.

This is also accompanied by the pragmatic legitimacy of offshoring. The resulting competitive advantage through internationalization creates good conditions for e.g. company growth or profit increase, from which the various stakeholders of a company also benefit. Owners gain financial value, other stakeholders, such as employees or society as a whole, can benefit from offshoring in different ways. On the one hand, assuming that business growth occurs, through the creation of

new jobs in the areas of the company's operations that have not been offshored. On the other hand, consumers are provided with cheaper products. Likewise, offshoring appears legitimate not only from the perspective of the stakeholders in the home country, but also from the perspective of the offshoring host country. The relocation of production units naturally creates high value added there by generating jobs and expanding entire industries.

However, the moral legitimacy of offshoring appears problematic from the outset. As already explained in the Chapter 2.3, the internationalization of corporations leads to environmental and social unintended side effects. These are problematic for moral legitimacy, provided they are communicated. Thus, the side effects become a ticking moral time bomb. Offshoring appears to be legitimate if cognitive and pragmatic legitimacy are paramount and carry the legitimacy of the strategy. Through communication, which, as mentioned, is a vital component of the globalized world, unintended side effects are brought to the center of attention of Western society and a societal discourse about them emerges (cf. Suchman, 1995; Clark, 1997). This process has been particularly strong in recent years. Public interest in especially offshore production entities has risen considerably due to horrendous scandals in several host countries (Henninger, Alevizou and Oates, 2016; cf. Jacobs *et al.*, 2018). Particularly one incident, namely the Rana Plaza collapse in Bangladesh in 2013 has been of utmost importance in this regard (cf. Chowdhury, 2017). Henninger, Alevizoi and Oates (2016) claim that this incident fostered and supported abroad public interest in the working conditions of Asian factory workers and under which circumstances products for the Global North, in the case of the Rana Plaza collapse garments, are produced (cf. Henninger, Alevizou and Oates, 2016). Public interest has also focused on the reasons of offshoring production and manufacturing and together with poor working conditions in factories of the Global South, environmental concerns, especially in relation to garment production, emerged (cf. Kinkel and Maloca, 2009).

Despite human disasters like this, it should be noted that the consequences of corporate internationalization, such as offshoring, and corporate internationalization have given countries of the Global South a massive economic boost. A good example is China or India, which have achieved massive economic and financial power through the offshore boom and have become political global players (cf. Sudhakara, 2009; Huang, 2010). Objectively, therefore, an offshoring strategy is also cognitively and pragmatically legitimate on the part of the host countries. Moral legitimacy of this strategy, however, cannot be judged from the host countries' perspective at this

point. From a Global North, Eurocentric point of view, however, the offshoring strategy appears questionable in terms of its moral legitimacy due to the unintended side effects.

Thus, a differentiated picture emerges across different markets as to what is legitimate and what is not. While, for example, from the perspective of the Global North, companies do not fulfill any of the different types of organizational legitimacy, this could be different in the Global South due to economic success. It is precisely these differences that show how difficult it can be for MNCs to manage and maintain their legitimacy on a worldwide scale.

In summary, from a cognitive and pragmatic perspective, offshoring appears to be legitimate, as it is an expected, rational behavior from which stakeholders benefit. Regarding the moral legitimacy, it depends on the respective approach. Objectively speaking, however, it can be said that offshoring represents a major economic opportunity for the Global South. Nevertheless, it must be remembered that execution is often very harmful to people and the environment. This is mainly due to the lack of production standards in these countries.

Similar to offshoring, reshoring appears similarly cognitively and pragmatically legitimate. Regardless of whether reshoring is a correction of an offshoring mistake or a strategic reaction to an endogenous or exogenous influence, it must be seen as a natural reaction of a company to avert a competitive disadvantage. Such a reaction is expectable and thus cognitively legitimate. At the same time, it is also necessary for the stakeholders, as they otherwise run the risk of benefiting less or no longer from the company.

Concerning moral legitimacy, however, reshoring is a double-edged sword. From the perspective of the Global North, it is a morally legitimate strategy, because it generates more value for the home countries economy, and it also averts the unintended side effects created by corporate internationalization through higher standards in the reshored countries. From the point of view of the (former) host countries in the Global South, a reshoring strategy is not desirable, as it takes away their local value added.

Moreover, it is important to note that the primary purpose of a reshoring strategy is not to neutralize unintended side effects, but rather a side effect important for moral legitimacy. However, this well describes the character of a reshoring decision in terms of OL: As has been clearly shown in the literature (cf. Di Mauro *et al.*, 2018), a reshoring decision is usually accompanied by a fundamental redesign of the supply chain, in which numerous other factors are taken into account and can have an additional motivating effect. These include demand-related drivers that are directly related to

the unintended side effects. It can be assumed that the cost of manufacturing in the host country must be significantly higher than the cost of moving back to the EU. Otherwise, the pragmatic and cognitive legitimacy would not be given due to a contradiction between behavioral expectations and actual entrepreneurial behavior.

Nevertheless, moral legitimacy plays an important role, especially in the context of unintended side effects. The public discourse in the Global North and especially in the EU on the harmful unintended environmental and social side effects caused by corporate internationalization has, of course, not passed society by without leaving a trace. In addition to lively NGO activity (cf. Palazzo and Scherer, 2006), a clear preference for environmentally and socially sustainable products can also be discerned in society. In the last three decades of academic research and debate on the consumption of products, an increasingly positive attitude of consumers towards environmentally and socially sustainable products has been continuously observed. Thus, the desire for these products has been increasing for some time. Moreover, new companies with environmentally and socially sustainable products are continuously emerging (cf. Dickenbrok and Martinez, 2018).

The social discourse has thus changed considerably, especially in recent years. This development has finally been taken up by the legislators of the EU, mirroring a fundamental change in the perception of those unintended side effects on a European level. This will be the subject of the next chapter.

## 4 The European Union and its influence on Organizational Legitimacy

As described in detail in Chapter 2.2, moral legitimacy is constructed through public discourse. The effectiveness of this discourse is particularly visible at the level of the EU, where it can be divided into two dimensions: first, a public, institutionalized discussion between political, economic and civil society actors, and second, a legal discussion. The former provides an opportunity for stakeholders of all kinds to express their opinions on current issues of European legislation through interest groups, consultations or public hearings. This allows non-political actors to influence the legislative process. Prominent examples of these opportunities are: First, for companies, there is the European social partner Business Europe, which brings together the national business federations of 35 different European countries and which campaigns for the growth and competitiveness of European companies and regularly interacts with the European

Parliament, the European Commission and the Council of the EU. Its opinions, recommendations and criticisms are expressed in the form of position papers, reports, studies and public letters (cf. Business Europe, 2023a). Second, both EU citizens and companies can directly express their views on existing and new EU policies through the Commission's "Have your say – platform" (European Commission, 2023c). It is possible to submit proposals to the "Fit for Future" group, a high-level panel of experts advising the Commission on how to modernize or simplify existing laws.

Third, for individuals, the "Conference of the Future of Europe" (European Commission, 2023a), a citizen-led series of debates in 2021 and 2022 to collect ideas for a common European future, created so-called European Citizens' Panels. In these panels, randomly selected EU citizens from all 27 member states discuss future policies. The panels will conclude with proposals to the Commission on the initiatives discussed (cf. European Commission, 2023b).

There are also elements of direct democracy, such as the European Citizens' Initiative (cf. European Union, 2023).

Through these opportunities, the institutionalized public discourse is brought to the attention of the EU, and hence fed into the legislative process. Because of that, the production standards set by the EU are a direct, institutionalized outflow of the very social discourse that simultaneously construct moral legitimacy. European production standards are thus directly linked to moral legitimacy.

When it comes to the legal discussion, the EU does not offer a truly coherent set of rules for either environmental or social standards. This is mainly due to the fact that the legal apparatus for defining and regulating standards has evolved over several decades, with legal acts building on each other. This has resulted in a quite heterogeneous mass of regulations, guidelines, declarations, and even international agreements (cf. Bongardt and Torres, 2022). In recent years, however, special political developments in the form of overarching policy strategies for, among other things, production standards have been observed in both areas: the European Green Deal (European Commission, 2022b; hereafter referred to as EDG) in the area of environmental standards and the European Pillar of Social Rights (European Commission, 2017a; hereafter referred to as EPSR) in the area of social standards.

Both the EDG and the EPSR directly base their actions on the Social Development Goals (hereafter referred to as SDGs) set by the United Nations General Assembly (United Nations General Assembly, 2015) as 17 goals guiding towards global peace and prosperity by 2030. All goals are listed in the figure below.



Figure 1: The 17 Social Development Goals (United Nations)

To document the progress and problems in this development, a Sustainable Development Report is published annually. This report also includes the SDG Index, which is an "assessment of each country's overall performance in the 17 SDGs" (Sachs *et al.*, 2022, p. 9) and measures the progress of all countries with regard to the SDGs and subsequently creates a global ranking. Repeatedly, European countries have the highest scores. Among the top 10 for 2022 are exclusively European countries, eight of which are members of the EU. The list is also headed by 3 member states of the EU, namely Finland (score 86.5), Denmark (score 85.6) and Sweden (score 85.2). In 2022, the EU27 score was slightly above 80 which is the highest in the world among all global regions (cf. Sachs *et al.*, 2022). Since both the EDG and the EPSR define, among other things, production standards, and both are based on the SDGs, the EU's performance in this regard defines European production standards as a global benchmark for both environmental and social standards.

In this chapter, the European standards will now be discussed in more detail, with a focus on both the public dimension and the legal dimension, as well as in relation to OL. Within the scope of this chapter, however, it is not possible to take a detailed look at the entire discourse, as this would require a disproportionate amount of methodological effort, which would have to be carried out in a separate project.

## 4.1 Environmental regulations

The EU can be characterized as an experienced actor in environmental policy legislature with proposals, known as Environment Action Programs (hereafter referred to as EAPs) with multi-year terms, dating back to the early 1970s. With the Lisbon Treaty (2009), the fight against climate change became a declared objective of the EU. The European environmental policy is mainly based on Article 11 of the Treaty of the Functioning of the EU (2009; hereafter referred to as TFEU), as well as on Title 20 TFEU, which comprises Articles 191 to 193. Three points in particular have to be emphasized: environmental protection conditions must be integrated into all policies and activities of the EU (Article 11 TFEU), the EU is obliged to disseminate environmental measures internationally (Article 191 TFEU), and the EU only defines minimum measures (Article 193 TFEU). This means that each member state can also set consistently stricter measures.

After the entry into force of the Lisbon Treaty in 2009, a somewhat incoherent collection of policies followed in the field of environmental and sustainability debate, also referred to in academic literature as a "piecemeal approach" (Bongardt and Torres, 2022, p. 171).

With the EGD, however, there has been a new policy developed by the Commission in 2019, which not only strives for visionary and broad goals, but also makes said piecemeals cohesive. The EGD can be seen as the new basis for European environmental policy. The grand goal set in the process is ambitious: By 2050, Europe should become the world's first carbon-neutral continent. This means that by 2050 there should be no net emissions of greenhouse gases. By 2030, half of all emissions are to be saved compared to the year 1990 (cf. Tagliapietra and Veugelers, 2021). This can be seen as one of, if not the largest transformation of the European economy. Although carbon neutrality is the most important and overarching goal of the EDG, it is not the only one. In the process of achieving this grand goal, a fair and prosperous society should emerge (cf. European Commission, 2019) and the European industry should become a world leader in clean technologies (cf. European Commission, 2020a).

These goals can be achieved not only by addressing real threats and challenges, namely the environmental and climate crises, but also by basing progress on science. This is done by "transforming potential threats (climate and environmental challenges) into economic opportunities (sustainable growth) by making the transition just and inclusive" (Bongardt and Torres, 2022, p. 172). In this spirit, some scholars, including Bauer and Becker (2014), Dupont et al. (2020), and Bongard and Torres (2022), even attest an entrepreneurial spirit to the Commission in creating the EDG, especially compared to the reaction to the 2008 financial crisis. The general

methodological approach is to generate economic growth through more sustainable and greener strategies, steadily cutting emissions through investing in new green technologies (cf. European Commission, 2019) and raising environmental standards across global value chains (c.f. European Commission, 2019). In particular, European lead markets should be created through coordination between Member States and the regions concerned, as well as through the public-private partnerships set out in the "New Industrial Strategy for Europe" (European Commission, 2020a), which is primarily intended to serve as a framework for implementing the green and digital transformation, and which was also presented in 2020 and updated in 2021 due to the identification of the geopolitical dependencies of the EU during the Covid19 pandemic. Especially public-private partnerships are considered by Tagliapietra and Veigelers (2021) as essential for the success of green industrial policies. Such partnerships are understood as institutionalized cooperation between governments at the national and supranational levels, private sector actors and civil society, especially in view of the strong interdependence of the state and the market economy in these matters (cf. Tagliapietra and Veugelers, 2021).

Thus, one can also speak of a true paradigm shift in the EDG, as it adds an environmental dimension to all EU actions (cf. Bongardt and Torres, 2022). In practical terms, this means that all future policies must be aligned with the goals set out in the EDG. Thus, the EDG has a massive impact not only on the European economy, but also on European society.

Such a massive shift in economic activity from reliance on resource consumption to environmentally sustainable economic growth cannot be conceived without appropriate policies. The EDG envisions a whole set of different initiatives that span numerous policy areas. These range from the energy and industrial sectors to air pollution and biodiversity, to construction and agriculture. In addition, three other instruments are foreseen for a proper implementation of the goals: First, the 'European Climate Law' (European Parliament and European Council, 2021), which translates the ambitious goals of the EDG into hard law (cf. European Commission, 2019). Second, the 'Just Transition Mechanism' (European Parliament and European Council, 2020; European Commission, no date c) and third, the 'Fit for 55' package (European Commission, 2021c), which proposes measures to achieve the ambitious plans of the EDG, such as a new EU emission trading system (cf. European Commission, 2021c), a fundamental renewal of energy taxation at the European level (cf. European Commission, 2021c) and the Carbon Border Adjustment Mechanism (cf. European Commission, 2021c).

The EGD, its objectives, resulting strategies and proposed policies have a direct impact on existing environmental standards. As mentioned above, EU secondary law now needs to be adapted to the new targets set by the EDG and the Climate Law. This also increases the environmental standards that will apply in the future, which are relevant for this master thesis. For this purpose, several packages of directives were proposed starting in March 2022. Not all enacted directives can be analyzed in depth within the scope of this master thesis. However, three relevant to the context of this master thesis will be singled out and examined in more detail, namely the Ecodesign Framework Directive, the Strategy for Sustainable and Circular Textiles and the Digital Product Passport.

The new Ecodesign Framework Directive (European Commission, 2022f) is essentially based on its predecessor (European Parliament, 2009), but expands it substantially. It specifies design requirements, as almost all products on the European market must be designed to be environmentally friendly, recyclable and energy efficient from production to consumption. In line with the circular economy, the life cycle of products should also be significantly extended, and products should be easier to maintain and repair. Longevity, reusability and recyclability are primarily determined by correct product design. This determines up to 80% of the lifecycle environmental impact (cf. European Commission, 2022c). Special measures will be taken for the European textile and construction industry, as they have a particularly high environmental impact. For this purpose, the Strategy for Sustainable and Circular Textiles (European Commission, 2022a) was drafted and a revision of the Construction Products Regulation (European Commission, 2022e) was proposed. Concerning circular textiles, by 2030, for example, clothing should consist almost entirely of recycled material and be completely free of hazardous substances (cf. European Commission, 2022a). Furthermore, socially responsible manufacturing is a condition, as the garment and textile industry traditionally struggles in this respect (cf. European Commission, 2022a). This strategy also hits the mark in terms of intent, as the textile and apparel industry is one of the world's most polluting and resource-intensive industries (cf. Dickenbrok and Martinez, 2018).

In addition, the new regulations should directly involve consumers in the green transition process started by the EDG: Consumers should receive comprehensive information about the sustainability of products even before they buy them and be protected more effectively from greenwashing. To this end, the EDG envisages a Digital Product Pass (hereafter referred to as DPP). The DPP is aimed at making it easier to repair and recycle products, but also enable consumers to track the

presence of certain potentially hazardous substances along the supply chain (cf. European Commission, 2022a).

In the public discourse, these initiatives were received positively throughout. At "Have your Say", there were some initiatives that were very popular (for example: European Commission, 2020i, 2020k; both initiatives are still waiting for feedback from the European Commission). In a position paper from Business Europe, the new Ecodesign Framework Directive (European Commission, 2022f) was described as an extraordinary possibility to "establish (...) a market for secondary raw materials and circular products" (Business Europe, 2022, p. 1). In 10 points, however, there were also suggestions for improvement, which were primarily aimed at defining the new regulations more precisely and providing more information about them. One point was the DPP. It was well received by the European companies, because it provides not only consumers but also companies along the supply chain with information and also suggests ways to make it more effective (cf. Business Europe, 2022). In another statement from May 2023, Business Europe also calls on EU policymakers to make rapid progress on both issues and calls for closer dialogue (Business Europe, 2023b). This example shows that an economic actor, in this case Business Europe, tries to influence the discourse by recognizing the problem and the necessity of the proposed measure and thus shows willingness to minimize the unintended side effects of its representatives. Furthermore, it also actively demands institutionalized discourse in the form of dialogue with policymakers.

## 4.2 Social regulations

The European Commission described European social standards, such as general living standards, working conditions and social protection, as the highest in the world (cf. European Commission, 2020b). Yet European initiatives in the area of social policy have been rather restrained in the past. This was sometimes due to the fact that previous initiatives often fell far short of their expectations or had notable impact only in certain branches of social legislation (cf. Rasnaca, 2017). Nevertheless, there are some important references to European social policy in the various European treaties. The Treaty of Amsterdam (1999) incorporated the changes of the Protocol on Social Policy already attached to the Treaty of Maastricht (1993), which gave the EU competences in the field of workers' protection and general working conditions (cf. Venturini, 1998). The horizontal social clause, Article 9 in the Lisbon Treaty (2009), obliges the EU to follow certain

defined social principles in all its actions. This clause was seen as having great potential to change policy initiatives in the long term but in retrospect, the effect of the clause fell short either (cf. Smejkal, 2016).

The reasons for this lack of initiative on the part of the EU lie primarily in the strongly developed national European welfare states, as well as in the consistently intense criticism of the member states when the EU has made an attempt at a social policy (cf. Rasnaca, 2017). Accordingly, relevant policies defining common standards are rare.

This changed in 2017, when a declaration (European Commission, 2017b) and recommendation (European Commission, 2017a) was issued by the European Commission, the European Council and the European Parliament on common future European minimum standards, namely the EPSR. The EPSR should serve as a social reference framework for national and European social policy initiatives. It is divided into three chapters with a total of 20 principles and, for the most part, formulated in very general terms.

From 2019 on, there has been a new dynamic in European social policy. Against the backdrop of ecological and digital change, which affects all member states of the EU equally, a European path was sought for maintaining European social standards. The EPSR was to serve as a guideline. This

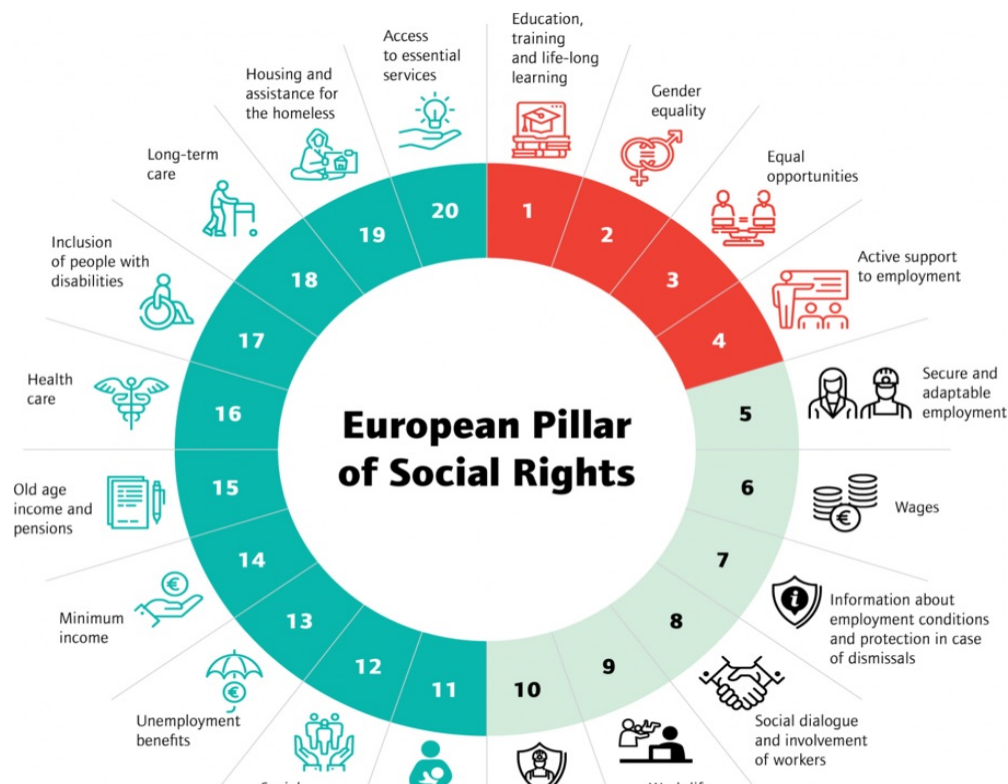


Figure 2: The EPSR with its 20 principles (Etui 2021)

was defined in a communication (European Commission, 2020b), and at the same time an action plan for the implementation of the EPSR was committed to be issued and corresponding legislative initiatives were coordinated (cf. European Commission, 2020b). This plan was published in March 2021 and defines three major targets for 2030: an employment rate of at least 78% across the EU, at least 15 million fewer people at risk of poverty and a rate of 60% of all adults attending training courses each year (European Commission, no date b). In May 2021, this plan, as well as the EPSR as a whole, was reaffirmed at the Social Summit in Porto, Portugal, by EU leaders and members of the Council through points 4 to 6 of the Porto Declaration (cf. European Council, 2021). This is to be seen as a consistently important sign of the European and national leaders for an implementation of the EPSR. For each of the 20 principles, the Commission wants to, respectively has already presented different actions to define them more precisely. These are seen as the future European standards. Rights are derived directly from some principles and the implementation is accompanied by strategies and EU funding. As in the previous subchapter, not all actions can be considered in more detail, but only those that are relevant in the context of this master thesis. These are: the European Skill Agenda (European Commission, 2020c), adequate minimum wages and the strategic framework on health and safety at work 2021 – 2027 (European Commission, 2021b). With the European Skill Agenda (European Commission, 2020c) every EU citizen should have the opportunity to adapt their skills to the constantly changing labor market. In addition, there should be a right to assistance in finding a job, training or further education, as well as the right of young people to training, apprenticeship, as well as a job offer within a four-month period after completion of training or work. There are two key initiatives so far, namely the Youth Employment support package (European Commission, 2020d) and the Action Plan for the Social Economy (European Commission, 2021a), which aims to create framework conditions for the social economy. Already in 2020, the Commission has proposed an EU directive for adequate minimum wages (European Commission, 2020f) in the EU. This puts the right of workers to fair wages first. A fair wage is defined as a wage that enables a decent standard of living. This is intended to prevent poverty despite work (cf. European Commission, no date a). The need for this directive arose because in most EU member states the minimum wage is too low for a decent living compared to other wages. In addition, certain groups of workers are often excluded from the minimum wage regulations in the member states. With this regulation, all European workers should now be protected and thus this directive unifies the wage standard within the EU. This contributes to

increased productivity "and to promoting economic and social progress" (European Commission, 2020f, p. 1).

The EU strategic framework on health and safety at work 2021 - 2027 (European Commission, 2021b), which is a continuation of the identically named framework for 2014 - 2020 (European Commission, 2014), aims to secure the right to a high level of protection of health and safety at work, the right to a working environment adapted to the professional needs of workers and a right to data protection in the context of employment. To this end, initiatives on mental health will be launched and the current EU legislation on hazardous chemicals will be evaluated and relaunched. The aim is to completely prevent accidents at work that result in death, occupational diseases and accidents at work (European Commission, 2021d).

The public debate on social standards focused mainly on wages and health and safety at work. European companies had a lot to say, particularly on the issue of adequate minimum wages. The introduction of a minimum wage for a dignified life and the dialog surrounding it were supported in principle, since such a standard is to be classified as growth-promoting and also prevents wage-dumping competition within the EU (cf. Business Europe, 2020). This is also in line with the avoidance of social unintended side effects in the EU. At the same time, however, the legal form of the directive for adequate minimum wages (European Commission, 2020f) is criticized, as it leaves the matter to state legislators and courts rather than to social partners. In the long run, this would weaken the social partners and the interests they represent, and lead to mistrust between the states and the social partners (cf. Business Europe, 2020). In terms of content, this view may not be surprising for an employer organization, but from the perspective of moral legitimacy, it is a clear commitment to a public discourse in society.

Adequate minimum wages were also discussed as part of a "Have your say" initiative, as was health and safety at work. There have been numerous initiatives in this area, for example on various toxic substances (e.g. European Commission, 2022d) or carcinogenic materials (e.g. European Commission, 2020g).

The standards presented in this chapter are all either already applicable or will be applicable in the near future in the environmental and social areas of the EU. The development of environmental and social minimum standards in the EU provides an impressive illustration, as explained above, of the process by which moral legitimacy is created. Moral legitimacy emerges, as already mentioned many times, through public discourse. Here, in the European legislative process, the

institutions of the EU have institutionalized a social discourse through their democratic legitimacy, and therefore the minimum standards, both in the form of the EGD and the EPSR, are to be understood as a direct outflow of this process constituting moral legitimacy. Moreover, the content level of the standards presented as examples makes it clear what Li and Zhou (2017) mean when they describe standards as a form of re-privatization of consequences that are privately caused but borne by the public sphere. In this sense, entrepreneurial action is increasingly restricted in order not to put producers on the spot in the first place by forcing them to establish regulatory legitimacy for entrepreneurial action with environmental or social side-effects. In this sense, the OL induced by European production standards is a restriction of entrepreneurial behavior in the sense of Dowling and Pfeffer (1975). Additionally, precisely because the EGD and EPSR are also rooted in the SDGs and are by far the most ambitious projects of this kind, the European minimum standards for production set the legitimating benchmark in a global comparison. After all, the SDGs are also to be understood as the outcome of a discourse that constitutes legitimacy, namely that of all the states of the world.

#### 4.3 Operationalization of Organizational Legitimacy against the background of European production standards with the help of the WTP

However, the public discussion about the moral legitimacy of unintended side effects, about environmental and social standards, and finally about location strategies does not only influence legislation in the EU. The influence of a public discussion about the moral legitimacy of corporate action on legislation also suggests an influence on the purchasing behavior of those people who are significantly involved in this discussion: the consumers. A change in purchasing preferences and attitudes in the Global North is indicated in several studies, although this change can be characterized as a slow and tenacious process (cf. Moser, 2015; Edbring, Lehner and Mont, 2016; Dickenbrok and Martinez, 2018; Kuchinka *et al.*, 2018; Bo, Yaozhong and Peng, 2021). If one follows the assumption of the theory of OL, this change is favored above all by the communication of environmental and social malpractices that occur in countries of the Global South to which production has been offshored. It is precisely this circumstance that establishes a link between moral legitimacy and cognitive legitimacy. Moral legitimacy is established in a public discourse, in this case about environmental and social unintended side effects. In the course of such a discussion, there may also be a shift in society's conception of how a company should (morally)

behave. The basis of cognitive legitimacy, i.e. the idea of how a company should behave that is assumed to have no alternative, suddenly takes on an alternative. This is also implied by Porter and Kramer (2011) when they postulate that the legitimacy of business is continuously falling due to outdated ideas of value creation, characterized by short-term optimization of finances without consideration of the environment. Accordingly, the goal should rather be to achieve long-term value creation in line with society and its expectations (cf. Porter and Kramer, 2011). This argumentation is directly linked to cognitive legitimacy, because the general societal idea of how an organization should behave can also be changed.

Operationalizing OL, however, proves to be problematic. In the academic debate, the author is not aware of any study in which legitimacy has been measured as a social construct understood in this master thesis. However, it is precisely because of this social constructivist understanding of legitimacy that it is difficult to measure, as problems with validity, reliability and objectivity can arise due to numerous external influences. Therefore, this master thesis suggests and pursues to measure legitimacy with the help of a proxy, namely the willingness to pay (WTP). This describes the willingness of a consumer to pay for a product with certain characteristics or, if product characteristics are manipulated, to pay more or less for this product. The use of the WTP as a proxy for legitimacy in this scenario is rooted in Grappi, Romani and Bagozzi (2018) as they describe a higher consumer's WTP for a reshored product as one of the central outcomes of their study (cf. Grappi, Romani and Bagozzi, 2018). Using WTP as a proxy for operationalizing legitimacy also seems consistent with the discussion of OL. As discussed in Chapter 3.3, low prices resulting from offshoring strategies are a benefit that consumers enjoy as stakeholders of the corporation. The price is therefore cognitively legitimate. However, if this price increases as a result of measures taken by a company to minimize unintended side effects, and if the consumer is still willing to pay this price, especially against the background of a morally legitimate production method, then the price continues to be cognitively legitimate. Against this background, WTP can serve as a proxy for operationalizing legitimacy.

The lack of cognitive and moral legitimacy in entrepreneurial actions is a major problem for affected organizations, as it puts them at a competitive disadvantage. Reshoring as a counter strategy to offshoring can be seen as a strategic solution here, because by relocating previously offshored manufacturing entities back to the EU, entrepreneurial actions can once again meet consumer expectations and would therefore foster congruence of the societal and entrepreneurial value sets.

Against this background, it can therefore be assumed that:

***H1a:** All other attributes equal, the consumer's WTP is lower when an offshoring strategy is used, compared to when a reshoring strategy is used.*

***H1b:** All other attributes equal, the consumer's WTP is higher when a reshoring strategy is used, compared to when an offshoring strategy is used.*

However, the public discourse is only conditionally concerned with the concrete location strategy that a company pursues in its production, but essentially with the environmental and social unintended side effects of production.

If one takes a look at the product itself, there are, according to Levitt (1980), three levels: the core product, which provides the consumer with a functional advantage, the actual product, which provides the consumer with an advantage through its physical properties, and the augmented product, in which all the other attributes of a product can be found, which are intended to provide the consumer with an advantage through extraordinary properties. According to Crane (2001), the latter level also indirectly includes characteristics and attributes of the production or the country of production. Thus, not only location strategy, but also environmental and social malpractices due to lack of production standards in the Global South, and, respectively, European production standards are an essential part of a product and can therefore potentially influence the WTP as well. These drive the discourse and are only conditionally linked to a location strategy, as they are primarily linked to production process itself. In this context, it is therefore important to determine whether the location strategy is the decisive argument or whether the actual production conditions are. This leads to the following hypothesis:

***H2:** The consumer's WTP is the same when a location strategy minimizes environmental and social side effects but remains offshore as when it is reshored.*

Subsequently, it is also necessary to determine which of the unintended side effects is more relevant for the consumer, the environmental or the social one. This leads to the following hypothesis:

*H3: The consumer's WTP for a strategy that only addresses environmental side effects is the same as for a strategy that only addresses social side effects.*

The literature also discusses two other attributes that, in addition to location strategies and production conditions, can significantly influence the WTP of a product: Quality and Price.

Quality is identified by Iwanow et al. (2005), Niinimäki (2010) or Jägel et al. (2012) as an extremely important influencing attribute. Above all, quality in the sense of durability is decisive as high-quality goods have a longer life cycle, thus preventing rapid replacement purchases and reducing waste and resource wastage. Despite this indication, actual purchasing of such products decreases as preference for quality and durability increases, as consumers automatically perceive goods produced under high environmental and social production standards to be of lower quality (cf. Jacobs *et al.*, 2018). Jacobs et al. (2018) attribute this fact to a lack of information, as well as, following Scaturro (2008), persistent prejudice. However, this contradiction does not mean per se that WTP for high quality products decreases, but merely that high quality in the sense of product longevity is not assumed if their high environmental and social production standards are explicitly indicated. This therefore leads to the following hypothesis:

*H4: All other attributes equal, the consumer's WTP rises as product quality rises.*

The situation is similar regarding price. Here, however, the results of academic studies are contradictory at first glance. Some authors, such as Connell (2010) or Eifler (2014), describe high prices as a barrier to the purchase of goods produced under high environmental and social production standards. Other scholars, like Chekima *et al.* (2016) postulate that the fact that a good produced under high environmental and social production standards increases the consumer's WTP. Jacobs et al. (2018) suggest that this may be related to the sample composition of the studies and that consumers of higher priced products are overrepresented. The author of this thesis argues, however, that while on the one hand the WTP for goods produced under high environmental and social production standards is higher in any case, nevertheless consumers do not want to or cannot pay a too high price. It can therefore be assumed that there is a certain price threshold, which can vary according to social class. The following hypothesis can, hence, be assumed:

*H5: The higher the price, the lower the WTP for a product, regardless of which location strategy was used and which side effects were counteracted.*

However, the above mentioned indicated changes in purchasing preferences and attitudes alone are not enough to predict actual purchasing behavior. After all, it has been found that while preferences toward high environmental and social standards are increasing, products that meet these standards are nevertheless purchased far less frequently. This phenomenon has been demonstrated in the literature and is referred to as the attitude - behavior gap (Auger and Devinney, 2007; cf. Reimers, Magnuson and Chao, 2016; Liobikienė and Bernatoniene, 2017; Jacobs *et al.*, 2018). This poses a problem, because for a measurement of legitimacy via WTP, the renewed interpretation of preferences is not sufficient. Rather, the aim is to find out how WTP, and thus legitimacy, behaves under the influence of real situations.

In order to prevent such a measurement of preferences, a methodical procedure is needed which simulates a real purchase situation and requires the participants to make a concrete decision in different trade-off situations in a survey. A methodical possibility to generate such a scenario is the CBCA, which is used as a method in this master thesis. It will be presented in the next chapter.

## 5 Methodology

In this chapter, the quantitative method, the CBCA, which is used for the implementation of the research project described above, is presented.

This method is a special form of Conjoint Analysis (hereafter referred to as CA), which was first presented mathematically in 1964 by Luce and Tukey (1964). In this method, the influence of individual attributes of a product on the consumer's preference formation is to be determined by combining survey and analysis procedures (cf. Hake and Grönefeld, 2008).

With the help of CBCA, this master thesis will identify the essential product attributes, as well as their characteristics, which consumers consider to be particularly important for the legitimacy of companies and which also have a significant influence on their WTP. For this purpose, the further development of CA, the CBCA, is explained and discussed in more detail in this chapter. The attributes and levels of this master thesis are also defined, and Hierarchical Bayesian (hereafter

referred to as HB) estimation as preference estimation is discussed in more detail. Finally, the specific design of the CBCA and the concrete survey used are presented.

## 5.1 A short introduction to CA and CBCA

The original CA was mathematically founded by Robert Luce and John Tukey in 1964 in their article "Simultaneous Conjoint Measurement: A New Type of Fundamental Measurement" (Luce and Tukey, 1964). While today CA is mainly used in business research, and here primarily in market research, it was originally used in psychological studies (cf. Green and Rao, 1971). In the late 1970s it became established in the canon of business methods due to Paul Green and V. Srinivasan's (1978) study "Conjoint Analysis in Consumer Research: Issues and Outlook" (Green and Srinivasan, 1978). In the following decades, CA enjoyed great popularity in theory and practice. CBCA is one of several further developments of the original CA and was created by Louviere and Woodworth (1983) in their article "Design and Analysis of Simulated Consumer Choice or Allocation Experiments: An Approach Based on Aggregate Data" (Louviere and Woodworth, 1983).

In this context, some basic concepts need to be clarified for a further understanding of this method: CA and its forms are centrally concerned with the utility of a product. This benefit is made up of the sum of part-worth utilities of the various properties in different forms. These product properties are referred to as attributes, the characteristics in which they can occur as levels. This decompositional character of the method, i.e. the splitting of a large, whole entity into smaller parts, is fundamental to CA. However, it is not individual attributes that are compared, but different, holistic product alternatives. Thus, with the help of a CA it is possible to determine the importance of both individual attributes and individual levels for the overall product (cf. Hake and Grönefeld, 2008). In this process, the respondent gives a preference about attributes in different levels, which are measured as utility functions. In this way, these preferences are made measurable and can subsequently be understood as a representation of future demand. This train of thought is based on the assumption that consumers make decisions in order to maximize use for themselves (cf. Lieder *et al.*, 2018).

Figure 3 shows the usual methodological process of a CA according to Rao (2014). First, as with any methodological work, the purpose of the analysis must be defined. This is a problem or an existing research gap that should be closed. The next step is to design the choice sets. Essentially,

this means determining the attributes and levels of the product in order to finally build the product for the study. Once this process is complete, the data must be collected. This can be done in various ways, such as online surveys or interviews. Once the data has been collected, it must be analyzed according to the purpose of the conjoint study.

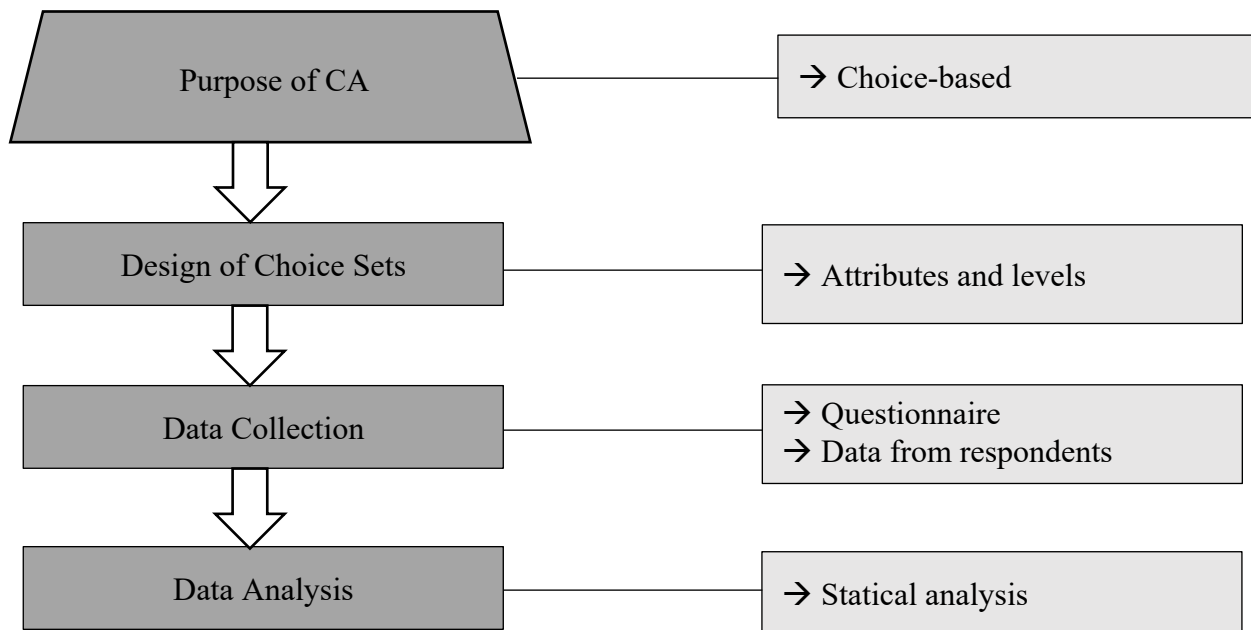


Figure 3: CBCA process based on Rao (2014)

In addition to its traditional form, which works with stated preferences, CA has undergone various further developments. These include the adaptive CA, which was developed specifically for a large number of attributes and levels, the self-explicated CA, which, unlike the other types, has a compositional character and therefore follows a bottom-up principle, or the CBCA, which, unlike the traditional form, does not work with stated preferences but with stated choices (cf. Lieder *et al.*, 2018). Traditional CA and CBCA are thus both to be understood as “stated preference methods”, which means, according to Alriksson and Ölberg (2008, p. 244), that in these methods the respondent himself states how he would act in a particular situation. Actual behavior is not observed.

Out of all of these variations, the CBCA is the most frequently used method because it is considered to be particularly realistic. It is essential that the respondent must decide which alternative he or she favors the most. The trade-off effect of the method is fully exploited in the CBCA. A real market situation is simulated in which the participants have to choose a product from a large

number of alternatives: They are presented with a product in different versions, always with different level compositions of the occurring attributes at the same time. They must then decide on the version that represents the greatest benefit for him, i.e. the best trade-off (cf. Lieder *et al.*, 2018).

The CBCA can be split into two further designs: Binary choice and multinomial choice. In the former, the respondent has a maximum of one alternative set available, in the latter at least two. In some study designs, subjects also have the option of choosing none of the given alternatives. This option is also called a no-choice option (cf. Rao, 2014). Such an option is always particularly important in the study design if one wants to define one or more threshold values. In this context, the attribute of price plays an essential role. As already explained in the previous chapter, the price of a product is always of great importance when buying and is significantly involved in a purchase decision. A no-choice option for a product thus creates the threshold of the WTP. If a respondent chooses the no-choice option from a set of alternatives, he indicates that every price in the set is above his WTP (cf. Gensler *et al.*, 2012). Conversely, this means that choosing an alternative or not using the no-choice option indicates a WTP in at least one case.

## 5.2 Attributes and Levels

It is important to select attributes and levels that are relevant to the topic and objectively justified (cf. Blamey *et al.*, 2002). There are two strategies for this. If there is already a lot of literature and academic discussion on a topic, attributes can be extracted well from this existing discourse. If a topic is still relatively unexplored, or if no particularly important attributes emerge, an attempt is usually made to find relevant attributes in a primary study with comparatively few participants (cf. Rao, 2014). In this master thesis, the first strategy is pursued.

The measurement of legitimacy of internationally operating companies has not yet been undertaken with the CBCA and thus represents a scientific novelty. However, following the explanations on the academic discourse on moral legitimacy in Chapter 2.3, in connection with the discourse-dependent establishment of new, European benchmark standards, attributes constructing legitimacy in corresponding levels do indeed emerge.

There is also a consensus in academic discourse that CBCA works better with a small number of attributes and levels. If there are too many attributes, there is a risk of confusion and of overtaxing the respondents. Therefore, a maximum of 10 attributes with a maximum of 15 levels per attribute

is recommended (cf. Sawtooth Software Inc., 2017). In this study, there are 5 attributes with a maximum of three levels each. Thus, these criteria are fulfilled.

In the following subsections, the attributes and levels of the study will be described in more detail. First, a brief description of the survey scenario is necessary. For the CBCA and especially for the price attribute, a concrete product is necessary as the object of investigation. In this study, this will be a simple T-shirt. This is due to the fact that the clothing industry in general is one of the industries that, through an offshoring strategy, is one of the biggest causes of environmental pollution and social grievances in its production countries (cf. Dickenbrok and Martinez, 2018). At the same time, as already mentioned, the garment industry is also the European sector in which companies most frequently apply reshoring strategies and are thus most directly affected by new European environmental and social standards (cf. Eurofund, 2019). Therefore, this industry lends itself well as a general object of study. A T-shirt is also an ideal, concrete object of study, as this is a gender-neutral basic product whose benefits seem self-explanatory to most test persons.

### *Locations Strategy*

The first attribute is Location Strategy (hereafter referred to as LS). The first two hypotheses examine the influence of the production LS used on the perceived legitimacy of MNCs. As explained in Chapter 3, there are two different approaches: offshoring and reshoring. Offshoring is popular internationalization strategy, in which, in brief, production units are relocated to another country due to better production conditions (cf. Schmeisser, 2013). Reshoring, on the other hand, which has become increasingly popular in the manufacturing sector worldwide in recent years, at least partially reverses the offshoring process (cf. Foerstl, Kirchoff and Bals, 2016; Di Mauro *et al.*, 2018).

The generic term LS is therefore the attribute, the individual strategies offshoring and reshoring are the two levels in which the attribute can occur.

| Attribute | Levels                                                                              |
|-----------|-------------------------------------------------------------------------------------|
| Strategy  | <ul style="list-style-type: none"> <li>- Offshoring</li> <li>- Reshoring</li> </ul> |

*Table 2: LS attribute and corresponding levels*

### *Environmental Production Standards and Social Production Standards*

The second and third attributes are the environmental and social production standards (hereafter referred to as EPS and SPS). These interact with the first attribute, the LS, as the different strategies have different positive and negative side effects on the environment and society. Chapter 4 focused on the existing and future standards of the EU. As explained in chapter 4, these are understood to be the international benchmark standards. For both attributes, therefore, there will be three different characteristics: Production standard below EU standard, as outside of the EU, production standards equal to EU standards, as the minimum standards production is legally required in the EU (cf. Art.193 TFEU), and production standards above EU standards. The last level may be surprising given that European production standards are considered benchmark standards. However, as mentioned above, these standards are only minimum requirements. Companies are therefore free to manufacture their products to much higher standards. The third level "above EU standards" is intended to take this option into account.

| Attribute | Levels                 |
|-----------|------------------------|
| EPS       | - Below EU standard    |
|           | - Equal to EU standard |
|           | - Above EU standard    |

*Table 3: EPS attribute with corresponding levels*

| Attribute | Levels                 |
|-----------|------------------------|
| SPS       | - Below EU standard    |
|           | - Equal to EU standard |
|           | - Above EU standard    |

*Table 4: SPS attribute with corresponding levels*

## Quality

The quality of the exemplary product is the fourth attribute. In past studies, this attribute has repeatedly been referred to by the term resilience. This approach is adopted in this master thesis, yet the naming of the levels here is not simple. Labels such as "poor", "low" or "high" quality imply a bias and can therefore distort the results of the study. Furthermore, designations such as "robust" or "(not) resistant" can confuse the test person, especially in connection with a basic T-shirt.

However, a solution to this problem can also be found in the literature: the term resilience in connection with the quality of a product is associated with the length of its life cycle. A product of good quality is more resistant, does not wear out as quickly and does not break down as quickly. Good quality thus implies a longer life cycle of the product (cf. Jacobs *et al.*, 2018). This can also be adapted for the designation of two levels: short life cycle and long life cycle.

| Attribute | Levels             |
|-----------|--------------------|
| Quality   | - Short life cycle |
|           | - Long life cycle  |

Table 5: Quality attribute with corresponding levels

## Price

The fourth attribute is price. Here it was argued in chapter 4.3 that WTP increases with social and environmental sustainability up to a certain threshold, and then decreases once this threshold is reached. In this study, the WTP for a company's product is used as a proxy for measuring the legitimacy of that company. Thus, the attribute of price is one of the most important in this analysis. The levels for this attribute were chosen based on three real market examples, covering a wide range of products with the same attributes presented at different levels. One of the three products was manufactured in the Global South, the other two in the EU. For the latter two, the EU minimum standards apply in any case. The products also differ in quality and significantly in price.

The three levels are as follows:

The first is by the popular Swedish retailer H&M and can be bought for €6.99. According to the online store website, it is made of cotton and was either produced in Bangladesh, India, Kenya,

Turkey or Ethiopia, but in any case outside Europe in the Global South (cf. H&M Hennes & Mauritz AB, 2023). The second T-shirt is by the European brand Armed Angels and costs €29.90. According to its website, it is made out of organic cotton and manufacturing is located in Portugal realized under environmentally friendly and fair conditions (cf. Social Fashion Company GmbH, 2023). The third and most expensive T-shirt is from Pangaia and costs €75.00. As with Armed Angels, this T-shirt is produced in Portugal under environmentally friendly and socially fair conditions, according to the website. In addition, however, this T-shirt has special fibers and impregnations so that the T-shirt fabric is antibacterial, which means that it does not absorb unpleasant body odor so quickly. As a result, the T-shirt can be worn more often and needs to be washed less often, using less water (cf. Pangaia, 2023).

So, with rounded amounts, the levels for the attribute price are: €7.00, €30.00, and €70.00.

| Attribute | Levels    |
|-----------|-----------|
| Price     | - € 7.00  |
|           | - € 30.00 |
|           | - € 70.00 |

*Table 6: Price attribute with corresponding levels*

### 5.3 Preference Estimation and empirical Model of CBCA

As already described, CAs are concerned with the evaluation of various product attributes and the resulting usage preferences. The different attributes and levels are linked to the utility attributed by the respondents and a collective evaluation of the product is made on the basis of these.

The evaluation of CBCA has mainly been dominated by aggregate models such as OLS regressions or logit (c.f. Orme, 2000). HB estimation is an alternative. This method is particularly popular in CBCA because it uses part-worth values. Briefly summarized, in the HB model there are two levels that stand in a hierarchy to each other. On the first level are these individual part-worths. These are multivariate normally distributed. On the second level, derived from the part-worths of the first level, are the individual probabilities that a certain result will come about, such as the purchase of a product. The quality of the estimated individual utility is improved by using data from other test persons (c.f. Orme, 2000).

HB estimation can therefore improve the reliability and validity of a study compared to the traditionally used aggregate models (c.f. Orme, 2000). These factors make HB attractive for CBCA and therefore HB is also used in this master thesis.

Subjects are confronted with different choice set alternatives from which they have to choose one alternative. Such a choice is called a discrete choice. Louveire et. al (2000, p. 49) give the following formula for the probability  $P$  that an individual  $q$  chooses alternative  $i$  from a set of alternatives  $J$  as follows:

$$P_{iq} = \frac{\exp(V_{iq})}{\sum_{j=1}^J \exp(V_{iq})}$$

According to Louvri r et al. (2000),  $V_{iq}$  corresponds to the utility of alternative  $i$  for an individual  $q$ . Therefore it can be describes as “a systemtic component or representative utility” (Louviere, Hensher and Swait, 2000, p. 38). However,  $V_{iq}$  is only a part of the total utility  $U$ . Since a factor is always assumed in the selection process that cannot be described or observed, a random component  $\varepsilon_{iq}$  is assumed in addition to  $V_{iq}$ . The total utility  $U$  can be calculated by assuming a random component  $E_{iq}$  in addition to  $V_{iq}$ . The total utility  $U$  is normally distributed and is described by . Louveire et. al. (2000, p. 38) as follows:

$$U_{iq} = V_{iq} + \varepsilon_{iq}$$

#### 5.4 Design of the CBCA and the survey

The CBCA can be used in different designs and thus be applied to the specific needs of the respective research project. First, a distinction is made between a full profile and a part profile design format. The difference between these two forms of design is that in the former, all levels of all attributes are shown. In the latter, this selection is limited, for example, because the number of possible combinations is too large (c.f. Chrzan and Orme, 2000). For this reason, a full profile format was chosen for this master thesis, as the possible combinations are manageable and

therefore losses in determining the influence of part-worth utilities on the total utility are not justified.

Secondly, a random design was chosen for this master thesis. In this design, the different versions of the choice sets are randomly assigned to the subjects of the study (c.f. Chrzan and Orme, 2000). According to Chrzan et al. (2000), four different methods are available for design generation: complete enumeration, shortcut, random and balanced overlap.

In complete enumeration, all possible combinations are used and the frequency of the different level combinations of the different attributes is balanced as much as possible so that the profiles created are almost orthogonal. This also leads to the fact that within a choice set the same levels of an attribute occur as little as possible twice. This is called minimal overlap.

With the shortcut method, the profiles shown are based on the least used attribute levels. Here, too, there is a minimum overlap.

In the random method, the choice sets are completely randomly sampled, resulting in overlaps within a concept. In some study designs, such as when researching interaction effects, this is advantageous.

Finally, there is the balanced overlap method, which is a combination of the complete enumeration and random method and combines the advantages of both methods: There is a random sample, but still the overlaps are contained. This makes the balanced method almost as effective as a complete enumeration and produces the most accurate results due to its combinative character. This is why it was chosen for this master thesis.

In a CBCA, it is also possible to prohibit different level combinations in the software. This is of course at the expense of the efficiency of the design, but is necessary in some studies for content-related reasons (cf. Sawtooth Software Inc., 2017). This is also the case in this master thesis. The level “reshoring” was prohibited to show up with the level “below EU standards” of the attributes “EPS” and “SPS”. This is because production in the EU, whether concerning environmental or social standards, is not allowed to be below the EU standard. Production within the EU at least meets the European standards, if not exceeds them.

The data collection for the analysis in this master thesis was done through an online survey. This type of survey has many advantages, especially for students. On the one hand, they are inexpensive compared to recruited professional research panels, and they are quick and easy to conduct. A potential, non-recruited, random audience is also much easier and quicker to reach. On the other

hand, participants are also much easier to access. Due to its omnipresence, the internet offers the possibility of spreading a survey particularly quickly and across geographical borders (cf. Wright, 2005). For these reasons, an online survey was chosen for this master thesis.

The survey questionnaire was created via Sawtooth Software's Lighthouse Studio, for which the author of this master thesis was given a student grant and made available online. In addition to personal forwardings by the author, several postings were also made online in various social media platforms.

The online survey ran for four weeks from the April 3<sup>rd</sup>, 2023 to April 28<sup>th</sup>, 2023.

In the survey, respondents were asked to imagine a shopping scenario in which they would like to buy a basic white T-shirt. In this scenario, they knew the five attributes of all products. The five attributes were then explained. They were then given 5 different products from which they could choose one. In addition, they also had the option of not choosing any of the 5 alternatives. The exact survey can be found in the appendix.

Finally, table 6 shows all five attributes with their respective levels.

| Attributes                         | Levels                                                                                                                                |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Strategy                           | <ul style="list-style-type: none"> <li>- Offshoring</li> <li>- Reshoring</li> </ul>                                                   |
| Environmental Production Standards | <ul style="list-style-type: none"> <li>- Below EU standards</li> <li>- Equal to EU standards</li> <li>- Above EU standards</li> </ul> |
| Social Production Standards        | <ul style="list-style-type: none"> <li>- Below EU standards</li> <li>- Equal to EU standards</li> <li>- Above EU standards</li> </ul> |
| Price                              | <ul style="list-style-type: none"> <li>- € 7.00</li> <li>- € 30.00</li> <li>- € 70.00</li> </ul>                                      |
| Quality                            | <ul style="list-style-type: none"> <li>- Short life cycle</li> <li>- Long life cycle</li> </ul>                                       |

*Table 7: All attributes with their corresponding levels*

## 5.5 Design Testing

Sawtooth Software provides a test design function, with which researchers can run a hypothetical test in order to see, whether the Choice Based Conjoint survey is able to estimate the utilities with sufficient accuracy. Sawtooth Software recommends that during such a test run, the standard errors for each level should be 0,05 or lower for main impacts of the attributes and 0,1 or lower for interactions between attributes.

As visible in the table below, all standard errors in the test run for this survey have been below the recommended values.

| Attribute | Level | Std. Error | Label                 |
|-----------|-------|------------|-----------------------|
| 1         | 1     | 0,04205    | offshoring            |
| 1         | 2     | 0,04205    | reshoring             |
|           |       |            |                       |
| 2         | 1     | 0,04680    | below EU standards    |
| 2         | 2     | 0,03171    | equal to EU standards |
| 2         | 3     | 0,03176    | above EU standards    |
|           |       |            |                       |
| 3         | 1     | 0,04679    | below EU standards    |
| 3         | 2     | 0,03182    | equal to EU standards |
| 3         | 3     | 0,03191    | above EU standards    |
|           |       |            |                       |
| 4         | 1     | 0,02532    | € 7.00                |
| 4         | 2     | 0,02542    | € 30.00               |
| 4         | 3     | 0,02527    | € 70.00               |
|           |       |            |                       |
| 5         | 1     | 0,01759    | short life cycle      |
| 5         | 2     | 0,01759    | long life cycle       |
|           |       |            |                       |
| None      |       | 0,04210    |                       |

Table 8: Estimated standard errors

## 6 Data Analysis

This chapter presents and analyzes the data collected using the method described in Chapter 5. The statistical tests performed will be described and their results interpreted regarding the individual attributes and their levels.

First, the description of the sample is given. Then the individual criteria utilities like the relative importance of the individual attributes, their interactions, the importance scores and the HB estimations are described. Finally, the results of the market simulator are discussed.

### 6.1 Sample Description

A total of 221 people participated in the survey. The majority of participants, 64% (141 participants), identified themselves as female. A total of 35% (78) identified themselves as male and 1% (2) did not provide any information.

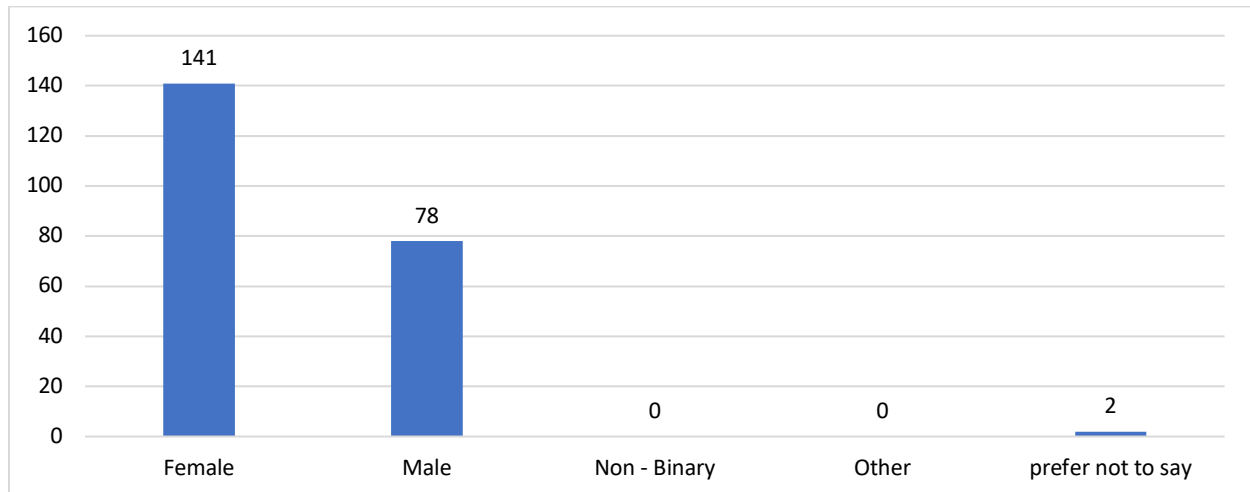


Figure 4: Distribution of Gender

Most respondents, namely 52% (116 participants), were between the ages of 18 and 30. Approximately 15% (34) were between 31 and 40 years old and approximately 12% (27) were between 41 and 50 years old. The group of participants 51 to 60 years old accounted for 9% (19), the group 61 - 70 years old accounted for 7% (16) and over 70 accounted for 4% (8) of the participants. A total of 0% (1) of participants were under the age of 18.

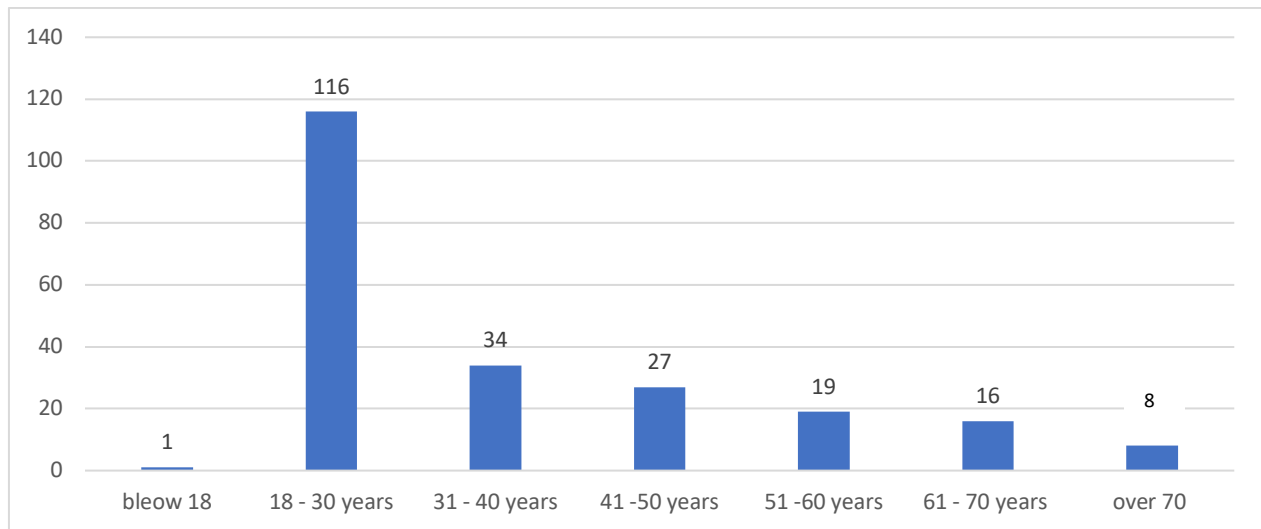


Figure 5: Distribution of Age

The participants in the sample also have a high level of education for the most part. Among these, 72% (158) have an academic degree. Only 3% (7) of participants have an apprenticeship degree and 2% (4) of participants have a vocational school degree. Likewise, 3% (6) did not provide any information in this regard.

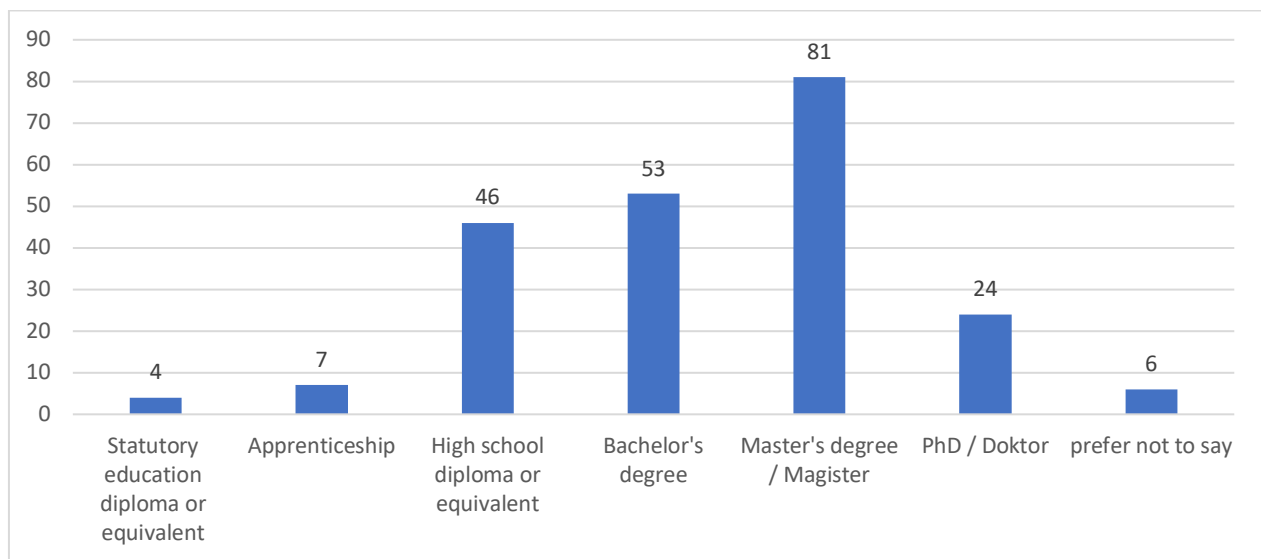


Figure 6: Distribution of Education

Similarly, the majority of participants, 72% (159) were employed. Students made up 13% (28) of the sample and retirees 9% (19). The self-employed were represented by 4% (8) and the unemployed by 2% (5). Only 1% (2) of the respondents made no statement in this regard.

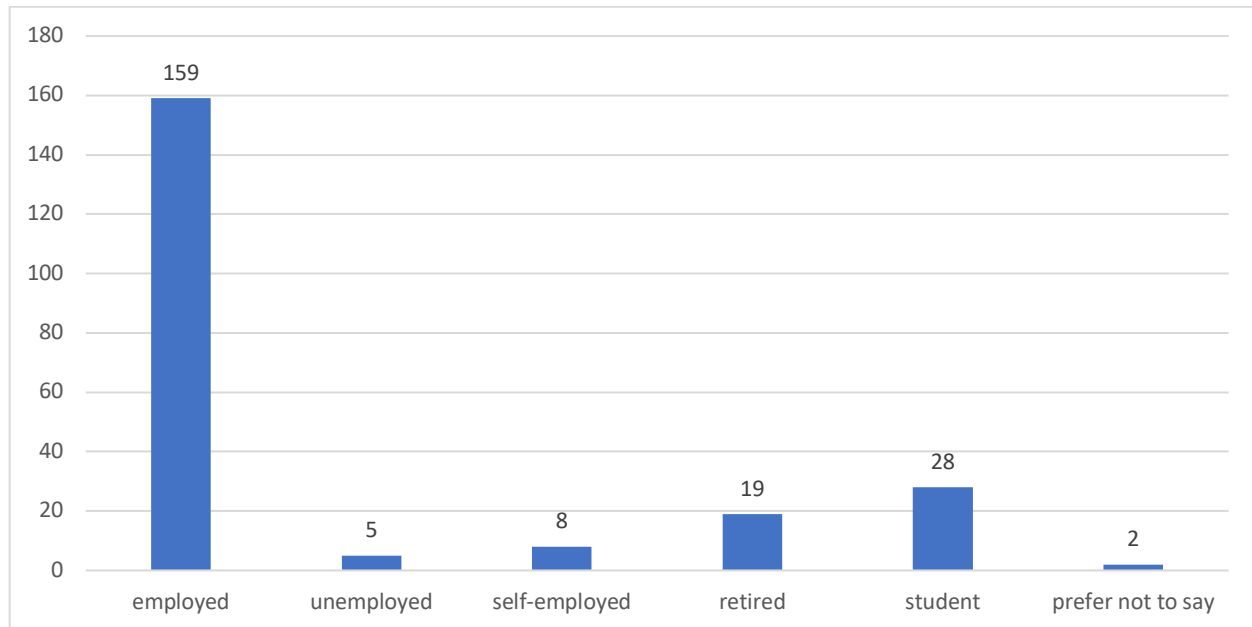


Figure 7 Distribution of Employment

## 6.2 Relative Impact of each attribute

To measure the relative impact of each attribute, the count program is used. It counts how often each level of an attribute is selected by the participants in relation to how often it was available for selection (c.f. Sawtooth Software, no date). This is possible in the case of a CBCA because of the probability that each level of an attribute occurs with each level of another attribute. An exception to this are prohibitions, in which certain combinations are prohibited. For this survey there were two prohibitions (see chapter 5.5).

Although this procedure is very basic, it provides a good basis for further analysis, since the main effects can already be well estimated at this stage. In order to prove the statistical significance of the individual attributes, a chi-square test was also performed.

The attribute "LS" with the levels "offshoring" and "reshoring" shows statistical significance with  $\chi^2_{(1)} = 1106.856; p < 0.01$ . With 45.7% the level "reshoring" was the most chosen level in this

attribute in contrast to the level "offshoring" with 10.7%. This already shows a clear preference for products whose production was brought back to the EU from former offshore production units.

The attribute "EPS", with the levels "below EU standards", "equal to EU standards" and "above EU standards", also shows statistical significance with  $\chi^2_{(2)} = 455.028$ ;  $p < 0.01$ . The levels "above EU standards" with 36.1% and "equal to EU standards" with 33.4% were chosen significantly more often than "below EU standards", which was chosen only in 10.6% of the cases.

The attribute of "SPS" with the levels "below EU standards", "equal to EU standards" and "above EU standards" also shows statistical significance with  $\chi^2_{(2)} = 551.719$ ;  $p < 0.01$ . In this attribute the level selection is similar to the last one. Products that were produced equal to EU standards (34.7%) or above EU standards (36.3%) were selected significantly more often than products that were produced below EU standards (8.9%) and thus also offshore.

The attribute "Price" with its levels "€7.00", "€30.00" and "€70.00" also shows static significance with  $\chi^2_{(2)} = 507.074$ ;  $p < 0.01$ . Here, a very clear preference can be seen, much more clearly than for the other attributes: products with the level "€7.00" were chosen in 40.1% of the cases, products with the level "€30.00" in 30.1% of the cases and products with the level "€70.00" only in 11.6% of the cases.

Finally, the attribute "Quality", which is divided into the levels "short life cycle" and "long life cycle" with  $\chi^2_{(1)} = 551.161$ ;  $p < 0.01$  also shows statistical significance. Again, there is a clear tendency, as level "long life cycles" was more popular than products with level "short life cycles" with 39.1%. The latter were chosen only in 15.6% of the cases.

It can thus be stated that all attributes are statistically significant. It is particularly interesting that especially the reshoring strategy, and together with-it production standards "equal to" or "above EU standards", were chosen most frequently compared to their respective other levels. Furthermore, there is a clear preference for cheaper products. Even though the cheapest level with "€7.00" was chosen most frequently, the level with "€30.00" also performed well. Between the levels of "€30.00" and "€70.00", however, the choice drops sharply. There is also a clear preference for high-quality products.

An extensive table derived from Sawtooth Software's count program can be found in the Appendix.

### 6.3 Interactions of the attributes

The count program also automatically calculates a Chi-Square test for all interactions between the attributes to prove their significance. Out of a total of ten possible interactions, seven showed statistical significance. These are explained below:

The attribute of "LS" and "EPS" had a statistical significance of  $\chi^2_{(2)} = 278.575$ ;  $p < 0.01$ . A clear trend can be seen, as shown in the table. While the levels of the production standard reached a maximum of 11.5% of the answers for the level "offshoring", and even here only if the production was offshore above the EU standard, the share of answers for the level "reshoring" reached 44% ("equal to EU standards") and 47.3% ("above EU standards"). For the level combination "reshoring x below EU standards" a prohibition was pronounced, as explained in chapter 5.5, because within the EU production is not allowed below the legal minimum standard.

| LS x EPS               |                       |  | Total     |
|------------------------|-----------------------|--|-----------|
| Total Respondents      |                       |  | 221       |
| offshoring             | below EU standards    |  | 0,106     |
| offshoring             | equal to EU standards |  | 0,104     |
| offshoring             | above EU standards    |  | 0,115     |
| reshoring              | below EU standards    |  | *         |
| reshoring              | equal to EU standards |  | 0,440     |
| reshoring              | above EU standards    |  | 0,473     |
| Interaction Chi-Square |                       |  | 278,575   |
| D.F.                   |                       |  | 2         |
| Significance           |                       |  | $p < .01$ |

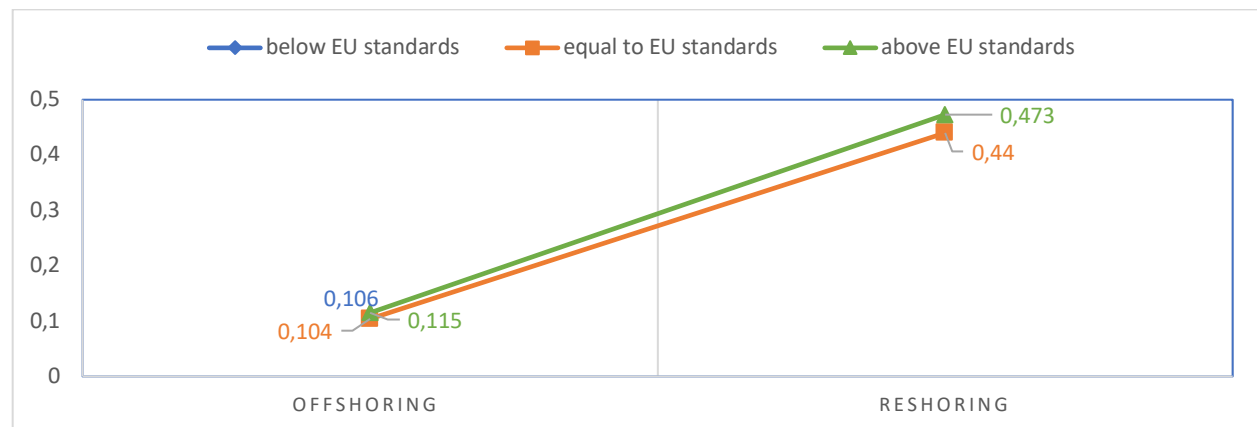


Table 9: Interaction LS and EPS

The situation is similar for the interaction between the attributes "LS" and "SPS". The statistical significance was  $\chi^2_{(2)} = 213.933$ ;  $p < 0.01$ . Here, too, the level combination of "offshoring" and the different production standards levels reached a maximum of 13.6% of the responses. The combination of "offshoring" and "below EU standards" was even lower (8.9%) than for the same combination for "EPS" (10.6%). Very similar values to the previous interaction were obtained by the combination of the level "reshoring" and the level "equal to EU standards" (44.4%) and the level "above EU standards" (47%).

| LS x SPS               |            |                       |           |
|------------------------|------------|-----------------------|-----------|
|                        |            |                       | Total     |
| Total Respondents      |            |                       | 221       |
|                        | offshoring | below EU standards    | 0,089     |
|                        | offshoring | equal to EU standards | 0,132     |
|                        | offshoring | above EU standards    | 0,136     |
|                        | reshoring  | below EU standards    | *         |
|                        | reshoring  | equal to EU standards | 0,444     |
|                        | reshoring  | above EU standards    | 0,470     |
| Interaction Chi-Square |            |                       | 213,933   |
| D.F.                   |            |                       | 2         |
| Significance           |            |                       | $p < .01$ |

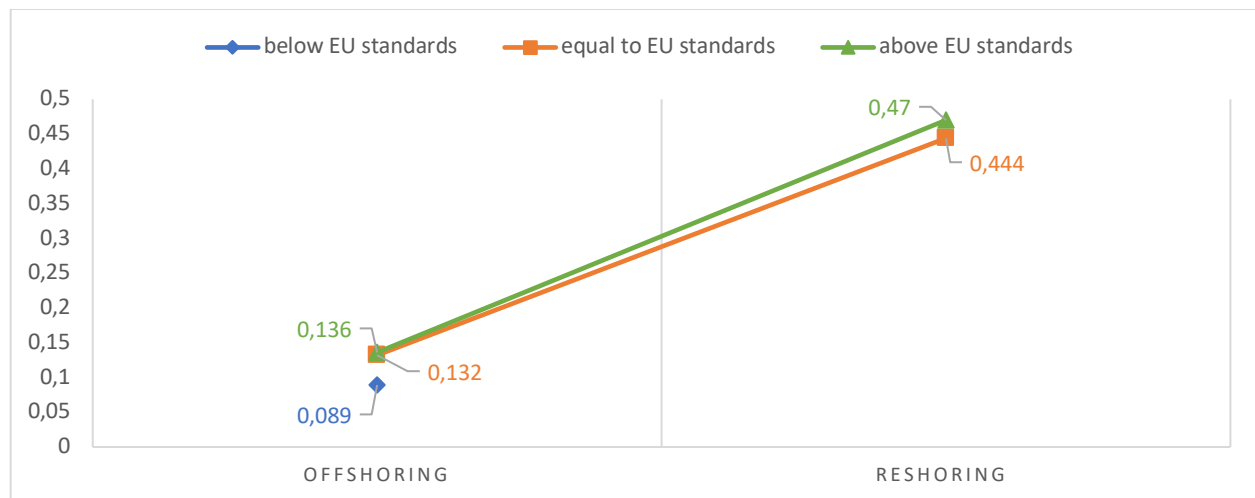


Table 10: Interaction LS and SPS

The interaction between "LS" and "Price" is also revealing. Static significance is given by  $\chi^2_{(2)} = 19.785$ ;  $p < 0.01$ . There is a clear tendency towards the low price level for both the "offshoring"

and "reshoring" levels. The most expensive level of "€70.00" achieved the lowest attribute internal value for both levels, namely 3.4% for "offshoring" and 20.8% for "reshoring". Meanwhile, the level "€7.00" reached the highest attribute internal values, namely 18.4% for "offshoring" and 64% for "reshoring". Between the levels "offshoring" and "reshoring", however, a huge difference emerges, establishing a very clear preference towards "reshoring". The lowest percentage for "reshoring", as already mentioned, 20.8% at "€70.00" is still higher than the highest percentage for "offshoring" (18.4%). The level combination of "reshoring" and "€7.00" reaches 64% of the responses, and a combination of "reshoring" and "€30.00" reaches a percentage response rate of 51.9%, which is well above half.

| LS x Price             |         |  |         |
|------------------------|---------|--|---------|
|                        |         |  | Total   |
| Total Respondents      |         |  | 221     |
| offshoring             | € 7.00  |  | 0,184   |
| offshoring             | € 30.00 |  | 0,105   |
| offshoring             | € 70.00 |  | 0,034   |
| reshoring              | € 7.00  |  | 0,640   |
| reshoring              | € 30.00 |  | 0,519   |
| reshoring              | € 70.00 |  | 0,208   |
| Interaction Chi-Square |         |  | 19,785  |
| D.F.                   |         |  | 2       |
| Significance           |         |  | p < .01 |

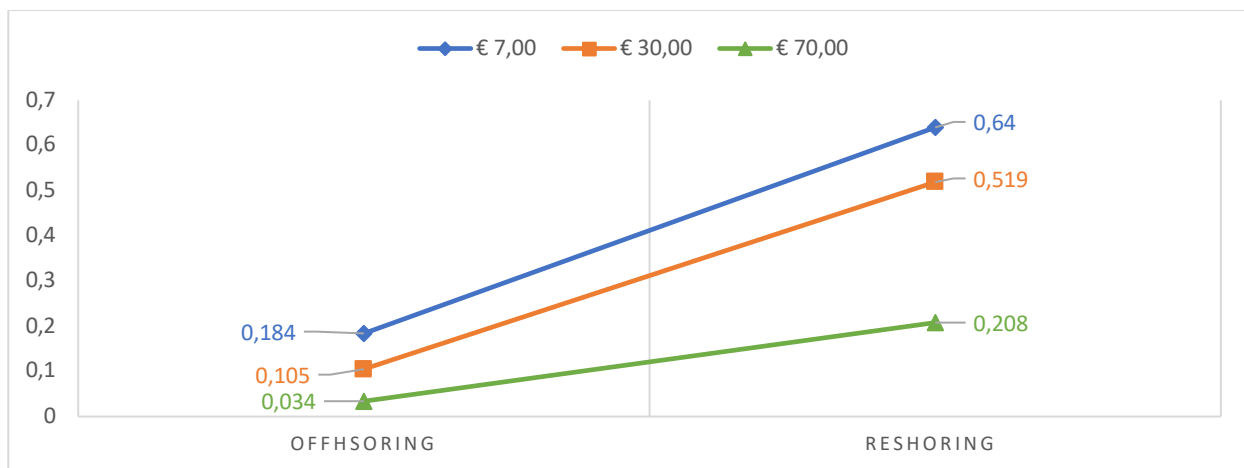


Table 11: Interaction LS and Price

The interaction between the attributes "EPS" and "SPS" also reaches a statistically significant value with  $\chi^2_{(4)}=23.848$ ;  $p < 0.01$ . Here it can be seen that the better the "EPS" and "SPS" are, the higher the percentage. The lowest value has the double combination of the levels "below EU standards" (6.1%) and the highest value has the double combination of the levels "above EU standards" (49.2%). Between these two extreme points, it can also be argued that there is a stronger emphasis on "SPS". This is because those percentages of "SPS" "below EU standards" (6.1%, 9.6% and 10.7%) are lower and therefore less attractive than when "EPS" are "below EU standards" (6.1%, 12.1% and 13.1%). For the levels "equal to EU standards" and "above EU standards" the exact opposite can be observed. Nevertheless, it should be noted that the differences here are only marginal and can therefore only be regarded as a possible indication.

| EPS x SPS              |                       |  |           |
|------------------------|-----------------------|--|-----------|
|                        |                       |  | Total     |
| Total Respondents      |                       |  | 221       |
| below EU standards     | below EU standards    |  | 0,061     |
| below EU standards     | equal to EU standards |  | 0,121     |
| below EU standards     | above EU standards    |  | 0,133     |
| equal to EU standards  | below EU standards    |  | 0,096     |
| equal to EU standards  | equal to EU standards |  | 0,436     |
| equal to EU standards  | above EU standards    |  | 0,442     |
| above EU standards     | below EU standards    |  | 0,107     |
| above EU standards     | equal to EU standards |  | 0,454     |
| above EU standards     | above EU standards    |  | 0,492     |
|                        |                       |  |           |
| Interaction Chi-Square |                       |  | 23,848    |
| D.F.                   |                       |  | 4         |
| Significance           |                       |  | $p < .01$ |

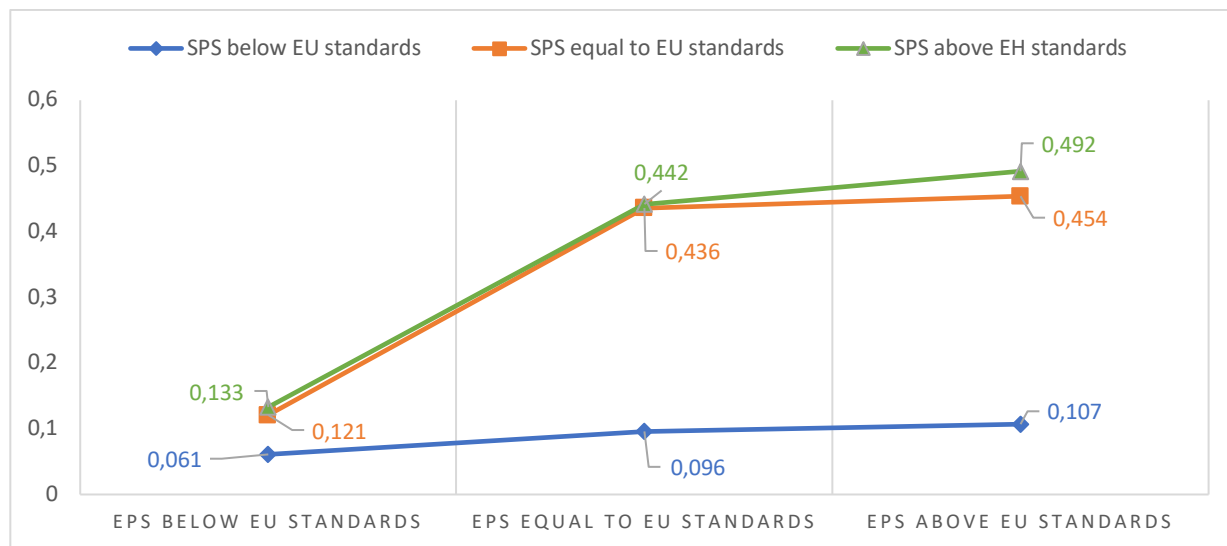


Table 12: Interaction EPS and SPS

The interaction between "EPS" and "Price" is also statistically significant with  $\chi^2_{(4)} = 15.268$ ;  $p < 0.01$ . Similar patterns to the attribute combination of "LS" and "Price" can be seen here. The level of cheapest price has the highest percentage share in each level attribute internally with 18.8% for "below EU standards", 47.5% for "equal to EU standards" and 51.3%, the maximum value, for "above EU standards". Conversely, the level of the most expensive price within the attribute "EPS" has by far the lowest percentage shares with 3.1%, 14.9% and 16%. However, it is noticeable that here the percentage of responses increases the better the "EPS" are.

| EPS x Price           |         |  |       |
|-----------------------|---------|--|-------|
|                       |         |  | Total |
| Total Respondents     |         |  | 221   |
| below EU standards    | € 7.00  |  | 0,188 |
| below EU standards    | € 30.00 |  | 0,102 |
| below EU standards    | € 70.00 |  | 0,031 |
| equal to EU standards | € 7.00  |  | 0,475 |
| equal to EU standards | € 30.00 |  | 0,373 |
| equal to EU standards | € 70.00 |  | 0,149 |
| above EU standards    | € 7.00  |  | 0,513 |
| above EU standards    | € 30.00 |  | 0,410 |
| above EU standards    | € 70.00 |  | 0,160 |

|                        |         |
|------------------------|---------|
| Interaction Chi-Square | 15,268  |
| D.F.                   | 4       |
| Significance           | p < .01 |

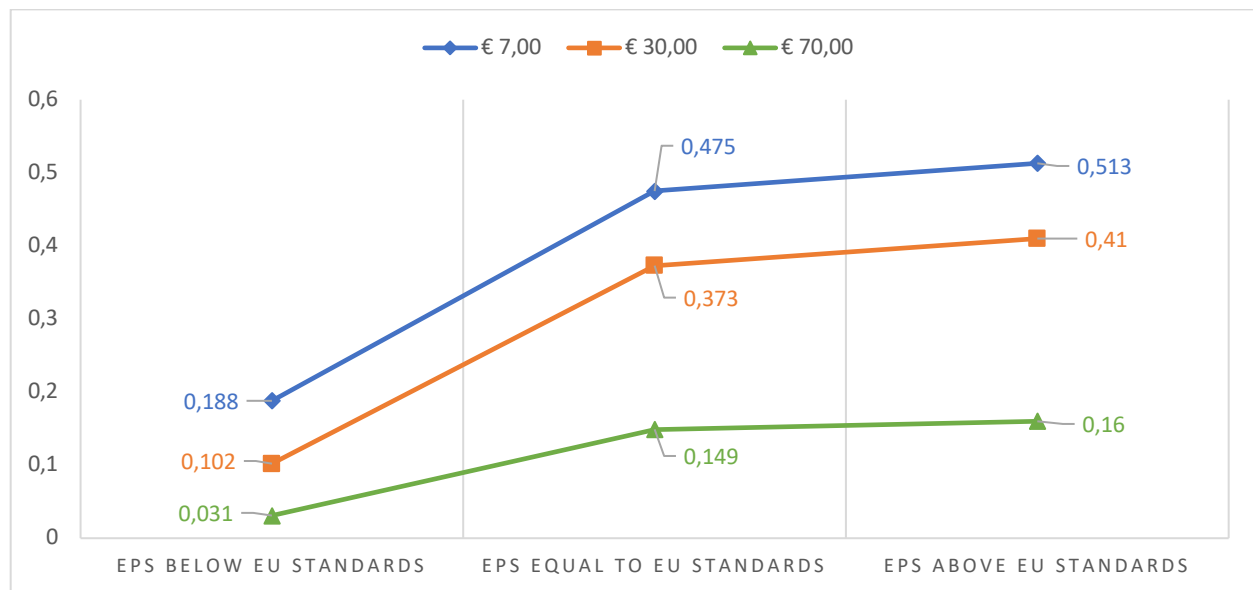


Table 13: Interaction EPS and Price

Apart from the latter, these observations can also be applied to the interaction between "SPS" and "Price". Again, there is statistical significance with  $\chi^2_{(4)} = 11.487$ ;  $p < 0.05$ . Similarly, the level of cheapest price is the highest in percentage terms in each level of the attribute "SPS", with 15.7% in "below EU standards", with 49.6% in "equal to EU standards" and 52.2% in "above EU standards". Conversely, the level of the most expensive price within the attribute "EPS" has by far the lowest percentages with 3%, 15.6% and 15.6% respectively. It is also true in this case that the percentage of answers with better production standards increases for the level of the highest price, but only from "below EU standards" to "equal to EU standards". The latter level and the level "above EU standards" share the same percentage.

| SPS x Price        |         |  |       |
|--------------------|---------|--|-------|
|                    |         |  | Total |
| Total Respondents  |         |  | 221   |
| below EU standards | € 7.00  |  | 0,157 |
| below EU standards | € 30.00 |  | 0,081 |

|                        |         |         |
|------------------------|---------|---------|
| below EU standards     | € 70.00 | 0,030   |
| equal to EU standards  | € 7.00  | 0,496   |
| equal to EU standards  | € 30.00 | 0,392   |
| equal to EU standards  | € 70.00 | 0,156   |
| above EU standards     | € 7.00  | 0,522   |
| above EU standards     | € 30.00 | 0,403   |
| above EU standards     | € 70.00 | 0,156   |
| Interaction Chi-Square |         | 11,487  |
| D.F.                   |         | 4       |
| Significance           |         | p < .05 |

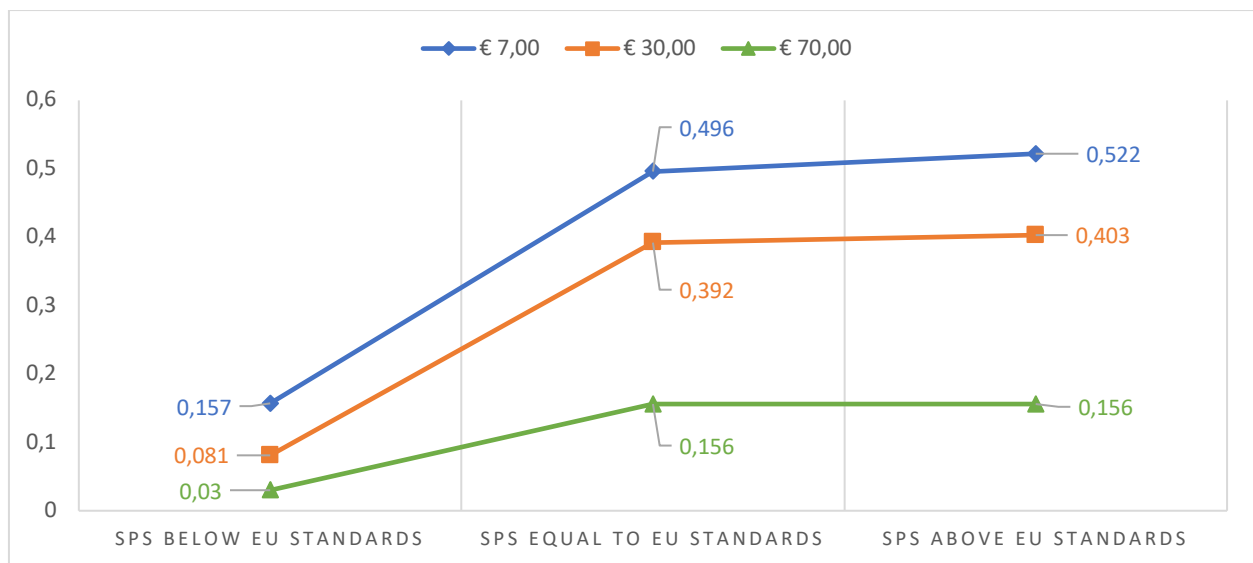


Table 14: Interaction SPS and Price

Also, the interaction between the attributes "Price" and "Quality" is statistically significant with  $\chi^2_{(2)} = 30,696$ ;  $p < 0.01$ . Again, a clear preference to a level of high quality and a level of low price is evident. Exactly this level combination is the highest with a percentage of 53.6% of the responses. The combination of the level with the highest price and the level with the lowest quality also has the lowest percentage of 4.7%. Here too, however, a tendency towards the "long life cycle" level is discernible, as the percentage of responses bearing this level is always significantly higher than for the "short life cycle" level.

| Price x Quality        |                  |  |         |
|------------------------|------------------|--|---------|
|                        |                  |  | Total   |
| Total Respondents      |                  |  | 221     |
| € 7.00                 | short life cycle |  | 0,264   |
| € 7.00                 | long life cycle  |  | 0,536   |
| € 30.00                | short life cycle |  | 0,154   |
| € 30.00                | long life cycle  |  | 0,448   |
| € 70.00                | short life cycle |  | 0,047   |
| € 70.00                | long life cycle  |  | 0,187   |
| Interaction Chi-Square |                  |  | 30,696  |
| D.F.                   |                  |  | 2       |
| Significance           |                  |  | p < .01 |

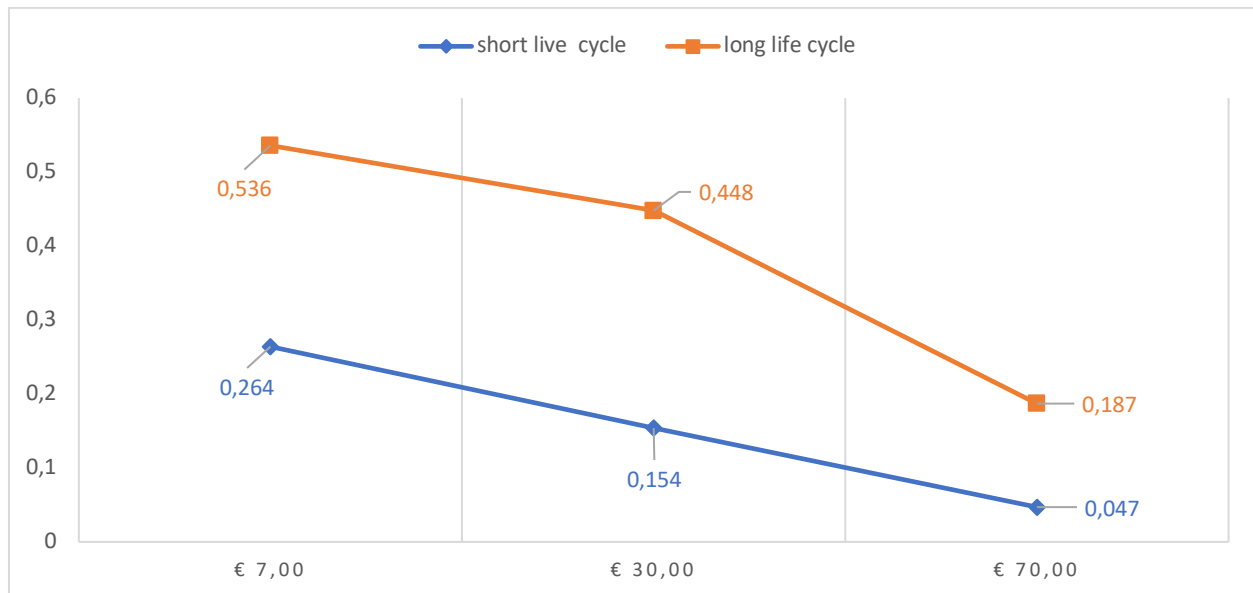


Table 15: Interaction Price and Quality

The interactions between "LS" and "Quality", between "EPS" and "Quality" and between "SPS" are not statistically significant.

## 6.4 Desirability according to Hierarchical Bayesian Estimates

As already explained in chapter 5.4, the HB model calculates part-worth utilities for the individual levels. Within an attribute, the individual utilities always add up to zero. This means that some utilities are negative, and some are positive. This is an important interpretation value for the probability that participants of the study select a product with this level. Thus, a positive value indicates an increase in desirability, but a negative value only means that a product with that level is not as desirable relative to the other levels. It should also be noted that part-worth utilities may only ever be related to each other internally. Inter-attribute comparisons cannot be made (cf. Orme, 2019). Results are always given in so-called credibility intervals (hereafter referred to as CI). These are calculated analogously to confidence intervals but are interpreted differently due to the fact that Bayesian inference treats static estimates as random variables. In this sense, a 95% CI means that the particular parameter lies within this interval with 95% probability (cf. Ellison, 1996).

Based on these values, the following can now be observed: Within the first attribute "LS" there were only two levels. The positive level in this case was "reshoring" with an average utility of around 22.3, making "reshoring" the preferred option.

In the second attribute "Environmental Production Standards", the levels "equal to EU standards" and "above EU standards" were clearly preferred to "below EU standards". The latter level achieved an average utility value of -50.44. Between the other two levels, "above EU standards" was preferred with a value of 29.37 compared to "equal to EU standards" with a value of 21.07.

Likewise, the preferences are clearly visible for the attribute "SPS". The level "above EU standards" is clearly the most preferred option with an average utility value of 37.41 and the highest within the attribute. "Equal to EU standards" reaches a value of 26.73 and "below EU standards" a value of -64.14.

For the attribute "Price", the level "€7.00" achieved the highest preference with an average utility value of 53.29. In relation to the other two options, the level "€70.00" was preferred with a value of -83.27. The level "€30.00" also has a positive value of 29.98.

The last attribute, "Quality", like the first, also has only two levels. The positive level in this case, with an average utility value of 52.02, was the "long life cycle" level.

| Label                                     | Utility |
|-------------------------------------------|---------|
| <b>Location Strategy</b>                  |         |
| offshoring                                | -22,31  |
| reshoring                                 | 22,31   |
| <b>Environmental Production Standards</b> |         |
| below EU standards                        | -50,44  |
| equal to EU standards                     | 21,07   |
| above EU standards                        | 29,37   |
| <b>Social Production Standards</b>        |         |
| below EU standards                        | -64,14  |
| equal to EU standards                     | 26,73   |
| above EU standards                        | 37,41   |
| <b>Price</b>                              |         |
| € 7.00                                    | 53,29   |
| € 30.00                                   | 29,98   |
| € 70.00                                   | -83,27  |
| <b>Quality</b>                            |         |
| short life cycle                          | -52,02  |
| long life cycle                           | 52,02   |
| None                                      | 9,10    |

Table 16: Part-worth utilities according to HB estimations

## 6.5 Importance scores according to Hierarchical Bayesian Estimates

Importance scores can also be calculated with the HB analysis. This value can be used to represent preference changes on attribute level. These are calculated from the range of the different utilities within an attribute.

The exact values for the individual attributes can be taken from the diagram. The most important attribute was "Price" with a score of 31.76. The least important attribute in comparison was "LS" with a score of 9.16. "SPS" (21.25) and "Quality" (20.99) were both similarly important with minimal difference. The attribute "EPS" achieved a value of 16.81.

This reveals an exciting inter-attribute relationship: the "LS" did not seem to be as important as the two production standards for the participants in the study. At the same time, it also shows that, as already assumed above in Chapter 6.3, the "SPS" are more important than the "EPS".



Table 17: Importance Scores according to HB

## 6.6 Impact of attributes calculated through the Choice Simulator

Sawtooth Software offers with its choice simulator function a very important and powerful tool to practically exploit the part-worth utilities, i.e. the results of the HB evaluation from a business but also scientific point of view. If we follow Orme (2019), this kind of simulation is even the most

important tool in CBCA. With the help of the Choice Simulator, actual market choices can be simulated.

In a specific case, the simulation can be used to find out how high the WTP is with respect to each attribute. A price point or a price range can be found out, above which the respondents prefer a different set.

Therefore, in this chapter, based on the research question and hypotheses, the role of the individual attributes on the WTP is tested. However, special attention is paid to the attribute "LS". To determine an impact on WTP, each level of the attribute in question is simulated against the None option in Sawtooth Software's Choice Simulator in relation to increasing price. The None option means that the respondents would rather not buy the product in question.

To make the changes in value of the attributes comparable, all other parameters were kept the same. This means that all attributes whose impact is not examined are kept at the same level, i.e. at the level which had the highest average utilities according to the HB estimation. For the attribute "LS" this was the level "reshoring", for the levels "EPS" and "SPS" each the level "above EU standards", for the attribute "Price" it was the level "€7,00" and for the attribute "Quality" it was the level "long-haul cycle". If all other attributes were not kept equal, the diverging attributes are mentioned.

### *The impact of "LS"*

First, the two levels, with all other parameters equal, were simulated against each other to determine the respondents' preference in terms of strategy.

To determine the impact of "LS" on WTP, each level of the attribute was crossed with each level of the Price attribute against the None option. Results are reported as percentages of preference.

Further, it should be noted that there were interaction effects between the "LS" attribute and the two production standards attributes. These must therefore be taken into account. In these cases, the two production standards attributes are shifted together with the prices, while the usual attributes remain the same.

If "offshoring" and "reshoring" are simulated against each other with the None option and all other parameters are kept the same as described above, a very clear picture emerges. At a price level of "€7.00", more than two thirds of the respondents, namely a total of 77.90%, prefer a reshoring strategy, while only 19.1% prefer offshoring.

At a price level of "€30.00", there is only a minimal difference to the first scenario. Around 77.60% prefer a reshoring strategy and 19% an offshoring strategy. A change only occurs at a price level of "€70.00". In this scenario, only 49.2% prefer a reshoring strategy, 12.1% an offshoring strategy and 38.80% prefer neither "offshoring" nor "reshoring".

When simulating "offshoring" and "reshoring" with None option against each other with a level of "equal to EU standards" for both production standard attributes, the results do not deviate noticeably from the standard at the price levels of "€7.00" and "€30.00". Even for production standards that do not exceed the EU minimum but correspond to it, more than two thirds still prefer a reshoring strategy. However, there is a difference at the "€70.00" price level. In this combination, the share of preference falls to well below 50% at 43.80% and the None option rises to 44.70%. This is a clear difference between the simulation "offshoring" versus "reshoring" with a production standards level of "above EU standards". This means that at a price level of "€70.00" most respondents still prefer a reshoring strategy, but 38.80% prefer neither strategy. Thus, a price level of "€70.00" is indicated as a price level that is too high in any case.

A similar situation emerges when the influence of the "LS" on WTP is simulated. At a price level of "€7.00" and a price level of "€30.00", the preferences are very close to each other for both a reshoring strategy and an offshoring strategy: for "reshoring" and "€7.00" it is 96.4%, for "€30.00" it is 96% and for "offshoring" and "€7.00" it is 91.50% and for "€30.00" it is 90.60%. Only when the price level is increased to "€70.00" the share of preference drops to 59% for "reshoring" and to 42.30% for "offshoring".

If the interaction effect is considered and the influence of the "LS" on the WTP is simulated with a level of "equal to EU standards" for both production standard attributes, the results for a reshoring strategy are similar to those for the production standard level "above EU standards". However, there is also a noticeable drop in shares of preferences, namely by -6%, at a price level of "€70.00" to 53%. Nevertheless, this value is still positive.

A different picture emerges when the production levels are set to "equal to EU standards" in an offshoring strategy. Compared to "above EU standards", the shares of preferences at a price level of "€7.00" are 88.20% and at "€30.00" even 86.60%. At a price level of "€70.00", on the other hand, an offshoring strategy with production standards "equal to EU standards" is only 34.4%. This interaction effect is very clear when an offshoring strategy involves production "below EU standards". In this scenario, respondents prefer not to buy the product at any price level.

Based on these results, respondents prefer a reshoring strategy to an offshoring strategy. Moreover, the respondents' price sensitivity is likely to start at a value above "30.00€", especially if an offshoring strategy was applied, because at a price of "70.00€" less than half of the respondents prefer this product in this scenario.

Noting the interaction effect with the "EPS" and "SPS", we also find that a deterioration of the standard increases the influence of the "LS" on WTP, but to different degrees. While in the case of a reshoring strategy this effect only becomes visible at a price level above "€70.00", in the case of an offshoring strategy a reduction in WTP already becomes apparent at a price level starting at "€7.00".

|                                    | 7 €    | 30 €   | 70 €   |
|------------------------------------|--------|--------|--------|
| <b>Reshoring vs. offshoring</b>    |        |        |        |
| reshoring                          | 77,90% | 77,60% | 49,20% |
| offshoring                         | 19,10% | 19,00% | 12,10% |
| none                               | 3,00%  | 3,40%  | 38,80% |
| <b>Simulating influence on WTP</b> |        |        |        |
| reshoring                          | 96,40% | 96,00% | 59,00% |
| none                               | 3,60%  | 4,00%  | 41,00% |
| offshoring                         | 91,50% | 90,60% | 42,30% |
| none                               | 8,50%  | 9,40%  | 57,70% |
| <b>Interactions</b>                |        |        |        |
| reshoring / PS equal               | 77,30% | 77,40% | 43,80% |
| offshoring / PS equal              | 19,10% | 19,10% | 11,50% |
| none                               | 3,60%  | 3,50%  | 44,70% |
| reshoring / PS equal               | 95,90% | 95,90% | 53,00% |
| none                               | 4,10%  | 4,10%  | 47%    |
| offshoring / PS equal              | 88,20% | 86,60% | 34,40% |
| none                               | 11,80% | 13,40% | 65,60% |
| offshoring / PS below              | 34,30% | 24,70% | 6,70%  |
| none                               | 65,60% | 75,30% | 93,30% |

Table 18: Choice Simulation – The impact of "LS" on the WTP and its interaction effect with both "EPS" and "SPS" (in combination hereafter referred to as PS) while all other attributes are equal

### *The impact of “EPS”*

In this case, with all other attributes equal, the impact of the attribute "EPS" on the WTP was tested. First, since all other attributes are based on the results of the HB estimation, the attribute "LS" has the level "reshoring". However, this level was specified in the survey with a prohibition with the level "below EU standards". Thus, no values can be collected for this scenario either. Second, the interaction effects of the attribute with the attributes "LS" and "SPS" must also be taken into account here.

When simulating the attribute, it is noticeable that the levels "equal to EU standards" and "above EU standards" only differ in the decimal point range for a price level of "€7.00" as well as for a price level of "€30.00". The WTP remains the same. A strong change is only noticeable at a price level of "€70.00". Here, the shares of preferences drop to 56.70% at the level "equal to EU standards" and to 59% at the level "above EU standards".

If the interaction effect is taken into account and the influence of the "EPS" on the WTP is simulated for an offshoring strategy and at a level of "below EU standards", a price level of "€7.00" shows a preference share of only 65.30%. At a price level of "€30.00" even only 58.10% and at a price level of "€70.00" finally only a share of 17.50%. With the other levels of the attribute, a basically comparable picture emerges, whereby an improvement of the production level to "equal to EU standards" and "above EU standards" at both a price level of "€7.00" and a price level of "€30.00" leads to shares of around 90%. In both cases, however, a clear majority of respondents prefer the "none" option at a price level of "€70.00".

These results show that the respondents' price sensitivity only starts at a price level of "€70.00". The levels "equal to EU standards" and "above EU standards" as well as the price levels "€7.00" and "€30.00" do not have a great influence on the WTP.

However, the influence of the "LS" shows very clearly that the WTP decreases, especially when the production standards are "below EU standards". As can be concluded from the previous subchapter, the “LS” interacts with the “EPS” and, in case of an offshoring strategy, the WTP decreases.

|                                        | 7 €    | 30 €   | 70 €   |
|----------------------------------------|--------|--------|--------|
| <b>Simulating influence on WTP</b>     |        |        |        |
| EPS equal to EU standards              | 96,30% | 96,30% | 56,70% |
| none                                   | 3,70%  | 3,70%  | 43,30% |
| EPS above EU standards                 | 96,40% | 96,00% | 59,00% |
| none                                   | 3,60%  | 4%     | 41,00% |
| <b>Interactions</b>                    |        |        |        |
| offshoring / EPS below EU standards    | 65,30% | 58,10% | 17,50% |
| none                                   | 34,70% | 41,90% | 82,50% |
| offshoring / EPS equal to EU standards | 90,20% | 89,40% | 38,20% |
| none                                   | 9,80%  | 10,60% | 61,80% |
| offshoring / EPS above EU standards    | 91,50% | 90,60% | 42,30% |
| none                                   | 8,50%  | 9,40%  | 57,70% |

Table 19: Choice Simulation – The impact of “EPS” on the WTP and its interaction effect with “LS” (reshoring & offshoring) while all other attributes are equal

### *The impact of SPS*

In this case there are again interaction effects with the attributes "LS" and "EPS" and on the other hand the level "below EU standards" can only be used for the interaction effects together with an offshoring strategy.

If the influence of the attribute is simulated equally with all other attributes, the result is very similar to the attribute "EPS". While at the level "above EU standards" logically the same values are calculated, at the level "equal to EU standards" a very fine difference appears: The share of preferences is minimally lower at the price level "€30.00" for the attribute "SPS" (95.70%) than for the attribute "EPS" (96.30%). Even if the difference is only small, it can already indicate that a worse “SPS” has a negative impact on the WTP.

This also becomes visible when considering the interaction effect with the “LS”. If the influence of the "SPS" on the WTP is simulated with an offshoring strategy and at a level of "below EU Standards", large differences between the attributes "EPS" and "SPS" become apparent. Already at a price level of "€30.00" the preference share for the "SPS" attribute is with 46.80% clearly below

50%. Compared to the "EPS" this is a minus of 11.3%. However, as the "SPS" increase, the proportion of preferences rises again to a level comparable with the "EPS".

These results show that the price sensitivity of the respondents basically only starts at a price level of "€70.00". The levels "equal to EU standards" and "above EU standards" as well as the price levels "€7.00" and "€30.00" do not have a great influence on the WTP. However, the comparison with the "EPS" is interesting, because it is indicated that when lowered, the "SPS" has a greater influence on the WTP than the "EPS". This is particularly evident in the case of an offshoring strategy with a social production standard that does not meet the EU minimum.

|                                    | 7 €    | 30 €   | 70 €   |
|------------------------------------|--------|--------|--------|
| <b>Simulating influence on WTP</b> |        |        |        |
| SPS equal                          | 96,20% | 95,70% | 55,60% |
| none                               | 3,80%  | 4,30%  | 44,40% |
| SPS above                          | 96,40% | 96,00% | 59%    |
| none                               | 3,60%  | 4%     | 41%    |
| <b>Interaction</b>                 |        |        |        |
| offshoring / SPS below             | 56,50% | 46,80% | 13,50% |
| none                               | 43,00% | 53,20% | 86,50% |
| offshoring / SPS equal             | 90,20% | 88,60% | 38,70% |
| none                               | 9,80%  | 11,40% | 61,30% |
| offshoring / SPS above             | 91,50% | 90,60% | 42,30% |
| none                               | 8,50%  | 9,40%  | 57,70% |

Table 20: Choice Simulation – The impact of "SPS" on the WTP and its interaction effect with "LS" (reshoring & offshoring) while all other attributes are equal

### *The impact of Quality*

Finally, the impact of the attribute "Quality" on the WTP is simulated equally with all other attributes. For this attribute there is no interaction effect with the other attributes, except with the attribute "Price".

The simulation shows that at the "long life cycle" level, the shares of preferences at the "€7.00" and "€30.00" price levels are approximately equal. An influence on the WTP can only be identified

from a price level of "€70.00". Here, the share of preference drops significantly to 59%, but is still clearly in the majority.

The picture is different for a "short life cycle". At a price level of "€7.00", the shares of preference are already much lower at 70.40% than at the "long life cycle" level. There is also a significant drop to 64.40% at a price level of "€30.00" and finally the share drops further to 25% at a price level of "€70.00".

From these results, it can be seen that the "Quality" has a great impact on the WTP of the product. The better the "Quality", the more respondents are willing to pay more. The poorer the "Quality", the less willing they are to pay, and at "€70.00" only around a quarter of respondents prefer the product to the "none" option.

|                                                     | 7 €    | 30 €   | 70 €   |
|-----------------------------------------------------|--------|--------|--------|
| <b>Simulating influence on WTP (LS = reshoring)</b> |        |        |        |
| long life cycle                                     | 96,40% | 96,00% | 59,00% |
| none                                                | 3,60%  | 4,00%  | 41,00% |
| short life cycle                                    | 70,40% | 64,40% | 25%    |
| none                                                | 29,60% | 35,60% | 75%    |

Table 21: Choice Simulation – The impact of "Quality" (long life cycle & short life cycle) on the WTP while all other attributes are equal

## 7 Discussion of results

In this chapter, the data analyzed in the previous chapter will be discussed and interpreted. The hypotheses formulated in chapter 4.3 and the research question in general provide a guideline along which the data obtained are linked to the theory of chapters 2, 3 and 4.

At this point, the research question, as well as all hypotheses, will be repeated once again. The research Question was:

*How do corporate strategies that promote or constrain environmental and social unintended side effects influence the maintenance and management of Organizational Legitimacy of multinational companies?*

Theoretical elaborations and analysis led to the following hypotheses:

**H1a:** *All other attributes equal, the consumer's WTP is lower when an offshoring strategy is used, compared to when a reshoring strategy is used.*

**H1b:** *All other attributes equal, the consumer's WTP is higher when a reshoring strategy is used, compared to when an offshoring strategy is used.*

**H2:** *The consumer's WTP is the same when a location strategy minimizes environmental and social side effects but remains offshore as when it is reshored.*

**H3:** *The consumer's WTP for a strategy that only addresses environmental side effects is the same as for a strategy that only addresses social side effects.*

**H4:** *All other attributes equal, the consumer's WTP rises as product quality rises.*

**H5:** *The higher the price, the lower the WTP for a product, regardless of which location strategy was used and which side effects were counteracted.*

All of these hypotheses are thereby built around the concept of WTP. As explained in Section 4.3, WTP is used as a proxy for measuring OL.

In recent literature, WTP has already been tested out in connection with reshoring and it was found that a reshoring strategy positively influences WTP (cf. Grappi, Romani and Bagozzi, 2018). Based on the tests conducted in this master thesis, this can be confirmed. Basically, the measurement of the relative impact already showed that "reshoring" was selected in 45.7% of all cases by the participants of the study compared to "offshoring" and the None option. The interaction effect between the attributes "LS" and "Price" is similar. This clearly shows that in the comparison of the levels "reshoring" and "offshoring", the level "reshoring" is chosen more often than the level "offshoring", even at the highest price level of "€70.00". In line with this, the HB estimates also show that "reshoring" has a higher utility compared to "offshoring" and is therefore more desirable. These indications are then also shown in the choice simulator, in which reshoring is preferred compared to offshoring. The choice simulator, which measures the influence of the "LS" and its levels on the WTP, confirms this already indicated assumption. The "reshoring" option is chosen significantly more often than the "offshoring" option, especially in direct comparison against the None option. Furthermore, there is a clear preference for the low and medium price levels. There is de facto no significant difference in purchase preferences between "€7.00" and "€30.00". Only at a value of "€70.00" does the preference of "reshoring" fall, however, not in favor of "offshoring", but in favor of the None Option. The None option means that in this case the product would not be bought at all, never mind the "LS". In such scenarios, however, reshoring and the None option balance each other out.

In summary, with all other attributes equal, the WTP is always higher for a "reshoring" strategy than for an "offshoring" strategy. Thus, hypotheses 1a and 1b can be clearly accepted.

|                                                                                                                                                                 |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>H1a:</b> <i>All other attributes equal, the consumer's WTP is lower when an offshoring strategy is used, compared to when a reshoring strategy is used.</i>  | ACCEPTED |
| <b>H1b:</b> <i>All other attributes equal, the consumer's WTP is higher when a reshoring strategy is used, compared to when an offshoring strategy is used.</i> | ACCEPTED |

If this result is interpreted in terms of the OL discussion, it is clear that "reshoring" as a strategy enjoys more legitimacy than an "offshoring" strategy. A clear preference for production within the

EU is of great importance for OL, especially due to unintended side effects. Indeed, these cannot occur to the same extent through manufacturing within the EU as in a production country of the Global South. In terms of cognitive legitimacy, this means that the discourse on these unintended side effects has led to an alternative, namely that precisely these tend to be avoided. However, this is not necessarily to be seen as a replacement of the previous purpose, but rather as an extension: The purpose of a company is still to create value, but in this process outflows of private decisions that have negative environmental and social consequences for the public are to be avoided. Nevertheless, as the data collected here also show, this has to be done at a low price, because WTP decreases as price increases, especially between the "Price" levels of "€30.00" and "€70.00". The pragmatic legitimacy with the affected stakeholders, namely the consumers, decreases. In the data collected, there are also indications that the strategy is perhaps not as important as is assumed. Although a "reshoring" strategy was selected much more often and is more desirable than an "offshoring" strategy, the importance scores of the HB estimates indicate a low importance of the attribute "LS". With 9.7, "LS" was the attribute with the lowest importance score by far. However, the attributes "Price", "EPS" and "SPS" had significantly higher importance scores. In addition, a statistically significant interaction of the "LS" was demonstrated with all three attributes. In the case of "EPS" and "SPS", it is also evident that those levels which indicate production standards equal to or higher than the EU minimum standards are chosen significantly more often than those which indicate a production standard below these minimum standards. This is also shown by the HB estimations, indicating an increased desirability of those levels. The attribute "Price" is also the attribute with the highest Importance Score by far. This now suggests that "LS" were not chosen for their own sake, but rather because of the levels of the production standards with which they co-occurred. However, such a spill-over effect cannot be confirmed on the basis of the analyses on the interactions between the attributes alone. Both in the interaction between the "LS" and the "EPS", as well as between the "LS" and the "SPS", it can be seen that the respective levels of the production standards were chosen more often in combination with "reshoring" than with "offshoring". This is particularly evident in the direct comparison between "reshoring" and "offshoring". For the level combinations "offshoring" with all three levels of "EPS" and "SPS", the shares of the chosen combination are about the same low, while for "reshoring" it is significantly higher. A very similar picture is also seen in combination with the attribute "Price". Here, too, the respective levels of the attribute were chosen more often in combination with "reshoring" than with "offshoring".

Therefore, if we go exclusively by the interactions, the attribute of "LS" nevertheless has greater significance.

In the choice simulator, however, a more differentiated picture emerges in this matter. If the levels of the "LS" are simulated separately against the None option and all other attributes, both strategies are not only clearly high at the "Price" levels "€7.00" and "€30.00" with over 90% each, but also relatively close together. Only with a level of "€70.00" does the WTP fall for both strategies and for a combination of "offshoring" and "€70.00" even to well below 50%. This again indicates that the "LS" is not insignificant, but still has a rather small influence in comparison. The original assumption of a spill-over effect of "EPS" and "SPS" is clearly shown in the choice simulator. "Reshoring" has very similar shares in the possible combinations and only shows a sharp drop in the WTP at a price level of "€70.00". In contrast, the "offshoring" strategy shows the influence of the production standards more clearly. Both the "EPS" and the "SPS" show that there is a higher price sensitivity. WTP increases with increasing production standard in an offshoring strategy. This is particularly well observed at a price level of "€7.00", but also at a price level of "€70.00". In the case of the latter, however, it should be noted that for both "EPS" and "SPS" the WTP is below 50% for all production standards and in any case a clear majority would refrain from buying. Nevertheless, the proportion of those participants who do make a purchase is increasing. Moreover, if the "EPS" and the "SPS" are equal or above the European production standard, but are still produced offshore, the shares of those participants who would decide to buy are around 90%, at least for the price levels of "€7.00" and "€30.00". If production is below the EU standard, this share drops sharply. So, in summary, with all other attributes equal, the "EPS" and "SPS" are actually decisive for the WTP and the attribute of the "LS" is influenced by these attributes. Thus, not only the spill-over effect of the production standards on the "reshoring" strategy can be spoken, but thus the second hypothesis can be confirmed.

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H2:</b> <i>The consumer's WTP is the same when a location strategy minimizes environmental and social side effects but remains offshore as when it is reshored.</i> |
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|----------|
| ACCEPTED |
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By demonstrating that the minimization or prevention of unintended side effects is actually the main driver for WTP and thus for OL, it becomes apparent how deeply rooted the collective interest in these problematic conditions is in public discourse. A "reshoring" strategy is, after all, only a

means to an end, i.e., a strategic vehicle for the actual moral desire to shape manufacturing in a way that does not adversely affect the public.

This insight is especially important to the price issue raised in the discussion of hypotheses 1a and 1b. Indeed, WTP, and thus legitimacy, declines when prices are too high, not only for a "reshoring" strategy, but also for high "EPS" and "SPS." A price that is too high therefore causes pragmatic legitimacy to fall again from the consumer's point of view.

However, a company can also use this factor to its advantage in its "LS": In order to be able to guarantee high "EPS" and "SPS" in production, a "reshoring" strategy does not necessarily have to be applied. Production can also remain offshore, but production standards mirroring those in the EU can be established there. Thus, production can still be cheaper than in the EU, which makes a company pragmatically legitimate. At the same time, moral legitimacy is not endangered by insufficient production standards.

A closer look at the production standards in the Choice Simulator also reveals that the "SPS" generate a higher price sensitivity than the "EPS". If a strategy is used in which the "SPS" are below the EU production standard and the "EPS" are above the production standard ("LS": "offshore", "SPS": "below EU standard" with all other attributes equal, which means that "EPS" are "above EU standards"), it can be seen that only at a price level of "€7.00" a majority of 56.50% of the participants make a purchase. The price level of "€30.00" is already too high for a majority of the participants. Conversely, if the "EPS" are below the EU production standard and the "SPS" are above the production standard, a clear majority still decides to buy at a price level of "€30.00". This means that the choice simulator suggests that social unintended side effects have a greater influence on OL than environmental ones. This is also reflected in the importance scores of the HB estimation, in which the attribute of "SPS" with an importance score of 21.26 is clearly more important than the attribute of "EPS", which has an importance score of 16.82. Therefore, hypothesis 3 must be rejected. It can be seen that WTP is more sensitive for "SPS" than for "EPS" and therefore a consumer is more willing to pay a higher price for a product produced under high "SPS" than for a product produced under good environmental standards.

|                                                                                                                                                                           |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <i><b>H3:</b> The consumer's WTP for a strategy that only addresses environmental side effects is the same as for a strategy that only addresses social side effects.</i> | <b>REJECTED</b> |
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For OL, this means that social unintended side effects play a prominent role in the discourse, although these are again limited by the pragmatic legitimacy of the prize. The data collected do not provide any information about the reasons for this. It is possible that this is related to differences in the communication of social and environmental side effects within this social discourse. Another possibility for this observation of the higher importance of "SPS" for OL could also lie in the composition of the drawn sample. In any case, further studies are needed to ultimately answer this question.

Based on the available data, it can be seen that the WTP for the "long life cycle" level is significantly higher than for the "short life cycle" level. In addition, the WTP for the "long life cycle" level does not differentiate noticeably between the price levels "€7.00" and "€30.00"; a sharp drop is only perceived at a price level of "€70.00". This is different for the level "short life cycle", where the WTP already drops at the level "€30.00". This confirms the hypothesis that higher quality goes hand in hand with higher WTP.

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| <i><b>H4:</b> All other attributes equal, the consumer's WTP rises as product quality rises.</i> | ACCEPTED |
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Again, at the OL level, it can be seen that, especially at high "EPS" and "SPS", the legitimacy is stronger for higher quality products and good quality also gives the higher priced items more legitimacy. Since quality did not show any interaction effects with production standards, Jacobs et al. (2018) thesis that high environmental and social production conditions would harm the perception of quality cannot be observed in the data collected.

With regard to the different levels of the attribute "Price", a certain pattern is continuously noticeable. The higher the price level, the lower the proportion of participants who complete a purchase. The price level "€7.00" and "€30.00" are generally always very close together, especially if the production standards corresponded to the EU production standards or were even higher. In all tested scenarios it can also be seen that between the price level "€30.00" and "€70.00" a sharp drop in WTP occurs and, with the exception of a few scenarios, also falls below 50%. However, these exceptions are exclusively found in a certain constellation: The "LS" has the level "reshoring", the "EPS" and "SPS" meet or exceed the EU standards, the attribute "Quality" has the

level "long life cycle" and there is a simulation against the None option. However, in two cases it could be observed that, if a simulation is performed against another option, this constellation also falls below 50% in the price level "€70.00". In the cases just described, a simulation was performed against another constellation, in which the level "offshoring" was used instead of "reshoring". In one of the two scenarios, the largest share of participants rejected a purchase, in the other, the larger share of participants bought the "reshoring" constellation.

In any case, these scenarios most closely simulate a real market situation in which different products are available for selection and not just the choice between one or none. Therefore, it can be clearly stated that the WTP drops below 50% at a price level of "€70.00". This also means that in this case a price of "€70.00" is too much for a T-shirt that has the highest levels of all attributes. In contrast, there is no significant difference in WTP between a price level of "€7.00" and "€30.00" in most scenarios. In the scenarios tested, there are only three cases where there is a major difference between these two price levels, and these are when either the production standards are generally below the EU standard (and thus production is also offshore), or when the "EPS" or the "SPS" are each alone below the EU standard (and thus production is also offshore, but all other attributes are the same), and when the attribute of "Quality" carries the level "short life cycle".

In summary, with all other attributes equal, the WTP decreases with increasing price, although no large difference can be assumed between the levels of "€7.00" and "€30.00". Hypothesis 5 can therefore be accepted, even if the restriction applies that WTP only decreases noticeably after the second price level. It should also be noted, however, that the WTP, and thus also the "OL", falls more sharply as soon as not all other attributes are equal and additional factors such as poorer "EPS" or "SPS" are added.

|                                                                                                                                                                   |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <i><b>H5:</b> The higher the price, the lower the WTP for a product, regardless of which location strategy was used and which side effects were counteracted.</i> | ACCPETED |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|

The price discussion, as with the other interpretations in this chapter, is primarily related to pragmatic legitimacy. This is always affected when case-specific stakeholders are involved and consumers who pay a certain price for a product are precisely such stakeholders. However, the importance of price, and thus in principle also of pragmatic legitimacy, can only be determined in combination with cognitive and moral legitimacy. Depending on the respective price, pragmatic legitimacy is trumped by the environmental and social unintended side effects, which are part of

the public discourse. At the same time, however, it also generates a price-threshold for precisely this morally assumed legitimacy in which good production conditions play such a large role. This also reflects the dual character of pragmatic legitimacy described in chapter 2.3, which makes it essential only in combination with moral or cognitive legitimacy: If the product is too expensive, OL declines. Moral legitimacy may exist, pragmatic legitimacy no longer exists, and in addition, once the price threshold is exceeded, cognitive legitimacy no longer exists. A product that is too expensive no longer corresponds to the expected patterns of organizational behavior.

Against this background, the research question can now be answered in full. Basically, it can be said that the data collection and interpretation of this master thesis has shown that strategies exert an influence on the OL primarily through their handling of environmental and social unintended side effects. Strategies that try to minimize or avoid environmental and social unintended side effects increase the OL of MNCs. Strategies that do not counteract or even favor environmental and social unintended side effects decrease the OL of MNCs. However, the exact modes of influence on OL differ for the three main types of legitimacy, namely cognitive, pragmatic, and moral legitimacy. To be understood as essential is the public discourse in which the unintended side effects are discussed. Strategies must be oriented to this discourse in order to be able to influence OL at all. Moral legitimacy is also ubiquitously connected to this discourse, because it is created by exactly this discourse. Thus, a strategy must participate in it in order to be able to influence moral legitimacy at all. However, this discourse also has a great influence on cognitive legitimacy. This is seen by both Suchmann (1995) and Palazzo and Scherer (2006) as the most fundamental form of legitimacy and includes the basic assumptions about entrepreneurial activity. Public discourse on unintended side effects has added environmental and social dimensions to the basic meaning and purpose. Society's expectation of corporations is no longer pure value creation at any price, but value creation along certain parameters. Thus, accepting these unintended side effects can no longer be justified and is no longer considered natural. Strategies that therefore take this development into account and address the avoidance of the environmental and social side effects in the fundamental structures and processes of companies thus ensure the most important kind of legitimacy that a company needs. Moreover, they contribute significantly to the further development and shaping of this process and the public discourse. For precisely the more this expanded understanding of the meaning and purpose of a company is now seen as natural, the more

unnatural strategies appear that continue to ignore the unintended side effects as a concomitant of the internationalization of a company.

A good example of this was found during the data collection of this master thesis: the "LS" was only partly responsible for the increase in legitimacy. Much more important was the compliance of "EPS" and especially of "SPS" on a good level, which was defined in this master thesis by the European minimum standard. Therefore, a strategy that wants to positively influence moral legitimacy must first address the extended preconditions of cognitive legitimacy.

This is equally true for pragmatic legitimacy, which, as described in chapter 2.3, has cognitive legitimacy as a precondition and varies from case to case. Of course, the public discussion about the environmental and social unintended side effects also reflects into the pragmatic legitimacy by means of the respective expectations of the stakeholders. In this master thesis, however, the strategic influence on pragmatic legitimacy was mainly considered from the consumer's side. It is understood in terms of a price threshold and thus plays an essential role for strategies that counteract environmental and social side effects. These must in fact ensure that the end product does not become too expensive for the consumer. Especially in the tension with cognitive legitimacy, this proves to be difficult if, on the one hand, unintended side effects are regarded as cognitively illegitimate, but their prevention, on the other hand, drives up the product price to such an extent that it no longer appears pragmatically legitimate.

A solution to this problem essentially arises from the public discourse that ultimately constructed moral legitimacy and expanded the understanding of cognitive legitimacy. As mentioned earlier, compliance with environmental and social production standards is the essential factor in increasing OL. Whether the manufacturing is placed within the EU or in the Global South is beside the point in this scenario.

However, contextual factors are also of utmost importance for the influence of the strategy on legitimacy. The EU and its legislation can be seen as one such context and this too is quite fundamentally related to the public discourse on these unintended side effects. The mass of EU legislative acts that further tighten environmental and social production standards can be seen as a sign of great strength and importance of this discourse in Europe. This is also clear from the institutionalized public discourse brought to the EU by social partners, companies or individual citizens, and is ultimately reflected in purchasing preferences and current purchasing behavior, as modeled in this master thesis. The public discourse on these environmental and social unintended side effects is thus comprehensive. It is unleashed by corporate action itself, captures civil society,

and in the process changes or expands the essential expectations of corporate action itself, which in turn changes legislators' expectations of corporations. Ultimately, the discourse finds its end at its starting point, the company itself. Strategies that address these environmental and social side effects can ultimately restore or enhance corporate legitimacy by following the very public discourse in which they themselves are embedded.

## 8 Conclusio

The aim of this master thesis was to show how corporate strategies that promote or constrain environmental and social unintended side-effects influence the maintenance and management of OL of MNCs. In a first step, an extensive literature review on OL and its subtypes, cognitive, pragmatic, moral and regulative legitimacy, their interdependencies and mutual influences were discussed against the background of internationalization. In this discussion it was shown that MNCs have major problems in maintaining and managing their OL due to the strong differences between "EPS" and "SPS" in different markets. This was explained in more detail using the example of two "LS", offshoring and reshoring. The EU as a market has the highest production standards. In a separate chapter, the processes behind these European benchmark standards were examined in more detail in the context of the discourse that is publicly conducted about the environmental and social unintended side effects and through which moral legitimacy is constructed. Various concrete examples of standards relevant to this master thesis were used to illustrate how the public European perception of these environmental and social unintended side effects is changing.

From this extensive discussion, five main attributes were finally deduced, which were essential for measuring the influence on legitimacy: "LS", "EPS", "SPS", "Quality" and "Price". The quantifiable measurement of OL had not been undertaken prior to this master thesis and since legitimacy is always socially constructed through said discourse, it had to be measured through a proxy. In this master thesis, that was the WTP. The method chosen was a CBCA.

The following conclusions can now be drawn from the study conducted:

The "LS" was the attribute with the lowest importance. On the other hand, the "EPS" and "SPS" had a much greater influence on the OL. The "LS" acts as a kind of a strategic carrier for the actual claim to design manufacturing without unintended side effects.

"SPS" exert a greater influence on the OL than "EPS". However, it cannot be interpreted from the given data what is the reason for this difference in valence. Possible explanations are either differences in the communication of environmental and social unintended side effects or the composition of the sample.

Furthermore, "Quality" in the form of product longevity is important for high "EPS" and "SPS" and increases legitimacy.

"Price" is by far the most important attribute of all the five attributes mentioned and also exerts a specific influence on OL. It has been shown that legitimacy decreases only at a very high price, namely between "€30.00" and "€70.00". So even at very high "EPS" and "SPS", which are above the European minimum standards, there is a price pain threshold, which causes the WTP and thus the legitimacy to decrease again.

For the debate about OL, this means that the public discourse that constructs moral legitimacy has changed or expanded the social expectations and values inscribed in cognitive legitimacy. In this matter, pragmatic legitimacy acts as a kind of regulative, in that it defines, via the price, at what point the price-related social expectations are exceeded and legitimacy thus declines again.

### *Scientific Contribution*

This master thesis was located at the intersection of international LS and OL and has brought some new insights into the academic debate.

In particular, it tried to put into practice the linkage between OL and internationalization that had already been theoretically started by Palazzo and Scherer (2006). This brought about two major scientific contributions: On the one hand, it was found that environmental and social unintended side effects have a significant impact on OL. This had previously only been postulated theoretically by Palazzo and Scherer but could now be demonstrated in this master thesis. It is essential that the "LS" is only a strategic carrier of this very circumstance. For the OL it makes no significant difference whether manufacturing takes place in the EU or in the Global North or in the offshore Global South. On the other hand, the data collected also show that the "SPS" have a greater influence on the OL than the "EPS". Even if the reasons for this are not clear, a ranking in importance between "EPS" and "SPS" - and thus also between environmental and social unintended side effects - was not known.

In the course of this, the two strategies offshoring and reshoring were also analyzed against the background of OL.

Furthermore, this master thesis can also make methodological contributions. For example, as far as the author of this master thesis knows, the OL was operationalized and practically applied to a specific industry for the first time. Similarly, the use of the CBCA in this context has never been done before. Again, the author is not aware of any other study that has measured the impact of “EPS” and “SPS”, as well as “Quality” and “Price”, on OL in a real trade-off scenario.

### *Managerial implications*

Managerial implications can also be derived from the results obtained. Since the apparel industry was used as an example, these implications relate specifically to garments.

It has been shown that not only the OL, but also the willingness to pay more for a product is significantly related to which standards are met during manufacturing. A price of "€30.00" is very well accepted if environmental and social side effects are minimized or avoided by high production standards. As the example of the Armed Angles brand shows, production at such conditions is already possible in the EU (cf. Social Fashion Company GmbH, 2023).

If, however, cost reasons speak against such an option and manufacturing nevertheless takes place outside the EU, there is no risk of losing OL if high "EPS" and "SPS" are applied offshore. This is probably the most important managerial implication of this study, as it means that a potentially very expensive relocation of manufacturing from the Global South to the EU is not necessary. Maintaining good production standards is also possible offshore.

Furthermore, it has been shown that "Quality" in the form of "long life cycles" of clothing products is very important for OL.

### *Limitations*

Of course, this master thesis has some limitations. On the one hand, in the sample. The majority of the participants were female, under 35 years old and academically very educated. Therefore, conclusions can be drawn mainly about female, younger, and more educated audiences.

On the other hand, these findings apply mainly to the apparel industry. The results may not be applicable to other industries.

### *Future Research*

Some possibilities for further research projects arise from this master thesis.

Due to OL's socially constructed character, a qualitative approach to this topic would also be interesting. Through interviews, for example, further interesting insights into this topic could be gained. In the same way, it would be interesting to test the relevance of the attributes deduced from the literature through qualitative primary studies.

Another topic for future research would also be to verify the importance of "SPS" over "EPS" as indicated in this master thesis. Potential studies here could also find out more detailed reasons for such a preference.

Furthermore, it would of course be interesting to see whether the results obtained here could also be applied to other industries apart from the apparel industry.

## Bibliography

- Alriksson, S. and Öberg, T. (2008) 'Conjoint analysis for environmental evaluation. A review of methods and applications', *Environmental science and pollution research international*, 15(3), pp. 244–257.
- Ancarani, A. *et al.* (2015) 'Prior to reshoring: A duration analysis of foreign manufacturing', *International Journal of Production Economics*, 169, pp. 141–155.
- Arlbjorn, J.S. and Lüthje, T. (2012) 'Global operations and their interaction with supply chain performance', *Industrial Management & Data Systems*, 112(7), pp. 1044–1064. Available at: <https://doi.org/10.1108/02635571211255014>.
- Ashforth, B.E. and Gibbs, B.W. (1990) 'The double-edge of organizational legitimation', *Organizational Science*, 1(2), pp. 177–194.
- Auger, P. and Devinney, T.M. (2007) 'Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions', *Journal of Business Ethics*, 76, pp. 361–383.
- Bauer, M.W. and Becker, S. (2014) 'The Unexpected Winner of the Crisis: The European Commission's Strengthened Role in Economic Governance', *Journal of European Integration*, 36(3), pp. 213–229.
- Blamey, R.K. *et al.* (2002) 'Attribute Causality in Environmental Choice Modelling', *Environmental and Resource Economics*, 23(2), pp. 167–186.
- Bo, Z., Yaozhong, Z. and Peng, Z. (2021) 'Consumer Attitude towards Sustainability of Fast Fashion Products in the UK', *Sustainability*, 13(3), p. 1646. Available at: <https://doi.org/10.3390/su13041646>.
- Bongardt, A. and Torres, F. (2022) 'The European Green Deal: More than an Exit Strategy to the Pandemic Crisis, a Building Block of a Sustainable European Economic Model', *Journal of Common Market Studies*, 60(1), pp. 170–185. Available at: <https://doi.org/10.1111/jcms.13264>.
- Brand, U. and Wissen, M. (2017) *Imperiale Lebensweise. Zur Ausbeutung von Mensch und Natur im globalen Kapitalismus*. München: oekom.
- Business Europe (2020) 'Position Paper: Proposal for an EU Directive on fair minimum wages'. Business Europe. Available at: <https://www.besbusiness.eu/publications/proposal-eu-directive-fair-minimum-wages-business-europe-position-paper> (Accessed: 8 June 2023).

- Business Europe (2022) ‘Position Paper: Ecodesign for Sustainable Products Regulation’. Business Europe. Available at: [https://www.businessseurope.eu/sites/buseur/files/media/position\\_papers/iaco/2022-09-07\\_espr\\_paper\\_and\\_am\\_proposals.pdf](https://www.businessseurope.eu/sites/buseur/files/media/position_papers/iaco/2022-09-07_espr_paper_and_am_proposals.pdf) (Accessed: 8 June 2023).
- Business Europe (2023a) *Mission and Priorities*, Business Europe. Available at: <https://www.businessseurope.eu/mission-and-priorities> (Accessed: 6 June 2023).
- Business Europe (2023b) ‘Statement: Ecodesign for sustainable products regulation. Call on EU policymakers.’ Business Europe. Available at: [https://www.businessseurope.eu/sites/buseur/files/media/position\\_papers/iaco/2023-05-10\\_businessseurope\\_statement\\_on\\_espr.pdf](https://www.businessseurope.eu/sites/buseur/files/media/position_papers/iaco/2023-05-10_businessseurope_statement_on_espr.pdf) (Accessed: 8 June 2023).
- Canham, S. and Hamilton, R.T. (2013) ‘SME internationalisation: offshoring, “backshoring”, or staying at home in New Zealand’, *Strategic Outsourcing: An International Journal*, 6(3), pp. 277–291. Available at: <https://doi.org/10.1108/SO-06-2013-0011>.
- Casson, M. (2013) ‘Economic analysis of international supply chains: An internationalization perspective’, *Journal of Supply Chain Management*, 49(2), pp. 8–13.
- Chekima, B. *et al.* (2016) ‘Examining green consumerism motivational drivers: does premium price and demographics matter to green purchasing?’, *Journal of Cleaner Production*, 112, pp. 3436–3450. Available at: <https://doi.org/10.1016/j.jclepro.2015.09.102>.
- Chowdhury, R. (2017) ‘The Rana Plaza disaster and the complicit behavior of elite NGOs’, *Organization*, 24(6), pp. 938–949. Available at: <https://doi.org/10.1177/1350508417699023>.
- Chrzan, K. and Orme, B. (2000) *An Overview and Comparison of Design Strategies for Choice-Based COnjoint Analysis*. Sequim: Sawtooth Software Inc.
- Clark, I. (1997) *Globalization and fragmentation: International relations in the twentieth century*. Oxford: Oxford University Press.
- Connell, K.Y.H. (2010) ‘Internal and external barriers to eco-conscious apparel acquisition’, *International Journal of consumer studies*, 34(3), pp. 279–286. Available at: <https://doi.org/10.1111/j.1470-6431.2010.00865.x>.
- Crane, A. (2001) ‘Unpacking the ethical product’, *Journal of Business Ethics*, 30(4), pp. 361–373. Available at: <https://doi.org/10.1023/A:1010793013027>.
- Dachs, B. and Kinkel, S. (2013) ‘Backshoring of production activities in European manufacturing: Evidence from a large scale survey.’, in *Operations management at the hearth of the recovery, proceedings of the 20th EurOMA conference*.

- Di Mauro, C. *et al.* (2018) 'Offshoring and backshoring: A multiple case study analysis', *Journal of Purchasing & Supply Management*, 24, pp. 108–134.
- Dickenbrok, C. and Martinez, L.F. (2018) 'Communication green fashion across different cultures and geographical regions', *Int Rev Public Nonprofit Mark*, 15, pp. 127–141. Available at: <https://doi.org/10.1007/s12208-018-0194-6>.
- Diodato, D., Malerba, F. and Morrison, A. (2018) 'The made-in effect and leapfrogging: A model of leadership change for products with country-of-origin bias', *European Economic Review*, 101, pp. 297–329. Available at: <https://doi.org/10.1016/j.euroecorev.2017.10.010>.
- Dolgui, A. and Proth, J.-M. (2013) 'Outsourcing: definitions and analysis', *International Journal of Production Research*, 51(23–24), pp. 6769–6777. Available at: <https://doi.org/10.1080/00207543.2013.855338>.
- Dowling, J. and Pfeffer, J. (1975) 'Organizational Legitimacy: Social Values and Organizational Behavior', *The Pacific Sociological Review*, 18(1), pp. 122–136.
- Dunning, J.H. (1980) 'Toward an Eclectic Theory of International Production: Some Empirical Tests', *Journal of International Business Studies*, 11(1), pp. 9–31.
- Dunning, J.H. (1988) 'The eclectic paradigm of international production: a restatement and some possible extensions', *Journal of International Business Studies*, 19(1), pp. 1–31.
- Dupont, C., Oberthür, S. and Homeyer, I. (2020) 'The Covid-19 Crisis: A Critical Juncture for EU Climate Policy Development?', *Journal of European Integration*, 42(8), pp. 1095–1110. Available at: <https://doi.org/10.1080/07036337.2020.1853117>.
- Edbring, E.G., Lehner, M. and Mont, O. (2016) 'Exploring consumer attitudes to alternative models of consumption: motivations and barriers', *Journal of Cleaner Production*, 123, pp. 5–15. Available at: <https://doi.org/10.1016/j.jclepro.2015.10.107>.
- Eifler, C. (2014) 'Professional women's thoughts about sustainable clothing: eco-fashion goes business?', *International Journal of Fashion Studies*, 1, pp. 149–163.
- Ellison, A.M. (1996) 'An Introduction to Bayesian Inference for Ecological Research and Environmental Decision-Making', *Ecological Applications*, 6(4), pp. 1036–1046.
- Ellram, L.M., Tate, W.L. and Petersen, K.J. (2013) 'Offshoring and Reshoring: An Update on the Manufacturing Location Decision', *Journal of Supply Chain Management*, 49(2), pp. 14–22. Available at: <https://doi.org/10.1111/jscm.12019>.
- Eurofund (2019) *Reshoring in Europe: Overview 2015–2018*. Luxembourg: European Foundation for the Improvement of Living and Working Conditions.

- European Commission (2014) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. On an EU Strategic Framework on Health and Safety at Work 2014-2020*, COM(2014) 332 final.
- European Commission (2017a) *Commission Recommendation of 26.4.2017 on the European Pillar of Social Rights*, (COM (2017) 2600 final).
- European Commission (2017b) *Proposal for a Interinstitutional Proclamation on the European Pillar of Social Rights*, COM(2017) 251 final.
- European Commission (2019) *Communication from the Commission COM(2019) 640 final about The European Green Deal*, COM(2019) 640 final.
- European Commission (2020a) *Communication from the Commission. A New Industrial Strategy for Europe*, COM(2020) 102 final.
- European Commission (2020b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A strong social Europe for just transitions*, COM(2020) 14 final.
- European Commission (2020c) *Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. European Skills Agenda for sustainable competitiveness, social fairness and resilience*, COM(2020) 274 final.
- European Commission (2020d) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Youth Employment Support: a Bridge to Jobs for the Next Generation*, COM(2020) 276 final.
- European Commission (2020e) *Environmental performance of products & businesses – substantiating claims*. Available at: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12511-Environmental-performance-of-products-businesses-substantiating-claims\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12511-Environmental-performance-of-products-businesses-substantiating-claims_en) (Accessed: 6 June 2023).
- European Commission (2020f) *Proposal for a Directive of the European Parliament and of the Council on adequate minimum wages in the European Union*, COM/2020/682 final.
- European Commission (2020g) *Protecting workers against cancer-causing substances*. Available at: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12608-Protecting-workers-against-cancer-causing-substances\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12608-Protecting-workers-against-cancer-causing-substances_en) (Accessed: 8 June 2023).

European Commission (2020h) *Sustainable products initiative*. Available at:

[https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12567-Sustainable-products-initiative\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12567-Sustainable-products-initiative_en) (Accessed: 6 June 2023).

European Commission (2021a) *Communication from the COmmission to the European Parliament, the Council, the European Economic and Social COmmittee and the COmmittee of Regions. Building an economy that works for people: an action plan for the social economy*, COM(2021) 778 final.

European Commission (2021b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social COmmittee and the Committee of the Regions. EU strategic framework on health and safety at work 2021-2027 Occupational safety and health in a changing world of work*, COM(2021) 323 final.

European Commission (2021c) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality*, COM(2021) 550 final.

European Commission (2021d) *Occupational safety and health in a changing world of work*. Available at: [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_3170](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3170) (Accessed: 16 December 2022).

European Commission (2022a) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee an the Committee of the Regions. EU Strategy for Sustainable and Circular Textiles*, COM(2022) 141 final.

European Commission (2022b) *European Green Deal: Commission proposes rules for cleaner air and water*. Available at: [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_22\\_6278](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6278).

European Commission (2022c) *Green Deal: New proposals to make sustainable products the norm and boost Europe's resource independence*. Available at: [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_22\\_2013](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2013) (Accessed: 15 December 2022).

European Commission (2022d) *Health & safety at work – protecting workers from exposure to chemicals (lead and diisocyanates)*. Available at: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12745-Health-safety-at-work-protecting-workers-from-exposure-to-chemicals-lead-and-di-isocyanates-\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12745-Health-safety-at-work-protecting-workers-from-exposure-to-chemicals-lead-and-di-isocyanates-_en) (Accessed: 8 June 2023).

European Commission (2022e) *Proposal for a Regulation of the European Parliament and of the Council laying down harmonised conditions for the marketing of construction products, amending Regulation (EU) 2019/1020 and repealing Regulation (EU) 305/2011, COM/2022/144 final.*

European Commission (2022f) *Proposal for a regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC, COM(2022) 142 final.*

European Commission (2023a) *Conference on the Future of Europe, European Commission.* Available at: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/new-push-european-democracy/conference-future-europe\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/new-push-european-democracy/conference-future-europe_en) (Accessed: 6 June 2023).

European Commission (2023b) *European citizens' panels, European Commission.* Available at: [https://citizens.ec.europa.eu/index\\_en](https://citizens.ec.europa.eu/index_en) (Accessed: 6 June 2023).

European Commission (2023c) *Have your say, European Commission.* Available at: [https://ec.europa.eu/info/law/better-regulation/have-your-say\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say_en) (Accessed: 6 June 2023).

European Commission (no date a) *Adequate minimum wages in the EU.* Available at: <https://ec.europa.eu/social/main.jsp?catId=1539&langId=en> (Accessed: 15 December 2022).

European Commission (no date b) *The European Pillar of Social Rights Action Plan.* Available at: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-action-plan\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-action-plan_en) (Accessed: 15 December 2022).

European Commission (no date c) *The Just Transition Mechanism: making sure no one is left behind.* Available at: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en) (Accessed: 14 December 2022).

European Council (2021) *Informal meeting of heads of state or government, Porto, 7-8 May 2021.* Available at: <https://www.consilium.europa.eu/en/meetings/european-council/2021/05/07/> (Accessed: 15 December 2022).

European Parliament (2009) *Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products, Directive 2009/125/EC.*

European Parliament and European Council (2020) *Proposal for a Regulation of the European Parliament and of the Council establishing the Just Transition Fund, COM/2020/22 final.*

European Parliament and European Council (2021) *Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'), Regulation (EU) 2021/1119.*

European Union (2023) *European Citizens' Initiative, European Union.* Available at: [https://europa.eu/citizens-initiative/\\_en](https://europa.eu/citizens-initiative/_en) (Accessed: 6 June 2023).

Foerstl, K., Kirchoff, J. and Bals, L. (2016) 'Rehsoring and incourcing: drivers and future research direction', *International Journal of Physical Distribution and Logistics Management*, 46(5), pp. 492–515. Available at: <https://doi.org/10.1108/IJPDLM-02-2015-0045>.

Fratocchi, L. *et al.* (2016) 'Motivations of manufacturing reshoring: an interpretative framework', *International Journal of Physical Distribution & Logistics Management*, 46(2), pp. 98–127. Available at: <https://doi.org/10.1108/IJPDLM-06-2014-0131>.

Gensler, S. *et al.* (2012) 'Willingness-to-pay estimation with choice-based conjoint analysis. Addressing extreme response behavior with individually adpated designs.', *European Journal of Operational Research*, 219, pp. 368–378. Available at: <https://doi.org/10.1016/j.ejor.2012.01.002>.

Godey, B. *et al.* (2012) 'Brand and country-of-origin effect on consumers' decision to purchase luxury products.', *Journal of Business Research*, 65(10), pp. 1461–1470. Available at: <https://doi.org/10.1016/j.jbusres.2011.10.012>.

Grappi, S., Romani, S. and Bagozzi, R.P. (2018) 'Reshoring from a demand-side perspective: Consumer reshoring sentiment and its marekt effect.', *Journal of World Business*, 53, pp. 194–208.

Gray, J.V. *et al.* (2013) 'The reshoring phenomenon: What supply chain academics ought to know and should do', *Journal of Supply Chain Management*, 49(2), pp. 27–33.

Green, P.E. and Rao, V.R. (1971) 'Conjoint Measurement for Quantifying Judgmental Data', *Journal of Marketing Research*, 8(3), pp. 355–363.

Green, P.E. and Srinivasan, V. (1978) 'Conjoint Analysis in Consumer Research. Issues and Outlook', *Journal of Consumer Research*, 5(2), pp. 103–123.

Gylling, M. *et al.* (2015) 'Making decisions on offshore outsourcing and backshoring: A case study in the bicycle industry', *International Journal Production Economics*, 162, pp. 92–100.

- Hake, B. and Grönefeld, K. (2008) 'Die Anwendung der Conjoint-Analyse für eine partnerschaftliche Sortimentsgestaltung in der Bekleidung', in *Retail Business in Deutschland. Perspektiven, Strategien, Erfolgsmuster*. 2nd edn. Wiesbad: Gabler, pp. 397–412.
- Henninger, C.E., Alevizou, P.J. and Oates, C.J. (2016) 'What is sustainable fashion?', *Journal of Fashion Marketing and Management*, 20(4), pp. 400–416. Available at: <https://doi.org/10.1108/JFMM-07-2015-0052>.
- H&M Hennes & Mauritz AB (2023) *T-Shirt aus Baumwolle*. Available at: [https://www2.hm.com/de\\_at/productpage.0963662001.html](https://www2.hm.com/de_at/productpage.0963662001.html) (Accessed: 12 June 2023).
- Huang, Y. (2010) *Reinterpreting China's Success Through the New Economic Geography*. Asia Programm 115. Washington D.C.: Carnegie Endowment for International Peace.
- Iwanow, H., McEachern, M.G. and Jeffrey, A. (2005) 'The influence of ethical trading policies on consumer apparel purchase decisions', *International Journal of retail and distribution management*, 33(5), pp. 371–387. Available at: <https://doi.org/10.1108/09590550510596740>.
- Jacobs, K. *et al.* (2018) 'Green thinking but thoughtless buying? An empirical extension of the value-attitude-behavior hierarchy in sustainable clothing', *Journal of Cleaner Production*, 203, pp. 1155–1169. Available at: <https://doi.org/10.1016/j.jclepro.2018.07.320>.
- Jägel, T. *et al.* (2012) 'Individual values and motivational complexities in ethical clothing consumption: a means-end approach', *Journal of marketing management*, 28(3–4), pp. 373–398. Available at: <https://doi.org/10.1080/0267257X.2012.659280>.
- Kinkel, S. (2012) 'Trends in production relocation and backshoring activities.', *International Journal of Operations & Production Management*, 32(6), pp. 696–720. Available at: <https://doi.org/10.1108/01443571211230934>.
- Kinkel, S. and Maloca, S. (2009) 'Drivers and antecedents of manufacturing offshoring and backshoring. A german perspective', *Journal of Purchasing & Supply Management*, 15, pp. 154–165. Available at: <https://doi.org/10.1016/j.pursup.2009.05.007>.
- Kinkel, S. and Zanker, C. (2013) 'New patterns of German production relocation and backshoring - A German perspective.', in *Operations management at the hearth of the recovery, proceedings of the 20th EurOMA conference*.
- Kostova, T. and Zaheer, S. (1999) 'organizational legitimacy under conditions of complexity: The case of the multinational enterprise', *The Academy of Management Review*, 24(1), pp. 64–81.

- Kuchinka, D. *et al.* (2018) 'Consumer attitudes toward sustainable development and risk to brand loyalty', *Sustainability*, 10(4), p. 997. Available at: <https://doi.org/10.3390/su10040997>.
- Levitt, T. (1980) 'Marketing success through differentiation - Of anything', *Harvard Business Review*, pp. 83–91.
- Li, X. and Zhou, Y.M. (2017) 'Offshoring Pollution while Offshoring Production?', *Strategic Management Journal*, 38, pp. 2310–2329. Available at: <https://doi.org/10.1002/smj.2656>.
- Lieder, M. *et al.* (2018) 'A conjoint analysis of circular economy value propositions for consumers. Using washing machines in Stockholm as a case study.', *Journal of Cleaner Production*, 172, pp. 264–273.
- Liobikienė, G. and Bernatoniene, J. (2017) 'Why determinants of green purchase cannot be treated equally? The Case of green cosmetics: literature review', *Journal of Cleaner Production*, 162, pp. 109–120.
- Louviere, J.J., Hensher, D.A. and Swait, J.D. (2000) *Stated Choice Methods. Analysis and Application*. Cambridge: Cambridge University Press.
- Louviere, J.J. and Woodworth, G. (1983) 'Design and Analysis of Simulated Consumer Choice or Allocation Experiments: An Approach Based on Aggregate Data', *Journal of Marketing Research*, 20(4), pp. 350–367. Available at: <https://doi.org/10.2307/3151440>.
- Luce, R.D. and Tukey, J.W. (1964) 'Simultaneous Conjoint Measurement. A New Type of Fundamental Measurement', *Journal of Mathematical Psychology*, 1, pp. 1–27.
- Martínez-Mora, C. and Merino, F. (2014) 'Offshoring in the Spanish footwear industry: A return journey?', *Journal of Purchasing & Supply Management*, 20, pp. 225–237. Available at: <https://doi.org/10.1016/j.pursup.2014.07.001>.
- McIvor, R. and Bals, L. (2021) 'A multi-theory framework for understanding the reshoring decision', *International Business Review*, 30(101827).
- Meyer, J.W. and Rowan, B. (1991) 'Institutionalized Organizations: Formal structure as myth and ceremony', in *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press, pp. 41–62.
- Moser, A.K. (2015) 'Thinking green, buying green? Drivers of pro-environmental purchasing behavior', *The Journal of consumer marketing*, 32(3), pp. 167–175. Available at: <https://doi.org/10.1108/JCM-10-2014-1179>.
- Mykhaylenko, A. *et al.* (2015) 'Assessing offshoring advantages: what and how to offshore', *Strategic Outsourcing: An International Journal*, 8(2/3), pp. 262–283. Available at:

<https://doi.org/10.1108/SO-07-2015-0017>.

Niinimäki, K. (2010) 'Eco-clothing, consumer identity and ideology', *Sustainable Development*, 18(3), pp. 150–162. Available at: <https://doi.org/10.1002/sd.455>.

Nujen, B.B., Halse, L.L. and Solli-Saether, H. (2015) 'Backsourcing and knowledge Reintegration: A case study', in *Advances in production management systems: Innovative production management towards sustainable growth. APMS 2015*. Springer (IFIP advances in information and communication technology).

Orme, B. (2000) *Hierarchical Bayes: Why All the Attention?* Sequim: Sawtooth Software Inc.

Orme, B. (2019) *Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research*. 4th edn. Research Publishers LLC.

Palazzo, G. and Scherer, A.G. (2006) 'Corporate Legitimacy as Deliberation: A Communicative Framework', *Journal of Business Ethics*, 66(1), pp. 71–88.

Pangaia (2023) *Organic Cotton T-Shirt With C-FIBER™ Core - Off-White*. Available at: <https://eu.pangaia.com/products/organic-cotton-t-shirt-with-c-fiber-off-white> (Accessed: 12 June 2023).

Parsons, T. (1960) *Structure and process in modern societies*. Glencoe: Free Press.

Porter, M.E. and Kramer, M.R. (2011) 'Creating Shared Value. How to reinvent capitalism and unleash a wave of innovation and growth', *Harvard Business Review*, pp. 2–16.

Powell, W.W. and DiMaggio, P.J. (eds) (1991) *The new institutionalism in organizational analysis*. Chicago: University of Chicago press.

Rao, V.R. (2014) *Applied Conjoint Analysis*. Berlin Heidelberg: Springer.

Rasnaca, Z. (2017) 'Bridging the gaps or falling short? The European Pillar of Social Rights and what it can bring to EU-level policymaking', *ETUI* [Preprint]. Available at: <https://doi.org/10.13140/RG.2.2.32569.26724>.

Reimers, V., Magnuson, B. and Chao, F. (2016) 'The academic conceptualization of ethical clothing: could it account for the attitude behavior gap?', *Journal of Fashion Marketing and Management*, 20(4), pp. 383–399. Available at: <https://doi.org/10.1108/JFMM-12-2015-0097>.

Rugman, A.M. and Hodgetts, R.M. (2000) *International Business: A Strategic Management Approach*. Harlow: Prentice-Hall.

Sachs, J.D. et al. (2022) 'From Crisis to Sustainable Development: the SDGs as Roadmap to 2030 and Beyond. Sustainable Development Report 2022'. Available at:

<https://doi.org/10.1017/9781009210058>.

Sawtooth Software (no date) *Counting Analysis*. Available at:

<https://sawtoothsoftware.com/help/lighthouse-studio/manual/cbc-counting-analysis.html>

(Accessed: 1 May 2023).

Sawtooth Software Inc. (2017) *The CBC System for Choice-Based Conjoint Analysis*. Version 9. Orem, Utah.

Schmeisser, B. (2013) 'A Systematic Review of Literature on Offshoring of Value Chain Activities', *Journal of International Management*, 19, pp. 390–406.

Scott, W.R. and Davis, G.F. (2015) *Organizations and Organizing. Rational, natural and open systems perspectives*. Taylor and Francis.

Slepinov, D., Brazinskas, S. and Waehrens, B.V. (2013) 'Nearshoring practices. An exploratory study of Scandinavian manufacturers and Lithuanian vendor firms', *Baltic Journal of Management*, 8(1), pp. 5–26. Available at: <https://doi.org/10.1108/17465261311291632>.

Smejkal, V. (2016) 'The Horizontal Social Clause of Art. 9 TFEU and Its Potential to Push the EU towards Social Europe'. Prague Law Working Papers Series No. 2016/III/1.

Social Fashion Company GmbH (2023) *T-Shirt aus Bio-Baumwolle*. Available at:

<https://www.armedangels.com/at-de/women/produkte/maraa-lanaa-white-34659> (Accessed: 12 June 2023).

Suchman, M.C. (1995) 'Managing Legitimacy: Strategic and Institutional Approaches', *The Academy of Management Review*, 20(3), pp. 571–610.

Sudhakara, R. (2009) *Economic Reforms in India and China: Emerging Issues and Challenges*. New Delhi, India.

Tagliapietra, S. and Veugelers, R. (2021) 'Fostering the Industrial Component of the European Green Deal: Key Principles and Policy Options', *Intereconomics*, 56, pp. 305–310. Available at: <https://doi.org/10.1007/s10272-021-1006-5>.

Taylor, M.S. (2005) 'Unbundling the Pollution Haven Hypothesis', *Advances in Economic Analysis and Policy*, 4(2), pp. 1–26. Available at: <https://doi.org/10.2202/1538-0637.1408>.

Teece, D.J., Pisano, G. and Shuen, A. (1997) 'Dynamic Capabilities and Strategic Management', *Strategic Management Journal*, 18(7), pp. 509–533.

Terreberry, S. (1968) 'The evolution of organizational environments', *Administrative Science Quarterly*, 12, pp. 590–613.

United Nations General Assembly (2015) *Transforming our world: the 2030 Agenda for*

*Sustainable Development*, UNGA A/RES/70/1.

Venturini, P. (1998) 'Social Policy and Employment Aspects of the Treaty of Amsterdam', *Fordham International Law Journal*, 22(6), pp. 94–105.

Weber, M. (1985) *Wirtschaft und Gesellschaft. Grundriss der verstehenden Soziologie*. 5th edn. Tübingen: Mohr.

Williamson, O.E. (2008) 'Outsourcing: Transaction cost economics and supply chain management', *Journal of Supply Chain Management*, 44(2), pp. 5–16.

Wright, K.B. (2005) 'Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services', *Journal of computer-mediated communication*, 10(3). Available at: <https://doi.org/0.1111/j.1083-6101.2005.tb00259.x>.

Zajak, S. (2015) 'Die (Re-)Konstruktion von corporate legitimacy in öffentlichen Legitimitätskonflikten. Soziale Bewegungen und Walmarts Unternehmenspolitik', *Zeitschrift für Wirtschafts- und Unternehmensethik*, 16(2), pp. 155–177.

Zucker, L.G. (1987) 'Institutional theories of organizations', *Annual Review of Sociology*, 13, pp. 443–644.

# Appendix

## 1. Screenshots of the Survey Questionnaire

Dear Participant!

Thank you very much for being part of this survey for my master thesis.

In this thesis I would like to find out how strategies that determine certain environmental and social side effects of international production influence the legitimacy of multinational companies.

Please read the following texts and questions carefully and answer the questions truthfully. Your answers will be treated strictly confidential and anonymous. They will only be used in aggregated form.

If you have any questions about the survey or the topic, please do not hesitate to contact me by email at [a01400899@unet.univie.ac.at](mailto:a01400899@unet.univie.ac.at)

Thank you in advance and best regards,

Fabian Karner



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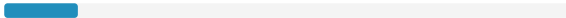
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How old are you?

- ☐ below 18
- ☐ 18 - 30
- ☐ 31 - 40
- ☐ 41 - 50
- ☐ 51 - 60
- ☐ 61 - 70
- ☐ above 70

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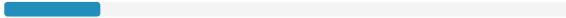
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What is your gender?

- ☐ Female
- ☐ Male
- ☐ Non - binary
- ☐ Other
- ☐ Prefer not to say

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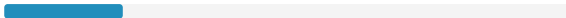
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What is your highest level of education?

- ☐ Statutory education diploma or equivalent
- ☐ Apprenticeship
- ☐ High school diploma or equivalent
- ☐ Bachelor's degree
- ☐ Master's degree / Magister
- ☐ PhD / Doktor
- ☐ prefer not to say

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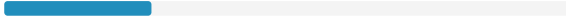
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I am currently...

- ☐ employed
- ☐ unemployed
- ☐ self-employed
- ☐ retired
- ☐ a student
- ☐ prefer not to say

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Imagine you buy a t-shirt and you know all the *five attributes* given about this product (explanation down below). The attributes of the t-shirt can appear in different characteristics. Over the next slides you will continuously be presented with three different t-shirt options with different combinations of the attributes' characteristics, as well as a none-choice-option.

**Pick the option with the combination you would buy. If you would not buy any of the given options, choose the non-choice-option. Which one would you choose?**

*A brief explanation:*

The *location strategy* indicates where the garment was produced:

1. *offshoring*: the product was produced outside the European Union, typically in a developing country
2. *reshoring*: the product was previously produced offshore, but production was brought back to the European Union by the company

Regarding the *environmental and social production standards*, it should also be mentioned that the current standards of the European Union are considered to be the highest in the world.

The *prices* used in this survey are realistic market prices and the *quality* is measured in the lifetime of the products.

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If these were your only options, which would you choose?

(1 of 15)

|                                  |                                       |                                       |                                       |                                       |
|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Location Strategy                | reshoring                             | reshoring                             | offshoring                            | NONE: I wouldn't choose any of these. |
| Environment Production Standards | equal to EU standards                 | above EU standards                    | equal to EU standards                 |                                       |
| Social Production Standards      | above EU standards                    | equal to EU standards                 | below EU standards                    |                                       |
| Price                            | € 70.00                               | € 7.00                                | € 30.00                               |                                       |
| Quality                          | short life cycle                      | short life cycle                      | long life cycle                       |                                       |
|                                  | <input type="button" value="Select"/> | <input type="button" value="Select"/> | <input type="button" value="Select"/> | <input type="button" value="Select"/> |

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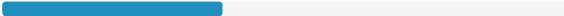
If these were your only options, which would you choose?

(2 of 15)

|                                  |                                       |                                       |                                       |                                       |
|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Location Strategy                | offshoring                            | offshoring                            | reshoring                             | NONE: I wouldn't choose any of these. |
| Environment Production Standards | below EU standards                    | equal to EU standards                 | above EU standards                    |                                       |
| Social Production Standards      | equal to EU standards                 | below EU standards                    | equal to EU standards                 |                                       |
| Price                            | € 7.00                                | € 7.00                                | € 30.00                               |                                       |
| Quality                          | long life cycle                       | short life cycle                      | short life cycle                      |                                       |
|                                  | <input type="button" value="Select"/> | <input type="button" value="Select"/> | <input type="button" value="Select"/> | <input type="button" value="Select"/> |

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Thank you very much for taking part in my survey!

Your responses have been submitted successfully.

You can close this tab now!

For questions please contact me via e-mail:  
[a01400899@unet.univie.ac.at](mailto:a01400899@unet.univie.ac.at)

Thank you!

Fabian Karner



universität  
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## 2. Design Testing through Sawtooth Software's Test Design Function

| Logit Efficiencies      |       |            |                       |
|-------------------------|-------|------------|-----------------------|
| Using main effects only |       |            |                       |
| Respondent Count        |       | 300        |                       |
|                         |       |            |                       |
| Attribute               | Level | Std. Error | Label                 |
| 1                       | 1     | 0,04205    | offshoring            |
| 1                       | 2     | 0,04205    | reshoring             |
|                         |       |            |                       |
| 2                       | 1     | 0,04680    | below EU standards    |
| 2                       | 2     | 0,03171    | equal to EU standards |
| 2                       | 3     | 0,03176    | above EU standards    |
|                         |       |            |                       |
| 3                       | 1     | 0,04679    | below EU standards    |
| 3                       | 2     | 0,03182    | equal to EU standards |
| 3                       | 3     | 0,03191    | above EU standards    |
|                         |       |            |                       |
| 4                       | 1     | 0,02532    | € 7.00                |
| 4                       | 2     | 0,02542    | € 30.00               |
| 4                       | 3     | 0,02527    | € 70.00               |
|                         |       |            |                       |
| 5                       | 1     | 0,01759    | short life cycle      |
| 5                       | 2     | 0,01759    | long life cycle       |
|                         |       |            |                       |
| None                    |       | 0,04210    |                       |

A general guideline is to achieve standard errors of 0.05 or smaller for main effect utilities and 0.10 or smaller for interaction effects or alternative-specific effects.

The strength of design for this model is 1682.39601678592.

(The ratio of strengths of design for two designs reflects the D-Efficiency of one design relative to the other.)

3. Relative attribute impact and interaction of attributes according to Sawtooth Software's Count Programme

|                                           |          |
|-------------------------------------------|----------|
| <b>Location Strategy</b>                  |          |
|                                           | Total    |
| Total Respondents                         | 221      |
| offshoring                                | 0,107    |
| reshoring                                 | 0,457    |
| Within Att. Chi-Square                    | 1106,856 |
| D.F.                                      | 1        |
| Significance                              | p < .01  |
| <b>Environmental Production Standards</b> |          |
|                                           | Total    |
| Total Respondents                         | 221      |
| below EU standards                        | 0,106    |
| equal to EU standards                     | 0,334    |
| above EU standards                        | 0,361    |
| Within Att. Chi-Square                    | 455,028  |
| D.F.                                      | 2        |
| Significance                              | p < .01  |
| <b>Social Production Standards</b>        |          |
|                                           | Total    |
| Total Respondents                         | 221      |
| below EU standards                        | 0,089    |
| equal to EU standards                     | 0,347    |
| above EU standards                        | 0,363    |
| Within Att. Chi-Square                    | 551,719  |
| D.F.                                      | 2        |
| Significance                              | p < .01  |
| <b>Price</b>                              |          |
|                                           | Total    |
| Total Respondents                         | 221      |
| € 7.00                                    | 0,401    |

|                                                               |                       |         |
|---------------------------------------------------------------|-----------------------|---------|
|                                                               | € 30.00               | 0,301   |
|                                                               | € 70.00               | 0,116   |
| Within Att. Chi-Square                                        |                       | 507,074 |
| D.F.                                                          |                       | 2       |
| Significance                                                  |                       | p < .01 |
| <b>Quality</b>                                                |                       |         |
|                                                               | Total                 |         |
| Total Respondents                                             |                       | 221     |
| short life cycle                                              |                       | 0,154   |
| long life cycle                                               |                       | 0,391   |
| Within Att. Chi-Square                                        |                       | 511,161 |
| D.F.                                                          |                       | 1       |
| Significance                                                  |                       | p < .01 |
| <b>Location Strategy x Environmental Production Standards</b> |                       |         |
|                                                               |                       | Total   |
| Total Respondents                                             |                       | 221     |
| offshoring                                                    | below EU standards    | 0,106   |
| offshoring                                                    | equal to EU standards | 0,104   |
| offshoring                                                    | above EU standards    | 0,115   |
| reshoring                                                     | below EU standards    | *       |
| reshoring                                                     | equal to EU standards | 0,440   |
| reshoring                                                     | above EU standards    | 0,473   |
| Interaction Chi-Square                                        |                       | 278,575 |
| D.F.                                                          |                       | 2       |
| Significance                                                  |                       | p < .01 |
| Warning: some cells have an expected value of less than five. |                       |         |
| <b>Location Strategy x Social Production Standards</b>        |                       |         |
|                                                               |                       | Total   |
| Total Respondents                                             |                       | 221     |
| offshoring                                                    | below EU standards    | 0,089   |
| offshoring                                                    | equal to EU standards | 0,132   |
| offshoring                                                    | above EU standards    | 0,136   |
| reshoring                                                     | below EU standards    | *       |
| reshoring                                                     | equal to EU standards | 0,444   |
| reshoring                                                     | above EU standards    | 0,470   |

|                                                                         |                       |                       |  |         |
|-------------------------------------------------------------------------|-----------------------|-----------------------|--|---------|
| Interaction Chi-Square                                                  |                       |                       |  | 213,933 |
| D.F.                                                                    |                       |                       |  | 2       |
| Significance                                                            |                       |                       |  | p < .01 |
| Warning: some cells have an expected value of less than five.           |                       |                       |  |         |
| <b>Location Strategy x Price</b>                                        |                       |                       |  |         |
|                                                                         |                       |                       |  | Total   |
| Total Respondents                                                       |                       |                       |  | 221     |
|                                                                         | offshoring            | € 7.00                |  | 0,184   |
|                                                                         | offshoring            | € 30.00               |  | 0,105   |
|                                                                         | offshoring            | € 70.00               |  | 0,034   |
|                                                                         | reshoring             | € 7.00                |  | 0,640   |
|                                                                         | reshoring             | € 30.00               |  | 0,519   |
|                                                                         | reshoring             | € 70.00               |  | 0,208   |
| Interaction Chi-Square                                                  |                       |                       |  | 19,785  |
| D.F.                                                                    |                       |                       |  | 2       |
| Significance                                                            |                       |                       |  | p < .01 |
| <b>Location Strategy x Quality</b>                                      |                       |                       |  |         |
|                                                                         |                       |                       |  | Total   |
| Total Respondents                                                       |                       |                       |  | 221     |
|                                                                         | offshoring            | short life cycle      |  | 0,054   |
|                                                                         | offshoring            | long life cycle       |  | 0,161   |
|                                                                         | reshoring             | short life cycle      |  | 0,266   |
|                                                                         | reshoring             | long life cycle       |  | 0,645   |
| Interaction Chi-Square                                                  |                       |                       |  | 3,822   |
| D.F.                                                                    |                       |                       |  | 1       |
| Significance                                                            |                       |                       |  | not sig |
| <b>Environmental Production Standards x Social Production Standards</b> |                       |                       |  |         |
|                                                                         |                       |                       |  | Total   |
| Total Respondents                                                       |                       |                       |  | 221     |
|                                                                         | below EU standards    | below EU standards    |  | 0,061   |
|                                                                         | below EU standards    | equal to EU standards |  | 0,121   |
|                                                                         | below EU standards    | above EU standards    |  | 0,133   |
|                                                                         | equal to EU standards | below EU standards    |  | 0,096   |
|                                                                         | equal to EU standards | equal to EU standards |  | 0,436   |

|                                                     |                       |                       |         |
|-----------------------------------------------------|-----------------------|-----------------------|---------|
|                                                     | equal to EU standards | above EU standards    | 0,442   |
|                                                     | above EU standards    | below EU standards    | 0,107   |
|                                                     | above EU standards    | equal to EU standards | 0,454   |
|                                                     | above EU standards    | above EU standards    | 0,492   |
|                                                     |                       |                       |         |
| Interaction Chi-Square                              |                       |                       | 23,848  |
| D.F.                                                |                       |                       | 4       |
| Significance                                        |                       |                       | p < .01 |
|                                                     |                       |                       |         |
|                                                     |                       |                       |         |
| <b>Environmental Production Standards x Price</b>   |                       |                       |         |
|                                                     |                       |                       | Total   |
| Total Respondents                                   |                       |                       | 221     |
|                                                     | below EU standards    | € 7.00                | 0,188   |
|                                                     | below EU standards    | € 30.00               | 0,102   |
|                                                     | below EU standards    | € 70.00               | 0,031   |
|                                                     | equal to EU standards | € 7.00                | 0,475   |
|                                                     | equal to EU standards | € 30.00               | 0,373   |
|                                                     | equal to EU standards | € 70.00               | 0,149   |
|                                                     | above EU standards    | € 7.00                | 0,513   |
|                                                     | above EU standards    | € 30.00               | 0,410   |
|                                                     | above EU standards    | € 70.00               | 0,160   |
|                                                     |                       |                       |         |
| Interaction Chi-Square                              |                       |                       | 15,268  |
| D.F.                                                |                       |                       | 4       |
| Significance                                        |                       |                       | p < .01 |
|                                                     |                       |                       |         |
|                                                     |                       |                       |         |
| <b>Environmental Production Standards x Quality</b> |                       |                       |         |
|                                                     |                       |                       | Total   |
| Total Respondents                                   |                       |                       | 221     |
|                                                     | below EU standards    | short life cycle      | 0,056   |
|                                                     | below EU standards    | long life cycle       | 0,157   |
|                                                     | equal to EU standards | short life cycle      | 0,194   |
|                                                     | equal to EU standards | long life cycle       | 0,473   |
|                                                     | above EU standards    | short life cycle      | 0,202   |
|                                                     | above EU standards    | long life cycle       | 0,518   |
|                                                     |                       |                       |         |
| Interaction Chi-Square                              |                       |                       | 1,035   |
| D.F.                                                |                       |                       | 2       |
| Significance                                        |                       |                       | not sig |
|                                                     |                       |                       |         |

|                                              |                  |  |         |
|----------------------------------------------|------------------|--|---------|
| <b>Social Production Standards x Price</b>   |                  |  |         |
|                                              |                  |  | Total   |
| Total Respondents                            |                  |  | 221     |
| below EU standards                           | € 7.00           |  | 0,157   |
| below EU standards                           | € 30.00          |  | 0,081   |
| below EU standards                           | € 70.00          |  | 0,030   |
| equal to EU standards                        | € 7.00           |  | 0,496   |
| equal to EU standards                        | € 30.00          |  | 0,392   |
| equal to EU standards                        | € 70.00          |  | 0,156   |
| above EU standards                           | € 7.00           |  | 0,522   |
| above EU standards                           | € 30.00          |  | 0,403   |
| above EU standards                           | € 70.00          |  | 0,156   |
| Interaction Chi-Square                       |                  |  | 11,487  |
| D.F.                                         |                  |  | 4       |
| Significance                                 |                  |  | p < .05 |
| <b>Social Production Standards x Quality</b> |                  |  |         |
|                                              |                  |  | Total   |
| Total Respondents                            |                  |  | 221     |
| below EU standards                           | short life cycle |  | 0,041   |
| below EU standards                           | long life cycle  |  | 0,137   |
| equal to EU standards                        | short life cycle |  | 0,194   |
| equal to EU standards                        | long life cycle  |  | 0,503   |
| above EU standards                           | short life cycle |  | 0,217   |
| above EU standards                           | long life cycle  |  | 0,507   |
| Interaction Chi-Square                       |                  |  | 5,687   |
| D.F.                                         |                  |  | 2       |
| Significance                                 |                  |  | not sig |
| <b>Price x Quality</b>                       |                  |  |         |
|                                              |                  |  | Total   |
| Total Respondents                            |                  |  | 221     |
| € 7.00                                       | short life cycle |  | 0,264   |
| € 7.00                                       | long life cycle  |  | 0,536   |
| € 30.00                                      | short life cycle |  | 0,154   |
| € 30.00                                      | long life cycle  |  | 0,448   |
| € 70.00                                      | short life cycle |  | 0,047   |

|                        |                 |         |
|------------------------|-----------------|---------|
| € 70.00                | long life cycle | 0,187   |
|                        |                 |         |
| Interaction Chi-Square |                 | 30,696  |
| D.F.                   |                 | 2       |
| Significance           |                 | p < .01 |
|                        |                 |         |
|                        |                 |         |
|                        |                 |         |
| <b>None</b>            |                 |         |
|                        |                 | Total   |
| Total Respondents      |                 | 221     |
| None Chosen            |                 | 0,181   |

#### 4. Hierarchical Bayesian Estimates

| Average Utility Values                    |                                    |                           |              |              |        |
|-------------------------------------------|------------------------------------|---------------------------|--------------|--------------|--------|
| Utility Scaling Method                    |                                    | Zero-Centered Differences |              |              |        |
| Respondent Count                          |                                    | 221                       |              |              |        |
| Label                                     | Utility                            | Std Deviation             | Lower 95% CI | Upper 95% CI |        |
| <b>Location Strategy</b>                  |                                    |                           |              |              |        |
|                                           | offshoring                         | -22,31                    | 12,55        | -23,96       | -20,65 |
|                                           | reshoring                          | 22,31                     | 12,55        | 20,65        | 23,96  |
| <b>Environmental Production Standards</b> |                                    |                           |              |              |        |
|                                           | below EU standards                 | -50,44                    | 20,25        | -53,11       | -47,77 |
|                                           | equal to EU standards              | 21,07                     | 11,15        | 19,60        | 22,54  |
|                                           | above EU standards                 | 29,37                     | 17,39        | 27,07        | 31,66  |
| <b>Social Production Standards</b>        |                                    |                           |              |              |        |
|                                           | below EU standards                 | -64,14                    | 25,37        | -67,49       | -60,80 |
|                                           | equal to EU standards              | 26,73                     | 13,84        | 24,90        | 28,55  |
|                                           | above EU standards                 | 37,41                     | 19,34        | 34,86        | 39,96  |
| <b>Price</b>                              |                                    |                           |              |              |        |
|                                           | € 7.00                             | 53,29                     | 57,67        | 45,69        | 60,89  |
|                                           | € 30.00                            | 29,98                     | 18,60        | 27,53        | 32,44  |
|                                           | € 70.00                            | -83,27                    | 59,07        | -91,06       | -75,48 |
| <b>Quality</b>                            |                                    |                           |              |              |        |
|                                           | short life cycle                   | -52,02                    | 26,27        | -55,48       | -48,55 |
|                                           | long life cycle                    | 52,02                     | 26,27        | 48,55        | 55,48  |
|                                           | None                               | 9,10                      | 114,59       | -6,00        | 24,21  |
| <b>Average Importances</b>                |                                    |                           |              |              |        |
| Attribute                                 | Importance                         | Std Deviation             | Lower 95% CI | Upper 95% CI |        |
|                                           | Location Strategy                  | 9,17                      | 4,55         | 8,57         | 9,77   |
|                                           | Environmental Production Standards | 16,82                     | 6,54         | 15,95        | 17,68  |

|                             |       |       |       |       |
|-----------------------------|-------|-------|-------|-------|
| Social Production Standards | 21,26 | 7,50  | 20,27 | 22,24 |
| Price                       | 31,77 | 17,99 | 29,39 | 34,14 |
| Quality                     | 21,00 | 10,12 | 19,66 | 22,33 |