

Handel und Internationales Marketing  
Hrsg.: Bernhard Swoboda und Thomas Foscht

Markus Meierer

# **International Corporate Brand Management**

Evaluating Standardized  
Corporate Branding Across Countries



**RESEARCH**

Markus Meierer

## **International Corporate Brand Management**

# **GABLER RESEARCH**

## Handel und Internationales Marketing / Retailing and International Marketing

Herausgegeben von  
Professor Dr. Prof. h.c. Bernhard Swoboda,  
Professor Dr. Thomas Foscht

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Branding Across Countries

With a preface by  
Prof. Dr. Prof. h.c. Bernhard Swoboda



**RESEARCH**

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## Foreword

With the growing awareness that brands are one of firms' most valuable resources, branding has emerged as a top management priority in the past decade. In this context, corporate branding strategies are gaining more and more importance. Companies regularly commit significant expenditures in order to guarantee a clear, non-contradictory and above all positive perception of their corporate brand in the minds of their stakeholders within their home market. However, with regards to other country markets, companies often neglect a consistent approach, e.g. branding activities are left to the autonomy of the subsidiaries. Many factors – such as a decentralized organization or the duration of the activity in a country – can lead to international variances in corporate brand management. Further, cultural factors exert a major influence on the process of interpreting brand-related information. International corporations are thus confronted with the problem of establishing a consistent understanding of the corporate brand within different cultures as the basis for their “glocal” corporate strategy.

Addressing these issues, the present dissertation deals with the often neglected effects attributed to corporate branding, whereby an international perspective is taken. On a national level, much has been written about the impact of specific corporate associations on consumers' product evaluation. However, the impact of corporate brand management on consumers has rarely been examined from an international perspective. In practice, companies lack knowledge on how to evaluate cross-nationally if their corporate branding strategy works. Focusing on the FMCG sector and considering consumers' product response in each case, Dr. Meierer analyzes firstly the role of specific corporate associations versus corporate image in determining consumers' product response and secondly the role of the reciprocal relationship between corporate and product image. In detail, the studies can be summarized as follows:

- *Does standardization of corporate branding across countries work?* Recently, internationally standardized corporate brands have gained in importance, even in industries historically dominated by product brands. Consumers gauge specific corporate associations and corporate image as an overall picture of the or-

ganization when deciding to repurchase a product. However, seldom do studies illustrate how both are interrelated or disentangle their effect on consumers' product response. Analyzing a multinational sample, results illustrate that specific corporate associations impact corporate image cross-nationally in a similar fashion. However, their direct impact on consumers' product response varies between countries, as does the impact of corporate image on consumers' product response. Concluding, standardizing firms' external portrayal works, but marketers must consider its varying relevance to consumers' product response.

- *Does endorsing product brands by corporate branding pay off? A multi-country study.* A growing number of firms use their internationally standardized corporate brands as an endorsement to their local, regional and international product brands. However, little attention has been given to cross-national effects. Further, the reciprocity between corporate and product brand has not been considered so far. Analyzing a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA and a longitudinal consumer sample from Germany and Romania, results emphasize that corporate and product brand are cross-nationally interrelated, but their impact on consumers' product response varies considerably between countries. Marketers should consider this if managing an international visible corporate brand.

With his work Dr. Meierer makes a significant contribution to marketing research. He advances knowledge on the effects of corporate branding in a cross-national context and disentangles the interrelation of corporate and product branding. His work impresses on the one hand with the extent of attention paid to the methodological details, using advanced methodology in an exemplary manner. On the other hand, he derives valuable insights for corporate brand managers.

Not only in his dissertation, Dr. Meierer has shown the remarkable ability to combine research and practice relevant issues. He never hesitated to invest time helping to improve other research projects. I thank him for working as a research assistant at the Chair for Marketing and Retailing and wish him all the best in his future endeavors.

*Professor Dr. Prof. h.c. Bernhard Swoboda*

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After writing more than a dozen conference papers and almost the same number of presentations for international marketing conferences in Australia, Europe, and North America, attending several statistical workshops and spending uncounted nights reading, re-reading and re-re-reading sophisticated papers, the task is done. I am thankful and proud that I had the chance to finish my PhD thesis after three years of both hard work and a lot of fun.

Even if writing a PhD thesis is a quite personal challenge, it also has a social aspect which impacts its content and success tremendously. Without the continuous help of my supervisor, colleagues, friends and family this would not have been possible.

First of all I have to thank my supervisor, Prof. Dr. Prof. h.c. Bernhard Swoboda (University of Trier), who trusted me enough to give me the amount of freedom I needed. He always supported my research. Due to his sponsorship, I was able to attend several conferences in Brighton, Milan, Sydney, Tallinn, Nantes, Ann Arbor, and Chicago as well as the Essex Summer School in Social Science Data Analysis, two workshops of the European Institute for Advanced Studies in Management Doctoral Education Network in Groningen and Brussels and several other workshops on statistical issues in Germany. The feedback I received helped me tremendously to improve my own research. Moreover, Prof. Dr. Prof. h.c. Bernhard Swoboda made it possible for me to conduct a large scale consumer survey in Germany, France, Romania, Russia and the USA, which was the basis for my Ph.D. thesis. Last but not least, I really appreciated the several challenging discussions, which always took me a step forward.

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Eventually, the last year would have been much tougher if not virtually impossible for me without my soul mate Margot Löwenberg. Her strength and her heart kept me going on.

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*Markus Meierer*

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## List of Abbreviations

ADH	adhesives
AGE1	age group 15 to 24 years
AGE2	age group 25 to 49 years
AGE3	age group 50-64 years
AGE4	age group 65 years and above
AVE	average variance extracted
CEO	chief executive officer
CFI	comparative fit index
CIM	corporate image
CIMa-c	corporate image at time points 1, 2 and 3
COM	community college / vocational school
COR	customer orientation
COS	cosmetics
CR	composite reliability
CSR	corporate social responsibility
DET	detergents
FMCG	fast moving consumer goods
FRA	France
GDP	gross domestic product
GEM	good employer
GER	Germany
GNI	gross national income
ITC	item-to-total correlation
KNO	country of origin of the corporate brand is known
OTH	other
PE bias	parameter estimate bias
PIM	product image
PIMa-c	product image at time points 1, 2 and 3
PLO	product loyalty

PLOa-c	product loyalty at time points 1, 2 and 3
Pop. Val.	population value
PPP	purchasing power parity
PRD	product
PRI	price
PRM	promotion
PRQ	product range quality
RFC	reliable and financially strong company
RMSEA	root mean square error of approximation
ROM	Romania
RUS	Russia
SE bias	standard error bias
SER	social and environmental responsibility
SHO	high school graduate
STU	college / university degree
TLI	Tucker-Lewis-index
UKN	country of origin of the corporate brand is unknown
USA	United States of America
WLSMV	weighted least squares means and variance adjusted

## 1 Introduction

**Corporate branding strategies are gaining more and more importance.** Recently, a growing number of firms use their corporate brand as an endorsement to their product brands in the fast moving consumer goods (FMCG) sector (Lei, Dawar, and Lemmink 2008, p. 121). While Procter & Gamble is primarily keeping its corporate brand discreetly in the background, putting the focus on its product brands, various international consumer goods companies are taking a different route. Historically, Nestlé has actively communicated its corporate brand towards consumers by using its name on products as diverse as bottled water, breakfast cereals, baby foods and confectionery. In 2001, Henkel also opted for a comparable strategy in which the corporate brand is perceived to be “the face to all its stakeholders”. The corporate brand should be a central communications instrument as well as a visible expression of the strategic positioning and identity of the company. Unilever recently announced the plan to put “signature corporate branding” on its product brand advertising. The company believes that this will help to improve consumer perception of trust in the portfolio of everyday brands. The corporate brand endorses the company’s product brands (e.g., Keller 1993, p. 11).

From a **practitioner’s point of view**, the reason behind these efforts is the necessity to gain and maintain a high level of awareness in the public domain. Adapting the companies branding strategy addresses recent company-, shareholder-, competitive-, retail- and consumer-level issues, which require an adequate corporate response:

- From an **internal perspective**, companies are continually searching for ways to deal with coordination and identity problems, in particular situations in which complexity raises due to an increasing internalization or the integration of an acquired firm (Einwiller and Will 2002, pp. 102-03). Furthermore, companies are looking to enhance corporate spirit and thereby the organizational citizenship behavior of their employees (Podsakoff et al. 2000, pp. 516-26).
- From a **shareholder perspective** the management is required to increase the value of a company. Therefore it has to consider all tangible and intangible as-

sets, which are relevant in determining valuations of corporations in the capital market and in both mergers and acquisitions (e.g., Kerin and Sethuraman 1998; Madden, Fehle, and Fournier 2006; Mizik and Jacobson 2009). Thus, consumers' brand associations provide complementary information to explain firms' overall financial performance and more specifically the stock return (e.g., Mizik and Jacobson 2008; Morgan and Rego 2009). Moreover, a company is forced to realize economies of scale and scope (Steenkamp, Batra, and Alden 2003, p. 53; Schuiling and Kapferer 2004, p. 99) whenever it is possible and reasonable.

- Globalization raises the **competitive rivalry** in existing and new markets (Levitt 1983, p. 102). The first consequence thereof is brand inflation. It is more and more difficult to build up a unique, favorable, and strong brand. Because of diluting measures to advertise brands, shorter product life cycles, and a comparable product quality between brands the flop rate of new brand introductions is high. A second consequence is the "war for talents", in which the company must attract the highest qualified applicants for position available (e.g., Gatewood, Gowan, and Lautenschlager 1993).
- The growing **bargaining power of the retail sector** must not be neglected. By now, internationalized retailers and large buying groups are dominating the relationship to the consumer goods industry. They are acting as gatekeepers and decide on the inclusion or exclusion of producers and products (e.g., Ailawadi 2001). Further, the rise of private labels makes retailers less dependent on established FMCG companies.
- On the **consumer level**, FMCG companies have to deal with an increasing number of situations consisting of consumer confusion in everyday life (Mitchell, Walsh, and Yamin 2005). This makes it difficult, i.e., cost-intensive, to maintain the number of regular customers and gain attention for product innovations. Moreover, consumers are encouraged by governmental and non-governmental initiatives to be increasingly aware of and to actively demand a responsible corporate behavior from organizations (Scholes and Clutterbuck 1998, pp. 227-28; Hulberg 2006, p. 61). This is of particular relevance for companies operating cross-nationally (Holt, Quelch, and Taylor 2004, pp. 70-72). The situation gains in complexity if considering that the global media provide

passive exposure and increasing international mobility provides active exposure of consumers to brands in different countries (Alden, Steenkamp, and Batra 1999). Further, the convergence of markets and of consumer needs must be taken in account in an international context (Levitt 1983, pp. 92-93).

Having highlighted the practical relevance, **theoretical reasoning also indicates a need to investigate corporate branding** in considerably greater depth. Consumer studies focusing on the relationship between corporate and product branding in the FMCG sector adopting a holistic, international perspective are relatively scarce:

- Given its highly competitive nature, much has been written about the impact of specific corporate associations on consumers' product evaluation (e.g., Gürhan-Canlı and Batra 2004). However, seldom is a rather **holistic perspective**, which brings together the findings from former analyses and validates those in the overall context, applied. Shocker, Srivastava, and Ruckert (1994, p. 157) already demanded "the development of more of a 'systems view' of brands and products to include how intangibles created by the pricing, promotional, service, and distribution decisions of the brand manager combine with the product itself to create brand equity and affect buyer decision making."
- To date, most studies dealing with corporate branding focus on the services or durable goods sector, i.e., automobile manufacturers (Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005; Biehal and Sheinin 2007). Historically dominated by product brands, studies on corporate branding rarely focus on the **FMCG industry**. A notable exception is Brown and Dacin (1997).
- Former research identified three major patterns of international brand architecture: corporate-dominant, product-dominant and **hybrid structures**. However, there is a considerable amount of variation within a given type of structure. Over time, internal and external reasons led to an evolution of corporate- and product-dominant structures towards hybrid structures (Douglas, Craig, and Nijssen 2001, p. 106; Laforet and Saunders 2005, p. 319).
- The **reciprocity between a corporate brand and the company's product brands** is mostly neglected (Muzellec and Lambkin 2009, p. 42). As highlighted by Keller and Lehmann (2006, p. 749), it seems obvious that the corporate

brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand. Muzellec and Lambkin (2008) illustrate how a multinational FMCG company deliberately pursued a strategy of separating its corporate brand from its product brand portfolio. The question remains what this reciprocal relationship looks like, when a company decides to communicate its corporate brand actively towards its stakeholders (Lei, Dawar, and Lemmink 2008).

- Studies have made little efforts to distinguish between the **direct and indirect effects of a corporate brand on consumers' product response**. Besides the direct effect, it is important to consider if an indirect effect of the corporate brand on the product brands, and thus on consumers' product response exists (Keller and Lehmann 2006, p. 743).
- Finally, in both research- and practice-oriented literature, the impact of corporate brand management on consumers has rarely been examined from an **international perspective**. Not only Monroe (1993, p. V) urged researchers to investigate issues relative to consumption on an international basis. Also Winer (1998, p. III) and more recently Steenkamp (2005, p. 6) as well as Keller and Lehmann (2006, p. 750) and Eden (2008, p. 2) highlight the importance of studies focusing on cross-national research questions. Lehman, Keller, and Farley (2008, p. 47) illustrate that brand effects are country-specific. Indeed, the impact of branding is increasing in complexity when shifting its focus from a single country market to a multi-national one. This is especially important to companies, which use their internationally standardized corporate brand as an endorser to their local, regional, and international product brands, intending to create a worldwide uniform anchor in the mind of the consumer.

Given these shortcomings, **this dissertation contributes to the knowledge about cross-national impact of corporate branding**. In particular, I focus on the rarely analyzed endorsement strategy (Maathuis 1999, pp. 196-97), which gains popularity in the FMCG sector and targets primarily consumers across countries.

## 1.1 Basic definitions: Corporate brand, corporate branding, and corporate brand management

The **corporate brand** is not limited to the name and logo of a company. It is a vehicle for those characteristics of the corporate identity that the senior management decides to communicate actively towards internal and external stakeholders (Balmer 2001, p. 281). Moreover, it should convey those characteristics that distinguish the company from its competitors. Defining these characteristics is related to the positioning of the corporate brand, i.e., determining the intended image of the corporate brand. Aaker (2004) assumes that, because the corporate brand represents an organization standing “behind its products in spirit and substance, it can also work on an emotional level by providing a valued relationship with a respected organization (p. 6).” To summarize, the corporate brand could be described as the interface between self-portrayal and external perception of the organization (Balmer 2001, p. 257). Balmer and Gray (2003, pp. 978-79) illustrate the fundamental differences between a corporate brand and a product brand. Traditionally used in service, business-to-business and durable goods industries, today the corporate brand gains in importance in general (Balmer 1995, p. 24).

The corporate brand is an extract of the **corporate identity** and thereby based on the **corporate culture** of an organization. The corporate culture - which could be defined as “pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with the norms for behavior in the organization” (Deshpandé and Webster 1989, p. 4) - is formalized through the corporate identity. The latter describes a set of internal and external communication measures to illustrate the core values, philosophy and strategy of the organization. Melewar (2003, pp. 202-03) summarizes the literature discussing the relationship on corporate culture and corporate identity.

**Corporate branding** is the effective and efficient communication of the corporate brand towards the company’s stakeholders (Balmer 1998, pp. 985-87). Referring to the positioning of the corporate brand, corporate branding is the implementation of its intended image in visible marketing efforts. In general, corporate branding aims that relevant constituents develop strong, favorable, and unique associations about the corpo-



rate brand in memory based on the words, actions, communications, products, or services by an identified corporate brand entity (Keller 2000, p. 115). To reiterate, corporate branding is a procedural effort to emphasize those characteristics that distinguish the company from its competitors, and thereby to influence the external perception of the organization as well as the constituent's response to its products positively.

On the one hand, **corporate brand management is the formalization of corporate branding measures**, routines, and related processes to guarantee the consistency of the stakeholders' perceptions. Any such integration in the company's organizational structure is a "sine qua non" to establish an efficient global communication of the corporate brand. After the senior management has decided on a basic concept, brand managers at a global, local, and regional level are given the task to implement, maintain, and adapt the globally binding corporate branding framework. Following the "think global, act local" principle, certain parameters might vary geographically as long as those adjustments still meet the basic concept. From an operational point of view, this ensures that things are done the right way.

On the other hand, **corporate brand management also affects, and therefore necessarily includes managing the company's entire brand architecture** (Aaker and Joachimsthaler 2000, p. 8). "Brand architecture is about how to get two or more brands to partner each other and the qualities that corporate/banner brands embody to make partnerships a win-win game" (Uncles, Cocks, and Macrae 1995, p. 83). In particular, fundamental principles must be established to effectively coordinate the entire brand portfolio, i.e., to find an optimal configuration between managing product brands independently and leveraging synergies through standardized corporate branding. Increasingly, shared corporate brands, i.e., trans-corporate brand alliance agreements, must be also considered (Balmer and Gray 2003, pp. 983-84). Formalizing the brand architecture improves the coordination processes on brand related issues by clarifying responsibilities as well as the assignment of marketing budgets through indentifying and leveraging synergies between the company's brands. From a strategic point of view, this ensures that the right things are done and that the value as well as the equity of the brand portfolio is maximized (Raggio and Leone 2007, pp. 384-89).

**Three major patterns of brand architecture** have to be distinguished (Laforet and Saunders 1994, pp. 67-69; Douglas, Craig, and Nijssen 2001, p. 106). Firstly, corpo-

rate-dominant structures are based on the corporate name, e.g., Nike or Benetton. Secondly, product-dominant structures focus on product brands rather than the corporate brand, e.g., Procter & Gamble operating “power” brands such as Pampers or Pringles. Finally, hybrid or mixed structures emerge, in which product and corporate brands are communicated in a complimentary fashion. For example, Henkel, Nestlé, or Unilever use their company’s name as endorsement to their product brands, whereby the degree of visibility might vary across product categories (cf., Douglas and Craig 2003, pp. 268-72).

## **1.2 Setting up corporate brand management internally: Stakeholder-orientation, implementation decisions, and organizational challenges**

The **practice-oriented literature on planning, organizing, guiding and controlling the corporate brand management** is manifold. Practitioners are advised on how to decide on the distinct characteristics of a specific corporate brand (e.g., Ind 1997; Hatch and Schultz 2001; 2008), how to implement corporate brand management in the company’s organizational structure (e.g., Einwiller and Will 2002, pp. 105-08) as well as how to best communicate the corporate brand (e.g., Gray and Balmer 1998, pp. 699-700) and evaluate the stakeholders’ perception of company’s corporate branding (Fombrun, Gardberg, and Sever 2000).

One of the most important characteristics of a corporate brand is its **orientation towards multiple stakeholders** (Balmer and Gray 2003, pp. 978-79), i.e., any group or individual who can affect or is effected by the achievement of the organization’s objective (Freeman 1984, p. 46). Stakeholder theory highlights that every stakeholder group is not of equal importance in all processes or decisions, but it is necessary to prioritize their claims (Donaldson and Preston 1995, p. 67). Considering the manifold concepts of corporate branding characterized by the varying degree of visibility of the corporate brand, their importance towards specific stakeholder groups is also varying. Mitchell, Agle, and Wood (1997) elaborate on how to identify these constituencies based on the attributes’ power to influence the company, legitimacy of the constituency’s relationship with the firm, and urgency of the constituents claim on the company.

Nevertheless, a company must pay attention to spillover effects due to the overlapping membership in different stakeholder groups and the difficulty to target a particular stakeholder group without the acknowledgement of other constituents (e.g., Gilly and Wolfinbarger 1998, pp. 69-71).

Considering recent developments in the FMCG sector (Saunders and Guoqun 1996, p. 29), corporate branding, which increasingly completes product branding, focus more and more on **consumers as a target group**. This trend observes the increasing importance of consumers perceptions of a firm's role in society for consumer purchase decisions (Keller 2000, p. 118). King (1991, p. 6) already highlighted the corporate brand's role as "main discriminator" in the consumers' mind. Roth (1992, p. 35) contrasted the relevance of brand managers' and consumers' perceptions and concluded that "consumers believe to be the meaning of the brand is arguably more important than what managers believe those perceptions to be."

Using corporate branding as an endorsement **aims** to establish the corporate brand as an integrating backdrop for all product brands. The corporate endorsement affirms that the product brand, which is positioned rather independently, delivers on its brand promise (Aaker and Joachimsthaler 2000, p. 12). The corporate brand should enhance the products' recognition as coming from a well-known umbrella brand with a broad, customer-oriented product range, solid financial performance, and management acting responsibly towards society and employees. Aaker (2004) summarizes reasons why leveraging a corporate brand toward internal and external stakeholders is important because it "can help differentiate, create branded energizers, provide credibility, facilitate brand management, support internal brand-building, provide a basis for a relationship to augment that of the product brand, support communication to broad company constituencies, and provide the ultimate branded house (p. 10)."

Combining the best of both worlds, i.e., of the branded house and the house of brands strategy (Rao, Agarwal, and Dahlhoff 2004, p. 128), the **chances of the endorsement strategy are contrasted by a major pitfall**. While realizing economies of scale though standardizing corporate branding, companies should take into account possible negative spillover effects from product brands on the corporate brand or the other way around.

Contrary to dual branding, that is when the corporate and product brand are given equal prominence (Laforet and Saunders 2005, pp. 319-20), the **corporate brand usually plays only a minor role if a company pursues the endorsement strategy**. However both approaches can be combined. In case of multi-branding, three or more brands are communicated on a product packing. In the case of Cadbury's Wispa Toppers hot chocolate, the corporate brand, Cadbury, and the product brand name, Wispa are endorsing the product brand Toppers.

Given the situation that a company, who sells a large number of product brands, has made the decision to communicate actively the corporate brand towards its stakeholders, this company must now make **two operational decisions**. **Firstly, how to shape the visibility of the corporate endorsement and secondly, how to explain the products' affiliation with the company, i.e., their common ground**. With regards to visibility, endorsement branding is generally characterized by comparably low corporate brand dominance, e.g., by showing the corporate logo on every product packaging and with every product advertisement (Berens, van Riel, and van Bruggen 2005, p. 36). Nevertheless, the degree of visibility could vary between product categories (van Riel and van Bruggen 2002, p. 243), e.g., in case of the Swiss FMCG company Nestlé (Kapferer 2008, p. 413). Further, the meaning of the relationship between the corporate and a product brand is as important as the visual part of the relationship. Thereby, a crucial task during the planning and designing of the endorsement strategy is the careful positioning of the corporate brand and all related product brands. To avoid consumers' confusion, the company has to highlight what is common ground of all product brands sold under the corporate brand. The German FMCG firm Henkel added e.g., a banderole labeled "Quality & Responsibility" to their corporate logo on every product packing, which illustrates the common corporate brand promise across product categories such as detergents, cosmetics and adhesives.

Furthermore, **implementing an endorsement strategy is associated with organizational challenges**. Communicating the corporate brand is a strategic decision. Considering all advantages and disadvantages, the final decision has to be made by the senior management. In particular, high involvement and continuous public support of the chief executive officer is necessary to achieve success. Brand managers at both the corporate and the product level often disagree about the preferred degree of corporate

endorsement. The former advocate a clearly visible presence of the corporate brand, the latter favors a weak or in extreme cases no endorsement of the corporate brand. While corporate brand managers argue that a corporate endorsement creates a sense of internal coherence, illustrating the company's strength and unity as well as leveraging standardization potential, product brand managers might have the impression that a corporate endorsement limits their freedom to act, confuses consumers, and jeopardizes former investments in the product brand (van Riel and van Bruggen 2002, p. 244). This will especially be the case if one of the following occurs: the strategic similarity between a product and the corporate brand is low, if organizational identification of product brand management is low, and / or if product brand autonomy is high. Both an early internal communication on corporate brand issues and the prominent commitment of the company's senior management help to prevent those misunderstandings and to yield a profit in the medium to long term.

Further, Aaker and Joachimsthaler (2000, p. 13) list four **drivers, which are used to enhance the external success of an endorsement strategy**. First, the corporate brand should have a certain degree of awareness in the corresponding markets, i.e., countries, as well as product categories. Second, the communication of the corporate brand should be consistent. Third, the corporate brand should be presented by an eye-catching visual symbol. Fourth, the corporate brand should appear on a range of well-regarded products and thus provides credibility from its ability to span product brands.

### **1.3 Controlling corporate brand management externally: Corporate associations, corporate reputation and corporate image**

As branding has been a highly topical issue for more than 50 years and has been investigated in countless practice- and research-oriented publications, the **definitions of relevant terms are manifold** (e.g., Gioia, Schultz, and Corley 2000, p. 66; Brown et al. 2006, p. 100; Stern 2006, p. 216). Stakeholders' perceptions of the corporate brand are summarized under the term corporate association, which includes corporate reputation and corporate image. Corporate associations describe all subjective assessments in the form of corporate brand signals decoded by the target groups (Keller 1993, p. 11;

Balmer 2001, p. 253).

Brown and Dacin (1997, p. 69) introduced the term **corporate associations** as a label for all the information about a company that a person holds. Corporate associations could thereby be referred to as “any types of beliefs, moods and emotions, evaluations etc, about an organization that are held by individuals and that are mentally associated with the organization. [...] In essence, corporate associations represent how individuals think and feel about the organization (Brown and Dacin 1997, p. 69).” Berens and van Riel (2004, p. 174) summarize the literature on corporate associations, concluding “that there is not one ‘definite’ set of corporate associations.”

According to Brown et al. (2006, p. 104), I refer to **corporate reputation** to encompass the set of corporate associations that individuals outside an organization believe are central, enduring, and distinctive to the company. Thereby, it constitutes a rather conscious, attitude-like evaluative judgment of the attributes and characteristics of an organization. Corporate reputation develops over longer periods of time and is the result of consistent corporate performance and behavior enhanced by deployment of effective communication instruments (Herbig and Milewicz 1995, p. 7; Gray and Balmer 1998, p. 697; Gotsi and Wilson 2001, p. 29; Walsh and Beatty 2007, pp. 128-30). Barnett, Jermier, and Lafferty (2006) summarize the literature on corporate reputation.

An early definition describes **brand image** as “everything the people associate with the brand” (Newman 1957, p. 101). Contrary to Brown et al. (2006, p. 104) and in line with most writers in the marketing discipline, when referring to brand image in this paper, it is meant as the associations consumers link to the said brand and commit to memory (Keller 1993). Thereby, brand awareness is regarded as a necessary condition for the creation of brand image, and whereby both brand awareness and brand image build up brand equity. The favorability, strength, and uniqueness of brand associations then determine the consumer response. According to Wu, Day, and Mackay (1988), brand image provides prefabricated evaluations of brand performance and must be distinguished from brand attributes which are considered by the consumer in forming preferences among the product brands. Brand image is distinct from related constructs such as perceived quality and perceived value through its higher level of abstraction (Kirmani and Zeithaml 1993, pp. 144-46). Dobni and Zikhan (1990, p. 118) highlight that brand image is a subjective and perceptual phenomenon, which is formed through

reasoned and emotional consumer interpretation and which is effected by marketing activities, by context variables, and by the characteristics of the perceiver. Stern, Zinkhan and Jaju (2001, pp. 205-11) as well as Dobni and Zinkhan (1990) summarize the literature on brand image.

Gotsi and Wilson (2001) review the literature on **corporate image** and corporate reputation and conclude that both are dynamically related. While corporate reputation constitutes a more conscious assessment of the attributes and characteristics of an organization, corporate image (i.e., corporate brand image) is the spontaneously composed picture of an organization formed in the minds of its stakeholder groups (Balmer 1998, p. 971; Gray and Balmer 1998, p. 697; Bick, Jacobson, and Abratt 2003, pp. 840-41; Barnett, Jermier, and Lafferty 2006, p. 34). Already early understandings of the corporate image could be condensed to this core (Bolger 1959, p. 7; Christian 1959, p. 80; Tucker 1961, p. 61; Hill 1962, p. 73; Easton 1966, p. 168). Stern et al. (2001, p. 213) summarize the literature on corporate image and concludes that there “is [an] agreement about an image’s nature (an impression or perception), locus (the minds of stakeholders), and number (an ‘overall’ impression that summates the segment’s impressions).”

Similarly **product image** (i.e., product brand image) refers to the immediate mental picture that the targeted consumer group has of the corresponding product brand. Further, Park et al. (1986, p. 135) highlight that product image is the understanding consumers derive from the total set of product brand-related activities by a firm.

In any case, **moderating factors** must be considered, because all variables are result of a subjective evaluation process. Customers’ perception are context-specific and could be influenced by e.g., customer’s involvement, the fit between corporate and product brand, the intensity of product use, etc.

#### **1.4 Managing the corporate brand internationally: Fundamental decisions and organizational integration**

**Corporate brands are inherently global** in scope, unless the company only operates in a limited number of geographic markets (Douglas and Craig 2003, p. 266). From

the company's perspective, an internationally visible corporate brand helps to forge global corporate identity and gathers its products under a global umbrella. Therefore, country-specific characteristics must be considered as moderating factors of the relationship between corporate and product brand and their impact on consumers' product response. This moderating influence is not only expressed through a different interpretation of brand names and symbols (Zhang and Schmitt 2001; Tavassoli and Han 2002), but in fundamentally differing perceptions and impacts of brand images across different countries and cultures (e.g., Hsieh 2002, p. 63). Branding may shape or echo cultural variations in consumers' product response, i.e., consumers in different countries could focus on different kinds of associations when perceiving a brand or the content of communication messages could be adapted per se to the consumers in a particular country (Belk and Pollay 1985, p. 888).

From an international perspective, an **evolution of brand architectures toward hybrid structures** could be determined (Douglas, Craig, and Nijssen 2001, p. 106). Drivers of this recent development are the changing configuration of markets and the changing expansion strategy in international markets, both fostering that corporate- or product-dominant structure mix up.

Referring to the **changing configuration of markets**, i.e., globalization and the increase in competition, demand for a higher degree of formalization of brand architecture to ensure that a consistent external brand perception exists (Douglas, Craig, and Nijssen 2001, p. 97). An increasing number of FMCG companies from emerging countries are pushing for the European and American markets to increase the number of brands available to customers. Therefore, established companies are under pressure to maintain an enduring, consistent, and unique positioning for their brands. At the same time, pressure rises to harmonize branding across country markets (Douglas and Craig 2003, p. 273).

With regards to **expansion strategy in international markets**, firms may expand in existing or new markets and withdraw resources for expansion elsewhere (Douglas and Craig 1996, p. 94). With regards to brand architecture, three patterns of expansion strategy must be distinguished. Firstly, firms which expand by organic growth leveraging domestic corporate or product level brands are likely to have fewer brands and a more coherent architecture. Secondly, firms expanding by acquisition have to absorb



brands into their structure. This resulting in a multiplicity of brands and thereby a higher complexity at any given level. Thirdly, firms internationalizing through strategic alliances are likely to be characterized by the highest degree of complexity in terms of brand architecture (Douglas and Craig 2003, p. 275).

Firms are responding to the changing configuration of markets and the changes of expansion strategies by **changing corporate- or product-dominant structures into hybrid structures**. Within corporate-dominant structures, product brands are added to differentiate between product categories (Douglas, Craig, and Nijssen 2001, p. 106). Coca-Cola, for example, acquired the Minute Maid Company in 1960, the world's largest marketer of fruit juices, and added a new line of business to the till then soft-drink company. Within product-dominant structures, the corporate brand is communicated with local product brands (Douglas, Craig, and Nijssen 2001, p. 106), e.g., Procter & Gamble decided to communicate its corporate brand along with its product brands towards Asian consumers and added a corporate signature to TV commercials (Kapferer 2008, p. 27; de Mooij 2009, p. 272).

Implementing an endorsement strategy **aims to combine advantages of both corporate-dominant and product-dominant structures within an international context**. A globally positioned corporate brand signals credibility, power, value, and the belonging to a global segment of consumers (Alden, Steenkamp, and Batra 1999, p. 75). By thinking and acting globally through the corporate brand, a company could adapt to local requirements through their product brands and create relevance with customers all over the world if pursuing an endorsement strategy. At the same time, locally and regionally adapted product brands help to avoid concerns that global companies threaten local differences and impose an objectionable consumer culture on societies (Holt 2002, p. 70).

However, a hybrid structure **challenges** a company to manage the complexity of interdependent corporate and product brands cross-nationally. In particular, it is difficult to align the endorsement for every product brand worldwide. Thereby, it is a challenge to reap the benefits of a global corporate image without appearing distant and bureaucratic towards external and internal stakeholders (Aaker 2004, p. 9).

To guide this development and to facilitate cohesion of branding strategies across in-

ternational markets companies, **planning and designing international brand architecture and thereby taking three strategic decisions is required** (Szymanski, Bharadwaj, and Varadarajan 1993, pp. 1-3; Douglas, Craig, and Nijssen 2001, p. 106). The first question to answer is whether to standardize or to adapt corporate and product branding in an international environment, i.e., to formulate the strategic orientation. Further, the management must decide on the degree of standardization of the strategic resource mix and of the strategy content. Both issues are interwoven. If a standardized brand logo and positioning is used, the strategy content is highly standardized, and at the same time the pattern of resource allocation among marketing mix elements is also likely to be standardized to a certain degree. Assuming a hybrid structure, the corporate brand must be communicated consistently to carry out its task as being a global umbrella. This means the degree of standardization of the visibility and message of the corporate brand should be relatively high, i.e., only minor, country-specific adaptations should be made (Melewar and Walker 2003, pp. 159-60). Thus, a standardized approach to corporate branding realizes economies of scale and scope, but risks negative spillover effects across countries as well as neglecting local needs (Keller 2003, pp. 683-84). However, the decision whether to standardize or to adapt a product brand is context specific. While the standardization of the strategic resource mix might be an option in Western countries, it remains to be seen if these findings are valid in the context of more heterogeneous markets (Szymanski, Bharadwaj, and Varadarajan 1993, p. 11). Further, the research findings on the standardization of strategy content show both positive (e.g., Alashban et al. 2002) as well as negative impact (e.g., Roth 1995a) on brand success. The transferability of the product brand's competitive advantage to foreign markets might be limited. Cultural differences and local market requirements might necessitate adaptations. However, practitioners should not only weigh the advantages and disadvantages of standardization versus adaption, but also try to achieve an appropriate fit between international marketing strategy and the context in which this strategy is implemented (Cavusgil and Zou 1994, p. 3; Theodosiou and Leonidou 2003, p. 167).

Based on these fundamental decisions, companies are increasingly formalizing their international brand architecture (Douglas, Craig, and Nijssen 2001, p. 106). **Formalizing the international brand architecture provides an operational framework for**

**routine branding decisions.** It sets up the principles for an effective use of corporate and product branding in international markets in order to gain the intended positioning within the stakeholders' perception. Cross-national inconsistencies are avoided by defining which brands should be emphasized, when (i.e., depending on the product category) and how in each country. Country-specific adaptation should be an exception.

From a practitioner's perspective, it is necessary to **integrate international corporate brand management into the company's organizational structure.** Depending on the organizational structure, a combination of centralized functions in a corporation's communications department (Einwiller and Will 2002, pp. 107-08) and interdepartmental team organization is proposed. The head of this department should report directly to the CEO, who makes the final decisions on all issues regarding the corporate brand for all countries and whose support is a necessary condition to facilitate the corporate brand's success (King 1991, p. 10). The centralized functions of corporate communications include internal communication (e.g., Intranet management), relationship management for non-customer-stakeholders (e.g., investor or public relations), and market communication (e.g., corporate design, advertising or sponsoring). The corporate communication department is responsible for a worldwide coordination of those activities to guarantee a consistent communication of the corporate brand across countries. In addition, permanent and temporary cross-functional teams with members from corporate communications and marketing (e.g., coordination of sponsoring as well as corporate and product branding activities), finance (e.g., coordination of investor relations activities), as well as human resources (e.g., coordination of internal communication activities) departments could enhance the coordination and thereby complete the organizational integration of corporate branding activities. Based on this centralistic approach, best practice would be to appoint representatives in every subsidiary. These representatives act as the point of contact for all issues related to country-specific corporate branding activities. At the same time, the corporate communication department can focus more on its cross-national steering function.

## 1.5 Contributions of the various chapters

Having highlighted the driving forces behind present corporate branding decisions, related theoretical issues which remain unanswered, as well as internal, external, and international aspects of corporate brand management, the **objectives of the following chapters** are outlined. Initially, the general managerial and theoretical contributions are highlighted, followed by a detailed discussion of each study's specific contribution. Figure 1 provides an overview of the thesis' structure emphasizing major points.

**From a managerial perspective**, it is necessary to know if the increasingly popular endorsement strategy adds value to a company's products and if so, how the corporate brand adds value. Internal and external drivers push the need to explore this issue. On the one hand, this knowledge is necessary to better position the company and its products compared to the competition. On the other hand, corporate governance regulations entail a thorough market research on the impact of corporate branding to justify those investments.

Firstly, **marketers have to understand how** the information that consumers associate with a company and its products affects their responses to those products. Evaluating the corporate brand using consumer surveys, which adapt e.g., measurement instruments like the Reputation Quotient (Fombrun, Gardberg, and Sever 2000) or more recent approaches, is limited in its significance, if this analysis is limited to target-performance-comparisons. The interviewees' perceptions are seldom related to relevant behavioral outcomes, although only such an analysis gives insights in their relevance. Furthermore, if considering the situation of an endorsed strategy, the question remains if existing evaluation approaches include the relationship between corporate brand and product brands in an adequate manner. Necessarily, a cross-national perspective needs to be taken, because a priori one would assume the difference in the perception and the impact of corporate and product branding across cultures and countries. To recapitulate, defining and implementing a distinguishable positioning is only possible if all relevant interrelations are taken into account. However, corresponding insights from actual managerial heuristics are limited.

Secondly, in terms of **corporate governance** regulations, it is necessary for a company's management to report the economic consequences of their decisions (Shleifer and

Vishny 1997). This features the importance that light must be shed on the relationship between corporate and product branding – both are representing company’s marketing investments – and their impact on consumers’ product response.

**From a theoretical perspective**, the following two chapters analyze the relationship between a corporate and a product brand as well as their impact on consumers’ product response across countries. Taking a holistic perspective, including consumers’ perceptions of corporate and product brand, and testing theoretically derived hypotheses, broadens the knowledge of what these cause-effect-relationships look like. Focusing on the FMCG sector, which has seldom been analyzed in corporate branding literature, I contribute to the knowledge on hybrid brand architectures. Highlighting the impact on consumers’ product response, the following two chapters address the role of specific corporate associations versus corporate image, the role of the reciprocal relationship between corporate and product image. In particular, I focus on international differences among those relationships.

In general, the **objective of the second chapter** is to analyze whether or not standardization of corporate branding across countries work. In detail, I analyze the relationship between specific corporate associations and corporate image as consumers’ overall assessment of the corporate brand. Further, I examine how the direct impact of specific corporate associations and corporate image on consumers’ product response varies cross-nationally. From a theoretical perspective, the relationship between specific and aggregated measures of a corporate brand is examined. From a managerial perspective, this research addresses the question if standardized international corporate branding impact consumers’ product response in the same way across countries or if there are country-specific particularities corporate brand managers should consider.

In detail, the following **research questions** are examined:

- Do specific corporate associations impact corporate image in the same way across countries?
- How does corporate image impact consumers’ product response across countries?
- How do specific corporate associations impact consumers’ product response directly across countries?

- Do further contextual factors influence those relationships?

The basis of the **conceptual framework** is threefold. Firstly, building upon Brown and Dacin (1997), I consider specific corporate associations as antecedents of the overall evaluation of the company, i.e., corporate image. Secondly, I not only hypothesize an indirect effect of those specific corporate associations through corporate image on product loyalty, but also that they might directly influence product loyalty. Thirdly, following Lehman, Keller, and Farley (2008, p. 47), I analyze the variation of the hypothesized cause-effect relationships across countries as well as depending on further contextual factors. By reviewing the literature on corporate associations and corporate image, former findings on their relationship to corporate image and consumers' product response are summarized and systematized. Moreover, it is referred to schema theory to derive hypotheses as basis for a subsequent empirical study.

The **analysis** is based on a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA. I apply multiple group structural equation modeling to test the hypotheses.

The **results** provide strong support that standardization of corporate branding across countries work. However, an internationally standardized corporate brand influences consumers' product response across countries to different degrees. Considering product categories, country of origin knowledge, education, age, and gender as contextual factors for all relationships examined in the hypothesized model, enhances the generalizability of the presented findings.

With regards to **theoretical implications**, the present study advances the knowledge on corporate branding in an international context, extending the findings of Brown and Dacin (1997) as well as Berens, van Riel, and van Bruggen (2005). To date most studies dealing with corporate branding focus on the services sector or on durable goods, i.e., automobile manufacturers (Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005; Biehal and Sheinin 2007), although corporate branding is gaining in importance in the FMCG industry. Analyzing corporate branding of a FMCG firm, answers also Walsh and Beatty's (2007, p. 140) call to examine their customer-based reputation measure in other context than the services sector.

With regards to **managerial implications**, general recommendations for evaluating

global corporate brands and adapting their positioning are derived. Building upon the work of Walsh and Beatty (2007), the proposed model could be used as diagnostic tool. It is suited to gather benchmark data in FMCG firms regarding current levels of specific corporate associations and overall corporate image and their impact on consumers' product response.

In general, the **objective of the third chapter** is to analyze cross-nationally whether or not corporate and product brand are reciprocally related and how both impact consumers' product response. From a theoretical perspective, I contribute a holistic approach on the impact of corporate and product branding on consumers' product response in an international context. From a managerial perspective, this research addresses the question how to evaluate corporate and product branding simultaneously to monitor if a company's endorsement strategy results in a greater public esteeming of both the corporation and its branded products.

In detail, the following **research questions** are examined:

- Do consumers perceive corporate and product brand as reciprocally related across countries?
- How do the direct and indirect effects of corporate and product branding on consumers' product response look like across countries?
- Do further contextual factors influence those relationships?

The basis of the **conceptual framework** is threefold. Firstly, I consider not only the transfer from consumers' corporate to product evaluations (Biehal and Sheinin 2007), but also that the opposite effect might exist (Keller 2003). Secondly, I consider product loyalty intentions as consumers' product response on their overall evaluation of the corporate and product brand, i.e., corporate and product image. Thereby it is important to consider both, the indirect and direct effect of corporate and product image on product loyalty (Keller & Lehmann, 2006). Thirdly, referring to Lehman, Keller, and Farley (2008, p. 47), I further analyze the variation of the hypothesized cause-effect relationships across countries as well as depending on further contextual factors. By reviewing the literature on corporate branding, brand extensions, ingredient branding, and brand alliances, former findings on the relationship between two brands communicated complementarily are summarized and systematized. Moreover, schema theory

is used to derive hypotheses as basis for a subsequent empirical study.

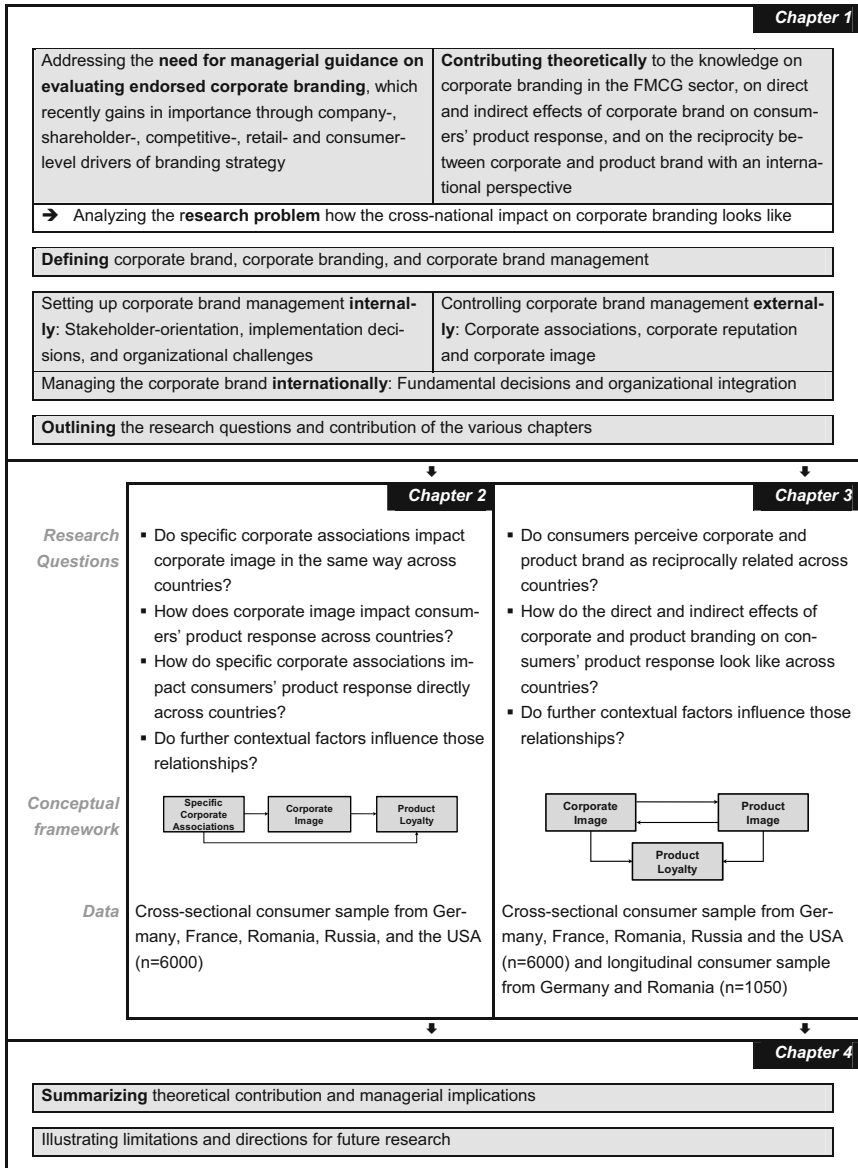
The **analysis** is based on a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA as well as on a three-wave consumer panel from Germany and Romania. I apply non-recursive, multiple group structural equation modeling to test the hypotheses.

The **results** provide strong support that a reciprocal relationship between corporate and product brand exists. Thereby, indirect effects of corporate and product branding on consumers' product response must be considered. However, direct and indirect effects of a corporate brand vary considerably between countries and must be taken into account if managing an international visible corporate brand. Considering product categories, country of origin knowledge, education, age, and gender as contextual factors for all relationships examined in the hypothesized model, enhances the generalizability of the presented findings.

With regards to **theoretical implications**, I contribute a holistic approach on the impact of corporate and product branding on consumers' product response in an international context. Despite the increasing emphasis on corporate branding (Brown and Dacin 1997; Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005), studies neglect to distinguish between the direct and indirect effects of corporate branding on consumers' product response. Besides the direct effect, I consider the indirect effect of corporate and product image on consumers' product response (Keller & Lehmann, 2006, p. 743) and how these effects vary cross-nationally. With this I answer Gürhan-Canli and Batra's (2004, pp. 203-04) call to advance knowledge on process and conditions through which corporate branding has an impact on product brands and on consumers' product response. Moreover, little attention has been given to the reciprocal relationship between corporate and product brand. I follow Brown and Dacin's (1997, p. 81) request to closer examine the reciprocal effects of a company and its products taking into consideration that the corporate brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand (Keller and Lehmann 2006, p. 749).



Figure 1: Overview of the thesis structure



With regards to **managerial implications**, I tackle an issue which is of high interest to practitioners. Corporate communication departments, in general, and corporate brand managers, in particular, spend significant time on defending their efforts to communicate the corporate brand within the firm. Although the strategic decision on implementing the corporate brand as an endorser is made by the CEO, opponents within the company, e.g., product brand managers, are often hardly to convince that this endorsement adds value to the product brands and is not diluting the individual product brands. A transparent, comprehensible evaluation approach, which is applicable across country markets, could solve this issue. Thereby, generalized recommendations for managing corporate and product branding across countries are derived.

In the **final chapter**, the findings of the two studies are summarized. Thereby, answers to research questions, analyzed in detail in chapter two and three, are recapitulated and discussed. Further, theoretical as well as managerial implications of both chapters are summarized. Finally, limitations and directions for future research are illustrated.

## **2 Does standardization of corporate branding across countries work?**

Even in industries dominated by product brands, internationally standardized corporate brands gain in importance. Consumers evaluate specific corporate associations, e.g., customer orientation, and corporate image as an overall picture of the organization when deciding to repurchase a product. However, seldom studies illustrate how both are interrelated or disentangle their effect on consumers' product response. Analyzing a multi-country sample, results illustrate that specific corporate associations impact corporate image cross-nationally in the same way. However, their direct impact on consumers' product response varies between countries, as does the impact of corporate image on consumers' product response. I conclude that the standardization of the companies' external portrayal works, but marketers must consider its varying relevance to consumers' product response.

## 2.1 Introduction

Corporate branding strategies are gaining more and more importance. Recently, a growing number of firms in the fast moving consumer goods (FMCG) sector communicate their corporate brand actively towards stakeholders. While this is an established practice in the services and durable goods industry, the FMCG sector is historically dominated by product brands (Laforet and Saunders 1994; 2005). The companies' goal is to gain a higher level of awareness in the public domain and to directly influence consumers' product response across countries. This is a change from previous policies that only indirectly influence consumers' product response through enhancement of the product image. Former research helps to identify what is associated with a firm (Fombrun, Gardberg, and Sever 2000; Walsh and Beatty 2007) and how single associations with a firm, e.g., the impact of corporate social responsibility, impact consumers' product response (Sen and Bhattacharya 2001; Luo and Bhattacharya 2006). However, companies **lack knowledge on how to evaluate cross-nationally if their corporate branding strategy works**. Knowledge on corporate brand management must be advanced in terms of a holistic view considering multiple associations, as well as their cross-national strength and relevance.

**Understanding why practitioners favor corporate branding** is necessary prior to deriving recommendations concerning the adaptation of its international implementation and management. From a practitioner's point of view, adapting the companies branding strategy addresses recent company-, shareholder-, competitive-, retail- and consumer-level issues, which require an adequate corporate response. The increasing importance of organizational citizenship behavior (Podsakoff et al. 2000) and a firm's intangible values (Kerin and Sethuraman 1998), as well as the need to hold its ground against growing competitive rivalry (Levitt 1983), and bargaining power of the retail sector (Ailawadi 2001) reinforce the trend to position the corporate brand visibly.

With **standardizing corporate branding internationally**, a firm aims to streamline the perceptions of stakeholders worldwide by signaling credibility, power, and value (Alden, Steenkamp, and Batra 1999, p. 75). Referring to Townsend, Yenyurt and Talay (2009), "global brands may be the most readily observable outcome of corporate attempts to adjust to globalization, as they are the face which with the firm portrays an

image to a more diverse customer base (pp. 539-40).” FMCG companies increasingly focus on the consumer by using corporate branding activities to sharpen their positioning cross-nationally. This requires a process to define the corporate brand based on the corporate identity as well as corporate culture and to extract commonalities, which have varying meanings to consumers across countries. Subsequently, corporate branding activities are widely standardized, whereas minor country-specific adaptations to avoid misunderstandings are possible. Consumers are likely to perceive these efforts in different ways. The marketed product portfolio, company history, and cultural influences are examples of country-specific context factors, which play an important role for consumers’ perception and product response (Roth 1995a, p. 164; Holt 2002; Lehmann, Keller, and Farley 2008, p. 47).

Practitioners particularly target **consumers** with their corporate branding efforts and try to give guidance to consumers confronted with numerous acceptable choices within the same product category from various FMCG companies (Brown and Dacin 1997, p. 81). Simplifying the regular buying decision, consumers tend to make highly habitualized purchase decisions in terms of nondurable goods. However, increasing situations of consumer confusion in everyday life (Mitchell, Walsh, and Yamin 2005) make it difficult and particularly cost-intensive, to maintain the number of regular customers and gain attention for product innovations. Moreover, consumers are encouraged by governmental and non-governmental initiatives to be increasingly aware of and to actively demand responsible corporate behavior from companies operating internationally (Scholes and Clutterbuck 1998, pp. 227-28; Holt, Quelch, and Taylor 2004, pp. 70-72; Hulberg 2006, p. 61). In an international context, both the convergence of markets and consumer needs must be taken into account (Levitt 1983, pp. 92-93). Thereby, global media provides passive exposure, whereas increasing international mobility enhances active exposure of consumers to brands in different countries (Alden, Steenkamp, and Batra 1999).

When focusing on consumers’ perception, **two different effects must be distinguished**. Besides consumers’ overall evaluation of the company, i.e., corporate image, specific corporate associations play an important role in determining consumer product response. Rarely do studies analyze both effects (Gürhan-Canli and Batra 2004, p. 203). Studies find that (1) specific corporate associations influence consumer product

response (e.g., Berens, van Riel, and van Bruggen 2005), (2) corporate image has an effect on consumer product response (e.g., Hsieh, Pan, and Setiono 2004), and (3) specific corporate associations influence consumer product response indirectly through influencing corporate image (e.g., Brown and Dacin 1997).

To review, research on how specific and overall corporate associations affect consumers' product response must be advanced (Gürhan-Canli and Batra 2004, p. 203; Walsh and Beatty 2007, p. 140). The **purpose of the present study** is to analyze whether or not standardization of corporate branding across countries work. In detail, I analyze the relationship between specific corporate associations and corporate image as consumers' overall assessment of the corporate brand. Further, I examine how the direct impact of specific corporate associations and corporate image on consumers' product response varies cross-nationally. From a theoretical perspective, the relationship between specific and aggregated measures of a corporate brand is examined. From a managerial perspective, this research addresses the question if standardized international corporate branding impact consumers' product response in the same way across countries or if there are country-specific particularities corporate brand managers should consider.

In detail, the following **research questions** are examined:

- Do specific corporate associations impact corporate image in the same way across countries?
- How does corporate image impact consumers' product response across countries?
- How do specific corporate associations impact consumers' product response directly across countries?
- Do further contextual factors influence those relationships?

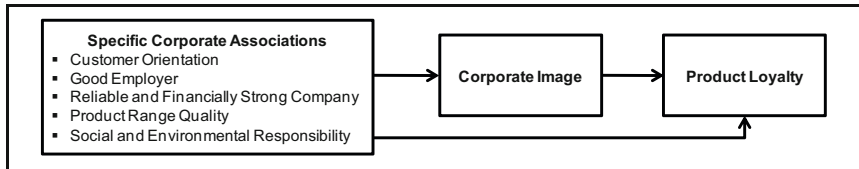
The **remainder** of this study is framed in the following manner. First, I introduce the conceptual model by summarizing and systematizing former findings on specific corporate associations, their relationship to corporate image, and consumers' product response. Considering these findings and referring to schema theory, I derive hypotheses as basis for a subsequent empirical study. The analysis is based on a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA. The results

provide strong support that specific corporate associations impact corporate image cross-nationally in a similar manner. However, their direct impact on consumers' product response varies between countries, as does the impact of corporate image on consumers' product response. Finally, I conclude with theoretical as well as managerial implications, limitations of the study, and directions for future research.

## 2.2 Conceptualization and hypotheses development

The **conceptual framework** underlying this analysis is threefold and builds up on schema theory as well as former research (see Figure 2). Firstly, based on the work of Brown and Dacin (1997), I consider consumers' specific corporate associations as antecedents of their overall evaluation of the company, i.e., corporate image. Thereby, I consider the work of Walsh and Beatty (2007), who analyzed in depth which associations a consumer generally links to a firm. Secondly, I not only hypothesize an indirect effect of those specific corporate associations through corporate image on product loyalty, but also that they might directly influence product loyalty. This addresses companies' intentions to have an immediate impact on consumers' product response by using corporate branding. Thirdly, following Lehman, Keller, and Farley (2008, p. 47), I analyze the variation of the hypothesized cause-effect relationships across countries as well as depending on further contextual factors.

Figure 2: Conceptual framework: Specific corporate associations, corporate image, and product loyalty



### 2.2.1 *Corporate associations and corporate image*

Brown and Dacin (1997, p. 69) introduced the term **corporate associations** as a label for all the information that a person mentally links to a company. Corporate associations could thereby be referred to as “any types of beliefs, moods and emotions, evaluations etc, about an organization that are held by individuals and that are mentally associated with the organization (Brown and Dacin 1997, p. 69).” According to those authors, I distinguish specific corporate associations and an overall evaluation of the company. Thereby, I also refer to former findings on the decomposition of consumers’ brand assessments (Park and Srinivasan 1994; Dillon et al. 2001). Considering the work of Walsh and Beatty (2007), I firstly include customer orientation, good employer, product range quality, reliable and financially strong company, and social and environmental responsibility as specific associations a consumer might relate to the corporate brand (see Appendix 2.5.1). With regards to the overall evaluation of the company, I further include corporate image in the proposed model to highlight the emotional as well as rational assessment of the corporate brand.

Early definitions describe **brand image** as “everything the people associate with the brand” (Newman 1957, p. 101). Contrary to Brown et al. (2006, p. 104) and in line with most writers in the marketing discipline, I refer to brand image as the associations linked to the brand that consumers hold in memory (Keller 1993). Therefore, brand awareness is regarded as a necessary condition for the creation of brand image. Both, brand awareness and brand image, build upon brand equity. The favorability, strength, and uniqueness of brand associations then determine the consumer response. Referring to Wu, Day, and Mackay (1988) brand image provides readymade evaluations of brand performance and must be distinguished from brand attributes. Attributes are considered by the consumer in forming preferences among the brands. Brand image is distinct from related constructs, such as perceived quality and perceived value through its higher level of abstraction (Kirmani and Zeithaml 1993, pp. 144-46). Dobni and Zikhan (1990, p. 118) highlight that brand image is a subjective and perceptual phenomenon formed through reasoned and emotional consumer interpretation and which is affected by marketing activities, by context variables and by the characteristics of the perceiver. Stern, Zinkhan and Jaju (2001, pp. 205-11) as well as Dobni and Zinkhan (1990) summarize the literature on brand image.



Gotsi and Wilson (2001) review the literature on **corporate image** and corporate reputation concluding that both are dynamically related. While corporate reputation constitutes a more conscious assessment of the attributes and characteristics of an organization, corporate image (i.e., corporate brand image) is the spontaneously composed picture of an organization formed in the minds of its stakeholder groups (Balmer 1998, p. 971; Gray and Balmer 1998, p. 697; Bick, Jacobson, and Abratt 2003, pp. 840-41; Barnett, Jermier, and Lafferty 2006, p. 34). Already early understandings of corporate image could be condensed to this core (Bolger 1959, p. 7; Christian 1959, p. 80; Tucker 1961, p. 61; Hill 1962, p. 73; Easton 1966, p. 168). Stern et al. (2001) summarize the literature on corporate image and conclude that there “is agreement about an image’s nature (an impression or perception), locus (the minds of stakeholders), and number (an ‘overall’ impression that summates the segment’s impressions) (p. 213).”

### *2.2.2 Schema-theoretic perspective on corporate branding*

The conceptual framework presented in this study is based on **schema theory**. The relationship between specific corporate associations and corporate image as a whole, the relationship between corporate image and consumers’ product response, as well as the relationship between specific corporate associations and consumers’ product response can be explained by taking a schema theoretic perspective.

Various types of memory representation, such as the **schema construct**, were first examined by Bartlett (1932, p. 201; cf., McVee, Dunsmore, and Gavelek 2005, pp. 535-39). In the present context, schemata are defined, according to Mandler (1979, p. 263), as a cognitive structure of an object, situation, event, a sequence of events, action, or a sequence of actions formed on the basis of past experiences. Thus, schemata can be seen as a temporal as well as a spatial organization of information in memory. On the basis of the information stored in a schema, it is possible to develop relatively ideal images of an object, situation, event, or action. In a sense, schemata represent stereotypes of certain concepts (Rumelhart and Ortony 1977, p. 101).

Minsky (1975, p. 212) was the first to find an **organizational structure within the schema construct**, which is examined in detail by Rumelhart und Ortony (1977, p. 106). Schemata have a vertical and horizontal structure (Crocker 1984, p. 473). A

schema with vertical structure will have more subordinate levels, whereby their number varies from schema to schema. Horizontal structure refers to the number of schemata, which are included at any given level of subordination.

#### *2.2.2.1 Relationship between specific corporate associations and corporate image*

The relationship between specific corporate associations and the corporate image can be explained by referring to the organizational structure of schemata. A rather abstract **superordinate schema interacts with several different, more specialized subschemata** (Tesser 1978, pp. 297-98). Interaction with a stimulus evokes a subschema, which in combination with other subschemata will activate a superordinate schema. Specific corporate associations as subschemata lead to certain expectations regarding the superordinate schema, i.e., the corporate image. As the superordinate schema depends on information from subschemata, any changes or additions to the information that will be incorporated into a new subschema, will lead to a change of the attributes associated to that superordinate schema (Sujan and Bettman 1989, p. 455). Generally speaking, subschemata are „the conceptual constituents of the concept being represented (Rumelhart 1984, p. 168).”

Usually, **consumers associate specific characteristics with a company, which shape its overall image in the consumers’ mind**. Evaluating specific corporate associations differently would therefore result in a different corporate image. I conclude that the set of specific corporate associations, which a person holds about a company, influences the corporate image of that company.

#### *2.2.2.2 Relationship of specific corporate associations and corporate image to consumers’ product response*

Schema theory offers an explanation for the relation of both corporate image and specific corporate associations to consumers’ product response. Schemata are formed of past experiences and consist of expectations about the order in which things occur (Mandler 1979, p. 263). **Schemata “have implications regarding attention, infer-**

**ence, evaluation, planning, and behavior**, yet 90% of the current research ignores these variables (Fiske and Linville 1980, p. 549).” The degree to which a schema-based evaluation serves as a guide for action depends upon whether the schema contains parameters that can help a person identify and choose among future courses of action (Axelrod 1973, p. 1252). In this context, Rumelhart and Ortony (1977, p. 122) conceptually distinguish comprehension and action schemata to highlight the inherent behavioral component of schemata, but conclude that both are highly interdependent. In other words, when the schema is evoked, the behavior is seen as an integral part of the schema. Therefore, a schema can be either the condition or the trigger for a series of actions, which can in turn become an organized unit, i.e., a schema as in script theory (Schank and Abelson 1977; Fiske and Linville 1980, p. 548).

**Consumers use schemata to organize their expectations** about the value and importance of a product or brand attributes (Sujan and Bettman 1989, p. 455). Thus, consumers compare new product or company related associations and information with previous experiences, i.e., evaluate the object, and thus the activation of the corresponding schema leads to a certain behavioral intention (Cohen 1982, p. 94). However, if consumer’s attitude is not developed through experience, it will hardly include a behavioral component and thus it won’t predict behavior (Fiske and Linville 1980, p. 551).

Rumelhart and Ortony (1977, p. 123) indicate that **action schemata exist at all levels of abstraction** and thereby are an integral part of both superordinate and subordinate schemata. Relating specific corporate associations, as well as corporate image, to consumers’ product response refers to the fact that each of these schemata is comprised of information that, depending on the situation, allows a prediction about the adequate behavioral response, e.g., consumer’s repurchase intention (cf., Schank and Abelson 1977, p. 38). I conclude that both specific corporate associations and corporate image could influence consumers’ product response.

### *2.2.2.3 Schemata in a cross-national context*

Lastly, it is important to note that **schemata are dependent on one’s cultural socialization** (Crocker 1984, p. 474; Saito 2000, pp. 139-41). Bartlett (1932), who defined

schema as an “active organization of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response (p. 201)” noted that “nearly all important human reactions, and most important ones as well, have a social frame or background into which they must fit (p. 254).” McVee, Dunsmore and Gavelek (2005) agree and conclude that if “we think of schema as embodied and not just in the head, then it becomes clear that patterns of enactment, ways of engaging the world, both shape our interpretation of cultural activity and are shaped by cultural activity (p. 550).”

**Consumers’ perception, information processing, and decision making might be influenced by cultural aspects,** e.g., some subschemata might influence the superordinate schema to a larger extent in specific countries. I conclude that the relationship between specific corporate associations and corporate image as a whole, between corporate image and consumers’ product response, as well as between specific corporate associations and consumers’ product response may vary across different countries depending on their cultural background and further country-specific characteristics.

### *2.2.3 Literature review and hypotheses development*

**Country-specific characteristics moderate the impact of brands on consumers’ product response.** Erdem, Swait, and Valenzuela (2006, p. 47) state in an empirical study across seven countries on various consumer goods that the return on a company’s branding efforts depend on consumers’ cultural values. However, it is increasingly difficult to disentangle the complex collage of culture and context as there is no clear demarcation line identifying where one culture begins and another ends (Douglas and Craig 1997, p. 380). Thus, Roth (1992, p. 26) states in a more general way that “consumers in different countries have similar needs, yet vary in the ways products are perceived as satisfying those needs. The needs products are designed to satisfy may thus affect consumers’ perceptions of the products’ benefits depending on where they are marketed. Consequently, market performance of a brand image strategy may be affected by country characteristics.” Besides a country’s cultural roots, its economic development and political background must be considered in research on international

branding issues (e.g., Ger and Belk 1993; Coulter, Price, and Feick 2003; Strizhakova, Coulter, and Price 2008).

**The importance of country-specific characteristics in the context of international corporate branding** seems obvious. If a company standardizes its corporate brand internationally, it intends to create a uniform perception of the corporate brand and tries to avoid country-specific influences. Assuming this strategy works, the relevant, specific corporate associations should impact corporate image in a similar way. Nevertheless, even if a company succeeds to establish a uniform perception of the corporate brand across countries, the question remains if specific corporate associations have a direct impact on consumers' product response.

Following, the **literature on specific corporate associations and corporate image is reviewed**. With regards to specific corporate associations, I summarize the findings with regards to their relation to corporate image as well as consumers' product response. In particular, I highlight if specific corporate associations vary in importance between countries. With regards to corporate image, I recap its importance to consumers' product response and summarize corresponding cross-national findings. Considering both former research and theory, I conclude in each case by deriving corresponding hypotheses.

### *2.2.3.1 Specific corporate associations*

With regards to **customer orientation**, not only is the employees' interaction with consumers crucial, but also how customers' needs are attended to. Customer orientation is seen as an integral part of a firm's market orientation (Kohli and Jaworski 1990, p. 3; Narver and Slater 1990, p. 21; Slater and Narver 1998; 1999) or can be considered synonymous with market orientation (Deshpandé, Farley, and Webster 1993, p. 27). In any case, customer orientation is seen as a relevant determinant of business performance far beyond the services industry (Matsuno and Mentzer 2000). Increasing competitive rivalry forces FMCG firms to elaborate on customer orientation enhancing consumers' evaluation of the company and ensuring their loyalty towards company's brands. Although most research primarily analyzes employees' perception (e.g., Saxe and Barton 1982; Franke and Park 2006), customer's assessments are vital

(Deshpandé, Farley, and Webster 1993, p. 32) and determine firms' overall external portrayal (Keller 2000). Further, Brady and Cronin (2001, p. 248) conclude that being customer oriented in the eye of the customer enhances loyalty. With regards to country-specific differences in customer orientation, Deshpandé, Farley, and Webster (1993, p. 32) state that "relatively good customer orientation appears to be achievable under a variety of cultures and, conversely, a particular type of culture may not necessarily facilitate customer orientation." Two meta-studies (Rodriguez Cano, Carrillat, and Jaramillo 2004; Kirca, Jayachandran, and Bearden 2005) analyzing country-specific characteristics as moderators of the relationship between market orientation and business performance support this finding from an organizational perspective.

With regards to being a **good employer**, customers' perception of how a company treats its employees and if that company is well-managed and has competent employees are emphasized (Walsh and Beatty 2007, p. 133). The perception of the company as a good employer does not only play a role for potential employees. Customers may be sensitive to the fact that a company has good employees and as a result holds them to a higher standard (Fombrun, Gardberg, and Sever 2000, p. 253). Lee (2004) confirms the positive relationship of employee treatment with corporate image from the consumers' perspective. Cross-national studies have not yet addressed the question, if consumers' perception of whether the company is a good employer or not has a varying impact on corporate image or consumers' product response.

With regards to **product range quality**, a firm's capability to produce quality products, which is commonly referred to as "corporate ability", is emphasized (Sen, Bhattacharya, and Korschun 2006, p. 158). Brown and Dacin (1997, p. 71) found in a pioneering study that corporate ability associations influence product evaluation through consumers' evaluation of the company as well as through the evaluation of specific product attributes. Berens (2004, p. 58) and Berens, van Riel, and van Bruggen (2005, p. 43) confirm a direct influence of corporate ability on purchase intention in the context of service firms. Similarly, Biehal and Sheinin (2007) highlight that corporate ability messages impact consumers' product response positively. However, again it remains open, if consumers' perception of company's product range quality has a varying impact on corporate image or consumers' product response across countries.

With regards to being a **reliable and financially strong company**, customers' perception of company's competence, solidity, and profitability and of the firm's vision and investment potential is emphasized (Walsh and Beatty 2007, p. 133). Although, one might argue that financial strength not only plays a major role in forming an opinion about a company for financial analysts, research focusing on consumers' perception is scarce. McGuire, Schneeweis and Branch (1990) found a close relationship between perceived financial strength of a company and its evaluation by executives. Vergin and Qoronfleh (1998, p. 22) conclude for both business people and consumers that if a firm is associated with financial success, the overall evaluation of the firm increases. It remains open, if being a reliable and financially strong company has a direct impact on consumers' product response and if its impact on corporate image and consumers' product response varies across countries.

With regards to **social and environmental responsibility**, not only the entrepreneurial duty to act socially (i.e., support for good purposes, creating new jobs), but economically and environmentally sustainable on a more or less voluntary basis, is emphasized (van Marrewijk 2003, pp. 96-97; Matten and Moon 2008, p. 405). Corporate social responsibility (CSR), as it is widely known as, has become increasingly significant in recent years (e.g., Harrison and Freeman 1999; Luo and Bhattacharya 2006; Campbell 2007). Robin and Reidenbach (1987, p. 51) emphasize, that customers have to be regarded as "close relatives" of the firm and should receive considerable concern by addressing the demand to "be socially responsible". The literature on corporate social responsibility is vast and has been reviewed in detail (e.g., Margolis and Walsh 2003, pp. 274-77; Orlitzky, Schmidt, and Rynes 2003, pp. 428-23). Recent works on customer-company identification (Bhattacharya and Sen 2003, p. 86; 2004, p. 16) also suggest that CSR initiatives can lead to customers' identification with the company, as they constitute a key element of corporate identity. Already Brown and Dacin (1997), Turban and Greening (1997), and Sen and Bhattacharya (2001, p. 238) find a positive effect of CSR initiatives on consumers' company evaluations, whereby the latter also state that a company's CSR efforts can directly affect consumers' intentions to purchase its products positively. Consistent with former studies (Osterhus 1997; Lichtenstein, Drumwright, and Braig 2004; Berens, van Riel, and van Bruggen 2005), Luo and Bhattacharya (2006, p. 15) provide evidence that CSR has a positive impact

on consumers' product response. Further, social and environmental responsibility is valued differently by consumers from different countries. Although several authors (Langlois and Schlegelmilch 1990; Maignan and Ralston 2002; Matten and Moon 2008) argue that CSR is more actively demanded from companies in Anglo-Saxon countries, a study by Maignan (2001) reveals that U.S. consumers value highly corporate economic responsibilities, while consumers in France and Germany value legal and ethical conformity with standards (2001, p. 69).

Summarizing, former findings support the positive **relationship of specific corporate associations to corporate image and consumers' product response**. However, research on consumers' perception is relatively scarce, as is research in a cross-national context. In the context of international standardization of corporate branding and corresponding activities, i.e., communicating the same characteristics of the corporate identity across countries, I assume that the pattern of effects between specific corporate associations and corporate image will be similar across countries. If this is not the case, the external portrayal would differ. Although the firm would still have reduced costs by standardizing corporate brand management internationally, the real objective, i.e., creating a uniform anchor in the consumers' mind across countries, would be missed. Thus, I hypothesize:

H1: The specific corporate association (a) customer orientation, (b) good employer, (c) product range quality, (d) social and environmental responsibility and (e) reliable and financially strong company impact corporate image positively and in the same way across countries.

However, the **direct impact of specific corporate associations on consumers' product response** might vary even if the pattern of effects between specific corporate associations and corporate image is similar. Against the background of country-specific characteristics, such as the national culture, consumers may value or devalue some specific corporate associations in terms of their product response. Whereas I assume product range quality, as the central cue customers focus on, to be of equal importance to customer behavior across countries, I hypothesize the impact of the remaining specific corporate associations to vary between countries. Focusing on national culture I refer to Hofstede (2001), who stresses that individualism/collectivism is a key criterion in distinguishing and comparing cultures. In individualistic cultures,



such as the USA or France, people are autonomous, independent from their in-groups, value their personal goals over the goals of their in-groups, and their behaviors are based on their own attitudes rather than on social norms. In collectivistic cultures, such as Romania or Russia, people are interdependent within their in-groups, value the goals of their in-groups and behave according to norms of their in-groups. Thereby I assume that customers in collectivistic, rather than individualistic countries value (1) business relationships based on mutual trust and manifestly felt obligations, (2) employer-employee relationships based on harmony, morals, as well as familiarity, and (3) corporate initiatives which contribute to the society and its general welfare as they are less suspicious and skeptical (Rodriguez Cano, Carrillat, and Jaramillo 2004). Conversely, performance orientation is more salient in individualistic cultures. Summarizing, I hypothesize:

- H2: (a) The specific corporate association product range quality has a direct positive impact on product loyalty in all countries.
- (b) The specific corporate associations customer orientation, good employer, and social and environmental responsibility have a direct positive impact on product loyalty in collectivistic cultures.
- (c) The specific corporate association reliable and financially strong company has a direct positive impact on product loyalty in individualistic cultures.

### 2.2.3.2 *Corporate image*

As Brown and Dacin (1997, p. 70) report, several studies show that **corporate image has a positive impact on consumer product judgments and responses** (e.g., Belch and Belch 1987). Further, research on consumer-company identification calls attention to the fact that people, who evaluate a company more positively and hence are more likely to identify with it, are more loyal to that company (Bhattacharya and Sen 2003, pp. 81-83). However, Gürhan-Canli and Batra (2004) conclude that research has only “begun to advance knowledge of the process by which corporate image potentially affects product evaluations, but [...] there is a need for a better understanding of the conditions in which such impact occurs (pp. 203-04).”

**Putting research on corporate image in an international context**, Hsieh, Pan, and Sentino (2004) contribute correspondingly and state that corporate image affects consumers' product response in developed as well as in emerging countries. Han and Schmitt (1997) analyze the impact of individualistic versus collectivistic culture on the impact of corporate image in detail and conclude that the latter value a communication strategy that includes a strong corporate identity, whereas U.S. consumers, for example, prefer a product brand centered marketing. Having a collectivistic value orientation means paying attention to and being affected by the concerns of groups and societal entities at large, whereby the focus is on interdependence rather than independence. Since companies are interdependent, collective societal entities, corporate image as the overall evaluation of the company should be of greater importance in collectivistic cultures. Thus, I hypothesize:

H3: Corporate image has a positive impact on product loyalty, which is higher in collectivistic cultures.

## 2.3 Empirical analysis

Prior to carrying out a **cross-national survey**, I conduct a Monte Carlo study to decide on sample size and to determine power of the hypothesized model. Following, I outline the sample design and present the measurements as well as the methods applied to analyze the data set. Illustrating the results, I address firstly if specific corporate associations impact corporate image cross-nationally in the same way. Secondly, I examine if the direct impact of both specific corporate associations and corporate image on consumers' product response varies between countries.

### 2.3.1 Monte Carlo study

Prior to the data collection, a **Monte Carlo study was conducted to decide on sample size and to determine power of the hypothesized model**. As structural equation modeling heuristics should be used to test measurement invariance and hypotheses, an adequate sample size is a necessary precondition for valid and reliable results

(Bearden, Sharma, and Teel 1982; Hancock, Lawrence, and Nevitt 2000; French and Finch 2006; Meade and Bauer 2007). The use of heuristics to decide on the sample size, such as the ratio of on the number of observations and model parameters, is questionable (Jackson 2001; 2003; Herzog, Boomsma, and Reinecke 2007, p. 385). I apply a procedure proposed by Muthén and Muthén (2002) to decide on sample size and to determine power, which permits to assess estimation accuracy a priori (Meuleman and Billiet 2009, p. 57). Referring to previous research, consumer focus groups and expert interviews, I select population values for each parameter of the model (see Appendix 2.5.2.1). With regards to the structural weights I distinguish small, medium and large effects using two conditions commonly applied to Monte Carlo studies, i.e., .1, .3, and .5 as well as .2, .4, and .6 (Cohen 1962, p. 148; 1969; Sedlmeier and Gigerenzer 1989). 500 replications were generated for each condition and sample size to ensure sufficient reliability of the summary information calculated.

Using **weighted least squares means and variance adjusted (WLSMV) estimation**, which performs at a superior level in the case of ordinal variables as compared to maximum likelihood or weighted least squares estimation (Flora and Curran 2004; Beauducél and Herzberg 2006; Bandalos 2008; Lei 2009), it is not necessary to specify item intercepts, but item thresholds. Thresholds equal the number of categories minus one – e.g., in case of a seven-point Likert type scale six thresholds are assigned to one item – and could be interpreted as z-score value. They describe the likelihood of progression from a lower to a higher category. A high threshold value reflects a more difficult transition between categories, while a threshold value of zero signals an equal probability of transition and a low threshold value indicates an easier movement between two categories. Further it is has to be considered that the degrees of freedom are not calculated, but estimated if applying WLSMV estimation. Thus, chi square values must be carefully interpreted.

Neglecting parameter differences specific to the country and product category surveyed in this stage, I derive a generalized model approximating the necessary sample size in each country. The analyses are carried out using the Mplus program (Muthén and Muthén 2007). In order to determine sample size, several criteria are examined (Muthén and Muthén 2002, pp. 605-06). Firstly, parameter and standard error bias must not exceed 10% for any parameter in the model. Further, standard error bias for

the parameter for which power is being assessed must not exceed 5%. Moreover, coverage must remain between .91 and .98. Finally, the sample size is chosen to keep power close to .80, which is an acceptable value for sufficient power. The results illustrate that a sample size between 1200 and 2800 observations per country is required to satisfy the criteria and to achieve an adequate power, depending on which condition is referred to. I conclude that a **sample size of 1200 is acceptable in terms of power**. However, resulting effects of .1 must be interpreted carefully in this context.

### *2.3.2 Sample characteristics*

A **FMCG manufacturer**, which standardized its international corporate branding in 2001 and thereby introduced its corporate brand as an endorsement to all of its product brands, was chosen as stimuli. The corporate brand serves as retrieval cue to consumers (Biehal and Sheinin 2007, p. 13). Consumers' awareness of the stimuli, i.e., recognition of the corporate brand and one of the company's product brands, was a necessary condition (Keller 1993, p. 3). All respondents rated the corporate image and the specific corporate association dimensions of this corporate brand.

The **company's brand portfolio** includes differently positioned brands in three product categories: detergents, adhesives, and cosmetics. Each product category is characterized by a wide variety of competitive brands, which enhance consumer confusion and evokes a need for guidance. A respondent named three product brands associated most with this corporate brand during the interview. One of these product brands was selected at random according to a previously defined procedure and then evaluated by the respondent in terms of product loyalty intentions.

Enhancing the generalizability of my study (Alden, Steenkamp, and Batra 1999, p. 79), I choose **countries** as unit of analysis, which seems to be appropriate if comparing national patterns of behavior (Douglas and Craig 1997, pp. 382-83,86). The choice of countries surveyed, i.e., Germany, France, Romania, Russia, and the USA, is based on three criteria, namely cultural background, economic conditions, as well as company history and presence within the country markets. Comparing these countries on demographic and economic characteristics as well as on Hofstede's (2001) cultural

dimensions indicate substantial differences (see Table 1). Germany is the home market of the corporate brand and serves as a reference market. France, a mature European market, where the company has been doing business for nearly 100 years, is opposed to a third Western country, the USA. The latter is one of the largest markets worldwide, which the company entered in 1986. The brand awareness of the corporate brand varies across those three countries such that almost every German consumer knows the corporate brand, whereas the familiarity decreases among French and, in particular, U.S.-American consumers. Further, I surveyed two post-socialist markets, where approximately half of the local consumers are aware of the corporate brand. Romania is an upcoming Eastern European market, into which the company entered approximately 10 years ago. Russia is one of the largest emerging markets, where the firm has operations since 1990. Given this considerable variation between the five countries, the research setting provides a stringent test of the generalizability of my hypotheses (van de Vijver and Leung 1997, pp. 27-28).

Table 1: Country-specific economic and cultural characteristics

Country	Germany	France	Romania	Russia	USA
<i>1a. Company profile (Internal company data)</i>					
Market presence (year)	1876	1909	1994	1990	1987
Brand Awareness (%)	94	36	48	58	11
<i>1b. Economic data (The World Bank 2009)</i>					
Inhabitants (in Mio.)	82.14	62.05	21.51	141.80	304.06
GNI per capita (PPP, US-\$)	35,940	34,400	13,500	15,630	46,970
GDP growth (annual %)	1.3	0.4	9.2	7.3	1.1
Inflation (annual %)	1.6	2.5	14.0	15.0	2.2
<i>1c. Hofstede's cultural dimensions (Hofstede 2001, pp. 500, 02)<sup>a</sup></i>					
Power distance	35	68	90	93	40
Individualism	67	71	30	39	91
Masculinity	66	43	42	36	62
Uncertainty Avoidance	65	86	90	95	46

GNI: gross national income; PPP: purchasing power parity; GDP: gross domestic product.

<sup>a</sup> The higher the value, the stronger the dimension in each country is pronounced; values from 1 to 100. Hofstede's fifth dimension "Long-term orientation" is not included as only data for two of the five surveyed countries is available.

Consumer data was collected in three French (Nantes, Paris, Strasbourg), German

(Berlin, Cologne, Trier), Romanian (Bucharest, Cluj-Napoca, Sibiu), Russian (Moscow, St. Petersburg, Volgograd), and U.S.-American metropolitan areas (New York, Phoenix, San Francisco) through face-to-face interviews. Native speakers conducted the interviews from August to October 2008. Applying quota sampling, based on the country-specific distribution of the populations in terms of age and gender, **1200 consumers above 15 years old were interviewed in each country. Thus, the final dataset includes 6000 observations.**

### 2.3.3 *Measurements*

With regards to **survey design**, I first considered general aspects, e.g., using seven point Likert-type scale items (Cox 1980; Weathers, Sharma, and Niedrich 2005), taking into account the hierarchy of effects (Bickart 1993, p. 121; Bergkvist and Rossiter 2007, p. 179) and the visual design (Stern, Dillman, and Smyth 2007). At the same time, it is important to consider the cross national applicability of the survey (Wong, Rindfleisch, and Burroughs 2003; Smith et al. 2005), in particular of measurement instruments.

All scales used in the survey were based on **established operationalizations** from previous studies. Whereby the specific corporate associations were measured according to Walsh and Beatty (2007), I refer to Keller (1993) with regards to corporate image and to Oliver (1999) with regards to product loyalty (see Appendix 2.5.1).

**Verification of scale equivalence** is especially important in international studies and should be assured prior to the data collection. I applied the back-translation method to ensure calibration and semantic equivalence (Davis, Douglas, and Silk 1981, p. 99; Hult et al. 2008, p. 1035). After the data collection, further analyses must be applied to test if the assumption of measurement invariance holds.

As part of the translation process, qualitative **pretests in every country**, i.e., consumer focus groups and expert interviews to check for face validity, led to a context- and country-specific adaptation of those scales. Thereby, I considered the literature on scale development and modification (Churchill 1979; Rossiter 2002; Finn and Kayande 2004). Finally, a quantitative pretest in every country, i.e., an online survey,

showed strong support for reliability and validity of the adapted scales.

Besides taking into account the moderating influence of country-specific characteristics, I consider further **contextual factors**, such as the product category of the product brand evaluated and the interviewee's knowledge about the corporate brand's country of origin. With regards to the latter, the interviewee's had to indicate the country of origin of the corporate brand. After recoding the answers, this results in a group of respondents, which was aware of the country of origin and another group which was not. Referring to Reynolds, Simintiras and Diamantopoulos (2003, p. 83), I also control for the main sociodemographic variables upon which national groups might vary and consider as additional contextual factors interviewee's highest educational attainment, age, and gender.

#### *2.3.4 Method*

My **methodological approach is threefold**. Firstly, sample weights are computed and included in the data set. Secondly, the measurements are tested on their validity and reliability. Thirdly, the hypotheses are tested.

To enhance representativeness of the data set and thereby results' generalizability, **sample weights** are computed based on the latest census data from those countries (Eurostat 2009; Information and Publishing Center «Statistics of Russia» 2009; United States Census Bureau 2009) to adjust the sample to product category, highest educational attainment, gender, and age (Asparouhov 2005). The decision to include product category in the calculation of sample weights is given by the sampling design. Among the three product brands the interviewee associated most with the corporate brand surveyed, one was chosen randomly. One might argue, that product brands from one product category are generally better rated than those in another product category and thus, that an overrepresentation of product brands from one product category leads to biased results. To exclude any bias ascribed to a varying proportion of product categories across countries, weighting adjusts the number of cases from each product category to 400 (see Appendix 2.5.3).

In a second step, I check for reliability and validity of the measurements (see Appen-

dix 2.5.4). With regards to **reliability**, each indicator of each measurement instrument is first examined in terms of its corrected item-to-total correlation. Individual item reliability can be confirmed as any corrected item-to-total-correlation falls below .5 (Bearden, Netemeyer, and Teel 1989, p. 475). To assess construct reliability, coefficient alpha (Churchill 1979, pp. 68-69) and composite reliability (Fornell and Larcker 1981, p. 45) are computed. Both exceed in every case the recommended threshold of .7 and .6, respectively (Nunally 1978, p. 245; Bagozzi and Yi 1988, p. 82). Finally, the average variance extracted (AVE) is above .5 for all latent variables (Fornell and Larcker 1981, p. 46).

With regards to **validity**, face validity is first assessed by means of expert interviews and consumer focus groups (Cronbach and Meehl 1955, p. 282; Hardesty and Bearden 2004). Secondly, construct validity is assessed by checking convergent and discriminant validity (Campbell and Fiske 1959). The afore mentioned AVE values provide support for convergent validity (Fornell and Larcker 1981, p. 46), as do the results of a confirmatory factor analysis including all measurement instruments. The model fits well and the factor loadings were all above .7 (Anderson and Gerbing 1988, p. 416). Referring to Fornell and Larcker (1981, p. 46), all latent variables fully satisfy the requirement of discriminant validity (see Appendix 3.5.1.3).

Following, I examined if **common method bias** is a potential problem. Besides improving scale items through pretesting, assuring respondent anonymity, and reducing evaluation apprehension to avoid common method bias, I analyzed whether the majority of the variance can be accounted for by one general factor (Podsakoff et al. 2003). However, the results provide strong support that common method bias could be neglected in the analysis.

Furthermore, assessment of the content-related equivalence, i.e., **measurement invariance** is conducted. Testing measurement invariance is important in any multiple group setting (Byrne, Shavelson, and Muthén 1989; Meredith 1993). Measurement invariance is a necessary condition if comparing consumer perceptions between multiple countries (Steenkamp and Baumgartner 1998), but it should also be considered in case of contrasting, e.g., different product categories. Using WLSMV estimation within a multiple group confirmatory factor analysis, the procedure to test for measurement invariance is rather complex (Glöckner-Rist and Hoijtink 2003, pp. 555-56; Millsap



and Yun-Tein 2004). Following Muthén and Muthén (2007, pp. 399-400), the invariance of factor loadings and thresholds should not be tested separately as is the case when using maximum likelihood estimation with continuous outcomes (Steenkamp and Baumgartner 1998). Instead, factor loadings and thresholds should be simultaneously tested as they interact to produce the item probability curve as a function of the factor. As the difference in chi-square values for two nested models using WLSMV estimation does not follow chi-square distribution, I apply a corrected chi-square difference test. Additionally, I use the difference in comparative fit indices to decide on measurement invariance (Cheung and Rensvold 2002, p. 251; Chen 2007, p. 501). Regarding the choice of the referent indicators, I followed the propositions by Johnson, Meade, and DuVernet (2009, p. 656). The results indicate firstly a good fit of all models (Hu and Bentler 1999, p. 27; Chen et al. 2008) and secondly, provide strong support that partial scalar invariance holds for all constructs for all groupings (see Appendix 2.5.5). The partial invariance models derived are used in subsequent analyses.

In a third step, I apply **multiple group structural equation modeling using WLSMV estimation** to test the hypotheses across the five countries (Baumgartner and Steenkamp 1998; Lubke and Muthén 2004). Additionally, contextual factors are considered by analyzing different multiple group settings.

### 2.3.5 Results

Descriptive statistics of the sample with regards to country, product category, country of origin knowledge, highest educational attainment, age group, as well as gender provide an initial overview regarding consumers' evaluations (see Appendix 2.5.6). Looking at the **goodness of fit indices** of the multiple group model across the five countries, results show that the cut of criteria proposed by Hu and Bentler (1999, p. 27) are met. The unstandardized structural coefficients, which are appropriate for comparison across groups (Singh 1995, pp. 598-600), are reported in Table 2.

Before discussing the estimates of the hypothesized model, it is necessary to ensure that this model fits better than other plausible **rival models** (Steenkamp, Batra, and Alden 2003, p. 59). It might be plausible to assume that if the corporate image schema

is frequently used with the same values assigned to some of its variables then the generation of a more specialized schema with those values fixed, incorporating a specific corporate association, may occur (Rumelhart and Ortony 1977, pp. 123-24). In this case corporate image and specific corporate associations would still have a direct impact on consumers' product response, but the causal-relationship between those would be reversed, i.e., corporate image would cause the specific corporate associations (cf., Farquhar and Herr 1993). However, the fit of this model ( $\chi^2(260)=2118.342$  ( $p=.000$ ), CFI=.935, TLI=.983, RMSEA=.077) is significantly worse than my hypothesized model. Thereby, I have evidence supporting the hypothesized causal sequence, from specific corporate associations to corporate image and to consumers' product response.

Consistent with **H1**, all five specific corporate associations have a significant positive impact on corporate image. Corrected chi-square difference tests reveal no significant differences for good employer, reliable and financially strong company, as well as customer orientation (see Appendix 2.5.8.1). However, significant differences are found for the other two specific corporate associations. With regards to product range quality, one out of ten comparisons is significant, i.e., the impact on corporate image is significantly lower in Romania compared to Germany ( $p=.0474$ ). With regards to social and environmental responsibility, two out of ten comparisons are significant, i.e., the impact on corporate image is significant lower in Romania compared to Germany ( $p=.0139$ ) and France ( $p=.0262$ ), respectively. Findings provide strong support for H1a, H1b and H1e, whereas H1c and H1d have to be rejected.

With regards to **H2**, product range quality is found to have a positive direct impact on product loyalty in all countries. The impact of good employer is not significant in any of the five countries. Furthermore, the impact of "customer orientation" is only significant in the USA ( $b=.163$ ,  $p<.05$ ), the country that scores the highest on the individualism dimension. In Germany ( $b=.098$ ,  $p<.05$ ) and France ( $b=.126$ ,  $p<.01$ ), the impact of social and environmental responsibility is significant, but not in the USA, Romania, and Russia, whereby the latter two are both characterized as being high on collectivism. The specific corporate association reliable and financially strong company, again, has only a positive direct impact on product loyalty in the USA ( $b=.154$ ,  $p<.01$ ). Summarizing, H2a and H2c can be supported, whereas H2b is rejected.

Table 2: Country-specific structural parameter estimates (Specific corporate associations, corporate image, and product loyalty)

	Germany	France	Romania	Russia	USA
CIM → PLO	.386 *** (.578 ***)	.136 *** (.221 ***)	.404 *** (.568 ***)	.247 *** (.361 ***)	.077 ** (.151 **)
COR → CIM	.303 *** (.189 ***)	.180 ** (.130 **)	.138 ** (.105 **)	.194 * (.136 *)	.232 ** (.152 **)
GEM → CIM	.142 * (.118 *)	.278 ** (.209 **)	.166 *** (.161 ***)	.287 *** (.235 ***)	.124 * (.097 *)
PRQ → CIM	.433 *** (.318 ***)	.250 ** (.164 **)	.271 *** (.231 ***)	.331 *** (.245 ***)	.431 *** (.315 ***)
RFC → CIM	.200 * (.107 *)	.255 * (.139 *)	.254 *** (.173 ***)	.122 * (.095 *)	.222 *** (.120 ***)
SER → CIM	.156 ** (.127 **)	.150 * (.126 *)	.339 *** (.308 ***)	.259 *** (.216 ***)	.282 *** (.211 ***)
COR → PLO	.039 ns (.036 ns)	.084 ns (.098 ns)	.032 ns (.034 ns)	-.004 ns (-.004 ns)	.163 * (.211 *)
GEM → PLO	-.043 ns (-.053 ns)	.063 ns (.077 ns)	.069 ns (.093 ns)	.118 ns (.141 ns)	-.048 ns (-.074 ns)
PRQ → PLO	.165 *** (.181 ***)	.200 ** (.213 **)	.141 *** (.170 ***)	.300 *** (.325 ***)	.177 *** (.256 ***)
RFC → PLO	-.088 ns (-.070 ns)	-.084 ns (-.074 ns)	-.028 ns (-.026 ns)	.011 ns (.036 ns)	.154 ** (.165 **)
SER → PLO	.098 * (.120 *)	.126 ** (.172 **)	.006 ns (.008 ns)	.091 ns (.111 ns)	-.043 ns (-.063 ns)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(267)=1404.275$  ( $p=.000$ ), CFI=.960, TLI=.990, RMSEA=.060.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

With regards to **H3**, corporate image has a significant positive impact on product loyalty in each country. Corrected chi-square difference tests reveal that the impact is significantly lower in the USA as compared to Germany, Romania and Russia (see Appendix 2.5.8.1). Corresponding findings on France, which scores the second highest on the individualism dimension, largely confirm this pattern. In conclusion, H3 can be accepted.

With regards to **contextual factors**, notable results are summarized in the following

(see Appendix 2.5.7 and 2.5.8). Analyzing the impact of specific corporate associations on corporate image, considering the moderating influence of product category as well as respondents' country-of-origin knowledge and gender, show that the effects hardly vary between groups. However, regarding education and age of the interviewees', significant differences across groups could be observed, e.g., consumers between 50 and 64 years as well as those above 65 years old, place a higher value on product range quality than the two other age groups. Analyzing the direct impact of specific corporate associations on product loyalty, product range quality has a positive direct effect on corporate image in each grouping, except for consumer group aged between 15 and 25 years. Being a good employer does not have a direct significant impact in any group. The direct impact of customer orientation, being a reliable and financially strong company, and social and environmental responsibility on corporate image varies depending on the contextual factors, e.g., the latter is significant within the product categories cosmetics and detergents, whereas it has no effect within the product category adhesives. Analyzing the impact of corporate image on product loyalty, it could be determined that the effect is significantly positive for all groups across the five contextual factors. Regarding product category, country of origin knowledge, and gender, no significant differences among the group-specific structural estimates could be found. However, the group-specific structural estimates reveal significant differences depending on respondents' education and age, e.g., corporate image significantly higher influences product loyalty for interviewees, who graduated either high school or community college, compared to the other two groups.

## 2.4 Discussion

**Does standardization of corporate branding across countries work?** Yes, it does. Referring to the initial question, I mainly focused on two aspects: (1) Is the corporate brand perceived homogenously by consumers? (2) Does the standardized corporate brand have a positive effect on consumers' product response? With regards to consumers' perception of the corporate brand, the results illustrate that specific corporate associations impact corporate image largely in the same way across countries (only 3

out of 50 pair wise country comparisons reveal a significant difference). With regards to the effect of an internationally standardized corporate brand, the results provide support that the impact of corporate image on consumers' product response is positive across all countries. In other words, from a consumer's perspective, using the corporate brand adds value.

**Does an internationally standardized corporate brand influence consumers' product response across countries in the same way?** No, it does not. With regards to corporate image, its impact on consumers' product response is found to be higher in collectivistic cultures. However, the analysis also reveals that consumers in the corporate brand's home market particularly value the company's favorable external portrayal. With regards to the direct impact of specific corporate associations on consumers' product response, I state that corresponding relationships exist depending on the country concerned. However, these relationships turn out to be rather complex. They are either equally important to customer behavior across countries, are dependent on national culture, or rely on further context specific factors.

Considering product categories, country of origin knowledge, highest educational attainment, gender, and age as **contextual factors** for all relationships examined in the hypothesized model, enhances the generalizability of the presented findings. Thus, for example, the impact of corporate image on consumers' product response does not vary across product categories or depending on consumers' knowledge of the company's country of origin. However, consumers' sociodemographics have to be taken into account in any case (cf., Roth 1995a).

#### *2.4.1 Theoretical implications*

With regards to **theoretical implications**, this study advances the knowledge on corporate branding in an international context by analyzing both direct and indirect effects of corporate branding on consumers' product response. Particularly, I (1) highlight the role of corporate branding and its evaluation for FMCG firms, (2) illustrate the relationship between corporate branding and consumers' product response across countries, and (3) show the importance of adopting an international perspective within

studies on corporate branding.

Even though corporate branding is gaining importance in the **FMCG industry**, to date, most studies dealing with corporate branding focus on the services sector or on durable goods, i.e., automobile manufacturers (Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005; Biehal and Sheinin 2007). Analyzing corporate branding of a FMCG firm, answers also Walsh and Beatty's (2007, p. 140) call to examine their customer-based reputation measure in other context than the services sector. Scale replication is often neglected which in turn leads to a limited generalizability of a scale's performance (Flynn and Percy 2001, pp. 412-13). In general, Hunter (2001) concludes that "we desperately need replication studies! (p. 155)" (see also Cohen 1994, p. 1002; Barwise 1995, p. G33). The results of the presented study provide support that it could be used in the context of the FMCG industry. However, focus groups with customers in the surveyed countries and qualitative interviews with corporate and product brand managers in advance of the main study revealed a minor relevance of the corporate association being a good employer. Further, being a good employer had no direct impact on consumers' product response in any grouping. Nevertheless, it could also be used as a distinct attribute in communicating the corporate brand towards customers and might be of major importance with regards to other target groups, e.g., non-governmental organizations.

Furthermore, this study analyzes the **relationship between corporate branding and consumers' product response** across countries. Taking a holistic perspective, including specific corporate associations as well as the overall evaluation of the company and testing theoretically derived hypotheses, broadens the knowledge of what these cause-effect-relationships look like. Thereby, I respond to Brown and Dacin's (1997) request to examining further corporate associations in addition to corporate ability and CSR and their influence on consumers' overall assessment of the company as well as investigating further contextual factors, e.g., different product categories.

Winer (1998, p. III) and more recently Steenkamp (2005, p. 6) as well as Keller and Lehmann (2006, p. 750) and Eden (2008, p. 2) highlight the **importance of studies focusing on cross-national research questions**. In more detail, Bello (2004) requests for further research in the area of marketing issues concerning transitional and emerging countries. Following those requests, my study focuses on the question whether

standardization across countries works and includes in a cross-sectional consumer study amongst Germany, France and the USA, Romania and Russia as emerging countries. Results indicate that in those more collectivistic countries the impact of corporate image on product loyalty is significantly higher than in the other countries observed. Extending the findings of Brown and Dacin (1997) as well as Berens, van Riel, and van Bruggen (2005), the present study advances the knowledge on corporate branding in an international context. Grounding on a schema-theoretic perspective, I analyze the impact of specific corporate associations and corporate image across five countries. Considering additional contextual factors, such as product category, country of origin knowledge, and several sociodemographics, the generalizability of the results is enhanced. The findings illustrate the importance of corporate image across the various groupings, while specific corporate associations, such as social and environmental responsibility, impact customer product response only under certain conditions.

#### *2.4.2 Managerial implications*

With regards to **managerial implications**, general recommendations for evaluating global corporate brands and adapting their positioning are derived. In particular, I highlight (1) the importance of a global marketing strategy taking account of country-specific particularities and thereby, illustrate (2) the need for an adequate instrument to evaluate whether the corporate branding strategy works across countries or not and give (3) guidance on how to adapt the company's strategy.

From an international point of view, **adopting a global marketing strategy** is necessary "for firms to achieve global economies of scale, deal with market interdependency, or seek cross-country synergies (Zou and Cavusgil 2002, p. 53)." However, international firms have to contend both with varying economic, competitive and cultural conditions in different countries and with the need to ensure a consistent external portrayal. These factors tend to slip into the background as corporate branding strategies are often developed on the basis of the organizational structures of product brand marketers in the home market, or assigned decentrally to the individual foreign subsidiaries. When managing an internationally standardized corporate brand, corporate brand

managers should be aware of these facts and monitor if the company's strategy is working.

The proposed model provides corporate brand managers with an **instrument to evaluate whether the corporate branding strategy works across countries or not**. Building upon the work of Walsh and Beatty (2007), the proposed model could be used as diagnostic tool. It is suited to gather benchmark data in FMCG firms regarding current levels of specific corporate associations and overall corporate image and their impact on consumers' product response. Referring to the results of invariance tests, the scales applied are also suitable for a cross-national evaluation. Such an approach would offer corporate brand management – which is mostly organized centrally from the headquarter supported by local representatives, who are responsible for the adaptation and coordination of country-specific communication – to evaluate the positioning of the corporate brand and the effectiveness of their corporate branding activities cross-nationally (Dawar and Parker 1994, p. 83). Results might provide support that the corporate branding strategy does not work, i.e., (1) corporate associations are not perceived similarly across countries or (2) corporate image does not significantly influence consumers' product response. Reasons and corresponding causes of actions are described in the following.

In the first case, a plausible reason is that those characteristics of the corporate identity that the senior management decides to communicate actively towards consumers, i.e., the specific corporate associations, are not communicated adequately and thus are not associated with a consumers' overall evaluation of the company in certain countries. Thus, brand managers need to find out, **which associations customer link to the corporate brand and which are rather not associated with it**. Detailed knowledge on the consumers' specific corporate association can be traced by letting them map their individual brand associations in order to identify detailed characteristics of the network of specific corporate associations in their memory on which consumers base their overall evaluation of the company (John Roedder et al. 2006, pp. 550-51). Thus, this map illustrates, what consumers link to the brand and identifies why some specific associations are less important in certain countries. To ensure a consistent external portrayal of the corporate brand, measures can be taken to strengthen less relevant specific corporate associations in the countries concerned.



In the latter case, it could be argued, that a favorable evaluation of the corporate brand alone does not influence consumer' product response (Farquhar 1989). The corporate brand is not visible enough in certain countries or rather the communication used to promote the corporate brand might not fit to the cultural characteristics of the country. Thus, respective courses of actions are needed to **strengthen the relevance of the corporate brand and make it easier to remember**, e.g., rearrange the position of the corporate brand logo on various products and shore up saliency of the corporate brand through corporate image campaigns. Referring to contextual factors, it has to be considered further that the existing branding strategy might not be suitable for the targeted customer group. However, corporate brand managers have to notice, that corporate branding might not be suitable for each company (Hatch and Schultz 2001, p. 8).

Further, results of the present study suggest, that looking at the direct effects of specific corporate associations would allow **corporate brand managers to consider possible particularities when adapting the general corporate branding strategy to specific countries**. Agreeing with Biehal and Sheinin (2007, p. 21), for example, it could be argued in the case of Germany and France that social and environmental responsibility might provide an effective "boost" to brands and contribute to their positioning in the consumers' mind.

### *2.4.3 Limitations and directions for future research*

Seeking to understand the value of corporate branding, particularly within an international context, **further testing is required to extend the findings of the present study** in several ways. In the following, I address issues regarding (1) the data basis, (2) the methodological approach as well as (3) further directions to disentangle the impact of corporate branding.

Clearly, researchers should **enhance the data basis** to further increase the generalizability of the results. Considering the power level for small effects, future studies may replicate the study using country-wide random sampling instead of quota sampling in three metropolitan areas. The present study used data collected only for one corporate brand. Future studies should focus on more than one company and survey other types

of industries and products. In this case, one would also be able to consider contextual factors on a firm or industry level basis. Furthermore, it would be worthwhile to analyze the implementation of internationally standardized corporate branding in several companies across several countries during a certain time period. Thus it would be possible to contrast successful and less successful implementations and to identify success factors.

From a methodological point of view, firstly, **longitudinal and experimental designs** could fill an important gap in my understanding of the observed relationships justifying the causal interpretation and clarify the directions of the relationships between specific corporate associations, corporate image, product loyalty, and other additional variables. Time may be included as a nested level in individual customers, as companies often lack knowledge on how brand change over time and whether these changes are the same for different consumer segments (Keller and Lehmann 2006).

Secondly, it would be valuable to consider **multiple levels of analysis** applying more advanced methodological approaches (Hitt et al. 2007, pp. 1385-86). The integration of insights from micro- and macro-level information, i.e., consumer-level as well as firm- and country-level data, is required to further advance knowledge on global brands in general and on international corporate brand management in particular. Advancing the methodological approach to analyze contextual factors would offer researchers the opportunity to draw more precise conclusions.

Further disentangling the impact of corporate branding, the consequences of implementing **other forms of mixed branding** in an international context, e.g., dual branding (Laforet and Saunders 2005, p. 319) could be analyzed and opposed to corresponding analyses of the endorsement strategy, e.g. by considering the moderating influence of corporate brand dominance (Berens, van Riel, and van Bruggen 2005). Agreeing with Berens, van Riel and van Bruggen (2005) it would also be a valuable contribution to current research on corporate branding to analyze the moderating influence of corporate brand dominance on the direct and indirect effects of corporate associations on consumers' product response across firms and countries.

Additional research should also explore the **relevance of other stakeholders**, e.g., employees, investors or journalists, in order to identify whether the model implied

holds true for further stakeholder groups. Modeling group-level contextual factors by applying e.g., multilevel structural equation modeling would help to disentangle more precisely the explanatory power of hypothesized cause-effect-relationships. Thus, more detailed conclusions could be drawn.

On a managerial level, it becomes interesting, **how specific corporate associations can be influenced across countries** and in addition how this affects consumers' corporate image and product response (Brown and Dacin 1997, p. 81). Additional research is also needed to investigate how specific corporate associations interact with each other and how such interactions affect both corporate image and consumers' product response cross-nationally. Moreover, it must be determined, to what extend personal values affect consumers' evaluation of the external portrayal of the company, i.e., if consumers' product response depends on the overlap of company's values communicated through the corporate brand with consumers' personal values.

## 2.5 Appendix

### 2.5.1 Definition, source and measurement of constructs

Construct	Definition and source	Measurement
Product loyalty (PLO)	Customers' conative loyalty toward the product brand, i.e., their behavioral intention to continue buying the product brand in the future (Oliver 1999, p. 35).	(PLO1) I like to buy [product brand] anytime. (PLO2) I will buy [product brand] on my next shopping trip. (PLO3) I will purchase [product brand] frequently in the next couple of months. (PLO4) I will buy [product brand] more than I will buy competitors' products in the future.
Corporate Image (CIM)	Customers' perceptions of a corporate brand as reflected by the brand associations held in consumer memory (Keller 1993, p. 3).	(CIM1) [Corporate brand] is a strong brand. (CIM2) [Corporate brand] is a unique brand. (CIM3) [Corporate brand] is a favorable brand.
Customer orientation (COR)	Customers' perception to which degree a company and its employees go to satisfy customer needs, and put customers at center of focus (Walsh and Beatty 2007, p. 135).	(COR1) [Corporate brand] cares about all of its customers regardless of how much money they spend. (COR2) [Corporate brand] employs people who try to meet their customers' needs. (COR3) [Corporate brand] employs people who are polite towards their customers. (COR4) [Corporate brand] takes customer rights seriously. (COR5) [Corporate brand] treats its customers fairly. (COR6) [Corporate brand] tries to meet its customers' needs.
Good employer (GEM)	Customers' perception how a company treats its employees and if that company is well-managed and has competent employees (Walsh and Beatty 2007, p. 133).	(GEM1) [Corporate brand] appears to take the needs of its employees seriously. (GEM2) [Corporate brand] appears to be a good employer. (GEM3) [Corporate brand] appears to have an excellent leadership style. (GEM4) [Corporate brand] appears to have high standards for its personnel management. (GEM5) [Corporate brand] appears to have competent staff. (GEM6) [Corporate brand] appears to be well organized. (GEM7) [Corporate brand] appears to treat its employees well.
Product range quality (PRQ)	Customers' perception to which degree a company offers innovative, high-quality products and services, which they stand behind (Walsh and Beatty 2007, p. 133).	(PRQ1) [Corporate brand] stands behind the product range that it offers. (PRQ2) [Corporate brand] is a strong, reliable company. (PRQ3) [Corporate brand] offers high-quality products. (PRQ4) [Corporate brand] develops innovative products.
Reliable and financially strong company (RFC)	Customers' perception of company's competence, solidity, and profitability and of firm's vision and investment potential (Walsh and	(RFC1) [Corporate brand] appears to have strong prospects for future growth. (RFC2) [Corporate brand] seems to be able to identify and make use of market opportunities.

	Beatty 2007, p. 133).	(RFC3)	[Corporate brand] seems to have a clear vision of its future.
		(RFC4)	[Corporate brand] appears to outperform competitors continuously.
		(RFC5)	[Corporate brand] looks like a good investment.
		(RFC6)	[Corporate brand] appears to be doing well financially.
		(RFC7)	[Corporate brand] appears to make financially sound decisions.
Social and environmental responsibility (SER)	Customers' perception to which degree a company sees and acts on environmental and social responsibilities (Walsh and Beatty 2007, p. 133).	(SER1)	[Corporate brand] would reduce its profits to ensure a clean environment.
		(SER2)	[Corporate brand] seems to make an effort to create new jobs.
		(SER3)	[Corporate brand] to be environmentally responsible.
		(SER4)	[Corporate brand] appears to support good causes.

## 2.5.2 Monte Carlo study

### 2.5.2.1 Population values

Model part	Parameter	Population value (condition 1)	Population value (condition 2)	
Structural model	CIM → PLO	.5	.6	
	COR → CIM	.3	.4	
	GEM → CIM	.1	.2	
	PRQ → CIM	.5	.6	
	RFC → CIM	.3	.4	
	SRE → CIM	.3	.4	
	COR → PLO	.1	.2	
	GEM → PLO	.1	.2	
	PRQ → PLO	.3	.4	
	RFC → PLO	.1	.2	
	SER → PLO	.1	.2	
	Measurement model	Factor loadings		.8
		Thresholds, 1 <sup>st</sup>		-1.5
Thresholds, 2 <sup>nd</sup>			-1.0	
Thresholds, 3 <sup>rd</sup>			-.5	
Thresholds, 4 <sup>th</sup>			0	
Thresholds, 5 <sup>th</sup>			.5	
Thresholds, 6 <sup>th</sup>			1.0	
Residual variances <sup>a</sup>			1	
Variances <sup>a</sup>			1	
Covariances <sup>b</sup>		.3		

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> Necessary requirement for a WLSMV estimation using Theta parameterization.

<sup>b</sup> Covariances among exogenous latent variables.

2.5.2.2 *Parameter estimate bias, standard error bias, coverage, and power for structural parameters (condition 1 and 2, 200-1400 observations)*

Parameter	Pop. val.	Estimates	Observations						
			200	400	600	800	1000	1200	1400
CIM → PLO	.5	PE Bias	.0112	.0092	.0068	.0030	.0042	.0058	.0072
		SE Bias	-.0609	-.0124	-.0634	.0183	.0094	-.0051	.0440
		95% Cover	.946	.954	.942	.966	.950	.956	.960
		% Sig Coeff	.952	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.0197	.0078	.0070	.0023	.0037	.0057	.0073
		SE Bias	-.0665	-.0065	-.0562	.0378	.0093	-.0086	.0631
		95% Cover	.952	.950	.936	.966	.956	.950	.956
		% Sig Coeff	.952	1.000	1.000	1.000	1.000	1.000	1.000
COR → CIM	.3	PE Bias	.0253	.0080	-.0027	-.0013	.0040	.0043	.0017
		SE Bias	-.0277	-.0139	-.0261	.0047	-.0069	-.0113	-.0202
		95% Cover	.948	.952	.948	.956	.964	.962	.944
		% Sig Coeff	.636	.922	.980	.998	1.000	1.000	1.000
	.4	PE Bias	.0340	.0145	.0040	.0042	.0080	.0077	.0055
		SE Bias	-.0338	-.0119	-.0300	-.0014	-.0127	-.0274	-.0368
		95% Cover	.956	.954	.942	.958	.954	.942	.942
		% Sig Coeff	.840	.990	1.000	1.000	1.000	1.000	1.000
GEM → CIM	.1	PE Bias	.0250	.0010	-.0070	-.0160	-.0090	-.0140	-.0100
		SE Bias	-.0703	-.0202	-.0535	-.0453	-.0127	-.0273	-.0275
		95% Cover	.956	.944	.940	.940	.936	.944	.942
		% Sig Coeff	.134	.204	.292	.348	.452	.482	.594
	.2	PE Bias	.0335	.0025	-.0030	-.0055	-.0020	-.0050	-.0035
		SE Bias	-.0675	-.0138	-.0457	-.0414	-.0136	-.0400	-.0298
		95% Cover	.960	.934	.942	.932	.940	.936	.942
		% Sig Coeff	.336	.590	.752	.870	.934	.968	.978
PRQ → CIM	.5	PE Bias	.0672	.0272	.0192	.0164	.0116	.0098	.0068
		SE Bias	-.1039	-.0167	-.0217	.0014	.0000	.0101	.0278
		95% Cover	.936	.944	.952	.952	.962	.956	.962
		% Sig Coeff	.958	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.0722	.0320	.0210	.0183	.0135	.0117	.0083
		SE Bias	-.1049	-.0330	-.0176	.0099	.0014	.0185	.0321
		95% Cover	.952	.948	.948	.960	.960	.960	.952
		% Sig Coeff	.992	1.000	1.000	1.000	1.000	1.000	1.000
RFC → CIM	.3	PE Bias	.0980	.0433	.0247	.0233	.0127	.0090	.0070
		SE Bias	-.0675	-.0542	-.0174	.0128	.0162	-.0410	.0281
		95% Cover	.954	.940	.944	.946	.946	.934	.956
		% Sig Coeff	.712	.932	.990	.994	1.000	1.000	1.000

	.4	PE Bias	.0933	.0418	.0245	.0235	.0132	.0105	.0088
		SE Bias	-.0352	-.0314	-.0112	.0378	.0321	-.0228	.0384
		95% Cover	.956	.950	.942	.950	.950	.938	.962
		% Sig Coeff	.892	.996	1.000	1.000	1.000	1.000	1.000
SER → CIM	.3	PE Bias	.0543	.0457	.0293	.0223	.0160	.0140	.0143
		SE Bias	.0049	-.0031	-.0305	-.0351	-.0286	-.0363	-.0134
		95% Cover	.970	.956	.948	.950	.958	.944	.958
		% Sig Coeff	.620	.906	.974	.994	1.000	1.000	1.000
	.4	PE Bias	.0583	.0435	.0280	.0215	.0160	.0143	.0140
		SE Bias	-.0025	-.0174	-.0325	-.0411	-.0235	-.0366	-.0210
		95% Cover	.970	.950	.958	.952	.956	.948	.948
		% Sig Coeff	.810	.988	.998	1.000	1.000	1.000	1.000
COR → PLO	.1	PE Bias	-.0690	-.0270	-.0080	-.0060	-.0040	-.0050	-.0100
		SE Bias	-.0429	-.0510	-.0134	-.0619	-.0855	-.0301	-.0285
		95% Cover	.960	.948	.954	.944	.940	.952	.942
		% Sig Coeff	.138	.210	.312	.370	.450	.516	.558
	.2	PE Bias	-.0010	-.0025	-.0030	-.0055	-.0050	-.0065	-.0105
		SE Bias	-.0400	-.0315	-.0047	-.0295	-.0652	-.0314	-.0128
		95% Cover	.954	.950	.954	.950	.944	.940	.940
		% Sig Coeff	.266	.492	.664	.786	.838	.914	.950
GEM → PLO	.1	PE Bias	.0090	.0170	.0160	.0020	-.0080	.0030	.0070
		SE Bias	-.0667	.0302	.0284	-.0279	.0038	-.0103	.0446
		95% Cover	.932	.954	.958	.960	.958	.956	.956
		% Sig Coeff	.140	.222	.282	.386	.468	.568	.600
	.2	PE Bias	.0490	.0290	.0215	.0075	.0025	.0035	.0025
		SE Bias	-.0539	.0283	.0066	-.0253	.0034	-.0239	.0490
		95% Cover	.948	.956	.950	.942	.958	.948	.964
		% Sig Coeff	.348	.586	.766	.860	.932	.968	.996
PRQ → PLO	.3	PE Bias	.0593	.0217	.0187	.0197	.0117	-.0017	-.0033
		SE Bias	-.0231	-.0009	-.0089	-.0129	-.0489	-.0506	-.0435
		95% Cover	.956	.950	.960	.954	.954	.938	.952
		% Sig Coeff	.526	.804	.926	.976	.992	.998	.998
	.4	PE Bias	.0635	.0262	.0205	.0197	.0122	-.0010	-.0030
		SE Bias	-.0413	.0054	.0038	.0022	-.0420	-.0474	-.0333
		95% Cover	.972	.958	.956	.954	.960	.942	.944
		% Sig Coeff	.614	.906	.978	.996	.996	.998	1.000
RFC → PLO	.1	PE Bias	.0070	.0060	.0090	.0040	-.0030	-.0070	-.0140
		SE Bias	-.0671	.0263	.0042	.0213	.0221	.0060	.0332
		95% Cover	.938	.960	.952	.952	.956	.954	.958
		% Sig Coeff	.140	.202	.294	.368	.470	.510	.552





GEM → CIM	.1	PE Bias	-.0070	.0090	.0110	.0140	.0170	.0200	.0130
		SE Bias	.0361	.0125	.0052	.0055	-.0278	-.0088	.0000
		95% Cover	.952	.944	.956	.958	.944	.944	.956
		% Sig Coeff	.638	.706	.754	.796	.808	.852	.882
	.2	PE Bias	-.0020	.0065	.0065	.0080	.0100	.0115	.0075
		SE Bias	.0270	.0118	.0049	.0052	-.0313	-.0165	-.0029
		95% Cover	.948	.952	.956	.946	.940	.944	.950
		% Sig Coeff	.990	.996	.996	.998	1.000	1.000	1.000
PRQ → CIM	.5	PE Bias	.0080	.0066	.0066	.0042	.0018	.0014	.0014
		SE Bias	.0277	.0700	.0266	.0376	.0343	.0574	.0456
		95% Cover	.960	.962	.962	.960	.944	.966	.962
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.0100	.0087	.0080	.0052	.0032	.0025	.0025
		SE Bias	.0288	.0592	.0139	.0254	.0289	.0373	.0313
		95% Cover	.954	.948	.958	.958	.950	.956	.954
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
RFC → CIM	.3	PE Bias	.0080	.0040	.0057	.0030	.0027	.0023	.0050
		SE Bias	.0277	.0072	.0000	.0188	-.0028	.0000	.0060
		95% Cover	.954	.954	.948	.952	.946	.950	.962
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0095	.0065	.0067	.0045	.0040	.0038	.0057
		SE Bias	.0366	.0022	.0023	.0251	.0156	.0163	.0140
		95% Cover	.954	.948	.950	.958	.954	.958	.958
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SER → CIM	.3	PE Bias	.0100	.0063	.0050	.0023	.0010	.0027	.0017
		SE Bias	.0042	-.0402	-.0380	-.0421	-.0369	-.0622	-.0109
		95% Cover	.952	.942	.946	.938	.942	.926	.944
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0113	.0085	.0070	.0045	.0035	.0042	.0040
		SE Bias	-.0038	-.0391	-.0372	-.0432	-.0320	-.0685	-.0151
		95% Cover	.948	.952	.942	.942	.940	.928	.942
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
COR → PLO	.1	PE Bias	-.0010	-.0020	-.0030	-.0030	.0040	.0040	.0070
		SE Bias	-.0429	-.0475	-.0148	-.0078	-.0293	.0116	-.0117
		95% Cover	.932	.946	.948	.940	.944	.944	.942
		% Sig Coeff	.608	.632	.690	.746	.784	.836	.850
	.2	PE Bias	-.0050	-.0060	-.0060	-.0045	-.0010	-.0005	.0020
		SE Bias	-.0361	-.0402	-.0216	-.0160	-.0213	.0025	-.0379
		95% Cover	.940	.940	.946	.940	.950	.948	.938
		% Sig Coeff	.966	.980	.996	.994	.996	1.000	.998

GEM → PLO	.1	PE Bias	.0160	.0140	.0120	.0170	.0230	.0260	.0160	
		SE Bias	-.0393	-.0175	.0449	.0000	-.0286	-.0181	.0228	
		95% Cover	.934	.952	.956	.946	.950	.954	.948	
		% Sig Coeff	.674	.732	.762	.814	.830	.880	.904	
	.2	PE Bias	.0080	.0065	.0060	.0090	.0120	.0135	.0080	
		SE Bias	-.0437	-.0114	.0675	-.0051	-.0310	-.0217	.0206	
		95% Cover	.944	.954	.972	.958	.948	.950	.948	
		% Sig Coeff	.988	.996	1.000	1.000	1.000	1.000	1.000	
	PRQ → PLO	.3	PE Bias	-.0047	-.0103	-.0120	-.0117	-.0107	-.0100	-.0103
			SE Bias	-.0378	-.0176	.0127	-.0421	-.0584	-.0413	-.0429
			95% Cover	.946	.952	.948	.944	.936	.926	.940
			% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000
.4		PE Bias	-.0043	-.0090	-.0090	-.0083	-.0075	-.0075	-.0075	
		SE Bias	-.0340	-.0118	.0072	-.0468	-.0488	-.0337	-.0487	
		95% Cover	.938	.956	.958	.936	.954	.938	.936	
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
RFC → PLO		.1	PE Bias	-.0210	-.0230	-.0180	-.0110	-.0190	-.0150	-.0150
			SE Bias	.0023	-.0190	-.0176	-.0133	-.0300	-.0201	-.0294
			95% Cover	.950	.952	.936	.942	.942	.944	.936
			% Sig Coeff	.612	.654	.694	.764	.758	.826	.834
	.2	PE Bias	-.0130	-.0155	-.0115	-.0070	-.0110	-.0095	-.0085	
		SE Bias	.0290	.0086	.0091	.0048	-.0146	.0052	-.0132	
		95% Cover	.966	.960	.952	.942	.952	.944	.948	
		% Sig Coeff	.984	.988	.994	.994	.998	.998	.998	
	SER → PLO	.1	PE Bias	-.0020	.0110	.0170	.0160	.0070	-.0040	.0100
			SE Bias	.0238	-.0132	.0144	.0176	-.0422	.0027	.0056
			95% Cover	.960	.934	.948	.954	.936	.958	.954
			% Sig Coeff	.556	.616	.692	.698	.728	.766	.800
.2		PE Bias	-.0055	.0010	.0050	.0050	.0010	-.0050	.0035	
		SE Bias	.0267	-.0059	.0277	.0132	-.0330	.0096	.0074	
		95% Cover	.962	.932	.946	.948	.944	.954	.960	
		% Sig Coeff	.960	.970	.986	.992	.998	.998	.998	

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employee; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

Pop. Val.: Population value.

PE Bias: Parameter estimate bias, i.e., population value minus parameter estimate average over the replications of the Monte Carlo study whereby the result is divided by the population value.

SE Bias: Standard error bias, i.e., population value minus standard error average over the replications of the Monte Carlo study whereby the result is divided by the population value.

95% Cover: Coverage, i.e., proportion of replications for which the 95% confidence interval contains the true parameter value.

% Sig Coeff: Power, i.e., proportion of replications for which the null hypothesis that a parameter is equal to zero is rejected for each parameter at the .05 level.

### 2.5.3 Country-specific sample and population demographics according to gender, age groups and highest educational attainment (in percent)

#### 2.5.3.1 Germany

	Male				Female			
	15-24	25-49	50-64	65+	15-24	25-49	50-64	65+
<b>Cosmetics' sample values (n=338)</b>								
High School	3.85	5.33	.89	1.18	3.85	2.96	1.185	.89
Community College / Vocational School	1.18	5.92	2.07	1.18	.59	9.76	6.21	4.44
College / University	2.96	13.9	6.51	.89	2.96	1.7	5.03	.59
Other	.30	.30	1.48	.59	.30	1.18	.30	.59
<b>Detergents' sample values (n=459)</b>								
High School	5.01	3.05	.44	1.96	4.14	3.05	.22	4.58
Community College / Vocational School	.44	5.01	2.83	6.10	.22	7.84	5.23	9.37
College / University	.44	1.2	6.10	4.36	1.09	6.32	3.70	3.92
Other	.22	.44	.87	.65	.22	.87	.22	.87
<b>Adhesives' sample values (n=403)</b>								
High School	3.47	3.23	.74	.25	2.98	2.23	.99	.50
Community College / Vocational School	1.99	7.44	3.72	4.71	1.74	7.44	3.97	5.71
College / University	1.24	1.4	4.96	3.47	1.49	1.7	5.21	5.71
Other	.25	.25	.99	1.74	.25	.25	.50	1.49
<b>Census' population values (Eurostat 2009)</b>								
High School	3.44	3.06	1.53	1.42	3.45	3.84	3.29	5.89
Community College / Vocational School	1.61	11.8	6.08	4.19	1.40	12.2	6.12	4.29
College / University	.09	5.83	3.21	1.71	.15	4.30	1.49	.62
Other	1.57	.87	.92	.78	1.45	.99	1.06	1.31

#### 2.5.3.2 France

	Male				Female			
	15-24	25-49	50-64	65+	15-24	25-49	50-64	65+
<b>Cosmetics' sample values (n=400)</b>								
High School	2.25	2.50	3.75	1.25	2.75	5.00	4.25	1.25
Community College / Vocational School	.50	2.00	.50	1.00	.50	1.50	2.00	3.25
College / University	4.50	9.75	5.00	1.75	3.00	9.00	2.75	2.25
Other	.75	6.50	1.75	4.25	1.50	5.50	2.50	5.00
<b>Detergents' sample values (n=404)</b>								
High School	1.24	4.46	1.98	3.22	2.23	4.95	4.21	3.71
Community College / Vocational School	.50	2.48	2.72	1.49	.50	2.72	1.24	3.47

College / University	4.46	6.93	1.73	.25	3.22	8.42	1.49	1.73
Other	1.73	7.185	4.46	3.22	1.98	4.95	4.46	2.72
<b>Adhesives' sample values (n=396)</b>								
High School	.51	4.80	4.04	1.01	1.01	7.32	4.04	3.54
Community College / Vocational School	.51	1.52	1.26	2.02	.51	1.77	2.02	2.27
College / University	5.30	7.83	1.26	.51	5.30	6.82	1.77	.76
Other	1.77	6.31	4.55	4.80	.76	5.05	3.79	5.30
<b>Census' population values (Eurostat 2009)</b>								
High School	2.15	1.54	.59	.48	2.26	2.02	.97	1.51
Community College / Vocational School	3.39	1.8	3.64	1.57	3.13	9.51	2.955	1.51
College / University	.96	5.21	1.47	.67	1.28	5.91	1.21	.52
Other	1.71	4.67	3.87	5.21	1.28	5.12	4.74	8.57

### 2.5.3.3 Romania

	Male				Female			
	15-24	25-49	50-64	65+	15-24	25-49	50-64	65+
<b>Cosmetics' sample value (n=399)</b>								
High School	4.51	4.76	3.01	1.50	3.51	6.77	3.76	2.76
Community College / Vocational School	.50	2.26	.50	2.01	.50	.75	1.25	2.26
College / University	3.51	13.0	5.76	2.26	3.76	14.0	5.26	3.01
Other	.50	2.01	.75	1.50	.50	.25	.75	2.51
<b>Detergents' sample value (n=401)</b>								
High School	5.74	5.49	2.99	1.00	2.99	7.98	2.74	1.75
Community College / Vocational School	.50	1.25	1.75	2.74	.25	1.50	1.25	3.24
College / University	2.49	13.7	4.99	2.49	4.24	1.9	6.23	2.00
Other	.25	1.50	.25	1.00	1.25	1.25	.75	3.49
<b>Adhesives' sample value (n=400)</b>								
High School	4.75	5.75	1.75	1.75	4.50	6.75	2.0	.75
Community College / Vocational School	.25	1.5	1.75	1.50	.75	3.00	4.75	4.00
College / University	3.50	13.5	6.00	2.50	1.25	11.0	3.5	4.00
Other	.50	1.255	.50	1.50	2.00	1.00	.75	1.75
<b>Census' population values (Eurostat 2009)</b>								
High School	6.50	1.6	3.61	2.70	7.01	14.0	5.23	3.20
Community College / Vocational School	1.61	7.69	3.52	.75	.93	4.13	1.20	.32
College / University	.16	2.41	1.00	.52	.24	2.34	.72	.27
Other	1.35	1.09	1.78	3.09	1.04	1.26	3.48	6.17

2.5.3.4 *Russia*

	Male				Female			
	15-24	25-49	50-64	65+	15-24	25-49	50-64	65+
<b>Cosmetics' sample values (n=402)</b>								
High School	4.23	1.00	.50	.25	3.98	1.49	.50	.25
Community College / Vocational School	1.74	5.22	2.24	1.24	1.24	7.21	5.97	3.23
College / University	3.48	14.9	5.72	3.48	3.48	13.7	4.48	7.21
Other	.50	.25	.50	.25	.75	.25	.25	.50
<b>Detergents' sample values (n=399)</b>								
High School	2.51	2.76	1.00	1.75	2.51	2.01	2.51	5.01
Community College / Vocational School	1.50	5.76	3.01	2.76	1.25	5.26	4.01	3.51
College / University	5.51	12.8	4.26	.25	5.26	14.8	4.51	1.75
Other	.50	.25	.25	.50	.50	.50	.25	1.00
<b>Adhesives' sample values (n=399)</b>								
High School	3.01	2.01	.75	1.50	1.25	2.26	1.75	3.76
Community College / Vocational School	.75	6.77	4.26	2.01	1.75	6.02	3.26	3.76
College / University	5.51	12.5	3.51	1.00	6.02	13.55	6.02	3.01
Other	.75	.25	.25	.75	.50	.50	.25	.75
<b>Census' population values</b> (Information and Publishing Center «Statistics of Russia» 2009)								
High School	3.82	8.39	2.68	.81	3.71	6.61	2.82	1.37
Community College / Vocational School	2.23	7.50	2.28	.85	2.53	9.63	3.57	1.64
College / University	.47	4.19	1.74	.70	.64	5.34	1.99	.90
Other	3.60	2.03	1.76	2.62	2.99	1.49	2.45	6.63

2.5.3.5 *USA*

	Male				Female			
	15-24	25-49	50-64	65+	15-24	25-49	50-64	65+
<b>Cosmetics' sample values (n=693)</b>								
High School	4.33	3.17	2.60	3.03	5.63	4.76	2.89	3.90
Community College / Vocational School	2.60	5.34	1.15	1.155	2.89	7.65	2.02	.14
College / University	4.62	1.3	3.32	2.02	4.04	12.1	3.03	1.44
Other	.29	.87	.43	1.15	.29	1.44	1.15	.29
<b>Detergents' sample values (n=367)</b>								
High School	3.00	4.90	1.09	4.09	2.45	5.72	3.54	2.18
Community College / Vocational School	2.18	4.63	1.63	.27	1.91	7.63	2.18	2.72
College / University	6.54	9.54	2.18	1.09	4.63	12.5	2.72	.82
Other	.54	1.09	.82	2.18	.54	1.36	1.36	1.91
<b>Adhesives' sample values (n=140)</b>								

High School	7.14	12.1	4.29	1.43	2.14	3.57	3.57	1.43
Community College / Vocational School	2.86	7.14	2.14	.71	1.43	1.43	1.43	.71
College / University	1.43	13.6	2.86	2.14	2.86	1.43	1.43	1.43
Other	1.43	4.29	2.86	4.29	1.43	1.43	.71	1.43
<b>Census' population values</b>								
(United States Census Bureau 2009)								
High School	3.97	11.46	4.48	2.83	4.03	11.57	5.44	4.58
Community College / Vocational School	.14	1.09	.37	.15	.13	1.29	.48	.25
College / University	.52	7.53	3.47	1.50	.72	8.32	2.97	1.33
Other	4.36	3.06	1.36	1.94	3.94	2.57	1.48	2.65

## 2.5.4 Reliability and validity testing

### 2.5.4.1 Reliability and convergent validity

	Germany		France		Romania		Russia		USA	
	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$
<b>Product loyalty</b>	$\alpha=.927$ AVE=.810 CR=.944		$\alpha=.861$ AVE=.643 CR = .877		$\alpha=.861$ AVE=.689 CR = .898		$\alpha=.880$ AVE=.707 CR = .906		$\alpha=.815$ AVE=.528 CR = .817	
PLO1	.822	.918	.702	.808	.746	.810	.729	.792	.593	.648
PLO2	.839	.902	.700	.784	.802	.798	.695	.873	.680	.707
PLO3	.863	.899	.747	.835	.725	.866	.819	.882	.683	.726
PLO4	.801	.871	.684	.775	.746	.855	.723	.822	.581	.868
<b>Corporate image</b>	$\alpha=.927$ AVE=.824 CR=.933		$\alpha=.849$ AVE=.699 CR = .872		$\alpha=.874$ AVE=.756 CR = .901		$\alpha=.881$ AVE=.780 CR = .912		$\alpha=.942$ AVE=.874 CR = .953	
CIM1	.899	.940	.683	.776	.746	.886	.791	.928	.845	.915
CIM2	.831	.936	.769	.881	.802	.873	.758	.834	.910	.962
CIM3	.829	.899	.708	.853	.725	.833	.764	.880	.884	.923
<b>Customer orientation</b>	$\alpha=.947$ AVE=.829 CR=.965		$\alpha=.934$ AVE=.781 CR = .954		$\alpha=.930$ AVE=.745 CR = .944		$\alpha=.910$ AVE=.744 CR = .943		$\alpha=.950$ AVE=.805 CR = .960	
COR1	.761	.829	.769	.836	.756	.858	.686	.813	.800	.848
COR2	.835	.860	.762	.842	.824	.854	.728	.828	.825	.870
COR3	.864	.926	.842	.910	.796	.831	.734	.822	.897	.938
COR4	.847	.915	.798	.903	.850	.872	.780	.867	.883	.857
COR5	.887	.910	.826	.887	.766	.920	.817	.885	.878	.903
COR6	.843	.943	.830	.879	.789	.848	.764	.907	.793	.917
<b>Good employer</b>	$\alpha=.958$ AVE=.825 CR=.970		$\alpha=.881$ AVE=.600 CR = .911		$\alpha=.936$ AVE=.777 CR = .960		$\alpha=.907$ AVE=.677 CR = .935		$\alpha=.960$ AVE=.815 CR = .968	
GEM1	.798	.872	.632	.762	.775	.856	.696	.796	.793	.864
GEM2	.862	.904	.623	.694	.711	.799	.681	.771	.852	.881
GEM3	.890	.915	.715	.794	.820	.885	.742	.820	.881	.901

GEM4	.900	.946	.694	.791	.850	.923	.740	.837	.892	.911
GEM5	.852	.902	.629	.757	.828	.925	.753	.855	.884	.906
GEM6	.804	.876	.690	.819	.765	.854	.681	.782	.844	.916
GEM7	.860	.893	.683	.793	.802	.881	.772	.868	.871	.924
<b>Product range quality</b>	$\alpha=.911$ AVE=.786 CR=.935	$\alpha=.785$ AVE=.548 CR = .825	$\alpha=.890$ AVE=.723 CR = .910	$\alpha=.863$ AVE=.694 CR = .896	$\alpha=.915$ AVE=.780 CR = .933					
PRQ1	.795	.894	.538	.714	.766	.882	.694	.856	.805	.924
PRQ2	.850	.918	.642	.778	.820	.896	.758	.876	.846	.893
PRQ3	.824	.872	.598	.680	.740	.788	.749	.828	.800	.826
PRQ4	.727	.830	.591	.770	.707	.786	.645	.690	.775	.876
<b>Reliable and financially strong company</b>	$\alpha=.933$ AVE=.745 CR=.953	$\alpha=.873$ AVE=.562 CR = .898	$\alpha=.931$ AVE=.709 CR = .944	$\alpha=.942$ AVE=.726 CR = .949	$\alpha=.921$ AVE=.672 CR = .934					
RFC1	.780	.832	.682	.781	.715	.760	.803	.845	.779	.849
RFC2	.831	.895	.640	.756	.812	.905	.806	.835	.739	.725
RFC3	.815	.892	.593	.824	.807	.875	.820	.894	.752	.854
RFC4	.787	.865	.695	.626	.786	.864	.815	.850	.767	.845
RFC5	.769	.874	.627	.754	.772	.807	.789	.849	.673	.819
RFC6	.755	.818	.612	.683	.785	.823	.808	.836	.748	.777
RFC7	.756	.820	.710	.786	.765	.818	.816	.850	.824	.880
<b>Social and environmental responsibility</b>	$\alpha=.926$ AVE=.886 CR=.964	$\alpha=.860$ AVE=.645 CR = .865	$\alpha=.911$ AVE=.838 CR = .947	$\alpha=.855$ AVE=.719 CR = .895	$\alpha=.880$ AVE=.740 CR = .905					
SER1	.768	.799	.731	.811	.781	.825	.698	.751	.660	.668
SER2	.850	.912	.709	.809	.805	.897	.651	.768	.807	.909
SER3	.871	.931	.733	.867	.883	.903	.708	.813	.783	.821
SER4	.843	.973	.658	.777	.785	.937	.740	.891	.731	.883

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; ITC: Item to total correlation;  $\lambda_S$ : Standardized loading on the latent variable based on a confirmatory factor analysis (all significant with  $p < .001$ );  $\alpha$ : Coefficient alpha; AVE: Average variance extracted; CR: Composite reliability.  
 $\chi^2(246)=1638.253$  ( $p=.000$ ), CFI=.951, TLI=.987, RMSEA=.069.

### 2.5.4.2 Discriminant validity

	PLO	CIM	COR	GEM	PRQ	RFC	SER
<b>Germany</b>							
PLO	.81	-	-	-	-	-	-
CIM	.51	.82	-	-	-	-	-
COR	.26	.39	.83	-	-	-	-
GEM	.26	.41	.47	.82	-	-	-
PRQ	.33	.46	.39	.51	.79	-	-
RFC	.24	.40	.42	.49	.55	.75	-
SER	.26	.35	.46	.49	.34	.41	.89

**France**

PLO	.64	-	-	-	-	-	-
CIM	.21	.70	-	-	-	-	-
COR	.16	.22	.78	-	-	-	-
GEM	.20	.31	.35	.60	-	-	-
PRQ	.21	.27	.25	.44	.55	-	-
RFC	.15	.28	.30	.43	.50	.56	-
SER	.18	.21	.24	.34	.21	.24	.64

**Romania**

PLO	.69	-	-	-	-	-	-
CIM	.56	.76	-	-	-	-	-
COR	.25	.35	.74	-	-	-	-
GEM	.33	.44	.45	.78	-	-	-
PRQ	.34	.39	.23	.29	.72	-	-
RFC	.24	.36	.28	.33	.33	.71	-
SER	.30	.45	.31	.45	.26	.21	.84

**Russia**

PLO	.71	-	-	-	-	-	-
CIM	.55	.78	-	-	-	-	-
COR	.35	.40	.74	-	-	-	-
GEM	.45	.48	.59	.68	-	-	-
PRQ	.49	.40	.33	.36	.69	-	-
RFC	.29	.31	.28	.34	.35	.73	-
SER	.38	.40	.33	.50	.28	.24	.72

**USA**

PLO	.53						
CIM	.22	.87					
COR	.23	.44	.81				
GEM	.16	.39	.64	.82			
PRQ	.27	.48	.52	.48	.78		
RFC	.18	.26	.24	.21	.32	.67	
SER	.13	.39	.47	.39	.38	.18	.74

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

Note: The AVE of each latent variable is listed in the diagonal, whereas off-diagonal elements are the square of the correlation between the corresponding latent variables. The diagonal elements have to be greater than the off-diagonal elements in their corresponding rows and columns (Fornell and Larcker 1981, p. 46).



## 2.5.5 Measurement invariance testing

### 2.5.5.1 Countries

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1638.429 (.000)	-	.951 (-)	.987 (-)	.069 (-)
Model 2: Thresholds and factor loadings constrained	1336.492 (.000)	245.795 (.0001)	.963 (.012)	.991 (.004)	.057 (-.012)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	1379.916 (.000)	160.752 (.1610)	.961 (.010)	.990 (.003)	.059 (-.010)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: RFC2, RFC3, RFC6, RFC7, CIM3, SER1, COR6, and GEM3.

### 2.5.5.2 Product categories

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1186.677 (.000)	-	.959 (-)	.990 (-)	.053 (-)
Model 2: Thresholds and factor loadings constrained	1011.398 (.000)	135.182 (.0760)	.967 (.008)	.993 (.003)	.045 (-.008)

### 2.5.5.3 Country of origin knowledge

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1095.276 (.000)	-	.956 (-)	.990 (-)	.051 (-)
Model 2: Thresholds and factor loadings constrained	955.802 (.000)	105.340 (.0002)	.963 (.007)	.992 (.002)	.045 (-.006)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	988.638 (.000)	58.091 (.1288)	.961 (.005)	.992 (.002)	.047 (-.004)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PLO2, CIM2, SER4, PRQ3, COR4, COR5, COR6, GEM4, GEM5, RFC1, RFC2, and RFC6.

## 2.5.5.4 Education

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1301.863 (.000)	-	.965 (-)	.989 (-)	.063 (-)
Model 2: Thresholds and factor loadings constrained	1126.943 (.000)	241.266 (.0001)	.971 (.006)	.992 (.003)	.053 (-.010)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	1206.597 (.000)	111.103 (.1551)	.968 (.003)	.991 (.002)	.058 (-.005)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PLO1, PLO3, CIM2, SER1, SER4, PRQ3, COR4, GEM1, GEM2, GEM3, GEM4, GEM5, COR6, RFC1, RFC3, RFC5, RFC6, and RFC7.

## 2.5.5.5 Age

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1234.319 (.000)	-	.956 (-)	.989 (-)	.059 (-)
Model 2: Thresholds and factor loadings constrained	1032.655 (.000)	255.946 (.000)	.965 (.009)	.992 (.003)	.051 (-.008)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	1148.710 (.000)	90.892 (.1698)	.960 (.004)	.990 (.001)	.055 (-.004)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PLO3, PLO4, CIM3, SER1, SER4, PRQ2, PRQ3, COR1, COR3, COR4, COR5, GEM1, GEM2, GEM4, GEM5, GEM7, RFC1, RFC4, RFC5, RFC6, and RFC7.

## 2.5.5.6 Gender

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1260.889 (.000)	-	.952 (-)	.990 (-)	.050 (-)
Model 2: Thresholds and factor loadings constrained	1137.050 (.000)	153.566 (.000)	.958 (.006)	.992 (.002)	.045 (-.005)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	1204.766 (.000)	49.883 (.0939)	.955 (.003)	.991 (.001)	.048 (-.002)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PLO3, PLO4, CIM2, SER3, SER4, PRQ2, PRQ3, COR1, COR3, COR4, COR6, GEM1, GEM5, GEM6, RFC1, RFC2, RFC4, RFC5, and RFC6.

## 2.5.6 Descriptive sample statistics

	Mean and standard deviation of model constructs						
	PLO	CIM	COR	GEM	PRQ	SER	RFC
	mean (st.d.)	mean (st.d.)	mean (st.d.)	mean (st.d.)	mean (st.d.)	mean (st.d.)	mean (st.d.)
<b>Countries</b>							
GER	4.84 (1.34)	4.87 (1.19)	4.51 (1.01)	4.56 (.98)	5.10 (1.06)	4.26 (1.14)	4.80 (1.02)
FRA	4.88 (1.28)	4.83 (1.12)	4.59 (1.01)	4.54 (.89)	5.14 (.95)	4.27 (1.16)	4.88 (.81)
ROM	4.90 (1.28)	5.07 (1.06)	4.62 (1.02)	4.68 (.97)	5.19 (1.06)	4.38 (1.08)	4.76 (1.15)
RUS	4.80 (1.30)	4.91 (1.09)	4.41 (.89)	4.53 (.90)	5.19 (.94)	4.29 (1.01)	4.58 (1.23)
USA	4.81 (1.32)	4.56 (1.37)	4.41 (1.14)	4.41 (1.08)	4.72 (1.21)	4.16 (1.24)	4.89 (.92)
<b>Product categories</b>							
DET	4.90 (1.36)	4.94 (1.16)	4.52 (1.00)	4.55 (.96)	5.14 (1.07)	4.29 (1.12)	4.82 (1.01)
COS	4.86 (1.38)	4.85 (1.25)	4.52 (1.05)	4.59 (1.02)	5.08 (1.10)	4.26 (1.16)	4.87 (1.01)
ADH	4.73 (1.25)	4.84 (1.14)	4.48 (.98)	4.54 (.96)	5.09 (.97)	4.24 (1.14)	4.68 (1.05)
<b>Country of origin knowledge</b>							
KNO	4.91 (1.34)	5.00 (1.17)	4.56 (1.00)	4.63 (.98)	5.21 (1.03)	4.30 (1.14)	4.86 (1.01)
UKN	4.69 (1.32)	4.62 (1.19)	4.39 (1.04)	4.42 (.98)	4.88 (1.08)	4.19 (1.14)	4.68 (1.04)
<b>Education</b>							
SHO	4.73 (1.46)	4.80 (1.24)	4.48 (1.06)	4.57 (1.03)	5.05 (1.11)	4.18 (1.21)	4.85 (.94)
COM	4.92 (1.28)	4.92 (1.22)	4.53 (1.03)	4.60 (.99)	5.12 (1.10)	4.34 (1.14)	4.82 (1.04)
STU	4.86 (1.31)	4.90 (1.15)	4.51 (.97)	4.54 (.94)	5.15 (1.00)	4.25 (1.09)	4.77 (1.07)
OTH	4.85 (1.29)	4.82 (1.15)	4.52 (1.03)	4.52 (1.00)	5.00 (1.03)	4.35 (1.17)	4.78 (1.00)
<b>Age</b>							
AGE1	4.69 (1.37)	4.75 (1.28)	4.47 (1.07)	4.50 (1.04)	5.02 (1.05)	3.94 (1.17)	4.87 (.96)

AGE2	4.88 (1.34)	4.94 (1.16)	4.52 (.96)	4.60 (.95)	5.14 (1.05)	4.34 (1.13)	4.84 (1.00)
AGE3	4.91 (1.26)	4.82 (1.11)	4.51 (.98)	4.54 (.93)	5.14 (1.01)	4.36 (1.05)	4.76 (1.00)
AGE4	4.80 (1.37)	4.90 (1.25)	4.52 (1.11)	4.53 (1.05)	5.06 (1.11)	4.31 (1.18)	4.69 (1.15)
<b>Gender</b>							
Male	4.71 (1.32)	4.77 (1.15)	4.42 (1.01)	4.48 (.97)	5.03 (1.02)	4.13 (1.14)	4.70 (1.00)
Female	4.96 (1.35)	4.97 (1.22)	4.59 (1.01)	4.63 (.99)	5.17 (1.09)	4.39 (1.13)	4.89 (1.04)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; GER: Germany, FRA: France; ROM: Romania, RUS: Russia, USA: United States of America; DET: laundry and detergents, COS: cosmetics, ADH: adhesives; KNO: country of origin of the corporate brand is known; UKN: country of origin of the corporate brand is unknown; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: others; AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 2: age group 50 to 64 years, AGE 3: age group 65 years and above. Note: To compute mean values and standard deviations, the items of each construct were averaged to obtain composite scores for the various constructs. Correlation as well as covariance matrices are available upon request.

## 2.5.7 Path coefficients

### 2.5.7.1 Product categories

	Cosmetics	Detergents	Adhesives
CIM → PLO	.282 *** (.367 ***)	.271 *** (.333 ***)	.239 *** (.328 ***)
COR → CIM	.107 * (.084 *)	.227 *** (.189 ***)	.132 ** (.113 **)
GEM → CIM	.220 *** (.205 ***)	.206 *** (.195 ***)	.144 ** (.145 **)
PRQ → CIM	.453 *** (.346 ***)	.287 *** (.243 ***)	.334 *** (.269 ***)
RFC → CIM	.095 * (.062 *)	.106 ** (.080 **)	.200 *** (.156 ***)
SER → CIM	.172 *** (.153 ***)	.186 *** (.175 ***)	.232 *** (.241 ***)
COR → PLO	.048 ns (.050 ns)	.013 ns (.013 ns)	.126 ** (.149 **)
GEM → PLO	.016 ns	.050 ns	.005 ns

	(.019 ns)	(.058 ns)	(-.008 ns)
PRQ → PLO	.167 *** (.166 ***)	.128 ** (.133 **)	.281 *** (.311 ***)
RFC → PLO	.150 *** (.128 **)	.101 * (.094 *)	-.036 ns (-.039 ns)
SER → PLO	.070 * (.081 *)	.117 ** (.136 **)	.028 ns (.040 ns)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(203)=1011.398$  ( $p=.000$ ), CFI=.967, TLI=.993, RMSEA=.045.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

### 2.5.7.2 Country of origin knowledge

	Country of origin known	Country of origin unknown
CIM → PLO	.258 *** (.360 ***)	.249 *** (.333 ***)
COR → CIM	.232 *** (.214 ***)	.126 ** (.102 **)
GEM → CIM	.142 ** (.143 **)	.194 *** (.178 ***)
PRQ → CIM	.411 *** (.335 ***)	.315 *** (.260 ***)
RFC → CIM	.097 * (.075 *)	.155 *** (.113 ***)
SER → CIM	.130 ** (.118 ***)	.267 *** (.228 ***)
COR → PLO	.026 ns (.034 ns)	.074 * (.080 *)
GEM → PLO	.032 ns (.045 ns)	.030 ns (.037 ns)
PRQ → PLO	.103 ** (.117 **)	.210 *** (.232 ***)
RFC → PLO	.156 *** (.169 ***)	.011 ns (.011 ns)
SER → PLO	.036 ns (.046 ns)	.096 *** (.109 **)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(132)=988.635$  ( $p=.000$ ), CFI=.961, TLI=.992, RMSEA=.047.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

### 2.5.7.3 Education

	High school graduate	Community college/ vocational school	College/ university degree	Others
CIM → PLO	.299 *** (.393 ***)	.306 *** (.440 ***)	.190 *** (.264 ***)	.117 * (.162 *)
COR → CIM	.161 *** (.117 ***)	.177 * (.127 *)	.349 ** (.255 ***)	.065 ns (.050 ns)
GEM → CIM	.258 *** (.231 ***)	.216 ** (.186 **)	.089 * (.081 *)	.110 ns (.100 ns)
PRQ → CIM	.358 *** (.309 ***)	.212 ** (.168 **)	.246 *** (.205 ***)	.562 *** (.476 ***)
RFC → CIM	.175 *** (.114 ***)	.233 ** (.154 **)	.209 *** (.137 ***)	.023 ns (.015 ns)
SER → CIM	.188 *** (.157 ***)	.202 ** (.166 **)	.275 *** (.223 ***)	.345 *** (.290 ***)
COR → PLO	.022 ns (.021 ns)	.042 ns (.042 ns)	.121 ** (.122 **)	.171 ** (.183 **)
GEM → PLO	-.001 ns (-.001 ns)	.080 ns (.099 ns)	.033 ns (.041 ns)	.040 ns (-.051 ns)
PRQ → PLO	.131 ** (.148 **)	.202 *** (.231 ***)	.202 *** (.234 ***)	.195 ** (.228 **)
RFC → PLO	.126 ns (.108 **)	-.070 ns (-.078 ns)	-.002 ns (-.002 ns)	.193 ** (.036 ns)
SER → PLO	.101 ** (.111 **)	.070 ns (.082 ns)	.062 ns (.069 ns)	.092 ns (.107 ns)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(202)=1206.595$  ( $p=.000$ ), CFI=.968, TLI=.991, RMSEA=.058.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

## 2.5.7.4 Age

	15-24	25-49	50-64	65+
CIM → PLO	.354 *** (.474 ***)	.238 *** (.358 ***)	.152 *** (.207 ***)	.309 *** (.425 ***)
COR → CIM	.109 ns (.085 ns)	.143 ** (.117 ***)	.195 *** (.184 ***)	.241 *** (.220 ***)
GEM → CIM	.317 *** (.274 ***)	.257 *** (.223 ***)	.093 ns (.094 ns)	-.161 * (-.143 *)
PRQ → CIM	.516 *** (.344 ***)	.315 *** (.242 ***)	.233 *** (.197 ***)	.692 *** (.517 ***)
RFC → CIM	-.149 ns (-.097 ns)	.123 ** (.094 ***)	.329 *** (.274 ***)	.242 *** (.199 ***)
SER → CIM	.326 *** (.288 ***)	.215 *** (.196 ***)	.125 * (.120 **)	.152 ** (.133 **)
COR → PLO	-.080 ns (.084 ns)	.115 *** (.142 ***)	.109 * (.139 *)	-.010 ns (.013 ns)
GEM → PLO	.026 ns (.030 ns)	-.023 ns (-.030 ns)	.030 ns (.040 ns)	.091 ns (.111 ns)
PRQ → PLO	.022 ns (-.019 ns)	.133 *** (.154 ***)	.338 *** (.387 ***)	.259 *** (.266 ***)
RFC → PLO	.361 *** (.314 ***)	.037 ns (.042 ns)	-.002 ns (-.002 ns)	-.096 * (-.109 *)
SER → PLO	.017 ns (.020 ns)	.081 ** (.111 ***)	.004 ns (.005 ns)	.158 ** (.191 **)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(207) = 1148.704$  ( $p = .000$ ), CFI = .960, TLI = .990, RMSEA = .055.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns = not significant; standardized coefficients in brackets.

## 2.5.7.5 Gender

	Male	Female
CIM → PLO	.215 *** (.317 ***)	.231 *** (.356 ***)
COR → CIM	.051 ns (.052 ns)	.258 *** (.208 ***)
GEM → CIM	.215 *** (.214 ***)	.150 ** (.132 **)

PRQ → CIM	.302 *** (.259 ***)	.378 *** (.328 ***)
RFC → CIM	.137 *** (.108 *)	.107 ** (.083 **)
SER → CIM	.254 *** (.252 ***)	.164 *** (.133 ***)
COR → PLO	.050 ns (.074 ns)	.044 ns (.055 ns)
GEM → PLO	.047 ns (.069 ns)	.005 ns (.006 ns)
PRQ → PLO	.118 *** (.149 ***)	.175 *** (.133 **)
RFC → PLO	.122 *** (.141 ***)	.003 ns (-.004 ns)
SER → PLO	.057 * (.084 *)	.073 *** (.092 *)

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

$\chi^2(154)=1204.760$  ( $p=.000$ ), CFI=.955, TLI=.991, RMSEA=.048.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

## 2.5.8 Differences in path coefficients

### 2.5.8.1 Countries

Effect	Group	p-Value Wald chi-square test of parameter equalities				
		Germany	France	Romania	Russia	USA
COR → PLO (Direct effect)	GER	-	-	-	-	-
	FRA	.5313	-	-	-	-
	ROM	.9051	.4502	-	-	-
	RUS	.5521	.2622	.6107	-	-
	USA	.1310	.3672	.1003	.0576	-
COR → PLO (Indirect effect)	GER	-	-	-	-	-
	FRA	<u>.0032</u>	-	-	-	-
	ROM	.0898	.1948	-	-	-
	RUS	.0702	.3814	.8139	-	-
	USA	<u>.0013</u>	.6135	.1039	.2471	-
COR → PLO	GER	-	-	-	-	-



(Total effect)	FRA	.5531	-	-	-	-
	ROM	.3362	.7767	-	-	-
	RUS	.1369	.4146	.5417	-	-
	USA	.7680	.4107	.2431	.1015	-
GEM → PLO (Direct effect)	GER	-	-	-	-	-
	FRA	.1307	-	-	-	-
	ROM	<u>.0390</u>	.9363	-	-	-
	RUS	<u>.0272</u>	.5108	.4821	-	-
	USA	.9241	.1117	<u>.0300</u>	<u>.0224</u>	-
GEM → PLO (Indirect Effect)	GER	-	-	-	-	-
	FRA	.5432	-	-	-	-
	ROM	.6787	.2724	-	-	-
	RUS	.6165	.2606	.8998	-	-
	USA	<u>.0402</u>	.1370	<u>.0054</u>	<u>.0109</u>	-
GEM → PLO (Total effect)	GER	-	-	-	-	-
	FRA	.2790	-	-	-	-
	ROM	.0559	.6610	-	-	-
	RUS	<u>.0205</u>	.3212	.4624	-	-
	USA	.3995	.0694	<u>.0027</u>	<u>.0013</u>	-
PRQ → PLO (Direct effect)	GER	-	-	-	-	-
	FRA	.6336	-	-	-	-
	ROM	.6639	.4146	-	-	-
	RUS	<u>.0433</u>	.2286	<u>.0133</u>	-	-
	USA	.8260	.7613	.5076	.0703	-
PRQ → PLO (Indirect effect)	GER	-	-	-	-	-
	FRA	<u>.0000</u>	-	-	-	-
	ROM	.0902	<u>.0059</u>	-	-	-
	RUS	<u>.0074</u>	<u>.0430</u>	.3483	-	-
	USA	<u>.0000</u>	.9587	<u>.0045</u>	<u>.0339</u>	-
PRQ → PLO (Total effect)	GER	-	-	-	-	-
	FRA	.2109	-	-	-	-
	ROM	.1990	.8330	-	-	-
	RUS	.4668	.0722	.0549	-	-
	USA	.0558	.7512	.5116	<u>.0126</u>	-
RFC → PLO (Direct effect)	GER	-	-	-	-	-
	FRA	.9650	-	-	-	-
	ROM	.3892	.5346	-	-	-
	RUS	.1222	.2687	.4679	-	-
	USA	<u>.0017</u>	<u>.0130</u>	<u>.0075</u>	<u>.0191</u>	-
RFC → PLO (Indirect effect)	GER	-	-	-	-	-
	FRA	.3050	-	-	-	-

	ROM	.5607	<u>.0332</u>	-	-	-
	RUS	.2261	.8503	<u>.0110</u>	-	-
	USA	.1036	.3991	<u>.0010</u>	.3917	-
RFC → PLO (Total effect)	GER	-	-	-	-	-
	FRA	.7094	-	-	-	-
	ROM	.2932	.1746	-	-	-
	RUS	.4859	.2893	.5559	-	-
	USA	<u>.0326</u>	<u>.0199</u>	.1700	<u>.0357</u>	-
SER → PLO (Direct effect)	GER	-	-	-	-	-
	FRA	.6116	-	-	-	-
	ROM	.0887	<u>.0265</u>	-	-	-
	RUS	.9121	.5721	.1599	-	-
	USA	<u>.0183</u>	<u>.0048</u>	.3918	<u>.0411</u>	-
SER → PLO (Indirect effect)	GER	-	-	-	-	-
	FRA	.1222	-	-	-	-
	ROM	<u>.0202</u>	<u>.0000</u>	-	-	-
	RUS	.9017	.0578	<u>.0163</u>	-	-
	USA	.1135	.9344	<u>.0000</u>	<u>.0480</u>	-
SER → PLO (Total effect)	GER	-	-	-	-	-
	FRA	.8546	-	-	-	-
	ROM	.8036	.9512	-	-	-
	RUS	.9635	.8907	.8401	-	-
	USA	<u>.0068</u>	<u>.0073</u>	<u>.0057</u>	<u>.0071</u>	-
COR → CIM	GER	-	-	-	-	-
	FRA	.2100	-	-	-	-
	ROM	.0570	.6186	-	-	-
	RUS	.2357	.9034	.5775	-	-
	USA	.5027	.6279	.3263	.7486	-
GEM → CIM	GER	-	-	-	-	-
	FRA	.2361	-	-	-	-
	ROM	.7430	.3070	-	-	-
	RUS	.1393	.9414	.1881	-	-
	USA	.8222	.1831	.5717	.1005	-
PRQ → CIM	GER	-	-	-	-	-
	FRA	.1061	-	-	-	-
	ROM	<u>.0474</u>	.8478	-	-	-
	RUS	.2916	.4972	.5034	-	-
	USA	.9848	.1127	.0543	.3059	-
RFC → CIM	GER	-	-	-	-	-
	FRA	.7193	-	-	-	-
	ROM	.6132	.9949	-	-	-

	RUS	.4548	.3176	.0795	-	-
	USA	.8415	.8104	.6999	.2104	-
SER → CIM	GER	-	-	-	-	-
	FRA	.9466	-	-	-	-
	ROM	<u>.0139</u>	<u>.0262</u>	-	-	-
	RUS	.2247	.2457	.2959	-	-
	USA	.1403	.1634	.4597	.7930	-
CIM → PLO	GER	-	-	-	-	-
	FRA	<u>.0000</u>	-	-	-	-
	ROM	.6998	<u>.0000</u>	-	-	-
	RUS	<u>.0087</u>	.0587	<u>.0100</u>	-	-
	USA	<u>.0000</u>	.1830	<u>.0000</u>	<u>.0017</u>	-

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; GER: Germany, FRA: France; ROM: Romania, RUS: Russia, USA: United States of America.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 2.5.8.2 Product categories

Effect	Group	p-Value Wald chi-square test of parameter equalities		
		Detergents	Cosmetics	Adhesives
COR → PLO (Direct effect)	DET	-	-	-
	COS	.5637	-	-
	ADH	.0782	.2140	-
COR → PLO (Indirect effect)	DET	-	-	-
	COS	.1321	-	-
	ADH	.1153	.9454	-
COR → PLO (Total effect)	DET	-	-	-
	COS	.9570	-	-
	ADH	.1996	.2449	-
GEM → PLO (Direct effect)	DET	-	-	-
	COS	.5613	-	-
	ADH	.2941	.6813	-
GEM → PLO (Indirect effect)	DET	-	-	-
	COS	.7936	-	-
	ADH	.2420	.1992	-
GEM → PLO (Total effect)	DET	-	-	-
	COS	.6743	-	-
	ADH	.1583	.4112	-
PRQ → PLO	DET	-	-	-

(Direct effect)	COS	.4937	-	-
	ADH	<u>.0089</u>	<u>.0487</u>	-
PRQ → PLO (Indirect effect)	DET	-	-	-
	COS	<u>.0322</u>	-	-
	ADH	.9238	.0641	-
PRQ → PLO (Total effect)	DET	-	-	-
	COS	.1176	-	-
	ADH	<u>.0097</u>	.2454	-
RFC → PLO (Direct effect)	DET	-	-	-
	COS	.4123	-	-
	ADH	<u>.0143</u>	<u>.0018</u>	-
RFC → PLO (Indirect effect)	DET	-	-	-
	COS	.9199	-	-
	ADH	.2611	.2562	-
RFC → PLO (Total effect)	DET	-	-	-
	COS	.4222	-	-
	ADH	<u>.0391</u>	<u>.0044</u>	-
SER → PLO (Direct effect)	DET	-	-	-
	COS	.3369	-	-
	ADH	.0744	.3910	-
SER → PLO (Indirect effect)	DET	-	-	-
	COS	.9239	-	-
	ADH	.7628	.7134	-
SER → PLO (Total effect)	DET	-	-	-
	COS	.3500	-	-
	ADH	.1033	.5005	-
COR → CIM	DET	-	-	-
	COS	.0941	-	-
	ADH	.1646	.7257	-
GEM → CIM	DET	-	-	-
	COS	.8518	-	-
	ADH	.3232	.2905	-
PRQ → CIM	DET	-	-	-
	COS	<u>.0075</u>	-	-
	ADH	.4815	.0999	-
RFC → CIM	DET	-	-	-
	COS	.8667	-	-
	ADH	.1301	.1250	-

SER → CIM	DET	-	-	-
	COS	.8211	-	-
	ADH	.4019	.3438	-
CIM → PLO	DET	-	-	-
	COS	.8117	-	-
	ADH	.4825	.3239	-

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; DET: laundry and detergents, COS: cosmetics, ADH: adhesives.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 2.5.8.3 Country of origin knowledge

		p-Value Wald chi-square test of parameter equalities	
Effect	Group	Country of origin known	Country of origin unknown
COR → PLO (Direct effect)	KNO	-	-
	UKN	.3470	-
COR → PLO (Indirect effect)	KNO	-	-
	UKN	.0879	-
COR → PLO (Total effect)	KNO	-	-
	UKN	.7089	-
GEM → PLO (Direct effect)	KNO	-	-
	UKN	.9705	-
GEM → PLO (Indirect effect)	KNO	-	-
	UKN	.4812	-
GEM → PLO (Total effect)	KNO	-	-
	UKN	.8259	-
PRQ → PLO (Direct effect)	KNO	-	-
	UKN	<u>.0264</u>	-
PRQ → PLO (Indirect effect)	KNO	-	-
	UKN	.1556	-
PRQ → PLO (Total effect)	KNO	-	-
	UKN	.1025	-
RFC → PLO (Direct effect)	KNO	-	-
	UKN	<u>.0016</u>	-
RFC → PLO (Indirect effect)	KNO	-	-
	UKN	.3409	-
RFC → PLO	KNO	-	-

(Total effect)	UKN	<u>.0042</u>	-
SER → PLO (Direct effect)	KNO	-	-
	UKN	.1751	-
SER → PLO (Indirect effect)	KNO	-	-
	UKN	<u>.0391</u>	-
SER → PLO (Total effect)	KNO	-	-
	UKN	<u>.0411</u>	-
COR → CIM	KNO	-	-
	UKN	.0666	-
GEM → CIM	KNO	-	-
	UKN	.3793	-
PRQ → CIM	KNO	-	-
	UKN	.0941	-
RFC → CIM	KNO	-	-
	UKN	.2770	-
SER → CIM	KNO	-	-
	UKN	<u>.0114</u>	-
CIM → PLO	KNO	-	-
	UKN	.8132	-

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

#### 2.5.8.4 Education

p-Value Wald chi-square test of parameter equalities					
Effect	Group	High school graduate	Community college/ vocational school	College/ university degree	Others
COR → PLO (Direct effect)	SHO	-	-	-	-
	COM	.7757	-	-	-
	STU	.1109	.2587	-	-
	OTH	.0627	.1331	.5111	-
COR → PLO (Indirect effect)	SHO	-	-	-	-
	COM	.8308	-	-	-
	STU	.3754	.6662	-	-
	OTH	<u>.0236</u>	.0780	<u>.0011</u>	-
COR → PLO (Total effect)	SHO	-	-	-	-
	COM	.7447	-	-	-

	STU	<u>.0438</u>	.2297	-	-
	OTH	.1815	.3845	.9113	-
GEM → PLO (Direct effect)	SHO	-	-	-	-
	COM	.1669	-	-	-
	STU	.4547	.4027	-	-
	OTH	.5919	.1362	.3070	-
GEM → PLO (Indirect effect)	SHO	-	-	-	-
	COM	.6944	-	-	-
	STU	<u>.0002</u>	.0588	-	-
	OTH	<u>.0003</u>	<u>.0498</u>	.7818	-
GEM → PLO (Total effect)	SHO	-	-	-	-
	COM	.3062	-	-	-
	STU	.5447	.1441	-	-
	OTH	.1717	.0556	.2920	-
PRQ → PLO (Direct effect)	SHO	-	-	-	-
	COM	.2164	-	-	-
	STU	.1447	.9924	-	-
	OTH	.3676	.9209	.9185	-
PRQ → PLO (Indirect effect)	SHO	-	-	-	-
	COM	.0751	-	-	-
	STU	<u>.0009</u>	.3860	-	-
	OTH	.2073	.9778	.5329	-
PRQ → PLO (Total effect)	SHO	-	-	-	-
	COM	.6244	-	-	-
	STU	.8216	.7273	-	-
	OTH	.7338	.9305	.8424	-
RFC → PLO (Direct effect)	SHO	-	-	-	-
	COM	<u>.0009</u>	-	-	-
	STU	<u>.0173</u>	.1659	-	-
	OTH	.4201	<u>.0017</u>	<u>.0164</u>	-
RFC → PLO (Indirect effect)	SHO	-	-	-	-
	COM	.4653	-	-	-
	STU	.4240	.1765	-	-
	OTH	<u>.0020</u>	<u>.0036</u>	<u>.0007</u>	-
RFC → PLO (Total effect)	SHO	-	-	-	-
	COM	<u>.0038</u>	-	-	-
	STU	<u>.0099</u>	.4125	-	-
	OTH	.8360	<u>.0189</u>	<u>.0489</u>	-
SER → PLO (Direct effect)	SHO	-	-	-	-
	COM	.5976	-	-	-

	STU	.4408	.8899	-	-
	OTH	.8786	.7595	.6404	-
SER → PLO (Indirect effect)	SHO	-	-	-	-
	COM	.8356	-	-	-
	STU	.7901	.7142	-	-
	OTH	.4888	.4958	.5754	-
SER → PLO (Total effect)	SHO	-	-	-	-
	COM	.7066	-	-	-
	STU	.3953	.7850	-	-
	OTH	.6972	.9978	.7731	-
COR → CIM	SHO	-	-	-	-
	COM	.8592	-	-	-
	STU	<u>.0044</u>	.0600	-	-
	OTH	.2857	.3096	<u>.0019</u>	-
GEM → CIM	SHO	-	-	-	-
	COM	.6140	-	-	-
	STU	<u>.0018</u>	.1289	-	-
	OTH	.1210	.3550	.8274	-
PRQ → CIM	SHO	-	-	-	-
	COM	<u>.0437</u>	-	-	-
	STU	<u>.0322</u>	.6282	-	-
	OTH	<u>.0102</u>	<u>.0002</u>	<u>.0001</u>	-
RFC → CIM	SHO	-	-	-	-
	COM	.4690	-	-	-
	STU	.5573	.7615	-	-
	OTH	<u>.0469</u>	<u>.0236</u>	<u>.0124</u>	-
SER → CIM	SHO	-	-	-	-
	COM	.8602	-	-	-
	STU	.1140	.3937	-	-
	OTH	<u>.0421</u>	.1608	.3938	-
CIM → PLO	SHO	-	-	-	-
	COM	.8736	-	-	-
	STU	<u>.0068</u>	<u>.0090</u>	-	-
	OTH	<u>.0022</u>	<u>.0024</u>	.2143	-

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: other.  
 Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.



## 2.5.8.5 Age

Effect	Group	p-Value Wald chi-square test of parameter equalities			
		15-24	25-49	50-64	65+
COR --> PLO (Direct effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0060</u>	-	-	-
	AGE 3	<u>.0146</u>	.9077	-	-
	AGE 4	.3926	<u>.0368</u>	.0779	-
COR → PLO (Indirect effect)	AGE 1	-	-	-	-
	AGE 2	.8640	-	-	-
	AGE 3	.7298	.7639	-	-
	AGE 4	.2572	.0914	.0605	-
COR → PLO (Total effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0143</u>	-	-	-
	AGE 3	<u>.0288</u>	.8429	-	-
	AGE 4	.2161	.1448	.2462	-
GEM --> PLO (Direct effect)	AGE 1	-	-	-	-
	AGE 2	.4385	-	-	-
	AGE 3	.9589	.3824	-	-
	AGE 4	.3762	<u>.0452</u>	.3937	-
GEM → PLO (Indirect effect)	AGE 1	-	-	-	-
	AGE 2	.1736	-	-	-
	AGE 3	<u>.0088</u>	<u>.0013</u>	-	-
	AGE 4	<u>.0001</u>	<u>.0000</u>	<u>.0051</u>	-
GEM → PLO (Total effect)	AGE 1	-	-	-	-
	AGE 2	.1973	-	-	-
	AGE 3	.2892	.9289	-	-
	AGE 4	.2870	.9687	.9704	-
PRQ → PLO (Direct effect)	AGE 1	-	-	-	-
	AGE 2	.0678	-	-	-
	AGE 3	<u>.0001</u>	<u>.0030</u>	-	-
	AGE 4	<u>.0050</u>	.0683	.2850	-
PRQ → PLO (Indirect effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0200</u>	-	-	-
	AGE 3	<u>.0016</u>	<u>.0142</u>	-	-
	AGE 4	.5681	<u>.0002</u>	<u>.0000</u>	-
PRQ → PLO (Total effect)	AGE 1	-	-	-	-
	AGE 2	.5970	-	-	-
	AGE 3	<u>.0246</u>	<u>.0032</u>	-	-
	AGE 4	<u>.0033</u>	<u>.0004</u>	.1890	-

RFC → PLO (Direct effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0001</u>	-	-	-
	AGE 3	<u>.0001</u>	.4353	-	-
	AGE 4	<u>.0000</u>	<u>.0078</u>	.1151	-
RFC → PLO (Indirect effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0064</u>	-	-	-
	AGE 3	<u>.0013</u>	.1721	-	-
	AGE 4	<u>.0003</u>	<u>.0261</u>	.2731	-
RFC → PLO (Total effect)	AGE 1	-	-	-	-
	AGE 2	<u>.0039</u>	-	-	-
	AGE 3	<u>.0039</u>	.7157	-	-
	AGE 4	<u>.0004</u>	.0902	.2492	-
SER → PLO (Direct effect)	AGE 1	-	-	-	-
	AGE 2	.3141	-	-	-
	AGE 3	.8603	.1183	-	-
	AGE 4	.0773	.1807	<u>.0263</u>	-
SER → PLO (Indirect effect)	AGE 1	-	-	-	-
	AGE 2	.0591	-	-	-
	AGE 3	<u>.0046</u>	<u>.0126</u>	-	-
	AGE 4	.0595	.8168	.1212	-
SER → PLO (Total effect)	AGE 1	-	-	-	-
	AGE 2	.9982	-	-	-
	AGE 3	.1694	<u>.0288</u>	-	-
	AGE 4	.3873	.2046	<u>.0083</u>	-
COR → CIM	AGE 1	-	-	-	-
	AGE 2	.6588	-	-	-
	AGE 3	.2836	.3921	-	-
	AGE 4	.1310	.1605	.5288	-
GEM → CIM	AGE 1	-	-	-	-
	AGE 2	.5006	-	-	-
	AGE 3	<u>.0225</u>	<u>.0142</u>	-	-
	AGE 4	<u>.0000</u>	<u>.0000</u>	<u>.0029</u>	-
PRQ → CIM	AGE 1	-	-	-	-
	AGE 2	.0556	-	-	-
	AGE 3	<u>.0091</u>	.1817	-	-
	AGE 4	.1369	<u>.0000</u>	<u>.0000</u>	-
RFC → CIM	AGE 1	-	-	-	-
	AGE 2	<u>.0021</u>	-	-	-
	AGE 3	<u>.0000</u>	<u>.0015</u>	-	-
	AGE 4	<u>.0001</u>	<u>.0401</u>	.2102	-

SER → CIM	AGE 1	-	-	-	-
	AGE 2	.1608	-	-	-
	AGE 3	<u>.0203</u>	.1252	-	-
	AGE 4	.0527	.3200	.7123	-
CIM → PLO	AGE 1	-	-	-	-
	AGE 2	<u>.0500</u>	-	-	-
	AGE 3	<u>.0019</u>	<u>.0410</u>	-	-
	AGE 4	.5165	.1517	<u>.0054</u>	-

PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 2: age group 50 to 64 years, AGE 3: age group 65 years and above.  
 Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 2.5.8.6 Gender

Effect	Group	p-Value Wald chi-square test of parameter equalities	
		male	female
COR → PLO (Direct effect)	male	-	-
	female	.8915	-
COR → PLO (Indirect effect)	male	-	-
	female	<u>.0006</u>	-
COR → PLO (Total effect)	male	-	-
	female	.3232	-
GEM → PLO (Direct effect)	male	-	-
	female	.3001	-
GEM → PLO (Indirect effect)	male	-	-
	female	.4729	-
GEM → PLO (Total effect)	male	-	-
	female	.2192	-
PRQ → PLO (Direct effect)	male	-	-
	female	.1483	-
PRQ → PLO (Indirect effect)	male	-	-
	female	.1716	-
PRQ → PLO (Total effect)	male	-	-
	female	<u>.0486</u>	-
PRQ → PLO (Direct effect)	male	-	-
	female	<u>.0021</u>	-
RFC → PLO (Indirect effect)	male	-	-
	female	.6926	-

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RFC → PLO (Total effect)	male	-	-
	female	<u>.0013</u>	-
SER → PLO (Direct effect)	male	-	-
	female	.6672	-
SER → PLO (Indirect effect)	male	-	-
	female	.2669	-
SER → PLO (Total effect)	male	-	-
	female	.9880	-
COR → CIM	male	-	-
	female	<u>.0001</u>	-
GEM → CIM	male	-	-
	female	.2976	-
PRQ → CIM	male	-	-
	female	.1663	-
RFC → CIM	male	-	-
	female	.5572	-
SER → CIM	male	-	-
	female	.1151	-
CIM → PLO	male	-	-
	female	.6375	-

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PLO: product loyalty; CIM: corporate image; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

### **3 Does endorsing product brands by corporate branding pay off? A multi-country study**

Corporate branding is recently gaining in importance in the FMCG sector. A growing number of firms use their internationally standardized corporate brands as an endorsement to their local, regional and international product brands. Nevertheless, little attention has been given to cross-national effects. Further, the reciprocity between corporate and product brand has not been considered so far. Analyzing both, a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA and a longitudinal consumer sample from Germany and Romania, my results emphasize that corporate and product brand are cross-nationally interrelated, but their impact on consumers' product response varies considerably between countries. Marketers should be aware of this fact if managing an international visible corporate brand.<sup>1</sup>

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<sup>1</sup> An earlier version of this chapter (Swoboda et al. 2009) has been presented at the AMA summer conference 2009 and was awarded with the best paper award in the global and cross-cultural marketing track.

### 3.1 Introduction

Combining the best of both worlds, i.e., the branded house and the house of brands strategy (Rao, Agarwal, and Dahlhoff 2004, p. 128), a growing number of firms use their **internationally standardized corporate brands as an endorsement to their local, regional and international product brands** (Lei, Dawar, and Lemmink 2008, p. 121). Moreover, there is evidence of an evolution from corporate- and product-dominant brand architectures towards hybrid structures (Sheth and Sisodia 1999, p. 78; Douglas, Craig, and Nijssen 2001, p. 106; Laforet and Saunders 2005, p. 319). Generally, given its highly competitive nature, much has been written about the impact of brand associations on consumers' product evaluation on a national level (e.g., Brown and Dacin 1997; Chaudhuri and Holbrook 2001; Gürhan-Canli and Batra 2004). However, in both research-oriented and practice-oriented literature, the impact of endorsed corporate branding on consumers has rarely been examined from an international perspective. Moreover, the reciprocal relationship of corporate and product brand has been neglected so far. Thus, marketers need guidance on evaluating and managing endorsed corporate branding.

Indeed, the **effects of branding are gaining in complexity if focusing on more than one country market** (Hsieh, Pan, and Setiono 2004). In particular, if a company, which is using its internationally standardized corporate brand as an endorser to its local, regional, and international product brands, sets a target of creating a worldwide uniform anchor in the mind of the consumer. Although recent research strongly supports the importance of monitoring consumers' brand evaluation (Mizik and Jacobson 2008; 2009; Rego, Billett, and Morgan 2009), data availability seldom permits the analysis of particularities in individual markets. In a globalized world selling the same or local brands to consumers in country markets other than the USA, often account for the majority of firms' revenue. Thus, not only Monroe (1993, p. V) urged researchers to investigate issues relative to consumption on an international basis. Also Winer (1998, p. III) and more recently Steenkamp (2005, p. 6) as well as Keller and Lehmann (2006, p. 750) and Eden (2008, p. 2) highlight the importance of studies focusing on cross-national research questions. Lehman, Keller, and Farley (2008, p. 47), for example, illustrate that brand effects are country-specific.

Despite the increasing emphasis on corporate branding (Brown and Dacin 1997; Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005), little attention has been given to the **reciprocal relationship** between corporate and product brand. Brown and Dacin (1997) conclude that „generally, the reciprocal effects of company and product remain for closer examination (p. 81).” Recently, Keller and Lehmann (2006, p. 749) highlighted that the corporate brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand. Whereas Muzellec and Lambkin (2008) illustrate how a multinational FMCG company deliberately pursued a strategy of separating its corporate brand from its product brand portfolio, it is necessary to shed light on the opposite case. The question remains what this reciprocal relationship would look like if a company decides to communicate its corporate brand complementary to its product brands towards stakeholders (Lei, Dawar, and Lemmink 2008).

Furthermore, studies neglect to distinguish between the **direct and indirect effects of corporate branding on consumers’ product response**. Thereby it is important to consider both, the indirect and direct effect of corporate and product image on product loyalty (Keller and Lehmann 2006, p. 743). Knowledge of process and conditions through which corporate branding has an impact on product brands and on consumers’ product response needs to be advanced (Gürhan-Canli and Batra 2004, pp. 203-04).

The **purpose of the present study** is to analyze cross-nationally whether or not corporate and product brand are reciprocally related and how both impact consumers’ product response. From a theoretical perspective, I contribute a holistic approach on the impact of corporate and product branding on consumers’ product response in an international context. From a managerial perspective, this research addresses the question how to evaluate corporate and product branding simultaneously to monitor if a company’s endorsement strategy results in a greater public esteeming of both the corporation and its branded products.

In detail, the following **research questions** are examined:

- Do consumers perceive corporate and product brand as reciprocally related across countries?
- How do the direct and indirect effects of corporate and product branding on

consumers' product response look like across countries?

- Do further contextual factors influence those relationships?

The **remainder** of this study is as follows. Firstly, I refer to the literature on corporate branding, brand extensions, ingredient branding, and brand alliances to summarize former findings on the relationship between two brands communicated complementarily towards consumers. Moreover, schema theory is utilized to derive hypotheses as basis for a subsequent empirical study. The analysis is based on a cross-sectional consumer sample from Germany, France, Romania, Russia, and the USA as well as on a three-wave consumer panel data from Germany and Romania. The results provide support that the existence of a reciprocal relationship between corporate brand and product brands is an indicator if endorsed corporate branding works. Even if this should be the case, direct and indirect effects of a corporate brand vary considerably between countries and depending on further contextual factors. Concluding, I present theoretical and managerial implications as well as limitations of my study and directions for future research.

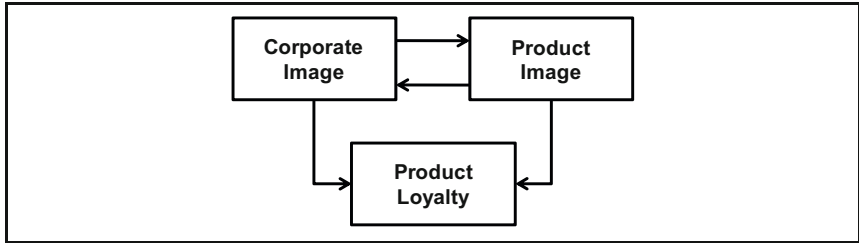
### 3.2 Conceptualization and hypotheses development

The **conceptual framework** underlying this analysis is threefold (see Figure 3). Firstly, I consider not only the transfer from consumers' corporate to product evaluations (Biehal and Sheinin 2007), but also that the opposite effect might exist (Keller 2003). Using the corporate brand as an endorsement should not only enhance product brands' evaluation, but likewise spillover effects from product brands to the corporate brand are also likely to occur. Taking this up, I assume a reciprocal relationship between corporate and product image. Secondly, I consider product loyalty intentions as consumers' product response on corporate and product image. Thereby it is important to consider both, the indirect and direct effect of corporate and product image on product loyalty (Keller & Lehmann, 2006). In particular, this addresses companies' intention to have an immediate impact on consumer behavior by applying endorsed corporate branding. Thirdly, referring to Lehman, Keller, and Farley (2008, p. 47), I further analyze the variation of the hypothesized cause-effect relationships across countries as



well as depending on further contextual factors.

Figure 3: Conceptual framework: Corporate image, product image, and product loyalty



### 3.2.1 Consumers' perception of corporate and product brands

A **brand** is not limited to its name or logo. It is a vehicle for those characteristics of the brand the company decides to communicate actively towards stakeholders. Thereby, the individuals' brand perception and evaluation plays a key role in determining the impact of branding activities.

**Brand image** refers to brands' external portrayal. Consistent with early definitions (Newman 1957, p. 101) and more recent interpretations (Keller 1993; Keller and Lehmann 2006), I define brand image as the associations linked to the brand that consumers hold in memory. Thereby, brand awareness is regarded as a necessary condition for the creation of brand image. Both, brand awareness and brand image, build upon brand equity. Thereby, "brand image can be defined as the meaning consumers develop about the brand as a result of the firm's marketing activities. Thus brand image encompasses the holistic interpretation consumers have about a brand, and the meaning, or personal relevance, they ascribe to it (Roth 1994, p. 495)." In detail, Keller (1993) assumes that the favorability, strength, and uniqueness of brand associations determine the consumer response. Brand image is distinct from related constructs, such as perceived quality and perceived value through its higher level of abstraction (Kirmani and Zeithaml 1993, pp. 144-46). Dobni and Zikhan (1990, p. 118) highlight that brand image is a subjective and perceptual phenomenon formed through reasoned

and emotional consumer interpretation and which is affected by marketing activities, by context variables and by the characteristics of the perceiver. Stern, Zinkhan and Jaju (2001, pp. 205-11) as well as Dobni and Zinkhan (1990) summarize the literature on brand image.

**Corporate image** is the spontaneously composed picture of an organization formed in the minds of its stakeholder groups (Balmer 1998, p. 971; Gray and Balmer 1998, p. 697; Bick, Jacobson, and Abratt 2003, pp. 840-41; Barnett, Jermier, and Lafferty 2006, p. 34). Already early understandings of corporate image could be condensed to this core (Bolger 1959, p. 7; Christian 1959, p. 80; Tucker 1961, p. 61; Hill 1962, p. 73; Easton 1966, p. 168). Stern et al. (2001, p. 213) summarize the literature on corporate image and conclude that there “is agreement about an image’s nature (an impression or perception), locus (the minds of stakeholders), and number (an ‘overall’ impression that summates the segment’s impressions).” Gotsi and Wilson (2001) review the literature on corporate image and corporate reputation, concluding that both are dynamically related, whereby corporate reputation constitutes – contrary to corporate image – a more conscious assessment of the attributes and characteristics of an organization.

Analogously, **product image** refers to the immediate mental picture that the targeted consumer group has of the corresponding product brand. Further, Park et al. (1986, p. 135) highlight that product image is the understanding consumers derive from the total set of product brand-related activities by a firm.

### *3.2.2 Schema-theoretic perspective on endorsed corporate branding*

The conceptual framework presented in this study is based on **schema theory**. The reciprocal relationship between product and corporate image as well as their impact on consumers’ product response can be explained by taking a schema theoretic perspective.

Various types of memory representation, such as the **schema construct**, were first examined by Bartlett (1932, p. 201; cf., McVee, Dunsmore, and Gavelek 2005, pp. 535-39). In the present context, schemata are defined according to Mandler (1979, p. 263)

as a cognitive structure of an object, situation, event, a sequence of events, action or a sequence of actions formed on the basis of past experiences. Thus, schemata can be seen as a temporal as well as a spatial organization of information in memory. On the basis of the information stored in a schema, it is possible to develop relatively ideal images of an object, situation, event or action. In a sense, schemata represent stereotypes of certain concepts (Rumelhart and Ortony 1977, p. 101).

Minsky (1975, p. 212) first found an **organizational structure within the schema construct**, which was examined in detail by Rumelhart und Ortony (1977, p. 106). Thereby, schemata have a vertical and horizontal structure (Crocker 1984, p. 473). A schema with vertical structure will have more subordinate levels, i.e., different levels of subschemata, whereby their number varies from schema to schema. Horizontal structure refers to the number of schemata, which are included at any given level of subordination. As an example, the relation between specific corporate associations, i.e., social and environmental responsibility as well as good employer, and the corporate image can be explained referring to the organizational structure of schemata. Summarizing, subschemata represent „the conceptual constituents of the concept being represented (Rumelhart 1984, p. 168).” As the superordinate schema depends on the subschemata information, any different or additional information, that will be incorporated into a new subschemata, will lead to a change of the attributes associated to that schema (Sujan and Bettman 1989, p. 455). Thereby, interaction with a stimulus evokes a subschema, which in combination with other subschemata will activate a superordinate schema. Thus, the image of an object as a superordinate schema is not related to a single subschema, but rather to several different subschemata (Tesser 1978, pp. 297-98).

### *3.2.2.1 Reciprocal relationship between corporate and product image*

Schema theory provides support that a reciprocal relationship between corporate and product image exists. Fiske and Linville (1980, p. 544) state that schemata are most useful in complex knowledge domains. In general, schematic information processing runs as follows, ”when a stimulus configuration is encountered in the environment, it is matched against a schema, and the ordering and relations among the elements of the

schema are imposed on the elements of the stimulus configuration (Taylor and Crocker 1981, p. 94).” It is a notable characteristic of the schema structure to be able to distinguish **relationships which exists between subschemata** and those that exist between the variables within a particular subschema (Rumelhart and Ortony 1977, p. 108). This refers to the fact that schemata are not only vertically organized, but also horizontally. Horizontal connections between schema are based on temporal or spatial proximity or on causal relatedness (Rabinowitz and Mandler 1983, p. 431). Whereas in taxonomic structure, vertical relations dominate and horizontal relations play only a minor role, both are equally important in schematic structures.

With endorsed corporate branding, the product brand is presented with the corporate brand and vice versa, so that subsequent **evaluations of each brand are likely to be influenced by the context of the other brand**. The product brand schema is interrelated to the corporate brand schema by horizontal relations. Moreover, consumers’ behavioral intentions are based on the evaluation of past experiences with both brands (cf., Simonin and Ruth 1998, p. 32). I conclude that corporate and product image are reciprocally related.

### *3.2.2.2 Relationship of corporate and product image to consumers’ product response*

Schema theory offers an explanation for the relation of both corporate image and specific corporate associations to consumers’ product response. As schemata are formed of past experiences and consist of expectations about the order in which things occur (Mandler 1979, p. 263), **schemata “have implications regarding attention, inference, evaluation, planning, and behavior**, yet 90% of the current research ignores these variables. (Fiske and Linville 1980, p. 549)” The degree to which a schema-based evaluation serves as a guide for action depends upon whether the schema contains parameters that can help a person identify and choose among future courses of action (Axelrod 1973, p. 1252). In this context, Rumelhart and Ortony (1977, p. 122) conceptually distinguish comprehension and action schemata, but conclude that both are highly interdependent. In other words, when the schema is evoked, the behavior is seen as an integral part of the schema. Thereby a schema can become either the condition or the trigger for a series of actions, which can in turn become an organized unit,

i.e., a schema as in script theory (Schank and Abelson 1977; Fiske and Linville 1980, p. 548).

**Consumers use schemata to organize their expectations** about the value and importance of a product or brand attributes (Sujan and Bettman 1989, p. 455). In other words, consumers compare new product or company related associations and information with already available experiences, i.e., evaluate the object, and thus the activation of the corresponding schema leads to a certain behavioral intention (Cohen 1982, p. 94). However, if consumer's attitude is not developed through experience, it will hardly include a behavioral component and thus it won't predict behavior (Fiske and Linville 1980, p. 551).

Rumelhart and Ortony (1977, p. 123) highlight that **action schemata exist at all levels of abstraction** and thereby are an integral part of superordinate as well as subordinate schemata. Relating specific corporate associations as well as corporate image to consumers' product response refers to the fact that each of these schemata comprise information that, depending on the situation, allows a prediction about the adequate behavioral response, e.g., consumer's repurchase intention (cf., Schank and Abelson 1977, p. 38). I conclude that both specific corporate associations and corporate image could influence consumers' product response.

### 3.2.2.3 *Schemata in a cross-national context*

Lastly, it is important to note that **schemata are dependent on one's cultural socialization** (Crocker 1984, p. 474; Saito 2000, pp. 139-41). Bartlett (1932), who defined schema as an "active organization of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response (p. 201)" noted that "nearly all important human reactions, and most important ones as well, have a social frame or background into which they must fit (p. 254)." In the same context, Fiske and Linville (1980, p. 549) state that information-processing factors underlie much of social behavior and social perception. McVee, Dunsmore and Gavelek (2005) agree and propose that if "we think of schema as embodied and not just in the head, then it becomes clear that patterns of enactment, ways of engaging the world, both shape my interpretation of cultural activity and are shaped by cultural activity (p.

550).”

Consumers’ perception, information processing and decision making might be influenced by cultural aspects, e.g., **some schemata might have a stronger relationship in specific countries**. I conclude that the impact of certain schemata might vary across different countries depending on their cultural background and further country-specific characteristics.

### *3.2.3 Literature review and hypotheses development*

Although studies do suggest that consumers care about the company, which stands behind a product (e.g., Biehal and Sheinin 2007), they make little efforts to distinguish between **direct and indirect effects of both corporate and product brand on consumers’ product response**. Besides the direct effect, it is important to consider if an indirect effect of the corporate image on the product image, and thus on consumers’ product response, exists (Keller & Lehmann, 2006, p. 743; Suh and Yi 2006). Analogously, product image could also impact consumers’ product response through enhancing corporate image (Aaker and Joachimsthaler 2000, p. 13).

Further, „the **reciprocal effects of company and product remain for closer examination** (Brown and Dacin 1997, p. 81).” A corporate brand endorsement does not only add value to the company’s product brands, but the product brands can also enhance the customers’ evaluation of the corporate brand. Advancing knowledge on this issue is increasingly important, as research on international brand architecture has shown that over time, both corporate- and product-dominant structures are evolving towards hybrid structures (Douglas, Craig, and Nijssen 2001, p. 106; Laforet and Saunders 2005, p. 319).

However, these effects are context-dependent. Country-specific characteristics might not only moderate the interrelation between two brands, but also their impact on consumers’ product response. Erdem, Swait, and Valenzuela (2006, p. 47) state in an empirical study across seven countries on various consumer goods that the return on a company’s branding efforts depend on consumers’ cultural values. However, it is increasingly difficult to disentangle the complex collage of culture and context as there

is no clear demarcation line identifying where one culture begins and another ends (Douglas and Craig 1997, p. 380). Thus, Roth (1992) states in a more general way that "consumers in different countries have similar needs, yet vary in the ways products are perceived as satisfying those needs. The needs products are designed to satisfy may thus affect consumers' perceptions of the products' benefits depending on where they are marketed. Consequently, market performance of a brand image strategy may be affected by country characteristics (p. 26)." Besides a country's cultural roots, its economic development and political background must be considered in research on international branding issues (e.g., Ger and Belk 1993; Coulter, Price, and Feick 2003; Strizhakova, Coulter, and Price 2008).

Following, the **literature on corporate branding, brand extensions, and co-branding is reviewed** to shed light on the interrelation between corporate and product brand and their effect on consumers' product response across countries. Thereby, I recap firstly research on the direct and indirect impact that brands might have on consumers' product response. Secondly, I summarize the findings with regards to the reciprocity between two brands, which are communicated complementary with one product. Thirdly, I take an international perspective and illustrate the role of country-specific characteristics play in determining consumers' brand evaluation and product response. Considering both former research and theory, I conclude in each case by deriving corresponding hypotheses.

### *3.2.3.1 Reciprocal relationship between corporate and product image*

Reviewing the literature on corporate branding, brand extensions, and co-branding, one notices that the reciprocity between corporate and product brand is mostly neglected. However, **each strand of literature finds empirical support that a relationship in one or the other direction exists.**

With regards to the **corporate branding literature**, Keller and Lehmann (2006, p. 749) argue that it seems obvious that the corporate brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand. Brown and Dacin (1997) found a significant positive impact of consumers' evaluation of the company on its evaluation of the company's products. Further studies confirm

the close relationship between consumers' perception of corporate and product brand (Saunders and Guoqun 1996; Sheinin and Biehal 1999; Aaker 2004; Gürhan-Canli and Batra 2004; Berens, van Riel, and van Bruggen 2005; Suh and Yi 2006; Biehal and Sheinin 2007).

With regards to the **brand extension literature**, Keller and Aaker (1992; 1998) substantiate the positive relationship between consumers' evaluation of the company and their evaluation of the brand extension. However, Balachander and Ghose (2003) illustrate that "a firm introducing the [brand] extensions can expect positive reciprocal spillover effects for the parent brand (p. 13)", which has already been argued in earlier publications (e.g., Tauber 1981, p. 38; 1988, p. 28; Swaminathan, Fox, and Reddy 2001, p. 14).

With regards to the **co-branding literature**, empirical research provides support that pairing two brands positively affects consumers' perceptions of the individual brands (Washburn, Till, and Priluck 2000; 2004; Lebar et al. 2005). Simonin and Ruth (1998) describe these effects as "a perceptual, strategic "boost" or detriment for the partnering brands (p. 39)."

Summarizing, although some initial evidence is provided, „**the reciprocal effects of company and product remain for closer examination** (Brown and Dacin 1997, p. 81)". In particular, there is no evidence how the relationship between a corporate brand and its product brands from the perspective of consumers from different countries looks like. Accordingly, taking into account the interrelation between schemata, I hypothesize:

H1: Corporate image and product image have a positive reciprocal relationship in all countries.

### *3.2.3.2 Impact of corporate and product image on consumers' product response*

Fundamentally, **a positive brand image should increase consumers' product loyalty** (Keller 1993, p. 8). If more than one brand is communicated actively towards consumers, this effect gains in complexity. Lei, Dawar, and Lemmink (2008, p. 111) highlight that brands inevitably become subject to indirect effects in such situations. How-



ever, studies make little efforts to distinguish between direct and indirect effects of corporate and product brand on consumers' product response.

With regards to the **direct effect of corporate and product brand on consumers' product response**, empirical studies provide support that consumer loyalty is in great part influenced by consumers' brand evaluation (Chaudhuri and Holbrook 2001, p. 90). Thereby, it seems to be uncontroversial to argue that both, corporate and product image have a direct, positive impact on consumers' product response. For example, Hsieh, Pan, and Setiono (2004) illustrate that corporate image as well as product image affect brand purchase behavior across 20 countries.

With regards to the **indirect effect of corporate and product brand on consumers' product response**, scholars recently questioned what the effect of a corporate brand on its product brands and thus on consumers' product response looks like (e.g., Keller and Lehmann 2006, p. 743). According to Suh and Yi (2006, p. 147) corporate image can influence product brand attitude, which in turn has a positive impact on brand loyalty. Former findings confirm this relationship (Biehal and Sheinin 1998; Sheinin and Biehal 1999). However, product image could also impact consumers' product response through enhancing corporate image, and thus, impact product loyalty indirectly (Lei, Dawar, and Lemmink 2008).

Concluding, empirical evidence support the positive relationship between both corporate and product image and consumers' product response. Considering further the implications schemata have for behavior, I hypothesize:

- H2: Corporate image has (a) a positive impact on product loyalty as well as (b) a positive indirect impact on product loyalty through positively influencing product image in all five countries.
- H3: Product image has (a) a positive impact on product loyalty as well as (b) a positive indirect impact on product loyalty through positively influencing corporate image in all five countries.

Former research provides support that **brands impact consumers' product response differently across countries and cultures** (e.g., Roth 1995a; 1995b; Hsieh, Pan, and Setiono 2004; Erdem, Swait, and Valenzuela 2006, p. 47). Referring to Han and Schmitt (1997), having a collectivist value orientation means paying attention to and

being affected by the concerns of groups and societal entities at large, whereby the focus is on interdependence rather than independence. Since companies are interdependent, collective societal entities, corporate image as the overall evaluation of the company should be of greater importance in collectivistic cultures. With regards to product brands, I refer to Hofstede (2001) and assume that product image has a stronger influence in individualistic culture.

Summing up, both former findings and schema theory support the varying impact of brands across countries and cultures. Thus, I hypothesize:

- H4: The total effect (i.e., the direct and indirect effect) of corporate image on product loyalty is higher in collectivistic cultures.
- H5: The total effect (i.e., the direct and indirect effect) of product image on product loyalty is higher in individualistic cultures.

### 3.3 Empirical analysis

Examining the hypothesized relationships, I analyze **cross-sectional and longitudinal data**. Conducting a cross-sectional survey, allow to gather data in multiple countries within a relatively short period. Using cross-sectional data allows gaining preliminary insights into the hypothesized reciprocal relationship, but is limited in its generalizability due to potential methodical flaws. To overcome the shortcoming of this approach, I also conduct a complementary panel study (Wong and Law 1999, p. 70; Menard 2002, pp. 78-80). Analyzing the longitudinal data provides reassurance if former findings are valid and reliable.

#### 3.3.1 *Cross-sectional study*

Prior to carrying out a **cross-national survey in five countries**, I conduct a Monte Carlo to clarify sample size and power issues. Following, I outline the sample design and present the measurements as well as the methods applied to analyze the data set. Illustrating the results, I address firstly if corporate and product image are reciprocally

related across countries. Secondly, I examine the direct as well as indirect impact of both corporate and product image on consumers' product response focusing on country-specific variations in these relationships.

### *3.3.1.1 Monte Carlo study*

Prior to the data collection, a **Monte Carlo study was conducted to decide on sample size and determine power of the hypothesized model**. As structural equation modeling heuristics should be used to test measurement invariance and hypotheses, an adequate sample size is a necessary precondition for valid and reliable results (Bearden, Sharma, and Teel 1982; Hancock, Lawrence, and Nevitt 2000; French and Finch 2006; Meade and Bauer 2007). The use of heuristics to decide on the sample size, such as the ratio of on the number of observations and model parameters, is questionable (Jackson 2001; 2003; Herzog, Boomsma, and Reinecke 2007, p. 385). I apply a procedure proposed by Muthén and Muthèn (2002) to decide on sample size and power determine power, which permits to assess estimation accuracy a priori (Meuleman and Billiet 2009, p. 57). Referring to previous research, consumer focus groups and expert interviews, I select population values for each parameter of the model (see Appendix 3.5.1.2.1). With regards to the structural weights I distinguish small, medium, and large effects using two conditions commonly applied to Monte Carlo studies, i.e., .1, .3, and .5 as well as .2, .4, and .6 (Cohen 1962, p. 148; 1969; Sedlmeier and Gigerenzer 1989). 500 replications were generated for each condition and sample size to ensure sufficient reliability of the summary information calculated.

**Using weighted least squares means and variance adjusted (WLSMV) estimation**, which performs superiorly in case of ordinal variables compared to maximum likelihood or weighted least squares estimation (Flora and Curran 2004; Beauducél and Herzberg 2006; Bandalos 2008; Lei 2009), it is not necessary to specify item intercepts, only item thresholds. Thresholds equal the number of categories minus one – e.g., in case of a seven-point Likert type scale six thresholds are assigned to one item – and could be interpreted as z-score value. They describe the likelihood of progression from a lower to a higher category. A high threshold value reflects a more difficult transition between categories, a threshold value of zero signals an equal probability of

transition and a low threshold value indicate an easier movement between two categories. Further, it is to be considered that the degrees of freedom are not calculated, but estimated if applying WLSMV estimation. Thus, chi square values must be carefully interpreted.

Neglecting parameter differences specific to the country and product category surveyed in this stage, I derive a generalized model approximating the necessary sample size in each country. The analyses are carried out using the Mplus program (Muthén and Muthén 2007). In order to determine sample size, several criteria are examined (Muthén and Muthén 2002, pp. 605-06). Firstly, parameter as well as standard error bias must not exceed 10% for any parameter in the model. Further, standard error bias for the parameter for which power is being assessed must not exceed 5%. Moreover, coverage must remain between .91 and .98. Finally, the sample size is chosen to keep power close to .80, which is an acceptable value for sufficient power. The results illustrate that a sample size between 1000 and 3600 observations per country is required to satisfy the criteria and to achieve an adequate power, depending on which condition is referred to. I conclude that a **sample size of 1200 is acceptable in terms of power**. However, resulting effects of .1 must be interpreted carefully in this context.

### *3.3.1.2 Sample characteristics*

A **FMCG manufacturer**, which has standardized its international corporate branding in 2001 and thereby introduced its corporate brand as an endorsement to all of its product brands, was chosen as stimuli. The corporate brand serves as retrieval cue to consumers (Biehal and Sheinin 2007, p. 13). Consumers' awareness of the stimuli, i.e., recognition of corporate and product brand, was a necessary condition (Keller 1993, p. 3). All respondents rated the corporate image and the specific corporate association dimensions of this corporate brand.

The **company's brand portfolio** includes differently positioned brands in three product categories that are detergents, adhesives and cosmetics. Each product category is characterized by a wide variety of competitive brands, which enhance consumer confusion, and evokes a need for guidance. A respondent named three product brands associated most with this corporate brand during the interview. One of these product

brands was selected at random according to a previously defined procedure and then evaluated by the respondent in terms of product image, product-related marketing mix, and product loyalty intentions.

Enhancing the generalizability of my study (Alden, Steenkamp, and Batra 1999, p. 79), I choose **countries** as unit of analysis, which seems to be appropriate if comparing national patterns of behavior (Douglas and Craig 1997, p. 386). The choice of countries surveyed, i.e., Germany, France, Romania, Russia, and the USA, is based on three criteria, namely cultural background, economic conditions as well as company history and presence within the country markets. Comparing these countries on demographic and economic characteristics as well as on Hofstede's (2001) cultural dimensions indicate substantial differences. Germany as the home market of the corporate brand serves as a reference market. France as a mature European market, where the company is doing business since nearly 100 years, is opposed to a third Western country. The USA is one of the largest markets worldwide, which Henkel entered in 1986. The brand awareness of the corporate brand varies across those three countries such that almost every German consumer knows the corporate brand, whereas the familiarity decreases among French and, in particular, U.S.-American consumers. Further, I surveyed two post-socialist markets, where approximately half of the local consumers are aware of the corporate brand. Romania is an upcoming Eastern European market, which the company entered approximately 10 years ago. Russia is one of the largest emerging markets, where the firm has operations since 1990. Given this considerable variation between the five countries, the research setting provides a stringent test of the generalizability of my hypotheses (van de Vijver and Leung 1997, pp. 27-28).

Consumer data is collected in three French (Nantes, Paris, Strasbourg), German (Berlin, Cologne, Trier), and Romanian (Bucharest, Cluj-Napoca, Sibiu), Russian (Moscow, St. Petersburg, Volgograd) and US-American metropolitan areas (New York, Phoenix, San Francisco) through face-to-face interviews. Native speakers conducted the interviews from August to October 2008. Applying quota sampling, based on the country-specific distribution of the populations in terms of age and gender, **1200 consumers above 15 years are interviewed in each country. Thus, the final dataset includes 6000 observations.**

### 3.3.1.3 *Measurements*

With regards to **survey design**, I firstly considered general aspects, e.g., using seven point Likert-type scale items (Cox 1980; Weathers, Sharma, and Niedrich 2005), considering the hierarchy of effects (Bickart 1993, p. 121; Bergkvist and Rossiter 2007, p. 179) and the visual design (Stern, Dillman, and Smyth 2007). At the same time, it is important to consider the cross national applicability of the survey (Wong, Rindfleisch, and Burroughs 2003; Smith et al. 2005), in particular of measurement instruments.

All scales used in the survey were based on **established operationalizations** from previous studies. Whereby corporate and product image were measured according to Keller (1993), I refer to Oliver (1999) with regards to product loyalty (see Appendix 3.5.1.1).

Further, antecedents of product and corporate image were included as **instrumental variables** (see Appendix 3.5.1.1). This is a methodological requirement to analyze the hypothesized reciprocal relationship. Referring to Wu, Day, and Mackay (1988) brand image provides readymade evaluations of brand performance and must be distinguished from brand attributes which are considered by the consumer in forming preferences among the product brands (see also Keller and Aaker 1992, p. 36). Building upon this understanding, I integrate on the one hand five specific corporate associations, which shape consumers' global assessment of the corporate brand, as antecedents of corporate image (Walsh and Beatty 2007). On the other hand, the four product-related marketing mix elements seem like an obvious choice as antecedents of product image (Hyman 2004). A product brand's external portrayal is considered to be "the sum of all elements of the marketing mix: product is just one element, alongside price, promotion and distribution (Ambler and Styles 1996, p. 10)". As actual marketing efforts cannot change consumers' product response unless consumers take note of them, perceived marketing efforts are likely to have a strong meaning. Hence, the latter explain consumers' product response effectively and are included in this study as instrumental variables for product image (Yoo, Donthu, and Lee 2000, p. 200).

**Verification of scale equivalence** is especially important in international studies and should already be assured prior to the data collection. I applied the back-translation

method to ensure calibration and semantic equivalence (Davis, Douglas, and Silk 1981, p. 99; Hult et al. 2008, p. 1035). After the data collection, further analyses must be applied to test if the assumption of measurement invariance holds.

As part of the translation process, qualitative **pretests in every country**, i.e., consumer focus groups and expert interviews to check for face validity, led to a context- and country-specific adaptation of those scales. Thereby, I considered the literature on scale development and modification (Churchill 1979; Rossiter 2002; Finn and Kayande 2004). Finally, a quantitative pretest in every country, i.e., an online survey, showed strong support for reliability and validity of the adapted scales.

Besides taking into account the moderating influence of country-specific characteristics, I consider further **contextual factors**, such as the product category of the product brand evaluated and the interviewee's knowledge about the corporate brand's country of origin. With regards to the latter, the interviewee's had to indicate the country the origin of the corporate brand. After recoding the answers, this results in a group of respondents, which was aware of the country of origin and another group which was not. Referring to Reynolds, Simintiras and Diamantopoulos (2003, p. 83), I also control for the main sociodemographic variables upon which national groups might vary and consider as additional contextual factors interviewee's highest educational attainment, age, and gender.

#### *3.3.1.4 Method*

My **methodical approach is threefold**. Firstly, sample weights were computed and included in the data set. Secondly, the measurements were tested on their validity and reliability. Thirdly, the hypotheses were tested.

To enhance representativeness of the data set and thereby results' generalizability, **sample weights** were computed based on the latest census data from those countries (Eurostat 2009; Information and Publishing Center «Statistics of Russia» 2009; United States Census Bureau 2009) to adjust the sample to age, gender, highest educational attainment and product category (Asparouhov 2005). The decision to include product category in the computation of sample weights is given by the sampling design.

Among the three product brands the interviewee associated most with the corporate brand surveyed, one was chosen randomly. One might argue, that product brands from one product category are generally better rated than those in another product category and thus, that an overrepresentation of product brands from one product category leads to biased results. To exclude any bias ascribed to a varying proportion of product categories across countries, weighting adjusts the number of cases from each product category to 400.

In a second step, I checked for **reliability and validity** of the measurements (see 3.5.1.3). With regards to reliability, each indicator of each measurement instrument was first examined in terms of its corrected item-to-total correlation. Individual item reliability could be confirmed as any corrected item-to-total-correlation fall below .5 (Bearden, Netemeyer, and Teel 1989, p. 475). To assess construct reliability coefficient alpha (Churchill 1979, pp. 68-69) and composite reliability (Fornell and Larcker 1981, p. 45) are computed. Both exceed in every case the recommended threshold of .7 and .6, respectively (Nunnally 1978, p. 245; Bagozzi and Yi 1988, p. 82). Finally, the average variance extracted (AVE) is above .5 for all latent variables (Fornell and Larcker 1981, p. 46).

With regards to **validity**, face validity was assessed firstly by means of expert interviews and consumer focus groups (Cronbach and Meehl 1955, p. 282; Hardesty and Bearden 2004). Secondly, construct validity was assessed by checking convergent and discriminant validity (Campbell and Fiske 1959). The already mentioned AVE values provide support for convergent validity (Fornell and Larcker 1981, p. 46) as do the results of a confirmatory factor analysis including all measurement instruments. The model fits well and the factor loadings were all above .7 (Anderson and Gerbing 1988, p. 416). Referring to Fornell and Larcker (1981, p. 46), all latent variables – except the latent variables product image and marketing mix instrument product in the Romanian sample – fully satisfy the requirement of discriminant validity (see Appendix 3.5.1.3.2). Analyzing the relationship between the latent variables product image and marketing mix instrument product in the Romanian sample, a significant corrected chi-square difference test of two alternative models – once constraining the correlation between the latent variables to unity, and once freeing the parameter – indicate a sufficient degree of discriminant validity (Anderson and Gerbing 1988, p. 416).



Following, I examined if **common method bias** is a potential problem. Besides improving scale items through pretesting, assuring respondent anonymity, and reducing evaluation apprehension to avoid common method bias, I analyzed whether the majority of the variance can be accounted for by one general factor (Podsakoff et al. 2003). However, the results provide strong support that common method bias could be neglected in the analysis.

Furthermore, assessment of the content-related equivalence, i.e., **measurement invariance** is conducted. Testing measurement invariance is important in any multiple group setting (Byrne, Shavelson, and Muthén 1989; Meredith 1993). In particular, measurement invariance is a necessary condition if comparing consumer perceptions between countries (Steenkamp and Baumgartner 1998), but it should also be considered in case of contrasting, e.g., different product categories. Using WLSMV estimation within a multiple group confirmatory factor analysis, the procedure to test for measurement invariance is rather complex (Glöckner-Rist and Hoijtink 2003, pp. 555-56; Millsap and Yun-Tein 2004). Following Muthén and Muthén (2007, pp. 399-400), the invariance of factor loadings and thresholds should not be tested separately as it is the case within maximum likelihood estimation with continuous outcomes (Steenkamp and Baumgartner 1998), but simultaneously as they interact to produce the item probability curve as a function of the factor. As the difference in chi-square values for two nested models using WLSMV estimation does not follow chi-square distribution, I apply a corrected chi-square difference test. I also use the difference in comparative fit indices to decide on measurement invariance (Cheung and Rensvold 2002, p. 251; Chen 2007, p. 501). Regarding the choice of referent indicators I followed the propositions by Johnson, Meade, and DuVernet (2009, p. 656). The results indicate firstly a good fit of all models (Hu and Bentler 1999, p. 27; Chen et al. 2008) and secondly, provide support that partial scalar invariance holds for all constructs (see Appendix 3.5.1.4.1). The partial invariance model derived was used in subsequent analyses.

In a third step, I apply **nonrecursive, multiple group structural equation modeling using WLSMV estimation** to test the hypotheses (Baumgartner and Steenkamp 1998; Lubke and Muthén 2004). Thereby, instrumental variables are used to be able to estimate the hypothesized reciprocal relationship (Wong and Law 1999).

### 3.3.1.5 Results

**Descriptive statistics** of the sample with regards to country, product category, country of origin knowledge, highest educational attainment, age group, as well as gender provide an initial overview regarding consumers' evaluations (see Appendix 3.5.1.5). Looking at the goodness of fit indices of the multiple group model across the five countries shows that the cut of criteria proposed by Hu and Bentler (1999, p. 27) are met. The unstandardized coefficients, which are appropriate for comparison across groups (Singh 1995, pp. 598-600), are reported in Table 3.

Before discussing the estimates of the hypothesized model, it is necessary to ensure that this model fits better than other plausible **rival models** (Steenkamp, Batra, and Alden 2003, p. 59). I estimate three rival models, which differ in the hypothesized relationship between corporate and product image. Firstly, once only the causal relationship from corporate to product image is modeled ( $\chi^2(315)=1375.157$  ( $p=.000$ ), CFI=.958, TLI=.986, RMSEA=.053), secondly only the causal relationship from product to corporate image is modeled ( $\chi^2(315)=1335.347$  ( $p=.000$ ), CFI=.960, TLI=.986, RMSEA=.052) and lastly only the error terms between corporate and product image are correlated, but no causal relationships between the two constructs are modeled ( $\chi^2(315)=1403.947$  ( $p=.000$ ), CFI=.957, TLI=.985, RMSEA=.054). However, corrected chi square difference tests reveal that each rival model fits the data significantly worse than the hypothesized model ( $\chi^2(314)=1272.609$  ( $p=.000$ ), CFI=.962, TLI=.987, RSMEA=.050). Thereby, I have evidence supporting the reciprocal relationship between corporate and product image.

With regards to **H1**, corporate image and product image have a significantly positive reciprocal relationship in Germany, Romania, Russia and the USA. However, in France, product image does not significantly impact corporate image ( $b=.075$ , ns). Summarizing, H1 has to be rejected.

Consistent with **H2**, the results reveal that corporate image has a significant positive direct impact on product loyalty across countries. Furthermore, a positive indirect impact on product loyalty through positively influencing product image is revealed in all five countries. Findings thus provide strong support for H2a and H2b.

Table 3: Country-specific structural parameter estimates – cross-sectional study (Corporate image, product image, and product loyalty)

		Germany	France	Romania	Russia	USA
CIM → PIM		.330 *** (.346 ***)	.359 *** (.427 ***)	.349 *** (.386 ***)	.291 ** (.364 **)	.292 *** (.354 ***)
PIM → CIM		.573 *** (.548 ***)	.075 ns (.063 ns)	.672 *** (.604 ***)	.735 *** (.589 ***)	.231 ** (.190 **)
CIM → PLO	<i>Direct</i>	.379 *** (.314 ***)	.295 ** (.262 **)	.520 *** (.406 ***)	.600 *** (.477 ***)	.272 *** (.298 ***)
	<i>Indirect<sup>a</sup></i>	.398 *** (.331 ***)	.291 ** (.259 **)	.519 * (.402 **)	.506 * (.404 *)	.192 *** (.211 ***)
	<i>Total<sup>b</sup></i>	.777 *** (.646 ***)	.586 ** (.522 **)	1.039 *** (.808 ***)	1.106 *** (.882 ***)	.464 *** (.510 ***)
PIM → PLO	<i>Direct</i>	.761 *** (.603 ***)	.768 *** (.574 ***)	.790 *** (.556 ***)	.927 *** (.589 ***)	.552 *** (.500 ***)
	<i>Indirect<sup>a</sup></i>	.445 *** (.354 ***)	.044 ns (.033 ns)	.698 ** (.488 ***)	.814 ** (.519 **)	.107 * (.097 **)
	<i>Total<sup>b</sup></i>	1.206 *** (.957 ***)	.812 *** (.606 ***)	1.488 *** (1.044 ***)	1.741 *** (1.109 ***)	.659 *** (.597 ***)
COR → CIM		.096 ns (.084 ns)	.124 * (.125 ns)	.054 ns (.061 *)	.145 ** (.147 **)	.183 ** (.167 **)
GEM → CIM		.119 ** (.108 **)	.165 ns (.134 ns)	.107 ** (.112 **)	.110 ns (.097 ns)	.008 Ns (.007 ns)
PRQ → CIM		.092 ** (.118 **)	.290 *** (.332 ***)	.072 ** (.106 **)	.072 ns (.095 *)	.266 *** (.334 ***)
RFC → CIM		.148 ** (.107 **)	-.024 ns (-.016 ns)	.129 ** (.114 ***)	.066 * (.065 *)	.137 ** (.092 **)
SER → CIM		.070 ns (.053 ns)	.209 ** (.165 **)	.138 ** (.116 **)	.130 * (.102 *)	.245 *** (.170 ***)
PRI → PIM		.071 * (.079 **)	.178 *** (.232 ***)	.015 ns (.019 ns)	.044 ns (.060 ns)	.052 Ns (.056 ns)
PRM → PIM		.243 *** (.217 ***)	.205 *** (.218 ***)	.021 ns (.023 ns)	.111 * (.125 *)	.273 ** (.203 **)
PRD → PIM		.395 *** (.332 ***)	.138 ** (.147 **)	.391 *** (.436 ***)	.262 *** (.304 ***)	.337 *** (.311 ***)
PLA → PIM		-.012 Ns (-.010 ns)	.080 ns (.074 ns)	.110 ** (.100 **)	.082 ns (.074 ns)	.067 Ns (.051 ns)

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(314)=1272.609$  ( $p=.000$ ), CFI=.962, TLI=.987, RSMEA=.050.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

With regards to **H3**, the results reveal that product image has a significant positive direct impact on product loyalty across countries. Referring to the indirect impact, France is again the only country that does not yield significant results ( $b=.044$ , ns). Thus H3a can be verified, whereas H3b has to be rejected.

Analyzing **H4**, the total effect of corporate image on product loyalty is higher in Romania ( $b=520$ ,  $p<.001$ ) and Russia ( $b=600$ ,  $p<.001$ ), which are both characterized as being high on collectivism. Corrected chi-square difference tests reveal that the total effect is significantly stronger in Romania compared to France ( $p=.0343$ ) and compared to the USA ( $p=.0004$ ) and in Russia compared to France ( $p=.0204$ ) and compared to the USA ( $p=.0005$ ), whereas France and the USA are the two most individualistic cultures (see Appendix 3.5.1.7.1). Concluding, H4 can be accepted.

Regarding **H5**, the total effect of product image on product loyalty is again higher in collectivistic cultures, whereas structural parameter estimates are the lowest for France ( $b=.812$ ,  $p<.001$ ) and the USA ( $.659$ ,  $p<.001$ ). Corrected chi-square difference tests support this result, which is contrary to my assumption, e.g., the impact is significantly lower in France compared to Romania ( $p=.0015$ ) and Russia ( $p=.0001$ ). Summarizing, H5 has to be rejected.

With regards to **contextual factors**, notable results are summarized in the following (see Appendix 3.5.1.6 and 3.5.1.7). Analyzing the reciprocal relationship between corporate image and product image, a significant positive reciprocal relationship can be revealed considering the moderating influence of all five contextual factors, i.e., product category, country of origin knowledge, and the respondents' education, age, and gender. Considering the direct impact of corporate image on product loyalty, again, this relationship is significantly positive for all contextual factors. The same can be analyzed regarding the indirect impact on product loyalty through positively influencing product image. Regarding the direct impact of product image on product loyalty a significant positive relationship is revealed, considering the moderating influence of all five contextual factors. Analyzing the indirect impact on product loyalty through positively influencing corporate image, again the relationships come out significantly for the five factors. Looking at the total effect of corporate image on product loyalty, structural parameter estimates are significantly positive for all five contextual factors. Regarding product category, education and gender no significant differences among

the group-specific structural estimates could be found. However, the group-specific structural estimates reveal significant differences depending on country of origin knowledge and the respondent's age, e.g., corporate image significantly higher influences product loyalty when the country of origin is known compared to when it is not known. With regards to the total effect of product image on product loyalty, considering the moderating influence of product category and the respondents' education and gender, show that the effects hardly vary between groups. However, analyzing country of origin knowledge and age of the interviewees, significant differences across groups could be observed, e.g., product image significantly higher influences product loyalty, when consumers know the country of origin of the corporate brand.

### 3.3.2 *Longitudinal study*

To enhance the empirical evidence for a profound discussion of the surveyed cause-effect relationships, a replication study, which was based on a longitudinal research design, should provide further insights. Reassuring if the assumption of reciprocity between corporate and product image holds as well as testing the impact of both on consumers' product response, I conduct a complimentary **panel study in two countries**. Following, I outline the sample characteristics, survey design and measurements as well as the methods applied to analyze the data set. Expanding on the results, I address not only the relationship of corporate and product image, but also their impact on consumers' product response.

#### 3.3.2.1 *Sample characteristics and measurements*

The same FMCG manufacturer as in the cross-sectional study was chosen as **stimuli** in the longitudinal study. All respondents evaluated the corporate brand and one product brand, which were randomly selected from the three product categories detergents, cosmetics, and adhesives, taking into account the company's product brands the corresponding consumer was aware of (see Appendix 3.5.1.1).

Among the five **countries** chosen in the cross-sectional study, I picked Germany and

Romania to oppose the home market of the corporate brand to an upcoming, highly dynamic market where the company is doing business for a relative time. Consumers' perceptions were assessed in three waves with four months intervals. Native speakers conducted the interviews in July 2008, November 2008, and March 2009. The final dataset includes 3000 observations, i.e., 500 consumers per wave per country.

With regards to **measurements**, the longitudinal study is geared to the survey design of the cross-sectional study. Also, operationalization of model constructs as well as contextual factors considered lean against the previous consumer survey in both countries.

### 3.3.2.2 *Method*

**Longitudinal modeling** has several advantages. Among those I like to highlight particularly that data collected at multiple time points allows testing both directions of potential causality in a more adequate way (Menard 2002, p. 79). The methodological approach is comparable to the one applied to the cross-sectional sample. Firstly, sample weights were computed and included in the data set. Secondly, the measurements were tested for validity and reliability. Lastly, the hypotheses were tested.

With regards to sample weights as well as reliability and validity, I followed the previously described outline. Several particularities concerning the **reliability and validity testing** of measurements should be highlighted. All measurements show a sufficient level of reliability and validity (see Appendix 3.5.2.1). However, with regards to discriminant validity all latent variables – except the latent variable product loyalty at time point two and three – fully satisfy the criteria of Fornell and Larcker (1981, p. 46). Analyzing the relationship between the latent variable product loyalty at time point two and three in the Romanian sample in detail, a significant corrected chi-square difference test of two alternative models – once constraining the correlation between the latent variables to unity, and once freeing the parameter – indicate a sufficient degree of discriminant validity (Anderson and Gerbing 1988, p. 416). Concerning measurement invariance testing, the procedure has to be adapted to check additionally for the equivalence of constructs over time. The results provide strong support that partial scalar invariance holds for all constructs (see Appendix 3.5.2.2). Examin-

ing common method bias shows no indication that systematic measurement error has to be taken into account within the present sample.

I apply a **longitudinal, multiple group cross-lagged design for structural equation models** to test the hypotheses (Finkel 1995, pp. 24-31), which is well suited for short time series with many cases (Menard 2002, p. 70). Thereby, structural paths between the same construct measured at all times are included to estimate the cross-time, relative stability of the construct. Thus, one can determine significant structural paths connecting different constructs explaining additional variance beyond the variance explained by the prediction of the same construct at a previous time point. Furthermore, autocorrelation of the measurement errors of the same indicators across the three waves is modeled. So far, this technique has rarely been employed for empirical studies (Burkholder and Harlow 2003, pp. 467-68).

### 3.3.2.3 Results

**Descriptive statistics** of the sample with regards to country, product category, country of origin knowledge, highest educational attainment, age group, as well as gender provide an initial overview regarding consumers' evaluations (see Appendix 3.5.2.3). Looking at the goodness of fit indices of the multiple group model across the two countries shows that the cut of criteria proposed by Hu and Bentler (1999, p. 27) are met. The unstandardized coefficients, which are appropriate for comparison across groups (Singh 1995, pp. 598-600), are reported in Table 4.

As parsimony is particular important in structural equation models (Bollen 1989, p. 72), I took into account that the cross-lagged effects between latent variables as well as the stability of each variable should be equal across waves as panel waves are equally spaced (Finkel 1995, pp. 29-30). Further, the covariance between disturbances of any two latent variables at time point 2 is assumed to be equal to those at time point 3. To ensure that this model fits better than a **rival model**, in which those parameter constraints are freed, a corrected chi-square difference test is applied. The results provide support that the constrained model ( $\chi^2(70)=184.676$  ( $p=.000$ ), CFI=.965, TLI=.984, RMSEA=.056) fits significantly better than the unconstrained model ( $\chi^2(86)=215.861$

( $p=.000$ ), CFI=.961, TLI=.985, RMSEA=.054). However, in both cases small, mostly insignificant values obtained for the standardized covariances between the disturbances of corporate image, product image, and product loyalty at time point two and three suggest that the model accounts very well for the synchronous covariation between the three latent variables (Finkel 1995, p. 30). Concluding, the constrained model is used for hypotheses testing.

Table 4: Country-specific parameter estimates – longitudinal study (Corporate image, product image, and product loyalty)

	Germany	Romania
CIMa → PLOb/ CIMb → PLOc	.123 *** (.140 ***)	.142 *** (.181 ***)
PIMa → PLOb/ PIMb → PLOc	.275 *** (.215 ***)	.181 *** (.168 ***)
PLOa → PLOb/ PLOb → PLOc	.738 *** (.668 ***)	.665 *** (.588 ***)
CIMa → PIMb/ CIMb → PIMc	.176 *** (.278 ***)	.107 *** (.156 ***)
PIMa → PIMb/ PIMb → PIMc	.425 *** (.457 ***)	.504 *** (.529 ***)
PIMa → CIMb/ PIMb → CIMc	.285 *** (.199 ***)	.174 *** (.117 ***)
CIMa → CIMb/ CIMb → CIMc	.694 *** (.708 ***)	.511 *** (.476 ***)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(70)=184.676$  ( $p=.000$ ), CFI=.965, TLI=.984, RMSEA=.056.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

Consistent with **H1**, a significant positive reciprocal relationship between corporate and product image can be revealed over time as well in Germany as in Romania. The cross-lagged relationships between corporate and product image as well as product and corporate image are significantly positive. Thereby, the impact of the precedent corporate image on the subsequent product image is not significantly different from the impact of the precedent product image on the subsequent corporate image in Germany



( $p=.1149$ ) and Romania ( $p=.4234$ ). Summing up, findings provide strong support for H1.

With regards to **H2**, results indicate a significant positive direct impact of precedent corporate image on consumers' subsequent product loyalty intentions for both countries. Analyzing the indirect impact of corporate image on product loyalty through influencing product image, results show a significant positive indirect effect of corporate image at time point one on product loyalty at time point three through positively influencing product image at time point two as well for Germany ( $b=.048$ ,  $p=.000$ ) as for Romania ( $b=.025$ ,  $p=.030$ ). In conclusion, H2a and H2b can be accepted.

Regarding **H3**, results indicate a significant positive direct impact of precedent product image on consumers' subsequent product loyalty intentions for both countries. Analyzing the indirect impact of product image on product loyalty through influencing corporate image, results show a significant positive indirect effect of product image at time point one on product loyalty at time point three through positively influencing corporate image at time point two for Germany ( $b=.035$ ,  $p=.000$ ). The indirect effect is not significant for Romania ( $b=.019$ ,  $p=.004$ ). Summarizing, H3a and H3b can be supported.

Analyzing **H4**, the total effect of corporate image on product loyalty is higher in Romania ( $b=.309$ ,  $p<.001$ ) than in Germany ( $b=.294$ ,  $p<.001$ ). However, corrected chi-square difference tests (see Table 5) reveal that the total effect is not significantly stronger in any of the two groups ( $p=.2037$ ). H4 thus has to be rejected.

Analyzing **H5**, the total effect of product image on product loyalty is higher in Germany ( $b=.585$ ,  $p<.001$ ) than in Romania ( $b=.381$ ,  $p<.001$ ). However, corrected chi-square difference tests reveal that the total effect is not significantly stronger in Germany compared to Romania ( $p=.0583$ ). Concluding, H5 is not supported.

Furthermore, the longitudinal analysis provides insights in the **stability of consumers' brand evaluations and product response**. With regards to brand evaluations, former research assumes a relatively high stability (Ailawadi, Lehmann, and Neslin 2003, pp. 8-10; Dolnicar and Rossiter 2008). The results provide support for these findings. However, it is interesting to note that corporate image is even more stable than product image in Germany ( $p=.0000$ ), but not in Romania ( $p=.9375$ ). Further, product loyalty

is characterized by a high stability.

Table 5: Differences in path coefficients (countries) – longitudinal study (Corporate image, product image, and product loyalty)

		p-Value Wald chi-square test of parameter equalities	
		Germany	Romania
CI <sub>Ma</sub> → PLO <sub>b</sub> / CI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	GER	-	-
	ROM	.2587	-
PI <sub>Ma</sub> → PLO <sub>b</sub> / PI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	GER	-	-
	ROM	.0580	-
CI <sub>Ma</sub> → PLO <sub>c</sub> (Indirect effect <sup>a</sup> )	GER	-	-
	ROM	.2545	-
PI <sub>Ma</sub> → PLO <sub>c</sub> (Indirect effect <sup>a</sup> )	GER	-	-
	ROM	.8271	-
CI <sub>Ma</sub> → PLO <sub>c</sub> (Total effect <sup>b</sup> )	GER	-	-
	ROM	.2037	-
PI <sub>Ma</sub> → PLO <sub>c</sub> (Total effect <sup>b</sup> )	KNO	-	-
	UKN	.0583	-

PLO<sub>a-c</sub>: product loyalty at time points 1, 2 and 3; CI<sub>Ma-c</sub>: corporate image at time points 1, 2 and 3; PI<sub>Ma-c</sub>: product image at time points 1, 2 and 3.

<sup>a</sup> The indirect effect considers the impact of PI<sub>Ma</sub> through CI<sub>Mb</sub> on PLO<sub>c</sub> and CI<sub>Ma</sub> through PI<sub>Mb</sub> on PLO<sub>c</sub>.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-values of the Wald tests, which are equal or less than .05, are underlined.

With regards to **contextual factors**, notable results are summarized in the following (see Appendix 3.5.2.4 and 3.5.2.5). Analyzing the reciprocal relationship between corporate image and product image, a significant positive reciprocal relationship can be revealed considering the moderating influence of all five contextual factors in 11 of 15 groups. Only in the case of interviewees, whose highest educational attainment was categorized as ‘others’, both the relationship of corporate on product image and the relationship of product on corporate image are not significant. In the three other cases, merely corporate image had no significant impact on product image, e.g., with regards to respondents between 15-24 years. Considering the impact of corporate image on product loyalty, this relationship is significantly positive in 10 of 15 groups. Exceptions are, e.g., people who fall into the age groups from 50 to 65 years and above 65 years. Another exception is again the group of interviewees, whose highest education-

al attainment is categorized as 'others'. The latter group also constitutes the only exception with regards to the impact of product image on product loyalty. This relationship is significantly positive in all other cases. Looking at the differences of structural parameter estimates between groups, the total effect of corporate image on product loyalty does not vary significantly with regards to gender. However, the group-specific structural estimates reveal significant differences depending on the four other contextual factors, e.g., the stronger impact of corporate image on product loyalty if consumers are aware of the country of origin of the corporate brand is confirmed, which was already found in the cross-sectional study. With regards to the total effect of product image on product loyalty the findings on the moderating influence of the contextual factors differ somewhat compared to the cross-sectional study. Whereas country of origin knowledge does not influence group-specific structural estimates, the four other contextual factors impact the relationship between product image and product loyalty, e.g., it is stronger in case of female respondents compared to male ones. Concluding, the impact of contextual factors on the hypothesized relationship is rather complex, whereas the pattern of effects stated in the cross-sectional study is widely consistent to the one in the longitudinal study.

### 3.4 Discussion

**Does endorsing product brands by corporate branding pay off?** Yes it does. Referring to the initial question, I mainly focused on two aspects: (1) Do consumers perceive corporate and product brand as reciprocally related across countries? (2) How do the direct and indirect effects of corporate and product branding on consumers' product response look like across countries?

With regards to the **reciprocal relationship between corporate image and product image**, results illustrate a significant positive reciprocal relationship in Germany, Romania, Russia and the USA. Only France constitutes an exception, as product image does not significantly impact corporate image in this country. This might be due to the fact that French consumers are not aware of the company that produces the product brands they are buying. Results of a panel study in Germany and Romania confirm the

positive reciprocal relationship between corporate and product image.

With regards to the **direct and indirect effects of corporate image and product image**, results reveal that corporate image has a significant direct impact as well as a significant indirect impact through positively influencing product loyalty on consumers' product response in all countries. For the direct and indirect impact of product image on consumers' product response, findings illustrate significant relationships in all countries, except for France where the indirect impact is found to be not significant. Again, this might be related to the fact that French consumers are less aware of which FMCG firm stands behind the product brand. Results of the longitudinal study underline these findings.

Referring to **total effects of corporate image and product image on consumers' product response**, the findings from the cross-sectional sample indicate that the total effect of corporate image is significantly higher in countries characterized as being high on the collectivism dimension. However, corresponding findings for the total effect of product image in individualistic countries could not be revealed. This effect is again higher in collectivistic countries. Although the findings from the longitudinal sample have not confirmed this pattern of effects, there is initial empirical evidence that product and corporate image are perceived differently depending on country-specific characteristics.

Considering product categories, country of origin knowledge, highest educational attainment, gender, and age as **contextual factors** for all relationships examined in the hypothesized model, enhances the generalizability of the presented findings. Thus, for example, the total effect of product image on product loyalty, considering the moderating influence of product category and the respondents' education and gender, show that the effects hardly vary between groups. However, analyzing country of origin knowledge and age of the interviewees, significant differences across groups could be observed, e.g., product image significantly higher influences product loyalty, when consumers know the country of origin of the corporate brand.

### 3.4.1 *Theoretical implications*

With regards to **theoretical implications**, this study advances the knowledge on corporate and product branding. Particularly, I highlight (1) the importance of taking a holistic perspective as well as (2) the contribution of an international focus in branding studies. Further, I exemplify (3) the reciprocal relationship between corporate and product brand and distinguish (4) between the direct and indirect effects of corporate and product branding on consumers' product response.

I contribute a **holistic approach** on the impact of corporate and product branding on consumers' product response in an international context. This holistic perspective brings together the findings from former analyses and validates those in the overall context. Shocker, Srivastava, and Ruckert (1994, p. 157) already demanded "the development of more of a 'systems view' of brands and products to include how intangibles created by the pricing, promotional, service, and distribution decisions of the brand manager combine with the product itself to create brand equity and affect buyer decision making."

Among others, Steenkamp (2005, p. 6) as well as Keller and Lehmann (2006, p. 750) highlight the **importance of studies focusing on cross-national research questions**. Following those requests, my study focuses on the question whether endorsing product brands through corporate brands pay off by analyzing the five countries Germany, France, Romania, Russia, and the USA in a cross-sectional consumer study. My results indicate that a positive reciprocal relationship exists in all countries except France and that the total effect of corporate image on consumers' product response is significantly higher in collectivistic countries. Thus, extending the findings of Brown and Dacin (1997) as well as Berens, van Riel, and van Bruggen (2005), the present study advances the knowledge on corporate branding in an international context. Considering additional contextual factors, such as product category, country of origin knowledge, and several sociodemographics, the generalizability of the results is enhanced. Thus, for example, the findings on the total effect of product image on product loyalty, considering the moderating influence of product category and the respondents' education and gender, show that this effect hardly varies between groups. However, analyzing country of origin knowledge and age of the interviewees, significant differ-

ences across groups could be observed, e.g., product image influences product loyalty to a larger extent, when consumers are aware of the country of origin of the corporate brand.

By closer examining the **reciprocal relationship** between corporate and product brand, I respond to Brown and Dacins' (1997, p. 81) request, that these effects remain for closer examination. Recently, Keller and Lehmann (2006, p. 749) highlighted that the corporate brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand. Whereas Muzellec and Lambkin (2008) illustrate how a multinational FMCG company deliberately pursued a strategy of separating its corporate brand from its product brand portfolio, it is necessary to shed light on the opposite case. Result provide insights in how this reciprocal relationship looks like, if a company decides to use their corporate brand as an endorsement for their product brands.

The present study advances existing research by distinguishing between the **direct and indirect effects of corporate and product branding on consumers' product response**. Answering Keller and Lehman's (2006, p. 743) call, I consider, besides the direct effect, the indirect effect of the corporate brand on the product brands and thus on consumers' product response. Analogously, I take into account that consumers' evaluation of product brands could also impact their product response indirectly through enhancing the evaluation of the corporate brand (Aaker and Joachimsthaler 2000, p. 13). With this, I advance the knowledge on the processes and conditions through which corporate and product branding have an impact on consumers' product response (cf., Gürhan-Canli and Batra 2004, pp. 203-04). Results illustrate that, except for the indirect impact of product brand on consumes' product response in France, all relationships show significant positive impacts across countries.

### *3.4.2 Managerial implications*

With regards to **managerial implications**, general recommendations for evaluating and managing endorsed corporate branding in an international context are derived. In particular, I propose (1) an approach to evaluate a firm's brand architecture from the

customer's perspective, highlight (2) the added value of a corporate endorsement across countries, and illustrate (3) the necessity of country-specific adaptations of the corporate branding activities.

The results provide insights into the consumer-based sources of corporate and product brand image and help marketers to **evaluate a firm's brand architecture**. Customer mindset measures are crucial for diagnosing the underlying drivers of brand image. Agreeing with Ailawadi, Lehmann and Neslin (2003, pp. 2-3, 15), I recommend that firms' periodically examine customer mind-set measures as well as product- and financial-market measures of brand equity to guide marketing decisions and fully diagnose problems being on the agendas of corporate and product brand managers.

Corporate communication departments, in general, and corporate brand managers, in particular, spend significant time on defending their efforts to communicate the corporate brand within the firm. Although the strategic decision on implementing the corporate brand as an endorser is made by the CEO, opponents within the company, e.g., product brand managers, are often hard to **convince that this endorsement adds value to the product brands** and is not diluting the individual product brands. Brand managers at the corporate and those at the product level often disagree about the preferred degree of corporate endorsement. The former advocate a clearly visible presence of the corporate brand, while the latter favor a weak or in extreme cases no endorsement of the corporate brand. While corporate brand managers argue that a corporate endorsement creates a sense of internal coherence, illustrating the company's strength and unity as well as leveraging standardization potential, product brand managers might have the impression that a corporate endorsement limits their freedom to act, confuses consumers, and jeopardizes former investments in the product brand (van Riel and van Bruggen 2002, p. 244). Both an early internal communication on corporate brand issues and the prominent commitment of the company's senior management help to prevent those misunderstandings and to yield a profit in the medium to long term. With this study, I present a transparent, comprehensible evaluation approach, which is applicable across country markets. Results clearly illustrate the positive effect a corporate brand can have on consumers' product response through positively influencing product image. Thus, product brand managers should consider the value corporate endorsement might indeed add to product brands. Product brands can profit from

former investments in the corporate brand, e.g., marketing efforts to communicate that the corporate brand stands for high quality products which are socially and environmentally responsible. Thus, for example, consumers will automatically relate a newly introduced product brand with those positive associations regarding the corporate brand.

Further, the results illustrate the **necessity of country-specific adaptations of the corporate branding activities**. Regarding the French consumers, I could not state that a reciprocal relationship between corporate brand and product brands exists. This could indicate that product brands are associated with the corporate brand in the other countries, whereas in France product image doesn't significantly affect corporate image. This might be related to the fact that French consumers are less aware which FMCG firm stands behind which product brand. On the other hand, the influence of corporate image on product image indicates that awareness and esteeming of the corporate brand strengthens the corresponding product brand, especially with regards to French consumers. Corporate managers have to survey those country-specific effects regularly and adjust their communication activities wherever necessary.

### *3.4.3 Limitations and directions for future research*

Seeking to understand the value of corporate branding, particularly within an international context, **further testing is required to extend the findings of the present study** in several ways. In the following, I address issues regarding (1) the data basis, (2) the methodological approach as well as (3) further directions to disentangle the impact of corporate branding.

Clearly, the **data basis can be further advanced**. Considering the power level for small effects, future studies may replicate the study using country-wide random sampling instead of quota sampling in three metropolitan areas. It should also be noticed, that in the case of the sample from Russia and Romania, quota sampling was useful as random sampling or telephone interviews are difficult to run in emerging markets. Further, it would be worthwhile to analyze the implementation of internationally standardized corporate branding in several companies across several countries during a certain



time period. Thus, it would be possible to contrast more and less successful implementations identifying success factors. The present study used data collected only for one corporate brand. Future studies should focus on more than one company and survey other types of industries and products. In this case, one would also be able to consider contextual factors on a firm or industry level basis. However, from a methodological point of view a large number of countries increase the complexity to ensure the comparability of data, e.g., different response styles might lead to nonequivalence (van Herk, Poortinga, and Verhallen 2004; 2005).

**Extending longitudinal and experimental designs** could fill an important gap in the understanding of the observed relationships justifying the causal interpretation and clarify the directions of the relationships between specific corporate associations, corporate image, product loyalty, and other additional variables. Time may be included as a nested level in individual customers, as companies often lack knowledge on how brands change over time and whether these changes are the same for different consumer segments (Keller and Lehmann 2006). Applying latent growth curve modeling could capitalize on the richness of multiwave data allowing for more effective testing of systematic inter-individual differences in change (e.g., Steenkamp and Baumgartner 2000; Byrne and Crombie 2003). Analyzing more time periods would also allow further analysis, e.g., autoregressive latent trajectory analysis (Bollen and Curran 2004).

Regarding the methodology, it would be valuable to consider **multiple levels of analysis** applying more advanced methodological approaches (Hitt et al. 2007, pp. 1385-86). The integration of insights from micro- and macro-level information, i.e., consumer-level as well as firm- and country-level data, is required to further advance knowledge on global brands in general and on international corporate brand management in particular. At the same time, advancing the methodological approach to analyze contextual factors would offers researchers the opportunity to draw more precise conclusions.

In addition to analyze the country-specific variation of effect, detailed managerial recommendations require a detailed assessment of **covariates**. Roth (1992, p. 26) highlights three contextual factor influencing brand image performance, these are the level of economic development, the degree of cultural context and extent of competition within a product category. The present study considered all of those country market

characteristics. Nevertheless data availability limited the analysis to a highly aggregated level. Multi-country studies analyzing the impact of those contextual factors on the brand-level would provide a valuable extent of research on international branding.

Additional research should also investigate the **importance of corporate brand in the context of habitual buying behavior** in detail, i.e., that consumers tend to buy the same brands and products across different shopping episodes. This is of particular relevance in the FMCG sector, e.g., when buying detergents. Understanding if corporate branding may drive consumer habits becomes relevant as “habits are quick to activate and are further augmented by the reduced activation of alternative responses (Wood and Neal 2009, p. 589).” If consumers tend to buy products habitually, it is to determine, whether or not specific corporate associations are important for consumers’ decision at all.

### 3.5 Appendix

#### 3.5.1 Cross-sectional sample

##### 3.5.1.1 Definition, source and measurement of constructs

Construct	Definition and source	Measurement
Product loyalty (PLO)	Customers' conative loyalty toward the product brand, i.e., their behavioral intention to continue buying the product brand in the future (Oliver 1999, p. 35).	(PLO1) I like to buy [product brand] anytime.
		(PLO2) I will buy [product brand] on my next shopping trip.
		(PLO3) I will purchase [product brand] frequently in the next couple of months.
		(PLO4) I will buy [product brand] more than I will buy competitors' products in the future.
Corporate Image (CIM)	Customers' perceptions of a corporate brand as reflected by the brand associations held in consumer memory (Keller 1993, p. 3).	(CIM1) [Corporate brand] is a strong brand.
		(CIM2) [Corporate brand] is a unique brand.
		(CIM3) [Corporate brand] is a favorable brand.
Product Image (PIM)	Customers' perceptions of a product brand as reflected by the brand associations held in consumer memory (Keller 1993, p. 3).	(PIM1) [Product brand] is a strong brand.
		(PIM2) [Product brand] is a unique brand.
		(PIM3) [Product brand] is a favorable brand.
Price (PRI)	Customers' perception of the price of a product brand referring to their internal reference price (Maddox 1982, p. 41).	(PRI1) [Product brand] has acceptable prices.
		(PRI2) [Product brand] has attractive prices.
		(PRI3) [Product brand] is a good buy.
		(PRI4) [Product brand] is available for reasonable prices.
Promotion (PRM)	Consumers' perception of advertising spending for the product brand, i.e., perceived advertising presence and quality (Yoo, Donthu, and Lee 2000, p. 200).	(PRM1) [Product brand] has appealing advertisements.
		(PRM2) [Product brand] appears to be supported by high levels of advertisements.
		(PRM3) [Product brand] regularly attracts my attention through advertisements.
		(PRM4) [Product brand] stands out through good advertisements.
Product (PRD)	Customers' perception of the physical quality of a product brand (Stayman and Batra 1991, p. 234).	(PRD1) [Product brand] is of high quality.
		(PRD2) [Product brand] appears reliable to me.
		(PRD3) [Product brand] is beneficial to me.
		(PRD4) [Product brand] is useful to me
Place (PLA)	Customers' perception of the availability of the product brand among and within retail stores (Yoo, Donthu, and Lee 2000, p. 201).	(PLA1) [Product brand] is available in adequate quantity in the shops I buy.
		(PLA2) [Product brand] is represented by a reasonable variety in the shops I buy.
		(PLA3) [Product brand] is offered in many different shops.
		(PLA4) [Product brand] can be bought without great efforts.

Customer orientation (COR)	Customers' perception to which degree a company and its employees' go to satisfy customer needs, and put customers at center of focus (Walsh and Beatty 2007, p. 135).	(COR1)	[Corporate brand] takes customer rights seriously.
		(COR2)	[Corporate brand] treats its customers fairly.
		(COR3)	[Corporate brand] tries to meet its customers' needs.
		(COR4)	[Corporate brand] cares about all of its customers regardless of how much money they spend.
Good employer (GEM)	Customers' perception how a company treats its employees and if that company is well-managed and has competent employees (Walsh and Beatty 2007, p. 133).	(GEM1)	[Corporate brand] seems to have good employees.
		(GEM2)	[Corporate brand] looks like a good company to work for.
		(GEM3)	[Corporate brand] seems to have excellent leadership.
		(GEM4)	[Corporate brand] seems to treat its employees well.
Product range quality (PRQ)	Customers' perception to which degree a company offers innovative, high-quality products and services, which they stand behind (Walsh and Beatty 2007, p. 133).	(PRQ1)	[Corporate brand] stands behind the product range that it offers.
		(PRQ2)	[Corporate brand] is a strong, reliable company.
		(PRQ3)	[Corporate brand] offers high-quality products.
		(PRQ4)	[Corporate brand] develops innovative products.
Reliable and financially strong company (RFC)	Customers' perception of company's competence, solidity, and profitability and of firm's vision and investment potential (Walsh and Beatty 2007, p. 133).	(RFC1)	[Corporate brand] appears to outperform competitors.
		(RFC2)	[Corporate brand] seems to be able to identify and make use of market opportunities.
		(RFC3)	[Corporate brand] appears to have strong prospects for future growth.
		(RFC4)	[Corporate brand] looks like a good investment.
Social and environmental responsibility (SER)	Customers' perception to which degree a company sees and acts on environmental and social responsibilities (Walsh and Beatty 2007, p. 133).	(SER1)	[Corporate brand] would reduce its profits to ensure a clean environment.
		(SER2)	[Corporate brand] seems to make an effort to create new jobs.
		(SER3)	[Corporate brand] to be environmentally responsible.
		(SER4)	[Corporate brand] appears to support good causes.

### 3.5.1.2 Monte Carlo study

#### 3.5.1.2.1 Population values

Model part	Parameter	Population value (condition 1)	Population value (condition 2)
Structural model	CIM → PLO	.1	.2
	PIM → PLO	.5	.6
	CIM → PIM	.3	.4
	PIM → CIM	.3	.4
	COR → CIM	.3	.4

	GEM → CIM	.1	.2
	PRQ → CIM	.5	.6
	RFC → CIM	.3	.4
	SER → CIM	.3	.4
	PRI → PIM	.3	.4
	PRM → PIM	.3	.4
	PRD → PIM	.5	.6
	PLA → PIM	.1	.2
Measurement model	Factor loading		.8
	Thresholds, 1 <sup>st</sup>		-1.5
	Thresholds, 2 <sup>nd</sup>		-1.0
	Thresholds, 3 <sup>rd</sup>		-.5
	Thresholds, 4 <sup>th</sup>		0
	Thresholds, 5 <sup>th</sup>		.5
	Thresholds, 6 <sup>th</sup>		1.0
	Residual variances <sup>a</sup>		1
	Variances <sup>a</sup>		1
	Covariances <sup>b</sup>		.3

PLQ: product loyalty; CIM: corporate image; PIM: product image; PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> Necessary requirement for a WLSMV estimation using Theta parameterization.

<sup>b</sup> Covariances among exogenous latent variables.

### 3.5.1.2.2 Parameter estimate bias, standard error bias, coverage, and power for structural parameters (condition 1 and 2, 200-1800 observations)

Parameter	Pop. val.	Estimates	Observations									
			200	400	600	800	1000	1200	1400	1600	1800	
CIM → PIM	.1	PE Bias	.0790	.0070	.0020	.0070	.0000	.0030	.0070	.0010	.0060	
		SE Bias	-.3653	-.0154	.0164	.0350	.0154	.0478	.0670	.0611	.0593	
		95% Cover	.922	.954	.954	.956	.964	.960	.966	.964	.966	
		% Sig Coeff	.148	.220	.288	.402	.468	.552	.630	.672	.738	
	.2	PE Bias	.0050	-.0050	-.0010	-.0005	-.0055	-.0035	-.0020	-.0045	-.0010	
		SE Bias	-.0960	.0126	.0387	.0323	.0111	.0400	.0463	.0406	.0432	
		95% Cover	.936	.968	.958	.954	.958	.962	.972	.948	.966	
		% Sig Coeff	.496	.840	.944	.982	.996	1.000	1.000	1.000	1.000	
	PIM → CIM	.3	PE Bias	.0040	.0127	.0140	.0057	.0100	.0100	.0080	.0083	.0057
			SE Bias	-.2383	-.0441	-.0427	-.0029	-.0174	-.0087	-.0132	-.0200	-.0043
			95% Cover	.922	.946	.946	.972	.954	.958	.960	.956	.960
			% Sig Coeff	.580	.870	.972	.996	1.000	1.000	1.000	1.000	1.000
.4		PE Bias	.0453	.0270	.0178	.0103	.0138	.0125	.0107	.0105	.0077	
		SE Bias	-.1225	-.0291	-.0432	-.0134	-.0310	.0075	.0081	-.0148	-.0046	
		95% Cover	.930	.944	.956	.958	.952	.964	.968	.940	.954	
		% Sig Coeff	.872	.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
CIM → PLO	.5	PE Bias	.0090	.0050	-.0002	.0000	-.0060	-.0046	-.0064	-.0062	-.0070	
		SE Bias	-.1134	-.0097	.0152	.0035	.0259	.0152	.0070	-.0049	.0351	

		95% Cover	.944	.948	.958	.948	.960	.950	.948	.958	.958
		% Sig Coeff	.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	-.0105	-.0017	-.0045	-.0025	-.0083	-.0070	-.0085	-.0078	-.0090
		SE Bias	-.0236	.0136	.0540	-.0059	.0507	.0223	.0080	.0194	.0206
		95% Cover	.946	.944	.964	.948	.958	.952	.948	.950	.942
		% Sig Coeff	.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
PIM →	.5	PE Bias	-.0146	-.0064	-.0094	-.0028	.0006	.0018	.0014	.0002	-.0010
PLO		SE Bias	-.1537	-.0777	.0309	.0376	.0234	.0318	.0458	.0690	.0961
		95% Cover	.920	.942	.950	.956	.954	.960	.954	.972	.976
		% Sig Coeff	.988	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	-.0205	-.0082	-.0088	-.0020	.0000	.0012	.0005	-.0013	-.0017
		SE Bias	-.1018	-.0628	.0330	.0339	.0565	.0328	.0574	.0661	.0946
		95% Cover	.916	.938	.946	.958	.952	.962	.966	.970	.972
		% Sig Coeff	.986	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
PRI → PIM	.3	PE Bias	.0400	.0200	.0147	.0107	.0137	.0103	.0077	.0120	.0120
		SE Bias	-.0810	-.0385	.0037	-.0099	-.0203	.0142	.0115	-.0100	.0131
		95% Cover	.944	.946	.954	.954	.954	.954	.962	.952	.958
		% Sig Coeff	.580	.872	.968	.988	.998	1.000	1.000	1.000	1.000
	.4	PE Bias	.0522	.0232	.0182	.0155	.0145	.0113	.0097	.0140	.0135
		SE Bias	-.0538	-.0046	.0232	.0040	-.0015	.0317	.0344	.0056	.0286
		95% Cover	.970	.958	.954	.944	.956	.964	.960	.962	.960
		% Sig Coeff	.748	.982	.998	1.000	1.000	1.000	1.000	1.000	1.000
PRM →	.3	PE Bias	.0980	.0280	.0273	.0197	.0243	.0187	.0150	.0140	.0107
PIM		SE Bias	-.1561	-.0996	-.0853	-.0462	-.0642	.0053	-.0222	-.0218	-.0470
		95% Cover	.928	.930	.934	.928	.922	.950	.948	.952	.940
		% Sig Coeff	.626	.864	.974	.994	.998	.998	1.000	1.000	1.000
	.4	PE Bias	.1020	.0362	.0320	.0222	.0250	.0197	.0168	.0153	.0118
		SE Bias	-.1004	-.0968	-.0894	-.0545	-.0594	.0147	-.0288	-.0290	-.0399
		95% Cover	.954	.934	.926	.926	.926	.952	.942	.942	.940
		% Sig Coeff	.778	.966	.996	1.000	1.000	1.000	1.000	1.000	1.000
PRD →	.4	PE Bias	.0898	.0334	.0250	.0148	.0108	.0090	.0098	.0080	.0100
PIM		SE Bias	-.1298	-.0028	-.0034	.0040	.0060	.0501	-.0105	.0115	.0398
		95% Cover	.930	.962	.954	.956	.950	.968	.958	.952	.954
		% Sig Coeff	.942	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.0873	.0300	.0227	.0133	.0102	.0090	.0090	.0070	.0082
		SE Bias	-.1102	.0331	.0324	.0224	.0069	.0688	.0115	.0230	.0481
		95% Cover	.960	.974	.956	.958	.956	.962	.956	.960	.956
		% Sig Coeff	.984	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
PLA →	.1	PE Bias	-.0960	-.0180	-.0020	-.0040	-.0040	-.0100	-.0120	-.0170	-.0140
PIM		SE Bias	-.1458	-.0989	-.0866	-.0487	-.0302	-.0279	.0098	-.0283	-.0087

		95% Cover	.914	.926	.930	.940	.948	.932	.950	.944	.962
		% Sig Coeff	.152	.182	.260	.302	.396	.452	.480	.538	.574
	.2	PE Bias	.0050	.0100	.0090	.0035	.0030	-.0015	-.0005	-.0035	-.0020
		SE Bias	-.0991	-.0878	-.0726	-.0471	.0000	-.0231	.0458	-.0303	-.0143
		95% Cover	.920	.926	.940	.940	.952	.936	.966	.942	.952
		% Sig Coeff	.278	.530	.664	.800	.872	.910	.960	.966	.992
COR →	.3	PE Bias	.0610	.0270	.0180	.0013	.0050	.0007	.0027	.0043	.0083
CIM		SE Bias	-.1041	-.0355	-.0190	-.0322	-.0015	-.0223	-.0207	-.0257	-.0513
		95% Cover	.948	.946	.948	.960	.958	.960	.944	.940	.936
		% Sig Coeff	.554	.834	.938	.986	.996	1.000	1.000	1.000	1.000
	.4	PE Bias	.0783	.0325	.0182	.0022	.0055	.0017	.0027	.0030	.0065
		SE Bias	-.0674	-.0206	-.0140	-.0342	-.0079	-.0337	-.0230	-.0278	-.0668
		95% Cover	.952	.952	.950	.966	.964	.954	.956	.942	.934
		% Sig Coeff	.664	.936	.982	.996	.998	1.000	1.000	1.000	1.000
GEM →	.1	PE Bias	-.0500	-.0250	-.0350	-.0030	.0030	.0100	.0080	.0020	-.0060
CIM		SE Bias	-.1595	-.0763	-.0515	.0000	-.0671	-.0645	-.0248	-.0445	-.0358
		95% Cover	.922	.942	.934	.946	.938	.938	.948	.934	.948
		% Sig Coeff	.128	.182	.224	.270	.354	.402	.454	.502	.512
	.2	PE Bias	.0495	.0125	-.0040	.0105	.0150	.0145	.0125	.0100	.0065
		SE Bias	-.1494	-.0686	-.0478	-.0074	-.0698	-.0683	-.0257	-.0341	-.0291
		95% Cover	.942	.950	.946	.948	.940	.932	.948	.942	.948
		% Sig Coeff	.232	.428	.594	.730	.800	.852	.904	.926	.958
PRQ →	.5	PE Bias	.1140	.0514	.0396	.0294	.0228	.0196	.0154	.0154	.0158
CIM		SE Bias	-.1021	-.0297	-.0218	-.0449	-.0514	-.0311	-.0273	-.0208	-.0221
		95% Cover	.954	.952	.958	.942	.950	.950	.954	.948	.952
		% Sig Coeff	.908	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.1163	.0523	.0393	.0277	.0232	.0185	.0147	.0140	.0142
		SE Bias	-.0851	-.0208	-.0100	-.0364	-.0550	-.0260	-.0254	-.0182	-.0130
		95% Cover	.972	.962	.964	.952	.948	.954	.956	.958	.960
		% Sig Coeff	.948	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
RFC →	.3	PE Bias	.1130	.0530	.0230	.0150	.0163	.0103	.0087	.0047	.0030
CIM		SE Bias	-.1192	-.0785	-.0701	-.0829	-.0932	-.0643	-.0931	-.0671	-.0515
		95% Cover	.942	.942	.944	.922	.930	.942	.934	.938	.944
		% Sig Coeff	.554	.820	.946	.980	.998	.998	1.000	1.000	1.000
	.4	PE Bias	.1233	.0508	.0262	.0162	.0170	.0113	.0097	.0067	.0055
		SE Bias	-.0977	-.0698	-.0635	-.0844	-.0815	-.0525	-.0865	-.0558	-.0396
		95% Cover	.958	.946	.948	.930	.930	.946	.926	.944	.948
		% Sig Coeff	.696	.926	.990	.998	.998	1.000	1.000	1.000	1.000
SER →	.3	PE Bias	.1427	.0503	.0300	.0160	.0190	.0163	.0180	.0173	.0163
CIM		SE Bias	-.1228	-.0431	-.0438	-.0433	-.0118	-.0081	-.0139	-.0038	-.0099

	95% Cover	.932	.950	.940	.946	.946	.948	.946	.940	.938
	% Sig Coeff	.564	.832	.942	.982	.998	1.000	1.000	1.000	1.000
.4	PE Bias	.1480	.0580	.0372	.0237	.0253	.0193	.0203	.0190	.0170
	SE Bias	-.1009	-.0306	-.0160	-.0386	-.0079	-.0241	-.0170	-.0034	-.0053
	95% Cover	.962	.950	.954	.940	.956	.936	.952	.940	.950
	% Sig Coeff	.710	.948	.994	.996	1.000	1.000	1.000	1.000	1.000

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

Pop. Val.: Population value.

PE Bias: Parameter estimate bias, i.e., population value minus parameter estimate average over the replications of the Monte Carlo study whereby the result is divided by the population value.

SE Bias: Standard error bias, i.e., population value minus standard error average over the replications of the Monte Carlo study whereby the result is divided by the population value.

95% Cover: Coverage, i.e., proportion of replications for which the 95% confidence interval contains the true parameter value.

% Sig Coeff: Power, i.e., proportion of replications for which the null hypothesis that a parameter is equal to zero is rejected for each parameter at the .05 level.

### 3.5.1.2.3 Parameter estimate bias, standard error bias, coverage, and power for structural parameters (condition 1 and 2, 2000-3600 observations)

Parameter	Pop. val.	Estimates	Observations								
			2000	2200	2400	4600	2800	3000	3200	3400	3600
CIM → PIM	.1	PE Bias	.0020	-.0020	-.0060	-.0090	-.0120	-.0080	-.0050	.0010	.0010
		SE Bias	-.0053	.0290	-.0173	-.0121	.0194	-.0098	.0279	-.0138	-.0211
		95% Cover	.950	.950	.950	.936	.948	.946	.950	.946	.938
		% Sig Coeff	.760	.826	.830	.868	.890	.908	.918	.940	.946
	.2	PE Bias	-.0010	-.0030	-.0030	-.0045	-.0055	-.0035	-.0020	.0010	.0005
		SE Bias	-.0153	.0132	-.0168	-.0106	.0000	-.0150	.0242	-.0277	-.0205
		95% Cover	.948	.948	.954	.948	.950	.942	.956	.950	.952
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
PIM → CIM	.3	PE Bias	.0053	.0057	.0043	.0047	.0057	.0033	.0027	.0007	.0007
		SE Bias	-.0353	-.0370	-.0363	-.0590	-.0212	-.0404	-.0227	-.0670	-.0661
		95% Cover	.952	.952	.946	.936	.940	.934	.940	.934	.938
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0060	.0055	.0040	.0032	.0027	.0020	.0013	.0000	.0000
		SE Bias	-.0304	-.0101	-.0131	-.0372	-.0142	-.0175	-.0152	-.0455	-.0495
		95% Cover	.946	.956	.956	.940	.942	.932	.944	.944	.946
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CIM → PLO	.5	PE Bias	-.0070	-.0070	-.0054	-.0048	-.0046	-.0046	-.0046	-.0046	-.0040
		SE Bias	.0283	.0298	-.0090	.0095	-.0223	.0137	.0324	.0258	.0150
		95% Cover	.952	.962	.952	.956	.946	.952	.952	.952	.954
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	-.0087	-.0077	-.0058	-.0048	-.0038	-.0042	-.0045	-.0043	-.0042





		SE Bias	-.0108	-.0023	-.0346	-.0099	.0078	.0275	-.0295	-.0168	-.0394
		95% Cover	.960	.950	.942	.946	.948	.958	.942	.942	.942
		% Sig Coeff	.994	.992	.996	.996	1.000	1.000	1.000	1.000	1.000
COR → CIM	.3	PE Bias	.0043	.0047	.0033	.0047	.0037	.0050	.0077	.0077	.0047
		SE Bias	-.0635	-.0446	-.0713	-.0350	-.0149	.0132	-.0159	-.0623	-.0716
		95% Cover	.946	.940	.932	.934	.952	.954	.946	.936	.940
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0032	.0027	.0013	.0022	.0010	.0025	.0047	.0050	.0030
		SE Bias	-.0767	-.0597	-.0731	-.0455	-.0284	-.0046	-.0303	-.0691	-.0689
		95% Cover	.936	.938	.940	.946	.952	.948	.946	.930	.940
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
GEM → CIM	.1	PE Bias	.0050	-.0040	-.0010	-.0070	-.0110	-.0140	-.0170	-.0100	-.0100
		SE Bias	-.0515	-.0245	-.0256	-.0219	-.0127	.0027	-.0321	-.0195	-.0339
		95% Cover	.930	.948	.944	.942	.948	.952	.954	.948	.948
		% Sig Coeff	.580	.626	.672	.712	.732	.744	.754	.784	.804
	.2	PE Bias	.0090	.0045	.0040	.0020	-.0015	-.0035	-.0055	-.0030	-.0035
		SE Bias	-.0454	-.0224	-.0213	-.0178	.0071	.0148	-.0050	-.0077	-.0209
		95% Cover	.934	.960	.956	.940	.962	.950	.960	.958	.950
		% Sig Coeff	.974	.994	.994	.994	.998	1.000	.996	.998	1.000
PRQ → CIM	.5	PE Bias	.0152	.0148	.0122	.0116	.0094	.0090	.0092	.0092	.0096
		SE Bias	-.0308	-.0643	-.0477	.0046	-.0275	.0049	-.0293	-.0077	.0136
		95% Cover	.950	.944	.936	.952	.936	.950	.948	.948	.950
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.6	PE Bias	.0135	.0125	.0093	.0083	.0063	.0060	.0063	.0063	.0068
		SE Bias	-.0303	-.0535	-.0404	.0020	-.0123	.0021	-.0195	-.0090	.0167
		95% Cover	.946	.948	.944	.952	.936	.952	.950	.946	.952
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
RFC → CIM	.3	PE Bias	.0027	.0053	.0070	.0050	.0060	.0050	.0053	.0063	.0057
		SE Bias	-.1011	-.0365	-.0360	-.0804	-.0434	-.0353	.0000	-.0191	.0116
		95% Cover	.920	.934	.958	.932	.936	.936	.946	.954	.954
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0050	.0065	.0065	.0050	.0052	.0045	.0052	.0057	.0047
		SE Bias	-.0959	-.0345	-.0437	-.0798	-.0533	-.0360	.0000	-.0218	.0077
		95% Cover	.932	.944	.954	.936	.938	.940	.960	.954	.950
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SER → CIM	.3	PE Bias	.0167	.0110	.0100	.0057	.0050	.0063	.0060	.0060	.0070
		SE Bias	.0107	.0022	-.0115	.0098	-.0075	-.0495	.0027	-.0400	-.0617
		95% Cover	.958	.940	.940	.950	.950	.932	.958	.942	.946
		% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	.4	PE Bias	.0168	.0118	.0100	.0060	.0052	.0067	.0065	.0065	.0070

SE Bias	.0095	.0141	-.0021	.0022	-.0067	-.0549	.0073	-.0358	-.0577
95% Cover	.964	.942	.946	.946	.946	.920	.960	.944	.944
% Sig Coeff	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

PLO: product loyalty; CIM: corporate image; PIM: product image; PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.  
Pop. Val.: Population value.

PE Bias: Parameter estimate bias, i.e., population value minus parameter estimate average over the replications of the Monte Carlo study whereby the result is divided by the population value.

SE Bias: Standard error bias, i.e., population value minus standard error average over the replications of the Monte Carlo study whereby the result is divided by the population value.

95% Cover: Coverage, i.e., proportion of replications for which the 95% confidence interval contains the true parameter value.

% Sig Coeff: Power, i.e., proportion of replications for which the null hypothesis that a parameter is equal to zero is rejected for each parameter at the .05 level.

### 3.5.1.3 Reliability and validity testing

#### 3.5.1.3.1 Reliability and convergent validity

	Germany		France		Romania		Russia		USA	
	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$	ITC	$\lambda_s$
<b>Product loyalty</b>	$\alpha = .927$ AVE = .811 CR=.944		$\alpha = .861$ AVE = .642 CR=.877		$\alpha = .861$ AVE = .692 CR=.899		$\alpha = .880$ AVE = .709 CR=.906		$\alpha = .815$ AVE = .533 CR=.820	
PLO1	.822	.924	.702	.791	.724	.821	.729	.808	.593	.649
PLO2	.839	.891	.700	.780	.664	.790	.695	.865	.680	.707
PLO3	.863	.898	.747	.832	.751	.883	.819	.883	.683	.719
PLO4	.801	.877	.684	.800	.694	.831	.723	.817	.581	.873
<b>Corporate image</b>	$\alpha = .927$ AVE = .861 CR=.948		$\alpha = .849$ AVE = .689 CR=.868		$\alpha = .874$ AVE = .754 CR=.900		$\alpha = .881$ AVE = .779 CR=.912		$\alpha = .942$ AVE = .873 CR=.952	
CIM1	.831	.927	.769	.887	.802	CIM1	.831	.927	.769	.887
CIM2	.829	.902	.708	.864	.725	CIM2	.829	.902	.708	.864
CIM3	.899	.944	.683	.756	.746	CIM3	.899	.944	.683	.756
<b>Product image</b>	$\alpha = .895$ AVE = .798 CR=.920		$\alpha = .774$ AVE = .587 CR=.804		$\alpha = .776$ AVE = .619 CR=.824		$\alpha = .798$ AVE = .597 CR=.816		$\alpha = .890$ AVE = .793 CR=.918	
PIM1	.760	.841	.657	.712	.626	PIM1	.760	.841	.657	.712
PIM2	.838	.917	.634	.770	.609	PIM2	.838	.917	.634	.770
PIM3	.785	.898	.543	.790	.599	PIM3	.785	.898	.543	.790
<b>Price</b>	$\alpha = .936$ AVE = .833 CR=.952		$\alpha = .920$ AVE = .781 CR=.934		$\alpha = .892$ AVE = .728 CR=.914		$\alpha = .827$ AVE = .588 CR=.850		$\alpha = .956$ AVE = .875 CR=.965	
PRI1	.901	.933	.858	.916	.848	.906	.705	.784	.920	.948
PRI2	.832	.897	.802	.892	.727	.864	.673	.849	.867	.910
PRI3	.864	.921	.820	.876	.680	.767	.613	.672	.872	.929
PRI4	.797	.884	.783	.840	.796	.873	.618	.779	.910	.952
<b>Promotion</b>	$\alpha = .867$		$\alpha = .779$		$\alpha = .843$		$\alpha = .807$		$\alpha = .794$	

		AVE = .685 CR=.895	AVE = .505 CR=.803	AVE = .643 CR=.876	AVE = .571 CR=.837	AVE = .559 CR=.830		
PRM1	.721	.807	.594	.733	.654	.736	.721	.810
PRM2	.710	.866	.497	.673	.658	.809	.642	.776
PRM3	.691	.757	.637	.775	.719	.816	.532	.587
PRM4	.749	.845	.611	.689	.680	.836	.608	.788
<b>Product</b>		$\alpha = .918$ AVE = .808 CR=.943	$\alpha = .880$ AVE = .689 CR=.898	$\alpha = .860$ AVE = .696 CR=.900	$\alpha = .819$ AVE = .632 CR=.866	$\alpha = .796$ AVE = .555 CR=.828		
PRD1	.831	.899	.791	.872	.712	.888	.670	.805
PRD2	.855	.917	.656	.733	.706	.793	.714	.786
PRD3	.728	.863	.754	.842	.642	.750	.512	.558
PRD4	.836	.904	.761	.884	.769	.878	.679	.919
<b>Place</b>		$\alpha = .922$ AVE = .803 CR=.941	$\alpha = .886$ AVE = .741 CR=.918	$\alpha = .884$ AVE = .723 CR=.912	$\alpha = .818$ AVE = .604 CR=.859	$\alpha = .832$ AVE = .633 CR=.873		
PLA1	.819	.882	.719	.824	.683	.819	.555	.732
PLA2	.0819	.895	.795	.910	.781	.877	.723	.829
PLA3	.821	.921	.777	.867	.776	.840	.613	.720
PLA4	.821	.870	.714	.824	.755	.869	.668	.839
<b>Customer orientation</b>		$\alpha = .915$ AVE = .793 CR=.938	$\alpha = .901$ AVE = .776 CR=.931	$\alpha = .896$ AVE = .730 CR=.915	$\alpha = .852$ AVE = .659 CR=.884	$\alpha = .917$ AVE = .777 CR=.932		
COR1	.844	.866	.761	.849	.826	.860	.733	.840
COR2	.820	.913	.811	.894	.743	.808	.640	.739
COR3	.765	.858	.753	.836	.766	.883	.675	.830
COR4	.800	.906	.793	.911	.749	.881	.725	.861
<b>Good employer</b>		$\alpha = .933$ AVE = .821 CR=.948	$\alpha = .811$ AVE = .595 CR=.854	$\alpha = .887$ AVE = .753 CR=.924	$\alpha = .850$ AVE = .679 CR=.894	$\alpha = .930$ AVE = .809 CR=.944		
GEM1	.877	.925	.619	.698	.737	.827	.672	.794
GEM2	.860	.902	.700	.800	.758	.889	.699	.810
GEM3	.825	.900	.574	.821	.721	.884	.719	.897
GEM4	.813	.890	.625	.790	.802	.883	.672	.790
<b>Product range quality</b>		$\alpha = .911$ AVE = .784 CR=.936	$\alpha = .785$ AVE = .547 CR=.825	$\alpha = .890$ AVE = .719 CR=.909	$\alpha = .863$ AVE = .686 CR=.894	$\alpha = .915$ AVE = .777 CR=.932		
PRQ1	.850	.915	.642	.768	.820	.886	.758	.890
PRQ2	.824	.870	.598	.671	.740	.811	.749	.836
PRQ3	.727	.857	.591	.810	.707	.793	.645	.684
PRQ4	.795	.882	.538	.693	.766	.871	.694	.838
<b>Reliable and financially strong company</b>		$\alpha = .899$ AVE = .766 CR=.927	$\alpha = .814$ AVE = .595 CR=.850	$\alpha = .879$ AVE = .691 CR=.897	$\alpha = .900$ AVE = .732 CR=.915	$\alpha = .855$ AVE = .661 CR=.883		
RFC1	.752	.879	.593	.762	.728	RFC1	.752	.879
RFC2	.749	.804	.685	.742	.707	RFC2	.749	.804
RFC3	.799	.850	.600	.724	.789	RFC3.	.799	.850
RFC4	.798	.917	.659	.819	.726	RFC4.	.798	.917



CIM	.56	.75	-	-	-	-	-	-	-	-	-	-
PIM	.57	.42	.62	-	-	-	-	-	-	-	-	-
PRI	.32	.37	.27	.73	-	-	-	-	-	-	-	-
PRM	.44	.41	.32	.33	.64	-	-	-	-	-	-	-
PRD	.54	.44	.64	.36	.37	.70	-	-	-	-	-	-
PLA	.45	.48	.31	.41	.49	.42	.72	-	-	-	-	-
COR	.23	.34	.16	.17	.32	.14	.22	.73	-	-	-	-
GEM	.29	.43	.32	.22	.30	.20	.27	.45	.75	-	-	-
PRQ	.34	.39	.24	.17	.29	.25	.29	.22	.25	.72	-	-
RFC	.26	.37	.17	.17	.35	.17	.21	.29	.29	.34	.69	-
SER	.30	.45	.41	.24	.30	.26	.31	.31	.46	.26	.23	.83
<b>Russia</b>												
PLO	.71	-	-	-	-	-	-	-	-	-	-	-
CIM	.55	.78	-	-	-	-	-	-	-	-	-	-
PIM	.49	.38	.60	-	-	-	-	-	-	-	-	-
PRI	.54	.39	.32	.59	-	-	-	-	-	-	-	-
PRM	.52	.52	.35	.44	.57	-	-	-	-	-	-	-
PRD	.60	.33	.41	.54	.44	.63	-	-	-	-	-	-
PLA	.50	.39	.26	.46	.46	.44	.60	-	-	-	-	-
COR	.37	.45	.26	.30	.34	.17	.26	.66	-	-	-	-
GEM	.44	.45	.24	.30	.40	.19	.26	.59	.68	-	-	-
PRQ	.49	.40	.23	.29	.24	.38	.36	.34	.33	.69	-	-
RFC	.29	.33	.14	.22	.30	.14	.21	.33	.35	.34	.73	-
SER	.38	.40	.26	.31	.40	.22	.19	.34	.54	.28	.25	.72
<b>USA</b>												
PLO	.53	-	-	-	-	-	-	-	-	-	-	-
CIM	.22	.87	-	-	-	-	-	-	-	-	-	-
PIM	.30	.26	.79	-	-	-	-	-	-	-	-	-
PRI	.08	.17	.31	.88	-	-	-	-	-	-	-	-
PRM	.23	.08	.33	.33	.56	-	-	-	-	-	-	-
PRD	.24	.20	.47	.48	.47	.56	-	-	-	-	-	-
PLA	.29	.11	.26	.36	.53	.47	.63	-	-	-	-	-
COR	.22	.44	.27	.16	.17	.21	.12	.78	-	-	-	-
GEM	.16	.37	.22	.14	.14	.20	.07	.67	.81	-	-	-
PRQ	.27	.48	.16	.11	.09	.21	.12	.51	.46	.78	-	-
RFC	.20	.28	.17	.05	.18	.19	.21	.26	.22	.32	.66	-
SER	.13	.38	.18	.06	.13	.07	.04	.50	.41	.38	.19	.73

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

Note: The AVE of each latent variable is listed in the diagonal, whereas off-diagonal elements are the square of the correlation between the corresponding latent variables. The diagonal elements have to be greater than the off-diagonal elements in their corresponding rows and columns (Fornell and Larcker 1981, p. 46).

### 3.5.1.4 Measurement invariance testing

#### 3.5.1.4.1 Countries

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	1326.122 (.000)	-	.959 (-)	.985 (-)	.054 (-)
Model 2: Thresholds and factor loadings constrained	1136.501 (.000)	277.489 (.000)	.967 (.018)	.989 (.004)	.047 (-.007)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	1189.209 (.000)	188.058 (.0788)	.965 (.006)	.988 (.003)	.049 (-.005)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PIM2, CIM3, PRI1, PRI2, PRM3, PRM4, PRD3, PRD4, COR2, COR4, GEM3, GEM4, PRQ3, RFC2, and SER1.

#### 3.5.1.4.2 Product categories

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	849.486 (.000)	-	.971 (-)	.991 (-)	.038 (-)
Model 2: Thresholds and factor loadings constrained	762.291 (.000)	156.116 (.0745)	.976 (.005)	.993 (.002)	.033 (-.005)

#### 3.5.1.4.3 Country of origin knowledge

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	793.455 (.000)	-	.970 (-)	.991 (-)	.036 (-)
Model 2: Thresholds and factor loadings constrained	715.527 (.000)	114.924 (.0016)	.974 (.004)	.992 (.001)	.033 (-.003)
Model 3: Thresholds and factor loadings partly freed <sup>a</sup>	716.271 (.0000)	72.868 (.2351)	.974 (.004)	.992 (.001)	.033 (-.003)

<sup>a</sup> Thresholds and factor loadings are freed for the following items: PLO2, CIM1, PIM2, PRM3, PRM4, COR2, COR3, PRQ3, and SER4.

#### 3.5.1.4.4 Education

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
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**Countries**

GER	4.84 (1.34)	5.32 (1.26)	4.85 (1.29)	4.90 (1.23)	4.77 (1.15)	5.39 (1.08)	5.32 (1.13)	4.50 (1.03)	4.50 (1.00)	5.10 (1.06)	4.76 (1.05)	4.26 (1.14)
FRA	4.88 (1.28)	4.98 (1.14)	4.86 (1.22)	4.64 (1.25)	4.73 (1.16)	5.31 (1.07)	5.27 (1.16)	4.57 (1.03)	4.46 (.93)	5.14 (.95)	4.82 (.86)	4.27 (1.16)
ROM	4.90 (1.28)	5.66 (1.10)	5.05 (1.21)	5.10 (1.16)	4.88 (1.12)	5.54 (1.07)	5.38 (1.08)	4.61 (1.04)	4.62 (.98)	5.19 (1.06)	4.73 (1.16)	4.38 (1.08)
RUS	4.80 (1.30)	5.88 (1.12)	4.86 (1.16)	4.89 (1.16)	4.61 (1.14)	5.37 (1.12)	5.35 (1.05)	4.40 (.91)	4.48 (.93)	5.19 (.94)	4.56 (1.23)	4.29 (1.01)
USA	4.81 (1.32)	5.03 (1.35)	4.65 (1.38)	4.92 (1.27)	4.86 (1.10)	5.28 (1.05)	5.36 (1.10)	4.41 (1.14)	4.40 (1.07)	4.72 (1.21)	4.86 (.95)	4.16 (1.24)

**Product Categories**

DET	4.90 (1.36)	5.39 (1.24)	4.84 (1.29)	4.88 (1.24)	4.81 (1.16)	5.46 (1.08)	5.46 (1.11)	4.51 (1.02)	4.48 (.99)	5.14 (1.07)	4.78 (1.03)	4.29 (1.12)
COS	4.86 (1.38)	5.25 (1.33)	4.79 (1.31)	5.01 (1.24)	4.88 (1.12)	5.35 (1.09)	5.41 (1.11)	4.52 (1.07)	4.54 (1.03)	5.08 (1.10)	4.84 (1.02)	4.26 (1.16)
ADH	4.73 (1.25)	5.34 (1.19)	4.95 (1.25)	4.78 (1.19)	4.57 (1.16)	5.37 (1.06)	5.05 (1.12)	4.47 (1.00)	4.49 (.97)	5.09 (.97)	4.65 (1.08)	4.24 (1.14)

**Country of Origin knowledge**

KNO	4.91 (1.34)	5.40 (1.23)	4.94 (1.26)	5.95 (1.22)	4.80 (1.22)	5.46 (1.06)	5.36 (1.14)	4.55 (1.02)	4.57 (1.00)	5.21 (1.03)	4.82 (1.04)	4.30 (1.14)
UKN	4.69 (1.32)	5.16 (1.31)	4.67 (1.32)	4.81 (1.24)	4.70 (1.12)	5.24 (1.09)	5.24 (1.11)	4.39 (1.05)	4.38 (.99)	4.88 (1.08)	4.65 (1.06)	4.19 (1.14)

**Education**

SHO	4.73 (1.46)	5.31 (1.29)	4.73 (1.33)	4.78 (1.26)	4.69 (1.18)	5.29 (1.14)	5.27 (1.17)	4.48 (1.08)	4.51 (1.04)	5.05 (1.11)	4.81 (.98)	4.18 (1.21)
COM	4.92 (1.28)	5.36 (1.30)	4.95 (1.29)	4.89 (1.27)	4.83 (1.16)	5.45 (1.08)	5.34 (1.13)	4.52 (1.05)	4.55 (1.00)	5.12 (1.10)	4.80 (1.06)	4.34 (1.14)
STU	4.86 (1.31)	5.35 (1.24)	4.86 (1.25)	5.01 (1.15)	4.75 (1.14)	5.43 (1.05)	5.35 (1.09)	4.50 (.99)	4.49 (.96)	5.15 (1.00)	4.73 (1.07)	4.25 (1.09)
OTH	4.85 (1.29)	5.16 (1.18)	4.88 (1.28)	4.77 (1.31)	4.86 (1.12)	5.34 (1.05)	5.31 (1.16)	4.50 (1.05)	4.47 (1.03)	5.00 (1.03)	4.73 (1.04)	4.35 (1.17)

**Age**

AGE1	4.69 (1.37)	5.09 (1.27)	4.58 (1.28)	4.75 (1.19)	4.59 (1.19)	5.24 (1.07)	5.18 (1.12)	4.45 (1.10)	4.44 (1.05)	5.02 (1.05)	4.81 (1.00)	3.94 (1.17)
AGE2	4.88 (1.34)	5.27 (1.28)	4.87 (1.29)	5.00 (1.19)	4.82 (1.13)	5.44 (1.05)	5.40 (1.11)	4.52 (.98)	4.55 (.97)	5.14 (1.05)	4.81 (1.02)	4.34 (1.13)
AGE3	4.91 (1.26)	5.45 (1.22)	4.95 (1.24)	4.93 (1.20)	4.79 (1.10)	5.48 (1.06)	5.33 (1.12)	4.50 (.99)	4.49 (.95)	5.14 (1.01)	4.73 (1.02)	4.36 (1.05)
AGE4	4.80	5.52	4.97	4.77	4.78	5.32	5.26	4.50	4.47	5.06	4.66	4.31

	(1.37)	(1.23)	(1.31)	(1.34)	(1.23)	(1.16)	(1.17)	(1.13)	(1.06)	(1.11)	(1.17)	(1.18)
<b>Gender</b>												
Male	4.71 (1.32)	5.23 (1.23)	4.77 (1.29)	4.79 (1.18)	4.60 (1.11)	5.32 (1.06)	5.20 (1.08)	4.41 (1.03)	4.43 (.99)	5.03 (1.02)	4.67 (1.03)	4.13 (1.14)
Female	4.96 (1.35)	5.41 (1.28)	4.93 (1.28)	5.01 (1.26)	4.92 (1.17)	5.45 (1.09)	5.43 (1.16)	4.58 (1.03)	4.58 (1.00)	5.17 (1.09)	4.85 (1.05)	4.39 (1.13)

PLO: product loyalty; CIM: corporate image; PIM: product image; GER: Germany, FRA: France; ROM: Romania, RUS: Russia, USA: United States of America; DET: laundry and detergents, COS: cosmetics, ADH: adhesives; KNO: country of origin of the corporate brand is known; UKN: country of origin of the corporate brand is unknown; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: others; AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 3: age group 50 to 64 years, AGE 4: age group 65 years and above.  
Note: To compute mean values and standard deviations, the items of each construct were averaged to obtain composite scores for the various constructs. Correlation as well as covariance matrices are available upon request.

### 3.5.1.6 Path coefficients

#### 3.5.1.6.1 Product categories

		Cosmetics	Detergents	Adhesives
CIM → PIM		.215 *** (.424 ***)	.146 *** (.268 ***)	.245 *** (.446 ***)
PIM → CIM		.736 *** (.373 ***)	.695 *** (.378 ***)	.773 *** (.425 ***)
CIM → PLO	<i>Direct</i>	.251 *** (.344 ***)	.255 *** (.328 ***)	.240 *** (.346 ***)
	<i>Indirect<sup>p</sup></i>	.263 *** (.360 ***)	.170 *** (.219 ***)	.268 *** (.386 **)
	<i>Total<sup>p</sup></i>	.513 *** (.704 ***)	.425 *** (.547 ***)	.508 *** (.732 ***)
PIM → PLO	<i>Direct</i>	.846 *** (.588 ***)	.872 *** (.610 ***)	.700 *** (.554 ***)
	<i>Indirect<sup>p</sup></i>	.378 *** (.263 ***)	.295 *** (.207 ***)	.393 *** (.311 ***)
	<i>Total<sup>p</sup></i>	1.224 *** (.850 ***)	1.168 *** (.817 ***)	1.092 *** (.866 ***)
COR → CIM		.062 ns (.046 ns)	.196 *** (.155 ***)	.066 ns (.055 ns)
GEM → CIM		.216 ** (.156 **)	.122 * (.089 *)	.067 ns (.051 ns)
PRQ → CIM		.282 ***	.202 ***	.277 ***

	(.238 ***)	(.190 ***)	(.247 ***)
RFC → CIM	.081 * (.047 *)	.087 ns (.058 ns)	.127 ** (.088 **)
SER → CIM	.133 ** (.107 **)	.148 *** (.126 ***)	.165 *** (.155 ***)
PRI → PIM	-.004 ns (-.006 ns)	.068 ** (.100 ***)	.120 *** (.171 ***)
PRM → PIM	.130 ** (.113 **)	.165 *** (.154 ***)	.189 *** (.173 ***)
PRD → PIM	.270 *** (.393 ***)	.205 *** (.321 ***)	.158 *** (.239 ***)
PLA → PIM	.052 * (.065 *)	.086 ** (.114 ***)	-.011 ns (-.014 ns)

PLO: product loyalty; CIM: corporate image; PIM: product image; PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(241)=873.999$  ( $p=.000$ ), CFI=.971, TLI=.991, RMSEA=.036.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

### 3.5.1.6.2 Country of origin knowledge

		Country of origin known	Country of origin unknown
CIM → PIM		.216 *** (.352 ***)	.265 *** (.404 ***)
PIM → CIM		.690 *** (.423 ***)	.491 *** (.322 ***)
CIM → PLO	<i>Direct</i>	.336 *** (.388 ***)	.173 *** (.215 ***)
	<i>Indirect<sup>b</sup></i>	.262 *** (.303 ***)	.270 *** (.335 ***)
	<i>Total<sup>b</sup></i>	.599 *** (.691 ***)	.443 *** (.550 ***)
PIM → PLO	<i>Direct</i>	.805 *** (.569 ***)	.802 *** (.654 ***)
	<i>Indirect<sup>b</sup></i>	.413 *** (.292 ***)	.217 *** (.177 ***)
	<i>Total<sup>b</sup></i>	1.218 *** (.861 ***)	1.019 *** (.831 ***)

COR → CIM	.095 * (.075 *)	.154 *** (.136 ***)
GEM → CIM	.120 ** (.092 **)	.129 ** (.105 **)
PRQ → CIM	.209 *** (.200 ***)	.294 *** (.270 ***)
RFC → CIM	.091 ** (.062 **)	.074 ns (.050 ns)
SER → CIM	.192 *** (.165 ***)	.089 ** (.078 **)
PRI → PIM	.066 *** (.101 ***)	.029 ns (.042 ns)
PRM → PIM	.141 *** (.139 ***)	.260 *** (.209 ***)
PRD → PIM	.230 *** (.342 ***)	.206 *** (.276 ***)
PLA → PIM	.007 ns (.008 ns)	.118 *** (.119 ***)

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(172)=827.827$  ( $p=.000$ ), CFI=.968, TLI=.991, RMSEA=.036.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

### 3.5.1.6.3 Education

		High school graduate	Community college/ vocational school	College/ university degree	Others
CIM → PIM		.260 *** (.319 ***)	.348 *** (.431 ***)	.384 *** (.470 ***)	.256 *** (.315 ***)
PIM → CIM		.472 *** (.385 ***)	.734 *** (.594 ***)	.445 *** (.364 ***)	.247 ** (.201 **)
CIM → PLO	<i>Direct</i>	.234 *** (.245 ***)	.360 *** (.414 ***)	.191 *** (.210 ***)	.350 *** (.377 ***)
	<i>Indirect<sup>b</sup></i>	.255 *** (.266 ***)	.401 ** (.460 **)	.390 *** (.428 ***)	.207 ** (.224 ***)
	<i>Total<sup>b</sup></i>	.489 *** (.511 ***)	.761 *** (.874 ***)	.581 *** (.638 ***)	.557 *** (.601 ***)

PIM → PLO	<i>Direct</i>	.749 *** (.637 ***)	.592 *** (.549 ***)	.756 *** (.680 ***)	.617 *** (.588 ***)
	<i>Indirect<sup>a</sup></i>	.231 *** (.197 ***)	.559 *** (.519 ***)	.259 *** (.232 ***)	.138 * (.121 *)
	<i>Total<sup>b</sup></i>	.980 *** (.834 ***)	1.151 *** (1.068 ***)	1.015 *** (.912 ***)	.809 *** (.709 ***)
COR → CIM		.134 ** (.118 ***)	.024 ns (.020 ns)	.223 *** (.191 ***)	.002 ns (.002 ns)
GEM → CIM		.087 ** (.075 **)	.127 ns (.104 ns)	.057 ns (.049 ns)	.197 ** (.174 **)
PRQ → CIM		.278 *** (.227 ***)	.161 ** (.122 *)	.196 *** (.155 **)	.527 *** (.423 ***)
RFC → CIM		.081 ** (.079 **)	.066 ns (.065 ns)	.086 *** (.084 ***)	-.014 ns (-.014 ns)
SER → CIM		.144 *** (.122 ***)	.105 ns (.087 ns)	.182 *** (.149 ***)	.260 *** (.222 ***)
PRI → PIM		.075 *** (.098 ***)	.078 ** (.102 **)	-.003 ns (-.003 ns)	.032 ns (.044 ns)
PRM → PIM		.356 *** (.212 ***)	.166 ** (.110 **)	.225 *** (.142 ***)	.248 ** (.168 **)
PRD → PIM		.288 *** (.361 ***)	.228 *** (.266 ***)	.278 *** (.346 ***)	.263 *** (.305 ***)
PLA → PIM		.024 ns (.025 ns)	.044 ns (.048 ns)	.036 ns (.040 ns)	.117 * (.146 **)

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(239)=986.607$  ( $p=.000$ ), CFI=.974, TLI=.989, RMSEA=.046.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

### 3.5.1.6.4 Age

	15-24	25-49	50-64	65+
CIM → PIM	.132 *** (.264 ***)	.254 *** (.423 ***)	.273 *** (.403 ***)	.250 *** (.397 ***)
PIM → CIM	.498 *** (.249 ***)	.783 *** (.469 ***)	.711 *** (.482 ***)	.452 *** (.284 ***)

CIM → PLO	<i>Direct</i>	.181 ** (.287 ***)	.129 *** (.226 ***)	.227 *** (.355 ***)	.332 *** (.531 ***)
	<i>Indirect<sup>a</sup></i>	.105 ** (.166 **)	.244 *** (.428 ***)	.232 ** (.362 **)	.165 *** (.264 ***)
	<i>Total<sup>b</sup></i>	.286 *** (.453 ***)	.373 *** (.654 ***)	.459 *** (.718 ***)	.497 *** (.795 ***)
PIM → PLO	<i>Direct</i>	.653 *** (.517 ***)	.671 *** (.704 ***)	.523 *** (.554 ***)	.436 *** (.440 ***)
	<i>Indirect<sup>a</sup></i>	.142 ** (.113 **)	.292 *** (.307 ***)	.326 ** (.346 **)	.224 *** (.226 ***)
	<i>Total<sup>b</sup></i>	.795 *** (.629 ***)	.964 *** (1.011 ***)	.850 *** (.899 ***)	.661 *** (.666 ***)
COR → CIM	.023 ns (.021 ns)	.089 ** (.083 **)	.181 *** (.197 ***)	.079 ns (.082 n.s)	
GEM → CIM	.251 * (.174 *)	.138 *** (.093 ***)	.031 ns (.026 ns)	.004 ns (.003 ns)	
PRQ → CIM	.472 *** (.291 ***)	.206 *** (.147 ***)	.209 *** (.165 ***)	.580 *** (.399 ***)	
RFC → CIM	-.075 ns (-.045 ns)	.083 * (.054 *)	.193 *** (.138 ***)	.174 ** (.126 ***)	
SER → CIM	.352 *** (.308 ***)	.154 *** (.139 ***)	.023 ns (.022 ns)	.135 ** (.118 **)	
PRI → PIM	.034 ns (.065 ns)	.044 ** (.074 ***)	.069 ** (.116 **)	.073 ** (.116 ***)	
PRM → PIM	.197 * (.196 ns)	.206 *** (.150 ***)	.085 ns (.067 ns)	.229 *** (.187 ***)	
PRD → PIM	.313 *** (.413 ***)	.239 *** (.313 ***)	.220 *** (.296 ***)	.215 *** (.241 ***)	
PLA → PIM	.056 ns (.068 ns)	.038 ns (.045 ns)	.052 ns (.061 ns)	.053 ns (.057 ns)	

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(240)=951.421$  ( $p=.000$ ), CFI=.967, TLJ=.988, RMSEA=.044.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

## 3.5.1.6.5 Gender

		Male	Female
CIM → PIM		.259 *** (.377 ***)	.229 *** (.381 ***)
PIM → CIM		.535 *** (.368 ***)	.701 *** (.422 ***)
CIM → PLO	<i>Direct</i>	.283 *** (.389 ***)	.197 *** (.282 ***)
	<i>Indirect<sup>a</sup></i>	.224 *** (.307 ***)	.234 *** (.335 ***)
	<i>Total<sup>b</sup></i>	.507 *** (.696 ***)	.431 *** (.617 ***)
PIM → PLO	<i>Direct</i>	.591 *** (.558 ***)	.718 *** (.619 ***)
	<i>Indirect<sup>a</sup></i>	.271 *** (.256 ***)	.302 *** (.260 ***)
	<i>Total<sup>b</sup></i>	.863 *** (.814 ***)	1.020 *** (.880 ***)
COR → CIM		.004 ns (.004 ns)	.232 *** (.192 ***)
GEM → CIM		.139 *** (.148 ***)	.032 Ns (.029 ns)
PRQ → CIM		.191 *** (.191 ***)	.254 *** (.255 ***)
RFC → CIM		.097 *** (.102 ***)	.003 Ns (.003 ns)
SER → CIM		.176 *** (.172 ***)	.131 ** (.109 **)
PRI → PIM		.067 *** (.114 ***)	.034 ** (.060 **)
PRM → PIM		.135 *** (.123 ***)	.173 *** (.169 ***)
PRD → PIM		.233 *** (.288 ***)	.261 *** (.381 ***)
PLA → PIM		.084 *** (.104 ***)	-.001 Ns (-.001 ns)

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

$\chi^2(193) = 992.622$ ; ( $p = .000$ ), CFI = .963, TLI = .990, RMSEA = .037.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns = not significant; standardized coefficients in brackets.

### 3.5.1.7 Differences in path coefficients

#### 3.5.1.7.1 Countries

		p-Value Wald chi-square test of parameter equalities				
		Germany	France	Romania	Russia	USA
CIM → PIM (Direct Effect)	GER	-	-	-	-	-
	FRA	.7507	-	-	-	-
	ROM	.8771	.9217	-	-	-
	RUS	.7153	.5435	.6613	-	-
	USA	.5929	.3850	.5794	.9973	-
PIM → CIM (Direct Effect)	GER	-	-	-	-	-
	FRA	<u>.0000</u>	-	-	-	-
	ROM	.3448	<u>.0000</u>	-	-	-
	RUS	.2171	<u>.0000</u>	.6409	-	-
	USA	<u>.0004</u>	.2002	<u>.0002</u>	<u>.0005</u>	-
CIM → PLO (Direct Effect)	GER	-	-	-	-	-
	FRA	.2456	-	-	-	-
	ROM	.1003	<u>.0078</u>	-	-	-
	RUS	<u>.0146</u>	<u>.0007</u>	.4193	-	-
	USA	.1590	.7447	<u>.0047</u>	<u>.0004</u>	-
PIM → PLO (Direct Effect)	GER	-	-	-	-	-
	FRA	.9304	-	-	-	-
	RUM	.7558	.8344	-	-	-
	ROS	.1024	.1461	.2350	-	-
	USA	<u>.0149</u>	<u>.0264</u>	<u>.0236</u>	<u>.0011</u>	-
CMI → PLO (Indirect Effect <sup>a</sup> )	GER	-	-	-	-	-
	FRA	.7407	-	-	-	-
	ROM	.8040	.9913	-	-	-
	RUS	.8546	.9599	.9718	-	-
	USA	.1114	.0646	.1786	.2476	-
PIM → PLO (Indirect Effect <sup>b</sup> )	GER	-	-	-	-	-
	FRA	<u>.0001</u>	-	-	-	-
	RUM	.0523	<u>.0000</u>	-	-	-



	RUS	<u>.0281</u>	<u>.0001</u>	.3964	-	-
	USA	<u>.0012</u>	.2576	<u>.0000</u>	<u>.0002</u>	-
CIM → PLO (Total Effect <sup>b</sup> )	GER	-	-	-	-	-
	FRA	.4673	-	-	-	-
	ROM	.1191	<u>.0343</u>	-	-	-
	RUS	.0618	<u>.0204</u>	.5955	-	-
	USA	<u>.0099</u>	.0630	<u>.0004</u>	<u>.0005</u>	-
PIM → PLO (Total Effect <sup>b</sup> )	GER	-	-	-	-	-
	FRA	<u>.0221</u>	-	-	-	-
	ROM	.0816	<u>.0015</u>	-	-	-
	RUS	<u>.0039</u>	<u>.0001</u>	.1223	-	-
	USA	<u>.0000</u>	.0794	<u>.0000</u>	<u>.0000</u>	-
CIM → PIM vs PIM → CIM	GER	<u>.0000</u>	-	-	-	-
	FRA	-	.4675	-	-	-
	ROM	-	-	<u>.0000</u>	-	-
	RUS	-	-	-	<u>.0000</u>	-
	USA	-	-	-	-	.1487
CIM → PLO vs PIM → PLO	GER	<u>.0000</u>	-	-	-	-
	FRA	-	<u>.0000</u>	-	-	-
	ROM	-	-	<u>.0000</u>	-	-
	RUS	-	-	-	<u>.0000</u>	-
	USA	-	-	-	-	<u>.0001</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; GER: Germany, FRA: France; ROM: Romania, RUS: Russia, USA: United States of America.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.1.7.2 Product categories

		p-Value Wald chi-square test of parameter equalities		
		Detergents	Cosmetics	Adhesives
CIM → PIM (Direct Effect)	DET	-	-	-
	COS	.1154	-	-
	ADH	<u>.0477</u>	.5097	-
PIM → CIM (Direct Effect)	DET	-	-	-
	COS	.7724	-	-
	ADH	.6418	.8284	-
CIM → PLO (Direct Effect)	DET	-	-	-
	COS	.9170	-	-

	ADH	.7500	.8102	-
PIM → PLO (Direct Effect)	DET	-	-	-
	COS	.7093	-	-
	ADH	<u>.0467</u>	.0849	-
CIM → PLO (Indirect Effect <sup>a</sup> )	DET	-	-	-
	COS	.1802	-	-
	ADH	.3104	.8109	-
PIM → PLO (Indirect Effect <sup>a</sup> )	DET	-	-	-
	COS	.8715	-	-
	ADH	.8687	.9833	-
CIM → PLO (Total Effect <sup>b</sup> )	DET	-	-	-
	COS	.3167	-	-
	ADH	.5609	.6640	-
PIM → PLO (Total Effect <sup>b</sup> )	DET	-	-	-
	COS	.8042	-	-
	ADH	.0620	.1024	-
CIM → PIM vs PIM → CIM	DET	<u>.0000</u>	-	-
	COS	-	<u>.0000</u>	-
	ADH	-	-	<u>.0001</u>
CIM → PLO vs PIM → PLO	DET	<u>.0000</u>	-	-
	COS	-	<u>.0000</u>	-
	ADH	-	-	<u>.0000</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; DET: laundry and detergents, COS: cosmetics, ADH: adhesives.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.1.7.3 Country of origin knowledge

		p-Value Wald chi-square test of parameter equalities	
		Country of origin known	Country of origin not known
CIM → PIM (Direct Effect)	KNO	-	-
	UKN	.2571	-
PIM → CIM (Direct Effect)	KNO	-	-
	UKN	.0784	-
CIM → PLO (Direct Effect)	KNO	-	-
	UKN	<u>.0006</u>	-
PIM → PLO	KNO	-	-

(Direct Effect)	UKN	.9861	-
CIM → PLO (Indirect Effect <sup>a</sup> )	KNO	-	-
	UKN	.3183	-
PIM → PLO (Indirect Effect <sup>a</sup> )	KNO	-	-
	UKN	<u>.0002</u>	-
CIM → PLO (Total Effect <sup>b</sup> )	KNO	-	-
	UKN	<u>.0128</u>	-
PIM → PLO (Total Effect <sup>b</sup> )	KNO	-	-
	UKN	<u>.0328</u>	-
CIM → PIM vs PIM → CIM	KNO	<u>.0000</u>	-
	UKN	-	<u>.0074</u>
CIM → PLO vs PIM → PLO	KNO	<u>.0000</u>	-
	UKN	-	<u>.0000</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; KNO: country of origin of the corporate brand is known; UKN: country of origin of the corporate brand is unknown.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.1.7.4 Education

		p-Value Wald chi-square test of parameter equalities			
		High school graduate	Community college/ vocational school	College/ university degree	Others
CIM → PIM (Direct Effect)	SHO	-	-	-	-
	COM	.3110	-	-	-
	STU	<u>.0496</u>	.6793	-	-
	OTH	.9557	.3271	.0782	-
PIM → CIM (Direct Effect)	SHO	-	-	-	-
	COM	<u>.0185</u>	-	-	-
	STU	.7741	<u>.0160</u>	-	-
	OTH	<u>.0419</u>	<u>.0003</u>	.1043	-
CIM → PLO (Direct Effect)	SHO	-	-	-	-
	COM	<u>.0298</u>	-	-	-
	STU	.4138	<u>.0004</u>	-	-
	OTH	.1062	.8707	<u>.0126</u>	-
PIM → PLO (Direct Effect)	SHO	-	-	-	-
	COM	<u>.0278</u>	-	-	-
	STU	.9011	<u>.0072</u>	-	-

	OTH	.3772	.3356	.2839	-
CIM → PLO (Indirect Effect <sup>a</sup> )	SHO	-	-	-	-
	COM	.8485	-	-	-
	STU	.0577	.1469	-	-
	OTH	.6860	.5883	<u>.0310</u>	-
PIM → PLO (Indirect Effect <sup>a</sup> )	SHO	-	-	-	-
	COM	<u>.0021</u>	-	-	-
	STU	.4175	<u>.0002</u>	-	-
	OTH	.5689	<u>.0013</u>	.9717	-
CIM → PLO (Total Effect <sup>b</sup> )	SHO	-	-	-	-
	COM	.0500	-	-	-
	STU	.4122	.1881	-	-
	OTH	.2245	.5552	.5750	-
PIM → PLO (Total Effect <sup>b</sup> )	SHO	-	-	-	-
	COM	.9688	-	-	-
	STU	.7823	.8255	-	-
	OTH	.2691	.2937	.3411	-
CIM → PIM vs PIM → CIM	SHO	<u>.0000</u>	-	-	-
	COM	-	<u>.0000</u>	-	-
	STU	-	-	<u>.0010</u>	-
	OTH	-	-	-	.1890
CIM → PLO vs PIM → PLO	SHO	<u>.0000</u>	-	-	-
	COM	-	<u>.0000</u>	-	-
	STU	-	-	<u>.0000</u>	-
	OTH	-	-	-	<u>.0000</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: other.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.1.7.5 Age

		p-Value Wald chi-square test of parameter equalities			
		15-24	25-49	50-64	65+
CIM → PIM (Direct Effect)	AGE1	-	-	-	-
	AGE2	<u>.0190</u>	-	-	-
	AGE3	<u>.0452</u>	.7775	-	-
	AGE4	<u>.0383</u>	.9445	.7491	-
PIM → CIM	AGE1	-	-	-	-

(Direct Effect)	AGE2	.0882	-	-	-
	AGE3	.2368	.6273	-	-
	AGE4	.7803	<u>.0140</u>	.0851	-
CIM → PLO (Direct Effect)	AGE1	-	-	-	-
	AGE2	.3364	-	-	-
	AGE3	.4292	<u>.0041</u>	-	-
	AGE4	<u>.0205</u>	<u>.0000</u>	<u>.0220</u>	-
PIM → PLO (Direct Effect)	AGE1	-	-	-	-
	AGE2	.8731	-	-	-
	AGE3	.2866	<u>.0066</u>	-	-
	AGE4	.0861	<u>.0001</u>	.1588	-
CIM → PLO (Indirect Effect <sup>a</sup> )	AGE1	-	-	-	-
	AGE2	<u>.0257</u>	-	-	-
	AGE3	.1769	.4865	-	-
	AGE4	.5150	.0636	.3745	-
PIM → PLO (Indirect Effect <sup>a</sup> )	AGE1	-	-	-	-
	AGE2	.7789	-	-	-
	AGE3	.1481	.1406	-	-
	AGE4	.2142	.2183	.8112	-
CIM → PLO (Total Effect <sup>b</sup> )	AGE1	-	-	-	-
	AGE2	.5257	-	-	-
	AGE3	.0982	.1742	-	-
	AGE4	<u>.0037</u>	<u>.0034</u>	.2215	-
PIM → PLO (Total Effect <sup>b</sup> )	AGE1	-	-	-	-
	AGE2	.7838	-	-	-
	AGE3	.6147	.1551	-	-
	AGE4	.1974	<u>.0090</u>	.2180	-
CIM → PIM vs PIM → CIM	AGE1	<u>.0098</u>	-	-	-
	AGE2	-	<u>.0000</u>	-	-
	AGE3	-	-	<u>.0005</u>	-
	AGE4	-	-	-	.0639
CIM → PLO vs PIM → PLO	AGE1	<u>.0008</u>	-	-	-
	AGE2	-	<u>.0000</u>	-	-
	AGE3	-	-	<u>.0000</u>	-
	AGE4	-	-	-	<u>.0447</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility; AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 3: age group 50 to 64 years, AGE 4: age group 65 years and above.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

## 3.5.1.7.6 Gender

		p-Value Wald chi-square test of parameter equalities	
		Male	Female
CIM → PIM (Direct Effect)	Male	-	-
	Female	.5274	-
PIM → CIM (Direct Effect)	Male	-	-
	Female	.1484	-
CIM → PLO (Direct Effect)	Male	-	-
	Female	<u>.0154</u>	-
PIM → PLO (Direct Effect)	Male	-	-
	Female	<u>.0253</u>	-
CIM → PLO (Indirect Effect <sup>a</sup> )	Male	-	-
	Female	.7367	-
PIM → PLO (Indirect Effect <sup>a</sup> )	Male	-	-
	Female	.6912	-
CIM → PLO (Total Effect <sup>b</sup> )	Male	-	-
	Female	.0756	-
PIM → PLO (Total Effect <sup>b</sup> )	Male	-	-
	Female	.0616	-
CIM → PIM vs PIM → CIM	Male	<u>.0002</u>	-
	Female	-	<u>.0000</u>
CIM → PLO vs PIM → PLO	Male	<u>.0000</u>	-
	Female	-	<u>.0000</u>

PLO: product loyalty; CIM: corporate image; PIM: product image, PRI: price; PRM: promotion; PRD: product; PLA: place; COR: customer orientation; GEM: good employer; PRQ: product range quality; RFC: reliable and financially strong company; SER: social and environmental responsibility.

<sup>a</sup> The indirect effect considers the impact of PIM through CIM on PLO and CIM through PIM on PLO, whereby the loop enhancement due to the reciprocal relationship between CIM and PIM is also taken into account.

<sup>b</sup> The total effect results from summing up the direct and the loop enhanced indirect effect.

Note: All p-values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.2 Longitudinal sample

#### 3.5.2.1 Reliability and validity testing

##### 3.5.2.1.1 Reliability and convergent validity

	Germany		Romania	
	ITC	$\lambda_s$	ITC	$\lambda_s$
<b>Product loyalty a</b>		$\alpha = .906$ AVE = .717 CR=.909		$\alpha = .711$ AVE = .746 CR=.920
PLOa1	.770	.817	.486	.632
PLOa2	.808	.821	.438	.723
PLOa3	.813	.872	.557	.675
PLOa4	.767	.862	.523	.630
<b>Corporate image a</b>		$\alpha = .915$ AVE = .885 CR=.950		$\alpha = .877$ AVE = .735 CR=.897
CIMa1	.856	.972	.777	.906
CIMa2	.854	.885	.785	.802
CIMa3	.776	.829	.725	.810
<b>Product image a</b>		$\alpha = .881$ AVE = .789 CR=.913		$\alpha = .870$ AVE = .654 CR=.845
PIMa1	.765	.812	.762	.836
PIMa2	.803	.928	.757	.809
PIMa3	.750	.866	.734	.783
<b>Product loyalty b</b>		$\alpha = .907$ AVE = .765 CR=.927		$\alpha = .828$ AVE = .605 CR=.855
PLOb1	.822	.916	.589	.801
PLOb2	.820	.867	.677	.849
PLOb3	.753	.833	.680	.754
PLOb4	.765	.847	.672	.687
<b>Corporate image b</b>		$\alpha = .894$ AVE = .838 CR=.952		$\alpha = .871$ AVE = .760 CR=.901
CIMb1	.773	.907	.767	.907
CIMb2	.837	.941	.770	.853
CIMb3	.767	.834	.723	.854
<b>Product image b</b>		$\alpha = .880$ AVE = .770 CR=.909		$\alpha = .840$ AVE = .760 CR=.901
PIMb1	.815	.884	.726	.860
PIMb2	.768	.886	.719	.846
PIMb3	.729	.859	.673	.772

<b>Product Loyalty c</b>	$\alpha = .919$ AVE = .769 CR=.928		$\alpha = .728$ AVE = .498 CR=.794	
PLOc1	.812	.014	.441	.648
PLOc2	.807	.019	.500	.707
PLOc3	.826	.022	.656	.849
PLOc4	.811	.024	.509	.671
<b>Corporate Image c</b>	$\alpha = .869$ AVE = .704 CR=.822		$\alpha = .837$ AVE = .638 CR=.835	
CIMc1	.732	.842	.721	.785
CIMc2	.823	.910	.708	.852
CIMc3	.698	.836	.669	.708
<b>Product image c</b>	$\alpha = .859$ AVE = .765 CR=.898		$\alpha = .798$ AVE = .681 CR=.855	
PIMc1	.720	.834	.641	.802
PIMc2	.767	.928	.642	.873
PIMc3	.719	.756	.653	.720

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3; ITC: Item to total correlation;  $\lambda_S$ : Standardized loading on the latent variable based on a confirmatory factor analysis (all significant with  $p < .001$ );  $\alpha$ : Coefficient alpha; AVE: Average variance extracted; CR: Composite reliability.  $\chi^2(75)=197.664$ , CFI=.963, TLI=.984, RMSEA=.056.

### 3.5.2.1.2 Discriminant validity

	PLOa	CIMa	PIMa	PLOb	CIMb	PIMb	PLOc	CIMc	PIMc
<b>Germany</b>									
PLOa	.72	-	-	-	-	-	-	-	-
CIMa	.40	.88	-	-	-	-	-	-	-
PIMa	.12	.09	.79	-	-	-	-	-	-
PLOb	.63	.39	.26	.77	-	-	-	-	-
CIMb	.23	.46	.11	.27	.84	-	-	-	-
PIMb	.17	.16	.28	.17	.16	.77	-	-	-
PLOc	.62	.36	.12	.59	.33	.35	.77	-	-
CIMc	.30	.50	.12	.31	.48	.19	.34	.70	-
PIMc	.07	.06	.18	.11	.13	.17	.09	.04	.77
<b>Romania</b>									
PLOa	.75	-	-	-	-	-	-	-	-
CIMa	.22	.74	-	-	-	-	-	-	-
PIMa	.01	.09	.65	-	-	-	-	-	-
PLOb	.40	.33	.08	.61	-	-	-	-	-
CIMb	.02	.21	.02	.11	.76	-	-	-	-
PIMb	.03	.14	.22	.04	.37	.69	-	-	-
PLOc	.34	.05	.06	.55	.22	.20	.50	-	-
CIMc	.00	.18	.05	.00	.49	.22	.01	.64	-



PIMc	.00	.04	.21	.00	.20	.41	.05	.17	.68
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PLOa-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMA-c: product image at time points 1, 2 and 3.

Note: The AVE of each latent variable is listed in the diagonal, whereas off-diagonal elements are the square of the correlation between the corresponding latent variables. The diagonal elements have to be greater than the off-diagonal elements in their corresponding rows and columns (Fornell and Larcker 1981, p. 46).

### 3.5.2.2 Measurement invariance testing

#### 3.5.2.2.1 Countries

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	197.664 (.000)	-	.963 (-)	.984 (-)	.056 (-)
Model 2: Thresholds and factor loadings constrained	177.432 (.000)	24.416 (.9991)	.972 (.09)	.989 (.005)	.045 (-.011)
Model 3: Thresholds and factor loadings constrained over time	205.201 (.000)	113.926 (.000)	.965 (.002)	.987 (.003)	.049 (-.007)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup>	176.098 (.000)	36.838 (.1225)	.974 (.011)	.990 (.006)	.043 (-.013)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c3, PLOa-c4, and CIMA-c1.

#### 3.5.2.2.2 Product categories

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	296.998 (.000)	-	.947 (-)	.981 (-)	.068 (-)
Model 2: Thresholds and factor loadings constrained	262.662 (.000)	77.913 (.4815)	.960 (.013)	.987 (.006)	.056 (-.008)
Model 3: Thresholds and factor loadings constrained over time	315.077 (.000)	187.650 (.000)	.945 (-.002)	.982 (.001)	.066 (-.002)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup> and across groups <sup>b</sup>	257.570 (.000)	37.691 (.0647)	.961 (.014)	.987 (.006)	.056 (-.012)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c3, PLOa-c4, CIMA-c1, and PIMA-c2.

<sup>b</sup> Thresholds and factor loadings freed across groups for the following items: PIMA-c2.

3.5.2.2.3 *Country of origin knowledge*

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	157.846 (.000)	-	.965 (-)	.981 (-)	.056 (-)
Model 2: Thresholds and factor loadings constrained	131.643 (.000)	34.714 (.2532)	.974 (.009)	.985 (.004)	.049 (-.007)
Model 3: Thresholds and factor loadings constrained over time	212.964 (.000)	229.413 (.000)	.949 (-.016)	.976 (-.005)	.062 (.006)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup> and groups <sup>b</sup>	150.977 (.000)	57.613 (.0012)	.970 (.005)	.985 (.004)	.050 (-.006)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c3, PLOa-c4, CIMa-c1, PIMa-c2.

<sup>b</sup> Thresholds and factor loadings freed across groups for the following items: PIMa-c2, CIMa-c1.

3.5.2.2.4 *Education*

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	237.322 (.000)	-	.974 (-)	.985 (-)	.071 (-)
Model 2: Thresholds and factor loadings constrained	256.449 (.000)	179.843 (.000)	.973 (-.001)	.973 (-.012)	.070 (-.001)
Model 3: Thresholds and factor loadings partly freed across groups	242.608 (.000)	130.292 (.000)	.974 (.000)	.985 (.000)	.069 (-.002)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup> and groups <sup>b</sup>	267.112 (.00)	96.322 (.000)	.971 (-.003)	.984 (-.001)	.072 (.001)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c2, PLOa-c4, CIMa-c3, PIMa-c1.

<sup>b</sup> Thresholds and factor loadings freed across groups for the following items: PLOa-c2, PLOa-c4, CIMa-c3, PIMa-c1.

3.5.2.2.5 *Age*

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	244.244 (.000)	-	.948 (-)	.970 (-)	.074 (-)
Model 2: Thresholds and factor loadings constrained	235.560 (.000)	127.576 (.000)	.954 (.006)	.975 (.005)	.067 (-.007)
Model 3:	239.998	102.257	.951	.973	.070

Thresholds and factor loadings partly freed across groups <sup>a</sup>	(.000)	(.0036)	(.003)	(.003)	(-.004)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup> and groups <sup>b</sup>	236.102 (.000)	35.896 (.00739)	.952 (.003)	.974 (.004)	.069 (-.005)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c3, PLOa-c4, CIMa-c2, PIMa-c1.

<sup>b</sup> Thresholds and factor loadings freed across groups for the following items: PLOa-c3, PLOa-c4, CIMa-c2, PIMa-c1.

### 3.5.2.2.6 Gender

Model	$\chi^2$ (p-Value)	$\chi^2$ -Difference (p-Value)	CFI ( $\Delta$ CFI)	TLI ( $\Delta$ TLI)	RMSEA ( $\Delta$ RMSEA)
Model 1: Configural invariance	203.643 (.000)	-	.951 (-)	.981 (-)	.054 (-)
Model 2: Thresholds and factor loadings constrained	194.861 (.000)	54.608 (.2699)	.959 (.008)	.986 (.005)	.047 (-.007)
Model 3: Thresholds and factor loadings constrained over time	289.396 (.000)	274.781 (.000)	.923 (-.028)	.975 (-0.06)	.062 (.008)
Model 4: Thresholds and factor loadings partly freed over time <sup>a</sup> and groups <sup>b</sup>	218.609 (.000)	88.266 (.000)	.950 (-.001)	.983 (.002)	.051 (-.003)

<sup>a</sup> Thresholds and factor loadings are freed over time for the following items: PLOa-c3, PLOa-c4, CIMa-c3, PIMa-c2.

<sup>b</sup> Thresholds and factor loadings freed across groups for the following items: PIMa-c2, PLOa-c3, PLOa-c4, CIMa-c3.

### 3.5.2.3 Descriptive sample statistics

	Mean and standard deviation of model constructs								
	PLOa mean (st.d.)	CIMa mean (st.d.)	PIMa mean (st.d.)	PLOb mean (st.d.)	CIMb mean (st.d.)	PIMb mean (st.d.)	PLOc mean (st.d.)	CIMc mean (st.d.)	PIMc mean (st.d.)
<b>Countries</b>									
GER	4.72 (1.48)	4.94 (1.36)	4.79 (1.17)	4.83 (1.47)	4.88 (1.34)	4.86 (1.20)	4.91 (1.48)	4.85 (1.29)	4.89 (1.12)
ROM	4.87 (1.14)	5.15 (1.24)	4.87 (1.14)	4.93 (1.20)	5.23 (1.25)	5.06 (1.11)	5.06 (1.15)	5.19 (1.17)	5.08 (.98)
<b>Product categories</b>									
DET	4.97 (1.47)	5.15 (1.37)	4.91 (1.19)	5.12 (1.48)	5.08 (1.32)	5.05 (1.20)	5.14 (1.42)	4.98 (1.29)	5.01 (1.06)
COS	4.62 (1.14)	5.03 (1.23)	4.73 (1.15)	4.64 (1.12)	5.06 (1.29)	4.81 (1.09)	4.81 (1.16)	5.14 (1.22)	4.97 (1.06)

ADH	4.62 (1.13)	4.75 (1.24)	4.80 (1.06)	4.66 (1.19)	4.99 (1.30)	4.97 (1.18)	4.89 (1.31)	4.92 (1.12)	4.95 (1.03)
<b>Country of origin knowledge</b>									
KNO	4.84 (1.31)	5.12 (1.28)	4.86 (1.15)	4.92 (1.32)	5.15 (1.25)	5.00 (1.15)	5.03 (1.30)	5.09 (1.21)	5.04 (1.01)
UKN	4.60 (1.36)	4.68 (1.39)	4.66 (1.18)	4.71 (1.44)	4.65 (1.46)	4.74 (1.21)	4.80 (1.44)	4.70 (1.35)	4.74 (1.21)
<b>Education</b>									
SHO	4.64 (1.23)	4.60 (1.26)	4.50 (1.13)	4.83 (1.36)	4.55 (1.30)	4.48 (1.17)	4.96 (1.29)	4.31 (1.24)	4.50 (1.00)
COM	5.00 (1.34)	5.10 (1.27)	4.94 (1.03)	5.09 (1.28)	5.24 (1.29)	5.00 (1.03)	5.22 (1.28)	5.07 (1.03)	5.16 (1.14)
STU	4.82 (1.38)	5.26 (1.29)	4.95 (1.19)	4.84 (1.40)	5.27 (1.22)	5.19 (1.13)	4.93 (1.41)	5.35 (1.12)	5.22 (.99)
OTH	4.69 (1.17)	5.08 (1.29)	4.91 (1.16)	4.78 (1.01)	5.02 (1.39)	5.10 (1.14)	4.84 (1.03)	5.10 (1.20)	4.97 (1.09)
<b>Age</b>									
AGE1	4.49 (1.25)	4.52 (1.39)	4.40 (1.13)	4.60 (1.37)	4.52 (1.38)	4.57 (1.13)	4.73 (1.32)	4.40 (1.40)	4.66 (1.11)
AGE2	4.73 (1.38)	5.08 (1.26)	4.78 (1.17)	4.80 (1.38)	5.08 (1.27)	4.94 (1.16)	4.90 (1.38)	5.09 (1.10)	4.94 (1.06)
AGE3	4.97 (1.34)	5.25 (1.23)	5.02 (1.06)	5.07 (1.24)	5.30 (1.14)	5.21 (1.15)	5.17 (1.28)	5.23 (1.12)	5.29 (.93)
AGE4	5.13 (1.14)	5.39 (1.22)	5.27 (1.07)	5.21 (1.22)	5.39 (1.27)	5.19 (1.10)	5.30 (1.17)	5.40 (1.23)	5.13 (.99)
<b>Gender</b>									
Male	4.59 (1.27)	4.91 (1.28)	4.75 (1.14)	4.70 (1.30)	4.93 (1.33)	4.93 (1.17)	4.84 (1.31)	4.93 (1.24)	5.00 (1.06)
Female	4.99 (1.34)	5.18 (1.32)	4.91 (1.17)	5.05 (1.36)	5.18 (1.27)	4.99 (1.15)	5.12 (1.33)	5.11 (1.23)	5.11 (1.23)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMA-c: product image at time points 1, 2 and 3; GER: Germany, FRA: France; ROM: Romania, RUS: Russia, USA: United States of America; DET: laundry and detergents, COS: cosmetics, ADH: adhesives; KNO: country of origin of the corporate brand is known; UKN: country of origin of the corporate brand is unknown; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: others; AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 3: age group 50 to 64 years, AGE 4: age group 65 years and above.

Note: To compute mean values and standard deviations, the items of each construct were averaged to obtain composite scores for the various constructs. Correlation as well as covariance matrices are available upon request.

### 3.5.2.4 Path coefficients

#### 3.5.2.4.1 Product categories

	Cosmetics	Detergents	Adhesives
CIMa → PLOb/	.006 ns	.250 ***	.131 **
CIMb → PLOc	(.009 ns)	(.315 ***)	(.161 **)
PIMa → PLOb/	.091 *	.142 ***	.226 ***
PIMb → PLOc	(.106 *)	(.178 ***)	(.272 ***)
PLOa → PLOb/	.841 ***	.565 ***	.674 ***
PLOb → PLOc	(.866 ***)	(.511 ***)	(.570 ***)
CIMa → PIMb/	.304 ***	.203 ***	.039 ns
CIMb → PIMc	(.372 ***)	(.227 ***)	(.049 ns)
PIMa → PIMb/	.350 ***	.415 ***	.581 ***
PIMb → PIMc	(.325 ***)	(.459 ***)	(.724 ***)
PIMa → CIMb/	.222 ***	.120 **	.185 **
PIMb → CIMc	(.169 ***)	(.119 **)	(.187 **)
CIMa → CIMb/	.590 ***	.655 ***	.548 ***
CIMb → CIMc	(.591 ***)	(.653 ***)	.563 ***

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(120)=295.909$  ( $p=.000$ ), CFI=.490, TLI=.982, RMSEA=.065.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

#### 3.5.2.4.2 Country of origin knowledge

	Country of origin known	Country of origin not known
CIMa → PLOb/	.165 ***	-.045 ns
CIMb → PLOc	(.178 ***)	(-.048 ns)
PIMa → PLOb/	.183 ***	.291 ***
PIMb → PLOc	(.189 ***)	(.253 ***)
PLOa → PLOb/	.682 ***	.880 ***
PLOb → PLOc	(.619 ***)	(.756 ***)
CIMa → PIMb/	.152 ***	.195 ***
CIMb → PIMc	(.194 ***)	(.239 ***)
PIMa → PIMb/	.400 ***	.652 ***
PIMb → PIMc	(.470 ***)	(.645 ***)
PIMa → CIMb/	.130 ***	.237 ***

PIMb → CIMc	(.122 *)	(.184 ***)
CIMa → CIMb/	.642 ***	.640 ***
CIMb → CIMc	(.628 ***)	(.614 ***)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(68)=182.319$  ( $p=.000$ ), CFI=.959, TLI=.980, RMSEA=.057.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

### 3.5.2.4.3 Education

	High school graduate	Community college/vocational school	College/university degree	Others
CIMa → PLOb	.244 ***	.126 ***	.181 ***	-.001 ns
CIMb → PLOc	(.284 ***)	(.165 ***)	(.242 ***)	(-.001 ns)
PIMa → PLOb	.434 ***	.104 **	.189 ***	.045 ns
PIMb → PLOc	(.383 ***)	(.119 **)	(.226 ***)	(.082 ns)
PLOa → PLOb	.342 ***	.717 ***	.572 ***	.900 ***
PLOb → PLOc	(.298 ***)	(.713 ***)	(.556 ***)	(.976 ***)
CIMa → PIMb	.206 ***	.235 ***	.183 ***	.054 ns
CIMb → PIMc	(.314 ***)	(.307 ***)	(.177 ***)	(.055 ns)
PIMa → PIMb	.357 ***	.380 ***	.491 ***	.693 ***
PIMb → PIMc	(.414 ***)	(.431 ***)	(.426 ***)	(.768 ***)
PIMa → CIMb	.232 ***	.121 **	.099 **	.053 ns
PIMb → CIMc	(.213 ***)	(.117 **)	(.089 **)	(.032 ns)
CIMa → CIMb	.544 ***	.645 ***	.668 ***	.363 **
CIMb → CIMc	(.655 ***)	(.721 ***)	(.671 ***)	(.203 **)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(100)=281.131$  ( $p=.000$ ), CFI=.965, TLI=.979, RMSEA=.083.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

### 3.5.2.4.4 Age

	15-24	25-49	50-64	65+
CIMa → PLOb	.155 ***	.123 ***	-.021 ns	-.025 ns
CIMb → PLOc	(.263 ***)	(.181 ***)	(-.035 ns)	(-.049 ns)
PIMa → PLOb	.044 ns	.130 ***	.265 ***	.171 ***
PIMb → PLOc	(.052 ns)	(.175 ***)	(.325 ***)	(.380 ***)

PLOa → PLOb	.537 ***	.691 ***	.747 ***	.887 ***
PLOb → PLOc	(.624 ***)	(.585 ***)	(.800 ***)	(.794 ***)
CIMa → PIMb	.108 ns	.285 ***	.245 ***	.028 ns
CIMb → PIMc	(.137 ns)	(.311 ***)	(.301 ***)	(.047 ns)
PIMa → PIMb	.756 ***	.435 ***	.183 *	.427 ***
PIMb → PIMc	(.667 ***)	(.434 ***)	(.163 *)	(.805 ***)
PIMa → CIMb	.184 *	.038 *	.348 ***	.149 *
PIMb → CIMc	(.140 *)	(.086 *)	(.249 ***)	(.152 *)
CIMa → CIMb	.464 ***	.585 ***	.516 ***	.551 ***
CIMb → CIMc	(.506 ***)	(.667 ***)	(.509 ***)	(.491 ***)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(104)=271.502$  ( $p=.000$ ), CFI=.939, TLI=.966, RMSEA=.079.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

### 3.5.2.4.5 Gender

	Male	Female
CIMa → PLOb	.105 ***	.111 **
CIMb → PLOc	(.154 ***)	(.152 ***)
PIMa → PLOb	.130 ***	.264 ***
PIMb → PLOc	(.132 ***)	(.235 **)
PLOa → PLOb	.731 ***	.681 ***
PLOb → PLOc	(.659 ***)	(.633 ***)
CIMa → PIMb	.116 ***	.176 ***
CIMb → PIMc	(.205 ***)	(.281 ***)
PIMa → PIMb	.542 ***	.330 ***
PIMb → PIMc	(.661 ***)	(.341 ***)
PIMa → CIMb	.197 ***	.234 ***
PIMb → CIMc	(.144 ***)	(.151 ***)
CIMa → CIMb	.630 ***	.559 ***
CIMb → CIMc	(.664 ***)	(.557 ***)

PLOa-c: product loyalty at time points 1, 2 and 3; CIMa-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

$\chi^2(86)=228.705$  ( $p=.000$ ), CFI=.944, TLI=.980, RMSEA=.056.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , ns=not significant; standardized coefficients in brackets.

Note: The standardized coefficients are given for the relationships between time point 1 and 2, the standardized coefficients for the corresponding relationships between time point 2 and 3 might vary slightly.

### 3.5.2.5 Differences in path coefficients

#### 3.5.2.5.1 Product categories

		p-Value Wald chi-square test of parameter equalities		
		Detergents	Cosmetics	Adhesives
CI <sub>Ma</sub> → PLO <sub>b</sub> / CI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	DET	-	-	-
	COS	<u>.0000</u>	-	-
	ADH	.0215	<u>.0129</u>	-
PI <sub>Ma</sub> → PLO <sub>b</sub> / PI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	DET	-	-	-
	COS	.3175	-	-
	ADH	.1257	<u>.0410</u>	-
CI <sub>Ma</sub> → PLO <sub>c</sub> (Indirect effect <sup>a</sup> )	DET	-	-	-
	COS	.9358	-	-
	ADH	.1593	.3033	-
PI <sub>Ma</sub> → PLO <sub>c</sub> (Indirect effect <sup>a</sup> )	DET	-	-	-
	COS	<u>.0146</u>	-	-
	ADH	.6763	.0507	-
CI <sub>Ma</sub> → PLO <sub>c</sub> (Total effect <sup>b</sup> )	DET	-	-	-
	COS	<u>.0000</u>	-	-
	ADH	<u>.0134</u>	<u>.0190</u>	-
PI <sub>Ma</sub> → PLO <sub>c</sub> (Total effect <sup>b</sup> )	DET	-	-	-
	COS	.1957	-	-
	ADH	.1458	<u>.0263</u>	-

PLO<sub>a-c</sub>: product loyalty at time points 1, 2 and 3; CI<sub>Ma-c</sub>: corporate image at time points 1, 2 and 3; PI<sub>Ma-c</sub>: product image at time points 1, 2 and 3; DET: laundry and detergents, COS: cosmetics, ADH: adhesives.

<sup>a</sup> The indirect effect considers the impact of PI<sub>Ma</sub> through CI<sub>Mb</sub> on PLO<sub>c</sub> and CI<sub>Ma</sub> through PI<sub>Mb</sub> on PLO<sub>c</sub>.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

#### 3.5.2.5.2 Country of origin knowledge

		p-Value Wald chi-square test of parameter equalities	
		Country of origin known	Country of origin not known
CI <sub>Ma</sub> → PLO <sub>b</sub> / CI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	KNO	-	-
	UKN	<u>.0001</u>	-
PI <sub>Ma</sub> → PLO <sub>b</sub> / PI <sub>Mb</sub> → PLO <sub>c</sub> (Direct effect)	KNO	-	-
	UKN	.1649	-
CI <sub>Ma</sub> → PLO <sub>c</sub> (Indirect effect <sup>a</sup> )	KNO	-	-
	UKN	.1588	-



PIMa → PLOc (Indirect effect <sup>a</sup> )	KNO	-	-
	UKN	<u>.0074</u>	-
CIMA → PLOc (Total effect <sup>b</sup> )	KNO	-	-
	UKN	<u>.0001</u>	-
PIMa → PLOc (Total effect <sup>b</sup> )	KNO	-	-
	UKN	.2247	-

PL0a-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3; KNO: country of origin of the corporate brand is known; UKN: country of origin of the corporate brand is unknown.

<sup>a</sup> The indirect effect considers the impact of PIMa through CIMb on PLOc and CIMA through PIMb on PLOc.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.2.5.3 Education

		p-Value Wald chi-square test of parameter equalities			
		High school graduate	Community college/ vocational school	College/ university degree	Others
CIMA → PLOb/ CIMb → PLOc (Direct effect)	SHO	-	-	-	-
	COM	<u>.0481</u>	-	-	-
	STU	.2695	.2340	-	-
	OTH	<u>.0000</u>	<u>.0083</u>	<u>.0001</u>	-
PIMa → PLOb/ PIMb → PLOc (Direct effect)	SHO	-	-	-	-
	COM	<u>.0000</u>	-	-	-
	STU	<u>.0002</u>	<u>.0430</u>	-	-
	OTH	<u>.0000</u>	.2391	<u>.0017</u>	-
CIMA → PLOc (Indirect effect <sup>a</sup> )	SHO	-	-	-	-
	COM	<u>.0057</u>	-	-	-
	STU	<u>.0185</u>	.3558	-	-
	OTH	<u>.0000</u>	<u>.0096</u>	<u>.0002</u>	-
PIMa → PLOc (Indirect effect <sup>a</sup> )	SHO	-	-	-	-
	COM	<u>.0231</u>	-	-	-
	STU	<u>.0300</u>	.7603	-	-
	OTH	<u>.0011</u>	<u>.0280</u>	<u>.0032</u>	-
CIMA → PLOc (Total effect <sup>b</sup> )	SHO	-	-	-	-
	COM	<u>.0136</u>	-	-	-
	STU	.1171	.2109	-	-
	OTH	<u>.0000</u>	<u>.0053</u>	<u>.0000</u>	-
PIMa → PLOc (Total effect <sup>b</sup> )	SHO	-	-	-	-
	COM	<u>.0000</u>	-	-	-
	STU	<u>.0001</u>	<u>.0471</u>	-	-

	OTH	<u>.0000</u>	.1925	<u>.0009</u>	-
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PLOa-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMA-c: product image at time points 1, 2 and 3; SHO: high school graduate, COM: community college / vocational school, STU: college / university degree, OTH: other.

<sup>a</sup> The indirect effect considers the impact of PIMA through CIMb on PLOc and CIMA through PIMb on PLOc.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

### 3.5.2.5.4 Age

		p-Value Wald chi-square test of parameter equalities			
		15-24	25-49	50-64	65+
CIMA → PLOb/ CIMb → PLOc (Direct effect)	AGE1	-	-	-	-
	AGE2	.4516	-	-	-
	AGE3	<u>.0003</u>	<u>.0042</u>	-	-
	AGE4	<u>.0002</u>	<u>.0024</u>	.9322	-
PIMA → PLOb/ PIMb → PLOc (Direct effect)	AGE1	-	-	-	-
	AGE2	<u>.0431</u>	-	-	-
	AGE3	<u>.0001</u>	<u>.0069</u>	-	-
	AGE4	<u>.0159</u>	.4107	.0998	-
CIMA → PLOc (Indirect effect <sup>a</sup> )	AGE1	-	-	-	-
	AGE2	<u>.0006</u>	-	-	-
	AGE3	<u>.0028</u>	.1937	-	-
	AGE4	.9945	<u>.0055</u>	<u>.0049</u>	-
PIMA → PLOc (Indirect effect <sup>a</sup> )	AGE1	-	-	-	-
	AGE2	.2370	-	-	-
	AGE3	.0803	.2415	-	-
	AGE4	<u>.0438</u>	.0747	.8202	-
CIMA → PLOc (Total effect <sup>b</sup> )	AGE1	-	-	-	-
	AGE2	.7196	-	-	-
	AGE3	<u>.0015</u>	<u>.0067</u>	-	-
	AGE4	<u>.0001</u>	<u>.0009</u>	.4978	-
PIMA → PLOc (Total effect <sup>b</sup> )	AGE1	-	-	-	-
	AGE2	.0710	-	-	-
	AGE3	<u>.0001</u>	<u>.0100</u>	-	-
	AGE4	<u>.0313</u>	.4936	.0959	-

PLOa-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMA-c: product image at time points 1, 2 and 3. AGE 1: age group 15 to 24 years, AGE 2: age group 25 to 49 years, AGE 3: age group 50 to 64 years, AGE 4: age group 65 years and above.

<sup>a</sup> The indirect effect considers the impact of PIMA through CIMb on PLOc and CIMA through PIMb on PLOc.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-Values of the Wald tests, which are equal or less than .05, are underlined.

## 3.5.2.5.5 Gender

		p-Value Wald chi-square test of parameter equalities	
		Male	Female
CIMA → PLOb/ CIMb → PLOc (Direct effect)	Male	-	-
	Female	.8893	-
PIMa → PLOb/ PIMb → PLOc (Direct effect)	Male	-	-
	Female	<u>.0227</u>	-
CIMA → PLOc (Indirect effect <sup>a</sup> )	Male	-	-
	Female	<u>.0065</u>	-
PIMa → PLOc (Indirect effect <sup>a</sup> )	Male	-	-
	Female	.6622	-
CIMA → PLOc (Total effect <sup>b</sup> )	Male	-	-
	Female	.6016	-
PIMa → PLOc (Total effect <sup>b</sup> )	Male	-	-
	Female	<u>.0221</u>	-

PLOa-c: product loyalty at time points 1, 2 and 3; CIMA-c: corporate image at time points 1, 2 and 3; PIMa-c: product image at time points 1, 2 and 3.

<sup>a</sup> The indirect effect considers the impact of PIMa through CIMb on PLOc and CIMA through PIMb on PLOc.

<sup>b</sup> The total effect results from summing up the corresponding direct effects between time point 1 and 2 as well as between time point 2 and 3 and the indirect effect.

Note: All p-values of the Wald tests, which are equal or less than .05, are underlined.

## 4 Final remarks and directions for future research

**Does standardization of corporate branding across countries work? Does endorsing product brands by corporate branding pay off?** Marketers have to understand how the information that consumers associate with a company and its products affects their responses to those products. In other words, it is essential to know from a managerial perspective if the increasingly popular endorsement strategy adds value to a company's products and if so, how consumers' evaluation of the corporate brand adds value. On the one hand, this knowledge is necessary to better position the company and its products compared to the competition. On the other hand, corporate governance regulations entail a thorough market research on the impact of corporate branding to justify those investments.

**From a theoretical perspective this thesis contributes to research in the field of international brand management.** Taking a holistic perspective, including consumers' perceptions of corporate and product brand, and testing theoretically derived hypotheses, my studies broaden the knowledge of what these cause-effect-relationships look like. Focusing on the FMCG sector, which has seldom been analyzed in corporate branding literature, I contribute to the knowledge on hybrid brand architectures. Highlighting the impact on consumers' product response, the previous two chapters addressed the role of specific corporate associations versus corporate image and the role of the reciprocal relationship between corporate and product image. In particular, I focused on international differences among those relationships. Additionally, I considered further contextual factors.

**In the following, I recapitulate the substantial contributions of the analyses described in chapter two and three.** Thereby, I will first summarize answers the analyses have given to the respective research questions. Subsequently, I illustrate theoretical and managerial implications of both chapters. Finally, as this study is not without limitations, I give directions for future research.

#### 4.1 Theoretical and managerial implications

**Specifying the two initial questions** – Does standardization of corporate branding across countries work? Does endorsing product brands by corporate branding pay off? –, detailed research questions are derived, which address substantial issues of managerial and theoretical importance that have been neglected by practice- and research-oriented studies so far. Recapitulating the purpose of each chapter, I repeat each of these research questions and briefly summarize the answer I gave based on the conducted analyses. Based on this, I explain the implications for research and practice.

The **purpose of chapter two** was to analyze whether or not standardization of corporate branding across countries work. In detail, I analyze the relationship between specific corporate associations and corporate image as consumers' overall assessment of the corporate brand. Further, I examine how the direct impact of specific corporate associations and corporate image on consumers' product response varies cross-nationally. From a theoretical perspective, the relationship between specific and aggregated measures of a corporate brand is examined. From a managerial perspective, this research addresses the question if standardized international corporate branding impact consumers' product response in the same way across countries or if there are country-specific particularities corporate brand managers should consider.. In detail, I derived four research questions, which I answer as follows:

- **Do specific corporate associations impact corporate image in the same way across countries?** Results illustrate that – in case of a thoroughly implemented standardization of corporate branding – specific corporate associations impact corporate image largely in the same way across countries.
- **How does corporate image impact consumers' product response across countries?** Results provide support that the impact of corporate image on consumers' product response is positive across all countries. In other words, from a consumer's perspective, using the corporate brand as an endorser to product brands adds value to the company's product brands. In detail, the impact of corporate image on consumers' product response is found to be higher in collectivistic cultures. However, the analysis also reveals that consumers in the corporate brand's home market particularly value the company's favorable ex-

ternal portrayal.

- **How do specific corporate associations impact consumers' product response directly across countries?** With regards to the direct impact of specific corporate associations on consumers' product response, I state that corresponding relationships exist depending on the country concerned. However, these relationships turn out to be rather complex. They are either equally important to customer behavior across countries, are dependent on national culture, or rely on further context specific factors.
- **Do further contextual factors influence those relationships?** Considering product categories, country of origin knowledge, highest educational attainment, gender, and age as contextual factors for all relationships examined in the hypothesized model enhances the generalizability of the presented findings. Thus, for example, the impact of corporate image on consumers' product response does not vary across product categories or depending on consumers' knowledge of the company's country of origin. However, consumers' socio-demographics have to be taken into account in any case.

The **purpose of chapter three** was to analyze cross-nationally whether or not corporate and product brand are reciprocally related and how both directly and indirectly impact consumers' product response. From a theoretical perspective, I contribute a holistic approach on the impact of corporate and product branding on consumers' product response in an international context. From a managerial perspective, this research addresses the question of how to evaluate corporate and product branding simultaneously to monitor if the endorsement strategy results in a greater public esteeming of both the corporation and its branded products. In detail, I derived three research questions, which I answer as follows:

- **Do consumers perceive corporate and product brand as reciprocally related across countries?** Results illustrate a significant positive reciprocal relationship in Germany, Romania, Russia, and the USA. With regards to the implementation of internationally standardized corporate branding surveyed, only France constitutes an exception, as product image does not significantly impact corporate image in this country. This might be due to the fact that French con-

sumers are not aware of the company that produces the product brands they are buying. Results of a panel study in Germany and Romania reconfirm the positive reciprocal relationship between corporate and product image.

- **How do the direct and indirect effects of corporate and product branding on consumers' product response look like across countries?** Results reveal that corporate image has a significant direct impact as well as a significant indirect impact through positively influencing product loyalty on consumers' product response in all countries. For the direct and indirect impact of product loyalty on consumers' product response, findings illustrate significant relationships in all countries, except for France where the indirect impact is found to be not significant. Again, this might be related to the fact that French consumers are less aware of which FMCG firm stands behind the product brand. Results of the longitudinal study widely support these findings. However, although the total effect of corporate image on consumers' product response is significantly higher in countries characterized as being high on the collectivism dimension in the cross-sectional sample, corresponding results of the longitudinal sample did not confirm this initial evidence. With regards to the total effect of product image on consumers' product response a significant difference between individualistic and collectivistic countries could not be revealed in both sample.
- **Do further contextual factors influence those relationships?** Considering product categories, country of origin knowledge, highest educational attainment, gender, and age as contextual factors for all relationships examined in the hypothesized model, enhances the generalizability of the presented findings. Thus, for example, the findings on the total effect of product image on product loyalty, considering the moderating influence of product category and the respondents' education and gender, show that this effect hardly varies between groups in the cross-sectional sample. However, after analyzing country of origin knowledge and age of the interviewees, significant differences across groups could be observed, e.g., product image influences product loyalty to a larger extent, when consumers are aware of the country of origin of the corporate brand. The results of corresponding analyses of the longitudinal sample show a widely consistent pattern of effects and reconfirm the importance of

contextual factors in explaining cause-effect relationships relevant to international corporate brand management.

#### 4.1.1 Theoretical implications

With regards to **theoretical implications**, chapter two advances the knowledge on corporate branding in an international context by analyzing both direct and indirect effect of corporate branding on consumers' product response. Chapter three contributes to a holistic approach on the impact of corporate and product branding on consumers' product response in an international context analyzing in detail the reciprocal relationship between corporate and product brand. I summarize the theoretical implications by illustrating (1) the role of corporate branding for FMCG firms, outline (2) the cause-effect-relationships relevant to international corporate brand management and highlighting (3) the importance of the international focus of the studies.

- To date most studies dealing with corporate branding focus on the services sector or on durable goods, i.e., automobile manufacturers (Hsieh, Pan, and Setiono 2004; Berens, van Riel, and van Bruggen 2005; Biehal and Sheinin 2007), even though corporate branding is gaining importance in the FMCG industry. Analyzing **corporate branding of a FMCG firm** answers also Walsh and Beatty's (2007, p. 140) call to examine their customer-based reputation measure in other context than the services sector. Scale replication is often neglected which in turn leads to a limited generalizability of a scale's performance (Flynn and Percy 2001, pp. 412-13). In general, Hunter (2001, p. 155) concludes that "we desperately need replication studies!" (see also Cohen 1994, p. 1002; Barwise 1995, p. G33). The results of the presented study provide support that it could be used in the context of the FMCG industry.
- The two studies analyze **cause-effect-relationships relevant to international corporate brand management**. Taking a holistic perspective, and testing theoretically derived hypotheses, broadens the knowledge of what these cause-effect-relationships look like.
  - With regards to consumers' perception of the corporate brand, the results illustrate that **specific corporate associations impact corporate image**



**largely in the same way across countries.** I respond to Brown and Dacin's (1997) request to examining further corporate associations in addition to corporate ability and CSR and their influence on consumers' overall assessment of the company as well as investigating contextual factors, e.g., different product categories.

- By closer examining the **reciprocal relationship between the corporate brand and its product brands**, I respond to Brown and Dacin's (1997, p. 81) request to more closely examine these effects. Recently, Keller and Lehmann (2006, p. 749) highlighted that the corporate brand is not only endorsing the corresponding product brand, but a product brand also reflect on the corporate brand. Whereas Muzellec and Lambkin (2008) illustrate how a multinational FMCG company deliberately pursued a strategy of separating its corporate brand from its product brand portfolio, it is necessary to shed light on the opposite case. Results provide insights in what this reciprocal relationship looks like, if a company decides to use their corporate brand as an endorsement for their product brands. In detail, my results indicate in case of the corporate brand used as stimulus in the present study that a positive reciprocal relationship exists in all countries except France.
- With regards to the effect of an internationally standardized corporate brand, the results provide support that the **impact of corporate image on consumers' product response is positive across all countries.** In other words, from a consumer's perspective, using the corporate brand as an endorser to product brands adds value to the company's product brands. Some evidence is found that the impact of corporate image on consumers' product response is higher in collectivistic cultures. However, the analysis also reveals that consumers in the corporate brand's home market particularly value the company's favorable external portrayal. With regards to the direct impact of specific corporate associations and consumers' product response, I state that corresponding relationships exist depending on the country concerned.
- Further, I advance existing research by distinguishing between the **direct**

**and indirect effects of corporate and product branding on consumers' product response.** Answering Keller and Lehman's (2006, p. 743) call, I consider, besides the direct effect, the indirect effect of the corporate brand on the product brands and thus on consumers' product response. With this I advance the knowledge on process and conditions through which corporate branding has an impact on product brands and on consumers' product response (Gürhan-Canli and Batra 2004, pp. 203-04). Results illustrate that, except for the indirect impact of product brand on consumers' product response in France, all relationships show significant positive impacts across countries.

- Winer (1998, p. III) and more recently Steenkamp (2005, p. 6) as well as Keller and Lehmann (2006, p. 750) and Eden (2008, p. 2) highlight **the importance of studies focusing on cross-national research questions.** In more detail, Bello (2004) requests for further research in the area of marketing issues concerning transitional and emerging countries. Following those requests, my studies focus on the question whether standardization across countries works and include in a cross-sectional consumer study amongst Germany, France and the USA, Romania and Russia as emerging countries. Extending the findings of Brown and Dacin (1997) as well as Berens, van Riel, and van Bruggen (2005), the present study advances the knowledge on corporate branding in an international context. Considering additional contextual factors, such as product category, country of origin knowledge, and several sociodemographics, the generalizability of the results is enhanced.

#### 4.1.2 *Managerial implications*

With regards to **managerial implications**, general recommendations for evaluating global corporate brands and adapting their positioning are derived in chapter two. In chapter three, generalizable recommendations for managing corporate and product branding across countries are derived. In the following, I summarize the managerial implications by (1) highlighting if standardized international corporate branding im-

pact consumers' product response in the same way across countries or if there are country-specific particularities corporate brand managers should consider and (2) illustrating how to evaluate corporate and product branding simultaneously to monitor if a company's endorsement strategy results in a greater public esteeming of both the corporation and its branded products.

- The proposed model of study 1 provides corporate brand managers with a **diagnostic tool to evaluate whether the corporate branding strategy works across countries or not** by analyzing brand perceptions of consumers. It is suited to gather benchmark data in FMCG firms regarding (1) current levels of specific corporate associations and overall corporate image and their impact on consumers' product response. Referring to the results of invariance tests, the scales applied are also suitable for a cross-national evaluation. Such an approach would offer corporate brand management – which is mostly organized centrally from the headquarter supported by local representatives, who are responsible for the adaptation and coordination of country-specific communication – to evaluate the positioning of the corporate brand and the effectiveness of their corporate branding activities cross-nationally (Dawar and Parker 1994, p. 83). Results might provide support that the corporate branding strategy does not work, i.e., (1) corporate associations are not perceived similarly across countries or (2) corporate image does not significantly influence consumers' product response. Reasons and corresponding causes of actions are described in the following.
  - In the first case, a plausible reason is that those characteristics of the corporate identity that the senior management decides to communicate actively towards consumers, i.e., the specific corporate associations, are not communicated adequately and thus are not associated with a consumers' overall evaluation of the company in certain countries. Thus, brand managers need to find out, **which associations customer link to the corporate brand and which are rather not associated with it**. Detailed knowledge on the consumers' specific corporate association can be traced by letting them map their individual brand associations in order to identify detailed characteristics of the network of specific corporate

associations in their memory on which consumers base their overall evaluation of the company (John Roedder et al. 2006, pp. 550-51). Thus, this map illustrates, what consumers link to the brand and identifies why some specific associations are less important in certain countries. To ensure a consistent external portrayal of the corporate brand, measures can be taken to strengthen less relevant specific corporate associations in the countries concerned.

- In the latter case, it could be argued, that a favorable evaluation of the corporate brand alone does not influence consumer' product response (Farquhar 1989). The corporate brand is not visible enough in certain countries or rather the communication used to promote the corporate brand might not fit to the cultural characteristics of the country. Thus, respective courses of actions are needed to **strengthen the relevance of the corporate brand and make it easier to remember**, e.g., rearrange the position of the corporate brand logo on various products and shore up saliency of the corporate brand through corporate image campaigns. Referring to contextual factors, it has to be considered further that the existing branding strategy might not be suitable for the targeted customer group. However, corporate brand managers have to notice, that corporate branding might not be suitable for each company (Hatch and Schultz 2001, p. 8).
- In addition to study 1, **the model of study 2 helps managers to evaluate corporate and product branding simultaneously**. Until recently, it was unclear whether corporate brands provided value to customers, other than value that product brands provide to customers (Maathuis 1999, p. 182). The present study supports that the corporate brand provides an additional value to customers across countries. However, deciding on one or the other branding strategy is always a strategic decision. From an international point of view, adopting a global marketing strategy is necessary "for firms to achieve global economies of scale, deal with market interdependency, or seek cross-country synergies" (Zou and Cavusgil 2002, : 53). Combining the best of both worlds, i.e., the branded house and the house of brands strategy (Rao, Agarwal, and Dahlhoff

2004, p. 128), a firm aims to establish the corporate brand as an integrating backdrop for all product brands. Thereby, international firms have to contend both with varying economic, competitive and cultural conditions in different countries and with the need to ensure a consistent external portrayal. These factors tend to slip into the background as corporate branding strategies are often developed on the basis of the organizational structures of product brand marketers in the home market, or assigned decentrally to the individual foreign subsidiaries. Results provide insight into the consumer-based sources of corporate and product brand image and help marketers to evaluate a firm's brand architecture. When managing an internationally standardized corporate brand, corporate brand managers should be aware of these facts and monitor if the company's strategy is working. Detailed recommendations for managers are given in the following.

- Corporate communication departments, in general, and corporate brand managers, in particular, spend significant time on defending their **efforts to communicate the corporate brand within the firm**. Although the strategic decision on implementing the corporate brand as an endorser is made by the CEO, opponents within the company, e.g., product brand managers, are often hard to convince that this endorsement adds value to the product brands and is not diluting the individual product brands. Brand managers at the corporate and those at the product level often disagree about the preferred degree of corporate endorsement. The former advocate a clearly visible presence of the corporate brand, while the latter favors a weak or, in extreme cases, no endorsement of the corporate brand. While corporate brand managers argue that a corporate endorsement creates a sense of internal coherence, illustrating the company's strength and unity as well as leveraging standardization potential, product brand managers might have the impression that a corporate endorsement limits their freedom to act, confuses consumers, and jeopardizes former investments in the product brand (van Riel and van Bruggen 2002, p. 244). Both an early internal communication on corporate brand issues and the prominent commitment of the company's senior manage-

ment help to prevent those misunderstandings and to yield a profit in the medium to long term. With this study, I present a transparent, comprehensible evaluation approach, which is applicable across country markets. Results clearly illustrate the positive effect a corporate brand can have on consumers' product response through positively influencing product image. Thus, product brand managers should consider the value corporate endorsement might indeed add to product brands. Product brands can profit from investments already effected regarding the corporate brand, e.g., marketing efforts to communicate that the corporate brand stands for high quality products which are socially and environmentally responsible. Thus, for example, consumers will automatically relate a newly introduced product brands with those positive associations regarding the corporate brand.

- Further, the results illustrate the **necessity of country-specific adaptations of the corporate branding activities**. Regarding the French consumers, I could not state a reciprocal relationship between the surveyed corporate brand and product brands. This could indicate that in the other countries product brands are associated with the corporate brand, whereas in France product image doesn't significantly affect corporate image. This might also be related to the fact that French consumers are less aware which FMCG firm stands behind which product brands. On the other hand, the influence of corporate image on product image indicates that awareness and esteeming of the corporate brand strengthens the corresponding product brand, especially with regards to French consumers. Further, results of the present study suggest, that looking at the direct effects of specific corporate associations would allow corporate brand managers to consider possible particularities when adapting the general corporate branding strategy to specific countries. Agreeing with Biehal and Sheinin (2007, p. 21), for example, it could be argued in the case of Germany and France that social and environmental responsibility might provide an effective "boost" to brands and contribute to their positioning in the consumers' mind.

## 4.2 Limitations and directions for future research

Although this study contributes to the managerial and theoretical knowledge on corporate branding, it is not without limitations. There are many areas in which the present research might be extended. In each chapter, several areas for future research have already been highlighted and are summarized in the following. In the following, I recapitulate **open issues** regarding (1) the enhancement of the data basis, (2) the methodological approach as well as (3) further directions to disentangle the impact of corporate branding.

Clearly, researchers should **enhance the data basis** to further increase the generalizability of the results. Two issues are of particular importance.

- One issue is **sampling design**. Considering the power level for small effects, future studies may replicate the study using country-wide random sampling instead of quota sampling in three metropolitan areas. As Reynolds, Simintiras, and Diamantopoulos (2003, p. 81) point out, the most common criticism concerning the choice of sampling method in international research is the reliance that is placed on nonprobability sampling. However, in comparative international research quota sampling (Sudman and Blair 1999, pp. 269-70) is often used to approximate probability sampling and regarded as an adequate approach. In the case of the sample from Russia and Romania, quota sampling was useful as random sampling or telephone interviews are difficult to run in emerging markets. To enhance representativeness of the data set, I computed sample weights on the latest consensus data of the countries surveyed.
- **Another issue is the number of companies and countries observed**. It would be worthwhile to analyze the implementation of internationally standardized corporate branding in several companies across several countries during a certain time period. Thus it would be possible to contrast successful and less successful implementations and to identify success factors. The present study used data collected only for one corporate brand. Future studies should not only focus on more than one company, but also survey other types of industries and products. In this case, one would also be able to consider contextual factors on a firm or industry level basis. Further, it would be of interest to analyze, for ex-

ample, China as an upcoming Asian market. However, from a methodological point of view a large number of countries increases the complexity to ensure the comparability of data, e.g., different response styles might lead to nonequivalence (van Herk, Poortinga, and Verhallen 2004; 2005).

The **methodological approach can be enhanced** by conducting further longitudinal or experimental analyses as well as by applying multilevel techniques. Further, elaborating on non-recursive structural equation modeling is necessary. Lastly, modeling group-level contextual factors becomes more and more important.

- Further **longitudinal and experimental analyses** could fill an important gap in the understanding of the observed relationships justifying the causal interpretation and clarify the directions of the relationships between specific corporate associations, corporate image, product loyalty, and other additional variables. Time may be included as a nested level in individual customers, as companies often lack knowledge on how brands change over time and whether these changes are the same for different consumer segments (Keller and Lehmann 2006). Applying latent growth curve modeling could capitalize on the richness of multiwave data allowing for more effective testing of systematic inter-individual differences in change (e.g., Steenkamp and Baumgartner 2000; Byrne and Crombie 2003). In addition, the possibility to include latent constructs that are indicated by a set of manifest measured variables offers the advantage of creating a theoretically error-free construct for latent growth curve modeling rather than using error-laden variables or their composites. Analyzing more time periods would also allow further analysis, e.g., autoregressive latent trajectory analysis (Bollen and Curran 2004).
- Secondly, the knowledge on **non-recursive structural equation models** must be advanced (Wong and Law 1999; Hayduk 2009; Rozeboom 2009). Topics such as the number of cycles of feedback loops and validity of parameter estimates needs to be further researched. In particular, it would be worthwhile to address the choice of instrumental variables within the context of non-recursive structural equation models.
- Furthermore, it would be valuable to **consider multiple levels of analysis by**



**applying more advanced methodological approaches** (Hitt et al. 2007, pp. 1385-86). The integration of insights from micro- and macro-level information, i.e., consumer-level as well as firm- and country-level data, is required to further advance knowledge on global brands in general and on international corporate brand management in particular. Advancing the methodological approach to analyze contextual factors would offer researchers the opportunity to draw more precise conclusions. In order to take into account context effects on individual behavior, basically three different approaches exist (Hofmann 1997). The first is the usage of aggregated data to explain the context's influence. The second is the usage of individual-level data to explain context influence, and the third is the application of multilevel measurement and analysis procedures. With regards to the latter, statistical methods considering dependency in the dataset, i.e., hierarchically structured data, are gaining popularity in marketing research (Wieseke et al. 2008). Klein, Tosi, and Cannella jr. (1999, p. 243) summarize that taking a multilevel perspective "bridge the micro-macro divide, integrating the micro domain's focus on individuals and groups with the macro domain's focus on organizations, environment, and strategy. The result is a richer portrait." Multilevel structural equation modeling (Muthén 1994) provides a technique to analyze causal relationships when the units of observation form a hierarchy of nested clusters and some variables of interest cannot be measured directly but are measured by a set of items (Rabe-Hesketh, Skrondal, and Pickles 2004, p. 168).

Modeling contextual factors using multilevel approaches would not only be worthwhile from a methodological, but also from a content-related perspective. In the following, I address first corresponding possibilities to extend the present work. However, several **further directions to disentangle the impact of corporate branding** can also be assessed. Thereby, the following issues on integrating actual figures, considering other forms of mixed branding, exploring the relevance of other stakeholder, influencing brand associations and taking into account habitual buying behavior should be additionally considered in future research.

- **Modeling group-level contextual factors** by applying e.g., multilevel structural equation modeling would help to disentangle more precisely the explanatory

power of the hypothesized cause-effect-relationships. In cross-national research multilevel techniques could be used to link individual characteristics to aspects of the national context (Cheung and Au 2005). However, a sufficient number of countries or regions surveyed are a necessary condition (Meuleman and Billiet 2009). The impact of external factors, e.g., the number of competitors, of the cultural context or the overall economic development, as well as the impact of internal factors, e.g., year of market entry or corporate communications budget in relation to revenues in a particular country, could be analyzed thoroughly. Besides the country-specific context other hierarchy levels could also be considered. For example, it might also be worth to look at brand-level factors, e.g., brands' history, their market share or marketing budget in relation to revenues. Roth (1992, p. 26) highlights three contextual factors influencing brand image performance, these are the level of economic development, the degree of cultural context and extent of competition within a product category. The present study considered all of those country market characteristics. Nevertheless data availability limited the analysis to a highly aggregated level. Multi-country studies analyzing the impact of those contextual factors on the brand-level would provide a valuable extent of research on international branding.

- I only use consumer mind-set measures (Ailawadi, Lehmann, and Neslin 2003, pp. 2-3) within the empirical study. However, recent studies illustrate their predictive value, for example, Mizik and Jacobson (2008) illustrate the relationship of consumers' brand associations for firms' performance. Nevertheless, **integrating actual figures** such as product brands' advertising expenditures or consumers' purchase behavior during a defined time period would be a valuable extension of the proposed model. Brand-related figures might be integrated as moderating variables, whereas consumer-specific purchase figures could also complete the proposed model as additional outcome variable. Including consumers' actual buying behavior would also provide a more precise picture of corporate branding's effectiveness.
- The presence and the brand awareness of the corporate brand in a specific country market are also restrictive. As it is preferable to enlarge the number of stimuli, companies implementing **other forms of mixed branding** in an interna-

tional context, e.g., dual branding (Laforet and Saunders 2005, p. 319) could be analyzed and opposed to corresponding analyses of the endorsement strategy, e.g. by considering the moderating influence of corporate brand dominance (Berens, van Riel, and van Bruggen 2005). Agreeing with Berens, van Riel and van Bruggen (2005) it would be a valuable contribution to current research on international brand management to analyze the moderating influence of corporate brand dominance on the direct and indirect effects of corporate associations on consumers' product response across firms and countries.

- Additional research should also explore the **relevance of other stakeholders**, e.g., employees, investors or journalists, in order to identify whether the model implied holds true for further stakeholder groups. Research on corporate branding across stakeholder groups is needed to create a profound knowledge on varying perception and relevance of corporate brands. Analyzing the corporate branding in the retail sector, Chun and Davies (2006, p. 144) state that there is a core in any successful corporate image that will appeal positively to more than one stakeholder group but that other dimensions will be more or less salient for individual stakeholder groups and more or less salient for different outcomes. However, quantitative research on this issue is far and few between.
- On a managerial level, it becomes interesting, **how specific corporate associations can be influenced across countries** and in addition how this affects consumers' corporate image and product response (Brown and Dacin 1997, p. 81). Additional research is also needed to investigate how specific corporate associations interact with each other and how such interactions affect both corporate image and consumers' product response cross-nationally. Moreover, it must be determined, to what extent personal values affect consumers' evaluation of the external portrayal of the company, i.e., if consumers' product response depends on the overlap of company's values communicated through the corporate brand with consumers' personal values.
- Additional research should also investigate the **importance of corporate brands in the context of habitual buying behavior** in detail, i.e., that consumers tend to buy the same brands and products across different shopping episodes. This is of particular relevance in the FMCG sector, e.g., when buying de-

tergents. Understanding if corporate branding may drive consumer habits becomes relevant as “habits are quick to activate and are further augmented by the reduced activation of alternative responses (Wood and Neal 2009, p. 589).” If consumers tend to buy products habitually, it is to be determined, whether or not specific corporate associations are important for consumers’ decision at all.

Concluding, the field of corporate branding offers various opportunities for substantial contributions relevant to both research and practice. In particular, interrelations of corporate and product branding as well as the influence of contextual factors on corporate brands’ impact on consumers’ product response (cf., Fischer, Völckner, and Sattler 2010) should receive special attention in future studies.

## References

- Aaker, David A. (2004), "Leveraging the Corporate Brand," *California Management Review*, 46 (3), 6-18.
- Aaker, David A. and Erich A. Joachimsthaler (2000), "The Brand Relationship Spectrum: The Key to the Brand Architecture Challenge," *California Management Review*, 42 (4), 8-23.
- Ailawadi, Kusum L. (2001), "The Retail Power-Performance Conundrum: What Have We Learned?," *Journal of Retailing*, 77 (3), 299-318.
- Ailawadi, Kusum L., Donald R. Lehmann, and Scott A. Neslin (2003), "Revenue Premium as an Outcome Measure of Brand Equity," *Journal of Marketing*, 67 (4), 1-17.
- Alashban, Aref A., Linda A. Hayes, George M. Zinkhan, and Anne L. Balazs (2002), "International Brand-Name Standardization/Adaptation: Antecedents and Consequences," *Journal of International Marketing*, 10 (3), 22-48.
- Alden, Dana L., Jan-Benedict E.M. Steenkamp, and Rajeev Batra (1999), "Brand Positioning through Advertising in Asia, North America, and Europe: The Role of Global Consumer Culture," *Journal of Marketing*, 63 (1), 75-87.
- Ambler, Tim and Chris Styles (1996), "Brand Development Versus New Product Development: Towards a Process Model of Extension Decisions," *Marketing Intelligence & Planning*, 14, 10-19.
- Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (3), 411-23.
- Asparouhov, Tihomir (2005), "Sampling Weights in Latent Variable Modeling," *Structural Equation Modeling*, 12 (3), 411-34.
- Axelrod, Robert (1973), "Schema Theory: An Information Processing Model of Perception and Cognition," *The American Political Science Review*, 67 (4), 1248-66.
- Bagozzi, Richard P. and Youjae Yi (1988), "On the Evaluation of Structural Equation Models," *Journal of the Academy of Marketing Science*, 16 (1), 74-94.
- Balachander, Subramanian and Sanjoy Ghose (2003), "Reciprocal Spillover Effects: A Strategic Benefit of Brand Extensions," *Journal of Marketing*, 67 (1), 4-13.
- Balmer, John M.T. (1995), "Corporate Branding and Connoisseurship," *Journal of General Management*, 21 (1), 1-24.

- (1998), "Corporate Identity and the Advent of Corporate Marketing," *Journal of Marketing Management*, 14, 963-96.
- (2001), "Corporate Identity, Corporate Branding and Corporate Marketing," *European Journal of Marketing*, 35 (3/4), 248-91.
- Balmer, John M.T. and Edmund R. Gray (2003), "Corporate Brands: What Are They? What of Them?," *European Journal of Marketing*, 37 (7), 972-97.
- Bandalos, Deborah L. (2008), "Is Parceling Really Necessary? A Comparison of Results from Item Parceling and Categorical Variable Methodology," *Structural Equation Modeling*, 15 (2), 211-40.
- Barnett, Michael L., John M. Jermier, and Barbara A. Lafferty (2006), "Corporate Reputation: The Definitional Landscape," *Corporate Reputation Review*, 9 (1), 26-38.
- Bartlett, Frederic C. (1932), *Remembering: A Study in Experimental and Social Psychology*. Cambridge: Cambridge University Press.
- Barwise, Patrick (1995), "Good Empirical Generalizations," *Marketing Science*, 14 (3), G29-G35.
- Baumgartner, Hans and Jan-Benedict E.M. Steenkamp (1998), "Multi-Group Latent Variable Models for Varying Numbers of Items and Factors with Cross-National and Longitudinal Applications," *Marketing Letters*, 9 (1), 21-35.
- Bearden, William O., Richard G. Netemeyer, and Jesse E. Teel (1989), "Measurement of Consumer Susceptibility to Interpersonal Influence," *Journal of Consumer Research*, 15 (4), 473-81.
- Bearden, William O., Subhash Sharma, and Jesse E. Teel (1982), "Sample Size Effects on Chi Square and Other Statistics Used in Evaluating Causal Models " *Journal of Marketing Research*, 19 (4), 425-30.
- Beauducel, Andre and Philipp Y. Herzberg (2006), "On the Performance of Maximum Likelihood Versus Means and Variance Adjusted Weighted Least Squares Estimation in Cfa," *Structural Equation Modeling*, 13 (2), 186-203.
- Belch, George E. and Michael E. Belch (1987), "The Application of an Expectancy Value Operationalization of Function Theory to Examine Attitudes of Boycotters and Nonboycotters of a Consumer Product," *Advances in Consumer Research*, 14 (1), 232-36.
- Belk, Russel W. and Richard W. Pollay (1985), "Images of Ourselves: The Good Life in Twentieth Century Advertising," *Journal of Consumer Research*, 887-97.
- Bello, Daniel C. (2004), "From the Editor in Chief," *Journal of International Marketing*, 12 (1), 1-3.
- Berens, Guido and Cees B.M. van Riel (2004), "Corporate Associations in the Academic Literature: Three Main Streams of Thought in the Reputation

- Measurement Literature," *Corporate Reputation Review*, 7 (2), 161-80.
- Berens, Guido A. J. M. (2004), *Corporate Branding - the Development of Corporate Associations and Their Influence on Stakeholder Reactions*. Rotterdam: Erasmus University Rotterdam.
- Berens, Guido, Cees B.M. van Riel, and Gerrit H. van Bruggen (2005), "Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate Brand Dominance," *Journal of Marketing*, 69 (3), 35-48.
- Bergkvist, Lars and John R. Rossiter (2007), "The Predictive Validity of Multiple-Item Versus Single-Item Measures of the Same Constructs," *Journal of Marketing Research*, 44 (2), 175-84.
- Bhattacharya, C. B. and Sankar Sen (2003), "Consumer-Company Identification: A Framework for Understanding Consumers' Relationships with Companies," *Journal of Marketing*, 67 (2), 76-88.
- (2004), "Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives," *California Management Review*, 47 (1), 9-24.
- Bick, Geoff, Marciene C. Jacobson, and Russell Abratt (2003), "The Corporate Identity Management Process Revisited," *Journal of Marketing Management*, 19 (7/8), 835-55.
- Bickart, Barbara A. (1993), "Carryover and Backfire Effects in Marketing Research," *Journal of Marketing Research*, 30 (1), 52-52.
- Biehal, Gabriel J. and Daniel A. Sheinin (2007), "The Influence of Corporate Messages on the Product Portfolio," *Journal of Marketing*, 71 (2), 12-25.
- (1998), "Managing the Brand in a Corporate Advertising Environment: A Decision-Making Framework for Brand Managers," *Journal of Advertising*, 27 (2), 99-110.
- Bolger, John F., Jr. (1959), "How to Evaluate Your Company Image," *Journal of Marketing*, 24 (2), 7-10.
- Bollen, Kenneth A. (1989), *Structural Equations with Latent Variables*. New York: John Wiley & Sons.
- Bollen, Kenneth A. and Patrick J. Curran (2004), "Autoregressive Latent Trajectory (Alt) Models a Synthesis of Two Traditions," *Sociological Methods & Research*, 32 (3), 336-83.
- Brady, Michael K. and J. Joseph Cronin, Jr. (2001), "Customer Orientation: Effects on Customer Service Perceptions and Outcome Behaviors," *Journal of Service Research*, 3 (3), 241-51.
- Brown, Tom J. and Peter A. Dacin (1997), "The Company and the Product: Corporate Associations and Consumer Product Responses," *Journal of Marketing*, 61 (1), 68-84.

- Brown, Tom J., Peter A. Dacin, Michael G. Pratt, and David A. Whetten (2006), "Identity, Intended Image, Construed Image, and Reputation: An Interdisciplinary Framework and Suggested Terminology," *Journal of the Academy of Marketing Science*, 34 (2), 99-106.
- Burkholder, Gary J. and Lisa L. Harlow (2003), "An Illustration of a Longitudinal Cross-Lagged Design for Larger Structural Equation Models," *Structural Equation Modeling*, 10 (3), 465-86.
- Byrne, Barbara M. and Gail Crombie (2003), "Modeling and Testing Change: An Introduction to the Latent Growth Curve Model," *Understanding Statistics*, 2 (3), 177-203.
- Byrne, Barbara M., Richard J. Shavelson, and Bengt O. Muthén (1989), "Testing for the Equivalence of Factor Covariance and Mean Structures: The Issue of Partial Measurement Invariance," *Psychological Bulletin*, 105 (3), 456-66.
- Campbell, Donald T. and Donald W. Fiske (1959), "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix," *Psychological Bulletin*, 56 (2), 81-105.
- Campbell, John L. (2007), "Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility," *Academy of Management Review*, 32 (3), 946-67.
- Cavusgil, S. Tamer and Shaoming Zou (1994), "Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures," *Journal of Marketing*, 58 (1), 1-21.
- Chaudhuri, Arjun and Morris B. Holbrook (2001), "The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty," *Journal of Marketing*, 65 (2), 81-93.
- Chen, Fang F. (2007), "Sensitivity of Goodness of Fit Indexes to Lack of Measurement Invariance," *Structural Equation Modeling*, 14 (3), 464-504.
- Chen, Feinian, Patrick J. Curran, Kenneth A. Bollen, James Kirby, and Pamela Paxton (2008), "An Empirical Evaluation of the Use of Fixed Cutoff Points in Rmsea Test Statistic in Structural Equation Models," *Sociological Methods and Research*, 36 (4), 462-94.
- Cheung, Gordon W. and Roger B. Rensvold (2002), "Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance," *Structural Equation Modeling*, 9 (2), 233-55.
- Cheung, Mike W.L. and Kevin Au (2005), "Applications of Multilevel Structural Equation Modeling to Cross-Cultural Research," *Structural Equation Modeling*, 12 (4), 598-619.
- Christian, Richard C. (1959), "How Important Is the Corporate Image?," *Journal of Marketing*, 24 (2), 79-80.



- Chun, Rosa and Gary Davies (2006), "The Influence of Corporate Character on Customers and Employees: Exploring Similarities and Differences," *Journal of the Academy of Marketing Science*, 34 (2), 138-46.
- Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (1), 64-73.
- Cohen, Jacob (1994), "The Earth Is Round ( $P < .05$ )," *American Psychologist*, 49 (12), 997-1003.
- (1969), *Statistical Power Analysis for the Behavioral Sciences*. New York: Academic Press.
- (1962), "The Statistical Power of Abnormal-Social Psychological Research: A Review," *Journal of Abnormal and Social Psychology*, 65 (3), 145-53.
- Cohen, Joel B. (1982), "The Role of Affect in Categorization: Toward a Reconsideration of the Concept of Attitude," *Advances in Consumer Research*, 9 (1), 94-100.
- Coulter, Robin A., Linda L. Price, and Lawrence Feick (2003), "Rethinking the Origins of Involvement and Brand Commitment: Insights from Postsocialist Central Europe," *Journal of Consumer Research*, 30 (2), 151-69.
- Cox, Eli P. (1980), "The Optimal Number of Response Alternatives for a Scale: A Review," *Journal of Marketing Research*, 17 (4), 407-22.
- Crocker, Jennifer (1984), "A Schematic Approach to Changing Consumers' Beliefs," in *Advances in Consumer Research*, Thomas C. Kinnear, ed. Vol. 11.
- Cronbach, Lee J. and Paul E. Meehl (1955), "Construct Validity in Psychological Tests," *Psychological Bulletin*, 52 (4), 281-302.
- Davis, Harry L., Susan P. Douglas, and Alvin J. Silk (1981), "Measure Unreliability: A Hidden Threat to Cross-National Marketing Research?," *Journal of Marketing*, 45 (2), 98-109.
- Dawar, Niraj and Philip Parker (1994), "Marketing Universals: Consumers' Use of Brand Name, Price, Physical Appearance, and Retailer Reputation as Signals of Product Quality," *Journal of Marketing*, 58 (2), 81-95.
- de Mooij, Marieke (2009), *Global Marketing and Advertising: Understanding Cultural Paradoxes*. Thousand Oaks: Sage.
- Deshpande, Rohit, John U. Farley, and Frederick E. Webster, Jr. (1993), "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrant Analysis," *The Journal of Marketing*, 57 (1), 23-37.
- Deshpandé, Rohit, John U. Farley, and Frederick E. Webster, Jr. (1993), "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrant Analysis," *Journal of Marketing*, 57 (1), 23-37.
- Deshpandé, Rohit and Frederick E. Webster, Jr. (1989), "Organizational Culture and

- Marketing: Defining the Research Agenda," *Journal of Marketing*, 53 (1), 3-15.
- Dillon, William R., Thomas J. Madden, Amna Kirmani, and Soumen Mukherjee (2001), "Understanding What's in a Brand Rating: A Model for Assessing Brand and Attribute Effects and Their Relationship to Brand Equity," *Journal of Marketing Research*, 38 (4), 415-29.
- Dobni, Dawn and George M. Zinkhan (1990), "In Search of Brand Image: A Foundation Analysis," *Advances in Consumer Research*, 17 (1), 110-19.
- Donaldson, Thomas and Lee E. Preston (1995), "The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications," *The Academy of Management Review*, 20 (1), 65-91.
- Douglas, Susan P. and C. Samuel Craig (1997), "The Changing Dynamic of Consumer Behavior: Implications for Cross-Cultural Research," *International Journal of Research in Marketing*, 14 (4), 379-95.
- (1996), "Executive Insights: Global Portfolio Planning and Market Interconnectedness," *Journal of International Marketing*, 4 (1), 93-110.
- Douglas, Susan P. and Samuel C. Craig (2003), "Dynamics of International Brand Architecture: Overview and Directions for Future Research," in *Handbook of Research in International Marketing*, Subhash C. Jain, ed. Cheltenham Glos: Edward Elgar Publishing.
- Douglas, Susan P., Samuel C. Craig, and Edwin J. Nijssen (2001), "Integrating Branding Strategy across Markets: Building International Brand Architecture," *Journal of International Marketing*, 9 (2), 97-114.
- Easton, Allan (1966), "Corporate Style Versus Corporate Image," *Journal of Marketing Research*, 3 (2), 168-74.
- Eden, Lorraine (2008), "Letter from the Editor-in-Chief," *Journal of International Business Studies*, 39 (1), 1-7.
- Einwiller, Sabine and Markus Will (2002), "Towards an Integrated Approach to Corporate Branding-an Empirical Study," *Corporate Communications: An International Journal*, 7 (2), 100-09.
- Erdem, Tülin, Joffre Swait, and Ana Valenzuela (2006), "Brands as Signals: A Cross-Country Validation Study," *Journal of Marketing*, 70 (1), 34-49.
- Eurostat (2009), "European 2001 Census Round " (accessed October, 2009), [available at <http://epp.eurostat.ec.europa.eu>].
- Farquhar, Peter H. (1989), "Managing Brand Equity," *Marketing Research*, 1 (3), 24-33.
- Farquhar, Peter H. and Paul M. Herr (1993), "The Dual Structure of Brand Associations," in *Brand Equity & Advertising: Advertising's Role in Building Strong Brands*, David A. Aaker and Alexander L. Biel, eds. Hillsdale:

- Lawrence Erlbaum Associates.
- Finkel, Steven E. (1995), *Causal Analysis with Panel Data*: Sage.
- Finn, Adam and Ujwal Kayande (2004), "Scale Modification: Alternative Approaches and Their Consequences," *Journal of Retailing*, 80 (1), 37-52.
- Fischer, Marc, Franziska Völkner, and Henrik Sattler (2010), "How Important Are Brands? A Cross-Category, Cross-Country Study," *Journal of Marketing Research*, 47, forthcoming.
- Fiske, Susan T. and Patricia W. Linville (1980), "What Does the Schema Concept Buy Us?," *Personality and Social Psychology Bulletin*, 6 (4), 543-57.
- Flora, David B. and Patrick J. Curran (2004), "An Empirical Evaluation of Alternative Methods of Estimation for Confirmatory Factor Analysis with Ordinal Data," *Psychological Methods*, 9 (4), 466-91.
- Flynn, Leisa Reinecke and Dawn Pearcy (2001), "Four Subtle Sins in Scale Development: Some Suggestions for Strengthening the Current Paradigm," *International Journal of Market Research*, 43 (4), 409-23.
- Fombrun, Charles J., Naomi A. Gardberg, and Joy M. Sever (2000), "The Reputation Quotient: A Multi-Stakeholder Measure of Corporate Reputation," *Journal of Brand Management*, 7 (4), 241-56.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Franke, George R. and Jeong-Eun Park (2006), "Salesperson Adaptive Selling Behavior and Customer Orientation: A Meta-Analysis," *Journal of Marketing Research (JMR)*, 43 (4), 693-702.
- Freeman, R. Edward (1984), *Strategic Management: A Stakeholder Perspective*. Boston: Pitman.
- French, Brian F. and Holmes W. Finch (2006), "Confirmatory Factor Analytic Procedures for the Determination of Measurement Invariance," *Structural Equation Modeling*, 13 (3), 378-402.
- Gatewood, Robert D., Mary A. Gowan, and Gary J. Lautenschlager (1993), "Corporate Image, Recruitment Image, and Initial Job Choice Decisions," *The Academy of Management Journal*, 36 (2), 414-27.
- Ger, Guliz and Russell W. Belk (1993), "The Development of Consumer Desire in Marketizing and Developing Economies: The Cases of Romania and Turkey," *Advances in Consumer Research*, 20 (1), 102-07.
- Gilly, Mary C. and Mary Wolfinger (1998), "Advertising's Internal Audience," *Journal of Marketing*, 62 (1), 69-88.
- Gioia, Dennis A., Majken Schultz, and Kevin G. Corley (2000), "Organizational

- Identity, Image, and Adaptive Instability," *Academy of Management Review*, 25 (1), 63-81.
- Glöckner-Rist, Angelika and Herbert Hoijtink (2003), "The Best of Both Worlds: Factor Analysis of Dichotomous Data Using Item Response Theory and Structural Equation Modeling," *Structural Equation Modeling*, 10 (4), 544-65.
- Gotsi, Manto and Alan M. Wilson (2001), "Corporate Reputation: Seeking a Definition," *Corporate Communications: An International Journal*, 6 (1), 24-30.
- Gray, Edmund R. and John M.T. Balmer (1998), "Managing Corporate Image and Corporate Reputation," *Long Range Planning*, 31 (5), 695-702.
- Gürhan-Canli, Zexnep and Rajeev Batra (2004), "When Corporate Image Affects Product Evaluations: The Moderating Role of Perceived Risk," *Journal of Marketing Research*, 41 (2), 197-205.
- Han, Jin K. and Bernd H. Schmitt (1997), "Product-Category Dynamics and Corporate Identity in Brand Extensions: A Comparison of Hong Kong and US Consumers," *Journal of International Marketing*, 77-92.
- Hancock, Gregory R., Frank R. Lawrence, and Jonathan Nevitt (2000), "Type I Error and Power of Latent Mean Methods and Manova in Factorially Invariant and Noninvariant Latent Variable Systems," *Structural Equation Modeling*, 7 (4), 534-56.
- Hardesty, David M. and William O. Bearden (2004), "The Use of Expert Judges in Scale Development Implications for Improving Face Validity of Measures of Unobservable Constructs," *Journal of Business Research*, 57 (2), 98-107.
- Harrison, Jeffrey S. and R. Edward Freeman (1999), "Stakeholders, Social Responsibility, and Performance: Empirical Evidence and Theoretical Perspectives," *The Academy of Management Journal*, 42 (5), 479-85.
- Hatch, Mary J. and Majken Schultz (2001), "Are the Strategic Stars Aligned for Your Corporate Brand?," *Harvard business review*, 79 (2), 128-34.
- (2008), *Taking Brand Initiative: How Companies Can Align Strategy, Culture, and Identity through Corporate Branding*. San Francisco: Jossey-Bass.
- Hayduk, Leslie A. (2009), "Finite Feedback Cycling in Structural Equation Models," *Structural Equation Modeling*, 16 (4), 658-75.
- Herbig, Paul and John Milewicz (1995), "The Relationship of Reputation and Credibility to Brand Success," *Journal of Consumer Marketing*, 12 (4), 5.
- Herzog, Walter, Anne Boomsma, and Sven Reinecke (2007), "The Model-Size Effect on Traditional and Modified Tests of Covariance Structures," *Structural Equation Modeling*, 14 (3), 361-90.
- Hill, Edward W. (1962), "Corporate Images Are Not Stereotypes," *Journal of Marketing*, 26 (1), 72-75.

- Hitt, Michael A., Paul W. Beamish, Susan E. Jackson, and John E. Mathieu (2007), "Building Theoretical and Empirical Bridges across Levels: Multilevel Research in Management," *Academy of Management Journal*, 50 (6), 1385-99.
- Hofmann, David A. (1997), "An Overview of the Logic and Rationale of Hierarchical Linear Models," *Journal of Management*, 23 (6), 723-44.
- Hofstede, Geert H. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations* (2 ed.). Beverly Hills: Sage.
- Holt, Douglas B. (2002), "Why Do Brands Cause Trouble? A Dialectical Theory of Consumer Culture and Branding," *Journal of Consumer Research*, 29 (1), 70-90.
- Holt, Douglas B., John A. Quelch, and Earl L. Taylor (2004), "How Global Brands Compete," *Harvard business review*, 82 (9), 68-75.
- Hsieh, Ming-Huei, Shan-Ling Pan, and Rudy Setiono (2004), "Product-, Corporate-, and Country-Image Dimensions and Purchase Behavior: A Multicountry Analysis," *Journal of the Academy of Marketing Science*, 32 (3), 251-70.
- Hsieh, Ming H. (2002), "Identifying Brand Image Dimensionality and Measuring the Degree of Brand Globalization: A Cross-National Study," *Journal of International Marketing*, 10 (2), 46-67.
- Hu, Li-tze and Peter M. Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," *Structural Equation Modeling*, 6 (1), 1-55.
- Hulberg, Jon (2006), "Integrating Corporate Branding and Sociological Paradigms: A Literature Study," *Journal of Brand Management*, 14 (1), 60-73.
- Hult, G. Tomas M., David J. Ketchen, Jr., David A. Griffith, Carol A. Finnegan, Tracy Gonzalez-Padron, Nukhet Harmancioglu, Ying Huang, M. Berk Talay, and S. Tamer Cavusgil (2008), "Data Equivalence in Cross-Cultural International Business Research: Assessment and Guidelines," *Journal of International Business Studies*, 39 (3), 1027-44.
- Hunter, John E. (2001), "The Desperate Need for Replications," *Journal of Consumer Research*, 28 (1), 149-58.
- Hyman, Michael R. (2004), "Revising the Structural Framework for Marketing Management," *Journal of Business Research*, 57 (9), 923-32.
- Ind, Nicholas (1997), *The Corporate Brand*. Oxford: Macmillan.
- Information and Publishing Center «Statistics of Russia» (2009), "2002 All-Russia Population Census," (accessed October, 2009), [available at <http://www.perepis2002.ru/index.html?id=87>].
- Jackson, Dennis L. (2003), "Revisiting Sample Size and Number of Parameter Estimates: Some Support for the N:Q Hypothesis," *Structural Equation*

- Modeling, 10 (1), 128-41.
- (2001), "Sample Size and Number of Parameter Estimates in Maximum Likelihood Confirmatory Factor Analysis: A Monte Carlo Investigation," *Structural Equation Modeling*, 8 (2), 205-23.
- John Roedder, Deborah, Barbara Loken, Kyeongheui Kim, and Alokparna Basu Monga (2006), "Brand Concept Maps: A Methodology for Identifying Brand Association Networks," *Journal of Marketing Research*, 43 (4), 549-63.
- Johnson, Emily C., Adam W. Meade, and Amy M. DuVernet (2009), "The Role of Referent Indicators in Tests of Measurement Invariance," *Structural Equation Modeling*, 16 (4), 642-57.
- Kapferer, Jean-Noel (2008), *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term*. London: Kogan Page.
- Keller, Kevin L. (2003), "Brand Synthesis: The Multidimensionality of Brand Knowledge," *Journal of Consumer Research*, 29 (4), 595-600.
- (2000), "Building and Managing Corporate Brand Equity," in *The Expressive Organization: Linking Identity, Reputation, and the Corporate Brand*, Majken Schultz and Mary J. Hatch and Mogens H. Larsen, eds. Oxford: Oxford University Press.
- (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (1), 1-22.
- Keller, Kevin L. and David A. Aaker (1992), "The Effects of Sequential Introduction of Brand Extensions," *Journal of Marketing Research*, 29 (1), 35-50.
- (1998), "The Impact of Corporate Marketing on a Company's Brand Extensions," *Corporate Reputation Review*, 1, 356-78.
- Keller, Kevin L. and Donald R. Lehmann (2006), "Brands and Branding: Research Findings and Future Priorities," *Marketing Science*, 25 (6), 740-59.
- Kerin, Roger and Raj Sethuraman (1998), "Exploring the Brand Value-Shareholder Value Nexus for Consumer Goods Companies," *Journal of the Academy of Marketing Science*, 26 (4), 260-73.
- King, Stephen (1991), "Brand Building in the 1990s," *Journal of Marketing Management*, 7, 3-13.
- Kirca, Ahmet H., Satish Jayachandran, and William O. Bearden (2005), "Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance," *Journal of Marketing*, 69 (2), 24-41.
- Kirman, Amna and Valarie A. Zeithaml (1993), "Advertising, Perceived Quality, and Brand Image," in *Brand Equity and Advertising: Advertising's Role in Building Strong Brands*, David A. Aaker and Alexander L. Biel, eds. London: Routledge.

- Klein, Katherine J., Henry Tosi, and Albert A. Cannella, Jr. (1999), "Multilevel Theory Building: Benefits, Barriers, and New Developments," *Academy of Management Review*, 24 (2), 243-48.
- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (2), 1-18.
- Laforet, Sylvie and John Saunders (2005), "Managing Brand Portfolios: How Strategies Have Changed," *Journal of Advertising Research*, 45 (03), 314-27.
- (1994), "Managing Brand Portfolios: How the Leaders Do It," *Journal of Advertising Research*, 34 (5), 64-76.
- Langlois, Catherine C. and Bodo B. Schlegelmilch (1990), "Do Corporate Codes of Ethics Reflect National Character? Evidence from Europe and the United States," *Journal of International Business Studies*, 21 (4), 519-39.
- Lebar, Ed, Phil Buehler, Kevin L. Keller, Monika Sawicka, Zeynep Aksehirli, and Keith Richey (2005), "Brand Equity Implications of Joint Branding Programs," *Journal of Advertising Research*, 45 (04), 413-25.
- Lee, Betty Kaman (2004), "Corporate Image Examined in a Chinese-Based Context: A Study of a Young Educated Public in Hong Kong," *Journal of Public Relations Research*, 16 (1), 1-33.
- Lehmann, Donald R., Kevin L. Keller, and John U. Farley (2008), "The Structure of Survey-Based Brand Metrics," *Journal of International Marketing*, 16 (4), 29-56.
- Lei, Jing, Niraj Dawar, and Jos Lemmink (2008), "Negative Spillover in Brand Portfolios: Exploring the Antecedents of Asymmetric Effects," *Journal of Marketing*, 72 (3), 111-23.
- Lei, Pui-Wa (2009), "Evaluating Estimation Methods for Ordinal Data in Structural Equation Modeling," *Quality and Quantity*, 43 (3), 495-507.
- Levitt, Theodore (1983), "The Globalization of Markets," *Harvard business review*, 61 (3), 92.
- Lichtenstein, Donald R., Minette E. Drumwright, and Bridgette M. Braig (2004), "The Effect of Corporate Social Responsibility on Customer Donations to Corporate-Supported Nonprofits," *Journal of Marketing*, 68 (4), 16-32.
- Lubke, Gitta H. and Bengt O. Muthén (2004), "Applying Multigroup Confirmatory Factor Models for Continuous Outcomes to Likert Scale Data Complicates Meaningful Group Comparisons," *Structural Equation Modeling*, 11 (4), 514-34.
- Luo, Xueming and C. B. Bhattacharya (2006), "Corporate Social Responsibility, Customer Satisfaction, and Market Value," *Journal of Marketing*, 70 (4), 1-18.

- Maathuis, Onno J.M. (1999), *Corporate Branding: The Value of the Corporate Brand to Customers and Managers: Selbstverl.*
- Madden, Thomas, Frank Fehle, and Susan Fournier (2006), "Brands Matter: An Empirical Demonstration of the Creation of Shareholder Value through Branding," *Journal of the Academy of Marketing Science*, 34 (2), 224-35.
- Maddox, R. Neil (1982), "The Structure of Consumers' Satisfaction: Cross-Product Comparisons," *Journal of the Academy of Marketing Science*, 10 (1), 37.
- Maignan, Isabelle (2001), "Consumers' Perceptions of Corporate Social Responsibilities: A Cross-Cultural Comparison," *Journal of Business Ethics*, 30 (1), 57-72.
- Maignan, Isabelle and David A. Ralston (2002), "Corporate Social Responsibility in Europe and the U.S.: Insights from Businesses' Self-Presentations," *Journal of International Business Studies*, 33 (3), 497-514.
- Mandler, Jean M. (1979), "Categorical and Schematic Organization in Memory," in *Memory Organization and Structure*, C. Richard Puff, ed. New York: Academic Press.
- Margolis, Joshua D. and James P. Walsh (2003), "Misery Loves Companies: Rethinking Social Initiatives by Business," *Administrative Science Quarterly*, 38 (3), 268-305.
- Matsuno, Ken and John T. Mentzer (2000), "The Effects of Strategy Type on the Market Orientation-Performance Relationship," *Journal of Marketing*, 64 (4), 1-16.
- Matten, Dirk and Jeremy Moon (2008), ""Implicit" And "Explicit" Csr: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility," *Academy of Management Review*, 33 (2), 404-24.
- McGuire, Jean B., Thomas Schneeweis, and Ben Branch (1990), "Perceptions of Firm Quality: A Cause or Result of Firm Performance," *Journal of Management*, 16 (1), 167-80.
- McVee, Mary B., Kailonnie Dunsmore, and James R. Gavelek (2005), "Schema Theory Revisited," *Review of Educational Research*, 75 (4), 531-66.
- Meade, Adam W. and Daniel J. Bauer (2007), "Power and Precision in Confirmatory Factor Analytic Tests of Measurement Invariance," *Structural Equation Modeling*, 14 (4), 611-35.
- Melewar, T. C. (2003), "Determinants of the Corporate Identity Construct: A Review of the Literature," *Journal of Marketing Communications*, 9 (4), 195-220.
- Melewar, T. C. and Christopher Walker (2003), "Global Corporate Brand Building: Guidelines and Case Studies," *The Journal of Brand Management*, 11, 157-70.
- Menard, Scott (2002), *Longitudinal Research*: Sage.



- Meredith, William (1993), "Measurement Invariance, Factor Analysis and Factorial Invariance," *Psychometrika*, 58 (4), 525-43.
- Meuleman, Bart and Jaak Billiet (2009), "A Monte Carlo Sample Size Study: How Many Countries Are Needed for Accurate Multilevel Sem?," *Survey Research Methods*, 3 (1), 45-58.
- Millsap, Roger E. and Jenn Yun-Tein (2004), "Assessing Factorial Invariance in Ordered-Categorical Measures," *Multivariate Behavioral Research*, 39 (3), 479-515.
- Minsky, Marwin (1975), "A Framework for Representing Knowledge," in *The Psychology of Computer Vision* Patrick Winston, ed. New York: McGraw-Hill.
- Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood (1997), "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts," *The Academy of Management Review*, 22 (4), 853-86.
- Mitchell, Vincent-Wayne, Gianfranco Walsh, and Mo Yamin (2005), "Towards a Conceptual Model of Consumer Confusion," *Advances in Consumer Research*, 32, 143-50.
- Mizik, Natalie and Robert Jacobson (2008), "The Financial Value Impact of Perceptual Brand Attributes," *Journal of Marketing Research*, 45, 15-32.
- (2009), "Valuing Branded Businesses," *Journal of Marketing*, 73 (6), 137-53.
- Monroe, Kent B. (1993), "Editorial," *Journal of Consumer Research*, 19 (4), v.
- Morgan, Neil A. and Lopo L. Rego (2009), "Brand Portfolio Strategy and Firm Performance," *Journal of Marketing*, 73 (1), 59-74.
- Muthén, Bengt O. (1994), "Multilevel Covariance Structure Analysis," *Sociological Methods & Research*, 22 (3), 376-98.
- Muthén, Linda K. and Bengt O. Muthén (2002), "How to Use a Monte Carlo Study to Decide on Sample Size and Determine Power," *Structural Equation Modeling*, 9 (4), 599-620.
- (2007), *Mplus User's Guide* (5 ed.). Los Angeles: Muthén & Muthén.
- Muzellec, Laurent and Mary C. Lambkin (2009), "Corporate Branding and Brand Architecture: A Conceptual Framework," *Marketing Theory*, 9 (1), 39-54.
- (2008), "Corporate Rebranding and the Implications for Brand Architecture Management: The Case of Guinness (Diageo) Ireland," *Journal of Strategic Marketing*, 16 (4), 283-99.
- Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54 (4), 20-35.
- Newman, Joseph W. (1957), "New Insight, New Progress, for Marketing," *Harvard business review*, 35 (6), 95-102.

- Nunnally, Jum C. (1978), "Psychometric Theory." 2nd ed. New York: McGraw-Hill.
- Oliver, Richard L. (1999), "Whence Consumer Loyalty?," *Journal of Marketing*, 63 (4), 33-44.
- Orlitzky, Marc, Frank Schmidt, and Sara L. Rynes (2003), "Corporate Social and Financial Performance: A Meta-Analysis," *Organization Studies*, 24 (3), 403-41.
- Osterhus, Thomas L. (1997), "Pro-Social Consumer Influence Strategies: When and How Do They Work?," *Journal of Marketing*, 61 (4), 16-29.
- Park, C. Whan, Bernard J. Jaworski, and Deborah J. MacInnis (1986), "Strategic Brand Concept-Image Management," *Journal of Marketing*, 135-45.
- Park, Chan S. and V. Srinivasan (1994), "A Survey-Based Method for Measuring and Understanding Brand Equity and Its Extendibility," *Journal of Marketing Research*, 31 (2), 271-88.
- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (5), 879-903.
- Podsakoff, Philip M., Scott B. MacKenzie, Julie Beth Paine, and Daniel G. Bachrach (2000), "Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research," *Journal of Management*, 26 (3), 513-63.
- Rabe-Hesketh, Sophia, Anders Skrondal, and Andrew Pickles (2004), "Generalized Multilevel Structural Equation Modeling," *Psychometrika*, 69 (2), 167-90.
- Rabinowitz, Mitchell and Jean M. Mandler (1983), "Organization and Information Retrieval," *Journal of Experimental Psychology*, 9 (3), 430-39.
- Raggio, Randle D. and Robert P. Leone (2007), "The Theoretical Separation of Brand Equity and Brand Value: Managerial Implications for Strategic Planning," *Journal of Brand Management*, 14 (5), 380-95.
- Rao, Vithala R., Manoj K. Agarwal, and Denise Dahlhoff (2004), "How Is Manifest Branding Strategy Related to the Intangible Value of a Corporation?," *Journal of Marketing*, 68 (4), 126-41.
- Rego, Lopo L., Matthew T. Billett, and Neil A. Morgan (2009), "Consumer-Based Brand Equity and Firm Risk," *Journal of Marketing*, 73 (6), 47-60.
- Reynolds, N. L., A. C. Simintiras, and A. Diamantopoulos (2003), "Theoretical Justification of Sampling Choices in International Marketing Research: Key Issues and Guidelines for Researchers," *Journal of International Business Studies*, 34 (1), 80-89.
- Robin, Donald P. and R. Eric Reidenbach (1987), "Social Responsibility, Ethics, and

- Marketing Strategy: Closing the Gap between Concept and Application," *Journal of Marketing*, 51 (1), 44-58.
- Rodriguez Cano, Cynthia, Francois A. Carrillat, and Fernando Jaramillo (2004), "A Meta-Analysis of the Relationship between Market Orientation and Business Performance: Evidence from Five Continents," *International Journal of Research in Marketing*, 21 (2), 179-200.
- Rossiter, John R. (2002), "The C-Oar-Se Procedure for Scale Development in Marketing," *International Journal of Research in Marketing*, 19 (4), 305-35.
- Roth, Martin S. (1992), "Depth Versus Breadth Strategies for Global Brand Image Management," *Journal of Advertising*, 21 (2), 25-36.
- (1995a), "The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies," *Journal of Marketing Research*, 32, 163-75.
- (1995b), "Effects of Global Market Conditions on Brand Image Customization and Brand Performance," *Journal of Advertising*, 24 (4), 55-75.
- (1994), "Innovations in Defining and Measuring Brand Image," *Advances in Consumer Research*, 21 (1), 495.
- Rozeboom, William W. (2009), "Some Esoteric Aspects of Sem That Its Practitioners Should Want to Know," *Multivariate Behavioral Research*, 44 (5), 553-87.
- Rumelhart, David E. (1984), "Schemata and the Cognitive System," in *Handbook of Social Cognition*, Robert S. Wyer and Thomas K. Srull, eds. Vol. 1. Hillsdale: Erlbaum.
- Rumelhart, David E. and Andrew Ortony (1977), "The Representation of Knowledge in Memory," in *Schooling and the Acquisition of Knowledge*, Richard C. Anderson and Rand J. Spiro and William E. Montague, eds. Hillsdale: Erlbaum.
- Saito, Akiko (2000), *Bartlett, Culture and Cognition*: Routledge.
- Saunders, John and Fu Guoqun (1996), "Dual Branding: How Corporate Names Add Value," *Marketing Intelligence & Planning*, 29 (7), 29-34.
- Saxe, Robert and A. Weitz Barton (1982), "The Soco Scale: A Measure of the Customer Orientation of Salespeople," *Journal of Marketing Research*, 19 (3), 343-51.
- Schank, Roger C. and Robert P. Abelson (1977), *Scripts, Plans, Goals and Understanding: An Inquiry into Human Knowledge Structures*. Hillsdale: Erlbaum
- Scholes, Eileen and David Clutterbuck (1998), "Communication with Stakeholders: An Integrated Approach," *Long Range Planning*, 31 (2), 227-38.
- Schuilng, Isabelle and Jean-Noël Kapferer (2004), "Executive Insights: Real Differences between Local and International Brands: Strategic Implications for International Marketers," *Journal of International Marketing*, 12 (4), 97-112.

- Sedlmeier, Peter and Gerd Gigerenzer (1989), "Do Studies of Statistical Power Have an Effect on the Power of Studies?," *Psychological Bulletin*, 105 (2), 309-16.
- Sen, Sankar and C. B. Bhattacharya (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility," *Journal of Marketing Research*, 38 (2), 225-43.
- Sen, Sankar, C. B. Bhattacharya, and Daniel Korschun (2006), "The Role of Corporate Social Responsibility in Strengthening Multiple Stakeholder Relationships: A Field Experiment," *Journal of the Academy of Marketing Science*, 34 (2), 158-66.
- Sheinin, Daniel A. and Gabriel J. Biehal (1999), "Corporate Advertising Pass-through onto the Brand: Some Experimental Evidence," *Marketing Letters*, 10 (1), 63-73.
- Sheth, Jagdish and Rajendra Sisodia (1999), "Revisiting Marketing's Lawlike Generalizations," *Journal of the Academy of Marketing Science*, 27 (1), 71-87.
- Shleifer, Andrei and Robert W. Vishny (1997), "A Survey of Corporate Governance," *The Journal of Finance*, 52 (2), 737-83.
- Shocker, Allan D., Rajendra K. Srivastava, and Robert W. Ruekert (1994), "Challenges and Opportunities Facing Brand Management: An Introduction to the Special Issue," *Journal of Marketing Research*, 31 (2), 149-58.
- Simonin, Bernard L. and Julie A. Ruth (1998), "Is a Company Known by the Company It Keeps? Assessing the Spillover Effects of Brand Alliances on Consumer Brand Attitudes," *Journal of Marketing Research*, 35 (1), 30-42.
- Singh, Jagdip (1995), "Measurement Issues in Cross-National Research," *Journal of International Business Studies*, 26 (3), 597-619.
- Slater, Stanley F. and John C. Narver (1998), "Customer-Led and Market-Oriented: Let's Not Confuse the Two," *Strategic Management Journal*, 19 (10), 1001-06.
- (1999), "Market-Oriented Is More Than Being Customer-Led," *Strategic Management Journal*, 20 (12), 1165-68.
- Smith, Tom W., Peter P. Mohler, Janet Harkness, and Noriko Onodera (2005), "Methods for Assessing and Calibrating Response Scales across Countries and Languages," *Comparative Sociology*, 4 (3), 365-415.
- Stayman, Douglas M. and Rajeev Batra (1991), "Encoding and Retrieval of Ad Affect in Memory," *Journal of Marketing Research*, 28 (2), 232-39.
- Steenkamp, Jan-Benedict E.M. (2005), "Moving out of the U.S. Silo: A Call to Arms for Conducting International Marketing Research," *Journal of Marketing*, 69 (4), 6-8.
- Steenkamp, Jan-Benedict E.M., Rajeev Batra, and Dana L. Alden (2003), "How Perceived Brand Globalness Creates Brand Value," *Journal of International*

- Business Studies, 34 (1), 53-65.
- Steenkamp, Jan-Benedict E.M. and Hans Baumgartner (1998), "Assessing Measurement Invariance in Cross-National Consumer Research," *Journal of Consumer Research*, 25 (1), 78-90.
- (2000), "On the Use of Structural Equation Models for Marketing Modeling," *International Journal of Research in Marketing*, 17 (2-3), 195-202.
- Stern, Barbara B. (2006), "What Does Brand Mean? Historical-Analysis Method and Construct Definition," *Journal of the Academy of Marketing Science*, 34 (2), 216-23.
- Stern, Barbara B., George M. Zinkhan, and Anupam Jaju (2001), "Marketing Images: Construct Definition, Measurement Issues, and Theory Development," *Marketing Theory*, 1 (2), 201-24.
- Stern, Michael J., Don A. Dillman, and Jolene D. Smyth (2007), "Visual Design, Order Effects, and Respondent Characteristics in a Self-Administered Survey," *Survey Research Methods*, 1 (3), 121-38.
- Strizhakova, Yuliya, Robin A. Coulter, and Linda L. Price (2008), "Branded Products as a Passport to Global Citizenship: Perspectives from Developed and Developing Countries," *Journal of International Marketing*, 16 (4), 57-85.
- Sudman, Seymour and Edward Blair (1999), "Sampling in the Twenty-First Century," *Journal of the Academy of Marketing Science*, 27 (2), 269-77.
- Suh, Jung-Chae and Youjae Yi (2006), "When Brand Attitudes Affect the Customer Satisfaction-Loyalty Relation: The Moderating Role of Product Involvement," *Journal of Consumer Psychology*, 16 (2), 145-55.
- Sujan, Mita and James R. Bettman (1989), "The Effects of Brand Positioning Strategies on Consumers' Brand and Category Perceptions: Some Insights from Schema Research," *Journal of Marketing Research*, 26 (4), 454-67.
- Swaminathan, Vanitha, Richard J. Fox, and Srinivas K. Reddy (2001), "The Impact of Brand Extension Introduction on Choice," *Journal of Marketing*, 65 (4), 1-15.
- Swoboda, Bernhard, Markus Meierer, Dirk Morschett, and Margot Löwenberg (2009), "Endorsing Product Brands through a Standardized Corporate Brand: Cross National Perceptions and Effects," in AMA summer conference, Michael Kamins and Ingrid M. Martin (Eds.). Chicago: American Marketing Association.
- Szymanski, David M., Sundar G. Bharadwaj, and P. Rajan Varadarajan (1993), "Standardization Versus Adaptation of International Marketing Strategy: An Empirical Investigation," *Journal of Marketing*, 57 (4), 1-17.
- Tauber, Edward M. (1981), "Brand Franchise Extension: New Product Benefits from Existing Brand Names," *Business Horizons*, 24 (2), 36.

- (1988), "Brand Leverage: Strategy for Growth in a Cost-Control World," *Journal of Advertising Research*, 28 (4), 26-30.
- Tavassoli, Nader T. and Jin K. Han (2002), "Auditory and Visual Brand Identifiers in Chinese and English," *Journal of International Marketing*, 10 (2), 13-28.
- Taylor, Shelley E. and Jennifer Crocker (1981), "Schematic Bases of Social Information Processing," in *Social Cognition: The Ontario Symposium on Personality and Social Psychology*, E. Tory Higgins and C. Peter Herman and Mark P. Zanna, eds. Hillsdale: Erlbaum.
- Tesser, Abraham (1978), "Self-Generated Attitude Change," in *Advances in Experimental Social Psychology*, Leonard Berkowitz, ed. Vol. 11. New York: Academic Press.
- The World Bank (2009), "Key Development Data & Statistics," (accessed October, 2009), [available at [www.worldbank.org/data/countrydata/countrydata.html](http://www.worldbank.org/data/countrydata/countrydata.html)].
- Theodosiou, Marios and Leonidas C. Leonidou (2003), "Standardization Versus Adaptation of International Marketing Strategy: An Integrative Assessment of the Empirical Research," *International Business Review*, 12 (2), 141-71.
- Townsend, Janell D., Sengun Yenyurt, and Mehmet Berk Talay (2009), "Getting to Global: An Evolutionary Perspective of Brand Expansion in International Markets," *Journal of International Business Studies*, 40 (4), 539-58.
- Tucker, W. T. (1961), "How Much of the Corporate Image Is Stereotype?," *Journal of Marketing*, 25 (1), 61-65.
- Turban, Daniel B. and Daniel W. Greening (1997), "Corporate Social Performance and Organizational Attractiveness to Prospective Employees," *Academy of Management Journal*, 40 (3), 658-72.
- Uncles, Mark D., Melanie Cocks, and Chris Macrae (1995), "Brand Architecture: Reconfiguring Organisations for Effective Brand Management," *Journal of Brand Management*, 3 (2), 1-12.
- United States Census Bureau (2009), "Educational Attainment in the United States: March 2002," (accessed October, 2009), [available at <http://www.census.gov/population/www/socdemo/education/pp1-169.html>].
- van de Vijver, Fons J.R. and Kwok Leung (1997), *Methods and Data Analysis for Cross-Cultural Research*. London: Sage.
- van Herk, Hester, Ype H. Poortinga, and Theo M.M. Verhallen (2005), "Equivalence of Survey Data: Relevance for International Marketing," *European Journal of Marketing*, 39 (3), 351-64.
- (2004), "Response Styles in Rating Scales: Evidence of Method Bias in Data from Six Eu Countries," *Journal of Cross-Cultural Psychology*, 35 (3), 346-60.
- van Marrewijk, Marcel (2003), "Concepts and Definitions of Csr and Corporate

- Sustainability: Between Agency and Communion," *Journal of Business Ethics*, 44 (2), 95-105.
- van Riel, Cees B.M. and Gerrit H. van Bruggen (2002), "Incorporating Business Unit Managers' Perspectives in Corporate-Branding Strategy Decision Making," *Corporate Reputation Review*, 5 (2), 241-51.
- Vergin, Roger C. and M. W. Qoronfleh (1998), "Corporate Reputation and the Stock Market," *Business Horizons*, 41 (1), 19-26.
- Walsh, Gianfranco and Sharon E. Beatty (2007), "Customer-Based Corporate Reputation of a Service Firm: Scale Development and Validation," *Journal of the Academy of Marketing Science*, 35 (1), 127-43.
- Washburn, Judith H., Brian D. Till, and Randi Priluck (2004), "Brand Alliance and Customer-Based Brand-Equity Effects," *Psychology and Marketing*, 21 (7), 487-508.
- (2000), "Co-Branding: Brand Equity and Trial Effects," *Journal of Consumer Marketing*, 17 (6/7), 591-604.
- Weathers, Danny, Subhash Sharma, and Ronald W. Niedrich (2005), "The Impact of the Number of Scale Points, Dispositional Factors, and the Status Quo Decision Heuristic on Scale Reliability and Response Accuracy," *Journal of Business Research*, 58 (11), 1516-24.
- Wieseke, Jan, Nick Lee, Amanda J. Broderick, Jeremy F. Dawson, and Rolf Van Dick (2008), "Multilevel Analyses in Marketing Research: Differentiating Analytical Outcomes " *Journal of Marketing Theory and Practice*, 16 (4), 321-39.
- Winer, Russell S. (1998), "From the Editor," *Journal of Marketing Research*, 35 (1), iii-v.
- Wong, Chi-Sum and Kenneth S. Law (1999), "Testing Reciprocal Relations by Nonrecursive Structural Equation Models Using Cross-Sectional Data," *Organizational Research Methods*, 2 (1), 69-87.
- Wong, Nancy, Aric Rindfleisch, and James E. Burroughs (2003), "Do Reverse-Worded Items Confound Measures in Cross-Cultural Consumer Research? The Case of the Material Values Scale," *Journal of Consumer Research*, 30 (1), 72-91.
- Wood, Wendy and David T. Neal (2009), "The Habitual Consumer," *Journal of Consumer Psychology*, 19 (4), 579-92.
- Wu, Tsung W., Ralph L. Day, and David B. Mackay (1988), "Consumer Benefits Versus Product Attributes: An Experimental Test," *Quarterly Journal of Business and Economics*, 27 (3), 88-114.
- Yoo, Boonghee, Naveen Donthu, and Sungho Lee (2000), "An Examination of Selected Marketing Mix Elements and Brand Equity," *Journal of the Academy*

- of Marketing Science, 28 (2), 195-211.
- Zhang, Shi and Bernd H. Schmitt (2001), "Creating Local Brands in Multilingual International Markets," *Journal of Marketing Research*, 38 (3), 313-25.
- Zou, Shaoming and S. Tamer Cavusgil (2002), "The Gms: A Broad Conceptualization of Global Marketing Strategy and Its Effect on Firm Performance," *The Journal of Marketing*, 66 (4), 40-56.