COUNTRY-OF-ORIGIN EFFECTS ON CONSUMER PRODUCT EVALUATIONS

Peeter W.J. Verlegh

STELLINGEN

Behorende bij het proefschrift van Peeter W.J. Verlegh

- zie literatuurlijst voor bronnen -

1. Het oordeel van consumenten over een product wordt beïnvloed door het land van herkomst van het product.

   Dit proefschrift

2. Zowel economische als sociaal-psychologische motieven dragen bij aan de neiging van consumenten om producten uit het eigen land positief te beoordelen.

   Dit proefschrift

3. Het oordeel van consumenten over producten uit een bepaald land wordt beïnvloed door eerdere ervaringen met producten uit dit land, maar ook door gevoelens ten opzichte van het land en percepties van de eigenschappen van het land en haar bevolking.

   Dit proefschrift

4. Alleen wanneer de consument in beperkte mate aandacht besteedt aan een advertentie voor een product uit een land met een negatief imago, leiden positievere claims in de advertentie tot een positiever oordeel over het geadverteerde product.

   Dit proefschrift

5. De positieve invloed van het aantal attribuutniveaus op het middels conjunct meten bepaalde belang van een attribuut is deels te verklaren uit de neiging van consumenten om interne representaties van attribuutniveaus te spreiden over het bijbehorende mentale continuüm.

   Verlegh,Schifferstein en Wittink, 2001

6. De intentie van de consument om kant-en-klaarmaaltijden te serveren wordt beïnvloed door de mening van relevante anderen, met name wanneer zij deelnemen aan de maaltijd.

   Verlegh en Candel, 1999

7. De aanwezigheid van assistenten-in-opleiding aan bedrijfskundige faculteiten laat zien dat financiële overwegingen niet altijd een doorslaggevende invloed hebben op de beroepskeuze.

8. Het voorkomen van zowel "onnodig linksrijden" als "bumperkleven" in de lijst van de tien grootste ergernissen van Nederlandse automobilisten illustreert het nut van segmentatie in marktonderzoek.

9. De resultaten van onderzoek naar de invloed van gemoedstoestanden op cognitie suggereren dat de vreugden van de wetenschap niet altijd ten goede komen aan de kwaliteit van wetenschappelijk onderzoek.

   Gebaseerd op Schwarz, 2001

10. De gewichtstoename die meestal gepaard gaat met het stoppen met roken, kan voorkomen worden door nicotinepleisters over de mond te plakken.

    Geïnspireerd door "Niet-rokersfeestje" - Harrie Jekkers

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Promotoren: prof. dr. ir. M.T.G. Meulenberg
Hoogleraar in de marktkunde en het consumentengedrag
Wageningen Universiteit

prof. dr. ir. J.E.B.M. Steenkamp
CentER research professor of marketing,
GfK professor of international marketing research
Katholieke Universiteit Brabant

Promotiecommissie: prof. dr. F.G.M. Pieters (Katholieke Universiteit Brabant)
prof. dr. ir. J.C.M. van Trijp (Wageningen Universiteit)
prof. dr. L. Warlop (Katholieke Universiteit Leuven, België)
prof. dr. ir. B. Wierenga (Erasmus Universiteit Rotterdam)

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Peeter W.J. Verlegh

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DUTCH WORDS OF THANKS AND APPRECIATION

"Wie zaait zal oogsten", "Rome is niet op één dag gebouwd", en "Je moet schieten, anders kun je niet scoren". Deze en andere zegswijzen hebben betrekking op de relatie tussen inspanning en opbrengsten. In essentie benadrukt elk van deze uitdrukkingen dat produkten (zoals dit proefschrift) het resultaat zijn van produktie. In het algemeen wordt de produktie buiten het aandachtsveld van de marketing geplaatst. Desalniettemin wil ik in het voorwoord van dit proefschrift de produktie centraal stellen en alle mensen bedanken die een bijdrage hebben geleverd aan dit eindprodukt.

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tijdens congressen van organisaties die zich verschuilen achter acronymen als ACR, ASPO, EMAC, SCP en INFORMS.

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CHAPTER 1

INTRODUCTION

"Commodities are lowercase brands when no one speaks up to claim them, but identities quickly arise: Japanese rice, Norwegian salmon, amber from the Baltics, diamonds from Africa and cotton grown in Egypt are differentiated from other rice, salmon, amber, diamonds, and cotton"

Sidney Levy (1996, p.170)

This dissertation examines the influence of the country of origin of products on consumers' product evaluations. The relevance of this topic was recognized already in one of the earliest papers on international consumer behavior (Dichter 1962), which argued that a product's country of origin may have a "tremendous influence on the acceptance and success of products" (p.116). This idea was elaborated upon by Levy (1996), who noted that country of origin provides products and brands with an identity or meaning. The relevance of this topic has not gone undisputed, as illustrated by Kenichi Ohmae's assertion that consumers "don't care about country of origin ... [and] don't worry about where the product was made" (Ohmae 1989, p.144). To further examine the issue of relevance, chapter two of this thesis presents a review and meta-analysis of previous research that has looked at the impact of country of origin on consumers' product evaluations.

Outside the realm of academic studies, the (managerial) relevance of country of origin depends first and foremost on consumers' awareness of the country of origin of products. Country of origin is generally indicated by "Made in ..." labels. The use of these labels has been traced back to the ancient Greece, where it was common practice to stamp products with logos or other indications of origin (Aaker 1996). For most products, country-of-origin labels are legally required in many countries (including the US and the European Union), although practices such as international sourcing and production make it increasingly difficult to answer the question "where does this product come from?". One way to address this issue is the introduction of a more fine-grained classification of product origins, distinguishing for example between "country of design" and "country of production". This idea has been adopted for example by Ikea, which labels its products as "Made in ... - Design and Quality: Ikea of Sweden".

"Made in" labels are found on most products. But these labels are not the only cues that consumers may use to infer the country or origin (or "nationality") of products. As illustrated by the examples in table 1.1, marketing instruments like advertising and branding may be used to implicitly or explicitly link a product to a (origin) country. Such links do not necessarily represent the "truth", i.e., they may link a product to a country other than the place of manufacture or design. For example, despite of sounding American or British, "Kenwood" is a Japanese make of consumer electronics, and the British flag on Reebok shoes has got no connection to the brand's country of origin (US) or to the shoes' country of manufacture (mostly Asian countries). Leclerc, Schmitt and Dubé (1994) have coined the term "foreign branding" to refer to such practices.

Table 1.1: Examples of references to country of origin

Marketing Instrument	Type of Reference
Advertising	Explicit: • Absolut: "Vodka from the country of Sweden" • Siemens: "from Germany with love" Implicit (through the use of language or visuals): • BMW: "Freude am Fahren" (in US and Europe) • Audi: "Vorsprung durch Technik" (in UK) • Milka chocolate: use of alpine scenery
Branding / Labeling	Explicit • Café de Colombia • American Express • Swissair / British Airways / Air France • Clearly Canadian Implicit (linguistic references or the use of flags/symbols) • Kenwood vs. Mitshubishi (both Japanese) • Boursin: French-sounding (Unilever) • Buitoni, Raguletto: Italian-sounding (Nestlé, Unilever) • Ikea: ("...of Sweden"): blue and yellow as corporate colors

Although consumers may not know where a specific product is manufactured, they often link a specific nationality to brands and companies: Nike is American, Gucci and Ferrari are Italian, Sony and Mitsubishi are Japanese, and Volkswagen is German. Like other "brand demographics" such as age, and social class, country of origin is an antecedent of brand personality (Aaker 1997), or in the words of Papadopoulos and Heslop (1993, p xxii) "[Country of origin] is to a product what *occupation* is to a new acquaintance we make at a party: we sort of *have* to ask about it (if it has not already been offered) to put our new friend into context [and] to make a value judgment".

The idea that consumers associate (well-known) brands with a particular country of origin was examined informally in a survey among 77 students taking an introductory course in consumer behavior at Erasmus University, Rotterdam. The respondents were asked to fill out a one-page questionnaire that contained a list of brand names. For each of these brands, respondents were asked to write down the country with which they thought the brand was associated most strongly. The brands were taken from a ranking of 75 "billion dollar brands", which are considered to be the most valuable brand names worldwide. This ranking is based on research carried out by the Interbrand group and Citibank (Financial Times 2000). From this list the fifteen highest ranked brand names were selected, applying the restriction that a maximum of two brands could originate from the same country (as listed in the ranking). This resulted in the list in table 1.2, which shows a large degree of consensus in the countries that respondents associated with each of the brands. For each of the brands, the country that was mentioned most often was equal to the actual country of origin (as listed in the Financial Times ranking). Brands were associated with 1 to 13 different countries (mean = 4.2 , median = 3). The lowest degree of consensus was found for Nescafé, which was associated with 13 different countries. But even for this brand, the top three countries accounted for 73% of the responses. For the other brands, the top three associated countries accounted for more than 90% of responses. For ten brands, we found that a single country accounted for more than 90% of responses, and we obtained 100% consensus for four of these brands (Microsoft, Mercedes, Heineken, and Philips).

Table 1.2: Countries associated with well-known brands (N=77)

Brand (Origin Country)	Three most mentioned countries (# respondents reporting specific association)			% associated with "correct" country (# countries)
Coca-Cola (US)	US (76)	Australia (1)		99 (2)
Microsoft (US)	US (77)			100 (1)
Nescafé (SWI)	Switzerland (27)	Netherlands (20)	Italy (9)	35 (13)
Mercedes (GER)	Germany (77)			100 (1)
Ericsson (SWE)	Sweden (61)	Finland (6)	Denmark (4)	79 (7)
Chanel (FR)	France (75)	Italy (1)	US (1)	97 (3)
Sony (JP)	Japan (71)	Netherlands (3)	France(1)	92 (5)
Heineken (NL)	Netherlands (77)			100 (1)
Samsung (KOR)	Korea (33)	Japan (30)	Germany (8)	43 (6)
Ikea (SWE)	Sweden (71)	Netherlands (5)	Norway (1)	92 (3)
Philips (NL)	Netherlands (77)			100 (1)
Gucci (IT)	Italy (71)	France (4)	Japan (1)	92 (4)
Toyota (JP)	Japan (72)	Korea (2)	Australia (1)	94 (5)
Nokia (FI)	Finland (42)	Japan (18)	Sweden (11)	92 (8)
BMW (GER)	Germany (75)	US (1)	Switzerland (1)	100 (3)

The fact that products tend to evoke a particular country of origin has several implications for marketers. If the evoked country of origin enjoys a favorable image, it may be beneficial to emphasize this origin in marketing communications. Smaller sized companies with restricted marketing budgets may even consider to construct their image entirely on this proposition, thus saving the cost associated with establishing an image of their own. When a country of origin enjoys a favorable image in a particular market, it may thus be a valuable marketing instrument. With an unfavorable country of origin, the best strategy seems to be to avoid any connection, or to revert to a "foreign branding" strategy (cf., Leclerc et al. 1994).

The relevance of country of origin is apparent from the large number of studies that have dealt with this topic. Chapter two describes and categorizes the country-of-origin effects that have been examined in these studies. Meta-analysis is used to

determine the magnitude of country-of-origin effects, and to examine how this magnitude is moderated by study characteristics. Most of the earlier country-of-origin research has focused on effect sizes, although there have also been a number of studies that examine the cognitive processes through which country of origin affects consumer product evaluations. Both streams of research essentially focus on the consequences of linking a product with a certain country of origin. Unlike these studies, this dissertation is focused primarily on the antecedents of the country-of-origin effects. This dissertation addresses the question why country of origin has such a strong effect on consumers' product evaluations, and shows how country-of-origin effects can be linked to a number of different sources, that each have their own influence on consumer product evaluations.

This dissertation is structured as follows. Following the review and meta-analysis in chapter two, chapters three and four examine antecedents of consumers' general images of products from a specific country of origin. We hereby assume that these images differ between product-categories. Chapter five studies how these images affect consumers' product evaluations. Each of these chapters provides a theoretical framework that is translated into a set of hypotheses that are empirically tested. Chapter six concludes this thesis, and provides a general discussion and suggestions for future research.

CHAPTER 2

REVIEW AND META-ANALYSIS OF COUNTRY-OF-ORIGIN RESEARCH, AND A FRAMEWORK FOR ANALYZING THE ANTECEDENTS OF COUNTRY-OF-ORIGIN EFFECTS [1]

2.1. Introduction

The first empirical study of the impact of country of origin on consumer behavior was conducted by Schooler (1965). He found significant differences in the evaluation of products that were identical in all respects, except for the name of the country specified on a "made in" label. Since Schooler's seminal paper, the "country-of-origin effect" has been the subject of a large number of studies. Most of these studies have focused on assessing the occurrence, magnitude and significance of country-of-origin effects for different products. In spite of a large body of research, consensus with regard to the importance of the effect has not been reached. Obermiller (1993) observed that the substantial differences in effect sizes most likely stem from differences in study characteristics. In an attempt to synthesize the literature on the country-of-origin effect, Peterson and Jolibert (1995) showed that country of origin has a strong influence on product evaluation. They also found that the size of the effect is significantly affected by a number of study characteristics. Their findings lead them to conclude that "country-of-origin effects are only somewhat generalizable" and that "the phenomenon is still not well understood" (Peterson and Jolibert 1995, pp. 894-895).

In this chapter we describe the extant literature on the role of country of origin in consumer behavior. We go beyond effect sizes, and search for explanations for the country-of-origin effect. We will start with a review of the theoretical developments in country-of-origin research. Then, we develop a set of hypotheses concerning the impact of various methodological and conceptual factors on country-of-origin effects. These hypotheses are tested in a meta-analysis, that allows us to derive generalized explanations for country-of-origin effects, that can be regarded as "the building blocks" of scientific advance in this domain (cf., Bass and Wind 1995).

[1] Sections 2.1 to 2.5 are based on Verlegh, P.W.J., and J.-B.E.M. Steenkamp (1999), A review and meta-analysis of country-of-origin research, *Journal of Economic Psychology*, 20, 521-546.

2.2. The role of country of origin in consumer product evaluation

Country-of-origin research has mainly studied the use of country of origin as a cognitive cue, viz., an informational stimulus about or relating to a product, which is used by consumers to infer beliefs regarding product attributes such as quality (Bilkey and Nes 1982, Steenkamp 1990). Since country of origin can be manipulated without changing the physical product, it is regarded as an extrinsic cue (Olson 1972). In this respect, country of origin is not different from other extrinsic cues like price, brand name and retailer reputation. A large number of studies has shown that such cues act as "signals" for product quality (e.g., Steenkamp 1990, Dawar and Parker 1994). The typical design of such studies is to describe a product on a number of attributes or cues, and assess the impact of country of origin and the other cues on the overall evaluation of the product.

Various studies however, have shown that country of origin is not merely another cognitive cue. Wyer and colleagues (Hong and Wyer 1989, 1990, Li and Wyer 1994) showed that the impact of country of origin cannot be explained entirely by a quality signaling process. In addition to its role as a quality cue, country of origin has symbolic and emotional meaning to consumers. Country of origin may associate a product with status, authenticity and exoticness (Li and Monroe 1992, Batra et al. 2000). Moreover, it links a product to a rich product-country imagery, with sensory, affective and ritual connotations (Askegaard and Ger 1998). Fournier (1998) found that country of origin relates a product to national identity, which can result in a strong emotional attachment to certain brands and products. She describes the case of a second-generation Italian-American woman who is strongly attached to Italian products, especially food-related items. For this person, "Italy" has very strong emotional and symbolic connotations. Botschen and Hemetsberger (1998) reported that consumers link country of origin not only to product quality, but also to feelings of national pride and memories of past vacations. These studies indicate that country of origin is not merely a cognitive cue for product quality, but also relates to emotions, identity, pride and autobiographical memories. Such symbolic and emotional connotations transform country of origin into an "expressive" or "image" attribute (cf., Lefkoff-Hagius and Mason 1993). Such attributes have been shown to be significant determinants of consumer preferences and an important source of brand equity (Lefkoff-Hagius and Mason 1993).

Obermiller and Spangenberg (1989) developed a framework that will be used to structure our discussion of the various ways in which country of origin influences consumer product evaluations. The framework distinguishes between cognitive,

affective and normative processing of the country-of-origin cue. It should be noted that the boundaries between these processes are fuzzy, and cognitive, affective and normative processes are interacting in consumer decision making (Isen 1984). Nevertheless, this framework is broadly consistent with the majority of the country-of-origin literature, and best structures our review of current knowledge on country-of-origin effects. Below, we will first discuss cognitive, affective and normative aspects of country-of-origin effects separately. Next, we elaborate on interactions of cognitive, affective and normative aspects of country of origin. Table 2.1 provides examples of cognitive, affective and normative mechanisms for country-of-origin effects.

Table 2.1: Mechanisms for country-of-origin effects

Mechanism	Description	Major findings
Cognitive	Country of origin is a cue for product quality	Country of origin is used as signal for overall product quality and quality attributes, such as durability.
Affective	Country of origin has symbolic and emotional value to consumers	Country of origin is an image attribute that links the product to symbolic and emotional benefits, such as status and national pride.
Normative	Consumers hold social and personal norms related to country of origin	Purchasing domestic products may be seen as appropriate because it supports domestic economy. By the same token, consumers may refrain from buying goods from countries with objectionable policies and regimes.

2.2.1. Cognitive aspects of the country-of-origin effect

Information processing models of consumer decision making generally assume that judgments of product quality are inferred from cues (Steenkamp 1990, Dawar and Parker 1994). Provided that basic criteria for cue selection, like vividness, clarity, and intensity are met, the use of a cue is determined by consumers' perception of its predictive value. The latter refers to the perceived strength of the relationship between a cue and the attribute that is to be judged (Olson 1972, Steenkamp 1990). The predictive value of a cue is affected by 1) the "ecological" or "observed" covariation between cue

and attribute (Steenkamp 1990), and 2) the perceived theoretical or intuitive relationship between cue and attribute (Pinson 1986, Broniarczyk and Alba 1994). In the case of country of origin, this theoretical relationship is largely shaped by mental representations of a country's people, products, culture and national symbols (Askegaard and Ger 1998), that may include widely shared cultural stereotypes. For example, Leclerc et al. (1994) found a positive effect of French-sounding brand names on evaluations of "hedonic" products such as perfume and wine, but a negative effect on the evaluations of "utilitarian" products like cars and computers. These effects persisted even when subjects actually experienced the product.

The finding that product evaluations relate to a number of characteristics of the origin country emphasizes the role of general impressions of countries in the country-of-origin effect (Bilkey and Nes 1982). These impressions, which we refer to as country images, are examined in greater detail in chapter four of this thesis. For example, consumers recognize that the production of high-quality technical products requires a highly trained and educated workforce. Hence, they perceive that such products are of better quality when produced in developed countries. The improvement in the quality image of Japanese products however, shows that such beliefs can change over time, and also depend on direct experiences of the quality of a country's products.

Roth and Romeo (1992) formulated a theoretical framework for the relationship between consumer preferences for a country's products, and perceptions of a country's culture, economy and politics. They argued that consumers' evaluations of a specific product from country X are based on the match between product and country. According to these authors, consumers prefer country X as an origin for specific products when they believe that there is a match between the perceived "strengths" of country X and the skills that are needed for manufacturing the product under consideration. A preference for German cars, for example, might be explained by the perception of the workmanship of German engineers, and the fact that Germany is a technologically advanced society.

2.2.2. Affective aspects of the country-of-origin effect

As mentioned earlier, country-of-origin effects cannot be attributed solely to the signaling of product quality. Countries have strong emotional and affective connotations that may be formed in direct experiences during holidays or encounters with foreigners, but also in indirect experiences with countries and their citizens through e.g., art, education and mass media. Such connotations may influence consumers' product or

brand attitudes. Obermiller and Spangenberg (1989) use the example of an Arab-American who recognizes the superior quality of Israeli optical instruments, but nevertheless has a negative attitude toward these products, that is caused by a strong negative attitude toward Israel. They note that such a mechanism is limited to specific cases where the attitude toward a country is very strong.

Such a perspective however reflects a rather narrow view of the impact of affective associations on the evaluation of countries and their products. Consumers link country of origin to autobiographical memories, to national or ethnic identities and to feelings of "status" and "pride" associated with the possession of products from certain countries (Batra et al. 2000, Botschen and Hemetsberger 1998, Fournier 1998, Hirschman 1985). It seems clear, therefore, that country of origin also acts as an "expressive" or "image" attribute. Expressive motives "would embrace esteem, social and self-actualization needs..." (Mittal et al. 1990, p.138). Image attributes "reveal how product use and/or ownership associates the consumer with a group, role or self-image" (Lefkoff-Hagius and Mason 1993, p.101). A noteworthy example of the latter is provided by Batra et al. (2000) who found that in India, a "western" product origin has a substantial positive effect on brand attitudes, even after controlling for perceived quality. The symbolic and social dimension of this phenomenon was further emphasized by the finding that this effect was most powerful for consumers with a high admiration for "western" lifestyles, and for products of which the consumption and ownership are more publicly visible. Similar findings have been reported in anthropological studies in Nigeria (Arnould 1989), Romania and Turkey (Ger et al. 1993).

2.2.3. Normative aspects of the country-of-origin effect

Because purchasing a country's products is a way of supporting its economy, the purchase of products from countries that engage in objectionable activities can be regarded as an a-moral action. Smith (1990) coined the term "customer voting" to capture this phenomenon: by deciding to purchase or avoid a country's products consumers "vote" pro or contra the policies and practices of its government. Such behavior can be found throughout the world, with for example Jewish consumers boycotting German products because of the holocaust and Australian consumers having boycotted French products because of French nuclear tests in the Pacific. Recently, Klein, Ettenson and Morris (1998) found that Chinese consumers' willingness to buy Japanese products is affected by the economic and military rivalry between the two countries. The purchase of Japanese products is perceived by some Chinese consumers

to be equivalent to treason. There are also instances where consumers reward "sympathetic" countries or regimes through the purchase of their products. Friedman (1996) calls these "buycotts".

Another salient norm that relates to country of origin is the norm to buy domestic. Many consumers consider it morally appropriate to buy products that are manufactured or grown in their own country (Shimp and Sharma 1987). In countries such as the U.S., Canada and the U.K., governments, labor unions, and industry groups have been sponsoring campaigns aimed at the establishment of a "buy domestic" norm. Consumer ethnocentrism (Shimp and Sharma 1987) serves as an important motivation for the decision to purchase domestic products. It refers to consumers' judgments of the morality of purchasing foreign made products. Consumer ethnocentrism has been found to relate positively to consumer preference for domestic products, and negatively to preference for foreign products (Shimp and Sharma 1987). This indicates that the perceived morality of purchasing foreign (vs. domestic) products indeed has a substantial impact on consumers' product attitudes.

2.2.4. Interplay of cognitive, affective and normative aspects of country of origin

In reality cognitive, affective and normative processes are not separate and independent determinants of preferences and behaviors. They are constantly interacting. As noted by Hoffman (1986) affect provides a motivating force for information processing, and may initiate, terminate or enhance the processing of information. Affective responses to country of origin may thus stimulate or inhibit further consideration of choice alternatives, and influence the retrieval and evaluation of cognitive beliefs related to the country of origin (Isen 1984, Askegaard and Ger 1998). Positive affect leads to more extensive and diverse mental representations (Isen 1984). Affect has also been found to influence the amount of information that is used to make a decision, and the strategy that is followed to combine this information and arrive at a decision (Cohen and Areni 1991). Affect thus plays an important role in determining which beliefs are formed, how they are evaluated, and how strongly they are weighted in the formation of preferences.

Normative judgments related to the purchase of a country's products involve both cognitive and affective responses as well. The complex issues that are at stake in boycotts and buycotts require elaborate cognitive processing, but also evoke emotions like fear and anger (Osterhus 1997, Klein et al. 1998). Schwartz (1973) even argued that the impact of personal norms on behavior and decision making is largely based on the fact that a violation of norms results in feelings of guilt and loss of self-esteem, while

conformity results in pride and enhanced self-esteem. Similarly, consumer ethnocentrism is related to more socio-psychological needs for belonging and identification. This relationship is studied in chapter three of this thesis.

2.3. Empirical generalizations in country-of-origin research

Having discussed the different mechanisms that play a role in country-of-origin effects, we now turn to a quantitative integration of country-of-origin research, using meta-analysis. Meta-analysis enables us to determine the robustness of empirical findings on country-of-origin effects, and also allows us to examine to which extent the magnitude of country-of-origin effects is affected by study characteristics (Farley et al. 1995).

2.3.1. Meta-analysis and the Parametric Adjustability model

The studies that investigate country-of-origin effects apply a variety of research designs and study different products from different countries. At the same time however, they are all aimed at assessing the same phenomenon, viz., the influence of country of origin on product evaluations. Such a body of research can be seen as a set of imperfect replications. The individual studies are replications in the sense that they investigate the same effect, but the replications are imperfect, since they differ from each other on a number of factors. As Farley and colleagues (1994, 1995) point out, the fact that the studies are imperfect replications allows us to draw conclusions that cannot be drawn from a set of exact replications or from single studies. Specifically, the fact that studies that examine the same effect differ in various ways allows us to determine the way in which these differences influence the size of the country-of-origin effect. For this, Farley and colleagues (1994, 1995) proposed the method of "parametric adjustability", which consists of three consecutive steps. First, the researcher collects empirical studies that investigate the same phenomenon. The next step involves the identification of study characteristics that are expected to cause systematic differences in the results of individual studies. Third, the model is analyzed by regression analysis using dummy variables.

2.3.1.1. Sampling studies

Empirical studies of country-of-origin effects, appearing in marketing and business literature in the period of 1980 to 1996, were identified through issue-by-issue searches

of a large number of journals that publish marketing and business research (Columbia Journal of World Business, European Journal of Marketing, International Journal of Research in Marketing, Journal of Business Research, Journal of Consumer Psychology, Journal of Consumer Research, Journal of Economic Psychology, Journal of International Business Studies, Journal of Marketing, Journal of Marketing Research, Journal of Retailing, Journal of the Academy of Marketing Science, Marketing Letters and Marketing Science) and proceedings of ACR, AMA and EMAC conferences. This search was backed-up by means of a computer bibliographic search using the ABI Inform system.

2.3.1.2. Effect size indicator

To enable a comparison of the size of the country-of-origin effects reported in different studies, these effects were converted into a common measure of effect size. Such a measure is an estimate of the degree to which the relationship of interest is present in a population. We selected Pearson's product-moment correlation coefficient, as it is the most widely used measure of effect size, that can be derived from a large number of summary statistics by means of relatively simple formulas (Fern and Monroe 1996).

2.3.2. Study characteristics

Following the retrieval of a large number of effect sizes, the next step is the selection of study characteristics likely to moderate the country-of-origin effect. From our review of country-of-origin literature, we have identified several variables that may have an impact on country-of-origin effect sizes. In addition, we have incorporated several variables that relate to aspects of research design.

2.3.2.1. Magnitudes of country-of-origin effects on various types of product evaluations

In a typical study of country-of-origin effects, consumers are asked to form an overall evaluation of a product alternative that is described verbally by a number of cues, including country of origin. By including the "dependent measure" as a moderator variable in the parametric adjustability model, we can establish the impact of country of origin on the different types of judgments used in such research. Specifically, we distinguish between measures of perceived quality (including ratings of "performance" and "reliability"), product attitudes, and purchase intentions.

Judgments regarding perceived quality and attitude (and purchase intentions) can be formed independent of each other. However, there is conceptual support for the

notion that perceived quality is a key component of attitude (Holbrook and Corfman 1985, Steenkamp 1989). For example, Holbrook and Corfman (1985) found that the overall attitude toward a product was affected by perceived quality, but also by convenience, fun and beauty. Thus, the attitude concept is "broader" than the quality construct, encompassing more and different factors. This should reduce the effect of country of origin. Moreover, the design of the typical country-of-origin study is more suited to study cognitive rather than affective processes. Since perceived quality has stronger cognitive overtones than attitude (Obermiller and Spangenberg 1989, Steenkamp 1989, see also Holbrook and Corfman 1985), one may expect greater country-of-origin effects for perceived quality than for attitudes and intentions.

Purchase intentions do not only represent a trade off between consumer needs and product features, but also incorporate several "external" influences, of which budget constraints are the most important. Specifically, consumers may perceive a product to be of high quality, and like it very much, but they may simply not be able to afford it. Hence, the impact of country-related inferences should be smallest for purchase intentions. We therefore hypothesize that:

H1: The effect of country of origin is largest for perceived quality (attributes), and smallest for purchase intentions, with attitude judgments falling in between.

2.3.2.2. Characteristics related to the product

Another issue that deserves attention is the generalizability of country-of-origin effects across different types of products. Although country-of-origin effects have been studied most frequently for consumer products, several studies have investigated the phenomenon for industrial products (cf., Bilkey and Nes 1982). In general, purchasing agents are viewed as being more rational and better informed than household buyers (Webster and Wind 1972). It seems likely that they are less influenced by extrinsic product information, such as country of origin. Although direct comparisons of country-of-origin effects in industrial and household buying are scarce, Ahmed and d'Astous (1995) suggest that industrial buyers may indeed be less susceptible to country information. We hypothesize therefore, that:

H2: The country-of-origin effect is larger for consumer goods than for industrial goods.

The term "country of origin" implies that products are (at least for the largest part) produced in a single country. In the "global era" however, manufacturers are spreading out their activities over a larger number of countries, which gives rise to multi-national production (Yip 1995). In light of this, Chao (1993) distinguishes between hybrid and non-hybrid products, the former being those products that are designed/branded in one country and manufactured in another (e.g., Volkswagen manufactured in Brazil). In a typical experiment involving hybrid products, "country of manufacture" is manipulated independently from "country of design". On one hand, it may be argued that consumers are aware of international sourcing practices, and that a specification of the country of manufacture increases the informational value of the country-of-origin cue, and thus its impact on product evaluations. On the other hand, separating country of origin into country of design and country of manufacture may result in a decrease of the meaning that consumers attach to these constructs. Hence, it seems worthwhile to explore how "country-of-origin" effect sizes are affected by multinational production.

H3: The magnitude of the country-of-origin effect differs between hybrid and non-hybrid products

As pointed out in our literature review, product evaluations based on country-of-origin information are often related to consumers' beliefs regarding general characteristics of the country of origin. One of these characteristics is the country's level of development. As noted by Porter (1990), the ability to manufacture products that require a certain level of skill and technology is closely related to a country's level of development. Consequently, the mere fact that a product is made in a less-developed country suggests to (western) consumers that it is of poorer quality, and associated with an increased risk of bad performance and dissatisfaction (Cordell 1991). Hence, products from Less Developed Countries (LDCs) are generally evaluated less positively than products from More Developed Countries (MDCs) (Bilkey and Nes 1982). Thus, we expect to find larger country-of-origin effects when products from MDCs and LDCs are included in the same study, and smaller effects when a study exclusively examines products from either MDCs or LDCs. For purposes of objectivity and convenience, we define MDCs as all OECD-member countries, excluding those designated by the OECD as "developing" (viz., Greece, Mexico and Turkey).

H4: The country-of-origin effect is larger in studies that compare products from MDCs to products from LDCs, than in studies that compare products from either MDCs or LDCs.

2.3.2.3. Characteristics related to research design

Bilkey and Nes (1982) noted a number of serious methodological shortcomings in country-of-origin research. Their review and suggestions for improvements received wide attention in the literature, but methodological issues have remained a source of concern (e.g., Usunier 1996). To investigate whether the alleged methodological shortcomings affect the magnitude of country-of-origin effects reported in the literature, we analyze several characteristics related to the design of country-of-origin research. A first issue concerns the use of single-cue vs. multi-cue designs. Early studies of the country-of-origin effect often used a so-called single-cue design, in which subjects are presented only with information about the product's country of origin, and are asked to provide a product evaluation. Such studies have often been criticized for their lack of realism and inflation of effect sizes (Bilkey and Nes 1982, Steenkamp 1989). It is obvious that consumers infer product quality from country of origin, when it is the only information available. Hence, we hypothesize that:

H5: The country-of-origin effect is smaller in multi-cue studies than in single-cue studies.

Another important distinction is between within-subjects and between-subjects designs. In a within-subjects design, subjects are asked to provide judgments for multiple products, from different countries of origin. This procedure may lead to respondents "discovering" the purpose of the study, and trying to answer in a way that they think pleases the experimenter (i.e., demand artifacts). Moreover, presenting the same respondent with several product descriptions varying on a limited number of attributes may lead to sensitization to the manipulated attributes. Consequently the respondent will devote more attention to these attributes, which inflates their effects. These effects are less likely to occur in between-subjects designs (Fern and Monroe 1996). Furthermore the error term in between-subjects designs includes random variation due to individual differences, leading to smaller effect size estimates. These processes are likely to increase effect sizes for within-subjects designs (Rao and Monroe 1989):

H6: Within-subjects designs yield larger effect sizes than between-subjects designs.

The question whether student samples are representative of "real consumers" has raised considerable debate in marketing and consumer research (e.g., Sternthal et al. 1994). Student samples differ from general consumer samples on two important aspects. First, they differ in socio-demographics. Students are younger and higher educated than the average consumer. It has been shown that country-of-origin effects are generally smaller for younger consumers and for consumers with a higher level of education (Usunier 1996). Second, student samples are more homogeneous than consumer samples. Consequently, student samples might yield larger effects because they have lower response variance due to individual differences (Sternthal et al. 1994). These biases go in opposite directions. On one hand, student samples are expected to yield smaller effect sizes than representative consumer samples. On the other, student samples are expected to yield larger effect sizes. Hence we hypothesize:

H7: The magnitude of the country-of-origin effect does not differ between studies that use student samples and studies that use "representative" consumer samples.

2.3.3. Analysis

To investigate the influence of moderator variables on effect sizes, a two-step procedure is generally recommended (Farley et al. 1995). After the average effect size has been calculated and found to be significant, a (chi-square) test for homogeneity is conducted. If this test indicates that effect sizes are homogeneous across studies, variation in effect size is due to random error, and no further analyses on its sources are warranted. Heterogeneity in effect sizes indicates that at least part of the variability is systematic (Hedges and Olkin 1985). When the effect sizes are heterogeneous, their variance can be examined through the application of the parametric adjustability model (Farley et al. 1995). Here, the impact of moderator variables is analyzed through dummy regression analysis, with the effect size as dependent variable and *j* dummy variables representing the various study characteristics as independent variables. If the effect sizes are correlation coefficients, the data are usually z-transformed, to achieve normality (Hedges and Olkin 1985). In formula:

(1) $$z_i = b_0 + \Sigma_j b_j C_{ij} + u_i$$

Where z_i is a z-transformed effect size i, C_{ij} (j = 1,...,k) are k moderator variables, b_j's are regression coefficients and u_i is a random error term. A complete listing of moderator variables is included in table 2.2.

Table 2.2: Moderator variables included in the parametric adjustability model.

Moderator	Levels	Hypothesis
QUALITY	0 = attitudinal measures 1 = perceived quality	H1: +
INTENTION	0 = attitudinal measures 1 = purchase intentions	H1: -
PRODTYP	0 = industrial goods 1 = consumer goods	H2 : +
HYBRIDS	0 = uninational products 1 = hybrid products	H3 : ?
DEVELOP	0 = comparisons among products from different MDCs. 1 = comparisons among products from MDCs and from LDCs	H4 : +
# OF CUES	0 = single-cue design 1 = multi-cue design	H5 : -
DESIGN	0 = within-subjects design 1 = between-subjects design	H6 : -
SAMTYP	0 = "representative" consumer sample 1 = student sample	H7 : 0

Because the variance of effect-size estimates is inversely proportional to sample size, the parametric adjustability model is estimated through a weighted least squares procedure with n-3 as weight (Hedges and Olkin 1985). Furthermore, since most studies yield more than one effect size, the observations that are used to estimate the model cannot be regarded as independent. A general solution for this problem is the addition of a dummy variable for each study, except for one, which then serves as a baseline (Johnston 1984). In meta-analysis however, this is likely to result in severe multicollinearity. To avoid this problem, we included only the most relevant study dummies, selected through a procedure introduced by Anderson and Weitz (1989). First, the model was estimated without the study dummies. The residuals from this analysis

were used as the dependent variable in a new (stepwise) regression analysis with the study dummies as independent variables. The dummies that were included in the stepwise model were added to the original model, which was then re-estimated.

2.4. Results

Our search procedure yielded 41 empirical studies, which are listed in the appendix to this paper. A total of 278 individual effect sizes was retrieved. To establish the mean of these values, the weighted (by n-3) average of the z-transformed effect sizes was calculated and then converted back to r. This yielded an average r of .39, which may be classified as a medium to large effect (cf., Cohen 1988). The distribution of r's is displayed in figure 2.1, which contains a stem-and-leaf plot of the effect sizes.

Figure 2.1. Stem-and-leaf plot of the 278 retrieved effect sizes.

Stem	Leaf
.0	112345556689
.1	000123333333444455556777778 8
.2	000001111111222222333333444444445666666777777888888888999999
.3	0000000111111111223333334444555555555666666677777777777888888999999
.4	000000000001111112222222222333344455666666666667777888888999
.5	00111222233346677899
.6	0000011445556889
.7	000378
.8	23469
.9	02

The null hypothesis of homogeneity was rejected [χ^2 (277)=2315.43, p<.001] implying that the variance in effect sizes may be attributed (partly) to the influence of moderator variables. This influence was investigated with the model specified in (1). Eleven study dummies were selected through the earlier described procedure, and added to the original model. Our final model explained a significant portion of the variance in effect sizes (R^2=.438, p<.001). Parameter estimates are given in table 2.3.

Table 2.3: Results of parametric adjustability analysis.

Moderator	b (SE)	p*
QUALITY	.073 (.037)	.03
INTENTIONS	- .020 (.037)	.30
PRODTYP	.067 (.100)	.25
HYBRIDS	.023 (.042)	.59
DEVELOP	.194 (.035)	<.001
# OF CUES	- .274 (.040)	<.001
DESIGN	- .078 (.033)	.01
SAMTYP	- .003 (.039)	.94
INTERCEPT	.358 (.122)	<.001
Model fit:	R^2 = .438 (N = 278)	
	F_{model} [19, 258] = 10.58 (p<.001)	

** one-sided, except for "hybrids" and "sample type"*

H1 posits that the effect of country of origin is largest for perceived quality, and smallest for purchase intentions, with attitude judgments falling in between. In line with this hypothesis, we find that the country-of-origin effect is larger for quality judgments than for attitudes (b=.073, p=.03) and purchase intentions (b=.093, p=.02). However, no significant difference is found between the effect sizes for attitudes and purchase intentions, although the difference is in the expected direction (b=-.02, p=.30). Thus, H1 is partially supported.

With regard to the product-related moderators, we found that the country-of-origin effect is not significantly larger for consumer goods than for industrial goods (H2). However, the observed difference is in the expected direction (b=.067, p=.25). No significant difference was found between the effect sizes for hybrid and non-hybrid products, which rejects H3 (b=.023, p=.59). H4 states that the country-of-origin effect is larger when subjects are asked to compare products from MDCs with products from LDCs, instead of products from either MDCs or LDCs among themselves. This hypothesis is supported (b=.194, p<.001).

In addition to these product-related moderators, we examined the role of a number of moderators that relate to research design. In line with H5, it was found that country-of-origin effects are smaller for multi-cue studies than for single-cue studies (b=-.274, p<.001). Further, it was found that between-subjects designs yield smaller effect sizes than within-subjects designs (b=-.078, p=.01), which is consistent with H6. H7 states that country-of-origin effect sizes do not differ between studies that use student samples and studies that use "representative" consumer samples. Our analyses show that this is indeed the case (b=-.003, p=.94).

2.5. Discussion

Country-of-origin effects are a complex phenomenon. In our review we distinguished between cognitive, affective and normative aspects of country of origin. The boundaries between these aspects are fuzzy, and country-of-origin effects are often caused by interplay of cognitive, affective and normative aspects. Cognitively, country of origin may be regarded as an extrinsic cue for product quality. Consumers have been found to infer judgments of product quality from beliefs about a country's products, but also from their beliefs about more general characteristics. Symbolic and emotional associations with country of origin constitute the affective aspect. Consumers relate country of origin to status, identity, national pride and past experiences. Normative aspects of country of origin relate to "customer voting". The decision to purchase or avoid a country's products can be regarded as a vote pro or contra the policies and practices of the country. A particularly salient norm is the norm to buy domestic. Consumer ethnocentrism (Shimp and Sharma 1987) has been found to have a substantial impact on the purchasing behavior of many consumers. We will discuss consumer ethnocentrism further in chapter three.

We have sought to quantify the findings of past country-of-origin research in a meta-analysis. Based on the grand average effect size of .39 found in our meta-analysis, the country-of-origin effect can be classified as a substantial factor in product evaluations. We found that the impact of country of origin is stronger for perceived quality than for attitudes and purchase likelihood. Apparently, there exists a particularly strong link between country of origin and perceived quality. One factor that is closely related to the evaluation of products in general is the level of development of the country of origin. We found that country-of-origin effects are significantly larger when

products from MDCs are compared with products from LDCs. This finding supports the notion that consumers believe that products from LDCs are lower in quality, and associated with a larger risk of bad performance and dissatisfaction (Cordell 1991).

We also looked at other substantial issues. We found that country-of-origin effects are not significantly smaller for industrial goods than for consumer goods. Although industrial buyers are generally held to be more "rational" and better informed than the average consumer (Webster and Wind 1972), the effects of country of origin on purchase decisions for industrial and consumer goods seem to be comparable in magnitude. Furthermore, it is found that the effect of country of origin does not change substantially when a product is designed and manufactured in different countries. Thus, the growing importance of multi-national production and international sourcing (Yip 1995), which has been viewed by some as the end of the country-of-origin effect, does not seem to affect the relevance of country of origin. An interesting aspect of multi-national production is the opportunity to pragmatically emphasize those "origin countries" that carry favorable connotations. For example, Spanish automobile brand "Seat" highlights the German origin of its engines and other components.

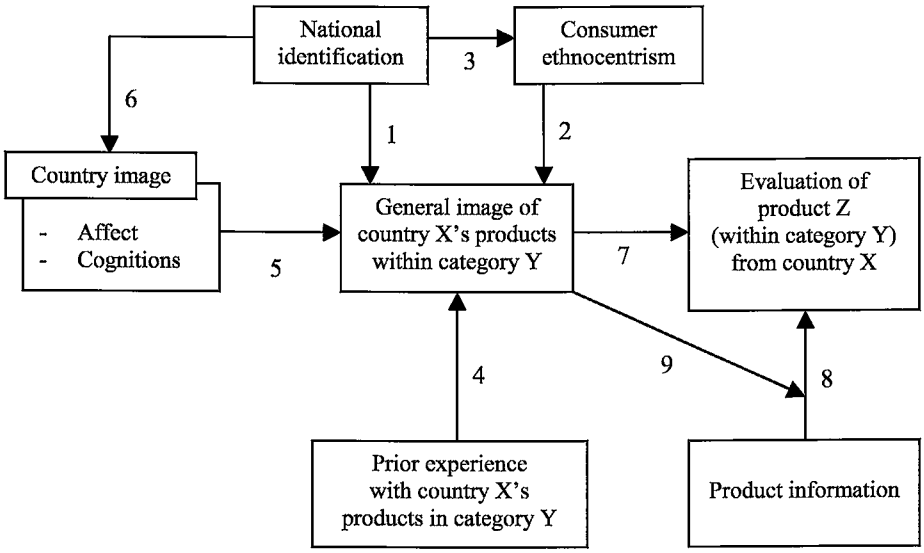
We have also investigated several methodological issues in country-of-origin research. Our meta-analysis shows that methodology can have a substantial impact on study findings. Our analysis corroborates two common propositions. First, single-cue studies yield larger effect sizes than multi-cue studies. Hence, our study adds to a larger body of meta-analytic evidence (e.g., Rao and Monroe 1989), that indicates that single-cue studies should be interpreted with caution. Second, we found that effect sizes obtained with a between-subjects design are smaller than those obtained with a within-subjects design. Further, we found that effect sizes do not differ between student and non-student samples. It should be noted however, that this finding does not imply that country-of-origin effects are similar for students and for consumers in general. Meta-analysis does not allow us to draw conclusions on underlying mechanisms, but is concerned with the mere size of the country-of-origin effect. The parametric adjustability model allows us to calculate the expected effect size for a particular study, by inserting the value for each parameter. Such calculations provide country-of-origin researchers with a benchmark for the interpretation of outcomes of future studies (Farley et al. 1995). Expected effect sizes can be used as input for power analysis, allowing researchers to estimate the sample size needed to achieve the desired statistical power (cf., Cohen 1988).

2.6. Organizing framework and outline for the remainder of this thesis

The review and meta-analysis support the idea that country of origin has a substantial effect on consumers' product evaluations, and provides a broad overview of the different ways in which country of origin may exert this influence. Country-of-origin effects reflect differences in consumers' evaluations of products from different countries. These evaluations are specific to product categories. For example, consumers may hold a positive evaluation of French wines, but a negative evaluation of French cars (cf., Han 1989). These evaluations represent a general image of a country X's products in a category Y. This concept takes a central place in figure 2.2, which presents an organizing framework for the remainder of this thesis.

In contrast with the sizeable interest in country-of-origin effects, the antecedents of consumers' general image of a country's products (within a category) have received little attention in the marketing literature. One of the contributions of this thesis is an attempt to fill this gap. The framework in figure 2.2 identifies several antecedents of consumers' general images of a country X's products in a category Y. The first of these is home country bias, viz., a positive "distortion" in the perception and evaluation of domestic products that may be paired with a negative distortion in the evaluation of foreign alternatives (Papadopoulos et al. 2000). In chapter three, we introduce two different motivations for this bias, one primarily economic (consumer ethnocentrism), and one of a more socio-psychological nature (national identification). This distinction extends the current literature on home country bias. The influences of national identification and consumer ethnocentrism are represented by paths 1 and 2 in figure 2.2. Path 3 in this figure indicates that national identification contributes to the strength of consumers' ethnocentrism.

Figure 2.2. Organizing framework for the remainder of this thesis



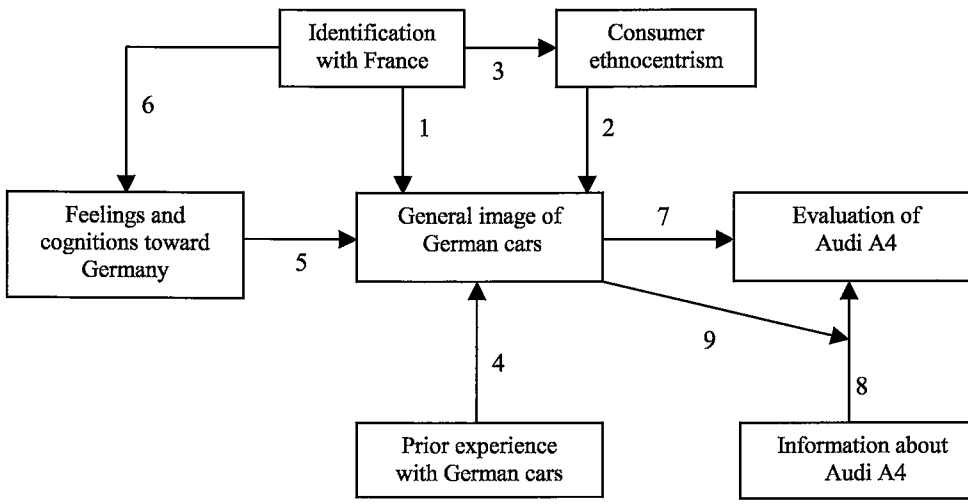
Apart from the distinction between domestic and foreign products, evaluations of a country's products within a category may be based on consumers' prior experience with these products, and on inferences based on cognitions and affect toward the country itself. Prior experience with a country's products within a category could be obtained by consumption or trial, but also indirectly, e.g. by vicarious learning or word-of-mouth. Prior experience provides consumers with information about the covariation of country of origin and product performance on different attributes (path 4 in figure 2.2).

Consumers' general image of a country's products within a category is also influenced by their perceptions of the country itself. These perceptions will be referred to as the country image: a mental network of affective and cognitive associations connected to the country. The associations in this network can be formed for example through travel, personal contacts, education, and media reports. Using inference principles described by Pinson (1986) consumers may develop naive theories that contain (causal) relations between the associations contained in the general country image and the attributes of a country's products. Within country image, we distinguish (and measure) cognitive and affective components of country images. This allows for a systematic study of the role of affect in country-of-origin effects, and extends the

current literature, in which affective components of country-of-origin effects have been limited to specific cases of extreme emotions (e.g. Klein et al. 1998). The influence of country image on consumers' general image of a country's products within a category is represented by path 5 in figure 2.2. Consumers' cognitions and feelings about countries are subject to nationalistic bias, and we therefore expect these variables to be influenced by consumers' national identification (path 6 in figure 2.2).

When evaluating products, consumers combine country of origin with other information about the product. Our framework therefore distinguishes between consumers' general image of a country's products within a category, and their evaluations of specific products from a country of origin. Chapter five for example distinguishes between consumers' general image of Dutch tomatoes, and their evaluation of Dutch tomatoes as a branded product for which additional product information is presented. To evaluate a specific product from a country of origin, consumers combine their general image of a country's products within a category with other available information (paths 7 & 8 in figure 2.2). In addition, country of origin may act as a source variable, affecting the processing and evaluation of other product information (path 9).

Figure 2.3. Illustration of thesis framework



For purpose of illustration, figure 2.3 applies the framework to a French consumer's evaluation of an Audi A4. This evaluation will be based on information about the A4 (e.g., brand image, mileage, price), but also on the general image of German cars (paths 7 & 8). The image of German cars may also moderate the impact of product information on product evaluation. For example, a favorable image of German cars might lead the consumer to question the validity of negative information on the Audi A4 (path 9).

The consumer's general image of German cars in turn, might be based on several forms of prior experience: they may have owned a German car or recall a recent article on German automobiles in a car magazine (path 4). In addition, the consumer may have negative feelings toward Germany, or think that Germans are very competent workers. These cognitions and feelings influence the consumer's general image of German cars (path 5). Furthermore, this French consumer's general image of German cars could be influenced by his or her identification with France. If being French is important to this consumer, evaluations of foreign countries would be negatively biased (path 6), and a similar influence would occur for foreign products like German cars (path 1). Independent of this, strong identification with the own country contributes to beliefs about the morality of buying foreign products instead of domestic (French) alternatives (consumer ethnocentrism - path 3). Such beliefs would negatively impact the general image of German cars (path 2).

The above-discussed framework organizes the studies described in the remainder of this thesis. By filling in this framework, chapters three, four and five contribute to our knowledge on the how and why of country-of-origin effects. Chapter three investigates paths 1, 2, and 3 of our model. Paths 1 to 6 are studied in chapter four, while chapter five deals with paths 7, 8, and 9. In chapter six, which concludes this dissertation, the main research results are summarized and key conclusions are given. This chapter will also be used to suggest some areas where additional research might help to further increase our understanding of country-of-origin effects.

Appendix 2 A: Country-of-origin studies used in the meta-analysis

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CHAPTER 3

HOME COUNTRY BIAS IN THE EVALUATION OF DOMESTIC AND FOREIGN PRODUCTS: THE ROLE OF NATIONAL IDENTIFICATION

3.1. Introduction

In this chapter, we examine what is perhaps the most basic issue in country-of-origin research, viz., the distinction between domestic and foreign goods, and its implications for consumer product evaluation. In his review of the literature on country-of-origin effects, Samiee (1994, p. 582) concluded, "there tends to be a preference for domestically produced products". Of course, this does not imply that consumers never choose foreign products instead of domestic ones. There may exist for instance superior foreign brands, or domestic alternatives may not be available within a certain category (cf., Papadopoulos, Heslop and Bamossy 1990). Home country bias should be conceptualized as a positive "distortion" in the perception and evaluation of domestic products, which may be paired with a negative distortion in the evaluation of foreign alternatives. Needless to say, home country bias is not always strong enough to overcome all quality differences that might exist between foreign goods and domestic alternatives. Rather, in cross-national research such a bias might result in the observation that goods from a particular country are rated more positively by consumers in its home country than in any other country, as found in a recent 15-country study by Papadopoulos et al. (2000).

Home country bias constitutes a mental barrier for the success of imported goods, and can be used as a protectionist instrument. This line of reasoning underlies "Buy National" campaigns, i.e., campaigns aimed at promoting the sales of domestically produced goods. Such campaigns are running (or have recently run) in countries across the world, including the US, Great Britain, Australia, France and India. They are often sponsored by governments or organizations related to business and industry. In addition, "buy national" may be sponsored by organized labor (e.g., "Union made in the USA") or consumers. An example of the latter is the "Made in the USA Foundation", which represents 60,000 members, and aims to promote the purchase of American goods by American citizens. For each of these parties, buy national campaigns are a means to increase the favorability of consumers' attitudes toward domestic goods, which is

thought to be beneficial to domestic economy, and to the preservation of jobs in the own country. Frank (1999) describes how this viewpoint is a major force in the U.S., which can be traced back to the Boston Tea Party. The ratification of international free trade agreements makes it more difficult to take formal protectionist action, and this development is hence likely to increase the importance of informal instruments such as buy national campaigns. Recently, Clarke, Owens and Ford (2000, p. 115) stated that "In the U.S.A., there are many attempts to affect consumer purchase behavior through such non-tariff barriers as "Buy National" campaigns".

In line with the protectionist character of buy national campaigns, Engel, Blackwell and Miniard (1995) note: "In this age of intensifying international competition and the loss of many manufacturing jobs to cheaper foreign labor, it is not surprising that the country in which a product is produced has become an important consideration among many American consumers. Some companies have tried to capitalize on this concern by emphasizing that their product is *Made in the U.S.A.*" (p. 210). But home country bias may represent more than a desire to support domestic economy, or a fear of loosing jobs to foreign competitors. According to the made in the USA Foundation (2001), buying national "...[instills] a pride in US citizens about our economy and our manufacturing process". In line with this, Papadopoulos et al.(1990) note that affective feelings toward the home country are a strong influence in consumers' evaluations of domestic goods versus foreign alternatives. Similarly, Botschen and Hemetsberger (1998) found that pride is associated with purchase and ownership of domestic products. Home country bias bears close resemblance to the social-psychological concept of ingroup bias, viz. "the phenomenon that people tend to favor their own group over relevant comparison groups" (Jetten, Spears and Manstead, 1999, p.107). Ingroup bias is an oft-studied topic in social psychology, and has been found to occur in many different forms. Positive bias has been found in ratings of the own group and its members versus other groups and their members (Mullen, Brown and Smith 1992). Ingroup bias occurs when people are asked to describe the own group in terms of typical features (Ellemers, van Rijswijk, Roefs and Simons 1997), and may also take the form of positively biased interpretations of current and historical events in which the own group and its members play a role (Kowalski and Wolfe 1994). Finally and most relevant to this study, ingroup bias is found when people are asked to judge of the achievements and performance of the own group versus those of other groups (Hinkle and Schopler 1979, Brown, Collins and Schmidt 1988).

Ingroup bias is often studied from the perspective of social identity theory, in which ingroup bias is regarded as a consequence of group identification (Tajfel 1981). We will elaborate on this theory in section two of this chapter. In the current study, social identity theory and the concept of ingroup bias are applied to international marketing. We examine whether the economic perspective, which is captured by Shimp and Sharma's (1987) concept of consumer ethnocentrism should be supplemented with this social psychological perspective to increase our understanding of home country bias. After providing an introduction on social identity theory, we derive a set of hypotheses that relates this theory to consumers' preferences for domestic and foreign products. Subsequently, we report on an empirical test of these hypotheses, and we end the paper with a discussion of our findings and their implications.

3.2. Theoretical Framework

3.2.1. The economic perspective on home country bias: consumer ethnocentrism

As noted earlier, the marketing literature on home country bias has predominantly taken an economic perspective on this phenomenon. At the consumer level, this perspective is embodied by Shimp and Sharma's (1987) concept of consumer ethnocentrism. Consumer ethnocentrism represents a belief that it is inappropriate or even immoral to buy foreign products. According to Shimp and Sharma (1987, p.280) "From the perspective of ethnocentric consumers, purchasing imported products is wrong because, in their minds, it hurts domestic economy [and] causes loss of jobs...". In other words, consumer ethnocentrism forms a primarily economic motive for preferring domestic products to foreign alternatives. Consumers with higher levels of consumer ethnocentrism hold more favorable attitudes toward domestic products, and less favorable attitudes toward foreign products (Shimp and Sharma 1987, Sharma, Shimp and Shin 1995, Klein et al. 1998), although this relationship is not always significant (Netemeyer, Durvasula, and Lichtenstein 1991, Herche 1992). In line with its protectionist background consumer ethnocentrism is stronger in regions and industries where employment is threatened by foreign competition. In addition, consumer ethnocentrism is stronger for lower classes (Shimp and Sharma 1987). These relations reflect the fact that consumer ethnocentrism is based on consumers' desire to protect the own country's economy.

H1a: Consumers' willingness to purchase domestic products increases with the level of consumer ethnocentrism.

H1b: Consumers' willingness to purchase foreign products decreases with the level of consumer ethnocentrism[2].

3.2.2. A socio-psychological perspective on home country bias: Social Identity Theory

Social identity theory deals with the psychological consequences of dividing people into social groups or categories. The theory is based on the results of a number of studies conducted within a minimal group paradigm (Tajfel 1981). Within this paradigm, researchers create meaningless ad-hoc groups in an experimental situation, and observe the ways in which people behave toward the own group and toward the other group. In a seminal study, Tajfel, Flament, Billig and Bundy (1971) found that the division of people into minimal groups results in ingroup favoritism, a finding that has been replicated in several other studies (Brewer 1979). Tajfel (1978) argued that the division of people into groups creates a social identity for them, which he defined as "that part of an individual's self-concept which derives from his [sic] knowledge of his membership in a social group ... together with the value and emotional significance attached to that membership" (Tajfel 1978, p. 63). With minimal groups, the salience of the social identity is limited to the experimental context in which the groups are created, but social identities associated with real-life groups are likely to have a more permanent character. Nevertheless, the value and significance that is attached to such groups will differ between groups and between people within groups. We will address this issue later on, when we discuss the notion of countries as social groups.

The social identity that is derived from an individual's membership in a social group is a part of the self. Mackie and Smith (1998, p. 512) argue that "the *incorporation of the ... group as part of the self* is more than an appealing metaphor: Instead it is a fundamental truth about psychological representations of the self and other". Social identity theory assumes that individuals are motivated to maintain a positive self-image. This assumption is consistent with most theories on the self and self-perception, in which the motivation to maintain a positive self image is viewed as a

[2] Because this study is concerned with willingness to purchase rather than purchases themselves, H1a and H1b are posed as separate hypotheses. When actual purchasing behavior (or simulations thereof) in a specific category is studied, these two hypotheses would combine into one (this also applies to H2a and H2b).

strong and universal characteristic of human nature (e.g. Jones 1973, Leary and Baumeister 2000, Tesser 1988). Combined with the premise that group membership creates a social identity which is part of the self, this motivation results in "a need for positive social identity, expressed through a desire to create, maintain or enhance the positively valued distinctiveness of ingroups compared to outgroups on relevant dimensions" (Turner 1999, p.8). This combination of ideas lies at the heart of social identity theory, and establishes a rationale for the existence (and persistence) of positive ingroup bias.

The extent to which group members identify with a particular group (i.e., the extent to which this group becomes part of the self) differs between individuals. These differences in identification may be related for example to individual differences in the need to belong, but also to differences in group members' position or role in the group, or to differences in other facets of the self (cf., Phinney 1990, Brown 2000). Whatever their cause, these individual differences in the strength of group identification are likely to create differences in the strength of ingroup bias. When an individual identifies more strongly with a particular group, evaluations of this group will have a stronger impact on the self. It is therefore likely that the individual displays a stronger bias in evaluations of this group versus relevant outgroups. This was supported in a recent meta-analysis, which found an overall correlation between identification and ingroup bias of .23 (Brown 2000).

3.2.3. National identification: Countries as social groups

In more than one way, countries can be considered as social groups that are associated with a significant social identity. Illustratively, Tajfel based his definition of a social group as a "body of people who feel that they are a group" on Emerson's view of a nation (Tajfel 1978). Various theorists have argued that nations can be seen as communities, whose members form a social group (e.g., Giddens 1981, Billig 1995). Giddens (1981) stated for example that a nation's inhabitants have "an overall awareness ... of belonging to an inclusive community with a certain identity". Nationality and citizenship are more or less concrete criteria for group membership, and can be used to delineate ingroup and outgroups. The value and significance of the social identity that is associated with the home country is reinforced in many aspects of the daily life, such as language, cultural products, and valuta, as well as in symbols like the national flag (Billig 1995). These daily reminders of national identity, as well as its omnipresence in education and mass media, provide a continuous reinforcement of the

feeling of belonging to a national group (Billig 1995). Other forces adding significance to countries as social groups include their role as sovereign political, legal and social systems, and the existence and importance of national cultures. According to Hofstede (1991, p. 12) national cultures create "... a considerable amount of common mental programming of their citizens", which can be ascribed to a relatively similar history, language, political, legal, and educational environment, among others.

Studies that successfully applied the social identity framework to countries include Feather (1981), Kowalski and Wolfe (1994), Doosje, Branscombe, Spears and Manstead (1998). The findings of these studies indicate that people identify with their own country (referred to as "national identification"), and display a positive ingroup bias toward this group. The level of national identification differs between individuals, which leads in turn to individual differences in the extent to which evaluations of the own country versus other countries are biased in favor of the own country (Doosje et al. 1998, Duckitt and Mphuting 1998). We contribute to this literature by examining the effect of national identification on consumers' preferences for domestic and foreign products.

The relationship between national identification and nationalistic ingroup bias can be translated straightforwardly into a marketing context, in order to derive a social psychological rationale for home country bias. The view of countries as social groups implies that domestic products are seen as own group products, toward which group members will have a positive bias. As noted earlier this does not necessarily imply that consumers always prefer domestic products over foreign alternatives. Product preferences are based on perceptions of actual products that may differ in their objective characteristics. Hence there may be cases where "objective" differences in for example price or quality result in a preference for foreign products. Although consumers' perceptions of these attributes can of course be biased in favor of domestic alternatives, this bias may not be strong enough to entirely compensate the shortcomings of domestic products (for a similar argument in a social psychological context, see Ellemers et al. 1997). However, as the strength of home country bias will increase with the strength of a consumer's national identification, consumers with a higher level of national identification should indicate a greater willingness to purchase domestic products, and a smaller willingness to purchase foreign products.

H2a: Consumers' willingness to purchase domestic products increases with the level of national identification.

H2b: Consumers' willingness to purchase foreign products decreases with the level of national identification.

3.2.4. Differences in the effects of national identification and consumer ethnocentrism

From social identity theory (Tajfel 1981) it follows that a positive bias in the evaluation of products made by the own group is a means to enhance group- and self-esteem. In this way national identification creates a social psychological motive for home country bias, resulting from the consumer's desire to maintain a positive social identity. Consumer ethnocentrism on the other hand offers an economic perspective on home country bias. Thus, national identification and consumer ethnocentrism are both related to home country bias, but these influences are based on different mechanisms. The effect of national identification on product preferences is based on the desire to maintain a positive social identity, while the effect of consumer ethnocentrism is based on the desire to protect the own economy. Because of the different origins of these two mechanisms, they offer complementary means to explain and predict consumers' willingness to purchase domestic (versus foreign) products. National identification has an effect on consumer preferences that is not captured by consumer ethnocentrism. This does not mean that these two constructs are not related to each other. Importantly the desire to protect the own country's economy will be stronger when consumers attach greater value and significance to their own country. When national identification is higher, consumers will attach more importance to their home country, and feel more strongly attached to other members of the national group. Accordingly, they will have a stronger desire to protect this group in an economic sense. In other words, higher levels of national identification will be paired with stronger consumer ethnocentrism. Given the differences in underlying psychological mechanisms, we do not expect that consumer ethnocentrism mediates the effect of national identification on willingness to purchase domestic and foreign products. We therefore hypothesize:

H3: Consumer ethnocentrism increases with the level of consumers' national identification.

H4: The impact of national identification on consumers' willingness to purchase domestic (respectively foreign) products is not mediated by consumer ethnocentrism.

3.3. Method

3.3.1. Data collection

Five hundred questionnaires were distributed among consumers in shopping centers across The Netherlands. Consumers were asked to participate in a survey. Upon agreement, they were handed over a questionnaire, and asked to fill it out at home and return it by mail. A total of 209 questionnaires were returned (response rate = 42%). Before analyzing the data, cases were screened to see whether respondents had appropriately filled out the questionnaire. For each respondent we calculated the variance in the ratings provided on all 12 dependent measures (four products, three countries). If this variance was equal to zero (meaning that all items were given exactly the same score), or if the questionnaire contained missing values, the respondent was omitted. Following this procedure 23 questionnaires were discarded. This left us with 186 usable questionnaires. Demographic information is provided in table 3.1. Although our sample is not representative of the Dutch population, it shows considerable variation in terms of demographics, which contributes to the generalizability of our findings.

Table 3.1: Sample demographics

Gender *			
Male	91		
Female	94		
Age *		*Education*	
18--29	52	Elementary	3
30--39	41	High school	63
40--49	51	Vocational	36
50--59	33	College/University	84
60 and over	8		

* *One missing observation*

3.3.2. Measurement instrument

Questionnaires were distributed together with a return envelope and an introductory letter. The questionnaire started with an introduction that informed respondents about the content of the questionnaire, and provided instructions for filling out and submitting the questionnaire. The introduction was followed by questions about the countries and

their products. Measures of national identification, consumer ethnocentrism and demographics were placed at the end of the questionnaire.

3.3.3. Measures

The questionnaire included four items that measured consumers' willingness to buy several products (viz., apples, tomatoes, refrigerators and CD-players) from each of three countries (i.e., The Netherlands, France and Germany). These items were worded as " I prefer to buy [tomatoes] from [The Netherlands]". For each product and country, respondents indicated their agreement with this statement on a 7-point scale, running from "not agree at all" to "completely agree". Analysis of variance on the means for these items shows that these scores differ significantly among countries ($F(2,184) > 54$, $p < .001$), which indicates that consumers could distinguish between the product offerings from the different countries. Our choice for these products was motivated by the fact that they differ widely in terms of price and complexity, and represent a distinction between branded goods (refrigerators and CD players), and unbranded goods (apples, tomatoes).

National identification was measured with four items based on measures used by Feather (1981) and Doosje et al. (1998). Items included were "*Being Dutch means a lot to me*", "*I am proud to be Dutch*", "*When a foreign person praises The Netherlands, it feels like a personal compliment*", and "*I don't feel any ties with The Netherlands*" [recoded]. Our measure for consumer ethnocentrism was a shortened version of the CETSCALE that had been validated in an earlier study conducted among more than 3000 consumers across the EU (Steenkamp, ter Hofstede and Wedel 1999). The five items were, "*Dutch people should not buy foreign products, because this hurts Dutch business and causes unemployment*", "*It is not right to purchase foreign products, because this puts Dutch people out of jobs*", "*A real Dutchman should always buy Dutch products*", "*I always prefer Dutch products over foreign products*" and "*We should purchase products manufactured in The Netherlands, in stead of letting other countries get rich off us*". Discriminant validity and reliability of the scales used to measure consumer ethnocentrism and national identification were further analyzed in a CFA. A two-dimensional measurement model showed a reasonable fit to the data [$\chi^2(26)=88.18$ ($p < .01$), CFI=.91, GFI=.91], and was a substantial improvement over an alternative model combining the two constructs into a single measure [$\chi^2(27)=423.0$ ($P < .01$), CFI= .44, GFI= .60]. Factor loadings for the two constructs ranged between .48

and .85 (median = .77). The correlation (phi) between the latent variables was equal to .13, which differs substantially from 1, indicating discriminant validity. Both measures were reliable, with composite reliabilities of .83 for national identification, and .85 for consumer ethnocentrism.

3.4. Results

The mean values for consumers' preferences for products from each of the three countries (as shown in table 3.2) suggest the presence of home country bias in these ratings. For all products, mean preferences are highest for goods made in The Netherlands (home country). Of the two countries, France is the nearest competitor for apples and tomatoes, but the differences in preferences for French and Dutch products are fairly large (apples: 5.89 versus 4.08, tomatoes: 5.24 versus 4.34). For refrigerators and CD-players, Germany is the nearest competitor, and the differences in preferences are somewhat smaller for these goods (refrigerators: 5.41 versus 5.12, CD-players 5.61 versus 4.69).

Table 3.2: Willingness to buy: mean and standard deviation by country of origin

	Netherlands	France	Germany
Tomatoes	5.24 (1.84)	4.08 (1.88)	3.33 (1.54)
Apples	5.89 (1.42)	4.34 (1.60)	3.60 (1.52)
Refrigerators	5.41 (1.48)	3.47 (1.39)	5.12 (1.79)
CD-Players	5.61 (1.41)	3.79 (1.37)	4.69 (1.68)

To determine the influences of consumer ethnocentrism and national identification on consumers' willingness to buy foreign and domestic products, we first conducted a series of univariate regression analyses in which willingness to buy was separately regressed on national identification and consumer ethnocentrism for each of the products, and each of the countries. These analyses offer tests of Hypotheses 1a and 1b (consumer ethnocentrism), and hypotheses 2a and 2b (national identification).

Table 3.3: Influence of consumer ethnocentrism on "Willingness to buy"

	Consumer Ethnocentrism		
	Netherlands (β)	France (β)	Germany (β)
Tomatoes	.194 *	-.102	-.080
Apples	.221 *	-.058	-.089
Refrigerators	.043	-.058	-.033
CD-Players	.168 *	-.002	-.033

* *Significant at p < .05*

The results in table 3.3 show the influence of consumer ethnocentrism on consumers' willingness to buy domestic and foreign products. A significant positive effect of consumer ethnocentrism is found on willingness to buy domestic tomatoes, apples, and CD-players. A nonsignificant positive effect is found for willingness to buy refrigerators from the own country. These results support H1a. For the impact of consumer ethnocentrism on willingness to buy foreign goods, we find nonsignificant negative effects for all German and French products. These effects are directionally consistent with H1b, but not strong enough to support this hypothesis.

Table 3.4: Influence of national identification on "Willingness to buy"

	National Identification		
	Netherlands (β)	France (β)	Germany (β)
Tomatoes	.253 *	-.156 *	-.070
Apples	.158 *	-.147 *	-.001
Refrigerators	.274 *	-.098	-.020
CD-Players	.343 *	-.003	-.072

* *Significant at p < .05*

Table 3.4 shows the influence of national identification on consumers' willingness to buy domestic and foreign products. This influence is significant for all four domestic products, which strongly supports H2a. Table 3.4 also shows significant negative effects

of national identification on willingness to buy tomatoes and apples from France. The other effects of national identification on willingness to buy foreign goods are not significant, although all of these effects are negative, which is consistent with H2b.

Hypothesis 3 proposes a positive influence of national identification on consumer ethnocentrism. Regressing consumer ethnocentrism on national identification, we find $\beta = .177$ ($t = 2.45$, $p < .05$). This positive effect of national identification on consumer ethnocentrism confirms H3. Hypothesis 4 states that consumer ethnocentrism does not mediate the influence of national identification on consumers' willingness to buy foreign and domestic products. According to Kenny and Baron (1986) mediation occurs when an independent variable X (i.e., national identification) influences a mediating variable Y (i.e., consumer ethnocentrism), which in turn influences a dependent variable Z (willingness to buy foreign and domestic products, respectively). Partial mediation occurs when the indirect effect of X on Z is supplemented by a direct influence of X on Z, which is not mediated by Y.

Given the relationships tested above (and stated in H1-3), the crucial test of mediation is to examine whether the influence of national identification on willingness to buy decreases when willingness to buy is regressed simultaneously on national identification and consumer ethnocentrism. Strictly taken, this test is necessary only for willingness to buy tomatoes, apples and CD-players from the Netherlands, since willingness to buy other products is not significantly influenced by consumer ethnocentrism. Moreover, for all German products, and for CD-players and refrigerators from France, we find no significant effects of national identification on willingness to buy. For sake of completeness however, table 3.5 shows the results of the multivariate regressions for all four products from each of the three countries.

Table 3.5: Regressions of both variables on willingness to buy

	Consumer Ethnocentrism	National identification	% mediation
Netherlands	β	β	
Tomatoes	.156 **	.227 **	1.8
Apples	.199 **	.123 *	22.3
Refrigerators	-.005	.275 **	0
CD-Players	.112 **	.324 **	5.8
France			
Tomatoes	-.078	-.143 *	8.8
Apples	-.033	-.141 *	4.0
Refrigerators	-.041	-.091	14.8
CD-Players	-.001	-.002	8.1
Germany			
Tomatoes	-.070	-.058	17.6
Apples	-.091	.016	0
Refrigerators	-.031	-.014	28.2
CD-Players	-.047	-.080	9.4

* *Significant at p < .10;* ** *significant at p < .05*

Table 3.5 shows that the influence of national identification on willingness to buy domestic products remains significant for tomatoes, apples, refrigerators, and CD-players. The negative effects of national identification on consumers' willingness to buy French tomatoes and apples also remain significant when consumer ethnocentrism is added as a predictor. These results indicate that the positive influence of national identification on willingness to buy domestic products is not mediated by consumer ethnocentrism (H4). In other words, national identification has a direct effect on willingness to buy, apart from its indirect effect through consumer ethnocentrism. To establish the relative contributions of direct and indirect effects of national identification we calculated the percentage of mediation. This can be obtained by dividing the direct effect of national identification on willingness to buy (i.e., the β's in the third column of

table 3.5.), by the total effect of national identification on willingness to buy. This total effect is equal to the sum of the direct effect and the indirect effect, which is equal to the effect of consumer ethnocentrism on willingness to buy, multiplied by the effect of national identification on consumer ethnocentrism. The results of this calculation are given in the fourth column of table 3.5. These values (which are all lower than 30%) confirm that consumer ethnocentrism does not mediate the effects of national identification on willingness to buy foreign for domestic products.

3.5. Discussion

Consumers have been found to display a positive home country bias in their willingness to buy domestic or foreign products. In this paper, we examined two personality variables that have an impact on the strength of this phenomenon. These variables are related to two different motives for home country bias. The first variable is consumer ethnocentrism, which is a well-known construct in the field of marketing. Consumer ethnocentrism reflects consumers' desire to protect domestic economy and employment. We find that consumer ethnocentrism has a positive impact on consumers' willingness to buy domestic products in different product categories. The second variable is national identification, which has received less attention from marketing researchers. National identification reflects the desire for a positive national identity, which is created by the need for a positive evaluation of private and social selves. This study is the first to show that national identification positively affects consumers' willingness to buy domestic products. The results indicate that there is a moderately strong positive relationship between national identification and consumer ethnocentrism. Nevertheless we find that the two variables exert distinct influences on the willingness to buy domestic products, supporting the notion of two different motives for home country bias.

We investigated the impact of national identification and consumer ethnocentrism on willingness to buy for both foreign and domestic products. We noted that these two variables positively affect willingness to buy domestic products. In addition, we postulated a negative effect of these variables on consumers' willingness to buy foreign products. The findings however, offer limited support for this hypothesis. For national identification, this finding can be understood from social identity theory's view of ingroup bias as an instrument to enhance one's esteem of the own group, and ultimately, as an instrument to enhance one's self-esteem. Obviously, a positive bias in perceptions

of the own group is much more effective to this end than a negative bias in perceptions of other groups. The review by Brewer (1999) shows that most of the empirical studies on ingroup bias have found this asymmetry between "ingroup love" and "outgroup hate", and it has been noted that "... ingroup bias is largely a function of ingroup enhancement rather than outgroup derogation." (Crocker, Thompson, McGraw and Ingerman 1987, p. 915).

Also, it should be noted that we have examined negative effects of consumer ethnocentrism and national identification on willingness to buy products from specific foreign countries. It may be that consumers do not view these particular countries as competitors that threaten the home country's economy, or its positive social identity. This corresponds to the notion of Brewer (1979) who has argued that evaluation of outgroups and their products does often not produce a negative bias, because the setting lacks the direct competitive context that can be observed in "zero sum" games, such as the distribution of rewards between ingroups and outgroups. Similar arguments have been forwarded by Hinkle and Brown (1990) who proposed a distinction between competitive and cooperative groups. This latter distinction might be especially relevant in the present context, in which home country and foreign countries are all members of the European Union. Interestingly, separate studies have supported the establishment of a significant European identity (Cinnirella 1997), and a positive bias of Europeans towards products "made in the EU" (Schweiger, Häubl, and Friederes 1995).

National identification may be a useful variable to include in market research that is conducted to develop and evaluate international marketing strategies. Our study shows that individual differences in the strength of national identification can be assessed effectively with a short multi-item scale, and that these differences have considerable impact on evaluations of domestic versus foreign products. These findings make national identification a construct that is useful for targeting segments that are sensitive to "nationalist" appeals. When used in conjunction with the CETscale, it could increase the effectiveness of such segmentations.

Social identity theory and the concept of national identification also shed light on findings of other studies. For example, social identity theory can be used to understand the preference for foreign goods that has been found in developing economies (e.g., Okechuku and Onyemah 1999). The theory proposes that people who are part of a negatively valued ingroup may engage in social mobility to enhance their social identity. Social mobility involves consumers leaving or dissociating themselves from a negatively valued ingroup, and associating with a positive ingroup instead (Jackson et

al. 1996, Tajfel 1981). In fact, it has been shown that the consumption of foreign goods associates consumers in developing countries with a modern "western" life style that is admired by (some of) them, and that this "admiration" can be used to partially explain these consumers' preferences for foreign goods (Batra et al. 2000). This finding is in line with the "social mobility" strategy that has been proposed by Tajfel (1981).

Social identity theory might also be used to understand the implications of the fact that consumers often identify themselves with multiple national or ethnic groups. These multiple identities may become more influential as western countries becoming more multicultural with the continuous influx of foreign consumers. Interestingly, a recent study of Dowley and Silver (2000) indicates that higher levels of ethnic or subnational identification are not necessarily paired with lower levels of national identification. Along the same lines, Cinnirella (1997) found a positive relationship between Italians' identification with their country and with the European Union.

A final avenue that might be worth exploring is the issue of situational differences in national identification (cf., Turner 1999). The situational differences can be understood when we realize that a particular group-membership may be important in one situation but unimportant in other situations. For most of us, for example, the salience of our national identity substantially increases when we attend a match between a national sports team and that of a neighboring country. In a similar vein, Stayman and Deshpande (1989) forwarded the notion of situational ethnicity, which implies that ethnicity is not a static demographic variable, but rather a feeling, which may be amplified in one situation and attenuated in another. Marketing actions, such as advertising might be used to enhance (temporarily) the strength of national identification, for example at the point of purchase. Areni, Duhan and Kiecker (1999) demonstrate how such an approach can have a positive impact on purchase likelihood.

CHAPTER 4

COUNTRY IMAGES AND PRIOR EXPERIENCE AS ANTECEDENTS OF COUNTRY-OF-ORIGIN EFFECTS

4.1. Introduction

In apparent contradiction with the sizeable interest in country-of-origin effects and the processes that underlie this phenomenon, there has been little research into the antecedents of country-of-origin favorability. As a result, there is no general framework available that is able to explain why a particular country-of-origin has a positive or negative effect on product evaluations. The present chapter addresses this gap, and relates consumers' evaluations of products to beliefs and feelings toward the products' origin countries. This study makes several contributions to the literature on country-of-origin effects.

First of all, we will focus not only on consumers' (cognitive) beliefs regarding country of origin, but also investigate the role of emotions and feelings attached to it. This issue has been largely neglected in previous country-of-origin research, although some studies indicate that country of origin can have emotional and symbolic connotations (Fournier 1998, Klein et al. 1998). Second, several studies have examined how consumers' perceptions of countries and their products are subject to home country bias. In chapter three of this thesis it was shown that this bias can be seen as a form of ingroup bias, viz., the tendency to favor the own group over other groups. This point is reiterated in the present chapter, which incorporates consumer ethnocentrism (Shimp and Sharma 1987), and national identification as individual-level variables that underlie country-of-origin effects. The remainder of this chapter is structured as follows: First we discuss different types of information associated with country of origin, and the role of ingroup bias. After that we discuss the dependent variables in our study. It has been suggested that country-of-origin effects operate differently on different stages within the process of consumer product evaluation (e.g., beliefs, attitudes – see chapter two). We briefly discuss differences between these variables, and propose a conceptual model that specifies the effects of country of origin on beliefs and attitudes toward specific products. From this model we derive hypotheses that are tested using data collected in The Netherlands. The results of this test are discussed in the final section of this chapter.

4.2. The information associated with country of origin

Beliefs about the relationship between product attributes and a cue like country of origin are based on perceived relationships between cue and attribute. For country of origin, a distinction may be made between beliefs based on information about products from a country, and beliefs based on information about the country itself. The former refers to prior experience with the product coming from this particular country of origin, while the latter refers to consumers' country images. This distinction has been discussed earlier in chapter two (section 2.6). Below we will elaborate first on country image, and then on prior experience.

4.2.1. Country images

Country images allow consumers to make inferences about a product's attributes, even in the absence of actual experience with a product-country combination. Building on Roth and Romeo (1992) we reason that the favorability of the country of origin in such a context is determined by the extent to which the perceived strengths of a country match the product's key attributes. When the country of origin is "fitting" and favorable, a valuable marketing strategy may be to emphasize the country of origin. An example is the recent European introduction of *"Clearly Canadian"* mineral water. European consumers' are not familiar with Canadian mineral water, but the key attributes of this product match the image of Canada as "natural" and "rugged".

4.2.1.1. Cognitive content of country images

Several studies have found that country-of-origin effects are related to the "structural features" of the country of origin. Manrai, Lascu and Manrai (1998) found that product evaluations were most favorable for highly developed countries, and least favorable for developing countries, with newly industrialized countries falling in between. The meta-analysis in chapter two showed the generalizability of this result across products and countries. Wang and Lamb (1983) found relations between product evaluations and a broader set of structural features that included economic, cultural and political characteristics. Unfortunately, the value of such findings is limited to the extent that these studies have assessed the structural features of the countries of origin through expert opinions or factual data (e.g., GDP/capita), while consumers rely on their subjective impressions of the structural features of country of origins. It therefore seems

relevant to examine how product evaluations are affected by consumers' perceptions of the structural features of the country of origin.

But what features should be included? In psychology, several studies exist that examine the structure of people's perceptions of countries. In these studies, perceptual mapping is applied to uncover the dimensional structure of these perceptions of countries. This exploratory technique produces different results for different studies. For example, Wish, Deutsch and Diener (1970) found dimensions of "political alignment", "economic development", "geography & population", and "culture & race", while Forgas and O'Driscoll (1984) found dimensions of "development", "capitalism" and "European". A summary of the dimensions uncovered in such studies can be found in appendix 4A. Recent qualitative studies using laddering and in-depth interviews find even more complex structures (Askegaard and Ger 1997, Iacobucci 1998). Although such studies are insightful, it seems beneficial to develop a more standardized structure and content of country images. In this way, findings can be generalized across countries and consumers, which facilitates the study of the role of country images in consumer product evaluations.

Within the cognitive component of country image, we propose a distinction between geographic aspects and human aspects. A similar distinction has been made in other areas in the social sciences (Billig 1995, Giddens 1981, Schooler 1996). Geographic and human aspects are each operationalized by two dimensions that are expected to be relevant for consumers' perceptions of products from different countries. This operationalization is not meant to be comprehensive, but aims to capture those aspects of the country image relevant to our study of country-of-origin effects. It is also important that these aspects can be measured with an instrument of reasonable length.

The proposed dimensions of country image are based on a review of the relevant literature (see appendix 4A), as well as a series of pretests. These pretests were conducted in two sequential steps. First of all, group discussions with Dutch consumers, on the topic of country images were conducted, in order to extend and adapt the list of items that was obtained through our literature review. Second, a series of four smaller-scale mail survey studies was conducted among different student and non-student samples. These survey studies were used to (1) assess the underlying dimensions of country images, and (2) to obtain a manageable and coherent set of items measuring all relevant dimensions.

Geography as a component of country images

Although technological developments have lead to a decrease of the importance of geographic characteristics of countries for that country's competitive position, they remain particularly significant in areas such as food and tourism. Moreover, (visual) impressions of a country's geography are an important component of the overall image of the own country and foreign countries (Hooson 1994). A review of relevant literature, combined with insights obtained in group discussions on country perceptions suggested that climate and landscape are two central components within this set of perceived "geographic features". Climate involves consumers' impressions of the temperature, and the amounts of sunshine and precipitation. Impressions of the climate in the country of origin may underlie consumer preferences for Spanish oranges or French wine (Delagneaux 1985). Landscape includes the perceptions of the nature and scenery in a country. Askegaard and Ger (1997) found that consumers' perceptions of the taste and quality of Danish foods were associated with their impressions of Denmark as an unspoiled and natural country.

The human component of country images

The concept of national character, defined as "enduring personality characteristics and patterns that are modal among the adult members of the society" (Inkeles and Levinson 1969, p.428), has received considerable attention from social psychologists. Clark (1990) reviewed the potential of this concept in the context of international marketing. In the course of research on this topic, the focus of investigators has gradually shifted from the "modal personality" to stereotypical trait perceptions. A large number of studies document how people stereotype national groups in terms of personality traits (e.g., Eagly and Kite 1987, Linssen and Hagendoorn 1994, Leyens, Yzerbyt and Schadron 1994)[3].

Several studies (Rosenberg, Nelson and Vivekananthan 1968, Eagly and Kite 1987, Wojcizske 1994) have shown that perceptions of personality traits can be divided

[3] National character and national stereotypes are different from the concept of national culture, although all terms are used to capture "typical" characteristics of different nationalities. The difference between the concepts lies in the type of characteristics that they relate to: National culture is defined as the "collective programming of the mind which distinguishes [people from one country] from those of another" (Hofstede 1991, p.5), and describes nationalities by means of their values. National character describes nationalities in terms of personality traits (Inkeles and Levinson 1969), and should be regarded as the proper counterpart of national stereotypes, which refer to generalized beliefs regarding traits of people from (foreign) countries (Eagly and Kite 1987).

into traits that relate to (intellectual) abilities, and traits that relate to social abilities and likability. In the present study, we will focus on the former group of traits, which seem to be most relevant for making inferences about the quality of a country's products. In fact, consumers have been found to explicitly relate the perceived quality of a product to perceptions of the competence and skills of the people in the product's country of origin (Li and Monroe 1992, Shimp et al. 1993). We investigate perceptions of two types of skills: competence and creativity. Perceived competence refers to the extent to which individuals are thought to possess traits that are instrumental to achievement and goal attainment (Wojciszke 1994). Competence-related traits like perceived efficiency have emerged in studies of the stereotypical perception of people from different nationalities (Eagly and Kite 1987, Linssen and Hagendoorn 1994). Creativity has been defined as the ability to come up with novel and unconventional ideas. It represents fluency and flexibility of thinking, and includes artistic ability and imaginativity (Sternberg 1985). Note that the dimensions of competence and creativity parallel important product-related perceptions of workmanship and design (Roth and Romeo 1992).

4.2.1.2. Affective content of country images

Next to beliefs, country images include consumers' feelings toward a country (Leyens et al. 1994, Alexander, Brewer and Herrmann 1999). Feelings toward a country may be based on a history of conflict or cooperation between the own country and a foreign country (Klein et al. 1998), but also on idiosyncrasies like family relations, international friendships, and memories of vacations. Countries have been found to evoke a variety of affective responses[4], including anxiety, hostility, sympathy and interest (Dijker 1987, Eagly, Mladinic and Otto 1994). There have been several studies that show how feelings contribute significantly to the prediction of intergroup attitudes, even when the effect of beliefs has been accounted for (Eagly et al. 1994). This notwithstanding, country-of-origin research has paid little attention to the role of feelings evoked by country of origin. An exception is a study by Klein et al. (1998), who found that negative feelings ("animosity") toward a product's country of origin can have a substantial effect on attitudes and purchase intentions. Qualitative studies by Fournier (1998) provide additional support for the notion that emotional responses to country of origin can affect product evaluations. Fournier found that brand loyalty can originate in

[4] A distinction between feelings, emotions and affect does not provide additional value to the present study. Hence, we will use the terms feelings, emotions and affect interchangeably (Mano and Oliver 1993).

consumers' emotional attachment to the brand's country of origin. A systematic study of the effect on product evaluations of feelings evoked by country of origin could assess the generalizability of these findings.

Feelings are often divided into positive and negative affect, a distinction which appears to capture the basic dimensions of the affective spectrum (Watson, Clark and Tellegen 1988). Studies employing more fine-grained classifications of emotions often find that these emotions ultimately reduce to two factors, one positive and one negative (e.g., Mano and Oliver 1993). Moreover, psychological and physiological research on emotions indicates that positive and negative affect are distinct types of responses, which differentially affect behavior, and emerge from separate neural systems (Cacioppo and Gardner 1999). The distinction between positive and negative feelings has been applied in the majority of consumer research dealing with emotional responses to advertising and consumption. We therefore distinguish between positive and negative feelings evoked by country of origin, and incorporate separate measures to assess them.

4.2.2. Prior product experience

Product use and trial, but also advertising, word-of-mouth, and information that is spread through various media provide consumers with information about brands and products. This information is processed and stored in memory, and retrieved when consumers make product judgments. Alba and Hutchinson (1987) noted that consumers gather product information through direct and indirect experience. The former refers to direct confrontations with a product, such as use and trial, and the latter refers to instances in which consumers do not experience the product themselves, but acquire product information via an intermediary. Indirect experience includes product information transferred from one consumer to another (word-of-mouth), and information disseminated on a larger scale, originating from corporate sources (advertising) or other sources (e.g., press). Presuming that consumers have direct and indirect experience with a product-country combination, a combination of both types of experience can be used to form an evaluation of a specific product-country combination.

4.3. Home country bias and national identification

The division of the world into countries naturally classifies people into "ingroup" (i.e., the own country) and "outgroups" (foreign countries). Those groups to which a person

thinks he or she belongs are ingroups, and all other groups are outgroups. Ingroups and outgroups are key concepts in social identity theory (Tajfel 1978, 1981). Chapter three provides an in-depth discussion of social identity theory and its implications for the evaluation of foreign and domestic countries and their products. Based on this theory, we propose that the perception of the own country as ingroup leads to a positive bias in the evaluations of the own country and its products. This is paired with a negative bias in the evaluation of foreign countries and products, although this latter bias is not always substantial (cf., chapter three). The combination of these biases is referred to as ingroup bias. The strength of ingroup bias is linked directly to the strength of national identification (Doosje et al. 1998, Duckitt and Mphuting 1998).

National identification is a social-psychological motive for home-country bias, which is rooted in the idea that a positive evaluation of products made by the own group (i.e., country) enhances group and self-esteem. As we have discussed and shown in chapter three national identification is also an antecedent of consumer ethnocentrism, a construct that reflects consumers' belief that purchasing foreign goods is harmful to the own economy. Consumer ethnocentrism may be regarded as an "economic motive" for preferring domestic products to foreign alternatives. Consumer ethnocentrism influences consumer preference for domestic vs. foreign products (Shimp and Sharma 1987), although the strength of relationship may vary and can be insignificant or absent for some countries or products (Netemeyer et al. 1991). As discussed in chapter three, national identification is a more central social-psychological construct that affects the evaluation of products, but also consumers' cognitions and feelings toward countries. Hypotheses about the different effects of consumer ethnocentrism and national identification on product evaluations are derived in our hypotheses section.

4.4. Product evaluations: Attitudes and beliefs

Consumer product evaluations form a chain of judgements that runs from attribute perceptions via attitudes to purchase intention or likelihood (Fishbein and Ajzen 1975, Dodds and Monroe 1991). Several studies have shown that country of origin has different effects on different types of judgments. Erickson, Johansson and Chao (1984) and Johansson, Douglas and Nonaka (1985) demonstrated that country of origin affects consumers' beliefs regarding product attributes, and that the impact of country of origin on attitudes is mediated by this effect on beliefs. Similarly, Agrawal and Kamakura

(1999) show that country of origin is related to objective product quality (viz., ratings from tests in "Consumer Reports"), and that this relationship accounts for the relationship between country of origin and market prices, which are assumed to reflect consumer preferences. Also, in chapter two, we showed how the impact of country of origin may vary significantly across evaluative constructs. To further examine these issues, we investigate consumers' evaluations of products from different countries in terms of product beliefs as well as attitudes.

4.4.1. Hedonic and utilitarian beliefs

We will distinguish between utilitarian and hedonic product beliefs (Mano and Oliver 1993, Dhar and Wertenbroch 2000). According to Batra and Ahtola (1990) the utilitarian component of an attitude represents the extent to which a product is perceived to be useful or beneficial, and the hedonic component reflects the extent to which the product evokes pleasant and agreeable feelings. Batra and Ahtola (1990, p.161) conclude that these components "...contribute, in different degrees, to the overall goodness of a consumer good or behavior". This notion is supported by their analyses of large sets of items that are used to measure attitudinal judgments. From this, a model emerges in which consumers' overall judgments of a product are determined by their appraisal of the hedonic and utilitarian benefits of the product (cf. Edwards 1990, Fabrigar and Petty 1999). Unfortunately, as noted by Batra and Ahtola (1990, p.169), their distinction between hedonic and utilitarian evaluations suffers from "interpretational ambiguities". Specifically, the use of terms like "useful" or "functional" to describe utilitarian benefits poses a conceptual problem, because these terms suggest that hedonic products like perfume have little use or function. Furthermore, the distinction is ambiguous with regard to symbolic or "image" attributes (Mittal, Ratchford and Prabhakar 1990). We therefore propose more explicit definitions of hedonic and utilitarian beliefs.

According to Dhar and Wertenbroch (2000, p.61) "[u]tilitarian goods are ones whose consumption is [primarily] cognitively driven, instrumental, and goal oriented and accomplishes a functional or practical task". In line with this, we propose that utilitarian product beliefs are based on consumers' evaluations of the product's instrumentality in achieving cognitively valued outcomes (Batra and Ahtola 1990, Mittal et al. 1990). By the term "cognitively valued outcomes", we mean outcomes of which the appraisal is based largely on reasoning, rather than on emotions or feelings.

Hedonic goods are defined by Dhar and Wertenbroch (2000, p.61) as "[goods] whose consumption is primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure, fantasy and fun". Similarly, we define hedonic beliefs as consumers' appraisal of their affective responses to a product. Affective responses, in turn, can be conceptualized as "consumers' multi-sensory images, fantasies and emotional arousal" (Hirschman and Holbrook 1982, p.93). They can be divided into direct responses, resulting from sensory stimulation or conditioning, and indirect responses that involve more extensive mental processes (Hoffman 1986, Shiv and Fedorikhin 1999). Indirect affective responses incorporate image and social benefits (cf. Mittal et al. 1990). Thus, the smell of perfume may elicit a direct affective response through stimulation of the olfactory system, but also an indirect affective response by evoking mental images of for example elegance or sensuality. Leclerc et al. (1994) showed that a distinction between hedonic goods and utilitarian goods adds to our understanding of country-of-origin effects. They found significant positive effects of French-sounding brand names on evaluations of hedonic goods (cosmetics), but not on evaluations of utilitarian goods (foil wrap, gasoline). These authors also show that the effects of foreign branding on product evaluation remain intact after product trial, but only for the hedonic dimension of product evaluations. It thus appears to be worthwhile to investigate country-of-origin effects for both hedonic and utilitarian beliefs.

4.5. Product category differences

Country-of-origin effects are known to differ across product categories, with effect sizes being larger in some product categories than in others (Papadopoulos 1993). Until now however, little has been done in terms of investigating systematic differences in country-of-origin effects among categories. Manrai et al. (1998) did not find a systematic difference between country-of-origin effects for luxuries and for necessities. Roth & Romeo (1992) argue that technological products are perceived more favorably when they originate in countries that have a stronger image in terms of technological skills (cf., Li and Monroe 1992). A broader framework is developed by Alden, Steenkamp and Batra (1999) who propose that products in some categories are often connected to local (cultural) attributes and circumstances, while other products are more universal, and detached from local culture. Products in this latter category are more likely to develop into symbols of modernity and cosmopolitanism. The authors argue

that foods are a prototypical example of the first category. Foods often carry strong social and cultural connotations (Fournier 1998, McCracken 1986), and food preferences are often determined to a large extent by culture and tradition (Rozin 1996). Askegaard and Madsen (1998) also underline the important role of foods in national culture, and inversely, conclude that national boundaries (still) have a strong impact on food cultures. At another, perhaps more "basic" level, Parker and Tavassoli (2000) show that the consumption of several products, and most notably the consumption of foods is strongly related to climatic factors like sunlight and temperature. These factors also are determinants of a country's ability to produce a particular food, which is often related to the availability of optimal growing temperatures, humidity and other geographical parameters. The "localized" character of food products is also supported by the fact that consumers tend to associate particular foods with particular countries (Shimp et al. 1993, Hooley, Shipley and Krieger 1988). Examples are the connection of France to wine and cheese, Holland to Cheese, Russia to Caviar and Vodka, Germany to Beer, and Norway and Canada to Fish.

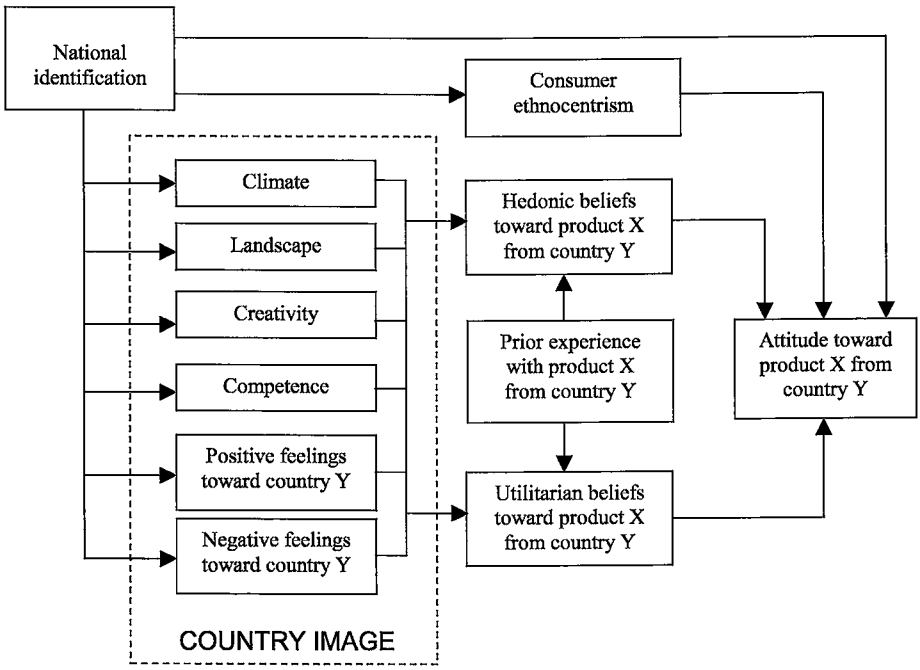
Country-of-origin effects have most often been examined for technology-based consumer durables such as cameras, cars, and VCRs. These products are at the other end of the continuum proposed by Alden et al. (1999). They are to a lesser extent linked to local culture, and have often been developed in the more recent era of technological advancement, which is regarded to be less localized, and pertaining to a larger region of the world. This "detachment" of national origin is especially salient for products of which the production is based on established technological processes that have been diffused globally, as described by Vernon's (1966) international product life cycle theory. Because production of these goods takes place under controlled circumstances within man-made facilities, quality is connected to a lesser degree to geographic and climatic factors. The conceptual differences between foods and technology-based consumer durables form a basis for establishing the generalizability of our framework, but also allows us to examine to which extent different product categories are affected by different components of country images.

4.6. Conceptual model

The association of a product with a country of origin activates a country image consisting of cognitive and affective components. This country image allows consumers

to make inferences about a product's attributes, even in the absence of actual experience with the product-country combination. Most of the empirical work on country-of-origin effects finds that country of origin primarily affects beliefs, and that the country of origin-beliefs linkage mediates the effects of country of origin on attitudes (Erickson et al. 1984, Johansson et al. 1985). Johansson and colleagues represent country of origin by dummy variables that do not capture the degree or character of between-country differences. Although they attribute the influence of country of origin on product beliefs to consumers' perceptions of the features of the origin countries, they do not present empirical evidence for this relationship. In our model we link consumers' country images to hedonic and utilitarian beliefs toward a country's products, which in turn affect attitudes toward a product. In other words we seek to "explain" the results of earlier studies that used a dummy variable representation of country of origin, and found significant effects of these dummy variables on product evaluations. Paths specified by our hypotheses are shown in figure 4.1.

Figure 4.1: Structural model used in this chapter



4.6.1. The impact of country images on beliefs toward product-country combinations

We propose that the perceptions of countries (which are captured by the cognitive component of country images) affect consumers' beliefs about products from these countries. Below we discuss our ideas on how geographic and human elements of country images influence consumers' hedonic and utilitarian beliefs about product-country combinations.

4.6.1.1. Impact of consumers' perceptions of geographic features of a country of origin

The study of the effect of the general features of a country on consumers' evaluations of the country has largely been limited to economic development. Features like nature and climate have received little attention, although they may be especially important in certain product categories. Agricultural production for example, is largely dependent on natural factors like climate and nature, and consumers' perceptions of these factors influence their evaluations of agricultural products (Askegaard and Ger 1997). Geographic factors will not however be a relevant influence for all products. For example, Porter (1990) notes that basic factors like climate and natural resources do not contribute to a nation's competitive advantage in knowledge-intensive industries. We therefore expect that these factors have significant impact on consumers' evaluations of foods from different countries, but not on their evaluation of technology-based consumer durables.

For some foods we may expect that consumer evaluations are more positive when the country of origin is perceived to have a warmer climate. Fresh fruits, for example, depend on warmth and light for their growth, and these factors are naturally related to the amount of sunshine. In recent summers, for example, the French promotional board Sopexa ran an advertising campaign in The Netherlands that stated "French summerfruits: The sun in France just tastes better". Although climatic factors are important in the production for many different agricultural products, they will not be relevant for all foods, and we therefore limit our hypothesis to those foods for which temperature and amount of (sun)light are critical production factors.

H1: When temperature and (sun)light are critical factors for the quality of a food, we expect that consumers' beliefs about that food will be more positive when its country of origin is perceived to have a warmer and sunnier climate.

For most foods we may also expect that product beliefs are affected by consumers' perceptions of the natural landscape in a country. In marketing practice, examples of associations between foods and natural landscape may be found in the use of brand names like "Klarbrunn", which relates the brands' mineral water to the natural environment of the Alps (Leclerc et al. 1994). Advertising for agricultural products often builds on this link with natural landscape, as exemplified by Aaker's (1996) description of the marketing of Hidden Valley Ranch dressings. We thus expect that consumers' evaluations of foods are more positive when the country of origin is perceived to have a more natural landscape. The term "more natural" refers to a landscape that is to a larger degree rural or uncultivated, and to a lesser degree urban. As far as the positive relationship between a natural landscape and a positive evaluation of agricultural products is based on a "romantic" ideal of agriculture, it may be paired with affective overtones, and hence stronger for hedonic beliefs than for utilitarian beliefs.

H2a: Consumers' hedonic and utilitarian beliefs about foods will be more positive when the products' country of origin is perceived to have a more natural landscape.

H2b: The effect of a more natural landscape on beliefs about foods is stronger for hedonic beliefs than for utilitarian beliefs.

4.6.1.2. Impact of consumers' perceptions of human features of a country of origin

To investigate the relationship between consumers' evaluations of product-country combinations, and their perceptions of the people of the country of origin, we have selected competence and creativity, which appear to be relevant to the context of product evaluations. For competence we expect a strong relationship with product evaluations. In theories of competitive advantage, great importance is attributed to the education and skill of the workforce. As noted by Li and Monroe (1992, p.277): "It was the belief about whether or not a country possesses that particular skill or not, that affected the perceived quality of products from that country". Li and Monroe (1992) review three types of skills, of which technical skills are most important. Technical skills closely relate to our competence trait, and we hence expect a strong relationship between the evaluation of a country's products and the perceived competence of its inhabitants. These skills are more relevant for technology-based consumer durables than

for foods, which are to a larger extent "natural" products. We therefore expect to find an effect of competence on the evaluation of technology-based consumer durables, but not on the evaluation of foods. Because products derive utilitarian value from their "fitness for use" and objective performance, we expect consumers' utilitarian beliefs to be affected by their perceptions of the competence of the product's country of origin. For hedonic beliefs, which relate to a product's ability to evoke affective responses, this relationship seems less straightforward. We therefore propose that competence has a stronger effect on utilitarian beliefs than on hedonic beliefs.

H3a: Consumers' hedonic and utilitarian beliefs about technology-based consumer durables will be more positive when the people in the country of origin of these products are perceived to be more competent.

H3b: The effect of perceived competence on consumers' beliefs about technology-based consumer durables is stronger for utilitarian beliefs than for hedonic beliefs.

Sternberg's (1985) research into laypersons' perceptions and definitions of creativity showed that the possession of aesthetic taste and imagination (e.g., the appreciation of art, and music, the ability to write or draw or compose music) is seen as an important element of creativity. Based on this, it is likely that consumers perceive the creativity of a country's people to be related to the aesthetic quality of the country's products. Aesthetic quality is a hedonic product aspect, and as such perceived creativity is more likely to affect hedonic beliefs rather than utilitarian beliefs. Dahl, Chattopadhyay and Gorn (1999) show that imaginativity, another element of creativity, is a determinant of the ability to produce original and appealing products. The impact of imaginativity on utilitarian product aspects is not significant in their study. Both arguments suggest that creativity affects hedonic product beliefs, but offer no support for the idea that perceived creativity is related to utilitarian beliefs[5]. We therefore hypothesize that:

[5] Although this link appears to be less straightforward for foods than for technology-based durables, we might also expect to find this relationship between creativity and hedonic beliefs toward foods. Creativity is related to hedonic aspects of foods, such as the creation of foods that are tasteful or otherwise sensory appealing. We therefore expect to find a significant effect of creativity on hedonic beliefs toward foods.

H4: Consumers' hedonic beliefs about technology-based consumer durables and foods will be more positive when the people in the country of origin of these products are perceived to be more creative.

4.6.1.3. Impact of consumers' affective responses toward a country of origin

Obermiller and Spangenberg (1989) suggested that affective responses to country of origin can influence consumers' product evaluations. Klein et al. (1998) showed that Chinese consumers' negative feelings (animosity) toward Japan influenced the evaluation of Japanese products. We thus expect that product beliefs will be less positive when consumers have more negative feelings toward the product's country of origin. Conversely, when consumers have positive feelings toward a country of origin, their product beliefs will be positively affected. Feelings might have a larger impact on consumer decision making for hedonic than for utilitarian goods, because affective responses form an important part of the experience that is tied to the consumption of hedonic goods (Pham 1998). In line with this, we propose that, compared to utilitarian beliefs, hedonic beliefs are influenced more by consumers' affective responses to country of origin.

H5a: Consumers' hedonic and utilitarian beliefs about products will be more positive when consumers have stronger positive feelings toward the products' country of origin. They will be less positive when consumers have stronger negative feelings toward the products' country of origin.

H5b: The effects of positive and negative feelings toward a country on consumers' beliefs about its products are stronger for hedonic beliefs than for utilitarian beliefs.

4.6.2. The impact of prior experience on beliefs toward product-country combinations

Experience with a product-country combination provides consumers with product information. Consumers evaluate, integrate and store such information in a process referred to as "descriptive belief formation" (Fishbein and Ajzen 1975). This process is the underlying rationale of Han's (1989) halo model of country-of-origin effects, where consumers use their prior experience with a country's products to form country-of-origin based beliefs about the quality of a product. In a recent study, Gürhan-Canli and Maheswaran (2000) found that consumers integrate information about the quality of

individual particular instances of products in a category from a country into an overall belief about the quality of that country's products within the category. Obviously, consumers' evaluations of a product-country combination will benefit from positive prior experience and suffer from negative prior experience. Regardless of the valence of consumers' prior experience, the strength of this influence will increase with the degree of experience.

H6: The amount of prior experience with a product-country combination influences consumers' hedonic and utilitarian beliefs toward this product-country combination. This influence can be positive or negative depending on the valence of consumers' evaluations of their product experience, but the magnitude of the influence will increase with the amount of experience.

4.6.3. Effect of national identification on country images

Country images are subjective impressions that are subject to ingroup bias. National identification influences the evaluation of consumers' ratings of the own country versus others, including ratings of the natural landscape, climate, competence and creativity of a country (cf. Kowalski and Wolfe 1994, Duckitt and Mphuting 1998). With regard to strength of these effects, asymmetry may be expected between the effects on ratings of the own country and those on ratings of foreign countries. This asymmetry can understood from the nature of ingroup bias, which has been viewed by Tajfel (1981) as an instrument to enhance one's esteem of the own group, and ultimately, as an instrument to enhance one's self-esteem. Obviously, a positive bias in perceptions of the own group is much more effective to this end than a negative bias in perceptions of other groups (see chapter 3).

H7a: Consumers' ratings of the own country's competence, creativity, natural landscape and climate will increase with the level of consumers' national identification.

H7b: Consumers' ratings of foreign countries' competence, creativity, natural landscape and climate will decrease with the level of consumers' national identification.

H7c: The effects of national identification on consumers' ratings of their own country are stronger than its effects on ratings of foreign countries.

Duckitt and Mphuting (1998) found that a higher level of group identification leads to more positive feelings toward the own group, and less positive feelings toward other groups. In an absolute sense, the positive effect of identification on feelings toward the own group was much stronger than the negative effect on feelings toward other groups. This asymmetry is similar to the one that was proposed for the more cognitively based perceptions, and has also been recognized by Brewer (1999), who noted that ingroup love (i.e., liking and favoritism) is much more common than outgroup hate (i.e., derogation and dislike).

H8a: Consumers' positive feelings toward the own country will be more positive for consumers with a higher level of national identification. Consumers' negative feelings toward the own country will be less negative for consumers with a higher level of national identification.

H8b: Consumers' positive feelings toward foreign countries will be less positive for consumers with a higher level of national identification. Negative feelings toward foreign countries will be more negative for consumers with a higher level of national identification.

H8c: The effect of consumers' national identification on their feelings toward the own country is stronger than the effect of national identification on feelings toward foreign countries.

4.6.4. Effects of national identification and consumer ethnocentrism on product attitudes

Through its effects on country images, national identification is expected to have a positive and significant effect on consumers' beliefs toward domestic products, and a negative and significant effect on their beliefs toward foreign products.

H9a: National identification influences consumers' hedonic and utilitarian beliefs toward domestic and foreign products. Beliefs toward domestic products will be more positive for consumers with higher levels of national identification, and beliefs toward foreign products will be less positive for consumers with higher levels of national identification.

Equivalent to other effects of national identification on the evaluations of own country and other countries, this effect is expected to be asymmetric in size. That is, the absolute value of the effect of consumers' national identification on consumers' beliefs toward domestic products is larger than the absolute value of its effect on beliefs toward foreign products

H9b: The effect of consumers' national identification on their beliefs toward domestic products is stronger than its effect on consumers' beliefs toward foreign products.

Several empirical studies have shown that consumer ethnocentrism is positively related to a preference for domestic products over foreign alternatives, although the strength of this relationship differs across studies, and significant effects are not always found (Shimp and Sharma 1987, Netemeyer et al. 1991, Klein et al. 1998).

H9c: Consumers' attitudes toward domestic products will be more positive for consumers with higher levels of consumer ethnocentrism, while attitudes toward foreign products will be less positive for consumers with higher levels of consumer ethnocentrism.

In chapter three it has been noted that national identification is an antecedent of consumer ethnocentrism, as feeling the need to protect the own country by purchasing domestic products requires that consumers attach a certain level of significance to their nationality.

H9d: The strength of consumers' ethnocentrism increases with the level of their national identification.

In addition to these effects, national identification offers a social psychological motive for home country bias. This has been discussed at length in chapter 3. Through this pathway, national identification may also have a direct effect on consumers' attitudes toward domestic and foreign products.

H9e: National identification has a direct and positive effect on consumers' attitudes toward domestic products, and a direct and negative effect on consumers' attitudes toward foreign products.

4.7. Method

4.7.1. Products

The hypotheses above are tested in an empirical study conducted in The Netherlands. The test will focus on tomatoes and washing machines, which are specific instances respectively of foods and technology-based consumer durables. Most consumers are familiar with these products, and consume or use them on a regular basis. These two products also have in common that they are produced in the Netherlands, as well as in other European countries. This feature is important because of the relevance of home country bias in country-of-origin effects. Similar to other fruit and vegetables, tomatoes are mostly sold as unbranded products, with country of origin and price as the sole sources of information next to the products' physical appearance. This leaves ample room for country-of-origin effects. By contrast, washing machines are marketed as branded goods, with well-known brand names from different countries existing in this category. Unlike tomatoes, washing machines are usually displayed with detailed information on the product's performance.

4.7.2. Data collection and procedure

Data collection was done by means of personal interviews, using computer-assisted questionnaires. Interviews were carried out by trained undergraduate students working part-time for a local market research company. Two versions of the questionnaire were developed, which differed in terms of the product and countries examined. The first version of the questionnaire contained questions related to consumers' general perceptions of The Netherlands, Germany and Spain, and questions on the evaluation of and experience with tomatoes from these countries. The second version contained questions related to consumers' general perceptions of The Netherlands, Germany and Italy, and questions on evaluation of and experience with washing machines from these countries. Consumers were familiar with these countries, and within both categories products from each of the selected countries are marketed in The Netherlands.

Table 4.1: Overview of the countries and products considered in the two surveys

	Survey 1: Tomatoes	Survey 2: Washing machines
Origin countries	The Netherlands Germany Spain	The Netherlands Germany Italy

Respondents took an average of 26 minutes to complete the survey, which was structured as follows: First, consumers were presented a set of items pertaining to the various hypothesized dimensions of the country images for the three countries. Then, they were asked about their experience with the examined product, coming from each of these countries. Third, they were asked for their beliefs and attitudes toward the three product-country combinations, and finally they were presented with questions on demographic and personality variables, including the items for national identification and consumer ethnocentrism. This order was chosen to avoid the possibility that respondents' ratings for the country images were affected by the product under consideration. The order of items within the questionnaire was randomized within each block. Consumers filled out the questionnaire item-by-item, with each item being repeated for each of the countries. To avoid confusion, the order of countries was kept constant within individual questionnaires, but we developed six different versions, of which each had one of the six possible orders for the three countries. There were no significant differences in item means across these conditions, indicating that order of countries did not affect the results.

4.7.3. Sample

We used a cost-effective way to gather a heterogeneous consumer sample: Each interviewer interviewed a heterogeneous group of respondents consisting of consumers living in their neighborhoods or hometowns, which produced a sample widely spread in terms of geography, age, education, and household size (Table 4.2). Compared to the Dutch population our sample is somewhat younger and higher educated.

Table 4.2: Demographic profile of the total sample (N = 451)

Education		Age		Gender	
Elementary	11	18 – 30	177	Male	212
Highschool	134	31 – 50	163	Female	239
Professional	102	older than 50	111		
College	120			Household size	
University	84			1	108
				2	147
				3 or more	176

The data were screened for missing values and inappropriately filled out surveys (see chapter 3 for this procedure), leading to the removal of 45 questionnaires. This resulted in N= 202 for survey one (tomatoes), and N = 204 for survey two (washing machines).

4.7.4. Measures

The questionnaire included multi-item measures of: (1) the cognitive component of country image, (2) the affective component of country image, (3) product experience (rated separately for products from each of the three countries), (4) consumers' beliefs and attitudes toward the product from each of the countries, and (5) personality variables, and demographics (see 4.7.3 for a discussion of the latter).

Measures for the cognitive content of country images included multi-item scales for natural landscape, climate, competence, and creativity. The items in those scales were obtained in the following manner, which is based on Churchill's (1979) paradigm for scale development. First of all, we conducted two group discussions with 6 to 10 consumers, who discussed differences among European countries and peoples. From the transcripts of these discussions we created a list of perceived differences, to which we added items that resulted from a search of the literature on perceptions of nations and nationalities (appendix 4A). This list was shortened by taking out equivalent items, and items that were uninformative (e.g., "I think the Italians are great", or "This is a neighboring country"). A list of about forty items was administered to 75 students. Based on this pretest we reduced this list of items to 25 items representing several dimensions of country image. Based on comments of individual respondents we reworded some of these items to enhance their clarity. Students supervised by the author

conducted two separate surveys (N = 200) to further refine the item lists based on factor loadings and inter-item correlations (Bosma 1999, Althuizen and Vroegh 1999).

After experimenting with different formats, we chose to word the items as statements, e.g., "There is a lot of unspoiled nature in [Country X]". Each question appeared on screen three times, with [Country X] replaced by the name of a target country. For each statement (and for each country), respondents had to indicate their agreement on a 7-point scale, running from "definitely not agree" to "fully agree". To obtain the final measurement models we omitted two items for "natural landscape", and one for "climate", which had (very) low loadings on the construct they were intended to represent. Measures for the affective content of country images (see section 4.2.1.2.). included multi-item scales for positive and negative feelings. The items in those scales were affective labels of mild intensity, taken from previous studies (e.g., Mano and Oliver 1993). Items were worded as questions, e.g., "Do you have a pleasant feeling about [country X]?" and rated on 7-point scales running from "not at all [pleasant]" to "very [pleasant]". All items in the affective component were retained for further analyses. Item listings for our measures of country image are given in appendix 4B-1

We used a general three-item attitude measure to determine consumers' overall attitudes toward products from each country (see appendix 4B-2). To determine which hedonic and utilitarian beliefs were appropriate, we first reviewed prior studies on the evaluation of foods (tomatoes), and consumer durables (washing machines). From the resulting lists of attributes we composed a set of attributes that included the most relevant attributes, and that was more or less balanced in terms of hedonic and utilitarian aspects. The latter was determined in discussions of this list with several other researchers and students. The resulting list of 10 to 15 items was administered to a group of about 40 consumers. From these data a two-factor structure emerged for both products, one of these factors being more hedonic in nature, the other one being more utilitarian. Items (e.g., "Compared to tomatoes from other countries, tomatoes from [country x] are...") were rated on 7-point scales, running from "much less [tasty]" (-3) to "much [tastier]"(+3). The midpoint (0) was labeled "equally [tasty]". All items within these scales were retained for further analyses. Consumers' prior experience with products from each of the countries-of-origin was measured with reference to six different types of experience with each product. These included prior consumption, purchase (for washing machines: ownership), direct previous exposure (in stores), indirect previous exposure (advertising or media reporting), and word-of-mouth. Questions were worded in the following manner: "Have you seen [tomatoes] from

[country x] in stores?". For each country of origin, consumers answered these questions on a 5-point scale running from "never" to "often". Because several items had a large number of "never" responses for two or more country of origins, we omitted three items for washing machines and four for tomatoes. The final set of items is shown in appendix 4B-2. Consumers who indicated that they had prior experience with the product-country combination provided evaluations of this experience on a 7-point scale running from –3 ("very negative") to +3 ("very positive").

Our measure for consumer ethnocentrism was a shortened version of the cetscale, validated in a survey of more than 3000 consumers across the EU (Steenkamp et al. 1999). National identification was measured with five items taken from Feather (1981), Duckitt and Mphuting (1998), and Doosje et al. (1998). Like the previously discussed measures, this measure was pretested and refined in several small-scale surveys. The results of these studies indicated that the measure had internal and external validity. The items for both scales are given in appendix 4B-3.

4.7.5. Analysis of measurement models

For each of the two surveys, a measurement model was constructed, that was analyzed through structural equations modeling using LISREL 8.30 (Jöreskog and Sörbom 1999). These models included all of the multi-item measures summed up above. In its final form, the measurement model consisted of twelve latent variables, measured by 36 items for tomatoes, and 37 for washing machines. For each survey the measurement model was analyzed in a multi-group analysis, in which ratings for each country constituted a separate group. In this way it was possible to estimate the structural models with some of the parameters free to differ across groups, and others constrained to be equal across groups, or across some of the groups (i.e., different for The Netherlands and other countries). Such constraints allow for tests of hypotheses like H6 to H8, proposing positive effects of national identification and consumer ethnocentrism on evaluations of domestic products, and negative effects of these variables on evaluations of foreign products.

For each respondent and for each item, ratings were mean-centered across the three countries. This way the scores on the items refer to the perceived differences between the three countries, and are not influenced by the mean levels of respondents' ratings, which are known to differ across consumers (cf., Baumgartner and Steenkamp

2001)[6]. Multi-group analysis also allowed us to constrain parameters so that they are equal across countries, which effectively means that parameter estimates are based on all data points, combined across groups. In this way, the estimated coefficients are based not only on the "within-country" variance in consumers' ratings of countries and their products, but also on the "between-country" variance in these ratings. The multiple group approach allows for explicit tests of the equivalence of structural paths across groups, enabling us to determine whether paths from country image, and prior experience to product evaluations are generalizable across countries.

Multi-group analysis assumes that the data for each group are obtained from independent samples. Such independence is not present in the current data, since one sample rated each of the three countries. The earlier discussed mean-centering resolves most of this problem however, because it takes away a major source of interdependence in ratings across individuals. We have also performed an alternative set of analyses, in which the data for each country were analyzed individually. The outcomes of these analyses were similar to the outcomes of the multiple group analyses, although some of the parameters with smaller t-values were no longer significant. This can be attributed to the fact that this alternative procedure produces less efficient parameter estimates, because it does not acknowledge that the ratings for each of the countries are repeated measurements of the same construct, under different "conditions". This implies that separate estimation of the model for each of the origin countries will underestimate the strength of the relationships between dependent and independent variables.

4.7.5.1 Measurement model for survey 1 (tomatoes)

The items constituting the measurement model for survey one are given in appendix B-I and in the left-hand column of the table in appendix 4B-2. In order to estimate meaningful structural parameters that reflect the relationships between latent variables in each group, measures have to be invariant across the perceptions of the three countries. Steenkamp and Baumgartner (1998) distinguish between configural, metric, and scalar invariance, as well as the invariance across groups of factor-covariances, factor variances and error variances. They note that scalar invariance is not required for studies that focus on the validation of structural models across groups, because no

[6] We also analyzed the data without mean-centering, and this resulted in similar estimates for most of the parameters, although most effects were smaller. Some of the negative effects of consumer ethnocentrism and national identification on foreign product evaluations were reduced to zero, which may be attributable to response tendencies.

absolute comparisons of scores are made. Thus, if comparisons of structural relations across groups are to be meaningful, configural and metric invariance need to be assured. This implies that the fit of measurement models across groups should not degenerate substantially as a result of the restrictions that assure the invariance across groups of factor structure and loadings. If full equivalence cannot be attained, Steenkamp and Baumgartner (1998) suggest that researchers should at least ascertain partial invariance, allowing a small number of factor loadings to vary between groups. Steenkamp and Baumgartner (1998) developed a procedure to identify constraints that can be relaxed in order to obtain a partially invariant measurement model. Following this procedure, we tested for invariance of factor loadings, comparing fit between models with loadings were constrained to be equal across countries[7], and models without this restriction.

To test for configural invariance (i.e., invariance of factor structure across countries) we compared the base model to a model in which factor loadings were allowed to vary between groups, except for one "marker" item per construct, for which the loading was fixed at unity. Across groups the same items were chosen as "markers" (Steenkamp and Baumgartner 1998). Because the more restricted base model is nested in this model, their fit can be compared by looking at the difference in chi-squared. In the configural invariance model, factor structure is identical across countries, but factor loadings are allowed to vary. This model had a good fit ($\chi^2(1624) = 2315.16$, CFI =.92, TLI =.90, CAIC =5005.72). The model with full metric invariance (factor loadings constrained to be equal across countries) performed worse in terms of chi-squared ($\chi^2(1658) = 2402.19$, $\Delta\chi^2(34) = 87.03$, $p < .001$). We examined modification indices (M.I) for the latter model, and found that model fit could be improved by relaxing one loading on the "creativity" construct for The Netherlands. This lead to significantly improved model fit ($\Delta\chi^2(1) = 13.26$, $p < .001$). Although the resulting model still performed slightly worse than the original model in terms of chi-squared ($\chi^2(1657) = 2388.93$, $\Delta\chi^2(33) = 73.77$, $p < .001$) we selected this model for further analyses, as CAIC improved to 4833.44, TLI remained equal, and CFI dropped slightly, to .91. This partially invariant model is the basis for further analyses. Composite reliabilities (C.R.) were calculated for each construct, and shown in table 4.3. Out of 32 reliabilities, 27 were at or above the cut-off level of .60 proposed by Bagozzi and Yi (1988). The median C.R. was equal to .69, indicating sufficient reliability. For national identification, C.R. = .82, and for consumer ethnocentrism, C.R. = .89.

[7] The term "countries" refers to subjects' ratings of different countries (see table 4.1).

Table 4.3: Completely standardized loadings and reliabilities - tomatoes

	Netherlands		Spain		Germany	
	c.r.	loadings	c.r.	loadings	c.r.	loadings
climate	**.60**		**.74**		**.69**	
item 01		.62		.65		.66
item 02		.68		.86		.79
natural landscape	**.61**		**.55**		**.45**	
item 03		.69		.67		.50
item 04		.64		.56		.58
competence	**.61**		**.62**		**.63**	
item 05		.75		.71		.71
item 06		.41		.46		.57
item 07		.59		.61		.53
creativity	**.73**		**.63**		**.50**	
item 08		.83		.35		.33
item 09		.58		.63		.50
item 10		.65		.79		.65
positive feelings	**.80**		**.80**		**.89**	
item 11		.65		.68		.82
item 12		.86		.83		.86
item 13		.76		.75		.87
negative feelings	**.66**		**.60**		**.69**	
item 14		.50		.43		.61
item 15		.63		.58		.54
item 16		.73		.70		.80
experience	**.89**		**.89**		**.92**	
item 17		.87		.85		.92
item 18		.92		.95		.93
hedonic beliefs	**.86**		**.85**		**.82**	
item 19		.87		.85		.80
item 20		.70		.69		.68
item 21		.87		.89		.84
utilitarian beliefs	**.56**		**.60**		**.50**	
item 22		.63		.62		.57
item 23		.48		.54		.43
item 24		.52		.56		.50
attitude	**.90**		**.91**		**.76**	
item 25		.89		.89		.77
item 26		.91		.94		.75
item 27		.78		.80		.61
cons. ethnocentrism	**.85**					
item 28		.75				
item 29		.88				
item 30		.79				
item 31		.83				
nat. identification	**.75**					
item 32		.87				
item 33		.69				
item 34		.54				
item 35		.51				
item 36		.82				

Table 4.4: Correlation matrix of the latent variables - tomatoes

Netherlands	Na	Cl	Co	Cr	PF	NF	Ex	HB	UB	Att	NI	CE
Nat. landscape	--											
Climate	.27	--										
Competence	.10	-.26	--									
Creativity	.20	-.07	.34	--								
Positive feelings	.22	-.03	.32	.33	--							
Neg. feelings	-.11	.05	-.06	-.17	-.76	--						
Experience	-.06	-.02	-.02	.09	.18	-.11	--					
Hedonic beliefs	.30	.26	.11	.21	.26	-.41	.05	--				
Util. beliefs	.25	.07	.12	.24	.10	.03	-.07	.19	--			
Attitude	.34	.22	.26	.32	.29	-.33	.16	.76	.25	--		
Cons. Ethno.	.33	.07	.18	.07	.05	.02	.01	.23	.11	.30	--	
Nat. Identif.	.30	.08	.27	.33	.36	-.20	.08	.29	.04	.36	.35	--
Spain												
Nat. landscape	--											
Climate	.05	--										
Competence	-.21	-.19	--									
Creativity	.15	.07	-.24	--								
Positive feelings	.18	.39	.15	.14	--							
Neg. feelings	.14	-.41	.02	-.16	-.71	--						
Experience	.15	.09	.02	.06	.19	-.13	--					
Hedonic beliefs	.22	.27	-.07	.10	.32	-.34	.28	--				
Util. beliefs	.19	.04	.08	.07	.16	.02	.02	.11	--			
Attitude	.27	.18	.13	.15	.45	-.38	.26	.68	.53	--		
Cons. Ethno.	-.29	-.04	-.15	-.09	-.15	.12	-.15	-.30	-.15	-.36	--	
Nat. Identif.	-.25	-.11	-.17	-.07	-.23	.13	-.16	-.24	.07	-.29	.35	--
Germany												
Nat. landscape	--											
Climate	-.31	--										
Competence	.10	-.02	--									
Creativity	.14	.21	-.24	--								
Positive feelings	.17	.28	-.04	.45	--							
Neg. feelings	-.16	-.22	.16	-.38	-.78	--						
Experience	-.10	-.09	.01	-.16	.03	.05	--					
Hedonic beliefs	.22	.26	-.07	.33	.25	-.32	.27	--				
Util. beliefs	.28	.04	-.09	.08	.24	-.15	.32	.51	--			
Attitude	.13	.13	-.02	.26	.33	-.32	.36	.70	.79	--		
Cons. Ethno.	-.09	-.04	.03	.06	.11	-.15	.16	.17	.12	.23	--	
Nat. Identif.	-.18	.04	-.02	-.23	-.07	.07	.11	-.04	-.18	.00	.35	--

4.7.5.2. Measurement model for survey 2 (washing machines)

Items in the measurement model for survey two are given in appendix 4B-1 and the right-hand column of appendix 4B-2. To establish measurement invariance, we followed the same procedure as we followed for survey one. We first tested for configural invariance. For the configural invariance model (with identical factor structures for the three countries) we found $\chi^2(1730) = 2481.17$, TLI =.91, CFI=.92, and CAIC =5125.48. The model with full metric invariance (i.e., all factor loadings constrained to be equal across countries) performed slightly worse in terms of chi-squared ($\chi^2(1766) = 2539.72$; $\Delta\chi^2(36) = 58.55$, $p < .01$), but TLI and CFI remained equal, while CAIC improved to 4932.43. Based on these indices, and because no large MIs were found for the fixed parameters, we accepted this model as the basis for further analyses. Composite reliabilities (C.R.) were calculated for each construct, and are given in table 4.5. Out of 32 reliabilities, 25 were at or above the level of .60, which Bagozzi and Yi (1988) proposed as cut-off level. The median value for C.R. was equal to .72, indicating sufficient reliability. Composite reliabilities for national identification and for consumer ethnocentrism were .84 and .89, respectively.

Table 4.5: Completely standardized loadings and reliabilities - washing machines

	Netherlands		Italy		Germany	
	c.r.	loadings	c.r.	loadings	c.r.	loadings
natural landscape	**.60**		**.66**		**.53**	
item 03		.63		.65		.51
item 04		.68		.76		.61
climate	**.61**		**.56**		**.46**	
item 01		.48		.47		.39
item 02		.83		.77		.69
competence	**.53**		**.70**		**.75**	
item 05		.68		.79		.84
item 06		.40		.52		.62
item 07		.48		.66		.64
creativity	**.58**		**.68**		**.74**	
item 08		.65		.72		.81
item 09		.49		.60		.66
item 10		.53		.60		.63
positive feelings	**.75**		**.82**		**.83**	
item 11		.74		.78		.79
item 12		.74		.81		.80
item 13		.64		.73		.77
negative feelings	**.72**		**.56**		**.71**	
item 14		.60		.44		.65
item 15		.70		.59		.60
item 16		.74		.61		.75
experience	**.67**		**.83**		**.94**	
item 17		.67		.88		.78
item 18		.73		.90		.77
item 19		.51		.54		.63
hedonic beliefs	**.71**		**.64**		**.74**	
item 20		.75		.75		.78
item 21		.65		.55		.65
item 22		.61		.53		.66
utilitarian beliefs	**.89**		**.90**		**.90**	
item 23		.85		.88		.89
item 24		.83		.83		.80
item 25		.89		.88		.90
attitude	**.91**		**.85**		**.90**	
item 26		.91		.88		.91
item 27		.92		.86		.94
item 28		.78		.66		.72
cons. ethnocentrism	**.89**					
item 29		.79				
item 30		.90				
item 31		.78				
item 32		.77				
nat. identification	**.84**					
item 33		.83				
item 34		.76				
item 35		.43				
item 36		.60				
item 37		.89				

Table 4.6: Correlation matrix of the latent variables - washing machines

Netherlands	Na	Cl	Co	Cr	PF	NF	Ex	HB	UB	Att	NI	CE
Nat. landscape	--											
Climate	.08	--										
Competence	-.03	-.25	--									
Creativity	.46	.11	.23	--								
Positive feelings	.10	.16	.19	.33	--							
Negative feelings	-.11	-.05	-.09	-.18	-.47	--						
Experience	.12	.09	-.01	.22	.06	-.03	--					
Hedonic beliefs	.23	.01	.21	.26	.08	-.12	.46	--				
Util. beliefs	.18	-.04	.12	.17	.20	-.14	.31	.88	--			
Attitude	.23	.00	.07	.22	.09	-.26	.33	.84	.88	--		
Cons. Ethno.	.26	.12	.11	.30	.14	.05	-.16	.09	-.02	.03	--	
Nat. Identif.	.22	.25	.19	.07	.46	-.17	-.04	.09	.02	.01	.27	--
Italy												
Nat. landscape	--											
Climate	-.01	--										
Competence	-.05	-.16	--									
Creativity	.18	.27	-.42	--								
Positive feelings	.20	.19	.15	.36	--							
Negative feelings	-.02	-.05	-.16	-.14	-.70	--						
Experience	.03	-.01	.05	-.13	.02	-.07	--					
Hedonic beliefs	.38	-.15	.37	.00	.02	-.09	.11	--				
Util. beliefs	.01	.00	.36	-.13	-.09	.03	.22	.68	--			
Attitude	.04	-12	.26	-.16	-.09	.07	.18	.76	.90	--		
Cons. Ethno.	-.26	-.12	.04	-.16	-.24	-.17	.01	-.13	.02	.13	--	
Nat. Identif.	-.15	-.25	-.05	-.12	-.46	.25	-.02	-.19	-.13	-.17	.27	--
Germany												
Nat. landscape	--											
Climate	.05	--										
Competence	.31	-.05	--									
Creativity	-.10	.13	-.14	--								
Positive feelings	.23	.17	.27	.38	--							
Negative feelings	-.08	-.02	-.29	-.23	-.73	--						
Experience	.14	-.03	.14	-.07	.05	-.07	--					
Hedonic beliefs	.02	.00	.36	-.11	.18	-.23	.32	--				
Util. beliefs	-.02	.22	.29	-.05	.08	.11	.40	.66	--			
Attitude	.04	.06	.25	-.14	.00	-.17	.39	.75	.83	--		
Cons. Ethno.	-.04	.02	-.13	-.05	.12	.13	.12	.11	.13	.13	--	
Nat. Identif.	-.17	.18	-.08	.06	.09	-.05	.02	.05	-.06	.01	.27	--

4.8. Results

The model in figure 4.1 was translated to a structural equations model for each product, which was fitted to the data using LISREL 8.30. Constructs in this model were measured according to the multi-group measurement models discussed above. The present section describes the structural paths that are added to the measurement model described in the previous section. The models fitted allowed for non-zero covariances between the residuals of hedonic and utilitarian beliefs, as these two evaluations have been found to be strongly correlated (e.g., Batra and Ahtola 1994). The fit of the resulting models was adequate for tomatoes ($\chi^2(1817)$ =2933.44, CAIC =4214.06, TLI =.86, CFI =.87), and also for washing machines ($\chi^2(1932)$ =3132.26, CAIC =4285.51, CFI =.87, TLI =.87). Tables 4.7a and b display the obtained parameter estimates. These estimates were constrained to be equal across countries, except for the parameters representing the effects of national identification and consumer ethnocentrism on country images and product evaluations, which were estimated separately for domestic and foreign products/countries (H6-8).

Table 4.7a: Structural parameter estimates for tomatoes**

Path	Hypothesis	b	t
Climate → HB	H1: +	.36 *	4.42
Climate → UB	H1: +	-.04	-0.60
Natural landscape → HB	H2a: +	.27 *	3.74
Natural landscape → UB	H2a: +	.12 *	2.22
Competence → HB	0	.06	0.88
Competence → UB	0	.06	0.97
Creativity → HB	H4: +	.20 *	2.66
Creativity → UB	0	.10	1.51
Positive feelings → HB	H5a: +	.05	0.93
Positive feelings → UB	H5a: +	.15 *	3.33
Negative feelings → HB	H5a: -	-.19 *	-4.40
Negative feelings → UB	H5a: -	.02	0.70
Amount of Prior experience → HB	H6: ≠0	.22 *	4.85
Amount of Prior experience →UB	H6: ≠0	.10 *	2.73
HB → Attitude	+	.53 *	14.02
UB → Attitude	+	.60 *	7.66
National Identification (NID) → CET	H9d: +	.29 *	7.54
Netherlands:			
NID → Climate	H7a: +	.02	1.27
NID → Natural landscape	H7a: +	.17 *	3.49
NID → Competence	H7a: +	.09 *	3.24
NID → Creativity	H7a: +	.12 *	3.96
NID → Positive feelings	H8a: +	.13 *	4.83
NID → Negative feelings	H8a: -	-.13 *	-2.81
NID → Attitude	H9e: +	.07 *	2.29
CET → Attitude	H9c: +	.06	1.70
Foreign Countries:			
NID → Climate	H7b: -	-.01	-0.82
NID → Natural landscape	H7b: -	-.07 *	-2.68
NID → Competence	H7b: -	-.03	-1.20
NID → Creativity	H7b: -	-.06 *	-2.42
NID → Positive feelings	H8b: -	-.07 *	-2.97
NID → Negative feelings	H8b: +	.07 *	2.05
NID → Attitude	H9e: -	-.01	-0.59
CET → Attitude	H9c: -	.00	0.04

Model fit (R^2)	Netherlands	Spain	Germany
HB = f (CI)	0.20	0.15	0.31
UB = f (CI)	0.10	0.06	0.16
ATT = f (HB,UB,CET,NID)	0.76	0.62	0.75

* $|t| > 1.96$, b *significant at* $\alpha = .05$

** *HB/UB =hedonic/utilitarian beliefs, CET =consumer ethnocentrism, NID = national identification, CI = country image*

Table 4.7b: Structural parameter estimates for washing machines**

Path	Hypothesis	b	t
Climate → HB	0	-.01	-0.15
Climate → UB	0	.05	0.63
Natural landscape → HB	0	.08	1.82
Natural landscape → UB	0	.03	0.62
Competence → HB	H3a: +	.22 *	4.91
Competence → UB	H3a: +	.27 *	4.58
Creativity → HB	H4: +	.05	0.74
Creativity → UB	0	-.03	-0.36
Positive feelings → HB	H5a: +	-.06	-1.35
Positive feelings → UB	H5a: +	-.02	-0.33
Negative feelings → HB	H5a: -	-.10 *	-2.61
Negative feelings → UB	H5a: -	-.07	-1.43
Prior experience → HB	H6: ≠0	.23 *	5.68
Prior experience → UB	H6: ≠0	.32 *	6.12
HB → Attitude	+	.45 *	6.14
UB → Attitude	+	.58 *	12.16
National Identification (NID) → CET	H9d: +	.21 *	5.96
Netherlands:			
NID → Climate	H7a: +	.05	1.77
NID → Natural landscape	H7a: +	.15 *	2.89
NID → Competence	H7a: +	.06 *	2.07
NID → Creativity	H7a: +	.02	1.09
NID → Positive feelings	H8a: +	.17 *	5.80
NID → Negative feelings	H8a: -	-.10 *	-2.22
NID → Attitude	H9e: +	-.02	-0.84
CET → Attitude	H9c: +	.02	0.65
Foreign Countries:			
NID → Climate	H7b: -	-.01	-0.42
NID → Natural landscape	H7b: -	-.07 *	-2.51
NID → Competence	H7b: -	-.04	-1.34
NID → Creativity	H7b: -	-.01	-0.66
NID → Positive feelings	H8b: -	-.11 *	-3.95
NID → Negative feelings	H8b: +	.06 *	1.98
NID → Attitude	H9e: -	.01	-0.56
CET → Attitude	H9c: -	-.01	-0.46

Model fit (R^2)	Netherlands	Italy	Germany
HB = f (CI)	0.19	0.20	0.22
UB = f (CI)	0.15	0.13	0.16
ATT = f (HB,UB,CET,NID)	0.83	0.82	0.77

* $|t| > 1.96$, *b significant at* $\alpha = .05$

** *HB/UB =hedonic/utilitarian beliefs, CET =consumer ethnocentrism, NID = national identification, CI = country image*

4.8.1. Testing the pathways of country-of-origin effects

The model in figure 4.1 (for which parameter estimates are given in tables 4.7a and 4.7b) assumes that country images influence product evaluations through specific pathways. We conducted several tests to examine these assumptions. We first examined the structural equivalence of the model. That is, we examined whether the 14 parameters representing the effects of country image and prior experience on product beliefs could be constrained to be equal across countries, without deteriorating model fit. For tomatoes, the fit of the model with these constraints ($\chi^2(1817)$ =2933.44, CAIC =4214.06,TLI =.86, CFI =.87) is not significantly worse than the fit of the model without the constraints ($\chi^2(1789)$ =2896.27, $\Delta\chi^2(28)$ = 37.17, p>.10). In terms of CAIC model fit even improved as a result of the constraints (CAIC without constraints is 4388.82), while other fit indices were not affected. For washing machines the model with constraints ($\chi^2(1932)$ =3132.26, CAIC =4285.51, CFI =.87, TLI =.87) fitted slightly worse than the model without constraints (χ^2 (1904) =3086.08, $\Delta\chi^2(28)$ = 46.18, p = .02), but CFI and TLI remained equal and CAIC improved from 4436.14 to 4285.51. These analyses support our assumption that the effects of country image can be constrained to be equal across countries.

A second assumption that we tested, was whether or not the effects of country image should act on hedonic and utilitarian beliefs. That is, we tested whether a better fit can be obtained with a model in which country image and prior experience act directly on attitudes, instead of acting on product beliefs. Strictly taken it is impossible to compare these alternative models by means of a likelihood ratio test, because they are not nested. However, because the fit of this alternative model is poorer both in terms of chi-squared and CAIC it seems reasonable to conclude that the original model with effects on product beliefs is more appropriate ($\chi^2(1939)$ =3195.44, $\Delta\chi^2(7)$ = 63.18, CAIC = 4305.14 versus 4285.51 for the original model).

Along the same lines we investigated whether the effects of national identification and consumer ethnocentrism operates directly on consumers' attitudes toward products from different countries, or whether they should operate on product beliefs. Although it is formally not possible to compare these two alternatives using a likelihood ratio test, the former option (which is in line with our model) seems more appropriate, as the latter alternative is similar in terms of chi-squared ($\chi^2(1930)$ =3130.72, $\Delta\chi^2(2)$ = 1.54), and performs worse on the CAIC (CAIC = 4312.71 vs. 4285.51).

4.8.2. Structural model: discussion of parameter estimates

The appearance of several significant parameters in the first block of twelve rows in tables 4.7a and b indicates that consumers' evaluations of both washing machines and tomatoes from a given country are affected by their perceptions of the country in general (e.g., climate, natural landscape, competence, creativity, positive and negative feelings). Hypotheses 1–5 deal with the effects of various elements of country image on the evaluation of tomatoes from different countries.

4.8.2.1. Effects of country image on product beliefs

The first parameter in table 4.7a shows that consumers' hedonic beliefs about tomatoes from a given country of origin are more positive when the country of origin is perceived to have a warmer and sunnier climate (b =.36, t = 4.42). For utilitarian beliefs, this relationship is not significant (b = -.04, t = -.60). As temperature and sunlight are essential factors in the production of tomatoes, this supports H1. This pattern of findings has face value as climatic effects are more likely to affect the hedonic aspects of tomatoes (i.e. taste, aroma) than utilitarian aspects like firmness and keepability.

Hypothesis 2a states that hedonic and utilitarian beliefs toward foods from a country are more positive when the landscape in this country is perceived to be more natural. For hedonic beliefs, we found b =.27 (t =3.74), and for utilitarian beliefs we found b =.12 (t = 2.22). In line with H2b, this effect is larger for hedonic beliefs than for utilitarian beliefs. As a more formal test of H2b, we constrained the parameters for hedonic and utilitarian beliefs to be equal, and re-estimated the model. This resulted in a decrease in model fit, which was marginally significant ($\Delta\chi^2(1)$ =3.45, p = .06), offering weak support for the notion that consumers' perceptions of a country's natural landscape have a stronger effect on hedonic beliefs toward foods than on their utilitarian beliefs toward foods. We did not expect significant effects of consumer perceptions of climate and natural landscape on evaluations of technology–based consumer durables. The non-significant parameters in the first four rows of table 4.7b are in line with this.

H3a states that consumers' beliefs about technology-based consumer durables are affected positively by the perceived level of competence of the people in a country. H3a is confirmed by positive effects of competence on hedonic and utilitarian beliefs toward washing machines (hedonic beliefs: b =.22, t =4.91, utilitarian beliefs: b =.27, t =4.58). These effects are similar in size and direction, which contradicts H3b (stating that the effect of perceived competence on hedonic beliefs is weaker than the effect on

utilitarian beliefs). To test H3b, we estimated the model with the parameters for hedonic and utilitarian beliefs constrained to be equal. This resulted in a minor and insignificant decrease in model fit ($\Delta\chi^2(1) = .69$, $p > .10$). We did not expect to find significant effects of perceived competence on beliefs toward foods, and the non significant parameters for these effects in table 4.7a are in line with this.

With respect to both technology-based durables and foods, H4 states that consumers' hedonic and utilitarian product beliefs are more positive when they perceive a country of origin to have a higher level of creativity. This was supported for foods (b = .20, t =2.66), but not for technology-based consumer durables (b = .05, t =.74). For both categories, we did not expect to find significant effects of perceived creativity on utilitarian beliefs, which was confirmed by our results (foods: b =.10, t=1.51, technology-based consumer durables: b = -.03, t = -.36).

Hypothesis 5a proposes a positive effect on product beliefs of positive feelings toward the country of origin, as well as a negative effect on these constructs of negative feelings toward the country of origin The results support this hypothesis, although the effects are not consistently significant. For foods we find a significant effect of positive feelings on utilitarian beliefs (b =.15, t =3.33) but not on hedonic beliefs (b =.05, t =.93). For foods we also found a significant effect of negative feelings on hedonic beliefs (b = -.19, t = -4.40), but not on utilitarian beliefs (b = .02, t = .70). For technology-based consumer durables, we find a significant effect from negative feelings on hedonic beliefs (b = -.10, t = -2.61), but other effects for this product category were insignificant ($|t| \leq 1.43$). Although individual coefficients are not always significant, these results support the notion that consumers' feelings toward a country influence the evaluations of products from that country.

Hypothesis 5b states that the effects of feelings are stronger for hedonic beliefs than for utilitarian beliefs. We examined this hypothesis for both types of feelings and both types of products. For both products, negative feelings had a significant impact on hedonic beliefs, and not on utilitarian beliefs, although this difference is more substantial for tomatoes (-.19, vs. .02) than for washing machines (-.10 vs. -.07). To test this difference formally, we re-estimated the models with the paths from negative feelings to hedonic an utilitarian beliefs constrained to be equal. This resulted in a significant decrease in model fit for tomatoes ($\Delta\chi^2(1) = 11.82$, $p < .001$), but not for washing machines ($\Delta\chi^2(1) = .44$, $p > .10$). Thus, for negative feelings, H5b is confirmed for tomatoes, and directionally supported for washing machines. For positive feelings,

there were no significant effects for washing machines. For tomatoes we find a significant effect of positive feelings on utilitarian beliefs, and a nonsignificant effect on hedonic beliefs. This pattern of effects runs counter to H5b, but for both products the paths from positive feelings to hedonic and utilitarian beliefs could be constrained to be equal without a significant effect on model fit. For washing machines $\Delta\chi^2(1) = .46$ ($p > .10$), for tomatoes $\Delta\chi^2(1) = 1.53$ ($p > .10$).

4.8.2.2. Effects of prior experience on product beliefs

Consumers' hedonic and utilitarian beliefs toward a product-country combination are influenced by their prior experience with this product-country combination. Hypothesis 6 states that the magnitude of this influence increases with the amount of prior experience. For washing machines we find significant effects of the amount of experience on hedonic beliefs ($b = .23$, $t = 5.68$), and on utilitarian beliefs ($b = .32$, $t = 6.12$), which are in line with H6. For tomatoes we obtain similar effects (hedonic beliefs: $b = .22$, $t = 4.85$, utilitarian beliefs: $b = .10$, $t = 2.73$). To determine whether the direction of these effects is in line with consumers' evaluations of their prior experience with these product-country combinations, we examined consumers' evaluations of their prior experience with each product-country combination. Both for tomatoes and for washing machines the mean level of these evaluations was positive for each individual country, and the values did not differ greatly between countries (see table below). Taken together, these results show that an increase in the amount of (positively evaluated) prior experience has a significant positive effect on product beliefs, confirming H6.

Table 4.8: Evaluations of prior experience: Mean, SD by country (scale –3 to +3)

		Mean	SD
Washing machines			
	Netherlands	0.81	0.95
	Italy	0.78	0.85
	Germany	1.46	0.85
Tomatoes			
	Netherlands	1.06	1.01
	Spain	1.24	0.87
	Germany	0.75	0.97

4.8.2.3. Effects of national identification on the cognitive component of country image

Consumers' ratings of the competence, creativity climate and natural landscape of the own country will increase with their level of national identification (H7a). In survey 1

we find positive parameters for all these paths (competence: b=.09, t=3.24, creativity: b=.12, t=3.96, climate: b=.02, t=1.27, natural landscape: b=.17, t=3.49), and a similar result was obtained in survey 2 (competence: b=.06, t=2.07, creativity: b=.02, t=1.09, climate: b=.05, t=1.77, natural landscape: b=.15, t=2.89). These results support H7a.

Consumers' ratings of the competence, creativity climate and natural landscape of foreign countries will decrease with their level of national identification (H7b). In both surveys we find negative effects of national identification for all cognitive elements of country image, which is in line with H7b. In survey 1 these effects are significant for natural landscape (b = -.07, t = -2.68), and creativity (b = -.06, t = -2.42), but not for climate (b = -.01, t = -.82), and competence (b = -.03, t = -1.20). In survey 2 we find a significant effect for natural landscape (b = -.07, t = -2.51), but not for other components (competence: b=-.04, t=-1.34, creativity: b = -.01, t = - .66, climate: b=-.01, t = -.42). These results offer some support for H7b, although these effects are not as strong as those that were found for ratings of the own country. This pattern of results is in line with H7c, which proposes that the effects of national identification are stronger for perceptions of the own country than for perceptions of foreign countries.

For each separate path from national identification to the country image components, a formal test of H7c was conducted. For each path, we computed the difference between the absolute value of the parameter estimate for the Netherlands and the absolute value of the parameter estimate for foreign countries. We calculated the standard error of this difference by taking the square root of the sum of the squared standard errors of the respective parameters for The Netherlands and Foreign countries (which were restricted to be equal). The results are given in table 4.9. For both surveys all difference scores are larger than 0, which is in line with H7c, but the effects proposed in this hypothesis are not significant.

Table 4.9: Differences in absolute parameter estimates for the effects of national identification on beliefs about The Netherlands and foreign countries

	Difference in absolute values for survey one	Difference in absolute values for survey two
Climate	0.014 (t = 0.60)	0.042 (t = 1.22)
Nat. Landscape	0.091 (t = 1.66)	0.083 (t = 1.35)
Competence	0.064 (t = 1.67)	0.022 (t = 0.54)
Creativity	0.061 (t = 1.59)	0.011 (t = 0.35)

4.8.2.4. Effects of national identification on the affective component of country image

H8a proposes that positive feelings toward the own country increase with the level of national identification, while negative feelings toward the own country decrease with the level of national identification. In both surveys this hypothesis is confirmed by the effects of national identification on positive feelings toward the own country (survey one: b = .13, t = 4.83; survey two: b = .17, t = 5.80), and on negative feelings toward the own country (survey one: b = -.13, t = -2.81, survey two: b = -.10, t = -2.22). H8b states that national identification has a negative impact on consumers' positive feelings toward other countries, and a positive impact on negative feelings toward foreign countries. In both surveys, this hypothesis is confirmed by the effects of national identification on positive feelings toward foreign countries (survey one: b = -.07, t = -2.97; survey two: b = -.11, t = -3.95), and on negative feelings toward foreign countries (survey one: b = .07, t = 2.05; survey two: b = .06, t = 1.98). According to H8c, the effects of national identification on feelings toward the own country should be stronger than the effect of national identification toward foreign countries. We tested this hypothesis in the same manner as we tested H7c. In line with H8c all differences in both surveys are larger than 0, but all t-values are below 1.96, so that this hypothesis is not strongly supported.

Table 4.10: Differences in absolute parameter estimates for the effects of national identification on feelings for The Netherlands and foreign countries

	Difference in absolute values for survey one	Difference in absolute values for survey two
Positive feelings	0.060 (t = 1.66)	0.066 (t = 1.58)
Negative feelings	0.062 (t = 1.10)	0.039 (t = 0.74)

4.8.2.5. Effects of identification and consumer ethnocentrism on product evaluations

H9a states that national identification influences consumers' beliefs toward domestic and foreign products. We calculated total effects of national identification on beliefs toward domestic products and foreign products. For domestic foods the total effect of national identification was positive and significant on hedonic beliefs (TE = .11, t = 4.81), and on utilitarian beliefs (TE = .05, t = 3.37). This is mirrored by significant negative effects of national identification on beliefs toward foreign foods (hedonic: TE = -.05, t = -2.59, utilitarian: TE = -.02, t = -2.35). For technology-based consumer durables, positive effects of national identification on beliefs toward domestic products

were marginally significant (hedonic: TE = .03, t = 1.95, utilitarian: TE = .03, t = 1.76). Nonsignificant negative effects were found for beliefs toward foreign technology-based durables (hedonic: TE = -.01, t = -1.34, utilitarian: TE = -.02, t = -1.30). Thus, H9a is supported strongly for foods, and weakly for technology based durables.

Effects of national identification on product beliefs were expected to be stronger for domestic products than for foreign products (H9b). In line with this we find larger absolute parameter estimates for domestic products than for foreign products, but these differences are small and nonsignificant, so that H9b is not supported (Table 4.11).

Table 4.11: Differences in absolute parameter estimates for the effects of national identification on beliefs toward Dutch and foreign products

	Difference in absolute values for tomatoes	Difference in absolute values for washing machines
Hedonic beliefs	0.060 (t = 1.88)	0.011 (t = 0.65)
Utilitarian beliefs	0.027 (t = 1.45)	0.012 (t = 0.60)

The effect of consumer ethnocentrism on consumers' attitudes towards domestic products is small for both products. For tomatoes, we find b=.06 (t=1.70), and for washing machines we find b =.02 (t=.65). Effects of consumer ethnocentrism on attitudes toward foreign products are even smaller (tomatoes: b = .00, t=.04, washing machines b = -.01, t = -.46). We thus find no support for H9c, which states that consumer ethnocentrism has a positive effect on consumers' attitudes toward domestic products, and a negative effect on their attitudes toward foreign products.

In line with the role of national identification as antecedent of consumer ethnocentrism (H9d), a positive effect of national identification on consumer ethnocentrism is found in both surveys (survey one: b = .29, t =7.54, survey two: b =.21, t = 5.96). H9e states that national identification has a direct and positive effect on consumers' attitudes toward domestic products, mirrored by a negative effect on attitudes toward foreign products. We indeed find a significant positive path from national identification to attitudes toward domestic tomatoes (b =.07, t =2.29). Other paths from national identification to attitudes toward foreign and domestic products are nonsignificant (|b|<.02, |t|<1), offering limited support for direct effects of national identification on consumers' attitudes toward domestic and foreign products (H9e).

4.9. Discussion and limitations

4.9.1. Discussion

Several studies have examined how relating a product or brand to a country of origin affects consumers' product evaluations (see chapter two for an overview). These studies have found that associating a product with a favorable country of origin can have a substantial positive effect on consumers' evaluation of the product. Less attention has been given to the question why (within product categories) consumers perceive products from one country of origin to be more favorable than products from another country of origin. This study presents a conceptual model that specifies which factors determine consumers' evaluations of products from different countries, and shows how these factors relate differently to the evaluations of products in different product categories. We propose that consumers' beliefs toward a country's products are affected by their prior experience with these products, but also by country images, which are defined as consumers' cognitions and feelings about a country. With respect to the cognitive component of country images, we differentiate between geographic factors (climate and natural landscape), and human factors (competence and creativity). Consumers' positive and negative feelings toward a country form the affective component of country image.

Individual components of country images have very different effects on consumers' beliefs toward products in different categories. For foods, of which the production and consumption is closely related to cultural and geographical characteristics of countries, we find that consumers' beliefs about products from different countries are influenced substantially by their perceptions of the geographical aspects of the product's country of origin. Consumers' beliefs about foods are more positive when their country of origin is perceived to have a warmer and sunnier climate, and a more natural landscape. This influence is absent for technology-based consumer durables. For the latter category the favorability of product beliefs is related strongly to the perceived competence of a country's people. Perceived competence has no impact on consumers' beliefs towards foods from different countries. These differential effects of geographic factors on the one hand and competence on the other, reflects the fact that foods are more "natural" products, while the production of technology-based consumer

durables relies more heavily on the competence and skills of people and equipment[8]. For perceived creativity we expected to find a stronger effect on hedonic beliefs than on utilitarian beliefs, as the former type of evaluations relate more strongly to sensory and aesthetic product aspects. This notion was confirmed for foods, but not for technology based durables. For this latter product, a link between creativity and hedonic beliefs would be plausible because of the importance of creativity in the design of (aesthetically) appealing products (Sternberg 1985). The absence of this link in the present study may be related to our choice of washing machines as an instance of technology-based durables. For this specific product, there is little variation in appearance and design (e.g., salespersons use the term "white boxes" to refer to washing machines).

We also examined the effects on product beliefs of the affective component of country image. Significant effects of both positive and negative feelings were found for both products. These results are in line with the findings of Klein and colleagues (1998) who showed that consumers' feelings toward a country can have a substantial impact on their evaluations of the country's products. Our study puts these findings in a broader and more general perspective, as it is the first to show that the impact of feelings about a country on product evaluations is not limited extreme cases of animosity. An interesting aspect of our findings is that the effects of feelings on product evaluation appear to be more prominent for foods than for technology-based consumer durables. Future studies might investigate the generalizability on this finding, and seek to uncover its causes. It might be that the impact of affective responses to a product depends on the level of product complexity or consumers' product involvement (as suggested for example by the Rossiter-Percy grid), but other explanations might also be plausible.

Another contribution of our model is the incorporation of ingroup bias as an influence on country image as well as on product evaluation. Although the importance of nationalistic or "ingroup") biases has been shown in previous studies (see chapter three), the present study is the first in marketing to examine the impact of ingroup bias on evaluations of countries as such. We find that nationalist sentiment (or national identification) has a consistent positive effect on the favorability of consumers' perceptions of the own country. This effect is mirrored by an almost equally important

[8] This does not imply that agricultural production does not require technical skills or that it is done without the use of (advanced) technological equipment. We merely refer to the fact that the technological aspect of production is more salient for technology-based durables, than for foods/agricultural products, and that this difference in salience is reversed for natural factors.

negative effect on perceptions of foreign countries. Although we also found a direct effect of national identification on consumers' attitudes toward domestic products, the main impact of national identification appears to be mediated by the affective and cognitive components of consumers' country images. In other words, our findings suggest that nationalistic bias in product evaluations is best captured by the phrase "our products are better, because our country is better", rather than a simple "our products are better". We find significant effects of national identification on beliefs toward foods, and nonsignificant effects on beliefs toward technology-based consumer durables. This might reflect the stronger link of foods to national cultures. Food products are often symbols of local culture, and consumers come to associate them with specific countries, as we noted in section 4.5. Further research in this area should examine whether this finding holds for other foods, and for other countries.

4.9.2. Limitations and issues for future research

As all studies, the present study has a number of limitations. First of all, the study is limited with respect to the number of countries and products which consumers were asked to rate. The fact that individual components of country image have different effects on different product categories suggests that it might be fruitful to examine these effects for a broader set of products. We made a first step in this direction by examining the role of country image for a food as well as for a technology-based consumer durable. Future research might incorporate additional instances of these categories to examine the generalizability of our findings with respect to the differential effects of country image on these categories. With respect to data collection, a limitation is the use of a convenience sample rather than a true random sample of the Dutch population. The implications of this are limited however, because we collected data on a heterogeneous sample of consumers, enhancing the (external) validity of our conclusions.

This notwithstanding, the findings of this study help us to better understand the nature and mechanisms of country-of-origin effects. We find that the favorability of consumers' evaluation of products from a particular country of origin is affected not only by their prior experience with the country's products, but also by their perceptions of the country and its people, and their feelings toward the country. Consumers' national identification produces an ingroup bias in these perceptions and feelings, which in turn affects their evaluations of domestic and foreign products. The impact of these feelings and cognitions toward countries themselves, and the role of ingroup bias in this process differentiate the effects of country-of-origin from those of other extrinsic cues.

Appendix 4A : Country-image items retrieved from literature

Earlier studies into national stereotypes (e.g. Katz and Braly 1933, Eagly and Kite 1987, Oakes, Haslam, and Turner 1994, Hagendoorn and Linssen 1994) and the perception of nations (Robinson and Hefner 1967, Wish et al. 1970, Johansson and Moinpour 1977, Forgas and O'Driscoll 1984) provide a large set of characteristics that relate to country images. The table below displays an overview of the items that was used as a basis for our pretests.

People	**Socio-economics**	**Geography**
Friendly	Poor/Rich	Large/Small
Creative	Prosperous	Dense Population
Hard Working	Industrialized	Close/Distant
Intelligent	Technologically Advanced	Sunny
Religious	Emancipated	Rainy
Family-Oriented	Extensive Social Security	Temperature
Ambitious	Educated People	Beautiful Scenery
Orderly	Democratic	Urban/Rural
Serious	Well-Organized	
Conservative	Socialist	
Scientifically Minded	Militaristic	
Christian	Politically Stable	
Efficient	Free	
	Powerful	
	Importing/ Exporting	
	Closed /Open	

Appendix 4B-1: Multi-item measures for country images

CONSTRUCT	ITEMS (both surveys)
Natural landscape	A lot of unspoiled nature Many forests and natural areas
Climate	Sunny Warm
Competence	Hardworking Efficient Meticulous
Creativity	Creative Imaginative Artistic
Positive feelings	Positive feelings Pleasant feelings Enthusiastic
Negative feelings	Distrustful Irritated Hostile

Appendix 4B-2: Multi-item measures for product experience and evaluations

CONSTRUCT	ITEMS (tomatoes)	ITEMS (washing machines)
Hedonic beliefs	Tasty Natural Aromatic	Modern design Easy to use Finely finished
Utilitarian beliefs	Keep well Constant quality Firm	Durable Reliable Good Quality
Attitude	Positive/Negative Appealing/Unappealing Good/Bad	Positive/Negative Appealing/Unappealing Good/Bad
Experience	Eaten Bought	Used Bought Seen in stores

Appendix 4B-3: Measures for national identification and consumer ethnocentrism

CONSTRUCT	ITEMS (tomatoes)
Consumer Ethnocentrism	Dutch people should not buy foreign products, because this hurts Dutch business and causes unemployment
	It is not right to purchase foreign products, because this puts Dutch people out of jobs
	A real Dutchman should always buy Dutch products
	We should purchase products manufactured in The Netherlands, in stead of letting other countries get rich off us
National Identification	I am proud to be Dutch
	Being Dutch is not important to me (recoded)
	I don't like it when someone has a negative opinion about The Netherlands
	I don't feel any ties with The Netherlands (recoded)
	Being Dutch means a lot to me

CHAPTER 5

COUNTRY OF ORIGIN IN ADVERTISING: SOURCE AND INFORMATION ROLES

5.1. Introduction

In advertising and other marketing communications, consumers are often informed about a product's country of origin (see chapter one). Consumers have a general image of a country's products within a category, which is based on prior experience, and on inferences from their country images (chapter 4). This makes country of origin a relevant piece of information for product evaluations. If country of origin is the only information that is available, consumers will base their product judgments entirely on their general image of a country's products within a category. In most cases however, consumers will combine this general image with their assessments of other information that is available to them. The present chapter examines consumer product evaluation in an advertising context, where consumers are being informed about the product's country of origin, but also presented with (favorable) claims about the product's attributes.

Research on country-of-origin effects has shown that country of origin provides consumers with information about the quality and other aspects of a product. Maheswaran (1994) has found that country of origin can serve as a cognitive shortcut ("heuristic") that enables consumers to save time and effort when evaluating a product. In line with this, he found that the impact of country of origin on product evaluations decreases with consumers' ability to process information. A similar finding was obtained by Hadjimarcou and Hu (1999). In addition however, several studies show that country of origin can moderate the influence of other product information on product evaluations (e.g., Johansson et al. 1985, Maheswaran 1994). In a series of experimental studies, Hong and Wyer (1989, 1990), and Li and Wyer (1994) showed that country of origin may activate a mental image that affects consumers' interpretation of other product information.

Based on these findings we distinguish between two ways in which country of origin can influence product evaluations, namely by serving as a piece of information, and by moderating the influence of other product information on product evaluation. The second type of influence is similar to the finding that brand and company names

may influence consumers' responses to advertising (Goldberg and Hartwick 1990) and brand extensions (Keller and Aaker 1992). In line with Goldberg and Hartwick (1990) we therefore use the term "source effect" to refer to this moderating influence of country of origin. This term is commonly used in communication research and attitude psychology, where a distinction is made between "source variables" and "message variables", although it is not uncommon for a single cue to play both roles at the same time (Eagly and Chaiken 1993, Petty, Wegener, and Fabrigar 1997).

The remainder of this chapter is structured as follows. Section 5.2.1 describes how consumers combine country of origin with other types of product information. Section 5.2.2. elaborates on the source variable role of country of origin. Message involvement is an important variable in the literatures on advertising and attitude change (e.g., Petty and Cacioppo 1986, Eagly and Chaiken 1993), and section 5.2.3 discusses the role of message involvement in the current study. In section 5.2.4 a set of hypotheses is developed that specifies how country of origin and other product information affect product evaluations. Sections 5.3 and 5.4 describe the method and results of the empirical study that is conducted to examine these hypotheses. Many studies on advertising and persuasion have been conducted in laboratories or classrooms, with student subjects. This decreases the external validity of findings in this area (cf., Sears 1985, Winer 1999). For the present study data has been collected in a field experiment, conducted among a large and representative sample of German consumers, who were asked to evaluate products that are presented with realistic full-color ads for a familiar product. Section 5.5 discusses implications of our findings, as well as some of the limitations of this study and suggestions for future research

5.2. Informational and source variable roles of country of origin

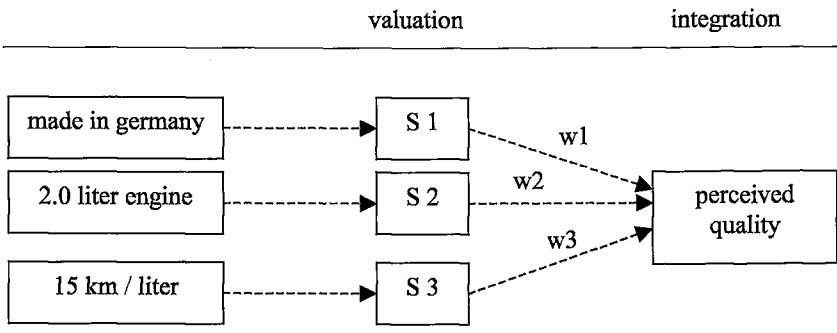
5.2.1. Integrating country of origin with other information.

To better understand the way in which consumers combine different pieces of information to form an overall product evaluation, we will start this chapter with a brief introduction on information integration theory (Anderson 1971, 1981). This theory provides a general framework for understanding the ways in which consumers process and combine different pieces of information. Applications to marketing and consumer behavior include Lynch (1985), Steenkamp (1989), and Johar, Jedid and Jacoby (1997). Information integration theory poses that consumers perform two cognitive operations

to arrive at an overall evaluation of a product[9]. These operations are referred to as valuation and integration. In the valuation process, a consumer evaluates each piece of information that is presented, and assigns to it a subjective scale value (s) that places the information on an internal scale. Imagine for example, a consumer who is trying to determine the quality of an automobile. Here, a German brand name may be positively evaluated because the consumer has a favorable general image of German cars. Accordingly the car is assigned a positive value on this consumer's internal scale for "car quality".

The valuation operation is performed separately for each piece of product information. In the subsequent integration process, the subjective scale values that are assigned to the individual pieces of information are integrated into one overall evaluation of the product. In this integrative process each subjective scale value is weighted (w). For a consumer determining the quality of a car, this means that the scale value assigned to "made in Germany" will be weighted and combined with weighted scale values for information like the car's fuel economy and engine size (see figure 5.1).

Figure 5.1. Schematic representation of information integration theory



Anderson (1971, 1981) proposed that the integration process be captured by simple mathematical operations like adding or averaging of the weighted scale values. Most studies have found that the averaging model provides the most accurate description of

[9] The theory also describes a third operation ("judgment"), in which the integrated mental representation is translated into an overt response (e.g., a rating on a 5-point scale). A discussion of this stage however, is not relevant to our present theorizing.

the integration process (Anderson 1981, Johar et al. 1997). Eagly and Chaiken (1993, p. 242) note that "... the averaging model has been most widely researched and apparently has widest applicability, especially to problems of attitude formation and change...". Hastak and Hong (1991) found that consumers use an averaging rule to combine evaluations of price and country of origin. The averaging rule is consistent with the finding that country-of-origin effects are smaller in multiple cue studies (chapter two). In the remainder of this chapter it will therefore be assumed that consumers use an averaging rule when they combine country of origin with other product information. Next to the direct impact of country of origin and claim favorability on product evaluations, this chapter proposes a more complex influence, which follows from the role of country of origin as a source variable.

5.2.2. Country of origin as a source variable

The outcome of the averaging process depends on the weights assigned to the consumer's subjective evaluation of each piece of information. Applying the information integration paradigm to a communication setting, Birnbaum and Stegner (1979) found that the perceived credibility of the source influences the weight that is attached to a piece of information. Based on this and other studies, Anderson (1981, p. 271) noted that "[a] given message will have greater influence when attributed to a more reliable source, and it seems natural to interpret this in terms of weight, with scale value being determined by the content of the message". The idea that consumers attach more weight to information that is presented by a more reliable source is a widespread notion in the literature on communication and attitude change (Eagly and Chaiken 1993, Petty and Cacioppo 1986, Cialdini 2001). The following section discusses how country of origin can be seen as a "source" for information that is presented together with it.

5.2.2.1. The source credibility of a country of origin

Research on source effects has mostly focused on variables like spokespersons and media. Rossiter and Percy (1997, p.260) however note that the definition of source variables should not be taken too narrowly, and that companies and brands should also be regarded as sources ("presenters") of advertisements. Along the same lines, Goldberg and Hartwick (1990) found that the persuasiveness of advertising claims is influenced by the extent to which a company is seen as a credible source for these claims, which in turn is determined by the image of the company that makes the advertised product. Keller and Aaker (1992, p.37) studied the impact of corporate credibility on the

evaluation of brand extensions, defining corporate credibility as "the extent to which consumers' believe that a company can deliver products and services that satisfy customer needs and wants" (cf., Brown and Dacin 1997).

Such a broader conceptualization of message sources may also include country of origin. In line with the conceptualizations of corporate (source) credibility that have been proposed by Brown and Dacin (1997), and Keller and Aaker (1992) we propose that the country's credibility as a source is determined by consumers' general image of the country's products within a category. When consumers have a favorable image of a country's products in a category, the source credibility of the country of origin is high for this category. Inversely, when consumers have an unfavorable image of a country's products within a category, the country's source credibility in this category is low.

5.2.2.2 The interaction between source credibility and claim favorability

Source credibility moderates the effect of claim favorability on attitude change (Goldberg and Hartwick 1990). In Goldberg and Hartwick's (1990) study, claim favorability was manipulated by advertising a new product's ranking in a taste-test, so that claiming the "number one" position was more favorable than claiming a number five position (out of 100 products). For companies with low credibility, Goldberg and Hartwick (1990) found that moderately favorable claims lead to better product evaluations than extremely favorable claims. This is in line with the notion of "boomerang effects" in advertising, i.e., the idea that overclaiming in advertisements has a negative effect on consumers' attitudes toward a brand (Rossiter and Percy 1997, p.252). Manrai et al. (1997) found a similar interaction between the favorability of "green" advertising claims (i.e., "this car produces X% less pollution than the average automobile"), and the favorability of consumers' evaluations of the car's country of origin. In the study of Goldberg and Hartwick (1990), further analyses showed that the interaction-effect of source credibility and claim favorability on product evaluations was mediated by ad credibility. That is, for companies with low source credibility an increase in claim favorability lead to a decrease in ad credibility, which in turn had a negative effect on product evaluations. This effect did not occur for companies with high source credibility.

The importance of this result lies in the trade-off between credibility and persuasiveness. This trade-off is best understood from the earlier discussed (averaging) model for information integration. In this model a higher level of claim favorability leads consumers to assign a more positive subjective scale value (s) to the information

in the ad. However, when the information pertains to a product from a country that is low in source credibility (because the country has a poor general image in the relevant product category), a high level of favorability may lead to a decrease in the credibility of the claim, resulting in a decrease in the weight (w) that is assigned to it. This might lead to the finding of a zero or negative effect of claim favorability on product evaluation under these circumstances. In general terms, this has been proposed earlier by Anderson (1981, p. 285), who cited research by McKillip and Edwards (1975) showing that the weight that is given to a piece of information may be determined interactively by the favorability of information and characteristics of the source.

5.2.3. The role of message involvement

The processes described above lead to different outcomes under different levels of consumers' involvement with the advertising message (hereafter referred to as "message involvement"). Message involvement takes a central place in dual process models like the Elaboration Likelihood Model (ELM – Petty and Cacioppo 1986), and the Heuristic Systematic Model (HSM – Chaiken, Liberman and Eagly 1989), which specify how advertising and other forms of communications influence consumers' attitudes[10]. These models distinguish between two modes of information processing, one systematic and one heuristic. Heuristic processing refers to low-effortful processing, in which consumers use shortcuts or heuristics to arrive at a product evaluation (the so-called "peripheral route" in the ELM). Systematic processing is more elaborate, and entails effortful scrutinizing of attitude-relevant information (the "central route" in the ELM). The amount of effort that consumers' devote to the processing of a message is determined by their motivation, ability and opportunity to process information. These three factors interact in a multiplicative way, so that an increase in one of these factors leads to a (gradual) shift from heuristic processing to systematic processing (if none of the factors is equal to zero).

An increase in message involvement leads to an increase in consumers' motivation to process attitude-relevant information, such as the claims that are presented in an ad. This implies a shift from low-effortful to high-effortful processing (cf., Petty and Cacioppo 1986). Increasing message involvement can be understood as increasing consumers' attention to the claims that are made in the ad, and can readily be

[10] ELM and HSM have a lot in common, but differ on some points that are not directly relevant to this study (cf., Eagly and Chaiken 1993). This chapter mostly relies on terminology from the HSM, although the ELM is just as appropriate

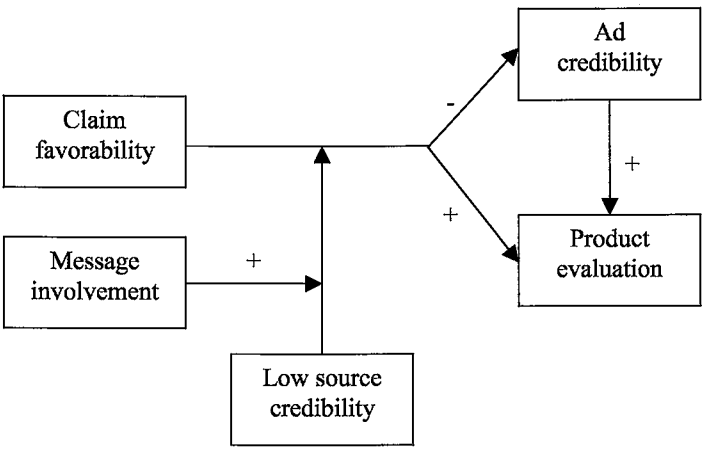
accommodated by information integration theory, which proposes that consumers assign larger weights to information to which they devote more attention (Anderson 1971, 1981). In other words, an increase in message involvement will increase the extent to which consumers process product-related claims that are made in an ad. This results in a greater weight of these claims, which will therefore have a larger effect on consumers' evaluations of the advertised products. Complementary, increasing message involvement should lead to a decrease in the impact of heuristic cues such as country of origin (cf., Maheswaran 1994, Hadjimarcou and Hu 1999).

We propose however that higher levels of message involvement do not always lead to an increased impact of ad claims. To elaborate on this, we will return to Goldberg and Hartwick (1990) finding that product evaluations are influenced by an interaction between source credibility and claim favorability. For claims that are made by a company that is perceived to be low in credibility, Goldberg and Hartwick found that an increase in claim favorability leads to a decrease in the effect of advertising claims on product evaluations. For this process to occur, Goldberg and Hartwick note that "a reasonable level of involvement must be associated with the [ad] viewing process" (1990, p. 178). This suggests that the interaction between source credibility and claim favorability was actually a three-way interaction between source credibility, claim favorability, and message involvement, in which the negative effects of low source credibility are more likely to occur when message involvement is high.

The interaction can be understood as follows: Both ELM and HSM propose that under higher levels of message involvement, consumers will elaborate on the content of a message, and carefully examine the arguments or claims that are made in an ad. This "extensive thinking about the merits of an ad's claims" (Miniard, Bhatla and Rose 1990, p. 293) might lead consumers to question the reliability of extremely favorable claims, especially when such claims are made by a source that is low in credibility. This process reduces the positive impact of favorable claims on product evaluation.

The process is visualized in figure 5.2, which shows that claim favorability has a negative impact on ad credibility when source credibility is low, and message involvement is high. Through this effect on ad credibility, the net effect of claim favorability on product evaluations is reduced. Depending on the strength of this interaction effect, the net effect of claim favorability on product evaluation may be positive, neutral or even negative.

Figure 5.2. Visualization of the interaction between source credibility, claim favorability and message involvement



This reasoning is in line with the literature on judgment correction, stating that consumers may adjust their judgements when they feel that their initial evaluation was incorrect (Meyers-Levy and Malaviya 1999). In the present context consumers might adjust the weight attached to extreme claims if these are made by a source that is low in credibility. Meyers-Levy and Malaviya (1999) note that such adjustments are more likely when many cognitive resources are available and used, e.g., under conditions of high message involvement (Martin, Seta and Crelia 1990). The complex interaction between source credibility, claim favorability and message involvement combines two early notions of Hovland (1959), namely that high involvement will decrease the impact of extreme arguments on attitude change, and that extreme arguments are more likely to produce large changes in attitudes when source credibility is high.

5.2.4. Hypotheses

Based on our theorizing, we develop a number of hypotheses that will be tested in our empirical study. The first of these hypotheses pertains to the well-known country-of-origin effect. The extensive literature on country-of-origin effects reviewed in chapter two of this thesis suggests that consumers who are presented with the same products from (meaningfully) different origin countries will evaluate these products differently, even when they are presented with additional product information. This country-of-origin effect occurs because consumers asked to evaluate a product will use their general image of a country's products within a category as information.

H1: Products from a country of origin with a relatively favorable general image in the relevant category will be evaluated more positively than products from a country that has a relatively unfavorable image in the relevant category.

Dual process models of information processing propose that the impact of country of origin on product evaluations is moderated by message involvement (that is, if consumers have the ability and opportunity to process all information presented). More specifically, these models predict that an increase in message involvement will result in an increased impact of systematically processed advertising claims on product evaluations. In an averaging model this implies that the impact of country of origin decreases with the level of message involvement.

We propose however that the moderating effects of message involvement may vary with the extent to which a country of origin is a credible source of favorable claims. As noted earlier, source credibility is determined by consumers' general image of the country's products within a category. Within a product category, the source credibility of a country of origin is higher when consumers have a more favorable general image of the country's products within that category[11]. Below we present hypotheses specifying how message involvement moderates the impact of advertising claims on product evaluations under conditions of low versus high source credibility.

When consumers have a relatively favorable general image of a country's products within a category, the source credibility of the country of origin is high for this category. This means that higher levels of message involvement will lead to a greater impact of claim favorability on product evaluations. An increase in involvement leads consumers to devote more attention to message arguments (i.e., advertising claims), which increases the weight that is assigned to these claims, resulting in an increase in the (positive) difference between evaluations of products advertised with moderately favorable claims, and products advertised with extremely favorable claims.

H2: When consumers are presented with an ad for a product from a country of origin with a relatively favorable general image in the relevant category, higher levels of message involvement will lead to a greater impact of favorable advertising claims on evaluations of the advertised product.

[11] Technically we specify a three-way interaction between country of origin, involvement, and claim favorability. For clarity of exposure we divide this interaction into separate hypotheses for the claim favorability * involvement interaction under low versus high source credibility.

When consumers have a relatively unfavorable general image of a country's products within a category, the source credibility of the country of origin is low for this category. In this case higher levels of message involvement will not necessarily lead to a greater impact of claim favorability on product evaluations. As outlined in section 5.2.3, an increase in message involvement has two different effects on product evaluations, which operate in opposite directions. On the one hand, increased message involvement implies that consumers devote more attention to advertising claims, which increases the weight that is attached to these claims (H2). On the other hand, when source credibility is low, increased higher levels of involvement make it more likely that consumers refute extremely favorable claims. Thus, although an increase in message involvement in general leads to a gain in importance, for extremely favorable claims this is countered by a decrease in claim credibility, which also occurs with higher levels of involvement. For products advertised with moderately favorable claims, we propose that the decrease in credibility will not occur, or at least to a lesser degree, so that an increase in message involvement leads to more favorable product evaluations.

H3a: When consumers are presented with an ad for a product from a country of origin with a relatively unfavorable general image in the relevant category, and this ad contains claims that are moderately favorable, higher levels of message involvement will lead to more favorable product evaluations.

H3b: When consumers are presented with an ad for a product from a country of origin with a relatively unfavorable general image in the relevant category, and this ad contains claims that are extremely favorable, higher levels of message involvement will not lead to more favorable product evaluations.

Together, hypotheses 3a and 3b predict a negative interaction effect of involvement and claim favorability, which occurs when consumers have a relatively unfavorable general image of a country's products within a category.

5.3. Method

Our hypotheses were tested in a field study conducted among a large sample of German consumers, which focused on German consumers' evaluations of fresh tomatoes from The Netherlands and Spain. These countries are two main competitors in this market. On a global scale The Netherlands is one of the larger exporters of fruit and vegetables, with a net export value of approximately 5 billion euros per year. Forty percent of this is exported to Germany, making it by far the most important export market for Dutch fruits and vegetables (Dutch Horticultural Board 2001). In the past decade Dutch agriculture has received a great deal of criticism in Germany. Dutch tomatoes have been targeted in particular, and are referred to as "Wasserbombe" (waterbombs). These criticisms have received widespread attention in the German press, resulting in a commonly held belief that Dutch agricultural products are artificial and tasteless. In-depth market research has shown that Dutch tomatoes are well known (aided awareness = 95%) but associated with negative aspects like "tasteless", "watery" and "artificial" (GfK 1996). This reflects a stereotypical view of Dutch agriculture as a modern enterprise that grows crops with use of advanced technology, and is remote from traditional farming. This view is expressed in headlines like "Dutch tomatoes grown by computers" that appeared in major German media (GfK 1996). Spain was selected as the positively valenced counterpart of this image. Like The Netherlands, Spain is a major exporter of tomatoes to Germany, with an aided awareness of 88 % (GfK 1998). Unlike Dutch tomatoes, Spanish tomatoes are seen as natural and sun-ripened produce (GfK 1996). This general view is confirmed by data obtained from the 1998 edition of the *Holland Imago Monitor* (HIM), which surveyed 1500 German consumers on their image of agricultural products from different European countries (Table 5.1).

Table 5.1: German consumers' evaluations of Dutch and Spanish tomatoes*

	Dutch tomatoes: Mean (SD)	Spanish tomatoes: Mean (SD)
good taste **	56.5 (28.3)	81.5 (17.7)
natural	51.6 (25.3)	71.7 (19.6)
good quality	63.3 (26.0)	79.2 (17.6)

* *Based on own analyses of data collected by GfK (1998)*

** *Attributes rated on a 10-point scale (10-100). "Don't know" responses were deleted.*

Our questionnaire was added to a larger survey on consumers' opinions with regard to food-related issues. Stimulus materials were distributed as separate enclosures with the questionnaire, and manipulated in a 2 X 2 X 2 between-subjects design, which manipulated country of origin, claim favorability and message involvement. The cells in the design were matched with regard to geographic and demographic characteristics. The questionnaire was distributed to 1500 consumers, with an equal number of consumers in each cell. Of this sample, 1009 returned the questionnaire, for a response rate of 67%. We deleted all questionnaires where the respondent had indicated that he or she was not at all familiar with Dutch or Spanish tomatoes. In addition we deleted a small number of questionnaires that were incomplete, or not properly filled out (see chapter three for a description of the screening procedure). This left us with 751 responses, more or less evenly distributed across the eight cells in the design[12].

5.3.1. Procedure

Data collection was carried out by GfK, a large international market-research company. Stimulus materials and questionnaires were distributed as a separate module in a survey on food-related issues. This module consisted of two pages containing a short instruction, measures for dependent variables and process-related measures. In the instruction consumers were asked to examine the enclosed stimulus material, and respond to the items in the questionnaire. As we discuss below, this introduction was also used to establish our manipulation of message involvement. Throughout the questionnaire, items were worded as evaluative statements. Consumers indicated their agreement on a 10-point scale with numbers 10, ...,100. The left end of the scale [10] was labeled "*not agree at all*", and the right end [100] was labeled "*fully agree*".

5.3.2. Stimulus material

Stimulus materials were full-page magazine ads consisting of a body text and pay-off line, supported by a matching visual. The ads were created by the researcher, and then pretested in a small mall-intercept study in which 25 shoppers in the German city of Oberhausen commented on the content and execution of the ads. These comments were used to further improve the ads. We then used additional suggestions from professionals at a large advertising agency to make final improvements. We developed four different versions of these ads, in which country of origin and claim favorability were varied

[12] Cell sizes varied between 88 and 101.

orthogonally, with two levels each. The four different versions of the ad are included in appendix 5A. Similar to Petty et al. (1981, 1983), message involvement was manipulated in the instruction to the questionnaire. The two different versions of this instruction are given in appendix 5B.

Each ad presented a branded version of tomatoes from one of two origin countries (The Netherlands or Spain). We used mock brands to ensure that consumers' responses reflected their opinion on the advertised tomatoes, and not their opinion on Dutch (Spanish) tomatoes in general. The brand names that we used were derived from the country names in a straightforward manner: For Dutch tomatoes we used "Hollandia", and for Spanish tomatoes we used "Spania". These brands did not exist in the market at the time of the study.

5.3.3. Independent variables

Country of origin was varied across two levels, i.e., The Netherlands and Spain. As described above, these two countries are expected to differ with respect to the favorability of consumers' general images of tomatoes coming form these countries. The ad theme was "natural produce", and the ad talked about naturally grown Spania (Hollandia) tomatoes, with a rich and natural flavor.

Favorability of the ad's claims was varied across two levels, i.e., moderately favorable and extremely favorable. In the "moderately favorable" condition, the ad stated that the farmers growing Spania (Hollandia) tomatoes paid attention to nature and tradition, which resulted in a quality product, with a good taste and aroma. It also stated that a test had shown that 6 out of 10 consumers rated Spania (Hollandia) tomatoes as tastier than other tomatoes. In the "extremely favorable" condition, the ad stated that Spania (Hollandia) tomatoes paid attention to nature and tradition *more than in any other country*, resulting in a product of *unmatched* quality, with an *unsurpassed* full taste and a rich aroma. It also stated that a test had shown that *9 out of 10* consumers rated Spania (Hollandia) tomatoes as *much* tastier than other tomatoes (see appendix 5A).

Message involvement. Our manipulation of involvement was modeled after the standard manipulation used in many information processing studies (e.g., Chaiken and Maheswaran 1994, Petty, Cacioppo and Schumann 1983). Involvement was varied across two levels. In the low involvement condition, consumers were informed that the advertised tomatoes were not available in their own country, and that the study was a

pretest for a larger study that would take place in a different country. They were instructed to look primarily at the execution of the ad, and then fill out the questionnaire. In the high involvement condition, consumers were informed that the ad featured a product that would soon be introduced in nearby supermarkets, and that the ad was pretested on a select group of customers. In this condition, consumers were urged to carefully look at ad, and pay attention to its content before filling out questions (see appendix 5B).

5.3.4. Measures

Consumers were asked to indicate their purchase intentions for the advertised products, which was measured with two items, i.e., *"If I came across X in my store, I would definitely buy it"*, and *"I would rather buy X than any other brand"*. In addition we measured the perceived credibility of the advertising claims with two items, i.e., "*The claims in this ad are credible / honest* ". Reliability of both measures was high ($\alpha = .88$ for purchase intentions, and $\alpha = .97$ for ad credibility). The correlation between these two measures was .69.

5.3.5. Covariate: Consumers' general images of Dutch and Spanish tomatoes

As noted earlier, the stimulus materials and questionnaires used for this study were distributed as a separate module within a more general survey on food-related issues. The general part of the survey included a large set of items measuring consumers' beliefs regarding tomatoes from different European countries. From this set of items, we selected three to serve as a measure of consumers' general images of Dutch and Spanish tomatoes: *"good taste"*, *"good quality"* and *"natural"*. The mean rating on these items was used as a measure of consumers' evaluations of Dutch and Spanish tomatoes ($\alpha =$ .90 for The Netherlands, and .87 for Spain). Means were 58.4 for Dutch tomatoes, and 76.8 for Spanish tomatoes ($F(1,656) = 125.82$, $p < .001$). This difference is in line with our manipulation of the favorability of country of origin. The combined measure was used as a covariate in our analyses. Unfortunately, use of this measure resulted in an additional loss of 93 subjects due to missing values[13]. We therefore report the results with and without the use of this covariate.

[13] The large number of missing values in this part of the survey is probably due to the design of this part of the questionnaire. Consumers rated tomatoes from five different countries on 28 items. For each country, this was done by writing a score between 10 and 100 in a small box.

5.4. Results

Table 5.2 shows the pattern of cell means that was obtained in the experiment. It reveals a large and positive difference between consumers' purchase intentions for Spania and Hollandia tomatoes that is consistent across conditions. For Spania tomatoes, Table 5.2 shows negative effects of involvement on consumers' purchase intentions toward Spania tomatoes advertised with moderately favorable claims. This effect is significant at $\alpha = .05$. Other effects for Spania tomatoes are not significant. For Hollandia tomatoes, Table 5.2 shows a positive effect of involvement for tomatoes advertised with moderately favorable claims, which is significant at $\alpha = .05$. For Dutch tomatoes advertised with extremely favorable claims, we find no significant effect of involvement. Together, these findings lead to a cross-over in the effects of claim favorability under high and low involvement (see figure 5.3). We find a positive effect of claim favorability under low involvement conditions (significant for purchase intention and attitude), and a negative but nonsignificant effect of claim favorability under high involvement conditions. This finding lends additional support to the notion that claim favorability operates differently under high and low involvement, although it does not support the idea that extremely favorable claims are harmful to the persuasiveness of ads from sources that are low in credibility.

Table 5.2: Purchase intention for Hollandia and Spania tomatoes with claims differing favorability, under high and low message involvement*

	SPANIA		HOLLANDIA	
	Low involvement	High involvement	Low involvement	High involvement
moderately favorable	68.5 [a]	61.6 [a]	46.0 [a,b]	56.1 [a]
extremely favorable	64.3	65.6	54.4 [b]	52.1

[a] *Difference between high and low involvement is significant at $\alpha = .05$*
[b] *Difference between moderate and extreme claims is significant at $\alpha = .05$*

The data were further analyzed by means of an analysis of variance (ANOVA) with *purchase intention* as dependent variable. Predictive variables were claim favorability, country of origin and message involvement. This analysis revealed a significant main

effect of country of origin ($F(1,743) = 54.30$, $p < .001$, $\eta^2 = .068$), which is a replication of the well-known country-of-origin effect (H1). When we included as a covariate our measure of consumers' general country image for tomatoes, the main effect of country of origin reduced substantially ($F(1,649) = 6.80$, $p = .009$, $\eta^2 = .010$). This indicates that the main effect of country of origin effect is due to differences in consumers' general images of countries' products within a category.

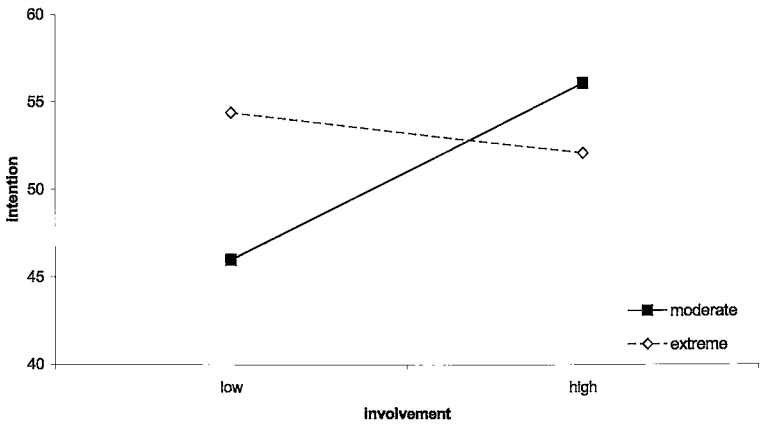
The remainder of the analyses were all performed with and without the covariate, but this did not have a substantial effect on the outcomes of the analyses. This section hence provides the results obtained in ANOVAs with the covariate. It was argued (see footnote 3) that Hypotheses 2, 3a and 3b together specify a three-way interaction of country of origin, involvement and claim favorability on purchase intentions. This interaction is significant in ANOVAs with covariate ($F(1,649) = 11.28$, $p = .001$, $\eta^2 = .017$), and without covariate ($F(1,741) = 8.72$, $p = .003$, $\eta^2 = .012$). Table 5.3. shows the results of the ANOVA with consumers' general image of a country's tomatoes as covariate.

Table 5.3: ANOVA Results

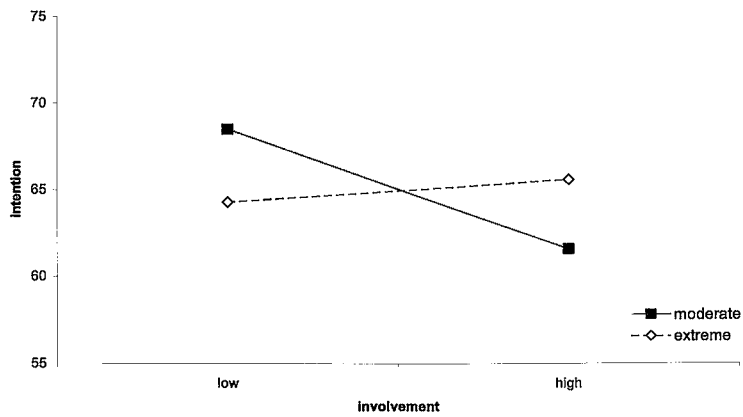
	df	MS	F	p	η^2
General country image	1	55909.04	114.65	<.001	.150
Country of origin (CO)	1	3314.46	6.80	.009	.010
Claim favorability (CF)	1	110.08	.23	.635	.000
Message involvement (MI)	1	74.83	.15	.695	.000
CO*CF	1	297.16	.61	.435	.001
CO*MI	1	1859.13	3.81	.051	.006
MI*CF	1	606.71	1.24	.265	.002
CO*MI*CF	1	5498.73	11.28	.001	.017
Error	649	487.64			
Total	658				

Figure 5.3: Purchase intentions for Hollandia and Spania tomatoes, in ads with moderately or extremely favorable claims

PANEL A: PURCHASE INTENTIONS FOR HOLLANDIA TOMATOES



PANEL B: PURCHASE INTENTIONS FOR SPANIA TOMATOES



To further examine Hypotheses 2 and Hypotheses 3a and 3b, we analyzed consumers' ratings of Dutch and Spanish tomatoes in separate ANOVAs that were similar to the one described above. Hypothesis 2 was examined in an ANOVA performed on the data for Spanish tomatoes, with purchase intention as the dependent variable. This analyses showed no significant main effects of message involvement and claim favorability ($F(1,292) < 1$), and also no interaction between these two variables ($F(1,292) = 2.20$, $p = .14$, $\eta^2 = .007$), so that the results offer no support for Hypothesis 2.

For Dutch tomatoes, Hypotheses 3a and 3b together predict a negative interaction effect of involvement and claim favorability. These hypotheses were examined in an ANOVA performed on the data for Dutch tomatoes, with purchase intention as dependent variable. The results revealed a nonsignificant main effect of claim favorability ($F(1,356) <1$), and a marginally significant effect of involvement ($F(1,356) = 3.16$, $p =.076$, $\eta^2 = .009$). The interaction between these variables was significant ($F(1,356) = 10.22$, $p =.002$, $\eta^2 = .028$), which is shown in the upper panel of figure 5.3.

In line with hypothesis 3a, a positive effect was found of message involvement on evaluations of Dutch tomatoes advertised with moderately favorable claims ($F(1,180) = 15.48$, $p < .001$, $\eta^2 = .079$). According to H3b, the effect of message involvement on evaluations of Dutch tomatoes advertised with extremely favorable claims should not be significant. Indeed, this effect was not significant ($F(1,175) = .66$, $p = .42$, $\eta^2 = .004$).

Hypotheses 3b deals with evaluations of ads for products from a country of origin of which consumers have an unfavorable general image. In that case, we proposed that an increase in involvement leads to a decrease in the credibility of extremely favorable claims, which cancels out the positive effect of involvement that is due to an increase in attention to the favorable information in the advertising claims. In fact, this line of reasoning proposes that ad credibility mediates the 3-way interaction effect of country of origin, involvement, and claim extremity on product evaluations. To examine this notion we followed Baron and Kenny's (1986) procedure for mediation analysis. We first examined whether ad credibility is influenced by a three-way interaction of involvement, country of origin, and claim favorability. An ANOVA with ad credibility as dependent variable indeed reveals a significant three-way interaction effect on perceived ad credibility ($F(1,644) = 5.95$, $p = .015$).

Subsequently we entered ad credibility as a covariate into the ANOVA with purchase intentions as a dependent variable. The results showed a significant impact of ad credibility on purchase intentions ($F(1,643) = 364.2$, $p <.001$, $\eta^2 = .36$), but also a

significant 3-way interaction of claim favorability, source credibility, and involvement ($F(1,643) = 6.02$, $p = .014$). Compared to the ANOVA without ad credibility, the magnitude of this effect was almost halved in terms of η^2 (with credibility: $\eta^2 = .009$, without credibility: $\eta^2 = .017$), which indicates that ad credibility partially mediates the 3-way interaction-effect of claim favorability, source credibility and involvement on purchase intention. The results do not however support the notion of full mediation.

5.5. Discussion

5.5.1. Findings and implications

The impact of country of origin on consumer product evaluations has often been studied in isolation of other factors. Up to this chapter, this thesis has been no exception to that observation. The advantages of such an approach are obvious: By isolating the object of study, it becomes possible to study it in detail, without possible disturbances caused by variations in other factors. However this approach also favors relatively large effect sizes, and entails the danger of obtaining inflated effect sizes (see chapter two).

The present study therefore offers a strong test of the country-of-origin effect. We present consumers with an ad that contains references to the product's country of origin, as well as a considerable amount of additional product information. Furthermore, this study involves products from countries that have similar levels of economic development, and tested our hypotheses in a between-subjects design. As shown in chapter two, these factors generally have a negative impact on the size of country-of-origin effects that is obtained in a study. Nevertheless, we find that country of origin has a significant and substantial impact on product evaluations, underlining its importance.

This study uses an advertising setting to examine how country of origin influences product evaluations, when it is presented jointly with additional information. In such situations we propose that country of origin has a dual role in influencing consumers' product evaluations, namely as information variable and as a source variable. The role of country of origin as an informational variable is extensively documented in the literature, and implies that consumers use their general image of a country's products within a category when they evaluate the specific instance that is presented to them.

As a source variable, country of origin moderates the effects of the additional information or claims that are presented to the consumer. When a country has an

unfavorable image in a certain product category, it will be perceived as a less credible source for (favorable) advertising claims, especially when these claims are extremely favorable. Thus, source credibility determines how claim favorability influences product evaluations (cf., Goldberg and Hartwick 1990, Brown and Dacin 1997). When source credibility is high, both moderately and extremely favorable claims could have a positive impact on product evaluations. We hypothesized that this positive impact should increase with message involvement. However, this notion is not confirmed in our study. We find that an increase in message involvement leads to a significant decrease in evaluations of moderately favorable claims, and a nonsignificant increase in evaluations of Spanish tomatoes advertised with extremely favorable claims.

This finding can be accommodated in our framework if we assume that consumers' general images of Spanish tomatoes are so favorable that they surpass the moderately favorable claims in our ad. In that case, an increase in the attention that is devoted to the claims would have a negative impact on consumers' evaluations of the advertised product. Similarly, a highly favorable general image of Spanish tomatoes could account for the small magnitude of the positive effect that was found for extremely favorable claims. Interestingly, our finding of a negative effect of involvement on the persuasiveness of ads with moderately favorable claims can also be observed in the results of Petty et al. (1983). Rossiter and Percy (1997, p. 252) warn for the detrimental effects of claims that are not sufficiently favorable: *"Underclaiming is just as much an error as overclaiming. Indeed, we may think of an underhand throw of the boomerang (underclaiming) as well as the overhand of overclaiming".*

When source credibility is low, it seems that underclaiming is not so much of a problem. In line with hypothesis 3a, we find that an increase in message involvement has a strong positive effect on consumers' evaluations of Dutch tomatoes advertised with weakly favorable claims. For ads containing extremely favorable claims, we found no effect of increasing message involvement. In terms of above cited notion of "boomerang effects", the use of extremely favorable claims in this case could be an example of overclaiming. In the present study however, the danger of overclaiming is limited. When message involvement is low, extremely favorable claims lead to significantly more favorable product evaluations. When message involvement is high, this difference is reversed, but it is not significant.

Although not significant, our results show that evaluations of Dutch tomatoes in extremely favorable ads tends to decrease with message involvement. This finding suggests a contrast effect, i.e., a negative effect of increased attention to positive

information (cf., Myers-Levy and Sternthal 1993). Li and Wyer (1994) show that the use of country of origin as a standard of comparison may produce contrast effects in consumers' product evaluations, especially when there is a discrepancy between the favorability of the product information, and the expectations raised by its country of origin. Contrast effects are likely to occur when there is a relatively large discrepancy between the evaluation of the contextual cue (i.e., country of origin) and the information that is presented together with it (Meyers-Levy and Sternthal 1993, Stapel, Koomen and Velthuijsen 1998) Furthermore, contrast effects are most likely when consumers have many cognitive resources available (Martin et al., 1990). These notions from the literature on assimilation-contrast effects imply that the likelihood of contrast effects increases with consumers' involvement with an ad, and with the size of the discrepancy between ad claims and consumers' general images of the product-country combination. Along these lines of reasoning, the literature on assimilation-contrast effects suggests an alternative explanation for the absence of an effect of message involvement on consumers' evaluations of Dutch tomatoes presented with extremely favorable claims. That is, this "zero-effect" finding might be the resultant of a balance between a positive effect of increased attention to favorable claims, and a negative contrast effect that is "caused" by increased attention to the discrepancy between the extremely favorable ad claims, and consumers' unfavorable general images of Dutch tomatoes. Additional research could show whether this explanation is more feasible than our own account.

Our results (especially those for Dutch tomatoes) show that the level of message involvement with the ad determines whether the use of extremely favorable claims is more effective than the use of moderately favorable claims. It seems that, as long as message involvement is low, extremely favorable claims are the most effective means of improving the image of Dutch tomatoes. Apparently, higher levels of involvement negatively affect claim credibility, and impair the effectiveness of extremely favorable claims. In this study however, there never is a significant advantage of moderately favorable claims over highly favorable claims, which suggests that extremely favorable claims are most effective in the current situation. Additional studies are needed to investigate whether this conclusion remains unchanged when consumers are repeatedly exposed to this ad. Under these circumstances, consumers will have multiple opportunities to process the claims made in the ad. Both HSM and ELM propose that, next to message involvement, the opportunity to process information is one of the factors that facilitates more elaborate processing, and thus a more careful examination of the information in the advertising claims.

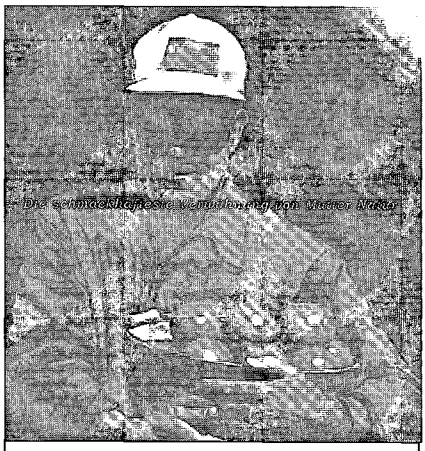
Another issue that might hamper the effectiveness of extremely favorable claims in the present context is the sensitivity of the German media to this issue (cf., GfK 1996). This increases the likelihood that advertising for Dutch tomatoes receives attention from the media, especially if these ads make extreme claims that counter German consumers' negative image of Dutch agriculture. Media coverage might prompt consumers to be more skeptic toward advertising for Dutch agricultural products, which would favor the use of less extreme claims. Based on the results of the present study however, there is no reason to expect a detrimental effect of the use of extremely favorable claims. Rather, our findings suggest that German consumers' negative image of Dutch tomatoes might best be countered via ads that use highly favorable claims.

5.5.2. Limitations and issues for future research

Like any other study, this experiment has both strengths and weaknesses. In this light, we would like to discuss the pros and cons of the data collection method that was used in this study. This study used a fairly large sample of "real" consumers, and in that respect it differs from most other work that has been done in the area of information processing. Such an approach is appealing from the perspective of external validity, and helps to establish the validity of marketing theories beyond the setting of laboratory studies and student samples (cf., Winer 1999). In the present study, the focus on external validity unfortunately implied that we were forced to make two compromises in the design and execution of our experiment. First of all, we were unable to collect process measures such as cognitive responses, which could be used to validate our reasoning with respect to the processes that we think underlie our findings. However, most of these processes have been earlier established in lab settings, and it therefore seems to be justifiable to omit these measures for the sake of collecting data among a large sample of non-student consumers. Second, the questionnaire was self-administered, and distributed via mail. This method of data collection does not allow for a tight control of environmental influences, leading to an increase in (measurement) error. Factors such as these render it more difficult to find large effects, especially when their size is compared to those obtained under carefully controlled conditions in laboratory studies with (under)graduate students as compliant participants. They also however, may be closer to the effects that can be expected to occur in the real world.

Appendix 5 A: Ads used in the experiment

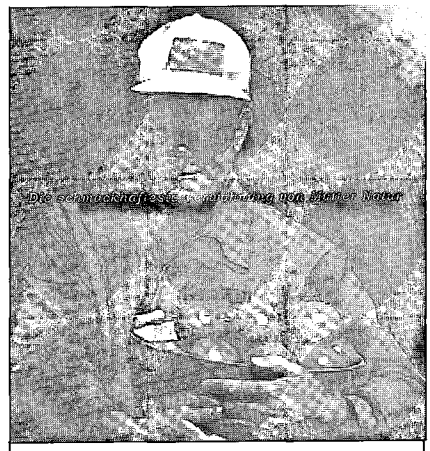
Spania – extremely favorable



Tomaten aus Spanien heissen von nun ab ***Spania Tomaten.*** *Beim Anbau von Spania Tomaten wird mehr als in jedem anderen Land auf Natur und Umwelt geachtet. Mit Hilfe von natürlichen Mitteln sorgt der spanische Bauer für ein Qualitätsprodukt ohnegleichen. Spania Tomaten haben einen unübertroffen vollen Geschmack und ein reiches Aroma. Forschung weist auf, dass 9 von 10 Konsumenten Spania Tomaten viel schmackhafter finden als andere Tomaten.*

Spania Tomaten:
Schmecken so gut wie Tomaten aus eigenem Garten

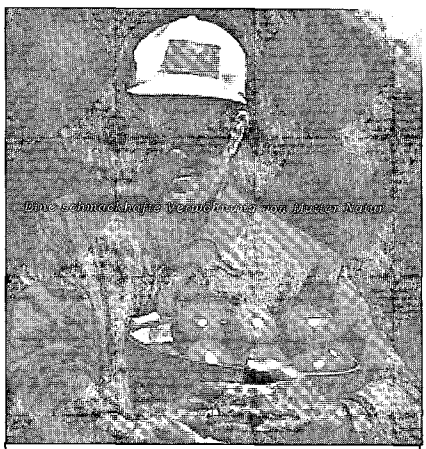
Hollandia – extremely favorable



Tomaten aus Holland heissen von nun ab ***Hollandia Tomaten.*** *Beim Anbau von Holandia Tomaten wird mehr als in jedem anderen Land auf Natur und Umwelt geachtet. Mit Hilfe von natürlichen Mitteln sorgt der hollandische Bauer für ein Qualitätsprodukt ohnegleichen. Hollandia Tomaten haben einen unübertroffen vollen Geschmack und ein reiches Aroma. Forschung weist auf, dass 9 von 10 Konsumenten Hollandia Tomaten viel schmackhafter finden als andere Tomaten.*

Hollandia Tomaten:
Schmecken so gut wie Tomaten aus eigenem Garten

Spania – moderately favorable



Tomaten aus Spanien heissen von nun ab ***Spania Tomaten.*** *Beim Anbau von Spania Tomaten wird auf Natur und Umwelt geachtet. Mit Hilfe von natürlichen Mitteln sorgt der spanische Bauer für ein Qualitätsprodukt. Spabia Tomaten haben einen guten Geschmack und Aroma. Forschung weist auf, dass 6 von 10 Konsumenten Spania Tomaten schmackhafter finden als andere Tomaten.*

Spania Tomaten:
Schmecken beinah so gut wie Tomaten aus eigenem Garten...

Hollandia – moderately favorable

Tomaten aus Holland heissen von nun ab ***Hollandia Tomaten.*** *Beim Anbau von Hollandia Tomaten wird auf Natur und Umwelt geachtet. Mit Hilfe von natürlichen Mitteln sorgt der niederländische Bauer für ein Qualitätsprodukt. Hollandia Tomaten haben einen guten Geschmack und Aroma. Forschung weist auf, dass 6 von 10 Konsumenten Hollandia Tomaten schmackhafter finden als andere Tomaten.*

Hollandia Tomaten:
Schmecken beinah so gut wie Tomaten aus eigenem Garten...

Appendix 5B: Message involvement manipulations

LOW INVOLVEMENT X HOLLAND

The questions below pertain to the ad which we sent you in a separate envelop. The Hollandia tomatoes in this ad are not for sale in Germany. This ad is used in a pretest for a study which we will conduct in a different country. We ask you to look at the ad, and watch its execution and style, so that you can form an opinion about it. Subsequently, you may answer the questions below.

HIGH INVOLVEMENT X HOLLAND

The questions below pertain to the ad which we sent you in a separate envelop. It is being considered to shortly introduce Hollandia tomatoes in shops in your city. Your opinion is very important in this decision. We ask you to look at the ad, and pay close attention to its content and message, so that you can form an opinion about the product. Subsequently, you may answer the questions below.

LOW INVOLVEMENT X SPAIN

The questions below pertain to the ad which we sent you in a separate envelop. The Spania tomatoes in this ad are not for sale in Germany. This ad is used in a pretest for a study which we will conduct in a different country. We ask you to look at the ad, and watch its execution and style, so that you can form an opinion about it. Subsequently, you may answer the questions below.

HIGH INVOLVEMENT X SPAIN

The questions below pertain to the ad which we sent you in a separate envelop. It is being considered to shortly introduce Spania tomatoes in shops in your city. Your opinion is very important in this decision. We ask you to look at the ad, and pay close attention to its content and message, so that you can form an opinion about the product. Subsequently, you may answer the questions below.

CHAPTER 6

GENERAL DISCUSSION

6.1. Summary and conclusions

This thesis intends to provide a better understanding of the influence of country of origin on consumers' product evaluations. In the first chapter, an introduction was given that presented a number of reasons why consumers attach importance to the country of origin of products. Next to "made in ..." labels, there are various ways in which products can be linked to a country of origin. Brand names, advertising and packaging may be used to make explicit and implicit references to a country.

The apparent relevance of country of origin has given rise to a large number of studies that investigate its effect on consumer behavior. Chapter two presents a review and meta-analysis of prior research in this area. A literature review provides first insights into the different ways in which country of origin affects consumers' product judgements. In addition, the meta-analysis establishes a number of empirical generalizations with regard to the country-of-origin effect. Most importantly, this meta-analysis shows that country of origin has a substantial and pervasive effect on consumers. Chapter two reviews a large number of studies that have investigated the country-of-origin effect in various different settings. In doing so, it also highlights several gaps within our knowledge of this issue. The concluding section of this chapter presents an outline that structures the research in this thesis, and identifies the contributions and themes of the individual studies described in chapters three, four, and five. Each chapter provides an introduction to the issues at hand, and offers a theoretical framework or rationale. Hypotheses are developed and tested, and the study's findings are discussed and placed into a larger context. Table 6.1 below summarizes the methods of data collection used in chapters three, four, and five, and describes which countries and products are studied. It also presents the major findings for each chapter.

Table 6.1: Summary of the studies in chapters 3, 4, and 5

Chapter	Method, Products, Countries	Major Findings
3	▪ self-administered questionnaires ▪ Dutch consumers ▪ products: tomatoes, apples, refrigerators, cd-players ▪ countries: Netherlands, Germany, France	Home country bias is related to two distinct motives, one more economic (consumer ethnocentrism) and one more socio-psychological in nature (national identification). The positive bias in consumers' evaluations of domestic products is stronger than the negative bias in evaluations of foreign products
4	▪ two surveys ▪ face-to-face interviews ▪ Dutch consumers ▪ products: tomatoes, washing machines ▪ countries: Netherlands, Germany, Italy/Spain	Consumers' general image of a country's products within a category is influenced by prior product experience and by country images (affective and cognitive). These influences are product specific. Home country bias operates primarily through an impact on the images of the own country and foreign countries.
5	▪ large-scale field experiment ▪ self-administered questionnaires ▪ German consumers ▪ product: tomatoes ▪ countries: Netherlands, Spain	Country of origin has a direct effect on consumers' evaluations of products even when other information is available. It also interacts with claim favorability and message involvement to affect evaluations of advertised products.

Chapter three is focused on consumers' evaluations of domestic versus foreign products. In general it has been found that consumers are biased positively toward products from their own country, a phenomenon that is referred to as "home country bias". Chapter three examines two personality variables that relate to distinct motives for home country

bias. The first variable is consumer ethnocentrism, which reflects consumers' desire to protect domestic economy and employment. The second is national identification, which relates to the desire for a positive national identity, created by the need for a positive evaluation of private and social selves. To our knowledge, the role of national identification in home country bias has not yet been examined in the marketing literature. Although there is a positive relationship between national identification and consumer ethnocentrism, the study shows that these constructs have independent positive effects on consumers' willingness to buy domestic products in different product categories. The study offers limited support for negative effects of national identification and consumer ethnocentrism on willingness to buy foreign products.

Chapter four goes beyond the distinction between foreign and domestic products, and presents a conceptual model that is primarily focused on the antecedents of consumers' attitudes and beliefs toward products from different countries. These antecedents include consumers' prior experience with a country's products within a category, but also country images, viz., consumers' cognitions and feelings about a country. The cognitive component of country images includes geographic factors (climate and natural landscape), and human factors (competence and creativity). A given component of country image can have different effects on evaluations of different products. The geographic component of country images influences consumers' beliefs toward food products from different countries, but does not affect beliefs toward technology-based consumer durables. Perceived competence influences beliefs toward technology-based consumer durables, but not beliefs toward foods.

Furthermore, it is shown that positive and negative feelings toward a country have a significant influence on consumers' beliefs toward the country's products. The study in chapter four is the first to show how the impact of feelings on product evaluations is not limited to extreme cases of animosity or admiration. Chapter four also extends the findings on home country bias that were obtained in the study described in chapter three. National identification is found to have a positive influence on consumers' image of domestic countries, and this is mirrored by a negative influence on consumers' image of foreign countries. These relationships mediate most of the impact of national identification on product evaluations.

Chapter five deals with interactions between country of origin and other product information. This issue is examined in the context of advertising. It is proposed that country of origin influences consumers' product evaluations in two ways: as an informational variable, and as a source variable. With regard to the former, we propose

that a general image of a country's products within a category is used as information when consumers evaluate a product that is presented in an ad (or otherwise). As a source variable, country of origin affects consumers' evaluation of advertising claims. When consumers have an unfavorable image of a country's products, this country will have less credibility as a source for advertising claims, especially when these claims are extremely favorable. The consequences of this depend on the level of message involvement. When involvement is low, extremely favorable claims are more persuasive than moderately favorable claims. Higher levels of involvement result in greater persuasiveness of moderately favorable claims. Extremely favorable claims however, are less persuasive with increased involvement, although such claims are not significantly less effective than moderately favorable claims.

Marketers can use country of origin in the positioning of their products, for example by linking a product to relevant characteristics of the origin country. It should be noted that consumers use country of origin not only as a piece of information in itself, but also as a source of other product information. In advertising, the source credibility of country of origin moderates the influence of advertising claims on product evaluations. Marketers choosing to emphasize country of origin should acknowledge the existence of home country bias. In domestic markets, this bias would of course be beneficial, but in foreign markets care should be taken to minimize psychological resistance to foreign products. It might be beneficial to develop different positioning strategies for segments that differ in the strength of consumer ethnocentrism and national identification, as these variables determine the strength of home country bias.

6.2. Research limitations and issues for future research

As all studies, the research in this thesis has a number of limitations. This section will identify the most important ones, and offer some guidance as to how future research might improve our knowledge in this area. First of all, the studies in chapters three and four are conducted among consumers in the Netherlands, and chapter five presents research among German consumers. Given the fact that country-of-origin effects are primarily an issue within the field of international marketing, it might have been interesting to examine our hypotheses in a larger set of countries. Country of origin has been found to affect consumer product evaluations in several countries, but this does not imply that country-of-origin effects operate in the same ways in different cultures.

Cross-national research into country-of-origin effects is needed to assess whether the models and findings that are presented in this thesis can be generalized across countries. The work of Hofstede and others in cross-cultural psychology identifies (national) cultural dimensions that could guide such research, and predict or explain the cross-national differences in country-of-origin effects that might emerge from such research (Sivakumar and Nakata 2001, Steenkamp 2001). A good example of this is a recent study by Gürhan-Canli and Maheswaran (2000a), which shows how cultural dimensions of collectivism and individualism can be used to explain differences in home country bias among consumers from the US and Japan.

A second limitation of the research in this thesis is that it is concerned with consumers' product evaluations as indicated by paper and pencil measures. Although such measures are widely accepted by marketing research and practitioners alike, future research should study country-of-origin effects in a choice paradigm, or actual field studies of consumers' purchasing behavior with regard to products from different countries. The use of scanner data or other direct measures of (purchase) behavior would enhance the external validity of country-of-origin research.

A third and final issue that should be discussed, is the fact the studies in this thesis are all concerned with consumer evaluations of products from different European countries. On the one hand, this characteristic can be seen as a contribution to the existing literature on the country-of-origin effect, which does not contain many studies that focus on differences in evaluations of products from different countries within Europe. On the other hand, combined with studying European consumers, a focus on European countries of origin implies that consumers are likely to have a fairly well-developed image of these countries, which may be formed through travel, education, word-of-mouth, and media coverage. This facilitates the development of naive theories that provide a rationalization for consumers' evaluations of products from these countries. Additional research is needed to establish whether consumers also hold images of countries with which they are less familiar, and whether these images also influence evaluations of products from these countries. One possibility is that consumers draw from their images of broader categories of countries. For European consumers, examples of such categories may be "African countries", "Arab countries" or "Latin countries". Similarly, consumers outside of Europe may have a general image of "European countries".

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SAMENVATTING

In dit proefschrift is getracht om te komen tot een beter begrip van de invloed van het land van herkomst van producten op de beoordeling van producten door de consument. Het eerste, inleidende, hoofdstuk beschrijft een aantal mogelijke oorzaken voor het gegeven dat consumenten belang hechten aan het land van herkomst van producten. Naast "made in ..." labels zijn er verscheidene manieren waarop producten gerelateerd kunnen worden aan een land van herkomst. Merknamen, advertenties en verpakkingen kunnen expliciet of impliciet verwijzen naar een herkomstland.

De relevantie van herkomstland voor de consument heeft geleid tot een groot aantal wetenschappelijke artikelen die onderzoek beschrijven naar de invloed van deze variabele op consumentengedrag. Hoofdstuk twee omvat een literatuurstudie en meta-analyse van eerder onderzoek op dit terrein. De literatuurstudie levert een eerste indruk op van de verscheidenheid aan manieren waarop land van herkomst van invloed kan zijn op productoordelen. De aanvullende meta-analyse kwantificeert deze invloeden, hetgeen leidt tot een aantal empirische generalisaties over het "land van herkomst effect". Essentieel is de bevinding dat land van herkomst een substantiële en significante invloed heeft op de productoordelen van consumenten. Hoofdstuk twee bespreekt de resultaten van een groot aantal studies naar het land van herkomst effect, en brengt zodoende een aantal hiaten aan het licht in de bestaande kennis over dit fenomeen. Aan het slot van dit hoofdstuk wordt een overzicht gegeven van het onderzoek in dit proefschrift. Deze sectie beschrijft de onderlinge relaties van de verschillende hoofdstukken van dit proefschrift, en bespreekt in het kort de thema's die onderzocht worden in hoofdstukken drie, vier en vijf. Elk van deze hoofdstukken geeft een inleiding tot de problematiek die in het betreffende hoofdstuk aan bod komt, en beschrijft een theoretisch raamwerk dat vertaald wordt in concrete hypotheses. Elk hoofdstuk beschrijft tevens een empirisch onderzoek waarin deze hypothesen getoetst worden. De resultaten worden besproken en in een bredere context geplaatst.

Hoofdstuk drie beschrijft de problematiek van consumentenoordelen over binnenlandse versus buitenlandse producten. De literatuur op dit gebied laat zien dat consumenten in het algemeen geneigd zijn tot het leveren van positieve oordelen over producten uit eigen land. Dit "thuisvoordeel" wordt in hoofdstuk drie gerelateerd aan twee persoonlijkheidskenmerken van consumenten, die op hun beurt gerelateerd zijn aan twee afzonderlijke motieven voor het positief beoordelen van producten uit eigen

land. Het eerste persoonlijkheidskenmerk is consumenten etnocentrisme. Dit kenmerk weerspiegelt de wens van consumenten om de binnenlandse economie te steunen, en zodoende welvaart en werkgelegenheid in het eigen land te beschermen. Het tweede persoonlijkheidskenmerk is nationale identificatie. Dit kenmerk is gerelateerd aan de behoefte van consumenten om een positief beeld te hebben van het eigen land en volk. Een dergelijk positief oordeel leidt immers tot een positiever zelfbeeld. De rol van dit laatste kenmerk is tot op heden niet onderzocht in de literatuur omtrent het land van herkomst effect. De studie in hoofdstuk drie laat zien dat er een positieve relatie bestaat tussen nationale identificatie en consumenten etnocentrisme, die echter geen volledige verklaring biedt voor de invloed van nationale identificatie op het oordeel over binnenlandse producten. Met andere woorden, consumenten etnocentrisme en nationale identificatie beïnvloeden onafhankelijk van elkaar het oordeel van consumenten over producten uit het eigen land. De veronderstelde negatieve invloed van deze variabelen op oordelen over producten uit het buitenland wordt slechts in beperkte mate terug gevonden. Dit resultaat vertoont grote overeenkomsten met sociaal-psychologisch onderzoek naar vergelijkingen tussen de eigen groep en andere groepen.

Hoofdstuk vier presenteert een theoretisch kader dat voornamelijk gericht is op het begrijpen van de vraag welke factoren ten grondslag liggen aan de houding van consumenten ten opzichte van producten uit verschillende herkomstlanden. Deze factoren omvatten eerdere ervaringen met producten uit een land, maar ook landenimago's, oftewel de ideeën en gevoelens van consumenten ten aanzien van een bepaald land. Het gaat hierbij om ideeën omtrent geografische kenmerken van het land (klimaat en landschap) en ideeën omtrent de creativiteit en competentie van de bevolking van het land. De invloed van deze componenten op productoordelen is productspecifiek. De resultaten laten bijvoorbeeld zien dat geografische kenmerken van invloed zijn op de houding van consumenten ten aanzien van voedingsmiddelen uit een land, maar niet op de houding van consumenten ten aanzien van duurzame technologische producten uit een land. Voor competentie van de bevolking wordt een tegengesteld patroon van effecten gevonden: er is een sterke invloed op de houding van consumenten ten aanzien van duurzame technologische producten, maar geen invloed op de houding ten aanzien van voedingsmiddelen uit het betreffende land. Daarnaast laat hoofdstuk vier zien dat positieve en negatieve gevoelens ten opzichte van een land een significante invloed hebben op de houding van consumenten ten aanzien van producten uit het betreffende land. De studie in hoofdstuk vier is de eerste die laat zien dat dergelijke affectieve invloeden niet beperkt hoeven te blijven tot extreme gevallen

van vijandigheid of bewondering. Hoofdstuk vier geeft tevens een aanvulling op het onderzoek beschreven in hoofdstuk drie. Er wordt aangetoond dat nationale identificatie een positief effect heeft op het imago van het eigen land, en een negatief effect op het imago van andere landen. Deze invloeden mediëren grotendeels de in hoofdstuk drie aangetoonde invloed van nationale identificatie op oordelen over binnenlandse producten.

Hoofdstuk vijf heeft als onderwerp de interacties tussen land van herkomst en andere productinformatie. Dit onderwerp wordt onderzocht in de context van adverteren. Er wordt gesteld dat het herkomstland op twee manieren van invloed is op productoordelen. Land van herkomst wordt door consumenten beschouwd als productinformatie, maar ook als een referentiekader voor het interpreteren van andere informatie in een advertentie. Met betrekking tot deze laatste invloed wordt gesteld dat een negatief oordeel over producten uit een bepaald land leidt tot een verminderde geloofwaardigheid van zeer positieve beweringen over producten uit het land. De gevolgen van deze verminderde geloofwaardigheid zijn afhankelijk van de mate waarin de consument betrokken is bij de advertentie. Wanneer de betrokkenheid van consumenten laag is, zijn extreem positieve beweringen veel overtuigender dan gematigd positieve beweringen. Bij hogere betrokkenheid echter, neemt de overtuigendheid van gematigd positieve beweringen sterk toe. Hierdoor leiden gematigd positieve claims bij hoge betrokkenheid tot een positiever oordeel dan extreem positieve claims, hoewel dit verschil niet significant is.

De studies in dit proefschrift laten zien dat land van herkomst een bruikbaar instrument kan zijn bij de positionering van producten. Producten kunnen gerelateerd worden aan relevante eigenschappen van het herkomstland, om zodoende de rol van dit kenmerk te versterken. Wanneer men ervoor kiest om het land van herkomst te benadrukken, kan gebruik gemaakt worden van het "thuisvoordeel" dat veroorzaakt wordt door de neiging van consumenten om producten uit eigen land positief te beoordelen. Dit heeft uiteraard zijn keerzijde bij het betreden van buitenlandse markten. In beide gevallen kunnen nationale identificatie en consumenten etnocentrisme gebruikt worden als basis voor de segmentatie van markten in groepen die meer of minder beïnvloed worden door het land van herkomst van het product of merk. Bij het inzetten van het land van herkomst in de marketingcommunicatie dient men zich te realiseren dat consumenten land van herkomst niet alleen beschouwen als productinformatie, maar ook als referentie kader. In advertenties wordt land van herkomst door consumenten gebruikt om de geloofwaardigheid van beweringen te bepalen.

CURRICULUM VITAE

Peeter Verlegh (Eindhoven, 1972) received his highschool (V.W.O.) diploma at Scholengemeenschap Sint Michiel in Geleen in 1984, and went on to study Food Technology at Wageningen University. He took an interest in marketing and consumer psychology in the final stage of his studies, writing M.Sc. theses on "taste perception" and "consumer evaluation of convience foods". In addition, he spent several months working as a visiting research assistant at the psychophysics department of John B. Pierce Laboratory, affiliated with Yale University. In 1996 he received his M.Sc. degree at Wageningen University, where he began his doctoral dissertation research in the same year. In february 2000 he became an Assistant Professor of Marketing Management, at Erasmus University Rotterdam, combining the work on his dissertation with lecturing on Consumer Behavior and Marketing Communication. His research has dealt with country-of-origin effects, but also with other issues in marketing and consumer psychology. It has been presented at several international conferences, and is published or forthcoming in *Acta Psychologica, Advances in Consumer Research, Food Quality & Preference, Journal of Economic Psychology*, and *Marketing Letters.*