

**INTERNATIONAL BUSINESS RESEARCH IN TIMES OF STRUCTURAL-MODELING -  
IS IT REALLY THAT SIMPLE TO TRANSFER SCALES?**

**BY**

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### **ABSTRACT**

Structural Equation Modeling, Lisrel and Confirmatory Factor Analyses are en-vogue. International business researchers, aiming at comparing results from one country with another country usually tap into a huge resource of well established scales, validated measures and ‘ready-to-go’ questionnaires. While this is good news at first glance, because it implies reduced levels of research effort and cost, problems may arise when minor differences, uncovered in the original measures or scales are overlooked. Comparability of research results may suffer and differences may render the particular findings questionable.

This paper calls for outlines culture-sensitive adaptation of marketing concepts across national borders. The concept of ‘Consumer Ethnocentric Tendencies’ originally developed in the U.S., and a measurement instrument, the ‘CETSCALE’, is investigated for their applicability to the Austrian context. Results from both a quantitative study and a qualitative analysis will be provided to explore viable solutions for improving the cross-cultural transfer of complex constructs.

Transfer of Constructs – culture-sensitive “emic” transfer of research measures – consumer ethnocentrism

## **INTERNATIONAL BUSINESS RESEARCH IN TIMES OF STRUCTURAL-MODELING - IS IT REALLY THAT SIMPLE TO TRANSFER SCALES?**

### **INTRODUCTION**

“The Business of International Business is Culture” (Hofstede 1994). Following this statement, many tasks, employed by international managers involve issues which heavily depend on situational, country context or cultural variables. Comprehensive managerial decision problems such as international market selection and entry decisions or the segmentation and targeting of international consumer markets, rely predominantly on variables which may change according to the respective cultural context. Hence, researchers involved in the international business domain need to question themselves, whether it is indeed sensible to follow the trendy route and apply quantitative research procedures in their comparative efforts. This often involves tapping into a vast library of well established scales, validated measures and ‘ready-to-go’ questionnaires, followed by applying item purification, reliability and validity tests and structural-equation modeling. The procedures and techniques certainly necessitate a high level of professionalism and sophistication on the side of the user; however, most if not all comparative efforts may be rendered useless, if situational differences are not represented in the original measure or scale.

Following the mainstream in the international business literature, this approach can be classified as a ‘traditional approach’ or ‘replication’ approach (Hubbard and Armstrong 1994), which is widely accepted and consists of transferring measures or socio-psychological constructs to a different culture by replicating them without guarding for cultural specifics. Cultural compatibility and/or equivalence issues (Salzberger, Sinkovics, and Schlegelmilch 1999) are often at risks and while actual cultural differences can indeed be identified in cross-cultural comparisons via low reliability and validity scores, the reason for why differences between these measures exist, remain unclear (Holzmüller and Stöllnberger 1994). This problem touches upon a paradigmatic view of cross-cultural analysis, which has been addressed as the ‘emic-etic’ dilemma (Douglas, Morrin, and Craig 1994; Triandis, Malpass, and Davidson 1973). Researchers generally have to make a decision a-priori on whether to investigate constructs or socio-psychological phenomena from an inside view or whether to take an outsider's position. Questions such as, whether it can be assumed that the phenomenon

under scrutiny is relevant in the target country need to be addressed; also, whether the phenomenon covers the same functional and conceptual dimensions. It is up to the researcher to decide whether it is appropriate to invest some additional time and effort to test for conceptual equivalence or whether constructs may be used simply via careful language translation (Bauer 1989).

However, quantitative procedures such as confirmatory factor analysis, structural equation modeling, or the use of 'Lisrel' in validating concepts and operational measures may not be sufficient to safeguard conceptual equivalence. Often, an 'emic' approach, a grounded 'introspection' into cultural and social backgrounds can be the only remedy against equivalence issues. Adopting an emic-approach helps to find reasons for discrepancies in replicated constructs and can assist the researcher to develop distinct strategies for culture-sensitive adaptation. Undoubtedly, emic-procedures are often much less helpful in demonstrating technological and statistical sophistication and may also be more resource-intensive. This is because they require the use of alternative research methods, such as in-depth-interviews, qualitative questionnaire designs or text-analysis.

This article extends beyond a traditional etic and replication perspective by incorporating a qualitative view on a well-established scale, the CETSCALE. The contrasting perspective which is gained by using formalized text analysis, categorization of response statements and correspondence analysis may be helpful for pointing out directions for a culture-sensitive transfer of concepts. This perspective follows an emic approach and aims to significantly enhance the understanding and usage of culture-bound concepts.

## CONCEPTUAL CONSIDERATIONS

### **Methodological Problems in International Business Research**

International-business research which aims at the transfer of concepts from one country to another has to cope with various challenges and equivalence issues (Bauer 1989). For instance, specific response patterns across cultures have to be considered when matching data from different countries. Questionnaires and other stimuli have to be translated so that respondents in other countries understand them. Above all, there is the problem of equivalent meaning in each research context (Douglas and Craig 1995). The well-established paradigm towards coping with data equivalence issues is provided by quantitative research and procedures. Using suggested procedures for refining, validating, and testing the

corresponding reliabilities of research methods provides data, which can be compared across cultures. However, the application of these procedures does not necessarily imply that the underlying constructs, which are investigated, are the same. Related to the CETSCALE context of this study this means, that only by replication of the U.S. based CETSCALE and reliability and validity scores providing satisfactory results, we have not yet provided satisfactory prove for the cross-cultural applicability of the measure. Replicability is hence seen as a necessary but not a sufficient condition for the cross-cultural applicability of the measure. It may well be that crucial culture-specific dimensions underlying the construct are overseen or neglected.

Qualitative research methods provide promising means of remedying this shortcoming of the quantitative approach. Especially when trying to extend upon the traditional replication approach (Collins 1985; Hubbard and Armstrong 1994) qualitative methods seem appropriate. However, despite their exceptional strengths, they are rarely used for cross-cultural purposes, because they require increased research efforts and resources. Especially in the context of multi-country studies, where different languages are involved, the complexity increases disproportionately: multi-language data has to be translated, transformed into a common category base, analyzed and interpreted in a multi-cultural research team on its similarities and differences, based on some conceptual or theoretical framework. Although the general requirements for qualitative research endeavors are significantly higher than for conventional quantitative methods, the long-term research output is more rewarding.

### **The Construct of Ethnocentrism and the CETSCALE**

The concept of consumer ethnocentrism by Shimp and Sharma (Herche 1992; Netemeyer, Durvasula, and Lichtenstein 1991; Sharma, Shimp, and Shin 1995; Shimp 1984; Shimp and Sharma 1987) is an extension to the original sociological concept of ethnocentrism (Sumner 1907). It is an alternative explanation for some aspects of consumer behavior suggesting that consumers evaluate domestic products as more desirable than those originating from foreign manufacture (Bannister and Saunders 1978; Nagashima 1970) Related previous approaches (country-of-origin research and made-in concepts, see: (Ahmed and d'Astous 1993; Bilkey and Nes 1982; Erickson, Johansson, and Chao 1984) did not explicitly cover the ingroup-outgroup conflicts (Stangl and Penz 1995; Tajfel 1982)

Despite ever growing internationalization, "world-citizenship", and the well-researched process of "Globalization of Markets" (Levitt 1983) a growing amount of patriotic,

ethnocentric, nationalistic, and even xenophobic feelings spreading among people from all nations (Sharma, Shimp, and Shin 1992) is observable. The ethnocentrism concept provides explanations for the mentioned phenomenon at the consumer level. Also there is a greater availability of foreign brands and an ever-expanding choice of purchase options which consumers in virtually all countries face (Netemeyer, Durvasula, and Lichtenstein 1991). This has provoked feelings of guilt for purchasing imported products, and patriotic advertisements remind us of our duty to choose home-made goods over imports (Sharma, Shimp, and Shin 1995).

Following recommended procedures for establishing marketing constructs (Anderson and Gerbing 1988; Churchill 1979; DeVellis 1991), Shimp and Sharma (1987) established a feasible measure for capturing consumer ethnocentric tendencies. The CETSCALE was carefully developed in the US setting after domain specification and generation of items. Several purification studies helped to refine and validate the measure. The 17-item CETSCALE has now been used extensively in different cultural settings and was replicated cross-culturally (Good and Huddleston 1995; Klein and Ettenson 1999; Sharma, Shimp, and Shin 1995; Watson and Wright 2000). However, despite all conceptual and methodological merits of the studies, they all follow an 'etic' perspective, letting aside the implicit assumption, that consumer ethnocentrism is a culturally invariant dimension.

The methodology discussed below is designed to challenge this assumption by illustrating a fruitful research path for the culture-sensitive (emic) transfer of measures across borders.

## **METHODOLOGY**

To contrast the contributions of both quantitative and qualitative approaches in international business research and challenge the view that structural-equation modeling is the only legitimate fashion-winner, when methods are concerned, a twofold procedure was applied. In the first step, a conventional quantitative approach in line with traditional testing theory was undertaken. In a second step, qualitative measures were applied to provide insights whether a culture-sensitive adaptation of the CETSCALE was achieved through conventional quantitative testing procedures.

## **Research Setting and Data Collection**

A questionnaire was designed comprising three sections. In the first part of the questionnaire the following statement was presented to the subjects: 'Austrians often buy foreign products. Please describe whether you consider this behavior right or wrong!' This question was introduced in order to provide qualitative insights into consumers' orientations towards foreign purchase. Responses were categorized and grouped according to corresponding meaning and provided the database for subsequent correspondence analysis. This technique was selected for its exploratory character and low data requirements (nominal data). Section two of the questionnaire comprised an abridged version of the original 17 item US-CETSCALE (Shimp and Sharma 1987), developed by Sinkovics (1999) for the Austrian context. Finally, demographic information was included in the questionnaire for the purposes of categorization and grouping.

A quota sample representative for the general Austrian population based on age, gender and level of education was applied. A total number of 1.000 questionnaires were distributed nationwide by means of the "questionnaire-drop-in" technique. In this case, interviewers were involved in distributing the questionnaires to potential interview partners with matching characteristics. The questionnaires were completed in absence of the interviewer and collected after successful completion. While this procedure implied increased time and cost-efforts, it helped to safeguard against self-selection bias and to deliver high-quality data with a high response-rate. The questionnaire was part of a larger two-stage study; hence, interviewers approached potential interview partners on two separate occasions. The two datasets were merged into one data file based on a unique identification code which did not reveal any information of the respondents. A total of 182 usable questionnaires were retained after successful merging of the two parts of the questionnaires. While this equals a response rate of 18%, the effective response was even higher, since this number actually only represents 'matched' cases of study one and two. Due to the specifics of the sampling and data-collection procedure, non-response bias (Armstrong and Overton 1977; Lambert and Harrington 1990) was not an issue and was not tested for. However, respondent's characteristics were checked against Austrian populations' characteristics, and apart from minor discrepancies in the regional distribution of the questionnaires, no relevant deviations could be identified.

## Factor Analysis

Following scale development and validation procedures (Churchill 1979; DeVellis 1991), an initial exploratory factor analysis was performed on the CETSCALE, as suggested by Sinkovics (1999) for the Austrian context. The results (Table 1) provide evidence of a uni-dimensional factor structure and illustrate high factor loadings throughout the items.

**Table 1: Principal component analysis of CETSCALE**

Items	CETSCALE Factor loading*	Communalities Extraction
<i>Austrians should buy Austrian products, because charity begins at home</i>	.643	.413
<i>We should buy Austrian first--it's the Austrian way</i>	.736	.542
<i>It is morally unwise to purchase foreign makes of merchandise</i>	.740	.547
<i>Austrians should remain loyal to Austrian-made goods and should not purchase foreign-made products</i>	.739	.545
<i>That is what is wrong with Austria now, too many foreign products</i>	.746	.556
<i>Only those products that are unavailable in Austria should be imported</i>	.645	.416
<i>Austrian products are usually superior to foreign products because they are backed by our home companies and they give less service and parts problems</i>	.493	.243
<i>There should be tariffs on foreign goods, making the price closer to Austrian products</i>	.654	.427
<i>The poor shape of the economy is largely the result of Austrians buying foreign-made products</i>	.638	.407
<i>It is always best to purchase Austrian products</i>	.703	.495
<i>Foreigners should not be allowed to put their products on our markets</i>	.656	.430
<i>Austrians should not buy foreign skiers, because this hurts Austrian businesses and causes unemployment</i>	.724	.524
<i>Austrian consumers who purchase products made in other countries are responsible for putting their fellow Austrians out of work</i>	.757	.574
<i>We must support products produced in our own country for our own survival</i>	.708	.501
<i>It is downright unpatriotic to buy anything except Austrian-made products</i>	.790	.624

\* Extraction Method: Principal Component Analysis (PCA), Eigenvalue 7.2, Variance explained, 48.3%

In addition to exploratory factor analysis (EFA), reliability coefficients were calculated (Cronbach's alpha = 0.917) and confirmatory factor analysis (CFA) was employed (Anderson and Gerbing 1988). CFA results, using EQS6 (Bentler 1993), although delivering not overly exciting threshold level indicators, confirmed the exploratory findings with NFI=0.803, NNFI=0.833, CFI=0.855 and RMSEA=.85). Thus, in line with findings of Netemeyer, Durvasula and Liechtenstein (1991), the results for the 15-item CETSCALE indicated good cross-cultural applicability.

International-business researchers in 'times of structural-modeling' might be encouraged by these results to stop further scaling procedures. Often, follow-up procedures would be based on the use of summated scale scores for comparative purposes, international market selection and entry decisions using psychographic variables or for segmenting within country customers and consumer segments. In order to illustrate potential hazards of replication approaches following an 'etic' paradigm, the subsequent qualitative study will be

illustrated. It shall be demonstrated that differences, which were not touched upon in earlier studies, might challenge the functional equivalence of the underlying construct.

### Correspondence Analysis

For the exploratory purpose of this paper correspondence analysis was used. Although this method is very capable in terms of data-requirements and graphical display of output, it is not very often used in marketing contexts (Blasius and Rohlinger 1988). Hence, the individual steps of analysis will be outlined in more detail.

#### *Categorization of responses*

The subjects' answers to the statement 'Please describe your view, whether it is right or wrong to purchase foreign made products' (free association) were categorized by three (male and female) independent raters. First, each of them created their own categories, which were then discussed within the group. Classification was sufficiently similar among the raters. In joint discussion and argumentation sixteen categories - which shared joint raters' agreement - were found and given titles. Subsequently the subjects' answers were assigned to the appropriate categories (classification via a binary variable in the database). Table 1 enumerates and describes the categories in their content.

**Table 2: Categories and their descriptions for ...**

#	<i>Categories</i>	<i>Description</i>
1.	Image	Products are purchased primarily because of their image or brand names. In case of such products it is unnecessary to ask for domestic or foreign production.
2.	No domestic production	Products have to/ should/ may be bought or imported if no domestic production exists
3.	(Economic) liberalism	No restriction may be applied on purchases due to considerations of domestic vs. foreign production. Everyone should be allowed to buy whatever he/she wants.
4.	Ecological aspects	Products have to be bought on an environmental basis: what are the environmental/ ecological circumstances of production and/or transportation?
5.	Openness	General openness towards other countries.
6.	Price	The only purchase criterion is the price, irrespective of where the product was manufactured.
7.	Price- performance ratio	The ratio of price to performance defines product purchase, not the country of origin.
8.	Preference of domestic products	Because of patriotic, economic, etc. reasons domestic products have to be preferred.
9.	Quality - general	It is the products general quality, not its place of origin which counts in purchase decisions.
10.	Higher quality of domestic products	Compared to foreign manufactured goods, Austrian products generally are of higher quality.

11.	Higher quality of foreign products	Compared to domestic manufactured goods, foreign products generally are of higher quality.
12.	Reciprocity	If Austrians want other countries to buy Austrian goods, they have to accept purchase of foreign products.
13.	Variety	Only by imports and trade supplied products show sufficient variety.
14.	Competition	Imports and trade result in (desired) competition in the market.
15.	Economic aspects	Imports and exports have to be viewed from a macro-economic perspective. Foreign trade accounts for an important part of the Austrian economy.
16.	Nothing	No answer.

In essence the categories contained all subcategories considered in the original US-item pool. Besides that, several other areas, not covered by the original items, also exist (e.g. no production in the home-country). In the procedure of correspondence analysis these categories represent the rows of the contingency table.

The individual respondents' CETSCORE served as a classification variable for the columns. For this reason the sample was divided into subgroups by level of ethnocentric tendencies, according to the raw score in the CETSCALE (part 2 of the questionnaire). By dividing along the median and the 25- and 75-percentiles we ended up with four groups of equal number. The first one consisted of those subjects showing very low ethnocentric tendencies (CETSCALE scores ranging from - lowest- 15 to 27). Participants with medium scores were assigned to group number two and three, with 28 to 38, and 39 to 55 points, respectively. The last group comprised those subjects scoring highest on the CETSCALE (more than 55 points).

For evaluation the frequencies for each cell in the contingency table - categories times groups - were calculated. The independent variable was represented by membership in one of the four groups or the sixteen categories. The dependent variable was represented by the frequencies of mention. The absolute distribution of the answers among categories and groups is shown in Table 2.

Chi-square tests were used to check out any significant deviation among the cell-frequencies. None of these categories was mentioned more frequently by any of the groups than expected (no significant deviation of the z-scores).

**Table 3: Input-table for the correspondence analysis**

#	Code	Category	Group 1 (15-27)	Group 2 (28-38)	Group 3 (39-55)	Group 4 (>55)	$\Sigma$
1	image	Image	10	8	8	4	30

2	kinprod	Non-existing domestic prod.	27	23	21	29	100
3	liberal	Liberalism	14	9	7	4	34
4	oekolog	Ecological aspects	3	3	3	2	11
5	offenheit	Openness	5	5	6	4	20
6	preis	Price	28	27	31	29	115
7	preislei	Price-performance ratio	7	7	5	2	21
8	prior	Preference for domestic goods	6	12	13	14	45
9	qualall	Quality, general	8	5	4	2	19
10	qualaus	Higher quality of foreign products	10	16	9	18	53
11	qualin	Higher quality of domestic products	23	15	16	14	68
12	reziproz	Reciprocity	9	5	3	3	20
13	vielfalt	Variety	14	10	11	7	42
14	wettbew	Competition	16	9	6	1	32
15	wiaspekt	Economic aspects	9	10	16	24	59
16	nichts	Nothing	0	2	1	2	5
		Sum	189	166	160	159	674

### Findings

For correspondence analysis canonical normalization was used for representing relations between row- and column-variables. Table 3 shows the distribution of the total variance among the three dimensions.

**Table 4: Dimensions of the correspondence analysis**

<i>Dimension</i>	<i>Eigenvalue</i>	<i>Inertia</i>	<i>expl. variance</i>	<i>cum. percent</i>
1	.26864	.07217	.831	.831
2	.08808	.00776	.089	.920
3	.08361	.00699	.080	1.000
TOTAL		.08692	1.000	1.000

The first dimension has an inertia of 0.26 and explains 83% of total variance. A result containing all three dimension facilitates representation without loss of information. In this case selection rules for the number of dimensions to be included (Matiaske, Dobrov, and Bronner 1994) were applied: (1) including additional dimensions does not result in any significant gain of information (Matiaske 1990); (2) the included dimensions add up to a predetermined portion of explained variance (Jambu 1992). In our case a two-dimensional solution was used, explaining 92% of the variance.

Table 4 and Table 5 show the statistics for the single points in the correspondence analysis (listed separately for rows and columns). The first two columns include general statistics, the points' quality and mass. These statistics are followed by three columns for each

dimension, containing the points' columns scores, squared correlation between points and dimension and the points' relative contribution to the dimension.

**Table 5: Statistics for the groups of the input table**

			<i>Dimension 1</i>			<i>Dimension 2</i>		
<i>group</i>	<i>quality</i>	<i>mass</i>	<i>column scores</i>	<i>expl. variance</i>	<i>contribution</i>	<i>column scores</i>	<i>expl. variance</i>	<i>contribution</i>
1: 15-27	.963	.280	-.658	.944	.452	-.163	.019	.084
2: 28-38	.133	.246	-.099	.110	.009	-.079	.023	.017
3: 39-55	.979	.237	.109	.116	.011	.521	.863	.733
4: >55	.988	.236	.776	.956	.528	-.249	.032	.166

**Table 6: Statistics for the rows of the input table**

			<i>Dimension 1</i>			<i>Dimension 2</i>		
<i>Category</i>	<i>quality</i>	<i>mass</i>	<i>column scores</i>	<i>expl. variance</i>	<i>contribution</i>	<i>column scores</i>	<i>expl. variance</i>	<i>contribution</i>
1	.974	.045	-.421	.797	.029	.347	.177	.061
2	.900	.148	.177	.492	.017	-.281	.408	.133
3	1.000	.050	-.683	.991	.088	-.112	.009	.007
4	.756	.016	-.133	.228	.001	.352	.528	.023
5	.958	.030	-.005	.000	.000	.525	.958	.093
6	.994	.171	.155	.591	.015	.223	.403	.096
7	.730	.031	-.568	.694	.037	.226	.036	.018
8	.916	.067	.591	.823	.087	.346	.093	.091
9	1.000	.028	-.739	.997	.057	-.065	.003	.001
10	.704	.101	-.220	.703	0.18	-.011	.001	.000
11	.836	.079	.476	.567	0.66	-.573	.269	.293
12	.980	.030	-.700	.794	.054	-.592	.186	.118
13	.979	.062	-.317	.813	.023	.250	.166	.044
14	1.000	.047	-1.162	.994	.239	-.155	.006	.013
15	.918	.088	.849	.918	.235	.023	.000	.001
16	.658	.007	1.089	.642	.033	-.304	.016	.008

For interpretation of the statistics so called 'explaining' and 'explained' points were determined for each quadrant and dimension, respectively. A point is called 'explaining' if its contribution to the variance of one axis is above average of all portions. A point is called 'explained' if one axis contributes to that point's variance by more than 50%. In other words: if that point's loading on one factor exceeds the explained - variance - limit of 0.5 (Jambu 1992).

For explaining points the average is  $(1.000/4) 0.25$  for the column variables, and  $(1.000/16) 0.0625$  for the row-variables, respectively. Concerning the first dimension, groups

number one (CETSCORE 15-27) and number four (CETSCORE >55) as well as the categories three (liberalism), eight (preference of domestic products), eleven (higher quality of domestic products), fourteen (competition), and fifteen (economic aspects) represent explaining points. Within the second dimension only group number three (CETSCORE 39-55), and categories two (non-existing domestic production), five (openness), six (prices), eight (preference of domestic products), eleven (higher quality of domestic products), and twelve (reciprocity) represent explaining points (Table 6).

**Table 7: explaining points in both dimensions**

<i>Dimension 1</i>		<i>Dimension 2</i>	
<i>negative semi-axis</i>	<i>positive semi-axis</i>	<i>negative semi-axis</i>	<i>positive semi-axis</i>
<i>group#1 (15-27)</i>	<i>group# (4&gt;55)</i>		<i>group#3 (39-55)</i>
<ul style="list-style-type: none"> <li>• Liberalism</li> <li>• Competition</li> </ul>	<ul style="list-style-type: none"> <li>• Preference for domestic products</li> <li>• Higher quality of domestic goods</li> <li>• Economic aspects</li> </ul>	<ul style="list-style-type: none"> <li>• No domestic production</li> <li>• Higher quality of foreign products</li> <li>• Reciprocity</li> </ul>	<ul style="list-style-type: none"> <li>• Openness</li> <li>• Price</li> <li>• Preference for domestic products</li> </ul>

Table 7 lists those points explained by the included two dimensions (whose portion of explained variance exceeds 50%). This shows clearly that dimension one explains far more points (image, liberalism, price-quality ratio, quality-general, higher quality of foreign products, reciprocity, variety, competition, no domestic production, price, priority to domestic products, higher quality of domestic products, economic aspects, nothing; groups number one and four) than dimension two (ecological aspects, openness; group number three).

**Table 8: explained points in both dimensions**

<i>Dimension 1</i>		<i>Dimension 2</i>	
<i>negative semi-axis</i>	<i>positive semi-axis</i>	<i>negative semi-axis</i>	<i>positive semi-axis</i>
<i>group#1 15-27</i>	<i>group#4 (&gt;55)</i>		<i>group#3 39-55</i>
<ul style="list-style-type: none"> <li>• Image</li> <li>• Liberalism</li> <li>• Price-performance ratio</li> <li>• Quality general</li> <li>• Higher qual. of foreign products</li> <li>• Reciprocity</li> <li>• Variety</li> <li>• Competition</li> </ul>	<ul style="list-style-type: none"> <li>• Non existing domestic production</li> <li>• Price</li> <li>• Preference for domestic products</li> <li>• Higher qual. of domestic products</li> <li>• Economic aspects</li> <li>• Nothing</li> </ul>		<ul style="list-style-type: none"> <li>• Ecological aspects</li> <li>• Openness</li> </ul>

### Figure 1: Correspondence analysis results

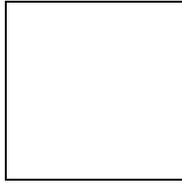


Figure 1 shows the result graphically. Row and column - elements - are represented jointly. Explaining points are underlined.

#### *Correspondence Interpretation*

The results of the correspondence analysis provided qualitative interpretation patterns for a more comprehensive understanding of the ethnocentrism construct.

The respondents were asked to give free associations to the statement: 'Austrian consumers often buy products, manufactured abroad. Please describe whether you consider this behavior is right or wrong.' Categorizations of these answers prove very close similarities between the Austrian and the US-American understanding of the ethnocentrism topic; e.g. liberalism, higher quality of domestic products, competition, higher quality of foreign products, etc.

Participants were divided into four groups by use of their CETSCORES: Very low scores, very high scores, and two groups with medium scores. As stated above, people with higher scores show higher patriotism, and higher personally perceived economic threat by foreign countries (unemployment, etc.). They want to subsidize their own country by deciding for domestic products over foreign ones; i.e. they want to contribute to economic growth, inner social, political, and economic stability. Low scores on the CETSCALE relate to opposite attitudes. These consumers show readiness for buying imported products, an attitude related to factors like 'openness to foreign cultures'.

Group number four (CETSCORES > 55, high ethnocentric tendencies) is located very close to the points of 'economic aspects', 'higher quality of domestic products', and 'priority to domestic products', as depicted in Figure 1. This implies that these categories were mentioned very often by this group. Further it can be clearly seen that for group number one (lowest CETSCORES), i.e. lowest ethnocentric tendencies, this topic is heavily related to areas like 'economic liberalism' and 'competition'. Interestingly these participants are also very close to categories like 'quality - general' and 'price - performance relation'. This implies that for this

group the product's quality, the ratio between disposable money and benefits received is much more important than the product's country of origin. Furthermore these subjects think that economic relations should be based on reciprocity: If Austria sells its products abroad, if it wants these products to be bought there, too, it should not and must not lock out foreign products.

The correspondence analysis mirrors the four groups' division by means of their CETSCORES and lines them up along the first axis (lowest CETSCORES are farthest out on the negative semi-axis, highest scores farthest out on the positive semi-axis). Explaining categories 'liberalism' and 'competition' (on the negative semi-axis) vs. 'preference for domestic products', 'higher quality of domestic products', and 'economic aspects' (on the negative semi-axis) are also lined up in that order along the first dimension. Therefore this first axis can be described very well by the term 'Consumer ethnocentrism'.

The second dimension's separation of points reflects structures less clearly. Here group number three (medium - high CETSCORES, 39-55) is situated on the positive semi-axis. In its vicinity categories 'openness', 'price', 'image', 'ecological aspects', and priority to domestic products can be found, i.e. these categories were mentioned more often by this group. Group number two (medium - low scores, 28-38 on the CETSCALE) is situated on the negative part of this dimension, but it lies too close to the origin (i.e. the average of the answer-patterns) for useful interpretation. So categories 'higher quality of domestic products', 'reciprocity', and 'non existing domestic production' make up most of the negative semi-axis of dimension two.

Characterization of this dimension is much more difficult and less clear than in the case of dimension one, but it just explains 9% of the variance (this is 1/9 of the first dimension's explained variance). For people along this axis the question cannot simply be divided into 'yes' or 'no' to imported products. For them it is a question of 'price', 'image', 'ecological aspects', and 'openness towards others'. But on the other side there arises a problem: If special products are not manufactured domestically, you simply have to buy the foreign goods, unless you sacrifice it totally.

Interpretation of the categories 'reciprocity' and 'higher quality of domestic products' is not absolutely clear. 'Reciprocity' surely comprises the opposite to 'priority to domestic products'. On *both* dimensions these categories are located on the opposite semi-axis. Hence, additional explanations as to why it is appropriate or not appropriate to purchase foreign products are thinkable. In addition to 'Yes, because liberalism and competition are important.'

and 'No, because the domestic economy has to be supported, and domestic products are of better quality' further explanations exist. 'Openness to foreign countries' and especially the problem of non-existing domestic production in certain areas.

## **Conclusions**

### *The questionable universality of IB constructs*

International business researchers should not rest until they have sufficiently answered the question of 'universality' of their constructs, scales and measures under scrutiny. Within this research, the objective was to define new ways in the culture-sensitive adaptation of psycho-structural concepts and challenge the view that in times of structural equation modeling, nothing else measures up to this standard. Hence, results derived via 'conventional' quantitative scaling and validation techniques were augmented by qualitative measurement instruments such as correspondence analysis. The correspondence analysis results indicate that the consumer-ethnocentrism construct is well transferable from the US cultural context to Austria. This was additional support for the quantitative findings.

However, correspondence analysis results also uncovered shortcomings in the quantitative conceptual structure. While various facets of the ethnocentrism phenomenon (price-value perceptions, restrictions mentality, reciprocity norms, image etc.) are well covered in the item pool, one distinctive dimension seems to be neglected.

In the case of products where an equivalent home market product is not available, consumers have no choice but to rely on foreign manufacture. This situation is very special to the Austrian economic and socio-political situation. Austria has close non-economic and economic relations to nearby countries (especially Germany, but also Hungary and Italy). In addition the small market size does not always justify for customized products or products with high setup costs for producers. The correspondence analysis results gave a good indication of this aspect by identifying a dimension, so far not considered in the CETSCALE. This dimension can be labeled: "non-existing domestic production". This implies that in the Austrian context situations may occur, where even high-ethnocentric consumers are forced to rely on foreign manufacture.

For research on international business and cross-cultural research issues, this has widespread implications. Differences in ethnocentric patterns across borders can be explained in more detail and reasons for dissimilarities can be grounded better on the corresponding

conceptual framework. Based on these results the authors suggest to include this issue into the CETSCALE and call for additional testing of the newly extended scale for reliability and validity.

#### *Implications for further research*

The findings of the quantitative and qualitative analysis open various paths for future development. Based on the insights of the correspondence analysis we suggest the further use of qualitative procedures for testing the applicability of measures and for scale-development and transfer purposes. For example qualitative in-depth interviews can provide valuable information on underlying dimensions, which extend upon the original conceptual foundations and allow for more extensive interpretation of findings.

Another suggestion for the improvement of international business research-results is the implementation of cross-cultural research teams. Rather than focusing on national insights a multi-cultural research approach might help to improve the complex task of data-collection, analyzing and interpretation. For instance the use of multi-lingual researchers might help to develop norms which can be easily compared with those, developed in other countries.

Further possibilities for extending the construct of ethnocentrism exist in the context of other target groups. Rather than sticking with consumers it might well make sense to develop measures of ethnocentrism for different stakeholder groups of corporations (Ward 1992).

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