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**IMM**

An empirical research of corporate reputation in China

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## An empirical research of corporate reputation in China

### **Abstract :**

Looking at the market-to-book ratio of stock quoted companies reveals that the major part of a firm's value is based on intangible assets. Corporate reputation has frequently been denoted as the most valuable intangible asset, not least because of its strong exclusiveness and irreproducibility. Though there is a universal agreement on its importance, a consensus on its measurement is far from being achieved. In 2004, a comprehensive measurement and explanation model was suggested by Schwaiger (2004), based on prior research, qualitative studies and a large multinational data set, conceptualizing corporate reputation as an attitudinal construct and splitting it into an affective and a cognitive component. The model has shown a significant goodness-of-fit within Western cultures, which triggers us to extend the model to different countries with different cultures. Since China is becoming an indispensable part of the world market and because ever more foreign companies are entering this market, corporate reputation management in China seems promising. Our empirical study in the Chinese context shows the applicability of our model in China as well.

JEL Classification: M31, M10; M14

**Keywords:** Corporate Reputation; Partial Least Squares; Comparison analysis, China

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## Introduction

Against the backdrop of growing economic globalization, searching for key success factors and fostering core competency are high-priority tasks for companies. Fierce global competition, more critical consumers and the information overload make intangible assets more and more important.

In the past decades, for good reasons reputation has roused widespread attention around the world in academia as well as in practice. Empirical research has given evidence of the strong link between a fine reputation and common management goals.

- A good reputation not only increases customers' confidence in products and services and advertising claims, but also lowers cognitive dissonance (Fombrun/van Riel 1998; Goldberg/Hartwick 1990; Lafferty/Goldsmith 1999). Via better customer retention (Caminiti 1992; Preece et al. 1995) firms can achieve price premiums and higher purchase rates (Klein/Leffler 1981; Milgrom/Roberts 1986).
- A strong corporate reputation helps win the war for talents and fosters employee retention (Caminiti 1992; Dowling 1986; Eidson/Master 2000; Preece et al. 1995; Nakra 2000). In this context, Stigler (1962) also mentions decreasing production costs per unit.
- Companies showing strong reputation have better access to capital markets, which decreases capital costs (Beatty/Ritter 1986). and lowers procurement rates (Schwalbach 2000).
- A good reputation pays off in terms of general advantages in conducting negotiations with stakeholders (Brown 1997; Cordeiro/Sambharya 1997; Deephouse 1997; Fombrun 1996; McMillan/Joshi 1997; Roberts/Dowling 1997; Srivastava et al. 1997).

Given the impact of reputation on performance relevant outcomes it is obvious that a company's profitability *ceteris paribus* grows with a better reputation. Roberts/Dowling (2002) shows that over time, corporate reputation supports the persistence of above-average profits.

Summarizing, we may argue that building up a strong corporate reputation creates market barriers in the sense of Porter, thus strengthening the company's strategic position in the competition. Hence, from a shareholder's point of view it makes sense to link manager's compensation to the level of corporate reputation, which at least implicitly seems to be done as literature proves a significant correlation between management compensation and corporate reputation (Winfrey/Logan 1998; Cordeiro et al. 1997). This finding is backed by Ballen's (1992) study, which shows that management quality is the main driver of reputation.

We can state that both the scientific community and the majority of practitioners consider corporate reputation as an intangible asset that is scarce, valuable, sustainable, and difficult for a competitor to imitate. Therefore, reputation is an appropriate tool to achieve strategic competitive advantages. It helps the companies strengthen their competitive advantages and protect them from downturns. Indeed, authors such as Haywood (2002) and Sherman (1999) suggest that corporate reputation is now 'the ultimate determinant of competitiveness' (Haywood, 2002: ix).

During the past 20 years of China's reform and opening up, Chinese enterprises have experienced a rapid growth and even some of the most excellent ones have begun to play in the global market and to participate in world competition. Identifying drivers of sustainable competitive advantage is even more important for them. At the same time, Chinese market has already been one of the biggest and indispensable parts of the world market. Therefore, measuring and explaining corporate reputation in Chinese context is of great importance for all companies doing business in the Chinese market. Tan found the evidence that corporate reputation is not only positively correlated with superior earnings quality, but also does have positive effect on superior earnings quality, as well as the superior total sales do in Chinese

public companies (Tan 2007).

Despite its importance and a growing field of study, research into corporate reputation remains in its infancy relative to other aspects of business. The academic literature on the subject is inconsistent and fails to provide an unambiguous definition as to the constituents and boundaries of corporate reputation. Although the intangible nature is a key characteristic in order to grant its relevance, it's still hard to perform a conceptual delimitation, characterization and measurement (Deephouse 2000).

In 2004, Schwaiger (2004) established a model to measure and explain corporate reputation based on empirical research within European countries and the US. Although the model has shown a pleasant goodness of fit within Western cultures, we can not be sure it is transferable to Eastern cultures. Hence, in this paper we examine the applicability of the model in Chinese context.

In section 1 we will briefly review the definition of corporate reputation in current literature and specify the definition which our model is based on, as the construct definition determines the specification of the model and the operationalization of the constructs. In section 2, we provide a brief survey of popular reputation measurement approaches. In section 3, the empirical study in China is presented, resulting in the parameterization of our model by means of Partial Least Square method (PLS) and a short comparison of the results between China and western countries.

## **1. Notion of Corporate Reputation**

Although the interest in corporate reputation has grown in the past decades, there is still no consensus on how to define the concept and how to operationalize the constructs involved. In order to conceptualize corporate reputation, we refer to pertinent literature (Weigelt/Camerer, 1988; Rao 1994; Fombrun 1996; Dollinger et al. 1997; Shenkar/Yuchtman-Yaar 1997; Baden-Fuller et al. 2000; Deephouse 2000; De Quevedo 2001; Roberts/Dowling 2002) and roughly group those approaches into several categories.

- **Dictionary definitions**

Scholars who rely on this type of concept are trying to describe the concept rather than providing a measurement approach. From a practical point of view this has to be bemoaned as we may not receive clues on how to measure and manage reputation. Considering corporate reputation e.g. as the manifestation of corporate identity in the field of organization theory or the result of a corporate branding in the area of marketing is surely correct, but it doesn't allow to derive management implications. A dictionary defines a reputation as the estimation in which a person or thing is held by other people. This and supporting academic definitions suggest that corporate reputation is a general organizational characteristic that reflects the extent to which people see the firm as substantially 'good' or 'bad' (Milgrom/Roberts 1992; Weiss et al. 1999).

- **A formation mechanism standpoint**

Some scholars define reputation from a formation mechanism perspective, which enables us to understand how corporate reputation is formed. Fombrun/Shanley (1990) showed that publics construct reputations on the basis of information about firms' relative positions within organizational fields. The publics do so by using market and accounting signals indicating performance, institutional signals indicating conformity to social norms, and strategy signals indicating strategic postures.

- **A result of past actions**

Some researchers are apt to consider corporate reputation as a result of the company's past actions. For example: Weigelt/Camerer (1988) state that reputation is a set of attributes ascribed to a firm, inferred from the firm's past actions. Similarly, Podonji/Philips (1996) and to a lesser extent, Roberts/Dowling (2002), have emphasized the importance of past performance over future prospects.

This kind of concept, however, neglects the way in which a corporate reputation can be managed strategically in the present in order to, firstly, manipulate stakeholders' perceptions of past events and, secondly, to influence the interpretation of future events (Tucker/Melewar 2005)

- "True" measurement concepts

Scholars who suggest this kind of definition simultaneously give hints on how to measure corporate reputation. Such as Fombrun (1996) defines reputation as the overall estimation of a firm by its stakeholders, which is expressed by the net affective reactions of customers, investors, employees, and the general public, ruling out the cognitive components, while Gray/Ballmer (1998) define corporate reputation as a valuation of a company's attributes, performed by the stakeholder, what would almost completely exclude affective component. However, Hall (1992) combines cognitive and affective components by formulating that a company's reputation consists of the knowledge and the emotions held by individuals.

Schwaiger (2004) followed Hall's definition, which he broadened to include the cognitive area, not only by allowing for (objective) knowledge, but also for more subjective perceptions as well. The combination of affective and cognitive components points up that we conceptualize reputation as an attitudinal construct, where attitude denotes subjective, emotional, and cognitive based mindsets (Schwaiger 2004). In this paper, we stick to this definition and check, whether the two-factor structure of corporate holds in the Chinese market as well.

## **2. Corporate Reputation Measurement Approaches**

The growing interest in reputation has led to the development of a variety of different measurement concepts. Among others, Fombrun (1996), Lewis (2001) and Wartick (2002) have reviewed the existing measurement approaches, highlighting Fortune's annual 'Most Admired Companies' and the Reputation Institute's 'Reputation Quotient, (RQ) as the most frequently used and discussed tools. Both represent rankings of companies based on a cluster of different associations that represent (some) stakeholders' expectations regarding the activities of a company (Berens/van Riel, 2004).

### **2.1 Fortune's Most Admired Companies (AMAC/GMAC)**

The FORTUNE Most Admired Companies study surveys top executives and directors from eligible companies, along with financial analysts, to identify the companies that enjoy the strongest reputations within their industries and across industries. There are two separate lists published annually: America's Most Admired Companies (AMAC) and the Global Most Admired Companies (GMAC).

Every year, FORTUNE determines the industry groupings by using the Fortune 1000 listing for the America's Most Admired Companies ranking and the Global 500 listing for the Global Most Admired Company ranking. Companies are required to have at least \$1.6 billion in

revenue to be eligible for the America's list and \$12 billion in revenue to be eligible for the World's list.

For those companies on the Most Admired list, a maximum of 10 top executives and seven directors (outside board members) per company are selected to be surveyed as well as a pool of industry analysts.

Raters are asked to evaluate each eligible company on each attribute including ability to attract and retain talented people; quality of management; social responsibility to the community and the environment; innovativeness, quality of products or services; wise use of corporate assets; financial soundness; long-term investment value; effectiveness in doing business globally. For the purposes of the industry rankings, a company's overall score is determined through a simple average of the individual attribute scores.

While the Fortune surveys have yielded valuable data on reputation, they have drawn criticism for not taking account of more subtle measures of reputation, and for having a purely business-focused set of respondents which do not represent the most important stakeholder groups of a company.

Bromley (1993) criticizes the eight categories as being inconcise. Sobol et al. (1992) refer to the missing definition of reputation in the AMAC, and Fryxell/Wang (1994) show that due to the financial halo effect the AMAC survey is not a suitable tool for measuring corporate reputation. Brown/Perry (1994) pointed that reputation is also determined by non-economic criteria. However, they also state that the AMAC is highly driven by past financial performance data. They suggest partializing out financial halo-effects. But as correlations between AMAC items and adjusted data are only marginally lower, the main problem still persists.

## **2.2 Reputation Quotient (RQ)**

A more complex and popular measure of reputation is the Reputation Quotient (RQ), developed by Charles Fombrun, Harris Interactive and Cees van Riel, the US market research company. The RQ is calculated on the basis of 20 attributes in six main categories and measures perceptions of companies across a range of industries and a wider stakeholder group (members of the public who may or may not be customers, plus employees of identified companies). The survey is designed to capture the concept of the "halo" around a company's performance, which means exploring impressions rather than facts. RQ is based on six pillars: emotional appeal (how much a company is liked and respected); products and services (perceptions of quality, innovation, value and reliability); financial performance (competitiveness, profitability, growth prospects and risk); vision and leadership (does the company demonstrate clear vision, strong leadership and an ability to recognize and capitalize on market opportunities?); workplace environment (is the company well managed? what is it like to work there? what is the quality of its employees?); social responsibility (does the company have high standards in its dealings with people, good causes and the environment?).

Analyzing the *RQ-Index*, we may appreciate that not experts, but a broad range of stakeholders, is surveyed. A thorough discussion on validity and reliability can hardly be given in this paper, since the RQ operationalization has not been published. However, in Fombrun's approach, a serious drawback in operationalization is evident: Obviously, good products and services are a prerequisite for corporate reputation; because a firm offers good products it increases its reputation – not the other way round. As opposed to this, "admiring the company" e.g. is a result of a fine reputation. This is to say that the calculation of a weighted mean of the 20 Fombrun items mixes up antecedents and consequences of corporate reputation. We will demonstrate later that keeping in line with latest research on scale development using outcomes as reflective indicators to measure reputation and using antecedents as formative indicators to perform a driver analysis prevents from establishing logical flaws.

### **2.3 Schwaiger's reputation model**

From the brief review, we can see the previous measure methods mainly focus on cognitive aspects. Most of the questions applied in these corporate reputation measurement concepts are extremely rationally influenced. With a deeper understanding of corporate reputation, the conventional approaches may be enhanced, as a company's position in the eyes of different stakeholders is not solely anchored in the cognitive but also in the affective sphere.

Therefore, in Schwaiger's model, the affective component was equally integrated in the corporate reputation analysis besides the cognitive aspects. After literature review, expert interviews and focus group discussion, six items were assigned to evaluate both the affective as well as the cognitive component (see Table 1 – Measurement Constructs). The model development was in line with Rossiter's C-OAR-SE procedure (Rossiter 2002).

Scale validation was done within the scope of an empirical study in 2002 (Schwaiger 2004). The survey was carried out by the GfK market research company in Germany, Great Britain and the US with 300 randomly selected respondents (CAT interviews) in each country. The respondents were asked to give their evaluations on four companies including BMW, Allianz, E.ON and Lufthansa. The statistical analysis of these data has proved the measurement scales could evaluate both affective and cognitive dimension of corporate reputation.

In order to utilize and control this valuable intangible asset, 18 explanatory items were chosen to identify the drivers of corporate reputation. By means of principal component analysis, four factors – quality, performance, responsibility and attractiveness -were identified to have impact and indices were successfully constructed for them (see Table 1 - Driver Constructs)

Finally, multiple linear regression analysis was applied to explain likeability and competence as exogenous variables. The results were stable and showed a strong explanatory power of our model.



Table 1: Constructs and measurement items

Construct		Item
Measurement Construct	Likeability	... is a company I would regret more if it didn't exist any more than I would with other companies . ... is a company I can identify with better than with other companies I regard ... as a likeable company.
	Competence	I believe that ... performs at a premium level. As far as I know ... is recognized world-wide. ... is a top competitor in its market.
Driver Construct	Quality	The products/services offered by ... are of high quality. I think that ...'s products/services offer good value for money. The services ... offers are good. ... seems to be a reliable partner for customers. Customer concerns are held in high regards at ... In my opinion ... tends to be an innovator, rather than an imitator.
	Performance	... is an economically stable company I assess the business risk for ... as modest compared to its competitors. I think that ... has growth potential. In my opinion ... has a clear vision about the future of the company. I think ... is a very well managed company.
	Responsibility	I have the feeling that ... is not only concerned about profit. I have the impression that ... is forthright in giving information to the public ... behaves in a socially conscious way. ... is concerned about the preservation of the environment. I have the impression that ... has a fair attitude towards competitors.
	Attractiveness	I like the physical appearance of ... (Company buildings, branch offices). In my opinion ... is successful in attracting high-quality employees.

### 3. An empirical study on corporate reputation in China

Since up to date only Germany-bound companies were evaluated within European and the US markets, another empirical study using the same model in a different culture could examine the transferability of this model. Therefore, we did a survey in March 2008 in China.

#### 3.1 Data collection

In order to test the applicability of our model in Chinese context, data collection was done in China using the questionnaire depicted in Table 1. Due to language and culture differences, the questionnaire was translated into Chinese using the translation-/back translation method (Douglas/Craig 1983; Malholtra et al. 1996). With the same questionnaire, face-to-face interviews were done at ten places in China including both urban areas and rural areas.

Before asking the respondents to evaluate, two questions "Are you involved in household decisions?" and "Do you know the companies BMW, Siemens, Haier Group and China Mobile at least by name?" were asked to make sure that our respondents qualified to evaluate these companies. The questionnaire was administered to 100 respondents at each place, which led to

a total of 1,000 respondents' evaluation on the four companies mentioned above.

After ruling out 21 questionnaires which failed to provide complete information, we applied an optimization algorithm in order to draw a subsample almost perfectly matching sociodemographic means from the sample and the corresponding means in the Chinese population. This resulted in a quasi-representative database of the Chinese population containing 302 respondents' questionnaires. By restructuring the original data, we finally got a sample of 1,208 company evaluations. Table 2 shows the data structure in details.

Table 2: Sample Structure

Item	Frequencies	Item	Frequencies
<b>Gender</b>	48.7% female	<b>Location</b>	59.6% rural area
	51.3% male		40.4% urban area
<b>Age</b>	8.9% under 18	<b>Occupation</b>	8.3% workers
	23.2% 18-29		9.3% skilled workers
	25.2% 30-39		10.9% employee in private sector
	17.2% 40-49		6.0% manager
	15.2% 50-59		9.3% employee in public sector
	6.3% 60-69		9.3% self-employed
	4.0% 70-79		4.0% freelancer
<b># of Family Members</b>	5.6% 1	6.0% housewife	
	23.2% 2	10.6% retired people	
	32.5% 3	9.9% students	
	22.5% 4	3.3% unemployed	
	16.2% above 5	13.2% others	

The frequency table shows female respondents account for 48.7%, which is consistent with the situation in China. As for the location, 59.6% of respondents are from rural areas and 40.4% are from urban areas, which is in line with the fact that the majority of the Chinese population lives in rural areas. Also, China's long term birth control policy results in the modal value of families with three members.

### 3.2 Data analysis and Result

#### 3.2.1 Descriptive Analysis

A descriptive analysis of all the items with arithmetic means and standard deviation is given in Table 3. Correlations for all pairs of variables are shown in Table 4 and 5, which include both 18 explanatory items and 6 endogenous items.

Table 3: Descriptive Statistics

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
[1] ...is a company I miss more than other companies when it does not exist anymore	5.64	1.467
[2] ...is a company that I identify more with than with other companies	5.59	1.405
[3] I regard ... as a likeable company	5.73	1.410
[4] I believe that ... performs at a premium level	5.75	1.399
[5] As far as I know ... is recognized world-wide.	5.75	1.453
[6] ... is a top competitor in its market.	5.85	1.346
[7] ... is a very well managed company.	5.69	1.360
[8] I think that ... has growth potential.	5.55	1.503
[9] ... is an economically stable company.	5.70	1.346
[10] I assess the business risk for ... as modest compared to its competitors.	5.69	1.228
[11] ... has a clear vision about the future of the company.	5.80	1.265
[12] I have the impression that ... has a fair attitude towards competitors.	5.63	1.349
[13] ... behaves in a socially conscious way.	5.51	1.367
[14] I have the feeling that ... is not only concerned about the profit.	5.29	1.469
[15] I have the impression that ... is forthright in giving information to the public.	5.33	1.442
[16] ... is concerned about the preservation of the environment.	5.43	1.414
[17] I like the physical appearance of ... (company buildings, branch offices).	5.66	1.301
[18] In my opinion ... is successful in attracting high-quality employees.	5.65	1.322
[19] The products / services offered by ... are of high quality.	5.84	1.280
[20] I think that ...'s products / services offer good value for money.	5.60	1.321
[21] The services ... offers are good.	5.60	1.361
[22] ... seems to be a reliable partner for customers.	5.66	1.324
[23] Customer concerns are held in high regards at ....	5.56	1.338
[24] In my opinion ... tends to be an innovator, rather than an imitator.	5.62	1.341

Table 4: Correlations (Part I)

Item	Likeability Items			Competence Items			Explanatory Items (7-25)						
	It.1	It.2	It.3	It.4	It.5	It.6	It.7	It.8	It.9	It.10	It.11	It.12	It.13
[1]... is a company I miss more than other companies when it doesn't exist anymore.	1.000												
[2]... is a company that I identify more with than with other companies.	.590	1.000											
[3] I regard ... as a likeable company.	.503	.519	1.000										
[4] I believe that ... performs at a premium level.	.486	.434	.518	1.000									
[5] As far as I know ... is recognized world-wide	.397	.424	.477	.616	1.000								
[6] ... is a top competitor in its market	.473	.460	.486	.638	.700	1.000							
[7] ... is a very well managed company.	.512	.502	.511	.615	.577	.643	1.000						
[8] I think that ... has growth potential.	.408	.408	.348	.408	.423	.462	.551	1.000					
[9] ... is an economically stable company.	.450	.489	.433	.423	.422	.496	.571	.518	1.000				
[10] I assess the business risk for ... as modest compared to its competitors.	.441	.456	.381	.398	.393	.470	.485	.502	.569	1.000			
[11] ... has a clear vision about the future of the company.	.438	.500	.455	.401	.425	.439	.511	.534	.543	.546	1.000		
[12] I have the impression that ... has a fair attitude towards competitors.	.453	.398	.421	.541	.457	.463	.498	.386	.397	.448	.415	1.000	
[13] ... behaves in a socially conscious way.	.451	.428	.476	.544	.489	.523	.537	.446	.420	.489	.451	.579	1.000
[14] I have the feeling that ... is not only concerned about the profit.	.358	.322	.341	.441	.422	.402	.415	.381	.303	.396	.366	.453	.598
[15] I have the impression that ... is forthright in giving information to the public.	.398	.432	.419	.457	.467	.461	.488	.396	.378	.454	.464	.462	.555
[16] ... is concerned about the preservation of the environment.	.393	.379	.418	.460	.422	.422	.467	.384	.389	.441	.453	.454	.498
[17] I like the physical appearance of ... (company buildings, branch offices).	.367	.403	.477	.493	.459	.449	.481	.389	.423	.454	.452	.469	.512
[18] In my opinion ... is successful in attracting high-quality employees.	.436	.460	.473	.431	.438	.470	.512	.439	.468	.493	.539	.473	.529
[19] The products / services offered by ... are of high quality.	.412	.385	.446	.530	.464	.470	.506	.429	.411	.457	.457	.543	.509
[20] I think that ...'s products / services offer good value for money.	.373	.407	.455	.476	.444	.448	.492	.423	.437	.433	.441	.517	.531
[21] The services ... offers are good.	.376	.381	.426	.484	.459	.464	.523	.439	.430	.423	.459	.473	.516
[22] ... seems to be a reliable partner for customers.	.436	.411	.408	.506	.466	.503	.533	.430	.456	.429	.478	.498	.479
[23] Customer concerns are held in high regards at ....	.396	.407	.369	.447	.415	.496	.500	.423	.436	.422	.455	.483	.459
[24] In my opinion ... tends to be an innovator, rather than an imitator.	.430	.397	.426	.481	.438	.445	.518	.453	.402	.420	.440	.480	.467

Table 5: Correlations (PartII)

Item	It.14	It.15	It.16	It.17	It.18	It.19	It.20	It.21	It.22	It.23	It.24
[14] I have the feeling that ... is not only concerned about the profit.	1.000										
[15] I have the impression that ... is forthright in giving information to the public.	.566	1.000									
[16] ... is concerned about the preservation of the environment.	.533	.571	1.000								
[17] I like the physical appearance of ... (company buildings, branch offices).	.390	.500	.542	1.000							
[18] In my opinion ... is successful in attracting high-quality employees.	.394	.511	.519	.589	1.000						
[19] The products / services offered by ... are of high quality.	.447	.526	.480	.538	.561	1.000					
[20] I think that ...'s products / services offer good value for money.	.384	.518	.428	.516	.507	.603	1.000				
[21] The services ... offers are good.	.418	.522	.459	.500	.519	.562	.617	1.000			
[22] ... seems to be a reliable partner for customers.	.426	.547	.437	.485	.543	.627	.607	.608	1.000		
[23] Customer concerns are held in high regards at ....	.425	.503	.456	.437	.507	.595	.547	.596	.631	1.000	
[24] In my opinion ... tends to be an innovator, rather than an imitator.	.403	.430	.473	.472	.506	.548	.490	.530	.572	.592	1.000
All correlations are significant at 0.01 level.											

### 3.2.2 Principal Component Analysis

Principal Component analysis was done to check if the model structure identified in previous studies would still show up in China.

Table 6: Principle Component Analysis result with six endogenous variables

Item	Component	
	Likeability	Competence
... is a company I would regret more if it didn't exist any more than I would with other companies	0.870	0.213
... is a company I can identify with better than with other companies	0.834	0.300
I regard... as a likeable company	0.770	0.347
... is a top competitor in its market	0.225	0.839
I believe that ... performs at a premium level	0.246	0.825
As far as I know ... is recognized world-wide	0.422	0.655
Variance explained	38.9%	34.8%

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization

Table 6 indicates that our concept to split corporate reputation into an affective and a competence component still works in Chinese context, and Table 7 shows that again we can

extract the four factors quality, performance, responsibility and attractiveness from the 18 explanatory items explaining 65% of the original information.

Table 7: Principal Component Analysis of 19 explanatory items

Item	Factor			
	Quality	Performance	Responsibility	Attractiveness
... seems to be a reliable partner for customers.	<b>0.749</b>			
Customer concerns are held in high regards at....	<b>0.737</b>			
The products / services offered by ... are of high quality.	<b>0.698</b>			
The services ... offers are good.	<b>0.693</b>			
I think that ...'s products / services offer good value for money.	<b>0.689</b>			
In my opinion ... tends to be an innovator, rather than an imitator.	<b>0.648</b>	0.300		
... is an economically stable company.		<b>0.770</b>		
I think that ... has growth potential.		<b>0.724</b>		
I assess the business risk for ... as modest compared to its competitors.		<b>0.670</b>		
... has a clear vision about the future of the company.	0.303	<b>0.660</b>		
... is a very well managed company.	0.415	<b>0.582</b>		
I have the feeling that ... is not only concerned about the profit.			<b>0.842</b>	
... behaves in a socially conscious way.	0.340	0.308	<b>0.629</b>	
I have the impression that ... is forthright in giving information to the public.	0.421		<b>0.548</b>	0.330
I have the impression that ... has a fair attitude towards competitors.	0.490		<b>0.465</b>	
... is concerned about the preservation of the environment.			<b>0.465</b>	0.537
I like the physical appearance of ... (company buildings, branch offices).	0.431			<b>0.699</b>
In my opinion ... is successful in attracting high-quality employees.	0.505	0.350		<b>0.482</b>
Variance explained	23.8%	17.1%	12.9%	11.2%
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Loadings< 0.3 suppressed.				

### 3.2.2 PLS-model estimation

Since our focus is placed on the explanation of an endogenous construct, variance-based methods like Partial Least Square analysis are preferred. Another reason to adopt this approach is that PLS can deal with both formative and reflective construct, which we exactly demand in our case. Contrary to covariance-based structural equation models, which attempt to reproduce

the observed covariance matrix using a maximum-likelihood function, PLS understands the latent variable as weighted sums of their respective indicators (Chin/Newsted 1999; Fornell/Cha 1994) and attempts to predict values for the latent variables (component scores) using multiple regressions (Chin 1998b; Chin/Newsted 1999; Fornell/Bookstein 1982; Fornell/Cha 1994).

PLS-model estimation was performed using SmartPLS. As the item scales are comparable, a standardization of the data is not necessary, so that model estimation was performed using the original data (Chatelin et al. 2002). To test whether path coefficients differ significantly from zero, t-values were calculated using bootstrapping procedure (Chartelin et al., 2002; Chin 1998b). Contrary to the default of 100 cases and 100 samples in SmartPLS, we calculated with 1208 cases and 500 samples to get more stable results. Since William Gould and Jeff Pitblado (2005) suggested to choose a sample size of the Bootstrapping procedure which is equal to the number of cases in the original dataset, because the standard error estimates are dependent upon the number of observations in each replication.

The final coefficients estimated by SmartPLS are shown in three parts (see Table 8, Table 9 and Table 10). All coefficients are presented with t-values given in parentheses.

Table 8: Coefficients and Quality Criteria of Measurement Construct with smartPLS

	Component	
	Likeability	Competence
[1] ... is a company I miss more than other companies when it doesn't exist anymore.	0.876 (90.304)	
[2]... is a company that I identify more with than with other companies	0.892 (90.716)	
[3] I regard ... as a likeable company.	0.860 (82.317)	
[4] I believe that ... performs at a premium level.		0.838 (67.033)
[5] As far as I know ... is recognized world-wide.		0.811 (48.740)
[6] ... is a top competitor in its market.		0.845 (66.028)
R squared	0.5934	0.5317
Composite Reliability	0.908	0.870
Communality	0.768	0.691
Average Variance Extracted (AVE)	0.7677	0.6916
Cronbach's $\alpha$	0.8487	0.7768
Correlations of latent variables	0.5885	0.5885

The results of the reflective part of the model in Table 8 show that all factor loadings exhibit values of above 0.8 indicating a strong goodness of fit. Composite reliabilities of each component are uniformly higher than 0.8 while the Cronbach's  $\alpha$  are located around 0.8, thus meeting stipulated thresholds (Nunnally/Bernstein 1994). To examine the discriminant validity, the Fornell/Larcker (1981) criterion is applied, where the square root of each endogenous construct's average variance extracted (AVE) is compared to its bi-variate correlations with all opposing endogenous constructs (cp. Hulland 1999, Gregoire/Fisher 2006). The result showed that the square root of AVE is greater than the variance shared between likeability and

competence. Thus we can presume discriminant validity between the likeability and the competence component.

Table 9: Estimated PLS parameters of Driver Construct

Items	Performance	Responsibility	Attractiveness	Quality
[7] ... is a very well managed company.	0.615 (15.519)			
[8] I think that ... has growth potential.	0.061 (1.790)			
[9] ... is an economically stable company.	0.156 (4.083)			
[10] I assess the business risk for ... as modest compared to its competitors.	0.167 (4.590)			
[11] ... has a clear vision about the future of the company.	0.210 (5.428)			
[12] I have the impression that ... has a fair attitude towards competitors.		0.351 (8.269)		
[13] ... behaves in a socially conscious way.		0.392 (8.324)		
[14] I have the feeling that ... is not only concerned about the profit.		0.014 (0.277)		
[15] I have the impression that ... is forthright in giving information to the public.		0.262 (5.891)		
[16] ... is concerned about the preservation of the environment.		0.225 (4.795)		
[17] I like the physical appearance of ... (company buildings, branch offices).			0.433 (8.825)	
[18] In my opinion ... is successful in attracting high-quality employees.			0.530 (11.966)	
[19] The products / services offered by ... are of high quality.				0.251 (4.403)
[20] I think that ...'s products / services offer good value for money.				0.209 (4.003)
[21] The services ... offers are good.				0.182 (2.928)
[22] ... seems to be a reliable partner for customers.				0.287 (4.046)
[23] Customer concerns are held in high regards at....				0.099 (1.840)
[24] In my opinion ... tends to be an innovator, rather than an imitator.				0.280 (6.188)

The t-values generated by bootstrapping can be interpreted as measures for the stability of the path coefficients. In those exogenous constructs, we can see there are formative indicators turning out to be insignificant according to the cutoff level of 1.98. Despite this insignificance in the overarching model, we prefer to keep these items in the model as we found somewhat different results when calculating the model split by brands.

Table 10:

	Coefficients	
	Likeability	Competence
Performance	0.404 (10.74)	0.42 (11.079)
Responsibility	0.246 (5.897)	0.209 (4.906)



Attractiveness	0.052 (1.222)	0.077 (2.005)
Quality	0.152 (3.573)	0.091 (2.095)

The PLS coefficients in Table 10 clearly show that responsibility, quality, attractiveness and performance show positive influence on likeability as well as on competence. The t-values generated by bootstrapping indicate that attractiveness doesn't have a significant influence on likeability; all other coefficients turn out to be different from zero in a statistical sense. Furthermore, responsibility and quality show stronger influence on likeability than on competence while attractiveness and performance show more significant influence on competence than on likeability.

### 3.3 Discussion

The main purpose of this paper is to check the applicability of our measurement model in China. By means of an empirical study we could prove that our model structure holds in China.

Besides that, a first glance comparison of path coefficients from the Chinese market to those of Western markets gives valuable insights on different driver impacts. In European countries and in the US, attractiveness shows a positive and significant influence on likeability, but performance has a negative influence on the affective component. Competence in Western markets is obviously driven by quality, performance and attractiveness, but slightly dampened by responsibility activities. Contrary to that, all exogenous constructs turn out to have positive influence on the endogenous side in Chinese markets. Moreover, performance shows by far the highest influence on both endogenous constructs in China, meaning that performance is the number one reputation driver in China.

Judging from these differences, we can infer different perceptions about corporate reputation between Chinese people and western people. In China, good performance could simultaneously and effectively lead to strong likeability and competence of corporate reputation, which clearly shows the main task of the CEOs. Responsibility as the second strongest driver of corporate reputation is definitely becoming more and more important to strengthen a company's standing in China.

Further research is needed to compare reputation building in China versus Western economies and societies. This may be done by splitting the database by brands and by parameterizing the model, which is expected to result in valuable managerial implications.

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