## **Stockholm School of Economics**

## **Institute of International Business**

# What drives Ideal Employer Image?

- A study of university students' perceptions in China, the US and Germany

**Master Thesis** 

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## **Summary**

"There is no truth. There is only perception."

*Gustave Flaubert (1821 - 1880)* 

Regardless of whether employers like it or not, there is always a perception of their employer brands among their potential employees. The perception can be right, the perception can be wrong. To gain a thorough understanding of ones employer brand is to position oneself for success.

This thesis will undertake a progressive investigation of employer branding, with a global comparison of university students' perceptions towards their ideal employers. Given the lack of available theories in the employer branding field, the newly developed intersection of HR, Marketing, PR and Communications, an inductive quantitative approach is taken based on a multi-national, large scale survey conducted among over 50,000 university students in China, the US and Germany in the Spring of 2006. The author was personally involved with the data collection in China. The research question "What are the key factors driving the Ideal Employer Image in China, the US and Germany" is discussed in three stages: 1. Students' desired characteristics of an ideal employer; 2. Cluster analysis (SPSS) of Ideal Employers helps us identify which companies group together and what attributes each group has; 3. Regression analysis (SPSS) to determine attributes with the most significant influence on students' choices of their ideal employers.

The findings indicate different factors driving ideal employer image in China, the US and Germany. A detailed analysis of the key driving factors, at both the national and international level, is given after each stage.

## **Key Terms Definition**

Employer Branding is a very new field at the intersection of HR, Marketing, PR and Communications. For the convenience of readers, several key terms are listed here before the main content.

**Brand** (Schneider, 2003): A name, term, sign, symbol or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors.

**Branding** (Peters, 1999): Branding was originally used to differentiate tangible products, but over the years it has been applied to differentiating people, places and firms.

**Employer Brand** (Conference Board, 2001): The employer brand establishes the identity of the firm as an employer. It encompasses the firm's value system, policies and behaviours toward the objectives of attracting, motivating, and retaining the firm's current and potential employees.

"A concept that a firm use to differentiates itself from its competitors".

**Employer Branding** (Backhaus & Tikoo, 2004): a targeted, long-term strategy to manager the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm.

**Employer Value Proposition (EVP)** (Universum Communications, 2005): An Employer's associations and offerings to its current and potential employees that differentiate it from recruitment competitors.

## A Special Thanks to Universum Communications

Universum Communications is the leading research and consulting firm helping organizations globally for the past 20 years to analyze measure and communicate their employer brand image and EVP (employer value propositions).

With operations in Europe, US, South Africa and Asia, Universum conduct surveys in 28 countries every year from among 150,000 University students and young professionals. Through research, advisory service and media, Universum helps employers attract, recruit and retain the best talent.

Being the pioneer of the employer branding field, Universum is growing along with the development of the Employer Branding concept. Its methodologies and independent research are highly recognized worldwide. Annually, Universum announces its ranking of IDEAL EMPLOYERS. Considered the equivalent to "J.D. Power Associates Awards" in employer branding; these lists rank the best-of-the-best from students surveyed to learn what they know about employers, based on "word-of-mouth," advertising, brand recognition and goodwill.

I worked as project manager of Universum's Asia survey in 2006, in charge of data collection for the Universum Graduate Survey in China. Thanks to Universum not only for providing me with access to part of the Chinese data, but also the entire database (all surveys throughout all years). This thesis has obtained a unique advantage due to the high quality of this representative data source. The collection of data used in this thesis would not be possible given the limited resources and time available for conducting a master thesis. Thus, I would like to give show special appreciation to Universum Communication for helping me realise my ambition of conducting research at an innovative cross function area with a global scope.

## Acknowledgement

This thesis was written while I was working full time in China. There are so many people I would like to thank, because without their support accomplishing this work would not have been possibly.

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Last but not the least, I would like to thanks my parents and best friends around me, for all the love I have received. I love you all.

Richard, a big hand to you for the proof-reading! Thanks! For the first time, time difference is a good thing. ©

Sara Ying Gao

9.30am 2006-8-29

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## 1 Introduction

The development of economies such as China are attracting more and more attention from international companies. How can a company win the War of Talent in multi-national markets? What factors influence the top talents choice of future employer? And, most importantly for this thesis, how do these factors vary in different countries? For those companies from the US and Europe who are eager to win the best talents from Chinese universities, are the employer image factors associated with the ideal employer in their home countries also the most important factors for Chinese university students?

## 1.1 Background

April 18<sup>th</sup>, 2006, CNN's website reported: "Asked to name the five firms where they'd most like to work after graduation, 12.55% of MBA candidates named Google according to the results of an annual survey of MBA candidates by research firm Universum Communications in an exclusive Fortune.com list. That made for a remarkable debut at No. 2 on the 100 Top MBA Employers list for the search-engine giant." (CNN, April 18, 2006). Image, last year Google was not even in the top one hundred and now it is in second place Google's popularity is not limited to the US. In Europe and Asia, Google was also selected as the Ideal Employer by many university students. Specifically, in China Google jumped to fourth position on the ideal employer list, previously it had not appeared in the list at all: so many students selected the company during the 2005 survey that it was pushed into the companies listed in 2006's survey.

Google's ideal employer brand has created a great advantage for them in the fast changing, globalized era in which the war for talent has developed into the war for the right talent. As a rather hot topic these days, *employer branding* is getting more and more attention from the HR managers'. "Creating a distinct employer brand is now on top of the list of priorities for most key organisations." (Jim Collins, 2001)

The right people for a company can not only make valuable contributions, but also stay and grow together with the company. Firms appear to be expending considerable resources on employer branding campaigns, indicating that they are finding value in the practice. According to the conference board report on employer branding (Conference Board, 2001) organizations have found that effective employer branding leads to competitive advantage, helps employees internalize company values and assists in employee retention.

"Employer branding is a targeted, long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm."

Backhaus & Tikoo (2004: 501)

As with a product brand, an employer brand is intangible and hard to measure. However, companies' spending on this has been increasing dramatically. According to a survey conducted in 2006 by Universum among over 900 companies in the US and Europe (Universum Global Employer Branding Survey, 2006), which is the largest global survey of Employer Branding activities and priorities, the average of spending on employer branding is around 500 USD per year per employee – more than double last years spending.

The same survey also shows that more than 42% HR managers surveyed in the US chose "defending, strengthening a number one position" as their current Employer Branding focus while 35% HR managers surveyed in Europe chose "reaching a number one position". Despite the fact that the expressed objectives in these two markets were different due to culture influences, we do see a strong demand from companies to be the number one ideal employer. Thus, it is important for companies to understand how this can be achieved.

According to Universum Communications (Universum, 2006), the world leading global student and young professional research firm in the field of Employer Branding since 1988, three aspects should be considered when evaluating one company's employer branding strategy:

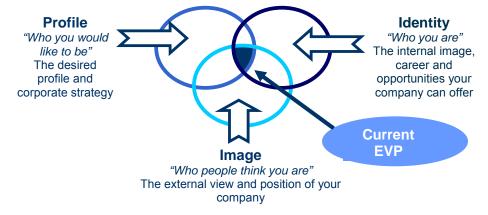
**Profile:** The desired profile and corporate strategy.

**Identity:** The internal image and career opportunities your company can offer.

**Image:** The external view and position of your company.

The first two concepts can be studied inside the corporation with the **profile** defined by the top management and the **identity** surveyed among current employees. The third, **Image**, involves work outside the corporation. The perceived image exists no matter whether or not a company likes it. To study it thoroughly from research and

incorporate it into the consistent strategy of employer branding is what successful companies are doing.



**Figure 1-1 IPI Gap Analysis** SOURCE: Universum Communications

Employer Value Proposition is an Employer's associations and offerings to its current and potential employees that differentiate it from recruitment competitors. It is the common ground amongst the three concepts outlined above. The goal for an employer would be to increase the overlap as much as possible. In an era when knowledge, commitment and employer loyalty are among the main competitive advantages of a company, it takes the employers more than "competitive compensation" to reach this goal.

Why are the perceptions of university students important to companies? According to Universum, those companies with a long term and consistent employer branding strategy will invest in research and branding towards university students for a number of reasons. Firstly, university students are the homogeneous group easiest to target and influence by new concepts and values. They are like a white board upon which companies may freely draw their own values. Those who might not join the company directly after graduation may join later when they become young professionals. Secondly, those students who might not become an employee of the company can also become the customers of your product or clients of your service. An ideal employer brand will help them make decisions among the consumption process.

## 1.2 Problems and research question

During the past 20 years, China's fast development speed has impressed the world. "With the huge supply of low-cost workers, mainland China has fast become the

world's manufacturing workshop, supplying everything from textiles to toys to computer chips" (McKinsey Quarterly, 2005). In recent years, with entry into WTO and China's consistent opening policy, more and more foreign companies have started to enter the Chinese market. However, success in China is not as simply as multiplying existing numbers with one-fourth of the worlds population. "When multinational companies explore the Chinese market, their failures often teach them more than their successes" (McKinsey Quarterly, 2006), Said the president of Carrefour China.

"Few of China's vast number of university graduates are capable of working successfully in the services export sector and the fast-growing domestic economy absorbs most of those who could." According to McKinsey's report (McKinsey Quarterly, 2006): "a looming shortage of home grown talent, with serious implications for the multinationals now in China and for the growing number of Chinese companies with global ambitions." "In the Greater China region, the competition for talent is very, very keen." Mr. Li from Watson Wyatt explained, "Companies without a proper employer branding strategy would lose out in the cutthroat Greater China recruitment market." (Watson Wyatt, 2004). Thus, while having an employee branding strategy is important all over the world, perhaps it is particularly important in markets with a shortage of qualified skilled labour like China where the war for the best talent is particularly fierce.

Enough lessons from the branding of a firm's product and corporate brand globally have shown the importance of local adaptation. Will employer branding meet the same problem? A research conducted by Deloitte among more than 400 executives globally encourages companies to "tailor talent management strategies to unique needs of employees in emerging markets" (Deloitte report, 2006). Does Google's successful case suggest that a company can become the ideal employer of choice in different countries with the same employer image factors perceived by their future employees? Would Google have been even more successful if it had different employer branding strategies in different countries? For those companies from the US and Europe who are eager to win the best talents from Chinese universities, are the employer image factors associated with the ideal employer in their home countries also the most important factors for Chinese university students? These are the questions that will be investigated in this paper. In order to make a global comparison of the students' perceptions, three countries are chosen: China representing the

world's fast emerging developing economies, the US representing the Angle-Saxon world and finally Germany, as the biggest economy, representing Europe. The research question of this paper is:

What key factors/attributes are driving Ideal Employer Image among university students in China, the US and Germany?

## 1.3 Objectives

In order to answer the research question, the following objectives will be implemented step by step:

- 1. What are the students' perceptions of their ideal employers in each country?
- 2. What companies are perceived with the similar characteristics by students?
- 3. Which characteristics are most important for influencing students' likelihood to choose a company as their ideal employer? Do these characteristics differ by country?

The first objective will be answered by an analysis of Universum's annual graduate survey conducted among university students in their last two years of graduating. Here USA, Germany and China are chosen to answer the question for the reasons already stated before. There are 37,063 respondents from the US, 11,607 respondents from Germany and 11,124 respondents from China.

The second objective will be answered by K-Means cluster analysis in SPSS. This procedure attempts to identify relatively homogeneous groups of cases based on selected characteristics, in this case, the attributes students associated with their ideal employers. A separate analysis for each country as well as a global comparison will be made.

The third objective will be answered with the help of regression analysis in SPSS. With the independent variables being the percentage of time a student felt that an attribute was associated with a given company. It is an answer to dichotomous variables. Then the average rating was calculated for each company. The dependent variable is the ideal proportion of each employer, which is the percentage of students who chose the company as one of the five employers they most likely to work for. The most important factors in the three countries will be discussed and compared.

#### 1.4 Limitations

This research paper will be focusing on Employer Image (the circle at the bottom of Figure 1-1). It will also be focusing on university students instead of young

professional or stakeholder groups. As the data set for analyze is based on survey 2006, conclusions are also based on the students' perceptions in the year 2006. Historical trends will only be quoted where necessary.

Every conclusion made in this research paper will be based on the *perception* of the ideal employer within the target group. Actions companies should take considering the research result of this paper should be discussed on a case-by-case basis, thus will not be include in the scope of this paper.

Due to limited length of the thesis as well as the maturity ratio of the market, only the multinational companies' perception in China will be discussed. Chinese companies' perception overseas will not be discussed.

## 1.5 Theoretical and Practical Relevance

There are a plethora of theories about marketing and branding, and a large number of articles discussing corporate image and corporate reputation, however, there are only a few theories available concerning employer branding. As a newly developed concept, employer branding has, in practice, been popular mainly among HR managers. Attention from within the academic world is now in the ascendant. The findings of this paper would hopefully contribute some inspiring insights into the theoretical understanding of employer branding and some useful explorations of bridging practical experience and the academic world.

This research will also provide a thorough understanding to multinational companies who are expanding abroad. Improving their understanding of what is important for Employer Branding and how it differs by country will be beneficial to companies looking to succeed in the new markets. Useful guidelines for strategic design and action plans can then be developed further base on an employer's particular circumstances.

## 2 Methodology

S Cientific approach is divided into two parts, with the first part focusing on the data collection and the second part focusing on analysis of the data. After each general description of the approaches applying to all three sets of data (US, Germany and China), the particular implementation in China is added, as the author has personally been in charge of the data collection in China.

## 2.1 Research approach in Data collection

## 2.1.1 Questionnaires

The questionnaire design is one of the most important parts of the research process; in formulating the questions and response alternatives, the frame is set for the results of the survey. Since the aim of the survey is to allow students to voice their opinions about their personal priorities, career goals, and future employers, it is important that the questionnaire's design allow them to do so. A combined approach was taken using both open- and closed-ended questions. The risk of omitting a potentially important alternative was further diminished by the inclusion of the alternative "Other" for each question, preventing students from feeling compelled to mark one of the pre-existing response alternatives.

In formulating the response alternatives in China, the broad knowledge of students and the recruitment market from Universum plays a major role. The 2005 year's survey is used as a starting point in designing the new questionnaire, with various topics of interest explored in further detail in 2006. To ensure that the questionnaire is easy for students to interpret, it is tested and evaluated by a sample group of students (a group of 15-20 students for the Chinese survey) before it is printed and distributed.

#### 2.1.2 Selection of ideal employers

In each survey 150- 200 companies are listed on the ideal employer list. Students are asked to choose the five companies they would most like to work for. Students are given the opportunity to write in the name of any company they would like to work for that did not appear on the list. The list of company, from which students select their ideal employers, is compiled from the list of companies appeared on the previous

year' ranking of desirable employers. Any company that received a high number of write-in votes in the previous year's survey is also included.

#### 2.1.3 Selection of schools and distribution

Universum conducts research on each school and draws up a proposed list for inclusion in the survey, which is discussed with and evaluated by chambers of commerce and various clients and partners. In China the ministry of education also gave advices on the pre-selected list, ensuring all the schools in the final lists are the most influential ones in China. The table below gives an overview of field period, total number of respondents and number of schools surveyed in each country. The schools surveyed in each country fairly spread out.

National Edition 2006	China	US	Germany
Field period	15 December 2005 - 27 March 2006	December 2005 -March 2006+	28 November 2005 - 17 April 2006
Total Number of respondents	11,124	37,063	11607
Number of educational institutions	62	207	57

**Table 2-1 Summary of three surveys** SOURCE: Universum Graduate Survey 2006

The great majority of questionnaires were distributed via e-mail and answers collected electronically (in China 90% of respondents answered the survey online), with a small percentage of printed paper questionnaires also given out. In distributing questionnaires electronically, the possibility of bias in the survey sample must be considered; however, the Internet is in especially wide use today among students, and is by no means a communication channel used only by specific subgroups. E.g. in China almost all the surveyed students need to search recruiting information and apply for vacancies through the internet. Universum is therefore confident that distributing the questionnaires via email has not affected the survey results to any significant extent.

## 2.1.4 Selection of respondents, incentives and sampling error

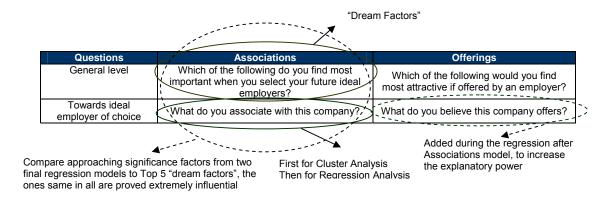
In order to survey a representative sample of students at each of the schools participating in the survey, Universum relies on its partners at each of these institutions. Once the student population and the areas of academic concentration for the survey to target are decided upon, contact persons at partner universities distribute

the questionnaires to respondents, attempting to ensure that the survey sample is similar to that of the previous year. It should be mentioned that the method of contacting people at each university can vary, as can respondents' interest in filling out the questionnaire. In China more than 80% of the 62 participating schools have established a partnership with Universum. Also at each campus there are one or two Universum Ambassadors to help out with promotion. Besides direct emails to students, announcement on the career web and BBS (electronic bullet board, a very popular platform of sharing information in Chinese top universities) recommendations from faculties, "word-of-month" among student association members, big posters on campus and small flyers sent to students' dorms, etc are various methods used at different schools.

## 2.2 Research approach in data presentation and analysis

## **2.2.1** Associations and Offerings (Employer Image)

In Universum's survey, employer image (the bottom circle in Figure 1-1) is investigated through two questions: associations include attributes more related to corporate image and offerings include attributes more related to what a job can really offer. Students can choose as many optional attributes as they want. The relationship between questions surveyed among students and data used in this paper is summarized in the table 2-2. All the attributes included are an accumulated result throughout the years, except the first year from answers gathered from student focus groups. Options least chosen by the students are deleted and options pushed by the students through "filling in" option are added. In Appendix all the options students can choose under Associations and Offerings in each countries are listed.



**Table 2-2 Questions surveyed among students and data used in this paper** SOURCE: Own source

## 2.2.2 Step One: Perception of Ideal Employer -"Dream Factors"

The students are asked in the survey "Which of the following do you find most important when you select your future employers (choose as many options as possible)?" The selection frequency percentage is determined by the number of times each attribute is chosen by students in each country. The options to choose from are basically kept the same in all Universum surveys with options necessary according to local market are also added.

Notes: They are addressed as "Dream factor" in this thesis because they are the factors students would select for their "ideal employer". The factors they are associating with Ideal Employer they have chosen might be different, due to limitation of reality

## 2.2.3 Step Two: Companies in the clusters

In the survey, students are asked to list 1-5 of their ideal companies to work for. After that, they will answer "What do you associate with this company?" The frequency of attributes being chosen to associate with each specific company is the base for the cluster analysis. Cluster analysis is considered as a good way to analysis this type of data because the procedure will be able to determine which companies have the same attributes associated with them, thus have a similar image among students.

Companies being selected as ideal employer by less than 50 students are taken out from the result for statistical significant requirement. After running the cluster analysis in SPSS, deciding how many clusters to use is more art than science. Analyses with different numbers of clusters were run and tested. The final decision is made upon a comprehensive consideration of the Number of members in each group, features of each group and most importantly of all, if each cluster has its own features that make sense.

There are 162 companies listed in the Chinese survey 2006, 195 in the US and 131 in Germany. After data cleaning, all the companies being selected by less than 50 students as an ideal company are taken out from the data set. In the end 141 companies in China survey 2006, 185 in the US and 124 in Germany are ready for SPSS analysis. After the cluster analysis, none of the companies are filtered out as an outlier. For each country, 6, 7, 8, 9 and 10 clusters are run separately. After a thorough comparison of all perspectives, the one most representatives and that make the best sense for each country is chosen (7 clusters for Germany and 8 clusters for China and the US).

## 2.2.4 Step three: Regression analysis

The purpose here is to determine which attributes that students associate with their ideal employers have the most significant influence towards students' choice of their ideal employers.

Linear regression is conducted in SPSS with dependent variable as ideal proportion (the frequency a company is chosen by all students to be one of their five ideal employers) and independent variables as the attributes students can associate with their ideal employers (the characteristics are dichotomous and percentage each attribute is chosen to be associated with one company by students who choose them as ideal is used here). Following the illustration in table 2-2, in the regression analysis, first an enter level linear regression is conducted based on "Associations" attributes. Then a backwards stepwise linear regression is conducted on the same dataset, where at each step, the variables with the largest probability-of-F value is removed, provided that the value is larger than POUT (in this case >0.15). In order to take into consideration of all factors that could possibly influence "ideal proportion", "Offerings" attributes set of the data is included to construct an extended model. Again, enter level and backwards stepwise level is conducted.

## 2.3 Discussion of Scientific Approach

## 2.3.1 Inductive and quantitative approach

Given the fact that this is a newly emerging area and very few theories are available, an inductive approach is chosen, to begin with specific observations and measures to detect patterns and regularities, to formulate some tentative hypotheses that can be explored and finally end up developing some general conclusions or theories (William M.K. 2006). A case study approach is used quite often in an inductive approach. However, in this case, the topic under discussion is regarding perceptions among university students in three countries. A large number of interviews and focus groups would be required in order to collect enough data for the qualitative study, which will be beyond the resources available for this master thesis. The quantitative approach becomes the best choice with the access provided by Universum to their global survey 2006, which the author involved in the data collection in China.

## 2.3.2 Reliability

Reliability concerns the degree to which the survey results are free from random error (as opposed to systematic biases) and thus if the same study was repeated by someone else the same results should be obtained. In order to prevent random error, a certain number of respondents per survey are required. The total number of respondents in the surveys studied by this paper is 59,794 with 37,063 respondents from the US, 11,607 respondents from Germany and 11,124 respondents from China. The normal rule of Universum is to only present result of a group with at least 30 respondents. In order to make the results less sensitive to an individual answer, in the data presenting and analysis steps in this thesis, all companies with less than 50 respondents chosen are excluded from the data set. The indication from one person choosing or not choosing to associate one attribute to their ideal employer worth 2%. e.g. if we have 20 answers, the percentage will increase to 5%.

Although it is widely believed that a certain minimum proportion of a given population must be surveyed to gain satisfactory results, this is not strictly true; the sample's size is of considerably greater importance than the response rate in determining the margins of error. Thus, Universum strives for the return of the maximum number of completed questionnaires in every survey it conducts.

## 2.3.3 Validity

Someone who has doubts about the validity of this survey might argue that the attributes respondents associated with each company are only opinions from those students who choose those companies as their most liked ideal employers. Thus the perception towards two companies might come from two completely different groups of students. This is true and the author is fully aware of the risk that this might bring to the result. However, we are not collecting data in an ideal world. It is not realistic to ask respondents filling in their perceptions towards 150-200 companies separately in one survey.

One might also argue that students are asked to only choose as many options as they want, instead of rate one option on a 1-10 scale. That would be one way to approach, which fit better a classic statistic manner. However, in reality, this would result in an unrealistic long survey because students then need to rate over 30 attributes from two questions for each of their 5 ideal employers of choice. This might be possible if the questionnaire is specially designed only with these two questions.

But then the question would be it is difficult to obtain data from over 50,000 respondents in three different countries.

To sum up, the author understands that Universum's data collection is not following an ideal statistical manner. The validity of the survey is controlled to the best extent that is currently available to minimizing the risk of bias.

## 3 Theory

The theory part intends to present an overview of current available theories regarding employer branding, started with the discussion of the theoretical foundation (Backhaus & Tikko, 2004) of employer branding (Resource-based view, the psychological contract, brand equity), then followed by a few important points to clarify (importance of perceptions, differences between organizational culture and employer branding and benefit generated from employer branding). Given the fact that latest global trends, economic development and people's perceptions towards international companies are going to be discussed in the paper, a globalization perspective is added into the end of the theory.

## 3.1 Theoretical foundation for Employer Branding

#### 3.1.1 Resource-based view (RBV)

Resource-based view (RBV) suggests that characteristics of a firm's resources can contribute to sustainable competitive advantage (Barney, 1991). First foundation for employer branding is the assumption that human capital brings value to the firm, and through skilful investment in human capital, firm performance can be enhanced (Priem and Butler, 2001). "External marketing of the employer brand establishes the firm as an employer of choice and thereby enables it to attract the best possible workers. The assumption is that the distinctiveness of the brand allows the firm to acquire distinctive human capital." Backhaus & Tikoo (2004: 503).

#### 3.1.2 The new psychological contract

In the traditional concept of the psychological contract between workers and employers, workers promised loyalty to the firm in exchange for job security (Hendry and Jenkins, 1997). However, the recent trend toward downsizing, outsourcing, and flexibility on the part of the employer has imposed a new form of psychological contract, in which employers provide workers with marketable skills through training and development in exchange for effort and flexibility (Baruch, 2004). In the face of negative perceptions of this new employment reality, firms use employer branding to

advertise the benefits they still offer and design employer branding campaigns to change perceptions of the firm.

## 3.1.3 Brand Equity

In marketing terms, brand equity is "a set of brand assets and liabilities linked to a brand that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers" (Aaker, 1991). Customer based brand equity relates to the effect of brand knowledge on consumer response to the marketing of the product (Keller, 1993). In terms of employer branding, brand equity applies to the effect of brand knowledge on potential and existing employees of the firm. Employer brand equity propels potential applicants to apply. Further, employer brand equity should encourage existing employees to stay with, and support the company. Employer brand equity is the desired outcome of employer branding activities. In other words, "potential or existing employees will react differently to similar recruitment, selection, and retention efforts from different firms because of the underlying employer brand equity associated with these firms". Backhaus & Tikoo (2004: 504)

## 3.2 A few points to clarify

## 3.2.1 Importance of perceptions

According to Aaker, brand associations are the thoughts and ideas that a brand name evokes in the minds of consumers (Aaker, 1991). A brand image is defined as an amalgamation of the perceptions related to the product-related/non-product related attributes and the functional/symbolic benefits that are encompassed in the brand associations that reside in consumer memory (Keller, 1993). Product-related attributes describe the product in objective and tangible terms and relate to functional benefits that are derived from using a product or service. Non-product-related attributes represent consumers' mental imagery and inferences about a product rather than what they think the product does or has and corresponds to the symbolic benefits that consumers seek to fulfil their social approval and personal expression needs.

Accuracy of perceptions about the organization is particularly important because it helps to reduce perceptions of breach of the psychological contact, or worse, violations of the psychological contract on the part of new employees (Robinson and Rousseau, 1994). Violations of the psychological contract, which can be defined as an

employee's belief that the organization reneged on its obligations, have been shown to correlate positively with turnover and intentions to quit, reduced job satisfaction, reduced organizational trust, and decreased job performance (Robinson et al., 1994; Robinson and Morrison, 1995; Robinson and Rousseau, 1994).

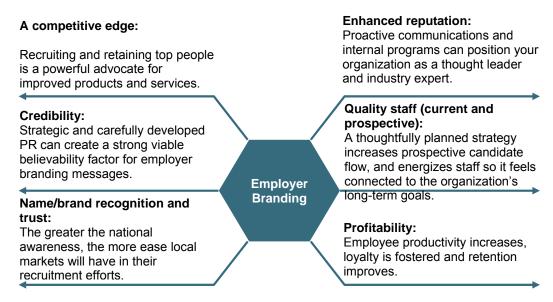
# 3.2.2 Linking HR and Branding: the importance of Corporate Reputation Management

The academic interest in corporate reputation grew out of the branding literature in the 1990s, the earlier work by Albert and Whetten (1985) and others on organizational identity. What has characterised this work is its focus on the reciprocal relationship between two core concepts – external image and internal organizational identity. It is argued that corporate reputation is formed by significant interactions between an organisation's representatives and the outside world. Building on this notion, there are three dimensions to the formation of a reputation (Schultz et al., 2002). First, informal interactions among stakeholders, for example through sales meetings, employee storytelling or accounts from satisfied or dissatisfied customers. These incidents strongly influence an organization's reputation or external image but are largely uncontrollable. Second, reputations are increasingly formed by the business press, such as the rankings of the best places to work and industry press ratings of organizations. Third, such reputations are formed not only by existing stakeholders, such as current customers and employees, but also by potential stakeholders, such as possible recruits, shareholders and other founders, government organizations and the community at large.

## 3.2.3 Benefits generated from Employer Branding

"HR professionals could also benefit in terms of their professional identities and career progress if they aligned themselves more closely with functions that are central to the creation and maintenance of corporate reputations, such as marketing, with its insights into brand management." Martin et al. (2004: 76).

According to Johnson & Roberts from Bayardad (Johnson & Roberts, 2006), employer branding generates numerous benefits.



**Figure 3-1 Benefits of Employer Branding** SOURCE: Johnson & Roberts (2006)

#### 3.3 Globalization- Five reasons

Globalization has become a popular topic in the 21<sup>st</sup> century. What is globalization? There are various definitions. Here in this paper, the globalization of the world economy is chosen for its close relevance to the topic discussed in this paper Sezgin (2005: 16 - 18).

"Globalization will be understood here to mean major increases in worldwide trade and exchanges in an increasingly open, integrated, and borderless international economy. There has been remarkable growth in such trade and exchanges, not only in traditional international trade in goods and services, but also in exchanges of currencies; in capital movements; in technology transfer; in people moving through international travel and migration; and in international ideas. "

"Globalization has involved greater openness in the international economy, an integration of markets on a worldwide basis, and a movement toward a borderless world, all of which have led to increases in global flows. The latter stems from developments over the last few decades in electronics, especially the microchip revolution; electronic mail and the internet are some of the manifestations of this new technology, "

"A second source of globalization has been trade liberalization and other forms of economic liberalization that have led to reduce trade protection and to a more liberal world trading system."

"The third source of economic globalization has been changes in institutions, where organizations have a wider reach, due, in part, to technological changes and to the more wide-raging horizons of their managers, who have been empowered by advances in communications. Thus, corporations that had been mainly focused on a local market have extended their range in terms of markets and production facilities to have a national, multinational, international, or even global reach. "

"A forth reason for globalization has been the global agreement on ideology, with a convergence of beliefs in the value of a market economy and a free trade system. The convergence of beliefs in the value of a market economy has led to a world that is no longer divided into market-oriented and socialist economies. A major aspect of this convergence of beliefs is the attempt of the former socialist states to make a transition to a market economy. These attempted transitions; especially those in the former Soviet Union and in Eastern and Central Europe have, however, been only partially successful..."

"A fifth reason for globalization has been cultural developments, with a move to a globalize and homogenized media, including the arts and popular culture, and with the widespread use of the English language for global communication. Partly as a result of these cultural developments, some, especially the French and other continental Europeans, see globalization as an attempt at U.S. cultural as well as economic and political hegemony. In effect, they see globalization as a new form of imperialism or as a new stage of capitalism in the age of electronics. These colonies supply the U.S. not only with raw materials and markets, as in earlier forms of European colonization, but also with technology; production facilities; labour, capital, and other inputs to the production process on a global basis."

In addition, Generation Y (Wikipedia, 2006), the generation born after 1980s in the US is influenced a lot by the globalization trend. Growing up in an internet era, being open towards immigration & races issues and redefined opinions towards Gay rights and gender roles are just a few examples of their characters.

To sum sup, the technological, institutional, ideological and cultural development are still actively leading the process of globalization. No matter if globalization is accepted or not by general public, it is a phenomenon clearly changing the world system and one can not ignore its influence. The development of globalization will even be accelerated in the future.

## 4 Results

Result of the survey findings are presented here following the order in the objectives: firstly perception of ideal employers, secondly companies in clusters and finally which attributes are the most important. After result presented country by country, a summary is followed presenting the comparison results globally.

## 4.1 Perception of ideal employers – "Dream Factors"

Notes: How to understand "dream factor": Students are asked in the survey "Which of the following do you find most important when you select your future employers (choose as many options as possible)? The frequency of every attribute is chosen by students are presented in the percent format. E.g. 46% of the business students in China who answered the survey find good/confidence inspiring management most important when they select their future employers.

#### 4.1.1 China

Business		Engineering/Natural Sciences/IT	
Good/confidence-inspiring management	46%	Good/confidence-inspiring management	46%
Strong corporate culture	33%	Strong corporate culture	35%
Exciting products/services	29%	Exciting products/services	30%
High ethical standards	26%	High ethical standards	29%
Financial strength	23%	Innovation	22%
Dynamic organisation	21%	Corporate social responsibility	21%
Market success	21%	Financial strength	20%
Innovation	20%	Dynamic organisation	19%
Corporate social responsibility	19%	Market success	17%
Diverse/multicultural employees	14%	Diverse/multicultural employees	12%
Equality between the sexes	12%	Equality between the sexes	10%
Good reputation at my school	6%	Good reputation at my school	7%
Recruiting only the best students	4%	Recruiting only the best students	4%
Other	0%	Other	0%

Table 4-1 Perception of Ideal Employer Image in China- Business and Eng/Sci/IT

SOURCE: 2006 Universum Global Survey

Among all the attributes, the three attributes Chinese business students most frequently find important when they select their future employers are good/confidence inspiring management (46%), strong corporate culture (33%) and exciting products/services (29%). The priority among the engineering/science/IT students are exactly the same, with little different in terms of percentage: (46%), (35%), (40%).

## 4.1.2 USA

Business		Engineering/Natural Sciences/I	Γ
High ethical standards	37%	High ethical standards	36%
Financial strength	29%	Innovation	28%
Attractive location(s)	23%	Attractive location(s)	26%
Industry leadership	23%	Financial strength	25%
Progressive working environment	21%	Progressive working environment	23%
Diverse workforce	20%	Industry leadership	21%
Market success	19%	Social responsibility	17%
Social responsibility	18%	Diverse workforce	17%
Innovation	17%	Exciting products	15%
Corporate responsibility	16%	Environmental responsibility	13%
Strong corporate culture	15%	Market success	12%
Exciting products	8%	Corporate responsibility	12%
Good reputation at my school	7%	Good reputation at my school	8%
Recruiting only the best students	6%	Strong corporate culture	6%
Environmental responsibility	6%	Recruiting only the best students	6%
Conservative working environment	5%	Conservative working environment	5%
Best on-campus recruitment activities	4%	Best on-campus recruitment activities	4%
Acceptance towards disabled employees	3%	Acceptance towards disabled employees	3%
Acceptance towards homosexual employees	3%	Dynamic recruiters	3%
Dynamic recruiters	3%	Acceptance towards homosexual employees	3%
Offers Rotational Program	2%	Offers Rotational Program	2%
Hierarchical structure	2%	Hierarchical structure	1%
Sponsors Case Study Competitions	0%	Sponsors Case Study Competitions	0%

Table 4-2 Perception of Ideal Employer Image in USA– Business and Eng/Sci/IT

SOURCE: 2006 Universum Global Survey

The top three choices among business students in the USA is High ethical standards (37%), Financial strength (29%) and Attractive locations (23%). With a slight difference among the engineering/science/IT students, the top three choices are High ethical standards (36%), Innovation (28%) and Attractive locations (26%).

## 4.1.3 Germany

Business	Engineering/Natural Sciences/IT			
Exciting products/services	49%	Exciting products/services	55%	
Good/confidence-inspiring management	35%	Good/confidence-inspiring management	42%	
Market success	32%	Innovation	41%	
Corporate social responsibility	28%	Corporate social responsibility	33%	
Strong corporate culture	25%	Market success	25%	
Dynamic organisation	24%	Financial strength	18%	
Innovation	22%	Dynamic organisation	15%	
Financial strength	18%	Strong corporate culture	14%	
Diverse/multicultural employees	17%	High ethical standards	13%	
High ethical standards	12%	Diverse/multicultural employees	11%	
Equality between the sexes	12%	Equality between the sexes	9%	
Good reputation at my school	7%	Good reputation at my school	6%	
Recruiting only the best students	6%	Recruiting only the best students	3%	
Other	2%	Other	2%	

**Table 4-3 Perception of Ideal Employer Image in Germany – Business and Eng/Sci/IT** SOURCE: 2006 Universum Global Survey

The top three choices among business students in Germany is exciting products/services (49%), good/confidence inspiring management (35%) and market success (32%). The engineering/science/IT students also prioritized exciting products/services and good/confidence-inspiring management with the highest priority with a 55% and 42%. The third one is replaced by innovation (41%).

## 4.1.4 Summary

In all three countries, business and engineering/science/IT students do not show big differences among their top priorities. Only in US and in Germany, innovation is among the top 3 choices of Engineering/Science/IT students while financial strength in the US and market success in Germany is among top 3 for business students. The preferences of Germany and Chinese students are closer to each other. US students indicate a very strong preference to "high ethical standards".

US	%	China	%	Germany	%
High ethical standards	39%	Good/confidence-inspiring management	46%	Exciting products/services	51%
Financial strength	26%	Strong corporate culture	34%	Good/confidence-inspiring management	38%
Attractive location(s)	24%	Exciting products/services	29%	Corporate social responsibility	31%
Progressive working environment	23%	High ethical standards	28%	Innovation	29%
Social responsibility	22%	Financial strength	21%	Market success	28%

**Table 4-4 Perception of Ideal Employer Image in three countries – overall Top 5** SOURCE: 2006 Universum Global Survey

If we look at the top 5 priorities among all students in these three countries, there are quite big differences. In the US, "high ethical standards" this year has overtaken financial strength to assume first position. In China, strong corporate culture is ranked the second, while this attribute is not among the top five choices in the US and Germany. Innovation is ranked among the top five in Germany.

We can also find similarities among the three countries. High ethical standards and financial strength are important in both US and China. Good/confidence-inspiring management and exciting products/services are of large attention both in China and Germany. Corporate social responsibility is among the top five in both in the US and Germany.

## 4.2 Companies in clusters

The final cluster centers (the means of all the cases assigned to the same cluster) demonstrate characteristics of each cluster with all the numbers a percentage rate. The

highest (red color) and lowest percentage (green color) among each attribute are marked respectively. For several attributes, more than one highest or lowest percentage is marked. That is because difference among them is very small, less than 2%. Presentation of all the clusters starts with the cluster getting the most "Highest". It is worth mentioning here all highest and lowest statement are relative, a result from comparing with all the other clusters. e.g. a cluster with the lowest percentage on "financial strength" does not mean all the companies in this cluster has "no financial strength". It means comparing with the other clusters, students associate least "financial strength" with ideal employers in this cluster. Each cluster has been assigned a name that can represent this group of employers by the author. It is hoped that this will make it easier for the readers to follow. It is also a preparation for the analysis part afterwards.

#### 4.2.1 China

Number of Cases in each Clu	ster							
China								
Cluster 1	30							
2	12							
3	12							
4	7							
5	9							
6	33							
7	14							
8	24							
Valid	141							
Missing	0							
Final Cluster Centers	1	2	3	4	5	6	7	
Competitive working environment	44.53	23.84	65.54	57.38	33.26	48.12	56.27	3
Conservative working environment	19.21	40.54	13.20	13.47	33.88	14.75	12.05	1
Corporate social responsibility	30.95	41.08	27.79	30.74	41.85	33.51	31.96	2
Diverse/multicultural employees	31.91	12.94	53.39	44.08	17.83	40.89	52.50	2
Dynamic organisation	25.32	14.07	29.30	32.09	17.51	31.02	33.86	2
Equality between the sexes	21.26	17.00	22.89	21.93	16.83	22.09	26.01	2
Excessive overtime	13.57	7.81	30.84	42.32	7.70	10.50	11.08	1
Exciting products/services	44.24	27.12	57.11	46.57	38.64	57.08	63.50	3
Financial strength	46.49	55.32	61.75	40.60	61.29	55.37	60.33	3
Good reputation at my school	33.49	34.22	47.58	51.29	39.47	37.38	49.38	2
Good/confidence-inspiring managemen	35.86	23.17	51.35	46.41	29.82	42.84	49.94	3
High ethical standards	27.20	22.43	29.30	28.71	23.23	29.68	27.90	2
nnovation	30.60	15.40	45.99	36.30	19.45	36.09	46.12	2
Varket success	39.87	43.48	41.00	37.97	52.81	54.32	60.10	3
Recruiting only the best students	21.22	16.13	46.55	36.13	18.85	20.56	35.17	1
Strong corporate culture	36.65	23.76	46.25	42.48	29.21	51.62	53.76	3

**Table 4-5 Final Cluster Centres - China** 

SOURCE: SPSS analysis

Cluster 1: The modest employers

This cluster is a mix of companies from various countries such as Sweden (ABB, Ericsson and Volvo), Germany (Bosch, DHL), USA (Amway, Merck, GSK, Boeing), Korean (LG) and Japan (Honda, Mitshubishi, Hitachi and Toshiba), and various industries like media (CCTV-China Central TV), banking (ABM AMRO, CICC-China International Capital Corporation), internet (Baidu), insurance (Ping An of China, Allianz) and telecom (3M, ZTE).

With no highest or lowest point marked, this cluster has got an average perceived image on all the attributes.

## Cluster 2: Chinese companies listed on the Fortune Global 500 Companies Ranking

This cluster has twelve companies, all of which are Chinese state-owned. Some of them are stock listed, but are still under the patronage of SASAC (State-Owned Assets Supervision and Administration Commission). They are from different industries, such as banking (Bank of China, China Development Bank, China Construction Bank, Agriculture Bank of China, Industrial and Commercial Bank of China), energy (Sinopec, Petrol China, China Southern Power Grid), automotive (China FAW Group Corperation), chemistry (Sinochem) and basic infrastructure (China Post Office and China Railway). 7 of these 12 companies are listed on the 2006 Fortune Global 500 Companies Ranking.

Students perceive this group as ideal employers who have conservative working environment, strong corporate social responsibility but less diverse/multicultural employees, less dynamic organization, less equality between the sexes, little excessive overtime, less exciting products/services, less good/confidence-inspiring management, not high ethical standards, less innovation, not recruiting only the best students and less strong corporate culture.

#### Cluster 3: International management consulting firms and investment banks

This cluster consists of three consulting firms (McKinsey, BCG, Roland Berger) and nine investment banks (Citigroup, HSBC, Morgan Stanley, Goldman Sachs Gao Hua Securities, Deutsche Bank, CSFB, JP Morgan, UBS and Merrill Lynch). This group stands out from all the other clusters for taking highest points in seven attributes.

The students perceived this group as ideal employers who have very competitive working environments, diverse/multicultural employees, financial strength, good/confidence-inspiring management, high ethical standards, innovation and recruiting only the best students. In contrast, the rating of them on conservative

working environment and corporate social responsibility is the lowest among all clusters.

#### Cluster 4: Auditing firms and IT consulting firms

In this cluster, there are the "big four" auditing firms (PwC, Deloitte, E&Y and KPMG), two consulting firms that are strong and mostly known for their IT consulting services (Accenture and Bearing Point). The dark horse in this group is Huawei, a fast growing Chinese Telecom Company providing customized network solutions for telecom carriers globally. It is quite surprising at the first glance to see Huawei falls into this particular group. However, this result is confirmed again and again no matter how many clusters are run.

The students perceive this group as ideal employers who have dynamic organization, excessive overtime, good reputation at my school and high ethical standards. Meanwhile, the rate towards them on conservative working environment is low, the same as the management consulting and investment banks cluster discussed above.

## Cluster 5: Chinese state owned company - Monopoly

This cluster is a group of 9 Chinese companies, owned by the Chinese government and with a monopoly operating background in the Chinese market (China Mobile, China Telecom, China National Offshore Oil Corp. (CNOOC), Air China, Bao Stell, China Unicom, China Ocean Shipping(Group) Company (COSCO), Huaneng Power International and China Life.

Students perceive this group as ideal employers who have strong corporate social responsibility, strong financial strength but with very little excessive overtime and inequality between the sexes.

#### Cluster 6: Employers with strong corporate culture

This cluster contains 33 companies, mostly foreign employers from various industries (e.g. Siemens, BMW, GM, Johnson & Johnson, IKEA, Sony, HP, Philips, Exxon Mobil). There are three Chinese Employers (Haier, Lenovo, Tecent) in the same cluster.

Students perceive this group as ideal employers who have high ethical standards and strong corporate culture. They don't have any particular lowest point in terms of the other attributes.

#### Cluster 7: Foreign Companies- Market leaders

The companies in this cluster are all foreign companies. There are 14 companies from different industries such as FMCG (P&G, Unilever, Mars, L'Oréal), IT (IBM, Microsoft, Cisco, Oracle SAP), internet (Google), energy (Shell), and cross-industry ones (GE, Motorola).

Students perceive this group as ideal employers who have diverse/multicultural employees, dynamic organization, equality between the sexes, exciting products/services, financial strength, strong innovation, market success and strong corporate culture. They also think these companies have a non-conservative working environment (lowest on conservative working environment among all clusters).

## Cluster 8: Companies with low profile

Quite a few Chinese companies that are less controlled by the state are in this cluster such as Wahaha (a leading beverage producer in China), Chang Hong (electronic goods producer), TCL (electronic goods producer) and Tsingtao Brewery Co. Benq (world's top-three producers of LCD displays, scanners and keyboards) from Taiwan is grouped into this cluster too. Some foreign employers also fall into this cluster, such as Carrefour, Alcatel, American Express and Danone.

Besides the average level among most attributes, this group of companies also reached a few *lowest points* among students perception in financial strength, good reputation at my school, high ethical standards, market success and recruiting only the best students.

## 4.2.2 USA

Number of Ca	ases in each	Cluster
Cluster	1	16
	2	8
	3	58
	4	6
	5	17
	6	17
	7	4
	8	59
Valid		185
Missing		0

Final Cluster Centers	1	2	3	4	5	6	7	8
Attractive location(s)	39.88	45.81	50.43	53.24	52.51	61.78	65.35	44.72
Acceptance towards homosexual employees	16.83	21.51	21.82	18.45	18.11	14.40	16.75	17.53
Acceptance towards disabled employees	21.58	26.74	26.04	25.34	22.95	16.66	20.74	21.93
Corporate Responsibility	41.69	42.24	47.83	45.54	48.52	44.78	55.68	44.17
Conservative working environment	22.44	24.57	27.31	37.11	30.71	28.05	33.59	22.97
Diverse workforce	34.34	41.53	42.76	50.77	35.96	36.70	44.52	37.22
Dynamic recruiters	19.46	22.59	23.35	25.50	22.79	26.70	37.54	21.16
Environmental responsibility	24.91	26.58	25.78	21.90	18.95	13.36	18.37	23.72
Exciting products	51.73	42.16	51.54	33.80	31.94	31.05	21.36	59.61
Financial strength	54.02	53.19	63.25	55.87	69.07	72.42	71.98	61.23
Good reputation at my school	31.31	32.26	35.79	33.93	37.65	50.84	61.07	36.60
Best on-campus recruitment activities	12.02	14.45	13.57	10.09	14.72	15.89	27.70	12.49
Hierarchical structure	18.94	22.72	24.92	38.88	25.75	25.53	28.96	20.58
High ethical standards	28.75	33.48	33.49	40.88	32.93	28.91	46.45	29.35
Industry leadership	45.85	44.66	50.57	42.20	46.22	56.84	54.58	53.85
Innovation	43.30	39.97	42.76	36.81	28.32	31.79	25.79	51.47
Market success	47.51	45.26	57.95	34.31	51.86	58.20	52.49	55.32
Offers Rotational Program	11.66	13.68	13.79	12.78	14.13	13.31	16.71	11.98
Progressive working environment	25.03	31.09	30.83	35.67	28.86	27.41	33.92	26.96
Recruiting only the best students	21.83	24.25	23.22	38.62	27.42	43.14	43.28	24.44
Social responsibility	28.11	35.84	33.03	40.67	30.11	22.88	33.02	27.66
Sponsors Case Study Competitions	9.65	12.10	10.56	8.76	10.50	8.68	14.11	9.54
Strong corporate culture	32.02	33.74	42.43	36.24	43.71	47.38	50.58	35.44

**Table 4-6 Final Cluster Centres -US** 

SOURCE: SPSS analysis

Cluster 1: Environmental friendly employers

Most of the companies in cluster one originated from the US. Ericsson and Novartis are the exceptions. Similar to the industry segments in Cluster eight, this cluster is a mix of companies from various industries, such as pharmaceutical (Abbot), medical (Genentech. Inc.), Internet (QualComm) as well as retail stores (Staples). There is also company from forest and paper products industry (Weyerhaeuser).

Students perceive these companies as ideal employers with environmental responsibility, less conservative working environment and lack of hierarchical structure. However, un-attractive locations, lack of corporate responsibility, lack of diverse workforce and less dynamic recruiters are their drawbacks. They are also

associated the least with good reputation at schools, best on-campus recruitment activities, offering rotational program, progressive working environment, recruiting only the best students and strong corporate culture.

#### Cluster 2:Mixer

The companies that fall into this cluster are diverse. There are 8 companies from different industries, such as Energy (Sunoco), Food (ConAgra Foods, Tyson Foods, Yum! Brand), Construction material supplier (Ferguson), Medical (Mayo Chlinic), telecom (AT&T) and non-profit (Ecker Youth Alternatives).

Students perceive these companies as ideal employers with environmental responsibility and acceptance towards homosexual as well as disabled employees. The negative ratings are regarding corporate responsibility, financial strength and good reputation at schools.

#### Cluster 3: Market Successes

There are 58 companies in this cluster, second largest cluster. Quite a few of these companies are well-know international brands with products/services closely linked to every body's life such as Procter & Gamble, Johnson & Johnson, MasterCard, Microsoft, Coca-Cola, PepsiCo, Wal-Mart, Nike, Dell and Starbucks. In addition, energy (Shell, BP, Chevron Corporation, ExxonMobil) entertainment (Walt Disney, Time Warner Inc.), Airlines (American Airlines, Southwest Airlines), transportation and logistics (American Express, UPS) are other industries represented here.

Students perceive these companies as ideal employers with market success. They are also associated the most with acceptance towards homosexual and disabled employees and environmental responsibility. They have not got any of the lowest percentages among all the attributes associated with them.

#### Cluster 4: US Government Agency

This cluster consists of 6 organizations, all government agencies: Federal Bureau of Investigation (FBI), Internal Revenue Service, US Department of State, Central Intelligence Agency (CIA), National Security Agency and US Customs Border Protection.

Students perceive them as ideal employers with conservative working environment, diverse workforce, hierarchical structure, progressive working environment. They are also associated the most with acceptance towards disabled employees and social responsibility. They are the least associated with best on-

campus recruitment activities, industry leadership, market success, offering rotational program and sponsoring cases study competitions.

## Cluster 5: The financial services companies

There are quite a few companies from the financial services industry falling into this cluster, such as commercial banks (Bank of America, JPMorgan Chase, HSBC, Wachovia Corporation, etc) and insurance (State Farm Insurance Companies, New York Life Insurance Company, Liberty Mutual, etc).

Students perceive these companies as ideal employers with lack of diverse workforce. In all other attributes they are around the average level compared with the other clusters

#### Cluster 6: Consulting Firms and Investment Banks

In this cluster you will find six consulting firms (McKinsey & Company, The Boston Consulting Group, Mercer Management Consulting, Accenture, Bain & Company, Booz Allen Hamilton) and 11 investment banks. (JPMorgan Investment Bank, Lehman Brothers, Deutsche Bank, UBS Investment Bank, Citadel Investment Group, Morgan Stanley, Merrill Lynch, Bear Stearns, Credit Suisse First Boston, Goldman Sachs, Citigroup).

Students perceive these companies as ideal employers with attractive locations, financial strength, industry leadership, market success and recruiting only the best students. They are considered to be very weak on accepting homosexual and disabled employees, environmental responsibility and sponsors case study competitions. Students also associate them the *least* with environmental responsibility and high ethical standards.

#### Cluster 7: The "Big Four" Auditing Firms

This cluster only has four companies, the so called "big four" auditing firms.

They very strongly appeal to the American students. Students perceive them to be ideal employers with attractive locations, corporate responsibility, dynamic recruiters, financial strength, high ethical standards, progressive working environment and strong corporate culture. Besides good reputation at the schools, offering best-campus recruitment activities and rotational program, they are also well-known for recruiting only the best students. The degree to which they are associated with exciting products and innovation is the lowest among all 8 clusters.

#### Cluster 8: The Innovators

There are 59 companies in this cluster, the biggest among all. Except for a few companies with foreign roots (L'Oréal, BMW, Nokia, Nestlé, Toyota, Sony, Philips, DaimlerChrysler, Bosch, Bertelsmann and Siemens), they are all American companies from various industries, such as chemical (DuPont, Dow Chemical), healthcare (Eli Lilly and Company), pharmaceutical (Pfizer, Merck, GSK), Computing and IT (Apple Computer, IBM, Oracle, Cisco, Intel), Internet (Amazon.com, Yahoo!, eBay, Google) defense and aerospace (Boeing, Lockheed Martin Corporation) and industrial manufactures (GM, GE, FM, Bose, Eaton, Motorola). Companies in the FMCG industry such as Unilever and Kraft Food are also present in this cluster.

Students perceive these companies as ideal employers with exciting products, innovation and less conservative working environment. Meanwhile, they are associated the least with dynamic recruiters and rotational program.

## 4.2.3 Germany

Number of Cases in each Cluster		luster							
Germany									
Cluster	1	18							
	2	18							
	3	4							
	4	19							
	5	17							
	6	17							
	7	31							
Valid		124							
Missing		0							
Final Cluster C	enters		1	2	3	4	5	6	
Competitive wor	rking environ	ment	50.94	19.40	14.31	17.23	30.90	32.72	23.
Conservative we	orking enviro	nment	17.26	28.55	46.17	18.79	16.63	23.73	10.
Corporate socia	ıl responsibilit	ty	17.72	28.78	49.99	31.95	30.90	20.63	23.
Diverse/multicul	Itural employe	ees	53.35	21.77	45.18	29.54	45.42	30.92	45.
Dynamic organi	sation		57.19	26.57	16.49	27.79	37.57	38.72	38.
Equality betwee	n the sexes		29.21	28.48	40.68	27.05	29.50	27.21	30.
Excessive overt	ime		63.42	16.68	20.82	14.05	20.66	29.31	16.
Exciting product	ts/services		62.04	57.96	48.16	69.61	74.08	54.92	69.
Financial streng	ıth		63.02	46.16	53.38	43.38	71.72	68.99	61.
Good reputation at my school		ol	55.92	24.86	34.11	36.12	45.88	32.65	26.
Good/confidence inspiring managemer		anagement	42.66	35.39	50.55	39.46	43.54	38.14	35.
High ethical standards			18.37	20.48	48.31	25.35	23.35	18.07	18.
Innovation			35.86	29.87	12.73	60.85	66.69	30.64	52.
Market success			69.89	51.88	22.81	57.94	77.08	65.45	73.
Recruiting only the best students		ents	63.23	14.47	38.79	20.34	36.47	28.74	20.
Strong corporate	e culture		47.91	34.14	26.46	37.23	49.64	40.53	38.

**Table 4-7 Final Cluster Centres - Germany** 

SOURCE: SPSS analysis

#### Cluster 1: Consulting firms, investment banks and auditing firms

There are 18 companies falling into this cluster, which can be divided into three types: Consulting firms (McKinsey & Company, BCG, Roland Berger, Bain & Company, Accenture, Booz Allen Hamilton, Mercer Management Consulting, A.T. Kearney, Capgemini, Bearing Point, Horváth & Partners Management Consultants), investment banks (Goldman Sachs, JPMorgan, UBS) and the "big four" auditing firms (PwC, E&Y, KPMG and Deloitte).

Students perceive them as ideal employers offering competitive working environment and equality between the sexes. They are also associated the most with diverse/multicultural employees, dynamic organisation, good reputation at schools, recruiting only the best students and strong corporate culture. They are linked the most with excessive overtime among all clusters while linked the least with corporate social responsibility.

#### Cluster 2: Local Players

The last cluster consists of 18 companies, most of which are German ones.

They are associated the least with diverse/multicultural employees, good reputation at schools, good/confidence inspiring management and recruiting only the best students. The rates they have regarding exciting products/services and market success are above average level.

#### Cluster 3: Government Background

There are only four companies in this cluster: Auswaertiges Amt (Federal Foreign Office), European Central Bank, Deutsche Boerse (Deutsche Boerse AG operates the Frankfurt Stock Exchange) and KfW Bankengruppe.

Students perceive these companies as ideal employers with conservative working environment, corporate social responsibility, equality between the sexes and high ethical standards. They are also associated the most with good/confidence inspiring management. Meanwhile, the chance they are associated with competitive working environment, dynamic organisation, exciting products/services, innovation, market success and strong corporate culture are the lowest among all clusters.

#### Cluster 4: the modest group

There are 19 employers in this cluster. Except ABB, all the other companies are local ones with distinguished background: research centres (Fraunhofer-Gesellschaft, DLR) automotive manufacture and suppliers (Vokswagen, MAN, ZF Friedrichshafen, MTU

Friedrichshafen, Brose and Voith), pharmaceutical (Boehringer Ingelheim), chemical (Degussa), medical products (B. Braun Melsungen AG).

The rating of them on excessive overtime and financial strength is the lowest. In all other attributes they are around the average level compared with the other clusters.

#### Cluster 5: Innovators and Market Successes

There are 17 companies in this cluster. The majority of the companies are German oriented enterprises with prestigious history and brilliant recent market performance. They are from the various industries in Germany such as automotive (BMW Group, Porsche, Audi, DaimlerChrisler, Bosch), chemistry (BASF AG), pharmaceutical (Bayer), business software solution (SAP) and consumer goods (Adidas, Henkel). Thyssenkrupp was from very traditional steel industry, but is now enjoying a great reputation for innovative solutions. EADS, the European giant player in aerospace, defence and related services is also included in this cluster. IBM, Procter & Gamble, Microsoft and Unilever are the few companies with non-German roots.

Students perceive these companies as ideal employers with exciting products/services, financial strength, innovation, market success and strong corporate culture. They have not got any lowest rate in the other attributes.

#### Cluster 6: Banking and Insurance

Although there are still companies from other industries such as Retails (Aldi and Lidl) and Media (Bertelsmann and Axel Springer Verlag), banking and insurance is playing a major role in this cluster, with the present of Deutsche Bank, Credit Suisse, Deutsche Bundesbank, Citigroup, HVP Group, Union Investment and Allianz.

There are not so many features to emphasis for this cluster. Except they are associated the least with high ethical standards, there are no extreme percentage reached in the other attributes. The rating of them on financial strength and market success are above average level.

#### Cluster 7: Foreign Players

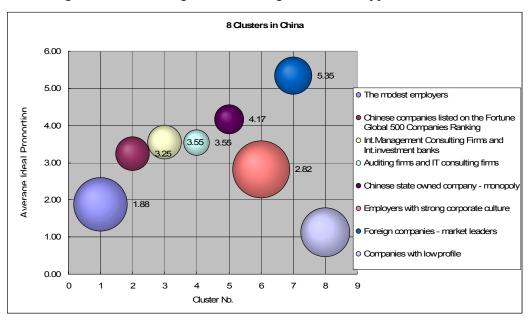
Except six or seven companies, all the other companies in this cluster with 31 companies are brands orientated from outside Germany.

They are associated the least with conservative working environment. However, the associations with them regarding good/confidence inspiring management and high ethical standards are also the lowest. Perceptions regarding diverse/multicultural employees and dynamic organisation are above average level.

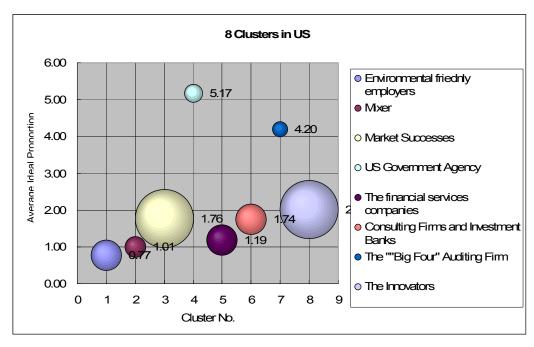
### 4.2.4 Summary

All the names given according to the features of each cluster are summarized below. A new indicator is added here: "average ideal proportion". It is in order to measure the cluster's achievement on the ideal employer ranking. Thus the proportion a companies selected by all the students in one country as their ideal employer is chosen to be an indicator. The average value of the ideal proportion of all the companies in the same cluster is calculated.

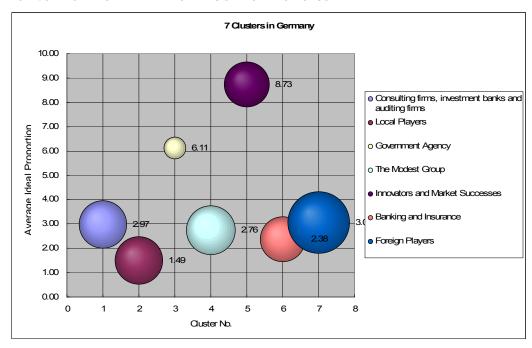
It is worth mentioning that the author is fully aware of the fact that there are more rankings available indicating employers achievement among different subgroups (preference from only business students, engineering students etc). However, the achievement indicated by all the students is representative in this case and beneficial to trend analysis as well as global comparison. The mean value is used here to make it convenient for comparison. The overall ranking which is based on the ideal proportion is marked by different color for readers who are interested to learn about the ranking differences among clusters in range. Please see appendix.



**Figure 4-1: 8 Clusters in China**NOTE: SIZE OF EACH BALL INDICATING SIZE OF EACH CLUSTER



**Figure 4-2: 8 Clusters in US**NOTE: SIZE OF EACH BALL INDICATING SIZE OF EACH CLUSTER



**Figure 4-3: 7 Clusters in Germany**NOTE: SIZE OF EACH BALL INDICATING SIZE OF EACH CLUSTER

# 4.3 Which attributes are more important

The results of the models at enter level can be found in the appendix, while the results from the backwards regression are presented below. The significant level is based on the "approaching significance" stage where  $\rho < 0.10$ , due to the nature of this research

this will not result in a high significant level. Instead of the actual figure of  $\rho$  value, only the level of significance is marked. Standardized Regression Coefficients are presented with which the strength of each attribute's influence can be compared.

### 4.3.1 Associations (Backwards Stepwise)

Variable	China	Variable	US	Variable	Germany
Excessive overtime	2339**	Acceptance towards homosexual employees	.1656*	Conservative working environment	.1888*
Good reputation at my school	.6069****	Dynamic recruiters	.4257****	Diverse/multicultural employees	.1770*
		Financial strength	.3340***	Excessive overtime	9155****
		Hierarchical structure	.2261*	Exciting products/services	.2097*
		Innovation	.3737****	Recruiting only the best students	.9524****
		Market success	1993*	Strong corporate culture	.1828*
		Offers Rotational Program	3056****		
$R^2$	.2494		.3155		.5093
Adjusted R <sup>2</sup>	.2329		.2844		.4842
F	15.172****		10.139****		20.242****
N	141		185		124

#### Notes

**Table 4-8: Regressions on Associations Attributes** 

a Dependent Variable: Ideal Proportion; Standardized regression coefficients are shown

b The Stepping method criteria, probability of F is set as "Entry .10, Removal .15"

d †:  $\rho$  < 0.10, \*:  $\rho$  <0.05, \*\*:  $\rho$  < 0.01, \*\*\*:  $\rho$  < 0.005, \*\*\*:  $\rho$  < 0.001

### **4.3.2** Associations and Offerings (Backwards Stepwise)

Variable	China	Variable	US	Coefficients	Germany
Corporate social responsibility	.1959†	Acceptance towards homosexual employees	.2449****	Conservative working environment	.3061***
Excessive overtime	3745**	Attractive location(s)	3370****	Diverse/multicultural employees	.1514**
Good reputation at my school	.5174***	Conservative working environment	.2116***	Dynamic organisation	.2891*
High ethical standards	1637†	Financial strength	.2602****	Excessive overtime	6682****
Innovation	2918**	Offers Rotational Program	3342***	Exciting products/services	.2767***
Recruiting only the best students	.3267†			Recruiting only the best students	1.1780****
Strong corporate culture	.2508†				
Competitive compensation	.4347**				
Flexible working hours	.1552†	Diversity/diverse colleagues	.1672***	Flexible working hours	.1630*
Internal education	5373*	Dynamic recruiters	.3695****	Managerial responsibility	.1706*
Secure employment	2117†	Inclusive work environment	.1590*	Mentorships	2569†
		Inspiring colleagues	.1810*	Rapid career advancement	4114**
		International career opportunities	.2575****		
		Rapid promotion	2311***		
		Support group networks	1888*		
$R^2$	.3722		.5411		.5742
Adjusted R <sup>2</sup>	.3187		.5062		.5366
F	6.954***		15.510****		15.241****
N	141		185		124

#### Notes

Table 4-9: Regressions on Associations and Offerings Attributes

a Dependent Variable: Ideal Proportion; Standardized regression coefficients are shown

b The Stepping method criteria, probability of F is set as "Entry .10, Removal .15"

C †:  $\rho$  < 0.10, \*:  $\rho$  < 0.05, \*\*:  $\rho$  < 0.01, \*\*\*:  $\rho$  < 0.005, \*\*\*:  $\rho$  < 0.001

### 5 Discussion

The discussion will follow the three objectives: perception of ideal employers ("Dream Factors"), companies in clusters and which attributes are most important. In each section the findings from China, the US and Germany are discussed separately with comparison towards other countries and all sections are ended with a global comparison.

## 5.1 Perception of ideal employers – "Dream Factors"

The preferences of American students in 2006 are very different from the year before, "high ethical standards" has overtaking financial strength to reach the first place of students' most important decision factors. It can be partly explained by the aging of generation Y. As more and more students who were born in 1980s join the graduation market, their attention to social affairs and high ethical standards is starting to influence the results of the survey. Nevertheless, financial strength is still the second most important factor influencing students' decisions. The switch from generation X to Y is a gradual process that has just begun. A reflection of all the corporate scandals of past years is also one explanation. Universities and business schools have now given more emphasis on ethics training. This could have made students more aware of these issues and to value them higher.

In China "Good/confidence-inspiring management" received the highest votes from the students. It is a reflection of students' demand for a "human-oriented" working environment, which is different from traditional hierarchical Chinese state-owned companies. Both strong corporate culture and exciting products/services can help the employer to spread a good reputation on campus. Employers with a strong product brand have the advantage towards students, especially students without work experience, as their choice of ideal employer can be strongly influenced by the perceptions gained from a company's products/services, which are established through consumer brand campaigns via the generally available media channels.

The same tendency can be found in Germany with "exciting products/services" leading the "dream factors". It is not surprising to see "Corporate social

responsibility" appearing here, considering the tradition in Europe. That innovation and market success are among the top five choices is unique to Germany.

### 5.2 Companies in clusters

Foreign companies in China have strongly taken a leading position, especially for those considered market successes and innovators. This is not the same in the US and Germany, where a lot of local companies were leading the rankings. However, this is relatively easy to understand. A huge number of successful multinational companies originate in western countries such as the US and Germany. Given the fact that China started its transition towards a market economy only 20 years ago, quite a lot of Chinese company are still in the fast developing stage.

A large number of Chinese companies are centralized into two clusters, one is the Chinese companies listed on the Fortune Global 500 Companies Rankings and the other one is the Chinese state owned companies. It is important then for the Chinese companies to understand students' perceptions. E.g. Bank of China might presume that they are competing with foreign banks such as HSBC in the market. However, the clusters indicate that it is their image as a traditional Chinese company is appealing to the students instead of a banking image. "Is this the image they would like to communicate?" "If not, how can it be change?" These are the questions Bank of China needs to consider. Another example here is Baidu, the search engine focusing on information in Chinese language. Competing with Google in this newly emerging and popular industry sector, it is natural to assume that they would be considered as innovative and successful in the market, just as their competitor Google. However, the cluster shows that Baidu falls into "the Modest group" where neither market successes nor innovative image are strongly appealing to the students.

Ideal employer image among different clusters in the US are more distinguished from each other. Besides the clear examples of government agency and "big four", market successes and innovators are also grouped separately while in both China and Germany the image of market success and innovation are associated with the same cluster.

The US government agency cluster is a small cluster with only 6 organizations. But it takes the second place on the overall ranking. After 9/11, as the media and press paid a lot of attention, government agencies such as CIA and FBI start to attract more and more generation Y students who care more about society and would like to make

a difference by being a *hero*. The association with the US government agencies describe very well their characters: diverse workforce and strong social responsibility. This match between their perception among students and the message they would like to communicate proved their effort on employer branding. Neither in Germany nor in China government agencies has reached such a distinguished position in the overall ranking.

In Germany the "foreign players" cluster, where a lot of non-German rooted companies are included, is left behind in the rankings by the "innovators and market successes" where a lot of Germany companies are clustered. This is quite a big difference from China and the US. The foreign players cluster (Cluster 5) in Germany is associated primarily with market success and exciting products/services. If we compare cluster 5 and 7 we find that cluster 5 has gained a better reputation on good/confidence inspiring management and high ethical standards. This is something companies in cluster 7 may keep in mind.

The RBV theory can be proved by the case of auditing firms, management consulting firms and investment banks which are the "first mover" in the field of employer branding. Because their recognition of *human capital creates the most important competitive advantage*, they strongly invest on their employer brands to attract the ideal top talents. In each of the three countries, they are always grouped into the same cluster. In the US, it is even more particular that there is one cluster only consists of "Big Four", which is leading the ranking among all clusters. Among all the attributes students associate with them the most, "high ethical standards" is worth mentioning, because it is also one of the "Dream factors" in the US. It can be explained partially by the highest maturity of EB activities in US market, where auditing firms already formed their own value proposition and distinguish themselves successfully from the other companies.

The graph below summarized top 6 attributes associated the most with the cluster "big four" in three countries. There is not one single attribute that is present in all of the three countries. "Good reputation at my school" and "strong corporate culture" are the same for China and US, while "financial strength" appearing both for US and Germany. "Competitive working environment", "Exciting product/services" and "Good/confidence-inspiring management" are associated the most with them only in China. "Competitive working environment" in China is considered a positive feature by the students who are looking for a fair working environment, where

working performance can be well recognized and awarded. It is the same for "good/confidence-inspiring management" which is one of the top five attributes Chinese students associate in general with their ideal employers. It is considered the opposite side of the same coin as the traditional hierarchical management of state-owned companies.

It must be a unique phenomenon that in China "Exciting services" is associated with auditing firms. It is easier to explain if we review the brand associations discussed in theory part<sup>1</sup>: the non-product (service) – related attributes represent consumers' mental imagery and inference about a product (service) rather than what they think the product (service) does or has. In this fast developing market, business of the "big four" is growing dramatically. The prospects make the products/services exciting.

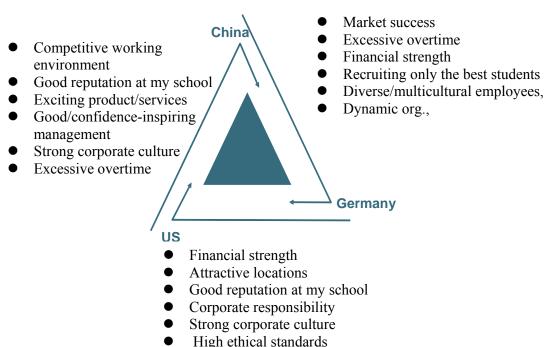


Figure 5-1: Characters of cluster containing "Big Four" in three countries

# 5.3 Which attributes are more important

If we compare the "dream factors" (associations) in section 3.1 and the approaching significant factors left in the "Association" final model, we can see clearly discrepancies. What does this tell us? First of all, the "dream factors" are the students' ideal choices. However, in reality the employers presenting in the market might not

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<sup>&</sup>lt;sup>1</sup> See "Importance of perceptions"

yet meet their demands. Thus the attributes students are able to associate with their current ideal employers are different. Secondly, those factor both appearing approaching significant in the final model and among top preferences (e.g. top 5) of "dream factors" are extra important. The approaching significant factors in the final model which can also be found among various top 5 "dream factors" are "financial strength" (overall), innovation (engineering/natural sciences/IT) in the US, exciting products/services (overall), strong corporate culture (business students) in Germany.

None of Chinese students' "dream factors" appears on the final significant factors list of Associations. Instead "good reputation at my school" and "excessive overtime" has a strong positive and negative impact towards the ideal proportion separately. Given the fact that only 5-10 years ago, Chinese universities stopped matching students with their future employers and Chinese students are given the freedom to choose their own career and companies they would like to work for, not all the Chinese students have developed strong capability to search and collect future employers information in order to make their judgement. The employer branding information available in the job market is also limited. Opinions from previous students and other professionals thus play a very important role. Thinking from the culture perspective, as the social statues is very important in China, a job offer from an employer perceived prestigious by everyone else around is more attractive than from an unknown employer to a Chinese student, although the latter one might fit them better. To communicate the right employer branding value proposition of the company to the students is a major task for employer branding in all countries, however, the importance of it is especially crucial in China because reputation is a major decision factor, if not the only one, for Chinese students.

The approaching significant factors increased after extending the model from "Association" to "Association + Offerings". An interesting factor to discuss is "competitive compensation" which only appeared approaching significance in China. Competitive salary is definitely an effective tool to attract fresh new graduates in China. In this fast growing developing market, competitive salary is used by applicants as a simple benchmark of employer's financial strength and market success. On the contrast, in Germany and the US where the economy is much more developed, competitive salary has become an implicit quality of ideal employers, which will not significantly influence students' choices.

R square value in model summary shows the explanatory power of all the independent variables towards independent variable. Among all the models, R square value is always the highest for Germany, lowest for China while US stands in between. One might argue that as the questionnaire were developed in Europe first and expanded to US then China, there might be other factors important in the new markets not yet included in the questions. This is a reasonable argument to consider. However, localised attributes have been added into the US questionnaire weakened this argument. Another way to look at the R square result is adding the Offerings attributes (the results from the question, where students answered "What") into the model results in a larger increase of R square in China (from 0.23 to 0.37) and the US (from 0.28 to 0.54) than in Germany (from 0.48 to 0.57). This difference indicates that the "Offerings" has a stronger impact towards student's ideal employer choices in China and the US than in Germany, while in Germany the "Associations" has a higher explanatory power.

Continuing this discussion, if we look at the final model of "Associations", we will find in China there is only two attributes qualified for approaching significance: "Excessive overtime" which negatively impact the ideal proportion and "Good reputation at my school" which positively impact the ideal proportion. One good reason for this unique case is that facing the under developing and unnatural job market, Chinese students haven't have not formed their own strong opinions towards future employers. Thus their associations to attributes are relatively equally distributed, which eliminated the overall explanatory power.

Globalization theory suggested that as the world economy is integrating, the cultural development is with a move to homogenized media too, including the arts and popular culture. Some places in Europe consider it is an attempt at US cultural as well as economic and political hegemony. However, the findings of this thesis indicate that there are clearly some differences among students' perceptions in different parts of the world. Presuming a standardized global ideology has been created without enough notions to country differences can be quite dangerous.

### 6 Conclusion

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his section will answer the research question through summarizing findings from discussion. Further research suggestions will also be given.

### 6.1 What drives the ideal employer image?

None of the "dream factors" stated a strong appeal in all three countries. However, China and Germany have a similar profile with two out of the top three preferences the same: "Exciting products/services" and "Good/confidence-inspiring management". "Corporate social responsibility" in Germany and "Strong corporate culture" in China are also among the top three ranks. The US is unique because the generation shift from X to Y is starting to influence the results: the factors this new generation who were born after 1980s *would like to consider* the most when choosing their ideal employers are "High ethical standards", "Financial strength" and "Attractive locations". Looking at the business and engineering/science/IT students in two groups respectively, the differences among their choices are not very big in all three countries. However, both in the US and Germany, engineering/science/IT students shows a higher preference towards "Innovation" while business students in the US choose "financial strength" and business students in Germany choose "Market success".

In China market successes and innovators are to a large extent perceptions associated with foreign employers who have a good reputation, while state-owned companies in a monopolized industry are associated the most with financial strength and corporate social responsibility. These two clusters have the highest overall average ideal proportion. In the US, "big four" auditing firms and government agency are leading the ideal employer rank with distinguished characters from the other clusters of companies. In Germany the local players who enjoy a prestigious tradition and innovative modern development are the most highly preferred ideal employers.

Although the "big four", consulting firms and investment banks appear in their own clusters in each of the three countries, there is still not a universally perceived image. Exciting products/services in China is giving the "big four" an added value while excessive overtime is having a negative impact on their image. "High ethical standards" associated with them in the US gives them a significant strength.

It is important for employers to understand what expectations students have from them depend on how students perceive them in their type of cluster, which can be determined by industry (like auditing firms in the US), by ownership (like state-owned companies in China) or the characteristics of the company (innovators or market successes in the US). Simply look at the competitor companies within the same industry might be a misleading direction in the war for talent.

After extending the model from only association attributes to both association and offerings attributes, R squares increased in all three models as well as approaching significance variables. However, the result shows the offerings attributes have a stronger impact towards the ideal employer of choices in China and the US than in Germany.

Listing together the three sources of key factors/attributes driving Ideal Employer Image among university students: the Dream Factor (ideally what factors matter), the association model (influence from all associations attributes towards ideal employer of choice), the association and offering model (influence from both associations and offerings towards ideal employer of choice), there is one factor in each country that is present in all three lists. That is "Good reputation at my school" in China, "Financial strength" in the US and "Exciting product/services" in Germany. It is carefully concluded that these are the driving factors of Ideal Employer Image among university students in China, the US and Germany.

After the investigation through this paper, we can conclude that the factors driving ideal employer images in China, the US and Germany do vary. As trends toward globalization continue, it is possible for these factors to become more or less similar. Nevertheless, national differences do matter.

### 6.2 Theoretical and practical implementation of this paper

This paper not only proved that differences do exist among students' perceptions towards ideal employers in China, the US and Germany, but also suggested factors that are most influential, relatively influential and less influential in each of the three countries. Furthermore, the conclusion of this paper also illustrates that Employer Associations and Job Offerings have different impact upon students' Ideal Employer choices in different countries. In addition, the paper successfully proved that cluster analysis of Employer's perceived image is a useful tool. The paper provides an

inspiring overview of students' perceptions in 2006 globally, which opens the doors for future trend research.

This paper has provided multinational companies a practical and handy "roadmap" to find themselves in their perceived clusters in China, the US and Germany. The questions a company should ask themselves will be:" Are characteristics of this cluster desirable? If it is not, which cluster I would like to be in? What characteristics do they have? Do I have these characteristics? How can I communicate these characteristics to the students?" Strategic decisions as well as an action plan can be made through analysis of the situation on a case by case basis.

### 6.3 Suggestions for Further Research

The discussion in this paper is just the "tip of the iceberg". The results can be further developed from many different angles. For example, different models can be tested for explaining students' preference towards one specific cluster, or within a specific students group like business or engineering/science students. Students' perceptions can also be looked at separately in different age groups. All variables that appeared significant can be investigated further for logical explanations. Result from trend changes through the years will also be interesting to see.

### 7 Reference List

#### **Books**

Aaker, D.A. (1991), Managing Brand Equity: Capitalizing on the Value of a Brand Name, The Free Press, New York, NY,.

Albert, S. and Whetten, D. (1985) "Organizational identity,eds Cummings, L.L. and Staw, B.M.." Research in Organizational Behaviour Vol. 7, pp. 263–295. JAI Press, Greenwich, CT.

Backhaus K., Tikoo S. (2004), "Conceptualizing and researching employer branding", Career Development International Volume 9 Number 5 2004 pp. 501-517

Baruch, Y. (2004), Managing Careers: Theory and Practice, Prentice-Hall, Harlow, .

(The) Conference Board (2001), Engaging Employees through Your Brand, The Conference Board, New York, NY, .

Deloitte report (2006), "Innovation in the emerging market" Published July 2006; A Manufacturing industry group report.

Ewing, M.T., Pitt, L.F., de Bussy, N.M., Berthon, P. (2002), "Employment branding in the knowledge economy", International Journal of Advertising, Vol. 21 pp.3-22.

Frook, J.E. (2001), "Burnish your brand from the inside", B to B, Vol. 86 pp.1-2.

Graeme Martin, Phillip Beaumont, Rosalind Doig, Judy Pate (2005) "Branding: a new performance discourse for HR?" European Management Journal Vol. 23, No. 1, pp 76-88, 2005

Hendry, C., Jenkins, R. (1997), "Psychological contracts and new deals", Human Resource Management Journal, Vol. 7 pp.38-44.

Hunt, Susan; Landry, Rob. (2005) "The importance of Employer Branding" Benefits Canada; Dec 2005 Supplement Future, Vol. 29, p33-36

Keller, K.L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", Journal of Marketing, Vol. 57 pp.1-22.

Martin G. Beaumont P. Doig R, Pate J (2004) 'Branding: A New Performance Discourse for HR?' European Management Journal Vol. 23, No. 1, pp. 76 – 88, 2005

Peters, T. (1999), The Brand You 50: Fifty Ways to Transform Yourself from an Employee into a Brand that Shouts Distinction, Knopf Publishers, New York, NY,.

Robinson, S.L., Kraatz, M.S., Rousseau, D.M. (1994), "Changing obligations and the psychological contract: a longitudinal study", Academy of Management Journal, Vol. 37 pp.137-53.

Robinson, S.L., Morrison, E. (1995), "Psychological contracts and organizational citizenship behavior: the effect of unfulfilled obligations on civic virtue behavior", Journal of Organizational Behavior, Vol. 16 pp.289-98.

Robinson, S.L., Rousseau, D.M. (1994), "Violating the psychological contract: not the exception but the norm", Journal of Organizational Behavior, Vol. 15 pp.245-59.

Schultz, M., Hatch, M.J. and Larsen, M.H. (2002) "The Expressive Organization: Linking Identity, Reputation and Corporate Brand." Oxford University Press, Oxford.

Standard Charterd Bank (2006), "HR Director: Keep employer branding real". Personnel Today; 2/14/2006, p3-3

Sudhaman, Arun (2004), "Internal breakdown in brand commns: survey.", Media Asia; 8/27/2004, p5-5, 1/3p, 3 charts.

Sullivan, J. (2004), "Eight elements of a successful employment brand", ER Daily, 23 February, available at: (accessed April 14, 2004), .

WATSON Wyatt [Sudhaman, Arun] (2004), "Internal breakdown in brand comms: survey" Media Asia; 8/27/2004 p5-5, 1/3p

Universum Communications (2005), "Employer Branding, Global Best Practices 2005"

#### Online resources:

Willian M. K. (2006) "Deduction and Induction thinking" <a href="http://www.socialresearchmethods.net/kb/dedind.htm">http://www.socialresearchmethods.net/kb/dedind.htm</a> (accessed August 28<sup>th</sup>, 2006), .

Schneider, L. (2003), "What is branding and how is it important to your marketing strategy?"

http://marketing.about.com/cs/brandmktg/a/whatisbranding.html (accessed August 28<sup>th</sup>, 2006), .

Sezgin. Ibrahim Can (2005) "Globalization: What? Where? How? And it's Impacts" <a href="http://www.fb1.uni-siegen.de/politik/mitarbeiter/bellers/dokumente/globalization.pdf">http://www.fb1.uni-siegen.de/politik/mitarbeiter/bellers/dokumente/globalization.pdf</a> (accessed Aug 28<sup>th</sup> 2006)

SKI (2005), "Svenskt Kvalitetsindex (SKI) providesyou with unique knowledge about both your own customers and those of your competitors" <a href="https://www.kvalitetsindex.se">www.kvalitetsindex.se</a> (accessed Aug 28<sup>th</sup> 2006)

Wikipedia, the free encyclopedia (2006): "Generation X" & "Generation Y" <a href="http://en.wikipedia.org/wiki/Generation\_Y">http://en.wikipedia.org/wiki/Generation\_Y</a> (accessed Aug 28<sup>th</sup> 2006)

Economist (2005), "In search of the ideal employer", Economist;8/20/2005, Vol. 276 Issue 8440, p49-49

http://www.socialresearchmethods.net/kb/dedind.htm

(accessed Aug 28<sup>th</sup> 2006)

Lessons from a global retailer: An interview with the president of Carrefour China McKinsey Quarterly, July 15<sup>th</sup> 2006

http://www.mckinseyquarterly.com/article\_abstract\_visitor.aspx?ar=1799&L2=16&L3=17&srid=27&gp=0

(accessed August 28<sup>th</sup> 2006)

China's Looming Talent Shortage McKinsey Quarterly, No. 4 2005

http://www.mckinseyquarterly.com/articles\_print.aspx?L2=18&L3=31 (accessed 28<sup>th</sup> Aug, 2006)

"Ga-ga for Google" CNN April 18, 2006

http://money.cnn.com/2006/04/13/news/companies/intro\_fortune\_mba (accessed 28<sup>th</sup> Aug, 2006)

#### Website:

http://www.wahaha.com.cn

http://www.changhong.com/changhong\_en/about\_en/12205.htm

http://www.tcl.com

http://www.benq.com/page/?pageId=3

http://www.novartis.com/about novartis/en/index.shtml

http://www.auswaertiges-amt.de/diplo/en/Startseite.html

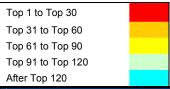
http://www.thyssenkrupp.com/

http://www.eads-nv.com

http://www.unicreditgroup.eu/DOC/jsp/navigation/index.jsp?parLocale=en

# 8 Appendix

# 8.1 Cluster Membership – China



27 CCTV	After Top 120								
Case Number         Employers         Cluster         Distance         Proportion %         Ranking           27         CCTV         1         38.34         2.35         7           14         Baidu         1         26.36         2.77         15           3         ABN AMRO         1         24.39         3.22         40           49         CICC China International Capital Corporation         1         31.64         1.99         54           49         CICC China International Capital Corporation         1         31.64         1.99         54           1         3M         1         20.07         5.77         63           23         Boeing         1         14.40         1.32         64           91         LG         1         10.68         1.90         68           10         Amway         1         19.40         2.34         72           20         Bell         1         16.78         1.56         77           51         CITIC China International Trust and Investment Corporation         1         22.74         7.62         80           58         Datang Telecom         1         39.94         1.70	Cluster Members	ship- China							
14       Baidu       1       26.36       2.77       15         3       ABN AMRO       1       24.39       3.22       40         2       ABB       1       18.03       0.84       48         49       CICC China International Capital Corporation       1       31.64       1.99       54         1       3M       1       20.07       5.77       63         23       Boeing       1       14.40       1.32       64         91       LG       1       10.68       1.90       68         10       Amway       1       19.40       2.34       72         20       Bell       1       16.78       1.56       77         51       CITIC China International Trust and Investment Corporation       1       22.74       7.62       80         58       Datang Telecom       1       39.94       1.70       88         32       China Eastern       1       17.32       1.36       89         3       Lucent       1       28.68       2.54       91         4       Bosch       1       17.62       1.84       93         4       China Eastern	Case Number	Employers	Cluster	Distance	Proportion	Ranking			
3 ABN AMRO 1 24.39 3.22 40 2 ABB 1 18.03 0.84 48 49 CICC China International Capital Corporation 1 31.64 1.99 54 1 3M 1 20.07 5.77 63 23 Boeing 1 14.40 1.32 64 91 LG 1 10.68 1.90 68 10 Amway 1 19.40 2.34 72 20 Bell 1 16.78 1.56 77 51 CITIC China International Trust and Investment Corporation 1 22.74 7.62 80 32 China Eastern 1 17.32 1.36 89 33 Lucent 1 28.68 2.54 91 24 Bosch 1 17.62 1.84 93 76 Honda 1 17.19 1.70 96 44 China Southern Airlines 1 22.64 0.62 99 18 Bayer 1 15.57 1.06 10 64 Ericsson 1 20.65 0.38 11 27 Sony Ericsson 1 20.65 0.38 11 17 Sony Ericsson 1 20.92 2.22 113 8 Allianz 1 24.67 1.62 114 Ping An of China 1 20.26 1.04 131 131 Toshiba 1 20.26 1.04 131	27	CCTV	1	38.34	2.35	7			
3 ABN AMRO	14	Baidu	1	26.36	2.77	15			
49   CICC China International Capital Corporation   1   31.64   1.99   54	3	ABN AMRO	1	24.39	3.22	40			
1   31.04   1.99   54     1   3M	2	ABB	1	18.03	0.84	48			
23   Boeing   1   14.40   1.32   64     91   LG   1   10.68   1.90   68     10   Amway   1   19.40   2.34   72     20   Bell   1   16.78   1.56   77     51   CITIC China International Trust and Investment Corporation   1   22.74   7.62     58   Datang Telecom   1   39.94   1.70   88     32   China Eastern   1   17.32   1.36   89     93   Lucent   1   28.68   2.54   91     24   Bosch   1   17.62   1.84   93     76   Honda   1   17.19   1.70   96     44   China Southern Airlines   1   22.64   0.62   99     18   Bayer   1   15.57   1.06   100     64   Ericsson   1   20.65   0.38   114     127   Sony Ericsson   1   23.91   0.70   115     140   Volvo   1   26.35   1.41   116     8   Allianz   1   24.67   1.62     114   Ping An of China   1   20.40   0.92   126     75   Hitachi   1   20.26   1.04   136     131   Toshiba   1   20.86   0.58   133     131   Toshiba   1   20.86   0.58   133     131   Toshiba   1   20.86   0.58   133     132   131   10   100   100   100     140   24.67   24.6	49		1	31.64	1.99	54			
91 LG	1	3M	1	20.07	5.77	63			
10 Amway	23	Boeing	1	14.40	1.32	64			
20   Bell	91	LG	1	10.68	1.90	68			
51         CITIC China International Trust and Investment Corporation         1         22.74         7.62         80           58         Datang Telecom         1         39.94         1.70         88           32         China Eastern         1         17.32         1.36         89           93         Lucent         1         28.68         2.54         91           24         Bosch         1         17.62         1.84         93           76         Honda         1         17.19         1.70         96           44         China Southern Airlines         1         22.64         0.62         99           18         Bayer         1         15.57         1.06         10           64         Ericsson         1         20.65         0.38         11           127         Sony Ericsson         1         23.91         0.70         11           140         Volvo         1         26.35         1.41         11           98         Merck         1         20.92         2.22         11           8         Allianz         1         24.67         1.62         12           101         M	10	Amway	1	19.40	2.34	72			
51       and Investment Corporation       1       22.74       7.62       80         58       Datang Telecom       1       39.94       1.70       88         32       China Eastern       1       17.32       1.36       89         93       Lucent       1       28.68       2.54       91         24       Bosch       1       17.62       1.84       93         76       Honda       1       17.19       1.70       96         44       China Southern Airlines       1       22.64       0.62       99         18       Bayer       1       15.57       1.06       10         64       Ericsson       1       20.65       0.38       11         127       Sony Ericsson       1       23.91       0.70       11         140       Volvo       1       26.35       1.41       11         98       Merck       1       20.92       2.22       11         8       Allianz       1       24.67       1.62       12         101       Mitsubishi       1       26.40       0.92       12         101       Mitsubishi       1	20	Bell	1	16.78	1.56	77			
32 China Eastern 1 17.32 1.36 89  93 Lucent 1 28.68 2.54 91  24 Bosch 1 17.62 1.84 93  76 Honda 1 17.19 1.70 96  44 China Southern Airlines 1 22.64 0.62 99  18 Bayer 1 15.57 1.06 10  64 Ericsson 1 20.65 0.38 11  127 Sony Ericsson 1 23.91 0.70 11  140 Volvo 1 26.35 1.41 118  98 Merck 1 20.92 2.22 119  8 Allianz 1 24.67 1.62  114 Ping An of China 1 26.40 0.92 12  101 Mitsubishi 1 21.43 0.76 129  75 Hitachi 1 20.26 1.04 136  62 DHL 1 20.86 0.58 133	51		1	22.74	7.62	80			
93 Lucent 1 28.68 2.54 91 24 Bosch 1 17.62 1.84 93 76 Honda 1 17.19 1.70 96 44 China Southern Airlines 1 22.64 0.62 99 18 Bayer 1 15.57 1.06 10 64 Ericsson 1 20.65 0.38 114 127 Sony Ericsson 1 23.91 0.70 118 140 Volvo 1 26.35 1.41 118 98 Merck 1 20.92 2.22 118 8 Allianz 1 24.67 1.62 114 Ping An of China 1 26.40 0.92 126 101 Mitsubishi 1 21.43 0.76 128 75 Hitachi 1 20.27 0.81 131 Toshiba 1 20.86 0.58 138	58	Datang Telecom	1	39.94	1.70	88			
24       Bosch       1       17.62       1.84       93         76       Honda       1       17.19       1.70       96         44       China Southern Airlines       1       22.64       0.62       99         18       Bayer       1       15.57       1.06       10         64       Ericsson       1       20.65       0.38       11         127       Sony Ericsson       1       23.91       0.70       11         140       Volvo       1       26.35       1.41       11         98       Merck       1       20.92       2.22       11         8       Allianz       1       24.67       1.62         101       Mitsubishi       1       26.40       0.92       120         101       Mitsubishi       1       21.43       0.76       120         75       Hitachi       1       20.27       0.81       13         62       DHL       1       20.26       1.04       130         131       Toshiba       1       20.86       0.58       130	32	China Eastern	1	17.32	1.36	89			
76       Honda       1       17.19       1.70       96         44       China Southern Airlines       1       22.64       0.62       99         18       Bayer       1       15.57       1.06       10         64       Ericsson       1       20.65       0.38       11         127       Sony Ericsson       1       23.91       0.70       118         140       Volvo       1       26.35       1.41       118         98       Merck       1       20.92       2.22       118         8       Allianz       1       24.67       1.62       124         101       Mitsubishi       1       26.40       0.92       124         101       Mitsubishi       1       20.27       0.81       134         75       Hitachi       1       20.26       1.04       134         62       DHL       1       20.26       1.04       134         131       Toshiba       1       20.86       0.58       138	93	Lucent	1	28.68	2.54	91			
44       China Southern Airlines       1       22.64       0.62       99         18       Bayer       1       15.57       1.06       10         64       Ericsson       1       20.65       0.38       11         127       Sony Ericsson       1       23.91       0.70       115         140       Volvo       1       26.35       1.41       116         98       Merck       1       20.92       2.22       115         8       Allianz       1       24.67       1.62       12         114       Ping An of China       1       26.40       0.92       120         101       Mitsubishi       1       21.43       0.76       120         75       Hitachi       1       20.27       0.81       130         62       DHL       1       20.26       1.04       130         131       Toshiba       1       20.86       0.58       130	24	Bosch	1	17.62	1.84	93			
18       Bayer       1       15.57       1.06       10         64       Ericsson       1       20.65       0.38       114         127       Sony Ericsson       1       23.91       0.70       118         140       Volvo       1       26.35       1.41       118         98       Merck       1       20.92       2.22       118         8       Allianz       1       24.67       1.62       12         114       Ping An of China       1       26.40       0.92       120         101       Mitsubishi       1       21.43       0.76       120         75       Hitachi       1       20.27       0.81       130         62       DHL       1       20.26       1.04       130         131       Toshiba       1       20.86       0.58       130	76	Honda	1	17.19	1.70	96			
64       Ericsson       1       20.65       0.38       114         127       Sony Ericsson       1       23.91       0.70       115         140       Volvo       1       26.35       1.41       118         98       Merck       1       20.92       2.22       118         8       Allianz       1       24.67       1.62         114       Ping An of China       1       26.40       0.92       120         101       Mitsubishi       1       21.43       0.76       120         75       Hitachi       1       20.27       0.81       133         62       DHL       1       20.26       1.04       133         131       Toshiba       1       20.86       0.58       138	44	China Southern Airlines	1	22.64	0.62	99			
127       Sony Ericsson       1       23.91       0.70       118         140       Volvo       1       26.35       1.41       118         98       Merck       1       20.92       2.22       119         8       Allianz       1       24.67       1.62         114       Ping An of China       1       26.40       0.92       126         101       Mitsubishi       1       21.43       0.76       128         75       Hitachi       1       20.27       0.81       136         62       DHL       1       20.26       1.04       138         131       Toshiba       1       20.86       0.58       138	18	Bayer	1	15.57	1.06	101			
140     Volvo     1     26.35     1.41     118       98     Merck     1     20.92     2.22     119       8     Allianz     1     24.67     1.62       114     Ping An of China     1     26.40     0.92     120       101     Mitsubishi     1     21.43     0.76     120       75     Hitachi     1     20.27     0.81     130       62     DHL     1     20.26     1.04     130       131     Toshiba     1     20.86     0.58     130	64	Ericsson	1	20.65	0.38	114			
98     Merck     1     20.92     2.22     118       8     Allianz     1     24.67     1.62       114     Ping An of China     1     26.40     0.92     126       101     Mitsubishi     1     21.43     0.76     128       75     Hitachi     1     20.27     0.81     133       62     DHL     1     20.26     1.04     138       131     Toshiba     1     20.86     0.58     138	127	Sony Ericsson	1	23.91	0.70	115			
8 Allianz 1 24.67 1.62  114 Ping An of China 1 26.40 0.92 126  101 Mitsubishi 1 21.43 0.76 129  75 Hitachi 1 20.27 0.81  62 DHL 1 20.26 1.04 136  131 Toshiba 1 20.86 0.58 139	140	Volvo	1	26.35	1.41	118			
124   114   Ping An of China   1   26.40   0.92   129   12	98	Merck	1	20.92	2.22	119			
101         Mitsubishi         1         21.43         0.76         120           75         Hitachi         1         20.27         0.81         130           62         DHL         1         20.26         1.04         130           131         Toshiba         1         20.86         0.58         130           132         1         20.86         0.58         130	8	Allianz	1	24.67	1.62	124			
75 Hitachi 1 20.27 0.81 133 62 DHL 1 20.26 1.04 134 131 Toshiba 1 20.86 0.58 135	114	Ping An of China	1	26.40	0.92	126			
132 62 DHL 1 20.26 1.04 133 131 Toshiba 1 20.86 0.58 133	101	Mitsubishi	1	21.43	0.76	129			
131 Toshiba 1 20.86 0.58 138	75	Hitachi	1	20.27	0.81	132			
131 Toshiba 1 20.86 0.58 139	62	DHL	1	20.26	1.04	138			
	131	Toshiba	1	20.86	0.58	139			
	70	Glaxo Smith Kline	1	24.89	0.93	147			
44 775	141	ZTE	1	23.99	2.55	148			
10 0 1001	16	Bank of China	2	16.94	2.91	12			
105 0	125	Sinopec	2	18.65	6.64	18			
	110	Petrol China Company	2	23.92	3.39	31			

31	China Development Bank	2	25.74	3.43	0=
30	China Construction Bank	2	10.42	2.41	37
5		2	19.34	1.74	38
5	Agriculture Bank of China	2	19.54	1.74	45
83	ICBC Industrial and Commercial Bank of China	2	9.73	1.56	40
45	China Southern Power Grid	2	27.09	2.46	46
33	China FAW group cooperation	2	27.13	2.40	56
33	Sinochem China National		27.10	2.03	59
124	Chemicals Import Export	2	22.94	3.98	
41	Corporation China Post Office	2	16.65	2.18	69
41	China Railway	2	26.89	5.34	83
97	McKinsey	3	28.91	6.71	92
52	Citigroup	3	18.43	1.74	5
77	HSBC	3	27.11	1.74	10
102	Morgan Stanley	3	22.47	2.36	11
130		3	23.39	6.70	24
	The Boston Consulting Group  Goldman Sachs Gao Hua				25
71	Securities	3	19.85	1.70	62
61	Deutsche Bank	3	22.41	8.74	73
55	Credit Suisse/Credit Suisse First Boston	3	31.94	1.20	84
87	JP Morgan	3	13.22	4.76	90
134	UBS	3	23.32	0.67	98
99	Merrill Lynch	3	17.92	4.74	103
118	Roland Berger	3	33.88	1.37	135
79	Huawei	4	29.06	1.91	14
115	PricewaterhouseCoopers	4	24.37	2.31	23
88	KPMG	4	21.86	3.48	32
60	Deloitte	4	27.55	2.66	36
65	Ernst & Young	4	16.33	5.88	51
19	Bearing Point	4	30.41	3.81	65
4	Accenture	4	23.67	4.77	76
37	China Mobile	5	23.26	3.77	1
48	ChinaTelecom	5	18.70	3.09	21
38	China National Offshore Oil Corp.(CNOOC)	5	14.32	1.07	27
6	Air China	5	22.55	14.24	33
17	Baoshan Steel	5	12.01	4.29	41
47	China Unicom	5	19.49	1.84	44
39	China Ocean Shipping (Group) Company (COSCO)	5	14.95	2.95	81
78	Huaneng Power International	5	15.53	4.92	97
35	China Life	5	18.16	1.38	112
73	Haier	6	34.80	6.06	8
106	Nokia	6	20.88	2.26	9
22	BMW	6	11.22	4.25	13
122	Siemens	6	14.68	1.17	16
90	Lenovo	6	23.06	1.73	19
119	Samsung	6	14.56	1.44	22
53	Coca-Cola	6	18.99	0.94	28
69	General Motors	6	17.19	1.84	30
86	Johnson& Johnson	6	19.07	3.99	34
137	Wal-Mart	6	18.28	7.30	35

129	TECENT	6	30.93	2.38	43
84	IKEA	6	35.93	2.45	47
105	Nestlé	6	13.60	2.77	50
80	Hutchison Whampoa Property	6	26.33	3.75	30
80	(HWPG)	Ö	20.33	3.75	58
126	Sony	6	14.59	1.12	60
74	Hewlett-Packard	6	12.34	5.26	61
25	BP	6	32.28	1.96	66
138	Vanke Co	6	30.02	1.19	70
112	Philips	6	10.03	2.75	71
139	Volkswagen	6	23.47	6.77	74
94	LVMH Moët Hennessy Louis Vuitton	6	30.20	1.10	75
67	Ford Motor	6	22.01	1.73	79
56	DaimlerChrysler	6	22.22	1.21	85
109	PepsiCo	6	21.22	2.12	86
59	Dell	6	13.80	0.67	95
111	Pfizer	6	24.02	4.83	102
96	McDonalds	6	23.50	5.67	104
54	Colgate-Palmolive	6	14.94	2.41	105
132	Toyota Motor	6	22.26	3.02	107
89	Kraft	6	19.05	1.14	109
108	Panasonic	6	23.60	2.12	110
66	Exxon Mobil	6	31.86	1.96	117
117	Roche	6	20.33	3.65	136
116	Procter&Gamble	7	16.69	2.23	2
82	IBM	7	10.84	5.05	3
72	Google	7	34.11	9.01	4
100	Microsoft	7	27.74	11.24	6
85	Intel	7	14.09	5.59	17
68	General Electrics	7	13.41	4.24	20
95	Mars	7	20.47	4.52	26
92	L'Oréal	7	21.55	8.56	29
121	Shell	7	21.01	2.75	39
103	Motorola	7	14.99	1.49	49
135	Unilever	7	19.61	13.61	57
50	Cisco	7	23.71	0.85	67
107	Oracle	7	20.15	3.27	94
120	SAP	7	22.05	2.46	122
36	China Merchants Bank	8	25.58	1.34	42
21	Benq	8	18.65	0.80	55
26	Carrefour	8	21.99	0.73	78
12	Avon	8	22.94	1.79	82
123	Sina Corporation	8	25.85	0.67	87
7	Alcatel	8	24.31	0.39	100
28	Hyundai Chang Hong	8	15.64	2.47	106
136	Chang Hong Wahaha	8	19.98 28.33	1.87 1.12	108
128	TCL	8	30.79	0.73	111
46	China Tai Group	8	23.24	0.73	113
40	China Pacific Insurance	8		3.07	116
	(Group) Co		18.49		120
133	Tsingtao Brewery Co	8	31.09	0.91	121
34	China Galaxy Securities Co	8	29.99	0.80	123

104	NEC	8	22.28	1.02	125
43	China Resources(Holdings)Co	8	21.62	0.68	127
9	American Express	8	20.13	0.66	128
11	Auchan	8	20.54	1.17	130
29	China Asset Management Co	8	26.47	0.83	131
57	Danone	8	23.05	0.57	133
13	B&Q	8	24.55	1.71	134
63	Digital China	8	26.49	1.06	137
113	PICC Property and Casualty Company	8	31.34	0.89	140
15	Bailian Group Corp	8	37.79	1.08	146

# 8.2 Cluster Membership – US

Top 1 to Top 30	
Top 31 to Top 60	
Top 61 to Top 90	
Top 91 to Top 120	
After Top 120	

Cluster Membership - US							
Cluster Me	mbersnip - US	1					
Case Number	Employers	Cluster	Distance	Ideal Proportion %	Ranking		
3	Abbott	1	13.64	0.36	54		
183	Wyeth Pharmaceuticals	1	14.26	2.10	61		
71	Genentech	1	18.37	0.19	70		
20	Bayer	1	15.01	1.38	82		
123	Novartis	1	16.06	0.43	117		
153	Takeda Pharmaceuticals North America	1	17.07	0.20	119		
126	Pacific Gas and Electric Company (PG&E)	1	14.59	1.57	135		
165	Turner Construction	1	23.40	0.78	146		
136	QUALCOMM	1	17.81	0.62	150		
44	ConAgra Foods	1	18.84	0.48	155		
180	Weyerhaeuser	1	23.41	0.34	161		
1	3Com	1	28.96	0.77	165		
166	Тусо	1	19.88	0.51	166		
147	Staples	1	23.21	0.35	168		
61	Ericsson	1	20.95	0.40	181		
6	Alcoa	1	18.84	1.80	185		
105	Mayo Clinic	2	19.79	0.79	13		
16	AT&T	2	13.23	0.16	116		
58	Eckerd Youth Alternatives	2	29.18	0.61	137		
167	Tyson Foods	2	16.26	0.20	141		
185	Yum! Brands	2	14.29	5.05	154		
152	Sunoco	2	18.93	0.22	179		
66	Ferguson	2	16.64	0.58	182		
53	DHL	2	16.69	0.44	188		
177	Walt Disney	3	16.28	2.76	1		
111	Microsoft	3	18.93	2.03	6		
90	Johnson & Johnson	3	12.82	3.22	8		
120	Nike	3	18.29	0.90	12		

133	Procter & Gamble	3	15.57	0.22	14
43	Coca-Cola	3	16.63	0.27	19
148	Starbucks	3	15.76	1.53	20
70	Gap Inc.	3	17.96	1.06	30
162	Time Warner Inc.	3	17.66	0.67	31
154	Target	3	13.43	0.61	32
12	Anheuser-Busch	3	9.93	4.27	33
82	Hilton Hotels Corporation	3	15.35	0.43	39
9	American Airlines	3	16.93	0.18	40
182	Virgin	3	17.15	2.38	42
50	Dell	3	14.64	0.23	48
127	PepsiCo	3	12.27	1.86	49
145	Southwest Airlines	3	12.96	0.59	51
102	Marriott	3	17.16	3.44	52
10	American Express	3	14.86	1.26	56
63	ExxonMobil	3	21.74	0.31	58
106	McGraw-Hill Companies	3	18.89	0.68	63
142	Shell Oil Company	3	20.57	1.17	69
158	The Hershey Company	3	18.35	2.96	71
25	Best Buy	3	21.51	0.12	73
149	Starwood Hotels & Resorts Worldwide	3	18.88	3.05	83
73	General Mills	3	13.98	1.18	88
176	Wal-Mart Stores	3	10.83	2.18	90
99	Limited Brands	3	17.69	0.60	93
80	Harrah's Entertainment	3	19.78	1.67	94
32	BP	3	20.66	6.69	102
112	Miller Brewing Company	3	15.66	1.04	104
173	UPS	3	12.79	0.21	106
179	Verizon	3	9.30	5.18	108
93	Kimberly-Clark Corporation	3	16.47	0.22	111
13	AOL	3	19.89	2.32	112
175	Walgreen Corporation	3	16.45	0.78	113
140	S.C Johnson & Son	3	15.35	4.72	115
129	Philip Morris USA	3	18.44	0.56	118
146 79	Sprint Nextel  Halliburton	3	15.34 24.80	0.84	129
38	Chevron Corporation	3	24.80	0.19 1.60	130
39	Cingular	3	15.16	2.20	131
103	MasterCard	3	15.10	0.70	136
65	Federated Department Stores	3	21.62	4.03	139
135	Pulte Homes	3	21.25	1.38	140 143
159	The Home Depot	3	13.57	3.26	143
45	ConocoPhillips	3	33.68	1.56	156
163	T-Mobile	3	18.91	0.49	163
160	The TJX Companies	3	21.66	0.35	167
75	Georgia-Pacific Corporation	3	19.90	3.28	169

23	Bell South	3	19.43	0.37	172
60	Enterprise Rent-A-Car	3	27.09	1.03	175
15	ARAMARK	3	20.29	1.03	176
125	Owens Corning	3	22.77	2.74	178
113	Milliken & Company	3	25.07	0.87	180
141	Sears Holding Corporation	3	20.30	1.23	184
181	Whirlpool Corporation	3	23.68	11.23	186
49	Darden Restaurants	3	17.77	0.19	187
169	U.S. Department of State	4	7.79	7.57	3
64	Federal Bureau of Investigation	4	5.13	7.97	4
37	Central Intelligence Agency	4	14.06	1.65	5
117	National Security Agency	4	12.59	3.82	26
89	Internal Revenue Service (IRS)	4	22.29	1.47	66
168	U.S. Customs Border Protection	4	15.72	8.52	75
19	Bank of America	5	15.57	3.67	29
91	JPMorgan Chase	5	17.65	0.22	46
174	Wachovia Corporation	5	16.62	1.25	86
67	Fidelity Investments	5	12.49	0.26	89
178	Wells Fargo & Company	5	9.57	0.67	105
134	Prudential Financial	5	9.83	0.75	110
150	State Farm Insurance Companies	5	22.37	6.15	114
87	ING U.S. Financial Services	5	17.16	0.45	120
161	The Vanguard Group	5	19.99	0.36	126
119	New York Life Insurance Company	5	20.07	0.71	128
85	HSBC	5	17.53	0.54	132
131	PNC Financial Services Group	5	11.40	0.94	144
97	Liberty Mutual	5	23.87	0.85	153
157	The Hartford Financial Services Group	5	14.45	0.40	159
116	National City	5	22.14	0.72	164
68	Fifth Third Bancorp	5	22.25	1.28	173
21	BB&T Corporation	5	32.75	1.03	177
110	Merrill Lynch	6	13.87	1.61	21
77	Goldman Sachs	6	11.48	1.42	23
92	JPMorgan Investment Bank	6	16.44	0.64	35
114	Morgan Stanley	6	8.71	0.73	38
42	Citigroup	6	15.84	0.29	47
107	McKinsey & Company	6	21.66	2.50	57
156	The Boston Consulting Group	6	13.60	0.63	65
4	Accenture	6	22.64	1.43	68
52	Deutsche Bank	6	12.34	3.97	77
18	Bain & Company	6	22.46	2.51	78
96	Lehman Brothers	6	16.30	1.35	85
170	UBS Investment Bank	6	9.76	2.00	91
29	Booz Allen Hamilton	6	13.15	0.73	123
108	Mercer Management Consulting	6	15.63	4.00	124
22	Bear Stearns	6	22.56	2.99	133
46	Credit Suisse First Boston	6	14.89	1.65	134

41	Citadel Investment Group	6	18.16	1.22	
132	PricewaterhouseCoopers	7	4.50	3.96	171
62	·	7	5.16	4.53	11
51	Ernst & Young  Deloitte	7	3.35	3.00	16
94	KPMG	7	7.37	5.32	24
78	Google	8	13.26	3.01	37
14	Apple Computer	8	11.15	1.63	2
27	BMW	8	9.52	3.70	7
144	Sony	8	16.72	1.41	9
128	Pfizer	8	10.14	1.03	10
28	Boeing	8	14.16	6.45	15
100	Lockheed Martin Corporation	8	16.29	0.43	17
86	IBM	8	14.09	0.47	18
72	General Electric	8	12.27	0.31	22
101	L'Oréal	8	15.96	5.79	25
7	Amazon.com	8	17.92	4.53	27
88	Intel	8	16.10	0.49	28
2	3M	8	7.90	1.13	34
76	GlaxoSmithKline	8	10.86	1.17	36
164	Toyota	8	13.46	0.48	41
109	Merck	8	13.01	0.41	43
59	Electronic Arts	8	16.58	1.27	
74	General Motors	8	10.25	1.07	45 50
57	eBay	8	13.96	0.26	53
184	Yahoo!	8	14.96	1.37	55
98	Lilly (Eli Lilly and Company)	8	16.53	1.11	59
69	Ford Motor Company	8	12.27	1.55	60
118	Nestle	8	17.77	0.12	62
137	Raytheon	8	14.05	2.17	64
5	Adobe Systems	8	17.68	2.58	67
55	DuPont	8	14.47	1.82	72
81	Hewlett-Packard	8	13.71	3.85	74
122	Northrop Grumman Corporation	8	20.67	2.25	76
8	AMD	8	17.20	2.76	79
83	Honda R&D Americas	8	14.63	9.15	80
95	Kraft Foods	8	15.77	1.51	81
48	DaimlerChrysler	8	12.24	1.40	84
36	Caterpillar	8	12.63	0.74	87
139	Rolls-Royce North America	8	11.50	3.98	92
155	Texas Instruments Incorporated	8	10.74	3.14	95
33	Bristol-Myers Squibb	8	9.87	1.39	96
143	Siemens	8	10.02	1.86	97
31	Bose Corporation	8	20.99	4.51	98
115	Motorola	8	7.48	3.70	99
54	Dow Chemical	8	16.48	1.06	100
40	Cisco Systems	8	11.47	2.64	101
104	Mattel	8	22.71	1.11	103

11	Amgen	8	14.42	1.69	107
151	Sun Microsystems	8	14.43	0.71	109
84	Honeywell	8	15.26	1.47	121
130	Philips	8	13.14	0.58	122
172	United Technologies	8	22.63	4.68	125
121	Nokia	8	13.08	0.73	127
138	Roche	8	15.60	1.66	138
124	Oracle	8	11.12	0.61	142
171	Unilever	8	13.68	1.19	145
30	Bosch	8	18.96	1.16	147
34	Campbell Soup Company	8	17.26	5.39	149
24	Bertelsmann (BMG, Random House)	8	25.12	0.97	151
35	Cargill	8	24.65	1.17	157
17	BAE Systems	8	21.34	2.73	158
26	Black & Decker	8	22.98	0.53	170
47	Cummins, Inc.	8	16.80	0.72	174
56	Eaton Corporation	8	25.36	2.04	194

# 8.3 Cluster Membership – Germany



Cluster Me	mbership - Germany				
Case Number	Employer	Cluster	Distance	Ideal Proportion %	Ranking
83	McKinsey & Company	1	29.92	0.92	9
17	BCG (The Boston Consulting Group)	1	38.13	1.95	13
97	PricewaterhouseCoopers	1	17.24	3.00	35
60	Goldman Sachs	1	32.90	7.99	38
54	Ernst & Young	1	19.52	0.64	39
101	Roland Berger	1	21.10	1.84	40
74	KPMG	1	25.13	0.75	43
14	Bain & Company	1	28.03	1.87	45
72	JPMorgan	1	22.34	3.53	51
3	Accenture	1	23.48	3.56	69
116	UBS	1	38.20	1.11	71
38	Deloitte	1	21.22	2.80	73
24	Booz Allen Hamilton	1	21.35	3.07	74
84	Mercer Management Consulting	1	24.87	9.72	77
65	Horváth & Partners Management Consultants	1	41.68	1.74	98
1	A.T. Kearney	1	20.96	3.77	108
27	Capgemini	1	31.03	3.33	114

18	BearingPoint	1	36.00	1.93	118
115	TUI (World of TUI)	2	39.84	0.86	23
39	Deutsche Bahn	2	29.27	1.62	46
59	GfK	2	37.00	1.06	53
92	Peek & Cloppenburg	2	31.05	2.93	67
13	Bahlsen	2	25.50	1.44	82
110	Sparkassen Finanzgruppe	2	50.87	1.53	84
52	EnBW Energie Baden-Wuerttemberg	2	21.84	1.07	85
44	Deutsche Telekom	2	29.40	2.76	86
91	Otto (Otto Versand)	2	35.79	0.52	97
56	Ford	2	42.75	0.77	102
32	Commerzbank	2	29.66	1.14	103
114	Tuev Sued Gruppe	2	40.06	2.06	107
4	Adam Opel	2	42.43	0.46	111
76	Kühne + Nagel	2	36.20	0.55	113
120	WestLB	2	28.14	1.54	115
103	Salzgitter AG	2	25.50	0.96	122
61	Heidelberg Cement	2	33.84	5.11	123
99	Rewe Handelsgruppe	2	30.72	0.47	127
10	Auswaertiges Amt	3	41.77	15.13	3
55	European Central Bank (EZB)	3	32.04	1.89	21
41	Deutsche Boerse	3	42.22	5.15	49
73	KfW Bankengruppe	3	39.41	2.26	60
58	Fraunhofer-Gesellschaft	4	60.53	1.34	6
46	DLR (Deutsches Zentrum fuer Luft- und Raumfahrt)	4	51.43	0.72	11
123	Volkswagen	4	29.43	1.32	18
81	MAN	4	19.72	1.18	52
47	Dr. Oetker	4	35.25	0.91	56
28	Carl Zeiss	4	18.84	2.18	63
124	ZF Friedrichshafen	4	18.15	1.05	75
71	JENOPTIK	4	25.48	1.18	79
87	MTU Friedrichshafen	4	25.15	8.24	81
49	Dresdner Bank	4	21.15	2.51	91
2	ABB	4	25.08	1.36	92
22	Boehringer Ingelheim	4	20.13	14.39	93
78	Linde	4	23.64	1.72	94
37	Degussa	4	19.16	1.31	95
23	Bombardier Transportation	4	43.39	2.79	96
30	Claas	4	30.29	1.62	104
26	Brose	4	34.71	0.59	110
12	B. Braun Melsungen AG	4	25.52	6.19	116
122	Voith	4	29.32	1.80	120
21	BMW Group	5	29.45	9.65	1
96	Porsche	5	42.46	14.66	2
9	Audi	5	21.28	4.62	4

107	Siemens	5	15.39	4.58	5
35	DaimlerChrysler	5	27.12	21.24	8
5	adidas	5	34.68	8.10	10
25	Bosch	5	34.26	10.89	12
51	EADS	5	34.14	7.81	14
67	IBM	5	19.22	2.05	15
98	Procter & Gamble	5	26.29	7.75	22
104	SAP	5	29.31	4.98	24
86	Microsoft	5	32.92	20.23	25
15	BASF AG	5	15.70	5.12	27
16	Bayer	5	27.84	5.04	29
112	ThyssenKrupp	5	30.50	14.53	31
117	Unilever	5	24.77	3.94	42
62	Henkel	5	27.04	3.24	68
20	Bertelsmann	6	24.38	1.08	19
40	Deutsche Bank	6	35.26	2.54	26
11	Axel Springer Verlag	6	27.86	4.59	28
108	Siemens Management Consulting (SMC)	6	34.56	5.65	32
50	E.ON	6	26.98	1.10	37
7	Allianz	6	25.14	2.10	54
102	RWE	6	27.66	4.74	59
34	Credit Suisse	6	33.90	2.86	66
64	Hochtief	6	31.18	1.09	70
42	Deutsche Bundesbank	6	20.78	3.63	72
29	Citigroup	6	34.15	1.95	99
48	Dräger	6	29.42	0.85	100
6	Aldi Sud	6	35.53	0.46	101
118	Union Investment	6	24.96	0.59	106
66	HVB Group	6	32.32	2.40	112
94	Philip Morris	6	34.78	3.89	119
77	Lidl	6	40.53	0.96	128
80	Lufthansa	7	32.20	2.54	7
68	IKEA	7	63.19	3.70	16
79	L'Oréal	7	27.85	4.45	17
109	Sony	7	34.50	1.43	20
31	Coca Cola Erfrischungsgetraeke AG	7	27.75	1.76	30
89	Nokia	7	26.57	2.15	33
88	Nestle	7	13.82	2.19	34
19	Beiersdorf	7	28.89	1.38	36
69	Infineon Technologies	7	36.97	3.05	41
57	Fraport	7	35.14	2.81	44
111	Tchibo	7	31.15	7.59	47
100	Roche	7	22.61	3.30	48
63	Hewlett-Packard	7	18.51	0.67	50
8	AMD Saxony	7	30.37	2.48	55

75	Kraft Foods	7	19.63	6.48	57
90	Novartis	7	25.96	13.65	58
95	Philips	7	21.14	1.68	61
45	DHL	7	23.75	1.42	62
106	Shell	7	32.35	3.81	64
43	Deutsche Post World Net	7	18.24	3.87	65
36	Danone	7	19.77	2.43	76
93	Pfizer	7	15.66	1.72	78
82	Masterfoods	7	15.78	2.26	80
119	Vattenfall Europe	7	30.01	2.87	83
33	Continental	7	21.17	1.01	87
85	Metro Group	7	24.26	2.17	88
53	Ericsson	7	22.80	5.63	89
121	Vodafone	7	25.06	2.92	90
105	Schenker	7	36.36	0.91	105
113	Tuev Rheinland Group	7	33.22	1.55	109
70	ING-DiBa	7	28.42	1.37	117

# 8.4 Regression on Associations Attributes (Enter Level)

Variable	China	Variable	US	Variable	Germany
Competitive working environment	.0301	Acceptance towards disabled employees	2097	Conservative working environment	.1857
Conservative working environment	0758	Acceptance towards homosexual employees	.3144†	Corporate social responsibility	.1545
Corporate social responsibility	.1231	Attractive location(s)	2062	Corporate social responsibility	.1818†
Diverse/multicultural employees	0494	Conservative working environment	.1300	Dynamic organization	.0606
Dynamic organisation	.1612	Corporate Responsibility	.1916	Equality between the sexes	.0320
Equality between the sexes	0387	Diverse workforce	.1785	Excessive overtime	8482***
Excessive overtime	3143†	Dynamic recruiters	.2666†	Exciting products/services	.2204†
Exciting products/services	3184	Environmental responsibility	.0009	Financial strength	.0366
Financial strength	0729	Exciting products	0667	Good reputation at my school	0068
Good reputation at my school	.4317**	Financial strength	.2003	Good/confidence- inspiring management	.0566
Good/confidence- inspiring management	.1445	Good reputation at my school	.1355	High ethical standards	1591
High ethical standards	1772	Best on-campus recruitment activities	1707	Innovation	.0708
Innovation	2496	Hierarchical structure	.1576	Market success	1203
Market success	.1676	High ethical standards	1127	Recruiting only the best students	.9022****
Recruiting only the best students	.3609	Industry leadership	0053	Strong corporate culture	.1494
Strong corporate culture	.1692	Innovation	.3133		

		Market success	0927	
		Offers Rotational Program	3042***	
		Progressive working environment	0555	
		Recruiting only the best students	.1687	
		Social responsibility	.0718	
		Sponsors Case Study Competitions	.0272	
		Strong corporate culture	0800	
$R^2$	.3135		.3484	. 5237
Adjusted R <sup>2</sup>	.2249		.2553	. 4576
F	3.539 ****		3.742****	7. 355****
N	141		185	124

#### Notes

- a Dependent Variable: Ideal Proportion; Standardized regression coefficients are shown
- b The Stepping method criteria, probability of F is set as "Entry .10, Removal .15"
- d †:  $\rho$  < 0.10, \*:  $\rho$  <0.05, \*\*:  $\rho$  < 0.01, \*\*\*:  $\rho$  < 0.005, \*\*\*\*:  $\rho$  < 0.001

# 8.5 Regressions on Associations and Offerings Attributes (Enter Level)

Variable	China	Variable	US	Variable	Germany
Competitive working environment	.0160	Acceptance towards disabled employees	0657	Competitive working environment	.0651
Conservative working environment	.0226	Acceptance towards homosexual employees	.1703	Conservative working environment	.2781
Corporate social responsibility	.2049	Attractive location(s)	1692	Corporate social responsibility	.0476
Diverse/multicultural employees	0925	Conservative working environment	.1870	Diverse/multicultural employees	.1086
Dynamic organization	.0273	Corporate Responsibility	.1890	Dynamic organization	.2564
Equality between the sexes	0245	Diverse workforce	0909	Equality between the sexes	0129
Excessive overtime	2678	Dynamic recruiters1	0081	Excessive overtime	5049
Exciting products/services	1349	Environmental responsibility	1183	Exciting products/services	.2440†
Financial strength	.0216	Exciting products	0305	Financial strength	0037
Good reputation at my school	.6658***	Financial strength	.2577	Good reputation at my school	2432
Good/confidence- inspiring management	0241	Good reputation at my school	.0002	Good/confidence- inspiring management	.0759
High ethical standards	1941	Best on-campus recruitment activities	.0122	High ethical standards	.1320
Innovation	2797	Hierarchical structure	.1150	Innovation	.0923
Market success	.1453	High ethical standards	1840	Market success	.0169

Recruiting only the best students	.4614†	Industry leadership	0859	Recruiting only the best students	.3953
Strong corporate culture	.2913	Innovation	.2423	Strong corporate culture	.0012
Competitive compensation	.2884	Market success	0718	Competitive compensation	0562
Arrange a residential permit (Hukou)	.0361	Offers Rotational Program	2633*	Flexible working hours	.1494
Flexible working hours	.1667	Progressive working environment	.0516	Good career reference	1161
Good career reference	1759	Recruiting only the best students	2140	Increasingly challenging tasks	1929
Increasingly challenging tasks	.0260	Social responsibility	.0767	Inspiring colleagues	0877
Inspiring colleagues	.0232	Sponsors Case Study Competitions	0028	Internal education	0125
Internal education	4360†	Strong corporate culture	0778	International career opportunities	.0714
Managerial responsibility	.1735	Clear advancement path	.0854	Managerial responsibility	.1716
International career opportunities	.0340	Community commitment	.0553	Mentorships	3548†
Mentorships	1804	Competitive compensation	.0263	Project-based work	.1698
Project-based work	1070	Cross-functional job flexibility	0703	Rapid career advancement	2731
Rapid career advancement	0816	Diversity/diverse colleagues	.1367	Secure employment	.0416
Secure employment	3237	Dynamic recruiters	.3875	Trainee programme	.1211
Trainee programme	.0068	Flexible working conditions	.1054	Variety of assignments	0024
Variety of assignments	.0550	Employee resource networks/affinity groups	.0496		
		Good career reference	.0000		
		High internship to full time hire conversion	0951		
		Inclusive work environment	.1500		
		Inspiring colleagues	.2158†		
		International career opportunities	.3400****		
		Job rotation	.0454		
		Leadership rotational program Long-term	0619		
		compensation potential Prestigious	2001		
		internship program	.3499***		
		Project-based work	0963		
		Rapid promotion	2600*		

		Secure employment Sponsorship of future education	.0378 0003	
		Support group networks	1471	
		Trainee/rotational program	0665	
$R^2$	.4119		.5900	.6130
Adjusted R <sup>2</sup>	.2446		.4534	.4881
F	2.463 ****		4.318****	4.910****
N	141		185	124

#### Notes

- a Dependent Variable: Ideal Proportion; Standardized regression coefficients are shown
- b The Stepping method criteria, probability of F is set as "Entry .10, Removal .15"
- d †:  $\rho$  < 0.10, \*:  $\rho$  <0.05, \*\*:  $\rho$  < 0.01, \*\*\*:  $\rho$  < 0.005, \*\*\*:  $\rho$  < 0.001

# 8.6 Options under Associations

Optional Attributes under Associations				
China	USA	Germany		
Competitive working environment	Acceptance towards disabled employees	Competitive working environment		
Conservative working environment	Acceptance towards homosexual employees	Conservative working environment		
Corporate social responsibility	Attractive location(s)	Corporate social responsibility		
Diverse/multicultural employees	Conservative working environment	Diverse/multicultural employees		
Dynamic organization	Corporate Responsibility	Dynamic organization		
Equality between the sexes	Diverse workforce	Equality between the sexes		
Excessive overtime	Dynamic recruiters	Excessive overtime		
Exciting products/services	Environmental responsibility	Exciting products/services		
Financial strength	Exciting products	Financial strength		
Good reputation at my school	Financial strength	Good reputation at my school		
Good/confidence-inspiring management	Good reputation at my school	Good/confidence-inspiring management		
High ethical standards	Best on-campus recruitment activities	High ethical standards		
Innovation	Hierarchical structure	Innovation		
Market success	High ethical standards	Market success		
Recruiting only the best students	Industry leadership	Recruiting only the best students		
Strong corporate culture	Innovation	Strong corporate culture		
	Market success			
	Offers Rotational Program			
	Progressive working environment			

Recruiting only the best students	
Social responsibility	
Sponsors Case Study Competitions	
Strong corporate culture	

# 8.7 Options under Offerings

Ор	Optional Attributes under Offerings					
China	USA	Germany				
Arrange a residential permit (Hukou)	Clear advancement path	Competitive compensation				
Competitive compensation	Community commitment	Flexible working hours				
Flexible working hours	Competitive compensation	Good career reference				
Good career reference	Cross-functional job flexibility	Increasingly challenging tasks				
Increasingly challenging tasks	Diversity/diverse colleagues	Inspiring colleagues				
Inspiring colleagues	Employee resource networks/affinity groups	Internal education				
Internal education	Flexible working conditions	International career opportunities				
International career opportunities	Good career reference	Managerial responsibility				
Managerial responsibility	High internship to full time hire conversion	Mentorships				
Mentorships	Inclusive work environment	Project-based work				
Project-based work	Inspiring colleagues	Rapid career advancement				
Rapid career advancement	International career opportunities	Secure employment				
Secure employment	Job rotation	Trainee programme				
Trainee programme	Leadership rotational program	Variety of assignments				
Variety of assignments	Long-term compensation potential					
	Prestigious internship program					
	Project-based work					
	Rapid promotion					
	Secure employment					
	Sponsorship of future education					
	Support group networks					
	Trainee/rotational program					

# 8.8 Correlations all variables in China, the US and Germany

# Correlations all variables in China (1/2)

Correlation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Ideal Proportion															
2 Competitive compensation	0,395														
3 Arrange a residential permit (Hukou)	0,130	-0,015													
<sup>4</sup> Flexible working hour	rs 0,085	-0,223	-0,028												
<sup>5</sup> Good career reference	ce ** 0,367	0,892	-0,139	-0,170											
6 Increasingly challenging tasks	0,299	0,796	-0,271 **	-0,026	0,840										
<sup>7</sup> Inspiring colleagues	0,254	0,660	-0,321	0,134	0,745	0,825									
8 Internal education	0,263	0,829	-0,178	-0,173	0,883	0,851	0,772								
9 Managerial responsibility	0,159	0,387	-0,187 *	0,081	0,490	0,501	0,570	0,545							
10 International career opportunities	0,251	0,745	-0,432	-0,056	0,814	0,838	0,806	0,802	0,493						
11 Mentorships	0,111	0,422	-0,309	0,161	0,565	0,691	0,671	0,623	0,530	0,653					
12 Project-based work	0,247	0,687	-0,137	0,022	0,743	0,802	0,715	0,759	0,385	0,708	0,710				
13 Rapid career advancement	0,014	0,083	-0,072	0,195	0,124	0,183	0,235	0,163	0,233	0,163	0,464	0,353			
14 Secure employment	0,125	0,078	0,684	-0,152	-0,042	-0,305	-0,323	-0,095	-0,105	-0,325	-0,426	-0,179	-0,104		
<sup>15</sup> Trainee programme	0,214	0,576	-0,254	-0,090	0,700	0,726	0,736	0,764	0,557	0,724	0,686	0,607	0,274	-0,211	
16 Variety of assignment	ots ** 0,219	0,534	-0,234	0,092	0,658	0,765	0,745	0,638	0,638	0,704	0,742	0,654	0,305	-0,308	0,701
17 Competitive working environment	0,259	0,785	-0,284	-0,017	0,793	0,903	0,814	0,788	0,425	0,807	0,662	0,770	0,223	-0,331	0,677
18 Conservative working environment	0,009	-0,227	0,607	-0,039	-0,286	-0,449	-0,477	-0,344	-0,260	-0,404	-0,386	-0,314	-0,094	0,753	-0,321
19 Corporate social responsibility	0,253	0,212	0,267	-0,065	0,266	0,082	0,040	0,222	0,284	0,099	0,025	0,111	0,102	0,527	0,284
20 Diverse/multicultural employees	0,254	0,703	-0,431	0,040	0,810	0,850	0,847	0,800	0,517	0,896	0,732	0,754	0,324	-0,401	0,737
21 Dynamic organisation	n ** 0,224	0,386	-0,193	0,445	0,476	0,598	0,664	0,516	0,530	0,565	0,612	0,507	0,327	-0,282	0,498
22 Equality between the sexes	0,068	0,110	0,007	0,276	0,270	0,303	0,347	0,267	0,256	0,229	0,462	0,357	0,375	-0,139	0,416
<sup>23</sup> Excessive overtime	0,043	0,413	-0,202	-0,156	0,388	0,490	0,335	0,321	0,097	0,442	0,558	0,555	0,455	-0,369	0,332
24 Exciting products/services	0,282	0,701	-0,349	0,055	0,832	0,834	0,852	0,861	0,580	0,830	0,671	0,716	0,146	-0,266	0,760
25 Financial strength	0,376	0,835	0,042	-0,258	0,795	0,600	0,519	0,738	0,343	0,624	0,241	0,531	-0,071	0,298	0,468
26 Good reputation at m school	y 0,444	0,798	0,086	-0,088	0,808	0,744	0,601	0,757	0,266	0,610	0,548	0,770	0,318	0,069	0,601
27 Good/confidence- inspiring managemer	0,302 nt **	0,725	-0,284	0,051	0,812	0,866	0,839	0,774	0,570	0,803	0,691	0,726	0,254	-0,241	0,754
28 High ethical standard	0.000	0,295	-0,194	0,087	0,396	0,469	0,504	0,453	0,500	0,495	0,473	0,388	0,296	-0,105	0,638
29 Innovation	0,217	0,605	-0,200	0,186	0,682	0,809	0,826	0,679	0,392	0,711	0,684	0,743	0,309	-0,339	0,637
30 Market success	0,393	0,592	-0,003	0,140	0,635	0,539	0,589	0,661	0,431	0,538	0,278	0,455	-0,045	0,217	0,480
31 Recruiting only the best students	0,275	0,721	-0,119	-0,190	0,731	0,747	0,659	0,663	0,269	0,700	0,649	0,759	0,384	-0,226	0,616
32 Strong corporate culture	0,316	0,586	-0,275	0,128	0,743	0,755	0,780	0,747	0,567	0,772	0,662	0,658	0,228	-0,177	0,753

Correlation is significant at the 0.01 level (2-tailed).
 Correlation is significant at the 0.05 level (2-tailed).

# Correlations all variables in China (2/2)

Correlation	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1 Ideal Proportion 2 Competitive compensation																
<ol> <li>Arrange a residential permit (Hukou)</li> </ol>																
<sup>4</sup> Flexible working hours																
<sup>5</sup> Good career reference																
6 Increasingly challenging tasks																
7 Inspiring colleagues																
8 Internal education																
9 Managerial responsibility																
<ol> <li>International career opportunities</li> </ol>																
11 Mentorships																
12 Project-based work																
13 Rapid career advancement																
<sup>14</sup> Secure employment																
15 Trainee programme																
<sup>16</sup> Variety of assignments																
17 Competitive working environment	0,720															
18 Conservative working environment	-0,341	-0,476 *														
19 Corporate social responsibility	0,127	0,003	0,425													
20 Diverse/multicultural employees	0,746	0,841	-0,523	0,050												
21 Dynamic organisation	0,679	0,612	-0,339	0,141	0,636											
22 Equality between the sexes	0,413	0,323	-0,105	0,199	0,384	0,465										
23 Excessive overtime	0,492	0,598	-0,275	-0,183	0,530	0,305	0,268									
24 Exciting products/services	0,686	0,795	-0,451	0,190	0,860	0,646	0,394	0,262								
25 Financial strength	0,331	0,570	-0,031	0,349	0,548	0,216	0,045	0,110	0,629							
26 Good reputation at my school	0,532	0,714	-0,131	0,288	0,682	0,445	0,354	0,495	0,665	0,661						
27 Good/confidence- inspiring management	0,777	0,882	-0,377	0,203	0,851	0,641	0,404	0,479	0,831	0,568	0,723					
High ethical standards	0,482	0,470	-0,118	0,371	0,504	0,488	0,511	0,194	0,574	0,264	0,404	0,594				
29 Innovation	0,722	0,829	-0,421	0,046	0,804	0,690	0,465	0,466	0,759	0,406	0,673	0,816	0,500			
30 Market success	0,407	0,454	-0,060	0,387	0,513	0,466	0,146	-0,158	0,688	0,738	0,528	0,554	0,348	0,449		
31 Recruiting only the best students	0,616	0,806	-0,298	-0,039	0,768	0,420	0,336	0,778	0,608	0,498	0,775	0,712	0,346	0,691	0,231	
32 Strong corporate	0,735	0,696	-0,345 **	0,301	0,799	0,663	0,418	0,201	0,882	0,549	0,609	0,802	0,594		0,715 (	0,515

<sup>\*\*</sup> Correlation is significan

\* Correlation is significan

# Correlations all variables in the US (1/1)

	Correlations	1	2	. 3	4		5 6	5 7	' 8	9	10	) 11	12
1	Ideal Proportion												
2	Diversity/diverse colleagues	0.435											
3	Dynamic recruiters	0.226	0.209 **										
4	Inclusive work environment	0.254	0.540 **	0.253									
5	Inspiring colleagues	0.536 **	0.424 **	0.214	0.287								
6	International career	0.378	0.342 **	0.187	0.106	0.310 **							
7	Rapid promotion	-0.079	0.194	0.487 **	0.347	-0.093	0.029						
8	Support group networks	0.171 *	0.449 **	0.478 **	0.581 **	0.217 **	0.161	0.441 **					
9	Acceptance towards homosexual employees	0.136	0.462 **	-0.086	0.477	-0.009	-0.046	0.232	0.314				
10	Attractive location(s)	0.119	0.159	0.503	0.109	0.185	0.271 **	0.373	0.130	-0.086			
11	Conservative working	0.150	0.230 **	0.368 **	0.202 **	0.005	0.099	0.377	0.218	0.030	0.506		
12	Financial strength	0.161 *	-0.056	0.325 **	-0.067	0.138	0.159	0.305	0.147 **	-0.206 **	0.640	0.348	
13	Offers Rotational Program	-0.139	0.096	0.523	0.277	-0.152 *	0.176	0.432	0.404	0.089	0.318	0.456	0.160

Correlation is significant at the 0.01 level (2-tailed).
Correlation is significant at the 0.05 level (2-tailed).

Notes: Only variables left in the final models are presenting here for the following reasons:

- 1. There are all together 47 variables (including dependent variable) in the US, which is too big to present properly
- The simply correlation result is the same for the case of all variables included and only a few chosen variables included

### Correlations all variables in Germany (1/2)

4 Corporate social responsibility	2 3	4	5	6									
2 environment 0.141 3 environment -0.039 -0. 4 Corporate social 0.258 -0. responsibility 0.325 0. 5 Diverse/multicultural employees 0.068 0. 7 Equality between the sexes 0.266 0. 8 Excessive overtime 0.004 0. 9 Exciting products/services 0.361 -0. 10 Financial strength 0.213 0. 11 Good reputation at my school 0.317 0. 12 Good/confidence-inspiring management 0.299 -0. 13 High ethical standards 0.299 -0.				U	/	8	9	10	11	12	13	14	15
3 environment -0.039 -0.  4 Corporate social 0.258 -0. responsibility ***  5 Diverse/multicultural employees 0.068 0.  7 Equality between the sexes 0.266 0.  8 Excessive overtime 0.004 0.  9 Exciting products/services 0.361 -0.  10 Financial strength 0.213 0.  11 Good reputation at my school *** 12 Good/confidence-inspiring management *** 13 High ethical standards 0.299 -0.  14 Innovation 0.338 -0.													
4 Corporate social responsibility 0.258 -0. 1													
responsibility 0.325 0. employees 0.325 0. employees 0.068 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	.108												
employees 6 Dynamic organisation 0.068 0.068 0.7 Equality between the sexes 0.266 0.8 Excessive overtime 0.004 0.9 Exciting products/services 0.361 -0.10 Financial strength 0.213 0.11 Good reputation at my school 0.11 Good/confidence-inspiring management 0.317 0.11 Good/confidence-inspiring management 0.299 -0.11 Honovation 0.338 -0.01	.479 0.334												
7 Equality between the sexes 0.266 0.  8 Excessive overtime 0.004 0.  9 Exciting products/services 0.361 -0.  10 Financial strength 0.213 0.  11 Good reputation at my school 0.317 0.  12 Good/confidence-inspiring management 0.317 0.  13 High ethical standards 0.299 -0.  14 Innovation 0.338 -0.	.531 -0.375	-0.242 **											
8 Excessive overtime 0.004 0. 9 Exciting products/services 0.361 -0. 10 Financial strength 0.213 0. 11 Good reputation at my school 0.389 0. 12 Good/confidence-inspiring management 0.317 0. 13 High ethical standards 0.299 -0. 14 Innovation 0.338 -0.	.727 -0.466	-0.440	0.532										
9 Exciting products/services 0.361 -0.  10 Financial strength 0.213 0.  11 Good reputation at my school 12 Good/confidence-inspiring management 0.317 0.  13 High ethical standards 0.299 -0.  14 Innovation 0.338 -0.	.004 0.021	0.455	0.202	0.187									
10 Financial strength 0.213 0.  11 Good reputation at my school 0.317 0.  12 Good/confidence-inspiring management 0.299 -0.  14 Innovation 0.338 -0.	.876 -0.017	-0.426	0.452	0.708	-0.009								
11 Good reputation at my school 0.389 0.389 0.389 o.389 o.38	.042 -0.569	0.041	0.211	0.124	0.118	-0.205							
school " " " 12 Good/confidence-inspiring management " 13 High ethical standards " 0.299 -0. " " 14 Innovation " 0.338 -0. " " " " " " " " " " " " " " " " " " "	.501 -0.048	-0.162	0.294	0.363	-0.006	0.244	-0.027						
management	.652 -0.016	-0.093	0.405	0.425	0.042	0.661	0.094	0.230					
14 Innovation 0.338 -0.	.100 0.187	0.445	0.039	0.173	0.286	0.176	-0.009	0.206	0.431				
**	.315 0.364	0.838	-0.040 *	-0.316 *	0.516	-0.218	0.010	-0.146	0.082	0.529			
15 Market success 0.119 0.	.122 -0.574	0.065	0.192	0.015	-0.057	-0.315 **	0.705	-0.028	0.140	-0.036	0.005		
**	.379 -0.578	-0.302	0.252	0.480	-0.070	0.126	0.452 ** *	0.630	0.157	0.054	-0.367	0.355	
16 students 0.337 0.	.825 -0.020	-0.225	0.547	0.591	0.113	0.859	-0.023	0.346	0.859	0.362	0.022	-0.086	0.143
17 Strong corporate culture 0.362 0.	.595 -0.210	0.016	0.366	0.567	0.257	0.373	0.305	0.537	0.445	0.298	-0.028	0.217	0.606
18 Competitive compensation 0.195 0.	.732 0.038	-0.172	0.414	0.517	0.124	0.633	-0.078	0.582	0.604	0.334	0.006	-0.110	0.280
19 Flexible working hours 0.125 -0.	.329 0.000	0.284	-0.149	-0.200	0.116	-0.405	0.078	-0.149	-0.139	0.027	0.054	0.257	-0.054
20 Good career reference 0.364 0.	.503 -0.157	-0.006	0.541	0.402	0.197	0.432	0.225	0.381	0.667	0.425	0.122	0.146	0.287
21 tasks 0.256 0.	.582 0.010	-0.044	0.442	0.465	0.086	0.651	0.080	0.222	0.727	0.415	0.129	-0.057	0.087
22 Inspiring colleagues 0.202 0.	.667 -0.117	-0.118	0.494	0.635	0.248	0.708	0.119	0.235	0.618	0.391	0.028	-0.047	0.201
23 Internal education 0.157 0.	.407 0.109	0.154	0.240	0.371	0.230	0.458	-0.050	0.163	0.475	0.377	0.128	-0.161	0.054
24 opportunities 0.315 0.	.580 -0.302	-0.236	0.761	0.558	0.073	0.514	0.262	0.392	0.557	0.241	-0.077	0.145	0.426
25 Managerial responsibility 0.259 0.	.514 0.023	-0.037	0.373	0.424	0.106	0.483	-0.062	0.322	0.504	0.360	-0.034	-0.153	0.146
26 Mentorships 0.060 0.	.704 0.003	-0.167	0.433	0.666	0.150	0.816	-0.124	0.137	0.614	0.327	-0.003	-0.186	0.063
27 Project-based work 0.289 0.	.433 -0.242	-0.097	0.429	0.342	0.017	0.461	0.262	-0.050	0.616	0.112	-0.049	0.278	0.055
28 Rapid career advancement 0.063 0.	000 0000	-0.321	0.473	0.695	0.090	0.867	-0.114	0.374	0.660	0.330	-0.107	-0.252	0.233
29 Secure employment 0.101 -0.	.833 -0.032												
30 Trainee programme 0.142 0.	.556 0.193	0.463	-0.389	-0.469 *	-0.052	-0.568	0.012	-0.148	-0.232 *	0.154	0.211	0.198	-0.181
31 Variety of assignments 0.181 0.		0.463 ** 0.147	-0.389 * 0.040	-0.469 * 0.131	-0.052 0.204	-0.568 ** -0.042	0.012	-0.148 * 0.207	-0.232 * 0.088	0.154	0.211 * -0.028	0.198	-0.181

Correlation is significant at the 0.01 level (2-tailed). Correlation is significant at the 0.05 level (2-tailed).

Correlations	16	17	18	19	20	) 21	22	2 23	3 24	25	26	5 27	28	29	
1 Ideal Proportion 2 environment															
3 environment															
4 Corporate social responsibility 5 Diverse/multicultural employees 6 Dynamic organisation															
7 Equality between the sexes															
3 Excessive overtime															
9 Exciting products/services															
Financial strength															
1 Good reputation at my school 2 Good/confidence-inspiring management 3 High ethical standards															
1 Innovation															
Market success															
S students															
7 Strong corporate culture	0.453														
3 Competitive compensation	0.727	0.511													
9 Flexible working hours	-0.375	-0.039	-0.286												
Good career reference	0.658	0.391	0.640	-0.030											
I tasks	0.772	0.354	0.631	-0.200	0.760										
2 Inspiring colleagues	0.731	0.456	0.613	-0.121	0.646	0.703									
3 Internal education	0.465	0.382	0.465	0.212	0.568	0.656	0.583								
1 opportunities	0.624	0.472	0.513	-0.184	0.758	0.676	0.628	0.402							
Managerial responsibility	0.547	0.398	0.535	0.008	0.552	0.672	0.583	0.640	0.536						
6 Mentorships	0.758	0.380	0.562	-0.140	0.517	0.718	0.758	0.666	0.518	0.601					
Project-based work	0.573	0.314	0.351	0.066	0.602	0.684	0.553	0.559	0.521	0.470	0.574				
Rapid career advancement	0.840	0.425	0.794	-0.374	0.618	0.753	0.753	0.556	0.614	0.606	0.814	0.467			
Secure employment	-0.479	-0.194	-0.296	0.656	-0.148	-0.200	-0.265	0.109	-0.356	0.027	-0.331	-0.004	-0.507		
Trainee programme	-0.040	0.310	0.148	0.332	0.273	0.184	0.135	0.456	0.265	0.426	0.098	0.013	0.130	0.182	
1 Variety of assignments	0.521	0.318	0.457	-0.099	0.656	* 0.730	0.629	0.638	0.601	0.589	0.616	0.581	0.549	* -0.105	0.2

Correlation is significant at the 0.01 level (2-tailed). Correlation is significant at the 0.05 level (2-tailed).