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Incentive Preferences of Employees in Germany and the USA: An Empirical Investigation**

This study investigates performance reward preferences of employees in Germany and the USA. The investigation uses the following three constructs: The Institutional Framework and its formal and informal implications for incentive compensation, Diminishing Marginal Utility of individuals related to performance rewards, and Incentive Schemes as motivational devices in organizations. Our empirical investigation is based upon survey data collected from employees of a MNC in Germany and the USA using an enriched form of Hofstede's cross-cultural questionnaire. Our results show that employees from these countries have different preferences on incentives and further that incentive plans designed for one country might have non-motivating consequences in the other. We also find that the logic of diminishing marginal utility applies to certain rewards. Referencing these results, we suggest a method for organizations to develop effective and efficient incentive systems.

Key words: **Institutional Framework, Incentive Compensation, USA, Germany, Performance Rewards**

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1. Introduction

As multinational corporations [MNC] enter foreign markets, the question of how to motivate and compensate the foreign employees arises. Merely transplanting performance incentive systems from the home country to the host country might not motivate the foreign employees as they motivate the employees in the home country. Such transplanted incentive plans might even create disincentives that work in opposition to the overall goal of incentives. In our analysis, we focus on rewards themselves, not on the performance measures, and especially on which rewards are motivating to the employees in Germany and the USA.

The Analytic Context

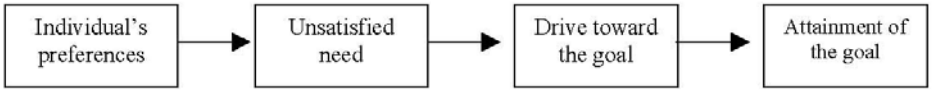
As the theoretical basis of our analysis, we have selected the New Institutional Economics [NIE] framework, because it combines the elements of law, economics and organization, all of which are relevant to employee motivation through incentive compensation (Williamson 1996). In the NIE fashion, we consider both the formal and informal institutional framework. The formal framework is the legal body of rules and the informal framework is more implicit, composed of social, cultural and religious values (North 1990). Economics also plays a pivotal role in the incentive analysis in that both employees and employers desire to find "satisfying regions" in terms of benefit/cost trade-offs. Because different institutional frameworks provide different compensation settings, it might, for instance, be more beneficial for tax reasons for employees to receive part of their compensation as benefits rather than as monetary compensation. Also, it might be less costly for the employer to provide a non-cash reward such as health benefits to employees because the organization often can negotiate group discounts, for instance, on health care plans (Lazear 1998). We focus our study on the organization. This is where employees and employers act, put forth effort, and give and receive rewards. As Barnard (1938: 139) notes "the subject of incentives is fundamental in formal organizations and in conscious efforts to organize". Put simply: employers want to motivate their employees to work towards the organization's goals.

2. Employee Motivation

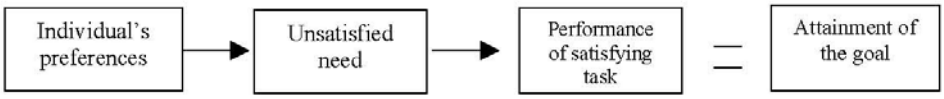
Motivation, coming from the Latin word *movere* meaning "to move", has been defined in various ways. For employee motivation our preferred definition is offered by Robbins (1996: 212): "the willingness to exert high levels of effort toward organizational goals, conditioned by the effort's ability to satisfy some individual need." We prefer this definition of motivation since it is *conditioned*, that is, it must be placed in a temporal organizational context. Although the process of motivation is universal, in that individuals seek to maximize their utility by pursuing goals they value, the conditioning of that behavior is the design challenge that our research addresses. It can be said that motivation results from the psychological drive to satisfy needs that remained to that point unsatisfied (see Figure 1a). Using this mechanism, the organization can, by understanding the needs as viewed through the respective institutional framework, design effective and efficient incentives.

Figure 1: Motivation Processes

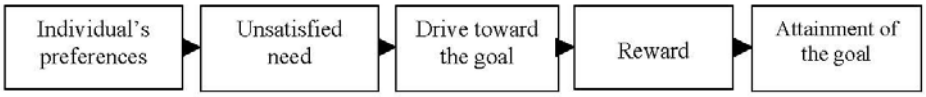
1a: Basic Motivation Process



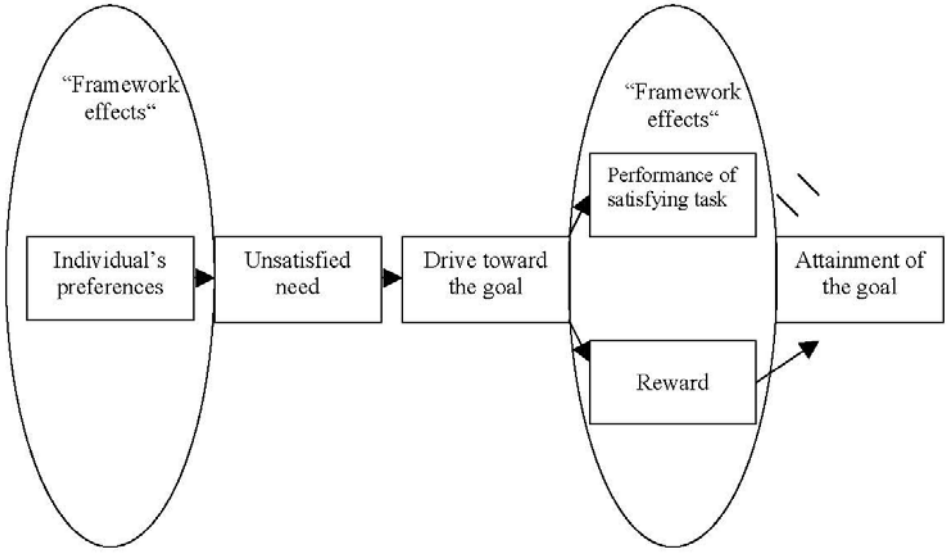
1b: Intrinsic Motivation Process



1c: Extrinsic Motivation Process



1d: Institutional Frameworks' Effects on the Motivation Process



The central question of our study is: Are the motivational aspects associated with the reward elements in the vector ***r*** of the utility function of the employee $U_I^E = f(r_1, r_2, r_3, ..., r_n)$ conditioned by the institutional framework (*I*). The firm's profit function is $\pi^F = g(x_1, x_2, x_3, ..., x_m)$. It has as its argument the task vector ***x*** where each element contributes to the utility derived from the profit that x_i produces. Employees also face negative utility $U^E(\boldsymbol{e})$, because they have to provide a cer-

tain level of effort, **e**, to perform the tasks in the vector ***x*** that leads to a reward in ***r*** of $U_I^E = f(r_1, r_2, r_3, ..., r_n)$. Theory suggests that employees will not perform a task as long as the negative utility resulting from their anticipated expended effort is higher than the positive utility that they derive from the rewards expected to be garnered (Milgrom/Roberts, 1992: 200-203). This general relationship may be noted as: $U^E(\boldsymbol{r}) > U^E(\boldsymbol{e})$. Here we are assuming that the equality case, characterized as indifference, is not a desirable state. If $U^E(r_i) > U^E(e_i)$, we say that the employee is in the *impact zone* of the incentive meaning that the incentive provided by the i^{th} reward has positive motivational effects on the performance of the employee for the given institutional framework. The same characterization exists for the firm's utility function in that employers will not be willing to provide rewards to their employees that incur higher utility costs than the utility benefits of having the task performed. The design *problématique* then is a problem of finding rewards that motivate the employees and are at the same time cost efficient for the employer. Let us consider the various aspects of motivation that form the set of reward possibilities available to the firm in constructing the incentive system.

Motivation can be either intrinsic or extrinsic. Intrinsic motivation comes from within the individual. Such motivation implies that the individual derives utility from performing the task itself, not from the reward (Wolff 1999: 164-165). This is presented in Figure 1b. In the case of intrinsic motivation, performing the task, e.g. working as a project manager, is already a reward to the employee if that employee derives need fulfillment from the task itself. So the task is a part of that person's reward vector ***r***.

Extrinsic motivation, on the other hand, is defined as something given from one person to another. The process of such motivation can be described as reaching a goal via a detour in that task performance leads to a reward which then fulfils an unsatisfied need as demonstrated in Figure 1c. For example, employees perform a particular task (x_i) and for doing so, receive a reward (r_i), which was their drive to perform the task, an extrinsic motivator.

Motivation theorists such as Herzberg (1966), Maslow (1968), McClelland (1953) and Vroom (1964) have tried to explain what motivates employees. However, these theories do not take into account the institutional frameworks that affect the needs of individuals and through that conduit also their preferences on performance incentives (see Figure 1d). However, framework-compatible incentive schemes are needed in order to motivate employees in different countries.

3. Institutional Frameworks and Motivation

> "What is rewarding to different people varies greatly depending on their background, expectations, values, and needs. The value of money, response to public recognition, the desire for peer and professional respect, and the need for challenging assignments all vary according to lifestyle and culture. The importance of these rewards to individuals affects their motivation, productivity, and satisfaction. A great variety of rewards is clearly called for." (Jamieson/O'Mara 1991: 109-110.)

This statement highlights the need to understand the perception as well as the value of incentives as motivators for firms moving into the multinational and so multicultural arena. Most simply stated, incentives as motivators vary in different countries. What is behind these differences? It can be said that one's work-related needs, values and expectations are partially dependent on the meaning of work to individuals and that meaning varies among the different national settings[1]. Work is inextricably tied to economic factors such as the ability to finance one's activities of daily living, e.g. purchase groceries, secure housing and provide for uncertainty in the future. In addition, work also provides individuals with additional psychological benefits, such as achievement, honor, and social connectedness. For German and US employees, work itself, as one understands the "work-ethic", seems to have a positive meaning. Further, Americans consider work as a place where one makes interesting contacts and where status and prestige can be obtained. One the other hand, for Germans work is related to prestige and status as well; however, they do not view working as a service to the society in the same sense as do Americans. In both countries, however, the main objective of working is the financial income[2].

Hypotheses

In order to motivate employees, various incentive schemes may be employed. Incentive schemes include all material and related components of a work contract, explicit and implicit, which may generate utility for the employees. The compensation schemes of organizations, and therefore their performance incentives, are dependent on various laws such as minimum wage and tax laws that differ in each institutional framework. At the same time, the motivational effects of incentives are again conditioned on cultural factors as well as individual preferences, which are, by definition, different in each country. Therefore, considering the different institutional frameworks, it is hypothesized that:

Hypothesis 1 [H1]: Different institutional frameworks generate different individual utility functions with respect to employee incentives.

H1 follows from the work of Gaßner (1999: 76-87) and Wolff/Lazear (2001: 227-230) who argue that various rewards can create both utility and disutility for the employee as well as for the employer. They use utility to describe benefits or savings where disutility represents costs to the respective parties. Referencing the relation $U^E(\boldsymbol{r}) > U^E(\boldsymbol{e})$, employees can be said to be in the "impact zone" of an incentive when they find themselves reaping benefits from a reward (see Figure 2). When individuals come from different cultural or legal environments, one would expect to find that the re-

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1 In a study entitled Meaning of Work International Research Team (1987) the meaning of work was divided in six categories: 1) Work provides a needed income, 2) Work is interesting and satisfying, 3) Work provides contact with others, 4) Work is a useful way for one to serve society, 5) Work keeps one occupied, and 6) Work gives status and prestige.

2 The scores in the Meaning of Work Study noted above were the following: *Germany:* 1) 40.3, 2) 16.7, 3) 13.1, 4) 7.4, 5) 11.8 and 6) 10.1; *U.S.:* 1) 33.1, 2) 16.8, 3) 15.3, 4) 11.5, 5) 11.3 and 6) 11.9. The mean number of points is here noted where all the points from one country should add up to 100.

wards that provide utility to the employees differ. For example, Deresky (2000: 411) notes that the living conditions in a country affect the incentive preferences of individuals. In this way then, because German law requires employee and employer cost sharing of comprehensive mandatory health care and retirement plans, an incentive tied to an improvement of healthcare or retirement benefits is less likely to motivate German employees than would an incentive for which they still have a greater expressed need. The US institutional framework does not provide the employees with such comprehensive coverage and so the US employees are largely responsible for their own healthcare and retirement plans (Albert 1991: 147-149 and Wolff 1999: 202-209). For that reason, US employees would be expected to value such benefits more highly than the German employees. According to Hofstede (1980, 1991, 2001), we would expect US employees, who have lower uncertainty avoidance[3] than Germans, to place higher importance on rewards such as stock options than do Germans who have relatively high uncertainty avoidance. Further, we would expect to see US employees appreciating and so reacting positively to rewards focusing on individual recognition such as verbal or award recognition for a job well done more than would Germans due to the fact that the US is a more individualistic nation than is Germany (Hofstede 1980, 1991, 2001). The US society is also said to be focused on visible signs of career success, the achievement of status and performance (Adler 2002, Trompenaars/Hampden-Turner 1997 and Javidan/House 2001). Therefore, one would anticipate that for US employees "Employee of the Month" rewards and positive feedback from a supervisor would provide high utility; whereas, the German employees might not value being recognized in such a manner. In line with The Meaning of Work Study (1987), we expect that the German employees would find pure monetary rewards, such as raises and bonuses, more motivating than do the US employees. One expects this due to the fact that Germans see work as means to provide income; whereas US employees seem to place more value on the social factors pertaining to work.

It is also important to understand how entitlements are viewed in the context of motivation. An employee might find a work goal, e.g. training, very important; however, it could, at the same time, be seen as a necessary entitlement. Therefore, even though an employee might find training important, it is still not always a motivator, because employees might consider it a necessity and therefore not a reward.

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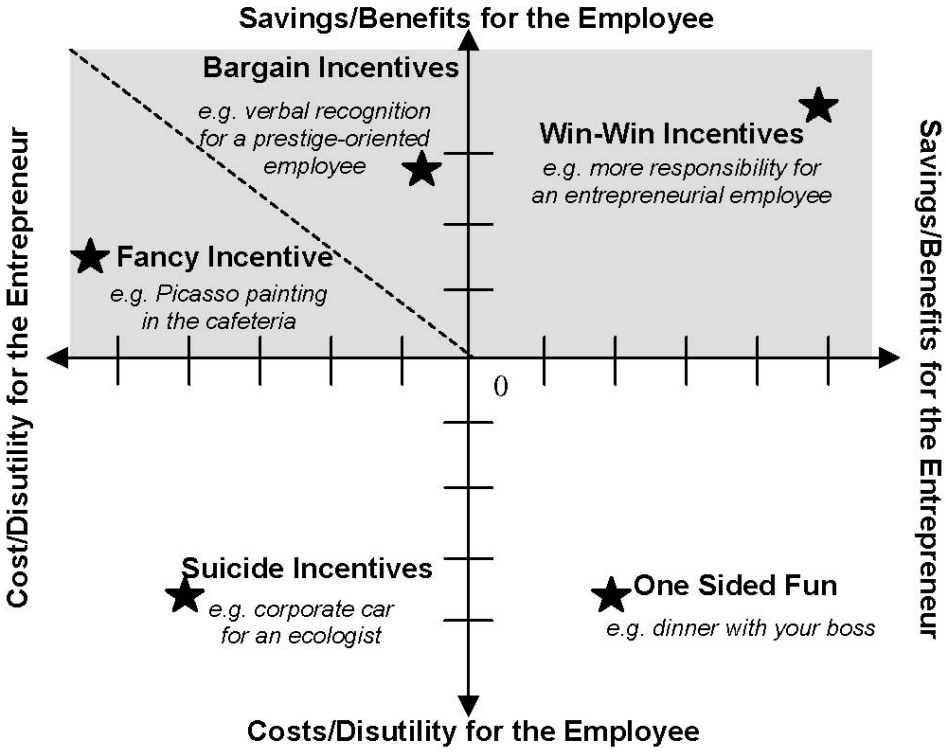
[3] Hofstede's (1980) dimensions of culture are Power Distance, Uncertainty Avoidance, Individualism and Collectivism, and Masculinity and Femininity. A fifth dimension, Long- vs. Short-Term Orientation was added later (Hofstede (2001)). Power Distance is related to the human inequality. Uncertainty Avoidance relates to the level of stress in a society in the face of an unknown future. Individualism and collectivism is related to the integration of individuals into primary groups. The Masculinity versus Femininity dimension is related to the division of emotional roles between men and women. However, it should be mentioned that the Hofstede's dimensions of culture are based on surveys performed in the 1960s and 1970s, and therefore, may be dated.

Figure 2: **Incentive Portfolio** (Source: Modified from Wolff/Lazear 2001: 228)



Even if employees find an incentive motivating, it does not mean that each unit of the incentive has the same impact relative to the perceived benefit. Economic theory suggests that as the amount of a certain reward increases, an additional unit of the same reward does not mean as much to the employee as the first unit received. This idea is examined in the institutional framework context of our study by the following hypothesis:

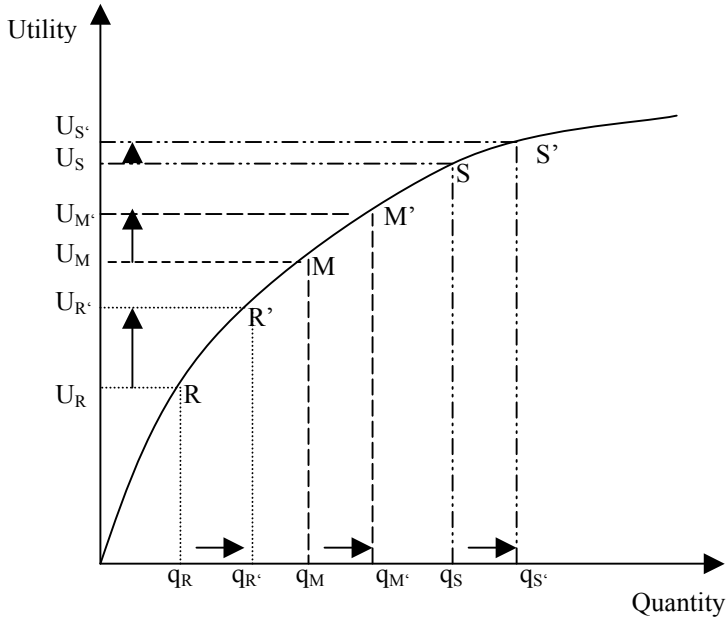
Hypothesis 2 [H2]: Rewards generate utility at diminishing marginal rates.

Diminishing marginal utility (e.g. Samuelson and Nordhaus 2001: 86) as it relates to incentive compensation means that each additional unit of the same incentive creates less utility to the employee than did the previous unit. The idea is presented in Figure 3 where an individual in the S-zone is located on the relative "plateau" of the utility curve, meaning that the need for a reward is almost **s**aturated. For an individual in the R-zone, who is at the incline of the curve, one expects that this individual would still be **r**equesting the reward. Between the two extremes S and R is an individual who is **m**oderately requesting the reward (M-zone), that is, neither highly requesting nor saturated by it. If an individual, who is in the R-zone of the utility curve, is given one more unit of the particular type of compensation, then the utility of this individual increases to R'. Analogous shifts happen to individuals located in the S- and the M-zones of the curve when an additional unit of compensation is given to them. However, the

amount of utility that an individual saturated by the reward gains from the extra unit of compensation is smaller than the amount of utility that individuals requesting or moderately requesting the reward gain from one unit of additional compensation. We refer to this as the *Satisfaction-Preference Inversion* [SPI] in that H2 suggests that individuals who are highly satisfied with respect to a particular need will express low preference for a reward that pertains to that need. Similarly, the Low-High inversion marks the tendency to highly value those rewards for which one has a low level of need satisfaction. In order to avoid giving out rewards that have very little motivational effects, individuals saturated by a reward should rather be compensated with other rewards; ones for which there is a higher level of expressed need. On the other hand, since individuals requesting this reward would be very motivated by it, such an incentive arrangement would be well suited as an effective and efficient motivator.

As suggested by Figure 3, in order to design effective and efficient incentive schemes, first the extremes represented by the R and S zones should be identified and then the incentives that the employees are still requesting may be chosen while the ones that they are saturated with should be avoided.

Figure 3: Diminishing Marginal Utility of Incentives



Taking into account both the formal and informal institutional frameworks as well as the current level of satisfaction of incentives each employee either finds an incentive more or less motivating or even non-motivating. As long as an incentive is motivating to the employee, regardless of the absolute level of motivation that it provides, it can be said that the employee is in the impact zone for that particular incentive. In other words, the incentive has positive motivational effects on the performance of the employee. It is important to note that the institutional framework and satisfaction are

sometimes co-dependent and so *both* are needed in assessing if an employee is in the impact zone of a reward. For example, if the informal framework provides employees with an extended family network that essentially guarantees the welfare of elderly family members, it could be assumed that individuals coming from such a culture will not demand retirement plan payments as an incentive. In this case, they are not in the impact zone of such a reward. This same result could be due to a comprehensive governmental retirement system.

Study Design and Sample

Our analysis focuses on the relationship of institutional frameworks and incentives as we find them in Germany and the USA. The study examines the two hypotheses explained above and discusses the results based on the institutional frameworks of these two countries.

To collect information on the hypotheses, we conducted a survey using the cross-culture survey research of Geert Hofstede (2001)[4] that he used to cluster cultures. The Hofstede Questionnaire poses 77 questions the majority of which have responses on Likert-type scales with range responses from one to five. The specific scales are *Satisfaction*, *Importance*, and *Agreement*. In addition, we added the following three groups of questions to the Hofstede questionnaire: The respondents were asked (1) to rank performance rewards according to their perception of which rewards might motivate them to improve their performance, (2) to indicate the rewards, if any, that would not be motivating and (3) to provide information on annual vacation days and salary. The salary information was converted to relative cost of living using the BigMac index[5]. Also, the employees were asked to note their nationality to make sure we were focusing on individuals who are natives in their particular institutional environment.

The questionnaire, containing 82 scoring questions and one open ended question, was distributed to the employees of a German based MNC under the auspices of the CEOs heading their respective international divisions. A single study organization here is preferred, albeit necessary, to minimize the problem of overlapping cultures. In other words, in order to avoid in so far as possible the biases in the cross-national comparisons caused by different organizational cultures, it was important to compare the different international locations of a single organization.

The study corporation is a producer of laboratory and process technology with distribution channels in over one hundred countries. They employ about 4,000 employees worldwide, the majority of which are German. The organization is among the global market and technology leaders in its key markets. A look at the investment banking reports from the *Investext Service* and the annual reports from the organization gives a positive picture of the organization. During the study period, the profits of the organization increased and the earnings per share rose. Compared to its competitive group in the US market, the US organizations rank in the top five per cent in their markets, exhibit strong cash flow and major debt reduction. According to the investment banking reports, the profit and market share expectations for the company are

4 We thank G. Hofstede for the permission to use the questionnaire.

5 The BigMac index can be found at: www.economist.com.

good. The *Investext Service* highlights the positive performance of the US subsidiaries and notes that one anticipates general employment security for the employees based in the USA.

The survey yielded 579 questionnaire responses with a weighted average response rate of 89 percent: 336 from Germany and 243 from the USA[6]. The survey was conducted between July and October 2003. The demographic presentation of the two countries varies as one would expect. The predominate differences were in position and gender. The German sample had more individuals in administrative positions: 36 percent for the German respondents compared to 20 percent for the US sample. Further, within the administrative group 27 percent of those individuals were female for Germany compared to 82 percent for the US respondents.[7]

The Testing of H1 and H2

In section 4, we will discuss the results and implications of the statistical testing. To concentrate on the discussion of the results, we will here briefly introduce the variables used in the statistical testing which will be noted in italics and the ways that the statistical tests are organized to create the inference structure. This will permit a more focused discussion of the rather voluminous results as they relate to the hypotheses.

For H1, two separate tests are performed. First, the differences in *Importance of Work Related Goals* between the two study countries are examined. Second, differences in motivator rankings and rewards that are found as non-motivating between the two countries are examined. For the first part of H1 testing, namely the importance of work goals, the 12 variables presented in Table 1 will be used in testing for differences between countries. For these tests, the parametric t-test and the Wilcoxon and Kruskal-Wallis rank sum tests are used. In addition, we will test where the respondents from each country are located on average relative to mid-point of the Likert-scales (noted as Of Moderate Importance) in order to provide a context for the analysis of differences. For this testing, the parametric t and the Wilcoxon signed rank tests

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6 As the data was checked, it was discovered that for the original questionnaire taken from Hofstede (2001) there was an error that affected six questions for 78 questionnaires; those questions were eliminated. We then corrected the error in the English version of the questionnaire for subsequent distributions. The German version was not affected.

7 In this case, we observe that there is an unbalanced distribution of gender relative to position with more US females in administrative positions compared to Germany that tests statistically significant at $p < 0.01$. This proportional imbalance, assuming that it is atypical to the particular institutional frameworks, could be confounding the inference results regarding the country incentive design information. We investigated this possible confounding and found that there were no statistically significant differences at $\alpha \leq 0.05$ by gender and position between the countries; however, the power of these tests was very low due to the small sample sizes of the subgroup partitions. Originally, we designed the study to accrue 200 responses per country which gave α and β control of 0.05 and 0.20—i.e. power of 80 percent. Due to the small sample sizes for the subgroup analysis needed to examine the possible confounding effects, the power for these tests is on average less than 30 percent. Therefore, with such low power, we cannot rule out the possibility of confounding effects.

are used. For the second part of H1 testing, namely for testing the differences in motivator rankings as well as the rewards that are seen as non-motivating, the respondents were asked to select up to ten reward from among 15[8] and rank their selections from one to ten according to their motivational effects. Also, they were asked to note which rewards, if any, they would not find motivating. We will be using the Chi^2 cell contribution to identify significant differences between the countries in motivator rankings as well as the rewards that were recorded as non-motivating (Tamhane/ Dunlop 2000).

For testing H2, that is, if a diminishing marginal utility relationship holds for performance rewards, we will be using the *Satisfaction* Likert-scale variable and the reward rankings as well as the non-motivator indications. The measurements used in testing H2 are the scores on the satisfaction scale combined with the preference rankings for the 15 rewards. It is important to note that there are two sides to the Satisfaction-Preference Inversion [SPI] match. For measuring the existence of High-Low matches, the specific SPI matches will be: scores of one or two (very satisfied or satisfied) on the satisfaction scale coupled with scores on the reward preference rankings in the eighth, ninth and tenth places or an indication as a non-motivator. The other SPI situation suggested by H2 is the Low-High match where an individual expresses a lack of satisfaction for an incentive and also ranks the reward high on the preference scale. Specifically, any low satisfaction scores, that is, four or five, (dissatisfied or very dissatisfied) coupled with high preference - i.e. ranks one, two or three - will be noted as a Low-High match. Further, the individual respondent group comparison to the "effective" center of the preference matching is tested. Because there is no mid-point marker as there is for the Likert-scale where one can give meaning to the middle of the scale, we have estimated the percentage of time that High-Low (the S-zone) or Low-High (the R-zone) SPI matches would occur by chance and used that percentage as the expectation against which the actual SPI matches will be compared.

Consider now the results of the study. In the following, the results identified as statistically significant, $p < 0.05$, using the inference methods discussed above will be presented. To efficiently discuss the study results, we will group them into logical clusters and then examine them as they relate to both H1 and H2.

4. The Results

Given the way that Hofstede's questionnaire is designed, it seems logical to group the incentives into six smaller relatively independent categories thus giving a context to the differences in incentive preferences. The six groups are: 1) Earnings and Achievement; 2) Family Related Rewards; 3) Fringe Benefits; 4) Recognition; 5) Training, Responsibilities and Use of Skills; and 6) Work Environment. These categories

[8] These 15 rewards were: Cash Rewards, Company Cars, Days Off, Electronic Equipment, Employee of the Month reward, Family Related rewards, Health Care Plan payments, Improvements in Working Conditions, Merit Raises, Promotions, Greater Responsibilities, Retirement Plan Payments, Stock Options, Additional Training, and Positive Feedback from Supervisors.

are similar to those used by Sirota/Greenwood (1971), who used the Hofstede questionnaire in their study.

To present the results for H1, we will always first reference Table 1 where the mean values for the inter-country comparisons for the importance of work related goals and the related p-values are presented. Preliminarily, we note that for all the variables in Table1 the Likert-scale comparisons against the mid-point of the scales tested statistically significant at $p < 0.05$. Both countries were on the high importance side of the scales for all 12 variables tested meaning that all of these variables were important in defining their overall work goals. After discussing the first part of H1 testing, we will discuss the second element of H1, namely the motivator ranking of the 15 rewards as well as the rewards that were mentioned as non-motivating. The motivators and non-motivators which were different from the Chi^2 expectations are presented in Table 2. For the H2 results, we will note the three SPI zones, R, M and S, on the utility curve of each reward for both countries. We will develop the context for the discussion of the results referencing not only Hofstede's cultural characterizations but other sources all of which in total help in the understanding of the various dimensions of effects that may underlie the specific results.

Table 1: Mean Value Table for *Importance* of Work Related Goals in H1

Country / Work Goals	Germany	USA	p-value
Earnings and Achievement			
Opportunity for advancement	2.59	2.03	<0.0001
Opportunity for high earnings	2.19	1.79	<0.0001
Family Related Rewards			
Desirable living area	2.12	1.57	<0.0001
Sufficient time for personal life	2.28	1.55	<0.0001
Fringe Benefits			
Fringe benefits	2.58	1.82	<0.0001
Recognition			
Recognition	2.11	2.06	0.53
Training, Responsibilities and Use of Skills			
Challenging work	1.86	1.78	0.19
Full use of skills and abilities	2.22	1.88	<0.0001
Training opportunities	2.41	1.95	<0.0001
Work Environment			
Good relationship with manager	2.11	1.78	<0.0001
Physical working conditions	2.38	1.91	<0.0001
Working with people who cooperate well	1.92	1.83	0.15

Scale: 1= of utmost importance, 3= of moderate importance, 5= of very little or no importance

As presented in Table 1, the *Earnings and Achievement* group covers the opportunity for advancement and the opportunity for high earnings. As the table presents, a signifi-

cant difference on importance of *high earnings* and *opportunity for advancement* can be found between the two countries. The US employees find the opportunity for high earnings and advancement significantly more important than do the German employees as demonstrated by the low p-values of less than 0.0001. Such a finding can be explained by formal institutional framework and the logic that in nations with relatively high-tax rates, employees rarely find monetary rewards motivating (Adler 2002). For comparison, an unmarried employee living in Germany and earning €100,000 per annum would pay 36.75 percent of the income in taxes, where an US employee would pay 22 percent (Anderson 2004). This particular finding differs from the conclusions of The Meaning of Work Study (1987) where it is suggested that the Germans would place higher importance on monetary rewards than would their US counterparts. This difference may be due to fact that the Meaning of Work Study was conducted almost 30 years prior to our study. It is possible to observe a shift in importance of work related goals when comparing our results to those of Sirota and Greenwood (1971), who also used the Hofstede questionnaire to examine work goal importance. We observe inter-country correlations for the countries in both study periods. However, no matched country correlations can be observed between the two time periods. When it comes to advancement, the US employees also find the opportunity for advancement more important than do the German employees, which can be explained by the informal framework. The culture in the United States is more focused on the visible signs of career success (Adler 2002), the achievement of status (Trompenaars/ Hampden-Turner 1997) and performance (Javidan/House 2001). For the 15 motivators we find, relative to Chi² expectations, that the US employees see *stock options* as significantly more motivating than do the German employees (see Table 2). The informal institutional framework can be used to explain this result. Schuler/Rogovsky (1998) find that employee ownership plans are more common in counties with high individualism, low uncertainly avoidance and low power distance. According to Hofstede (1980, 1991, 2001), the US has lower uncertainty avoidance and higher individualism compared to Germany suggesting that US employees would express a higher preference for employee-ownership plans. Also, the formal institutional framework contributes to this finding. As Hall/Soskice (2001) mention, the US stock market is highly developed, and the market value of listed domestic companies, as a percentage of GDP is significantly higher than in Germany. The central role played by the stock market in the market valuation of the firm may thus explain why the US employees prefer stock options as performance rewards.

Table 2: Motivators and Non-Motivators in Germany and the USA

	Motivators	Non-Motivators
Germany	Improvements in Working conditions	Days off Employee of the Month
USA	Stock Options Days off Employee of the Month	Greater responsibilities Retirement Plan Payments Training Improvements in Working conditions

The diminishing marginal utility argument of H2 applies for the Earnings and Achievement category as presented in Table 3. The US employees seem to be requesting *cash rewards* as an incentive, whereas the German employees are in the M-zone (moderately requesting) for cash rewards. This might be due to lower tax rate in the US as discussed above. In regard to *merit raises*, employees from both sample countries are in the R-zone of the reward, in other words requesting merit raises. When looking at *promotion* as a reward, the US employees seem to be in the M-zone of this reward, whereas due to their Low-High SPI match, the German employees are requesting the reward.

Table 3: SPI Summary Table for H2

Reward \ Country	Germany	USA
Earnings and Achievement		
Cash reward	M	R
Merit raise	R	R
Promotion	R	M
Family Related Rewards		
Days off to spend with family	M	M
Fringe Benefits		
Health care plan payments	M	M
Retirement plan payments	M	M
Recognition		
Employee of the Month reward	S	S
Positive feedback	R	M
Training, Responsibilities and Use of Skills		
Training	M	M
Work Environment		
Improvements in working conditions	M	S

R= requesting, M= moderately requesting, S= saturated

Relative to H1, *Family Related Rewards* seem to be significantly more important to the US employees regarding the variables *desirable living area* and *sufficient time for personal and family life* (see Table 1). Here the German employees score desirable living area and sufficient time for personal and family life significantly lower on the importance scale than did the US employees. These results can be explained by the informal framework. The German culture has been characterized to be more masculine than the US culture (Hofstede 1980, 1991, 2001). The informal framework suggests that nations with more feminine values would opt for security and time for family. Also, the formal framework might give an explanation for this difference. In Germany, the labor laws and collective bargaining agreements guarantee German employees a relatively

large number of paid vacation days per year compared to the US employees[9]. This extra time increases the possibility for the German workers to spend time with their families.

When looking at the current satisfaction with family related rewards, the diminishing marginal utility argument of H2 applies for this grouping as well. For both sample countries, significant M-zone SPI-matches can be found.

The US employees find *Fringe Benefits* significantly more important than do the German employees (Table 1). This result may be explained by the differences in the social security systems between the two countries (Albert 1991: 147-149 and Wolff 1999: 202-209). The German social security benefits are more comprehensive in a number of areas compared to US governmental entitlements that supplement the fringe benefits offered by the organization. Also the informal framework can be used to explain the fringe benefits preference of the US employees. As Schuler and Rogovsky (1998) find, benefit plans seem to be less prevalent in masculine societies than in more feminine societies. However, interestingly, the German employees rank retirement plan payments significantly less non-motivating than expected. This may relate to the uncertainty about what the future will hold given the discussion of the reforms (formal institutional framework) in Germany at the time the survey data was collected. Also, as expected, due to the differences in annual vacation time, the American employees find *days off* significantly more motivating than do their German counterparts. The formal framework supports these results as follows. It provides the German employees with a large number of annual days off. For example, in the study organization, the differences in vacation days between organizations in the two countries are large. While the US employees of the study organization have at maximum 20 vacation days per year after 10 years of service, the German employees start with 23 vacation days after their first year with the company.

Also for fringe benefits, the argument of diminishing marginal utility applies as presented in Table 3. Relative to H2, significant M-zone SPI matches for fringe benefits can be found for both countries.

The *Recognition* group also provides interesting results. When looking at the *importance of recognition* as presented in Table 1, differences between the countries are not in evidence. Employees from both Germany and the US find recognition as an important factor in the workplace. An interesting difference between the two countries however is found in the rankings of recognition rewards, especially in the *employee of the month* reward as presented in Table 2. Whereas the US employees rank this reward as a motivator, the Germans find it to be a non-motivator. This can be traced partly back to the fact presented by Hofstede (1980, 1991, 2001) that the United States is a more individualistic country than Germany which leads to the demand for rewards that are focused on the individual. Further, Adler (2002), Trompenaars/Hampden-Turner (1997) and Javidan/House (2001) describe the US as a society focused on visible signs of career success, the achievement of status and performance that can also be seen as a reason for their preference for *the employee of the month* reward.

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9 In 2001, US employees had 1821 annual work hours; where as German employees had only 1467 annual work hours (Süddeutsche Zeitung, Nov. 16, 2002, Nr. 265, p. V1/15).

When looking at the SPI matches for the *employee of the month*, employees from both countries have a significant number of High-Low matches, that is, they are in the S-zone of this reward as presented in Table 3. Nevertheless, the German employees are in the R-zone for positive *feedback from supervisor*, meaning that the German employees value this reward highly. This may be due to the fact that the employees are currently not satisfied with their level of recognition in the company. The US employees are in the M-zone for the positive feedback reward meaning that they are moderately requesting positive feedback.

When it comes to *Training, Responsibility and Use of Skills*, our results indicate that the US employees find training more important than do the German respondents. This result is different from the 1970s findings of Sirota/Greenwood who found the reverse. Further, the US employees find it significantly more important to be able to *use learned skills and abilities* on the job than do the Germany employees (see Table 1). Adler (2002), provides a context for these results in that the US society is focused on the ability to change and improve which certainly seems to be related to learning and using skills. Further, Kaye (1998) and Cascio, (2003) highlight the necessity of training to remain competitive in the selective U.S. labor market given the massive downsizing, the loss of jobs to less costly foreign salary regions, and the weakening of the trade unions over the last 25 years in the U.S. Perhaps, in this light, the US workers see training and learning as a necessary component in assuring their employment compared to the German workers who have not experienced these effects to the same extent. The US employees find *additional training* to be non-motivating, even though, as discussed above, they find it as an important factor in their work. It can, perhaps, be said that the US employees consider training a necessary entitlement and not a reward. Again, pertaining to H1, the German employees rank *greater responsibilities at work* significantly less non-motivating than expected, whereas the US employees find this reward significantly non-motivating. In other words, the US employees would not put forth more effort if they were rewarded with additional tasks (see Table 2). From the US employee perspective additional tasks are not found to be a reward in and of themselves. Greater responsibilities would need to be accompanied by some other reward in order to offset the additional effort required.

Nevertheless, relative to H2, neither of the countries is in the S-zone nor in the R-zone for *training*; they are moderately requesting the reward, that is, in the M-zone for this SPI-match. This means that the employees would be motivated by training as a reward, however, not as much as by a reward that they were still requesting.

In summary, we find that the importance of possible rewards does not necessarily suggest that such rewards will be motivating. This is well demonstrated by *training* as discussed above and underscores the importance of understanding how entitlements may complicate the incentive design process.

Considering the *Work Environment,* perhaps due to the more feminine nature of the US culture, the US employees place higher importance on *working conditions* and *relationships with managers* than do the German employees (see Table 1). This maybe be explained by the co-determination entitlement right granted to German employees by the formal institutional framework. By German law, employees are entitled to take part in decisions about the firm in particular for matters like working conditions, as

well as hiring and firing decisions within the firm. However, when looking at the incentive rankings of the individuals, the German employees find *improvements in working conditions* a significantly motivating reward, whereas their US counterparts find the same reward significantly non-motivating. They probably consider it an entitlement (see Table 2).

The diminishing marginal utility argument of H2 applies also for working conditions as indicated in Table 3. A significant S-zone SPI match is confirmed for the US employees with the German employees being in the M-zone. This might be due to the fact that the US employees are currently more satisfied with their physical working conditions than are the Germany employees.

5. Summary and Outlook

Previous research has focused mainly on culture as a determinant of reward preferences; however, our research has extended the literature to consider both the informal and formal institutional frameworks. Our findings confirm the two study hypotheses. For H1, as discussed above and as presented in Tables 1 and 2, we see many instances where the respective institutional frameworks are associated with differences in preferences, assessments of importance, and relative satisfaction. For H2 as summarized by Table 3, we find pervasive support for decreasing marginal utility relative to satisfaction as identified in the three utility zones. We find that most of the rewards land in the M-zone, meaning that they are motivating, but probably not sufficiently so to be stand-alone motivators. This suggests that these incentives would best be combined with others as a package of rewards. Institutional differences are found over the six logical groupings as noted above. This speaks, we believe, to the robustness of the results. However, our results differ in some cases from the existing literature which may be due to the fact that these studies were performed in the 1960s, 1970s and 1980s. Effects of institutional frameworks are not merely an isolated aspect of one or two compensation items but seem to be present over a wide range of incentive issues. As to the general design considerations, the utility zones of Figure 3 give reasonable information about the ways to distribute particular incentives so as to address the expressed needs as measured through the questionnaire. To wit, as long as an employee is not satisfied with the current amount of a reward, an additional unit of that reward will be motivating. For the employer, the most efficient way of motivating is choosing rewards for which employees have expressed needs and not giving out incentives where employees are already saturated assuming, at this stage, identical cost of each unit of different items. Therefore, in answer to the question implied by the study it is not advisable for multinational corporations to transplant incentive schemes from the home country to others without collecting information on the relationships of satisfaction, preference and institutional framework. The results of the study may help employers to design effective and efficient incentive schemes, because with a questionnaire, they are able to determine where exactly employees are in the impact zone for certain incentives, that is, if the incentives have significant motivational effects. The information on the employees' utility from different rewards will, of course, have to be considered along with information on the firm's cost of providing the requested items at the different locations. This information,

however, is usually readily available to personnel managers venturing into country-compatible incentive design.

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