

Culture Conflict of Transnational M&As Measure Research and Its Evolution Law Analysis based on Time Latitude

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ABSTRACT: Quantitative indicators of culture conflict of transnational M&As were determined based on the concept of culture conflict of transnational M&As. Then the formula to measure the value of culture conflict of transnational M&As based on the time latitude was proposed. Culture conflict curve was fit out by Matlab according to the measured values. The curve's evolution law was analyzed. The curve was a good match with the schematic diagram of culture conflict put forward by Kalvero oberg in 1960.

KEYWORD: Time latitude; Transnational M&As; Culture conflict; Measure

1 INTRODUCTION

American scholar Brown[1] confirmed that relationship between conflicts and performance were of the inverted "U" type. But in order to control the culture conflicts of transnational M&As in the range of a reasonable degree, the value of the culture conflicts should be clearly calculated. Therefore, how to measure the culture conflicts of transnational M&As is very important and necessary.

From the evaluation on culture conflicts of joint ventures or multinational coalitions by previous scholars [2-4], we may conclude: first, scholars never considered the time factors. Most scholars just gave an evaluation level such as "high, medium and low" on culture conflicts. Second, scholars carried on the quantitative research on culture conflicts mostly by fuzzy comprehensive evaluation method to judge the degree of the level of culture conflicts, but they didn't give the change of the value over time.

This paper is committed to do the culture conflicts of transnational M&As measure research and its evolution law analysis.

2 MEANING AND QUANTITATIVE INDICATORS OF CULTURE CONFLICTS OF TRANSNATIONAL M&AS

In this article culture conflict is defined as: under the background of transnational M&As, as time goes on, different forms of culture or cultural elements between the two parties is in an interactive process of culture friction in forms of violent confrontations

(including the psychological and the behavioral conflicts) through mutual communion with each other because of the existence of the culture differences in two aspects of national culture and corporate culture. The definition has three aspects of meaning: First it is an interactive process of different forms of culture as the change of time, second it includes the national culture conflicts and the corporate culture conflicts, and the third it is in the form of psychology and behavior.

The division of national culture conflicts dimension derived from theory of five dimensions put forward by Dutch scholar Hofstede[5], five dimensions are as follows: power distance, uncertainty avoidance, individualism and collectivism, male and female, long-term orientation and short-term orientation. In this paper, national culture conflicts were divided into the above five dimensions and each dimension was designed for different items.

And we put the corporate culture conflicts of transnational M&As into the following four aspects: material-culture conflicts, behavior-culture conflicts, system-culture conflicts and spirit-culture conflicts. Each aspects was designed for four items.

Relational capital refers to the quality of relationship between the two enterprises in the transnational M&As. Under the sense of transnational M&As, good relational capital is beneficial for both sides in communication, learning and creative activity on the basis of mutual trust. Thus it may effectively coordinate and reduce the culture conflicts between the two sides, and reduce the negative effects caused by culture conflicts. Relational capital can increase the enterprise's ability

to understand different cultures and the ability to adapt to the culture conflicts. It thus plays a big role on reducing all sorts of culture conflicts caused by culture differences between the two sides in transnational M&As.

In this article, therefore, the relational capital was introduced to calculate the culture conflicts in transnational M&As. Relational capital is defined as: it is a kind of relationship resources between the both sides in transnational M&As, and it is based on mutual trust in each other and communication with each other between the individuals or organizations, and takes culture cognition as the basic social psychological factors. Based on comprehensive analysis on the dimension of social capital put forward by NallaPie and Ghoshal[6], and the dimension of relational capital put forward by Lee[7]. In this article we divided relational capital into four aspects, which were: awareness of culture differences, perception of culture conflicts, trust between the two sides, communication between the two sides.

3 MEASURE METHODS OF THE VALUE OF CULTURE CONFLICTS OF TRANSNATIONAL M&AS BASED ON TIME LATITUDE

In current literatures, there isn't a kind of method of how to measure culture conflicts of transnational M&As. In some scholars' research, the dominant conflicts level in transnational joint ventures were tried to judge based on frequency or intensity of divergences among the partners. In this paper, a kind of method for measurement, which was put forward by Habib Ghazi [8] on the basis of predecessors' study in 1987 and its reliability and validity had been recognized in research, was used for reference. The Habib Ghazi method is as follows: first of all, total values of the frequency and intensity of all levels of culture conflicts were measured respectively, then the conflict frequency is multiplied by the conflict intensity. But in this paper, compared with his method, the variable relational capital was introduced to calculate the culture conflicts.

Through the analysis on the literatures we can learn that, both the national culture conflicts and the corporate culture conflicts have a positive correlation with the overall values of the culture conflicts, and the relational capital has a negative correlation with the overall values of the culture conflicts, therefore in this paper, a formula of measuring the values of the culture conflicts of transnational M&As based on time latitude was proposed as follows.

$$VC = \frac{[WN \times (N_F \times N_I) + WC \times (C_F \times C_I)]}{R}$$

Where VC = the overall values of the culture conflicts. WN = the weight of national culture conflicts. WC = the weight of corporate culture conflicts. N_F , N_I are represented as the frequency and intensity of culture conflicts respectively. C_F , C_I are represented as the frequency and intensity of corporate culture conflicts respectively. R is represented as the value of relational capital.

National culture conflicts in transnational M&As are equaled to: the frequency of the conflicts N_F times the intensity of the conflicts N_I . And its formula is:

$$N_F(n) = \sum_{h=1}^h \eta_h \left[\sum_{k=1}^k \phi_k N_F(n, h, k) \right]$$

$$N_I(n) = \sum_{h=1}^h \eta_h \left[\sum_{k=1}^k \phi_k N_I(n, h, k) \right]$$

Where, "n, h, k" mean that the scores of the No. k items of the No. h types in the No. n enterprises. ϕ_k means the weight of the No. k items. η_h means the weight of the No. h types. Weight was calculated by using Analytic Hierarchy Process.

Corporate culture conflicts in transnational M&As had the same measure steps with the one of national culture conflicts. And measure steps of relational capital are the same as the one of the frequency of the culture conflicts N_F .

4 DETERMINATION OF INDEX WEIGHT

In order to calculate the culture conflicts more scientifically and reasonably, we need to determine the index weights of all levels. In this paper, we adopt the Analytic Hierarchy Process (AHP) to calculate the corresponding weights of various index by using expert scoring method.

5 CASE STUDY

5.1 Acquisition of IBM PC by Lenovo

In this paper, In order to explore the culture conflicts after transnational M&As we took the acquisition of IBM PC by Lenovo for example. On May 1, 2005 Lenovo announced its successful acquisition of IBM's PC. This transnational M&As was like "a snake swallows an elephant." Lenovo's business volume was only \$2.9 billion in the market of China before the acquisition, however its business volume was \$16.9 billion at the end of the second year after the acquisition in 2007, its net profit increased from \$1.4 billion to \$4.84 billion, and it's international

market share also increased from 2.4% to 7.7%. (quoted from Lenovo annual report 2007). But Lenovo also met with the problems of culture conflicts. Liu Chuanzhi, Lenovo's chairman, once said when he was interviewed in 2011: "the culture conflicts were the biggest risk of all after the acquisition, its difficulty was beyond the expected [9]".

5.2 The questionnaire and the sample statistics

In order to get the quantitative value of culture conflicts, we need to calculate the weight of each index. In this paper we designed questionnaire and asked experts to give the scores. We had a total of 30 copies of questionnaires for survey. And this 30 copies were distributed to 10 scholars engaged in cross-culture research, 10 executives and 10 middle-class managers from the enterprises which had finished the transnational M&As. Finally, we successfully got all the 30 copies of questionnaires back and all of the 30 copies were effective. Based on the scores given by the 30 experts, we calculated the weight of each index by using AHP.

The measure of culture conflicts we study was acquired through the subjective evaluations given by the respondents, so most culture conflicts belonged to dominant conflicts, which could be felt by the respondents, otherwise it would be unable to evaluate. In order to get the quantitative value of culture conflicts, we designed questionnaires of frequency and intensity of national culture conflicts, questionnaires of frequency and intensity of corporate culture conflicts, and questionnaires of relational capital. Each form in the questionnaires is based on the time latitude. We set up a measurement range which was from the beginning of the completion of deal to the second year after the completion of deal. In this range, we set every three months as a measure-point. And finally we had 8 measure points based on time latitude.

We used the Likert measure method. We had five grades which are "almost never, rarely, sometimes, often, and always" and "very low, low, medium, high and very high" when testing the frequency and intensity of the culture conflicts respectively, and giving the score "1, 3, 5, 7, 9" correspondingly. Levels of evaluation on relational capital is as "strongly disagree, disagree, neutral, agree, agree with very much" and is given the score "1, 3, 5, 7, 9" correspondingly.

We had a total of 120 copies of questionnaires for investigation of Lenovo. And the 120 copies were distributed to 10 scholars engaged in cross-culture research, 30 executives and 30 middle-class managers and 50 employees. Finally, we successfully got 108 copies of questionnaires back. All of the 108 copies passed the test of the reliability and validity with the application of SPSS, and 108

copies were effective to satisfy the requirements of sample statistics.

In the end, we calculated the data of 108 questionnaires according to the proposed formula. We drew out the culture conflict curve used Matlab software according to the values of culture conflicts on each measure-point. And the curve fit out and value measured are shown in figure 1, 2.

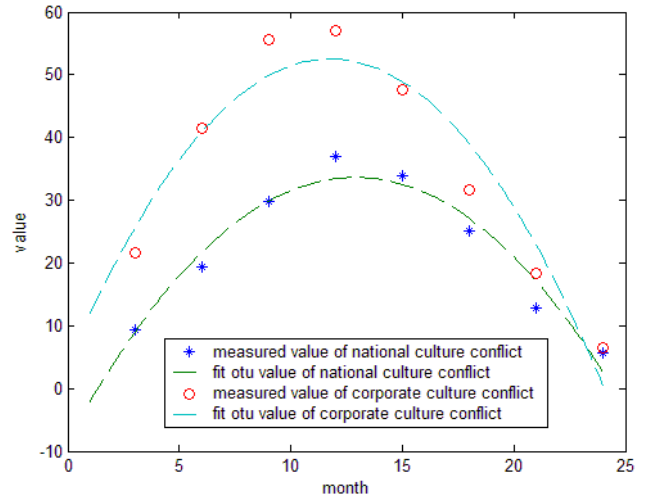


Figure 1 Value of $N_F \times N_I$ and $C_F \times C_I$

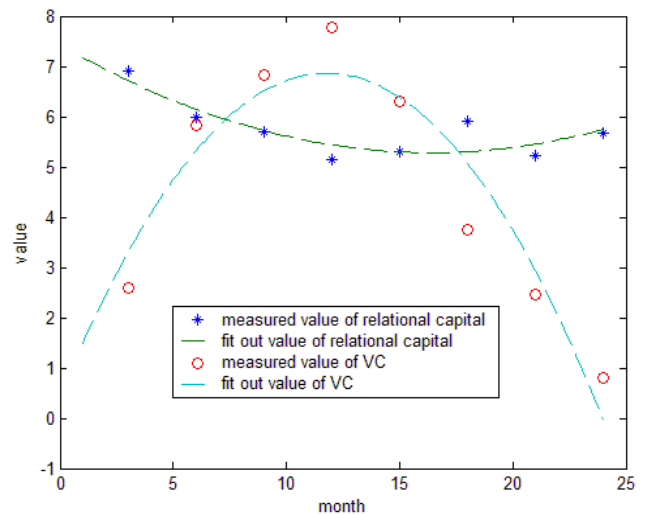


Figure 2 Value of R and VC based

6 ANALYSIS ON CULTURE CONFLICTS EVOLUTION PROCESS OF TRANSNATIONAL M&AS

From figure 1-2, we can find that, the evolution diagrams of both national culture conflicts and corporate culture conflicts are consistent with the one of overall culture conflicts curve. All of them are inverted "U" type curves. It can also reflect that both national culture conflicts and corporate culture conflicts have positive influence on measured values of overall culture conflicts. And we can find that relational capital curve was a positive "U" type curve. Its evolution diagram showed a reverse trend

to that of overall culture conflicts curve. It means that relational capital may reduce the culture conflicts and it has negative influence on measured values of overall culture conflicts. It also can be proved that we put the variable "relational capital" in the denominator of calculation formula of overall culture conflicts is correct.

Analysis on each measured index of culture conflicts

From a psychological point of view, transnational M&A is the growth point of culture conflicts. Along with the contact between each other after the transnational M&A, discontent and even prejudice may take place in both sides due to the objective existence of culture differences. As time went on, it may gradually change to be culture conflicts. The process of culture conflicts is the one of actual behaviour caused by psychological contradiction among people. Commonly culture conflicts curve is an inverted "U" type curve and experiences four stages, which are: honeymoon stage, depression (or hostile) stage, adjustment stage and adaptation stage.

Stage 1: Honeymoon stage. From Figure 2 we concluded that the first measure point (month 1-3) belonged to this stage. In Figure 2 the value of relational capital in this stage is 6.9 which was the biggest one during the two years. And it fully illustrated that this stage was an exciting and optimistic stage for the employees from both sides from the psychological point of view. At the beginning of completion of the deal of transnational M&A, the two sides entered into each other's different culture environment, both of them felt freshly on everything, satisfied with the changes and filled with dreams for future. And it is located in optimistic, excited "honeymoon" stage. In fact culture conflicts took place at the beginning of the first three months after Lenovo's acquisition of IBM PC. This stage is the incubation period of the culture conflicts.

Stage 2: Depression (or hostile) stage. From Figure 2 we concluded that the second, the third and the fourth measure point (month 4-12) belonged to this stage. The value of relational capital in this stage had been declining and located at the left of the positive "U" type curve during the whole measure range in Figure 2. Its value achieved the minimum (5.14) during the month of 10-12. However the values of both national culture conflicts and corporate culture conflicts and overall value of culture conflicts in this stage achieved the maximum which are 36.96, 57.04, 7.76 respectively. During this stage, both sides felt confused, frustrated and disappointed along with the deep and wide contact over time. Their original work and the way of life were always denied. Various problems and contradictions happened in their daily life. The exciting and optimistic feelings were replaced by worry and anxiety.

In fact culture conflicts took place at this stage after Lenovo's acquisition of IBM PC. Because of the culture differences between Lenovo and IBM, employees from the two sides gradually had psychological problems. Lenovo employees had a certain amount of resistance to the new entrants from IBM because they worried that the new entrants would damage their benefits. However, IBM employees had a certain sense of loss after the acquisition. They worried that they may be required to change the original way of work and life and their own values. Culture conflicts among the employees from both Lenovo and IBM gradually upgraded in the contact. For example, Chinese employees are used to keep silent during the meeting. But they kept silent did not mean they agreed with the resolution of discussion. And when IBM employees who like actively express their views joined in the meeting, IBM employees thought Chinese employees were lack of enthusiasm and the sense of responsibility to work, while Chinese employees thought that IBM employees expressed themselves too much, therefore, they did not understand each other. Culture Conflicts happened because of the culture differences. This stage is the outbreak period of the culture conflicts.

Stage 3: Adjustment stage. From Figure 2 we concluded that the fifth and the sixth measure point (month 13-18) belonged to this stage. The value of relational capital in this stage had been rising and located at the right of the positive "U" type curve during the whole measure range in Figure 2. However the values of both national culture conflicts and corporate culture conflicts and overall value of culture conflicts had been declining in this stage. After the employees experienced the psychological confusion, frustration and disappointment, they gradually found the way to deal with the new culture environments and solved some puzzles. They became to be familiar with the way of the new enterprise after the acquisition.

In fact, Lenovo had adopted a series of measures in front of the culture conflicts. First, Lenovo set up a new headquarters in New York after the acquisition of IBM PC. Second, Lenovo appointed the former senior IBM as the CEO of new Lenovo. Third, Lenovo retained the original IBM's salary and welfare systems, the salaries of employees of both sides were calculated separately. These series of measures, to a certain extent, reduced the culture conflicts and ensured the stability of the new Lenovo, and promoted the stable development of Lenovo within a few years after the acquisition. This stage is the remission period of the culture conflicts.

Stage 4: Adaptation stage. From Figure 2 we concluded that the seventh and the eighth measure point (month 19-24) belonged to this stage. The value of relational capital in this stage had been rising and reached a higher level of 5.66. However

the values of both national culture conflicts and corporate culture conflicts and overall value of culture conflicts had been declining in this stage and achieved the minimum of 5.66, 6.52 respectively. In this stage employees adapted to the new culture environments and gradually established a new enterprise's sense of pride and belonging. This stage is the innovation period of the culture convergence.

It is a nearly painful transformation process, but it is also an inevitable journey towards the success to transnational M&As culture integration.

7 CONCLUSION

Innovation of this paper lies in: firstly, it took the time factor into consideration, and do the research on culture conflicts of transnational M&As in stages. We innovatively set up a measurement range which was from the beginning of the completion of deal to the second year after the completion of deal. And in this range we set every three months as a measure-point. So we had 8 measure points altogether based on time latitude. We got the measured values of culture conflicts on each measure-point based on time latitude by the formula we put forward in this paper. According to the change of measured values in the range, we can find the evolution trend of the culture conflicts of transnational M&As, and do further research and analysis. Secondly, on the basis of predecessors' research, after the analysis on influence factors of culture conflicts of transnational M&As, we introduced an variable "relational capital" in formula of calculating culture conflicts and innovatively proposed a formula of calculating culture conflicts based on time latitude.

The culture conflict curve of transnational M&As fit out based on the proposed formula was well consistent with the culture conflict curve put forward by Kalvero Oberg [10] in 1960. It is also proved the correctness and applicability of the measure method we proposed in the research.

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