Summer 5-25-2013

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Abstract: The results from subgroup regression analysis of the high-tech listed companies show that intellectual capital not only has a significant influence on corporate value creation, but also has a significant influence on the perception and evaluation to companies' market value by capital market. Company's life cycle indeed has significant effects on the relations between intellectual capital and corporate value. In different stage of life cycle, intellectual capital plays different roles in value creation and realization. The overall IC plays the most important role in the maturing stage of companies. While in the growth stage, human capital and innovation capital are the main elements of value creation and they both significantly enhance corporate value. In the stagnant stage, human capital becomes the main factor to enhance corporate value. Therefore, basing on specific stage of companies life cycle managers should make appropriate strategies to invest and manage Intellectual capital to maintain competitive advantage in the complex and competitive environment.

Keywords: Intellectual capital, Life cycle, Corporate value

In the knowledge economic era, the main influential factors of market value, especially in High-tech companies, have gradually evolved from tangible assets to IC (Lev and Sougiannis, 2000) [1] . Many researchers suggest that intellectual capital (IC) is the key drivers of corporate value. With the globalization of economy, the rapid development of technology and the appearance of knowledge customers dramatically shorten the life-cycle of knowledge intensive products. The change of life-cycle exerts enormous influence on the value-driving process of IC. Black (1998) pointed out that if one ignores the influence of life-cycle on intangible value-drivers, an incorrect analysis will be generated by the heterogeneity in financial /non-financial characters across firms. Therefore, the purpose of this study is to investigate life-cycle influence on the value creation and realization of IC, and to verify the different effects of IC under different life-cycle stages. It will help companies make appropriate strategic on IC management. Meanwhile, it will help investors to find the right investment ideas.

1. LITERATURE REVIEW

The knowledge-based view considers that IC has become the most important source of value creation in the era of knowledge economy. The value creation of IC and its impact on corporate value has been the hot topic in IC field. Bassi and Van Buren (1999) studied 500 U.S. companies and found that IC investment not only has positive relationships with financial performance, but also can improve the competitive advantage. By using the financial value of 81 multinational companies, Ahmed Riahi-Belkaoui(2003) found that there has been a significant positive relationship between IC and corporate value. Chen et al. (2005) explored the relationship between IC and the future financial performance under an emerging capital market condition by using the data of 4254 listed companies from 1992-2002 in Taiwan[2]. The result shows that there is a significant correlation between IC and market value, and IC can be considered as an indicator of future financial performance. However, other scholars have got the inconsistent conclusions. South African scholars Firer and Williams (2003) used 75 companies' listed on the Johannesburg Stock Exchange market as the samples in 2001. They found corporate market value has no relationship with IC[3]. Sandra et al. (2007) used questionnaire method to analysis

the knowledge-intensive companies in Egypt [4]. The study found that the hardware elements of IC have relations with corporate value, while the software doesn't. Shui(2006) used Taiwan listed companies data in 2003, found that IC has a positive relation with profitability and market value, but has a negative impact on productivity. In China Li Jiaming et al(2004) found that human capital has a positive impact on performance, but not significantly [5]. Fu Chuanrui (2007) re-examined the relationships between IC and company performance and indicated that both human and physical capital have significant positive effects on firms' profitability [6].

The above literatures explore the contributions of IC elements to corporate value. However, because they didn't consider companies' life stage which would lead to the samples have heterogeneity in financial and non-financial characteristic. Therefore the existing research can't reveal the contribution and role of IC elements on corporate value creation. Beaver et al. (1989) stated that heterogeneity in productions across firms usually makes it difficult to aggregate sample evidence in a statistically powerful way [7]; that is, samples in given life cycle stages are relatively more homogeneous across multiple financial/non-financial characteristics than those in a pooling of all samples. We need to consider the specific life cycle stage of the firms to reveal the role and contribution of IC elements on corporate value. So this paper will study the impact of company's life cycle on the relationship between IC elements and value creation. The results not only can further explain the impact of IC to corporate value, but also can detect the most important elements of IC at different stages of company's life cycle which will give empirical support for IC applications and management.

2. HYPOTHESES

2.1 Fundamental assumptions

Intellectuall capital is referred as the knowledge resources which are transformed from organization knowledge in the process of production and management and can help organization to create value . The concept of intellectual capital not only reflects its characteristics of knowledge resources, but also reflects its essence of value creation. Edvinsson(1997) classified IC into three elements: human capital, structure capital which is further divided into innovation capital and process capital and customer capital [8]. His view has been widely accepted by the following researchers. In this paper, we adopt it and divide IC into 4 dimensions: human capital, innovation capital, process capital and customer capital.

Human capital mainly refers to the knowledge, skill and experience of employees . Staff knowledge and experience are valuable, rare, inimitable, irreplaceable strategy resources which can create competitive advantage and business performance. Human capital is not only a source of value creation, but a factor affect the realization of market value. Therefore, we come to the first basic assumption：

Hypothesis 1a：Human capital positively affects corporate value

Innovation capital is defined as innovation capability, innovation results and potential ability of researching and developing new products and service, innovation achievements. Many studies have shown innovation has positive effects on corporate value. Most empirical results show that the measurement of innovation focusing on R&D spending, the number of patents, have positively influences on performance. Jui-Chi Wang (2008) considered that innovation capability is the key driving factor to a company value.

Hypothesis 1b：Innovation capital positively affects corporate value

Process capital refers to working process, expertise, business procedures, norms and information systems. These can help filter information and make the organization do the right thing (Galbraith, 1977), prevent the organization repeating the same mistake (Garvin, 1993) and then enhance corporate value. So the process capital is one of the key driver elements of corporate value.

Hypothesis 1c：Process capital positively affects corporate value

Customer capital is a series of accumulated knowledge on customer and relations, which is embodied in

business process, marketing channels and relationships. Customer value is a key driver of business value. Only realizing the customer value, business value can be achieved. Pelham and Wilson (1996) showed that customer capital has a direct positive correlation with business performance.

Hypothesis 1d：Customer capital positively affects corporate value

2.2 The moderating role of company's life cycle

Life cycle refers to a cyclic status with stages recurring in sequence. Companies in different life cycle stages (i.e. growth, maturity, and stagnant stages) would devote themselves to the innovation of products, services, technological and other value creation activities; so as to continuously enhance company market value. Therefore company's life cycle is an important moderating variable impacting on the value drivers.

In growth stage, "market orientated" ideas make firms to regard expanding market share as their strategic goal and customer capital will play a more important role. At this stage, the total human capital level has raised and human capital team has been preliminary formed. Organization structure, rules and regulations have been built, and innovative ability have been given due attention. So in growth stage, human capital, customer capital and innovation capital play balanced roles. The impact of process capital on corporate value gradually emerges.

In maturity stage, with organization structure improving, companies have the ability to pay more attention to innovation and to meet customers' demands. Human capital, customer capital and process capital has matured. The impact of innovation capital on companies' value is gradually enhancing. The role of organization structure, rules and regulations and corporate culture make companies run smoothly. The good customers' relationships create better external environment, corporate image and reputation. That is to say, in this stage human capital and process capital play significant role. The role of innovation capital and customer capital has shown.

In stagnant stage, the impact of human capital and innovation are decreasing, but process capital and customer capital will continue to play important roles. In summary, in different life cycle stages, IC elements will play different roles to create companies' value. Therefore, the hypotheses are as follows:

Hypothesis 2a：Human capital plays different roles in different life cycle stages

Hypothesis 2b：Process capital plays different roles in different life cycle stages

Hypothesis 2c：Innovation capital plays different roles in different life cycle stages

Hypothesis 2d：Customer capital plays different roles in different life cycle stages

3. RESEARCH METHODS

3.1 Sample selection

This paper selects the high-tech companies as the sample which will help us verify the contribution of IC to corporate value better. Samples need to meet the following criterion: Firstly, the high-tech companies must meet the definition of the high-tech industry in China's Ministry of Science. Secondly, the main business has not been changed during the study period. Thirdly, we exclude ST, missing values and abnormal value companies. Fourthly, we exclude the companies whose annual net profit is negative. Finally, we have selected 374 listed companies including electronic components manufacture, instruments, cultural medicine and biological products, communications and related equipment manufacture, computer and related equipment manufacture, computer application services（2002-2004）. (This paper dose not exclude the companies both issue A and B or H shares, but we just use A share value when calculate the companies' market value). In this study IC and performance are chose in the two time points T_0 and T_1. The data of IC elements and control variables is at T_0 (2002, 2003, 2004) and the dependent variables data is at T_1(2003-2005, 2004-2006, 2005-2007, three years average).

3.2 Variable measurement

3.2.1 IC Measurement

Most measurement indicators of IC come from the existing literatures. The relevant variables measurement,

definition shows in table 1. The financial data comes from CCER database. The non-financial information comes from the publicly companies' information.

Table 1. Measurement and definition of variables

Variables and measurement index	Definitions and notes	Previous studies support
Human capital(HC)		
HC1 (employees' value added)	value added / total number of employee	VA = OP + EC + I . OP:operating profit, EC:total staff remuneration, I:Interest cost
HC2 (employee productivity)	Net revenue/ total number of employee.	Tsan ,2002; Chen ,2004
HC3 (staff net profit)	net profit/ total number of employee	Brennan and Connell,2000;Tsan,2002;
HC4 (higher education staff ratio)	college employees /the total number of employees	Wiersema et al,1992; Bukh et al. ,2002
HC5 (average education level of staff)	The average education level of total employees. The staffs is divided into Master and above, university, college and the following, and given the weight of 3,2,1and 0.	Bantel and Jackson,1989; Blau,1977; Wiersema, 1992
Innovation capital (INC)		
INC1 (R&D productivity)	R&D expenses / average total assets	new
INC2 (R&D expenditure)	Data comes from marketing expense and administration expense and so on. Also refer to the cash flow statement in the "cash flow" project "R&D expenditure".	Jui-Chi Wang， 2008; Edvinsson and Malone (1997), van Buren (1999), Hsieh (2000), Tsan (2002) and Chen (2004)
INC3(the ratio of R&D personnel)	The number of R&D personnel/total number of employees.	Hummert,2004; Pao-long et. al,2004
INC4 (R&D intensity)	R&D expenses/net operating revenue	Meng-Yuh Cheng,2008; Dzinkowski 2000
Process capital(PC)		
PC1	inventory turnover	Meng-Yuh Cheng,Jer-Yan Lin et al., 2008
PC2	current asset turnover	Chiung-Ju Liang, 2008; Dzinkowski,2000
PC3	accounts receivable turnover	Meng-Yuh Cheng,Jer-Yan Lin et al., 2008
PC4	Management expense/ net operating revenue	Edvinssonand Malone,1997; Chen 2004
Customer capital(CC)		
CC1 (growth rate)	Growth rate of operating revenue	ASTD,1999; Brennan and Connell,2000; Tsan,2002; Marr and Adams 2004
CC2(marketing expense)	marketing expense	Wen-Ying Wang et al., 2005
CC3(marketing expense ratio)	marketing expense/ net sales	Wen-Ying Wang et al., 2005
CC4 (advertising expenses)	Data comes from the fees to be apportioned, drawing expense in advance, marketing expense, administration cost.	Tsan (2002), Wu (2003) and Chen (2004); Wen-Ying Wang and Chingfu Chang, 2005

3.2.2 Measurement of Companies Life Cycle

In China, companies must meet listing requirements which have some qualification when they try to enter the capital market. So it can be accepted that listed companies have been through the initial stage. Thus, the life

cycle of high-tech listed company is divided into growth, maturing and stagnant stages.

We must choose some variables as the criteria to measure life cycle stages. These indicators should reflect the stage of the company's development to a certain extent. We choose 4 life cycle descriptors, such as the dividend payout rate, sales revenue growth rate, capital expenditure rate and firm age to measure the life cycle stage, which are proposed by Anthony and Ramesh(1992) [9] (Table 2).

Table 2.The measurement descriptor of company's life cycle

	Description of life cycle			
life cycle	Dividend payout rate	revenue growth rate	Capital expenditure rate	Firm age
Growth	low	high	high	short
Maturing	medium	medium	medium	medium
stagnant	high	low	Low	long

We use multi-variable ranking procedure to classify corporate life cycle. Firstly, we calculate the three financial variables: the dividend payout rate, revenue growth rate, capital expenditure rate and firm age in each study year for each sample company's. Secondly, according to the four variables, 4 groups of samples are formed. Thirdly, we divide these sample into high, medium and low three levels, and mark them with different grade (growth stage = 0, maturing stage= 1, stagnant stage = 2). Finally, we sum up the value of the life cycle of different measurement variables of each company. That is to say, we calculate the total of grade marks under the 4 variables. And the 0-3 is regard as growth stage, 4-6 is maturing stage, and 7-10 is stagnant stage. We successfully determine the cross-sectional data of the companies life cycle based on four different characteristic. Therefore, the measurement results are more reasonable. Consequently, 146 sample companies are in the growth stage, 207 are in the maturing stage, and only 21 are regarded as being in stagnant stage.

3.2.3 Measurement of company's value

This study selects the future implementation of the existing profitability (average ROA and ROE in the following three years) as the indicator of company intrinsic value (V1). MV/BV is the most common indicator used to measure corporate value from IC perspective. Tobin's Q is a measurement tool used to predict the investment behavior and can show the contribution of intangible resources. This paper uses MV / BV, Tobin's Q to measure companies' hidden value (V2) which is the differences between book value and market value.

4. EMPIRICAL RESULTS

4.1 Factor analysis

We use the exploratory factor and principal component analysis and orthogonal factorization method to analyze other factors, and the results are in table 3. We delete the CC1, because it is insignificant in the first test.

The KMO value is 0.660, lager than 0.5, Bartlett's is 5466.165, and $P<0.01$, which indicate the data is suitable for factor analysis. Variance ratio of the common factors shows that all information extraction ratio is more than 75% except management expense ratio(0.616). The cumulative contribution rate of the four factors is 67.513%. In general, the rate over 65% is better. The four factors can replace 16 variables to reflect the characteristics of IC elements. Thus, we will use the factor scores to testing the hypothesis of our model.

From the table 3, we know that the R&D productivity, R&D intensity, the proportion of R&D employee, higher education staff ratio and education level can be classified as the first factor, which can better reflect the company's innovation ability and potential innovation as innovation capital. We think in high-tech industry, the "level of education" and the "higher education staff ratio" are more relevant. They both determine the

knowledge accumulation and innovation ideas and sense. Therefore, we accept the factor analysis results. Value added per employee, employee productivity and employee net profit can be listed as the second factor. Current asset turnover, accounts receivable turnover, inventory turnover and management expense ratio can represent process capital. Selling cost, the ratio of expenses to sale and the ad-rate can be as customer capital.

Table 3. Exploratory factor analysis

Item Code	Factor1	Factor2	Factor3	Factor4
INC1	.919			
INC4	.900			
INC3	.872			
HC4	.636			
HC5	.608			
INC2	.518			
HC1		.990		
HC2		.982		
HC3		.970		
PC2			.840	
PC3			.666	
PC1			.580	
PC4			-.545	
CC2				.834
CC3				.786
CC4				.767

We do factor analysis on dependent variable. KMO value is 0.561, the extraction rate of common factors is more than 85%, and the accumulate explanation of the first two factors is 93.352%. The Bartlett's is 1071.705(P<0.01). The results show that the loading values of ROA and ROE on factor 1 are 0.985 and 0.949, representing the internal value. The loading values of Tobin's Q and MV/BV on factor 2 are 0.936 and 0.929, reflecting the hidden value. From the above information, the indicators of corporate value are reasonable. The four indicators can represent the feature of dependent variable. The loading values are over 0.9 and the new two factors can represent the 4 variables to reflect the corporate value.

4.2 Regression results

4.2.1 The regression results of fundamental hypothesis

Firstly, we put IC elements as independent variables and corporate value as the dependent variable into regression. The results in table 4 show that the equation is statistically significant (F=9.215， P<0.01;F=7.055， P<0.05). Human capital (β=0.195, P<0.001), process capital (β=0.166, P<0.001) and customer capital (β = 0.150, P<0.001) have significant positive impacts on companies value. Innovation capital has a positive effect on corporate intrinsic value (β=0.067, t=1.336). When V1 is as dependent variable, H1a, H1b, H1c and H1d are partly supported and verified. When company's hidden value is regarded as dependent variable, innovation capital has a significant positive effect on company's hidden value (β=0.192, P<0.001). Human capital has a positively impact on hidden value, but not significantly. Process capital and customer capital have negative effects on hidden value, especially process capital has a significantly negative effect on hidden values (β= -0.181, P <0.001). The result of process capital is different from our initial assumption.

Table4. Regression results

variables	V1	V2
	Standard coefficient	Standard coefficient
Human capital	.195***(3.890)	.054(1.059)
Innovation capital	.067(1.336)	.192***(3.783)
Process capital	.166***(3.307)	-.181***(-3.573)
Customer capital	.150*** (3.001)	-.007(-.144)
R^2	.092	.072
Adjusted R^2	.082	.062
F	9.215***	7.055**

***、**、*represent 1%, 5% and 10% significance level, t values in brackets.

4.2.2 Subgroup regression results of company's life cycle moderating effects

According to research method of Slevin and Covin(1997), during analysis of moderating effects, we need to predict variables structure and standardize the moderating variables. Basing on the analysis, we adopt the standardization methods of the various elements suggested by Hou Jietai(2003,2004). They proposed to use the factor scores of endogenous variables to do moderating regression [10]. Therefore, we put the factor scores into the regression model, and use the VIFs greater than 5 to ensure there is no multicollinearity.

As for the effect of life cycle regulation, we use the subgroup analysis (Wen Zhonglin, Hou Jietai, 2004). Firstly, Chow test is done among the three groups of samples in growth, maturing, and stagnant stages, with the company's intrinsic being as dependent variable. The Chow test results of growth and maturing, growth and stagnant, maturing and stagnant are F=4.30065(P<0.01), F=77.484559(P<0.01), F=53.966777(P<0.01) respectively, which show that the three groups of samples are different significantly. Then we put control variables and IC elements into the growth, maturity, stagnant equations. Table 5.1 shows the regression results. As can be seen all equations is significant statistically.

Table 5.1. Regression results of company's life cycle moderating effects

Dependent	V1								
Life-cycle	Growth stage			Maturing stage			stagnant stage		
	Standard coefficient	t	Sig.	Standard coefficient	t	Sig.	Standard coefficient	t	Sig.
T_0 V1	.553	7.599	.000	.639	11.867	.000	1.100	7.329	.000
Innovation capital	.084	1.204	.231	.043	.811	.419	-.389	-2.788	.014
Human capital	.140	2.024	.045	.008	.058	.960	.311	2.230	.041
Customer capita	-.043	-.611	.542	.176	3.361	.001	.003	.023	.982
Process capital	-.011	-.161	.873	.009	.062	.950	-.061	-.523	.608
R^2	.332			.458			.843		
Adjusted R^2	.308			.445			.791		
F	13.931	.000		34.032	.000		16.116	.000	

Table 5.1 shows that in growth stage human capital has a significant effect on intrinsic value (β=0.140, P<0.1), which means human capital significantly increases companies intrinsic value. It is the core and source of the value creation of high-tech companies in the growth stage. Innovation capital has a positive impact on the companies intrinsic value, but not significantly (β=0.084, t=1.204). However, the correlations between customer

capital, process capital and the companies' value are negative. At this time, customer capital and process capital are in the accumulating phase, and do not show the role of value creation.

In maturing stage, all of IC elements have positive effects on companies' intrinsic value. Good customer relations, corporate image and reputation have received a certain recognized by capital market and can enhance corporate value significantly (β=0.176, P<0. 01). Customer capital plays the most important role in this stage. In stagnant stage, human capital and customer capital have positive effects on corporate value. Human capital becomes the most important factors to increase the corporate value significantly. However innovation capital and process capital have negative impacts on corporate value. Especially innovation capital significantly erodes the corporate value in the stagnant stage.

Secondly, we do chow-test among the three groups of samples in growth, maturing, and stagnant stages by regarding hidden value as dependent variable. The Chow test results of growth and maturing, growth and stagnant, maturing and stagnant are（F=5.32655,P<0.01）,（F=39.79520,P<0.01）,（F=42.9320,P<0.01）respectively, which show that the three groups of samples are different significantly. Table 5.2 shows the regression results. As can be seen all equations is significant statistically.

Table 5.2 shows that in the growth stage, innovation capital significantly increases company market value (β=0.314, P<0.01), which means that innovation capital has been recognized and focused by capital market. Therefore, innovation capital can enhance high-tech company market value. Customer capital and process capital have negative impacts corporate market value. And process capital significantly decrease corporate market value (β=-0.251, P<0.01). In the growth stage, customer capital and process capital are in the accumulating phase, which directly results in the lower profitability and underestimated corporate market value.

Table 5.2. Regression results of companies life cycle regulatory effects

Dependent	V2								
Life-cycle	Growth stage			Maturing stage			stagnant stage		
	Standard coefficient	t	Sig.	Standard coefficient	t	Sig.	Standard coefficient	t	Sig.
T_0, V2	-.029	-.371	.711	.360	1.695	.111	.281	4.013	.000
Innovation capital	.314	3.989	.000	.476	1.880	.080	.016	.229	.819
Human capital	.112	1.455	.148	.109	.503	.622	-.011	-.164	.870
Customer capital	-.119	-1.548	.124	.205	.925	.370	-.015	-.225	.822
Process capital	-.251	-3.289	.001	.148	.668	.514	-.066	-.966	.335
R^2	.185			.486			.093		
Adjusted R^2	.155			.314			.070		
F	6.339	.000		2.832	.054		4.098	.001	

In maturing stage, all of IC elements have positive effects on hidden value. The good customer relations, corporate image and reputation have received a certain recognized by capital market and enhance corporate value (β=0.205, t=0.925). Innovation capital affects company's market value significantly (β=0.476, P<0.1). The effects of human capital are lower in maturing stage than its effects in growth stage. In the stagnant stage, all of the IC elements except the innovation capital have negative impacts on corporate market values.

In summary, when intrinsic value is as dependent variable, innovation plays different positive roles in growth and mature stage, but in stagnant stage it plays a negative role. Human capital plays a significant role in enhancing the value, but its role minimizes in the mature stage. Process capital erodes intrinsic value in growth and stagnant stages, but improves the corporate value in mature stage. Customer capital reduces corporate value

in growth stage, while in the mature and stagnant stages can improve corporate value. When the hidden value is dependent variable, innovation capital can improve corporate value from the growth stage to the mature stage, while from the mature stage and stagnant stage the impact reduces gradually. And human capital in this process is the same as innovation capital. Therefore, $H2_a$, $H2_b$, $H2_c$ and $H2_d$ have been supported.

5. CONCLUSION AND IMPLICATION

The empirical results show that human capital and Innovation capital have positive contributions on corporate value and are important driving factors of corporate intrinsic value. Innovation capital not only is the key to corporate value, but also is the most important factor to predict the market value of high-tech companies. The results demonstrate that the concept of human capital and innovation capital are accepted by investors. They tend to invest on the firms which have more human capital and innovation abilities. Therefore, we suggest that management should pay more attention on human capital and innovation capital.

In particular, process capital has a significant negative impact on corporate value. It erodes the hidden value of high-ten companies. Hidden value is the differences between book value and market value. Process capital erosion reflects the underestimate corporate value by market. The first reason can be attributed to investors preferring to short-term profit. As the behaviors of pursuing short-term profit, investors tend to regard the investment on process capital as "cost" or "expenditure", not as "capital". The behaviors and ideas of investors underestimate the market value of high-tech enterprises. The second reason is that accounting standards treat process capital investment as expense. The greater investments on process capital are, the greater the current expense of the firms have, which reduces the current profitability. The corporate value is significantly affected by the profitability which results in corporate value being underestimated. Although the new accounting standards being implemented from January 1, 2007, the new standard dose not fundamentally solve the issue of IC underestimated (Li Dongwei, 2009) [11].

Empirical results show that IC elements play different roles on value creation in different company's life cycle stages. In the growth stage, human capital is the core and source of value creation, significantly increases companies' intrinsic value. Innovation capital promoting value initially appears during this stage. In the maturing stage, all elements of IC have positive impacts on intrinsic value. The contributions of the whole IC in the maturing stage are the greatest. In the stagnant stage, human capital is the main factor to enhance intrinsic value, but innovation capital significantly reduces it. In the growth stage, regarding hidden value as dependent variable, both innovation capital and human capital enhance hidden value. In the maturing stage, all the elements enhance company's hidden value. In the stagnant stage, innovation capital has a positive impact on promoting companies' value, while other elements have negative impact on the realization of companies' market value in maturing stage. So the empirical result provides valuable information and empirical support for the managers and investors of listed companies. Firstly, because the financial performance is unable to provide adequate and overall information, managers and investors should view IC information as the main part of the value-relevant information in different life cycle stages. Secondly, managers should formulate appropriate strategies about IC management, investment and applying in different company's life cycle stage to deal with complex environment and enhance business profitability and value. Thirdly, while evaluating companies' value, the investors should not only consider the financial performance, but also consider the IC information. As Rappaport' s study (1999) showed that if one assesses company market value under different life-cycle stages, considering only the effect of financial performance on company market value, this will only results in insufficient information due to the neglect of incremental information content provided by IC. At last, the results have some meanings for regulatory or standard-setters. Supervision department should recognize that IC information has played a very important role on the evaluation of company value objectively. Therefore,

supervisors should pay attention to the norms of IC accounting and information disclosure.

In this study, there are still some shortcomings. For example, we use the information and data disclosed by the sample companies directly, thus, the limitations of secondary data itself may have to some extent influence on the result.

ACKNOWLEDGEMENT

This research was supported by the Humanities and social science of Ministry of Education of China under Grant 11YJC630097.

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