

The Impacts of Uncertainty Avoidance and Masculinity on Income Smoothing

Esmaeil Kavousy¹, Mohamadreza Abdoli²

¹ Senior Lecturer & Faculty Member , Tehran sharg(giam dash) Branch, Islamic Azad University ,Tehran,Iran

² Department of Accounting, Shahrood branch , Islamic Azad University ,Shahrood ,Iran

ABSTRACT

In this research, the impacts of cultural components on income smoothing are studied. The cultural dimensions are selected based on the Hofstede Model and include uncertainty avoidance and masculinity. The income smoothing is measured using the IKAL model as well as income-to-sale variations coefficient at the net income and operational income levels. The statistical population of this study consists of the companies listed in Tehran Stock Exchange and the statistical samples include 87 companies which are selected through the Systematic Elimination Method. The linear regression and the F test are applied as statistical methods. The confidence level is considered as 95% and research period is considered 2009-2011. The study findings indicate that there is a significant relationship between uncertainty avoidance and masculinity indicators with income smoothing at the net income and operational income levels. Also, this relationship is direct and positive and the relationship intensity of the cultural components with income-to-sale variations coefficient at the net income level is slightly higher than the operational income level. Moreover, in larger companies more income smoothing was observed and their employees emphasized on keeping rules unchanged and their consistency. Moreover, in larger companies, there was more loyalty to goals and interests of companies, however in smaller companies, whenever there was a conflict between the interests of company and society, the society's interests were considered. Besides, in smaller companies, the rate of masculinity and gender-based distribution of tasks is more than large companies.

KEYWORDS: Income smoothing, Masculinity , Uncertainty avoidance

INTRODUCTION

Raising Awareness on the role of environmental factors in the formation of accounting systems and procedures is among the important achievements of researches conducted in the field of accounting. These achievements have led to more serious attempts in identifying relative environmental factors and how they affect accounting. In these researches, culture is recognized as one of the important environmental factors effective on nations accounting systems. This recognition is based on this discussion that accounting is a socio-technical activity [20] , [10]. In doing so, several researches are carried out in different countries on the impacts of culture on the behavior of accountants [17]. In all of these researches, the concept of culture is considered based on Hofstede's definition. According to this definition, culture can be examined considering five elements. These elements include the power distance, uncertainty avoidance towards future, level of individuality, level of masculinity and the people's perspective in terms of long-term and short-term views [21] , [18] , [13] .

Research Background

Hofstede in his research on the IBM personnel in 50 different countries which includes 116,000 people has analyzed the difference of culture in different countries. These differences include individuality, power distance, uncertainty avoidance, and masculinity. Iran is ranked 29 in power distance, 43 in masculinity, 59 in uncertainty avoidance, and 41 in individuality [6] , [7] .

Hu Kung, and Yu found out that income manipulation by managers of companies depends on the value systems (culture) and structural aspects (legal environment) of each country [8]. Bahar Moghaddam and Hassani(2010) identified significant relationships among operational cash flow, inventory changes, and earnings management in companies listed in Tehran Stock Exchange [4]. Mollanazari and Karimi (2007) demonstrated that there is a strong and invert correlation between the size of corporation and income smoothing . [12].

Thaghafi 2006 and Askary 2006 studied the cultural context of accountants' professional behaviors. In this study, Hofstede's model and variables about culture were probed in terms of effectiveness on accountants' behavior in conservatism, secrecy, and information disclosure[19] , [3] . Thaghafi and Baharmoghaddam (2006) studied the effective stimuli on the earnings management in stock exchange companies and provided observations about relationships between ownership structure, block stocks, managers' rewards, quality of auditing firms, companies' growth, size of company as well as financial structure with level of earnings management .Roya'e and Abdoli 2009 and Pingsum 2009 did not found a significant relationship between cultural components and earnings management. In fact, by including the type of company ownership variable, whether public or private, the relationships between dependent and independent variables were slightly balanced [16] , [14] .

Several researches in Iran and other countries have confirmed the presence of relationship between cultural and behavioral components on financial behaviors. In this study, the effect of cultural components on the feasibility of income

smoothing is studies for the first time[22] ,[9]. Also, it is intended to determine the relationship orientation as well as the relationship intensity of any uncertainty about career and work environment in addition to masculinity at work on the feasibility of adopting specific accounting policies and methods in Iran. [2], [5] , [15] ,[1] .

MATERIALS AND METHOD

Research method

This study is analytical-descriptive. Given that previous data are also utilized, this research is an ex post facto study.

Research Hypotheses

1. There is significant and direct relationship between income smoothing and uncertainty avoidance index.
2. There is significant and direct relationship between income smoothing and masculinity index.

Statistical Population

The statistical population of research includes the companies listed in Tehran Stock Exchange. In fact, the companies should have the following conditions:

They should be included in the listed companies during the study period of this research, i.e. 2009-2011. They should not be investment and broking companies. Their fiscal year should terminate by the mid-March.

For the cultural components, questionnaire was distributed among the personnel of financial affairs departments of the above mentioned companies which include cost accounting functions, financial accounting, warehouses, budgets and credits staffs with at least 3 years of related experience.

Variables Measurement Method

Income Smoothing

In order to measure this variable for each company, the variations in coefficients model (Ikak model) is used. In this model, the variance of income changes ratio to the variance of sales changes is calculated (Xiang Yan, 2007). The income smoothing index calculation method is as follows:

$$CY = CV_{income_{it}} / CV_{sales_{it}}$$

Where,

$CV_{income_{it}}$ = the frequency coefficient of income variations in company i during the t period, and

$CV_{sales_{it}}$ = the frequency coefficient of sales variations in company i during the t period.

Uncertainty Avoidance

Uncertainty avoidance is the level of anxiety and concern and also the presence of uncertainty. Economic sanctions and country's trading limitations as well as lack of long-term established plans and long-term goals, all affect people's hope towards future and their uncertainty about future. Indeed, keeping rules and regulations unchanged and consistency lead to decreased people's uncertainty and their long-term views.

In order to measure this variable, the answers of each company's personnel to the 4th, 5th, and 6th questions of the written questionnaire were separately put in the related formula using the Microsoft Excel's spreadsheet, and accordingly the index was calculated. The following table presents these questions and formula.

Table 1: Questions Related to Uncertainty Avoidance

The 4th question: How concerned are you about career issues (such as career future, proper performance, etc.)?

The 5th question: To what extent do you agree to this statement: "as an employee, one should never disobey company's regulations, even at the times when he/she thinks that these regulations are merely to meet the company's interests"?

The 6th question: In your opinion, How long will last your cooperation with the company?

This questionnaire was previously used by Thaghafi, Rezazadeh, Abdoli, and Roya'e (in an accounting doctorate dissertation), therefore it holds high reliability and validity.

Masculinity

The social role of every individual is clearly separated based on gender in masculine communities or institutions, where aggressive and tough roles and emphasis on financial success are for men and emotional roles with emphasis on life quality are considered for women. On the other hand, in feminist community or organizations, the social role of each person has gender overlap and both men and women have emotions and are interested in life quality. Therefore, emotional and aggressive behaviors can occur by both men and women.

In order to measure this variable, 14 questions (presented in the written questionnaire) related to the career goals of an ideal job are used. For eliminating the effects of answers optimism (answering positively to questions without considering their content), the answers were first standardized. During the standardization process, all answers were stated as a distance from their common average and based on common standard deviations. Then, using the factor analysis statistical technique, the factors derived from the employees standardized answers were analyzed. First, the primary results of factor analysis were obtained, which indicated two effective factors and one not-very-important factor. Given that, generally the primary results of

each factor analysis do not have high interpretation capability, the factors were alternated to obtain two expected factors in terms of correlation level with each career goals. Then, both extracted factors from the factor analysis and correlation coefficient of each career goals with factors, were considered as a basis and principle for determining each of the individuality and masculinity indices, using the theoretical principles and research literature. The following table shows the factors effective on measurement of the individuality variable:

Table 2: The goals of an ideal career

sign	Career Goals Presented in the Questionnaire
A1	Personal satisfaction in performing the job
A2	To provide a desirable dwelling for family
A3	Possibility of achieving higher income
A4	Good work relationship among the colleagues
A5	To create educational opportunity in order to improve skills or to learn new skills
A6	To enjoy employment benefits
A7	To expect to be appreciated whenever doing a job properly
A8	The existence of proper physical conditions at work environment (Air-conditioning, light, etc.)
A9	Considerable latitude in applying one's desired viewpoints
A10	Job security to cooperate with the company as long as you desire
A11	Grounds for job advances
A12	The possibility to establish proper working relationship with the direct supervisor
A13	The possibility to take advantage of one's own skills and capabilities
A14	To specify an advisable and desirable time to spend with the family

The calculated coefficients for each of the career goals are the outcome of the views of companies' personnel about masculinity or feminism factors.

The calculations illustrate that the coefficients related to career goals— A4, A5, A6, A7, and A8— have high correlation with the first factor. That is, according to the views of the companies' personnel of statistical population, the above issues are important in an ideal career (in the factor analysis, usually coefficients close to 50 or higher are considered significant). By reviewing the above items, it can be found that they are utterly related to feminism concept. According to research literature and theoretical principles, the feminism of people is related to good relationship with co-workers, improving educational opportunities, expecting to be rewarded by higher ranks, and providing proper physical conditions at work. In fact, this view can be emphasized by both men and women; however, it is referred to as feminism in the classification of culture concepts. Therefore, the five abovementioned career goals are the basis to calculate the masculinity index in each company.

RESULTS AND DISCUSSIONS

Descriptive analysis of respondents and their answers indicated that their related average job experience is six years and 70 percent of them hold bachelor's degree in accounting, economics, and management. 35 percent of them are female and the rest are male, and 84 percent of managers in various financial decisions are men. 53 percent of them believe that designating any job in companies and work environment should be based on men-priority, and distributing them between men and women should be in regard to their physical capabilities. Almost half of the men and 70% of women have minor uncertainty about the future. In larger companies, the personnel demand good relationships among colleagues in company and establishing proper conditions. However, in smaller companies, where the smoothing index is higher, the personnel demand more income and job benefits as wells as job security. The results of hypotheses analysis for the net income level are presented in the following table:

Table 3: The statistical Results of The Relationship Between Net Income From Taxes and Cultural Factors

results	F test	sign	D-W	St.error	R ² adj	R ²	Variables
confirm	2.001	0.034	1.75	0.19	0.323	0.547	uncertainty avoidance
confirm	2.182	0.041	1.997	0.310	0.342	0.572	Masculinity

As shown in the Table, the relationship between uncertainty avoidance and masculinity with income smoothing for the net income level is confirmed at 95% of confidence level. This is also confirmed by the F statistic. The relationship intensity indicates that over 30% of the variations in the net income smoothing index can be determined by uncertainty avoidance and masculinity in the personnel of companies. Therefore, in companies in which the level of uncertainty avoidance and

masculinity is high, the income smoothing level might be high as well. The results of hypotheses analysis for the operational income level are presented in the following table:

Table 4: The Statistical Results of the Relationship Between Operational Income and Cultural Components

results	F test	sign	D-W	St.error	R ² adj	R ²	Variables
confirm	2.78	0.023	1.595	0.186	0.264	0.461	uncertainty avoidance
confirm	2.189	0.018	2.198	0.208	0.206	0.378	Masculinity

As shown in the above Table, the relationship between income smoothing with uncertainty avoidance and masculinity is confirmed at 95% of confidence level. In fact, the relationship intensity of these two variables for the operational income level is lower than the net income level. This relationship is also confirmed by the F statistic. Therefore, in companies where the income smoothing is carried out, the uncertainty avoidance and masculinity indices dominant on them can affect the level of income smoothing and can explain more than 20% of the variations.

Analysis and Discussion

Based on the theoretical principles and research literature, it is expected that there is a positive and significant relationship between the management behavior in regard to the financial reporting and cultural components. Therefore in environments with high and large uncertainty, violation of legal and accounting standards and income manipulation can be high as well. Inversely, lower uncertainty and anxiety about the career future may lead to lower feasibility of income manipulation. The statistical testing results of the first hypothesis confirmed such an outcome in the statistical population. Moreover, according to the first statistical test, the relationship between both net and operational income levels with uncertainty avoidance is confirmed and the relationship intensity of the net income level is higher than the operational income level. In smaller companies, due to concerns about the continuity of company activity as well as the future and job security of the company and the personnel, the income smoothing and manipulation are carried out to pay less tax and other legal levies as well as less interest payment to stockholders.

According to the second hypothesis of research and according to the theoretical principles, it can be expected that there is a direct and significant relationship between income smoothing and masculinity. That is, more emphasis on distributing tasks among the personnel based on gender leads to more feasibility of income manipulation. The results of statistical testing of research hypothesis confirm significant relationship between these two. In companies with higher income manipulation, more masculinity can be observed. In fact, this happens less in larger companies. It can be due to improved work conditions and lack of masculinity among the managers of companies. In such companies due to more stability, more accurate mechanisms, considering work conditions and personnel's skills and interests, their gender is not taken into account. But in smaller companies due to more emphasis on profitability and the feasibility of their work stability, the presence of men in work environment and designating more duties to them as well as less expectations demanded by men are mainly considered.

Recommendations

- Considering that there is an approved presence of income manipulation at the operational income level, the designers of Iranian accounting standards should mull over this issue and should reconsider the incomes and expenses standards.
- According to more intense effect of cultural components with the income manipulation, it is recommended that the managers of these companies should be more responsive and concerned about this issue.

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