A study on relationship between cultural values and earnings quality: A case study on Iranian banking industry

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CHRONICLE

ABSTRACT

This performs an empirical investigation to evaluate the relationship between cultural values and earnings quality in some Iranian banks over the period 2005-2011. The individualism, uncertainty avoidance, power distance and masculinity dimensions are regarded as criteria for cultural values. The study also considers change in return on assets and loan loss provisions as the main criteria for earnings quality of banks. For measuring the cultural values, the questionnaire of Hofstede [Hofstede, G. (1994). The business of international business is culture. International business review, 3(1), 1-14.]. The study also uses two measures to calculate earnings quality: 1-just-meet-or-beat the prior year’s earnings and 2- Income smoothing through loan loss provisions based on compound linear regression. Research results showed that there was a weak relationship between cultural values and earnings management.

1. Introduction

One of the most important achievements on accounting research in different countries is to increase awareness towards environmental factors on formation of accounting systems and procedures. In this research the term culture is regarded as the most important effective environmental factor on accounting system of different countries by having this assumption that accounting is regarded as any social-executive (technical) activity, which deals with human and material resources. Although technical perspective of accounting has less relationship with culture compared with social aspect, due to mutual relationship among other factors, accounting is not separated from culture (Perera, 1989).
Quality of fiscal information of companies reflects accounting system and reveals performance of the firms. In macro level, economic performance of each country originates from its culture, ethical issues and its ownership structure. Therefore, offering higher quality information, which leads to prosperity of capital market and economy of countries depends on arrangement and execution of social, financial and legal rules on behalf of governments and other applicable organizations, investment and planning for improving inner performance of companies. Thus, whereas quality of fiscal information are key factors for the success of business units, the accounting system and organizational performance of companies must lead companies towards offering higher quality information (Etemadi et al., 2009). On this basis, this research focuses on organizational factors influencing on the performance of organization, behavior of its employees and finally offering higher income. This article offers pattern in association with earnings quality of banks in compliance with some of the most important factors on creating performance of an organization i.e. cultural values (individualism, uncertainty avoidance, power distance and masculinity).

2. Literature review

Numerous definitions are offered for organizational culture. According to comment of Hofstede (1994), the organizational culture is defined as a set of key values, beliefs and agreements, which are common among members of an organization. Hofstede (1994) applied from 4 cultural aspects in order to evaluate cultural values among sample banks including individualism, uncertainty avoidance, power distance and masculinity. One of the most common techniques applied for being informed from optimum status of companies is earnings management i.e. general intervention of management in the process of determining earnings to reach management objectives (Wild et al., 2001). There are different works on Iranian firms where the focus is on the relationship between cultural values and earnings management among companies accepted at Tehran stock exchange (e.g., Nikoomaram et al., 2010). Nevertheless, the effects of economic institutes at financial and banking service are neglected. Whereas the importance of economic and global economy is the most influential by observing the relative importance of the fact that economic units at this sector are very different from other industrial units, it is, therefore, necessary to consider the impact of cultural factors on earnings quality of banks. In addition, the effect of cultural values in industries including banks with complicated information (Don et al. 185, 2009). While, banks operate at legal environment and are supervised by central bank and other legal agencies such as insurance companies, the cultural values do not have great influence on their earnings management behavior (Kanagaretnam et al., 2011).

Kanagaretnam and et al. (2011) explained that whereas managers are assessed through performance of their companies, thus, they have some motives for meeting the desired criteria in such a way to reach high earnings. In addition, among individualism societies, the risk accepting factor is very high. Having high level of risk accepting factor leads to instability of earnings, it means that the level of earnings management among individualism cultures in comparison to collective cultures is higher. Fonseca and Gonzalez (2008) stated that income smoothing through loan loss provisions could be less because of limitations and higher supervision on having broad level of supervision and exact banking rules.

Gary (1988) recommended that uncertainty avoidance could lead to conservatism accounting activities. Gary reported that countries having high level of uncertainty avoidance generally show more financial standards and rules. These pre-assumptions have revealed that societies with high level of uncertainty avoidance maintain low level of earnings management. Doupink (2008) and Han et al. (2010) stated that there was a negative relationship between uncertainty avoidance and earnings management among great industrial companies. Kanagaretnam and et al (2011) stated that high level of uncertainty avoidance could lead to low level of risk accepting. In return, this inference lead to offering equal profit and reducing motives for just-meet-or-beat the prior year’s earnings and income smoothing through loan loss provisions by banks.
They believe that having high level of power distance means that the decisions were made more coherent i.e. within societies with the high level of power distance that the managers were easily able to impact on financial choices. In addition, they inferred that in societies having high level of masculinity the issue of obtaining the goals and high risk accepting issue is very important; nevertheless, whereas banking is a coherent industry, thus, the earnings management is limited.

Etemadi et al. (2009) studied the effect of organizational culture, concentration of ownership and structure of ownership on quality of information for companies accepted at Tehran stock exchange. In this research, they applied from different Hofstede’s cultural aspects including individualism, uncertainty avoidance, power distance and masculinity as organizational culture criteria on some sample companies. They reported that those class of companies having high level of power distance and masculinity had higher level of financial information. In addition, the companies having high level of individualism and uncertainty avoidance, had less quality of financial information.  

Nikoomaran et al. (2010) studied the relationship between cultural values and earnings management among companies accepted at Tehran stock exchange and applied from cultural values of Hofstede (individualism, uncertainty avoidance, power distance and masculinity). Research results indicated that dimensions of power distance, individualism, and masculinity had a weak and positive relationship and uncertainly avoidance dimension and had a weak negative relationship with earnings management.

Kanagaretnam et al. (2003) studied managerial motives of income smoothing among banks by using loan loss provisions based on analytical results of Fodenberg and Tyrol (1995). They anticipated that bank managers with good level of efficiency (poor) at the present and anticipation of poor performance (good) in future by using increase (decrease) at loan loss provisions, may reduce (increase) level of current earnings and part of their earnings for future, which means they may borrow from future. Fonseca and Gonzalez (2007) studied determining factors for income smoothing through management of loan loss provisions among banks of 40 countries and tested income smooth among public and specific trading banks. Results of their research disclosed that when indices of investor protection and accounting disclosure, limitation of banking activity and administrative supervision became high, the level of income smooth would be less. Meanwhile, through determining status of market and developing financial system of a country, the level of income smoothing is higher. In addition, they found out that banks could use loan loss provisions for income smoothing. In this way, banks increase loan loss provisions when pre-managed earnings are high, and decrease loan loss provisions when pre-managed earnings are low.

Doupink (2008) studied the effect of national culture on earnings management among 31 countries using from cultural values of Hofstede’s cultural aspects including individualism, uncertainty avoidance, power distance and masculinity. Research results showed that, the cultural dimensions of uncertainty avoidance and individualism were significantly associated with earnings management, even after controlling for investor protection and other legal institutional factors. In fact is culture effective factor on earnings management and income smoothing. Han et al. (2010) studied the effect of national culture on earnings management among 32 countries over the period 1999-2003 using Hofstede’s cultural method as well as Touker and Zarovein’s model (2006) for measuring earnings management and tested the relationship between dimensions of national culture, support from investment and earnings management. Results of their study revealed that 2 dimensions of increasing earnings and management of earnings increase among great industrial companies was influenced by cultural factors, specially they found positive relationship between individualism and earnings management and negative relationship between uncertainty and earnings management.

Kanagaretnam et al. (2011) studied the effect of national culture on earnings quality of banks among 39 countries over the period 1993-2006. They applied Hofstede’s cultural questionnaire as agent for
natural culture. They studied earnings quality of banks through 2 criteria of earnings management: 1- just-meet-or-beat the prior year’s earnings and 2- income smoothing through loan loss provisions. Research results indicated that banks in high individualism, high masculinity and low uncertainty avoidance societies manage earnings to just-meet-or-beat the prior year’s earnings and in high individualism, high power distance and low uncertainty avoidance societies report smoother earnings. This inference revealed that culture in spite of coherence of banking industry was associated with important factor for earnings quality of banks.

3. Research hypothesis

Principal Hypothesis:
There is a relationship between cultural values with earnings management in banks.

Subsidiary Hypothesis:
1. There is a relationship between earnings management with individualism dimension of culture.
2. There is a relationship between earnings management with uncertainty avoidance dimension of culture.
3. There is a relationship between earnings management with power distance dimension of culture.
4. There is a relationship between earnings management with masculinity dimension of culture.

4. Research methodology

General methodology of this research due to applying available theories and models for evaluating problems of organization is based on applied research

4.1 Statistical universe and sample

Statistical community of this research consists of 18 Iranian banks where their fiscal performance were evaluated over the period 2005-2011 including: Eghtesad Novin Bank, Parsian Bank, Pasargad Bank, Post Bank, Tejarat Bank, Keshavarzi Bank, Maskan Bank, Refah Karegaran Bank, Saman Bank, Sepah Bank, Sarmayeh Bank, Sina Bank, Saderat Bank, Sanat & Madan Bank, Karafarin Bank, Melat Bank and Melli Bank. While evaluating cultural values of fiscal employees of these banks it was benefited from regular random class method based on Cochran formula and finally 245 people were selected and the Hofstede’s cultural questionnaire was distributed among them.

4.2 Method & tool of collecting data & analyzing data

In order to collect the data associated with earnings management we benefit from studying documents such as: financial statements of banks. In addition, in order to collect data associated with cultural values the study was benefited from Hofstede’s questionnaire. Data was analyzed by using SPSS software and the following statistical methods were applied: 1) Descriptive method that was applied for describing observations and statistical parameters 2) Correlation analysis and regression for determining relationship between variables

4.3. Research model

Research model is offered as a mathematical model, i.e. $Y = f(x_1, x_2, ..., x_n)$, where $Y$ is earnings quality of banks, $x_1$ to $x_n$ are variables of cultural values including individualism, uncertainty avoidance, power distance and masculinity. In addition, some variables are considered for level of banks including size, growth, loans, leverage, change in cash flow, income before taxes and loan loss provisions, change in loans, receivables and capital ratio. In order to evaluate earnings quality of bank it is applied from 2 earnings management criteria including just-meet-or-beat the prior year’s earnings
and income smoothing through loan loss provisions within compound linear regression mode as follows,

**Model 1) Evaluating criterion of just-meet-or-beat the prior year's earnings**

Independent variables (cultural values): individualism, uncertainty avoidance, power distance and masculinity and variables for level of bank are including: size, growth, loans, leverage and change in cash flow are entered into model and finally the following logical model is estimated:

\[
\Delta \text{ROA}_{it} = \alpha_0 + \alpha_1 \text{IND} + \alpha_2 \text{UA} + \alpha_3 \text{PD} + \alpha_4 \text{MAS} + \alpha_5 \text{SIZE}_{it} + \alpha_6 \text{GROWTH}_{it} + \alpha_7 \text{LOANS}_{it} + \alpha_8 \text{LEVE}_{it} + \alpha_9 \Delta \text{CF}_{it} + \varepsilon,
\]

where \(\Delta \text{ROA}\) is change in return on assets (income before taxes divided by total assets) from the beginning to the end of the year, \(\text{IND}, \text{UA}, \text{PD}\) and MAS are calculated based on Hofstede’s cultural questionnaire. In addition, \(\text{SIZE}\) is the logarithm of total assets at the end of the year, \(\text{GROWTH}\) is difference of total assets from the beginning to the end of the year divided by assets at the beginning of the year, \(\text{LOANS}\) is total loans divided by total assets at the end of the year, \(\text{LEVERAGE}\) is total equity at the end of the year divided by total assets at the end of the year and \(\Delta \text{CASH FLOW}\) is change in annual cash flows (income before taxes and loan loss provisions) divided by total assets at the end of the year.

**Model 2) Evaluating income smoothing through loan loss provisions**

Independent variables (cultural values): individualism, uncertainty avoidance, power distance and masculinity and variables for level of bank are including: income before taxes and loan loss provisions, loans, change in loans, receivables, capital ratio entered to model and finally this logical model is estimated.

\[
\beta_0 + \beta_1 \text{EBTP}_{it} + \beta_2 \text{IND} + \beta_3 \text{UA} + \beta_4 \text{PD} = \text{Y2}=\text{LLP}_{it} + \beta_5 \text{MAS} + \beta_6 \text{IND.EBTP}_{it} + \beta_7 \text{UA.EBTP}_{it} + \beta_8 \text{PD.EBTP}_{it} + \beta_9 \text{MAS.EBTP}_{it} + \beta_{10} \text{LOANS}_{it} + \beta_{11} \Delta \text{LOANS}_{it} + \beta_{12} \text{RECEIVABLES}_{it} + \beta_{13} \text{CAPRATIO}_{it} + \varepsilon,
\]

where \(\text{LLP}\) is loan loss provisions divided by total assets at the end of the year, \(\text{EBTP}\) is income before taxes and loan loss provisions, \(\Delta \text{LOANS}\) is difference total loans from the beginning to the end of the year divided by assets at the end of the year, \(\text{RECEIVABLES}\) is total receivables divided by total assets at the end of the year and \(\text{CAPRATIO}\) is total equity at the end of the year divided by total assets at the end of the year.

**5. Research findings**

Earnings quality of banks was studied through 2 criteria of earnings management including just-meet-or-beat the prior year’s earnings and income smoothing through loan loss provisions. The first evaluated just-meet-or-beat the prior year’s earnings (\(\Delta \text{ROA}\)) and income smoothing through loan loss provisions (\(\text{LLP}\)) over the period 2005-2011 using compound linear regression model for all banks. Then based on ownership of banks (private or governmental) the following governmental banks were separately evaluated including: Post Bank, Tejarat Bank, Tose-e-Saderat, Refah Karegaran Bank, Sepah Bank, Sanat Madan Bank, Keshavarzi Bank, Maskan Bank, Melat Bank, Melli and the following private banks separately including: Eghtesad Novin Bank, Parsian Bank,
Pasargad Bank, Saman Bank, Sarmayeh Bank, Sina Bank, Karafarin Bank. Finally, we observed time period 2005-2011 and consider the limitations, the estimated model for the year 2005 was only estimated for total banks consisting at statistical sample and for time period 2006-2011 for sum of banks and based on their types of ownership, private or governmental, by using compound linear regression a separated estimation was performed. Coefficients for determining each of the estimation models (Y1 and Y2) are described in Table 1.

Table 1
Summarize of estimating determining coefficient relationship between variables

<table>
<thead>
<tr>
<th>Models coefficients</th>
<th>First model (Y1): Evaluating just-meet-or-beat prior year's earnings ($\Delta ROA$)</th>
<th>Second model (Y2): Evaluating income smoothing through loan loss provisions (LLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total banks</td>
<td>Governmental banks</td>
</tr>
<tr>
<td>determining coefficients</td>
<td>0.225</td>
<td>0.276</td>
</tr>
</tbody>
</table>

5.1. Estimating Relationship between Variables

According to definition of research model, in order to determine the relationship between dependent variables and independent variables, compound linear regression has been implemented. The relationship between dependent variable change in return on assets ($\Delta ROA$) and independent variables consists of individualism, uncertainty avoidance, power distance and masculinity. In addition, the model considers other variables for level of bank are including size, growth, loans, leverage, change in cash flow, and relationship between dependent variable loan loss provisions (LLP) and independent variables are including individualism, uncertainty avoidance, power distance and masculinity and variables for level of bank are including; income before taxes and loan loss provisions, loans, change in loans, receivables and capital ratio for sum of banks over the period 2005-2011 and each of the cultural dimensions for compound linear regression model has been estimated within 10 models as described in Tables 2 and Table 3.

Table 2
Estimating relationship between $\Delta ROA$ and independent variables (2005-2011)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width from origin</td>
<td>-0.090</td>
<td>0.012</td>
<td>0.026</td>
<td>0.051</td>
<td>-0.077</td>
</tr>
<tr>
<td>IND</td>
<td>0.018</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.020</td>
</tr>
<tr>
<td>UA</td>
<td>-</td>
<td>0.004</td>
<td>-</td>
<td>-</td>
<td>0.005</td>
</tr>
<tr>
<td>PD</td>
<td>-</td>
<td>-</td>
<td>-0.001</td>
<td>-</td>
<td>-0.006</td>
</tr>
<tr>
<td>MAS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.005</td>
<td>-0.003</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.006</td>
<td>-0.007</td>
<td>-0.006</td>
<td>-0.006</td>
<td>-0.006</td>
</tr>
<tr>
<td>LOANS</td>
<td>-0.027</td>
<td>-0.028</td>
<td>-0.028</td>
<td>-0.027</td>
<td>-0.027</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>-0.003</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.004</td>
<td>-0.001</td>
</tr>
<tr>
<td>$\Delta CF$</td>
<td>0.183</td>
<td>0.177</td>
<td>0.197</td>
<td>0.191</td>
<td>0.194</td>
</tr>
</tbody>
</table>

**Model 1:** In this model, the relationship between dependent variable $\Delta ROA$ and individualism is estimated as:

$$\Delta ROA_t = -0.090 + 0.018 \text{IND} - 0.001 \text{SIZE}_t - 0.006 \text{GROWTH}_t - 0.027 \text{LOANS}_t - 0.003 \text{LEVE}_t + 0.183 \Delta CF_t$$

Estimated model refers to 22% change in variables and reveals that there is a poor relationship between variables i.e. individualism has positive poor relationship with just-meet-or-beat the prior year’s earnings.
Model 2: In this model, the relationship between dependent variable $\Delta \text{ROA}$ and uncertainty avoidance is estimated as:

$$\Delta \text{ROA}_{it} = 0.012 + 0.004 \text{UA} - 0.001 \text{SIZE}_{it} - 0.007 \text{GROWTH}_{it} - 0.028 \text{LOANS}_{it} - 0.005 \text{LEVEl}_{it} + 0.177 \Delta \text{CF}_{it}$$

Estimated model refers to 22% change in variables and reveals that there is a poor relationship between variables i.e. uncertainty avoidance has positive poor relationship with just-meet-or-beat the prior year’s earnings.

Model 3: In this model the relationship between dependant variable $\Delta \text{ROA}$ and power distance is estimated as:

$$\Delta \text{ROA}_{it} = 0.026 - 0.001 \text{PD} - 0.001 \text{SIZE}_{it} - 0.006 \text{GROWTH}_{it} - 0.028 \text{LOANS}_{it} - 0.005 \text{LEVEl}_{it} + 0.197 \Delta \text{CF}_{it}$$

Estimated model refers to 22% change in variables and reveals that there is a poor relationship between variables, i.e. power distance has negative poor relationship with just-meet-or-beat the prior year’s earnings.

Model 4: In this model, the relationship between dependent variable $\Delta \text{ROA}$ and masculinity is estimated as:

$$\Delta \text{ROA}_{it} = 0.051 - 0.005 \text{MAS} - 0.001 \text{SIZE}_{it} - 0.006 \text{GROWTH}_{it} - 0.027 \text{LOANS}_{it} - 0.004 \text{LEVEl}_{it} + 0.191 \Delta \text{CF}_{it}$$

Estimated model refers to 22% change in variables and reveals that there is a poor relationship between variables i.e. masculinity has negative poor relationship with just-meet-or-beat the prior year’s earnings.

Model 5: In this model the relationship between dependent variable $\Delta \text{ROA}$ and cultural values were estimated as:

$$\Delta \text{ROA}_{it} = -0.077 + 0.020 \text{IND} + 0.005 \text{UA} - 0.006 \text{PD} - 0.003 \text{MAS} - 0.001 \text{SIZE}_{it} - 0.006 \text{GROWTH}_{it} - 0.027 \text{LOANS}_{it} - 0.001 \text{LEVEl}_{it} + 0.194 \Delta \text{CF}_{it}$$

Estimated model refers to 22.5% change in variables and reveals that there is poor relationship between variables, i.e. masculinity has poor relationship with just-meet-or-beat the prior year’s earnings.

### Table 3

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>Model 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width from origin</td>
<td>0.063</td>
<td>0.037</td>
<td>0.047</td>
<td>0.156</td>
<td>0.123</td>
</tr>
<tr>
<td>IND</td>
<td>-0.009</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.012</td>
</tr>
<tr>
<td>UA</td>
<td>-0.014</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.046</td>
</tr>
<tr>
<td>PD</td>
<td>-0.013</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.017</td>
</tr>
<tr>
<td>MAS</td>
<td>-</td>
<td>-0.023</td>
<td>-0.003</td>
<td>-</td>
<td>-0.036</td>
</tr>
<tr>
<td>EBITP</td>
<td>0.123</td>
<td>0.169</td>
<td>0.192</td>
<td>0.087</td>
<td>0.371</td>
</tr>
<tr>
<td>IND. EBITP</td>
<td>0.021</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-1.882</td>
</tr>
<tr>
<td>UA. EBITP</td>
<td>-0.055</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-1.652</td>
</tr>
<tr>
<td>PD. EBITP</td>
<td>-0.040</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.340</td>
</tr>
<tr>
<td>MAS.EBITP</td>
<td>-0.026</td>
<td>-0.005</td>
<td>-0.009</td>
<td>-0.004</td>
<td>-0.006</td>
</tr>
<tr>
<td>LOANS</td>
<td>0.001</td>
<td>0.003</td>
<td>0.003</td>
<td>0.002</td>
<td>0.000</td>
</tr>
<tr>
<td>Δ LOANS</td>
<td>0.027</td>
<td>0.027</td>
<td>0.027</td>
<td>0.030</td>
<td>0.025</td>
</tr>
<tr>
<td>RECE</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.002</td>
<td>0.000</td>
</tr>
<tr>
<td>CAPRATIO</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.002</td>
<td>0.000</td>
</tr>
</tbody>
</table>
**Model 6:** In this model the relationship between dependent variable LLP and individualism was estimated as:

\[ LLP_{it} = 0.063 + 0.123 \text{EBTP}_{it} - 0.009 \text{IND} + 0.021 \text{IND.EBTP}_{it} - 0.009 \text{LOANS}_{it} + 0.001 \Delta \text{LOANS}_{it} + 0.027 \text{RECE}_{it} - 0.001 \text{CAPRATIO}_{it} \]

Estimated model refers to 19% change in variables and reveals that there is a poor relationship between variables, i.e. individualism has positive poor relationship with income smoothing through loan loss provisions.

**Model 7:** In this model the relationship between dependent variable LLP and uncertainty avoidance aspect, the cultural values were estimated as:

\[ LLP_{it} = 0.037 + 0.169 \text{EBTP}_{it} - 0.014 \text{UA} + 0.055 \text{UA.EBTP}_{it} - 0.008 \text{LOANS}_{it} + 0.003 \Delta \text{LOANS}_{it} + 0.027 \text{RECE}_{it} - 0.001 \text{CAPRATIO}_{it} \]

Estimated model refers to 19.5% change in variables and reveals that there is a poor relationship between variables, i.e. uncertainty avoidance has positive poor relationship with income smoothing through loan loss provisions.

**Model 8:** In this model the relationship between dependent variable LLP and power distance was estimated as:

\[ LLP_{it} = 0.047 + 0.192 \text{EBTP}_{it} - 0.013 \text{PD} + 0.040 \text{PD.EBTP}_{it} - 0.009 \text{LOANS}_{it} + 0.003 \Delta \text{LOANS}_{it} + 0.027 \text{RECE}_{it} - 0.001 \text{CAPRATIO}_{it} \]

Estimated model refers to 20.5% change in variables and reveals that there is a poor relationship between variables, i.e. power distance has positive poor relationship with income smoothing through loan loss provisions.

**Model 9:** In this model the relationship between dependent variable LLP and masculinity was estimated as:

\[ LLP_{it} = 0.156 + 0.087 \text{EBTP}_{it} - 0.023 \text{MAS} + 0.026 \text{MAS.EBTP}_{it} - 0.004 \text{LOANS}_{it} + 0.002 \Delta \text{LOANS}_{it} + 0.030 \text{RECE}_{it} + 0.002 \text{CAPRATIO}_{it} \]

Estimated model refers to 20% change in variables and reveals that there is a poor relationship between variables, i.e. masculinity has positive poor relationship with income smoothing through loan loss provisions.

**Model 10:** In this model the relationship between dependent variable LLP and cultural values were estimated as:

\[ LLP_{it} = 0.123 + 0.371 \text{EBTP}_{it} + 0.012 \text{IND} + 0.046 \text{UA} - 0.017 \text{PD} - 0.036 \text{MAS} + 0.340 \text{IND.EBTP}_{it} + 0.377 \text{MAS.EBTP}_{it} - 0.006 \text{LOANS}_{it} + 0.000 \Delta \text{LOANS}_{it} + \text{RECE}_{it} + 0.000 \text{CAPRATIO}_{it} \]

Estimated model refers to 23% change in variables and reveals that there is poor relationship between variables i.e. cultural values has poor relationship with income smoothing through loan loss provisions.

Variables UA.EBTP and PD.EBTP due to great dependency to other variables or self-correlation were neglected from model.
6. Conclusion

Whereas application of census method for collecting performance data, not selecting random sample and applying descriptive method for inferring data, leads to hypothesis test without enough distance and this conclusion is based on inference method at descriptive research. The results of our survey have indicated that cultural values had a poor relationship with earnings management at banks. This relationship in just-meet-or-beat the prior year’s earnings criterion was positive with individualism and uncertainty avoidance and was negative with power distance and masculinity and in income smoothing through loan loss provisions criterion was positive with individualism, uncertainty avoidance, power distance and masculinity.

In similar foreign researches, it was revealed that income smoothing through loan loss provisions had a positive relationship with individualism, power distance, masculinity and had negative relationship with uncertainty avoidance. The only difference of foreign researches with the present research is the aspect of uncertainty avoidance. Due to difference at this cultural aspect among governmental and private banks, a separate evaluation has performed and it was revealed that the relationship of uncertainty avoidance with income smoothing through loan loss provisions at private banks was negative relationship, which is similar to the results of foreign researches.

Other results have indicated that:

1) Managers of private banks in comparison with the governmental banks are more likely to manage earnings to Just-meet-or-beat the prior year’s earnings. One of the reasons for higher level of risk accepting is to keep their job security, obtaining more suitable bonus based on performance, increase profitability and value of bank stock.

2) There is less amount of Income smoothing through loan loss provisions at private banks compared with governmental banks; since, the private banks, due to membership in stock exchange, were faced with limitation for audit report and require observing circulars of central bank exactly in relation with terms & conditions of calculating loan loss provisions.

3) After execution of circular on Mar 2007 of the central bank in relationship with equalizing terms & conditions of calculating loan loss provisions in banks, the smoothing through loan loss provisions of banks was reduced.

4) Results of evaluating cultural values show that among Iranian banks the individualism, masculinity was low and the uncertainty avoidance and power distance was high. In addition, it was indicated that uncertainty avoidance and power distance among private banks was less than governmental banks.

References


