Providing a Model of the Effect of Accounting Information Systems Characteristics on System Performance Based on Moderating Role of Organizational Decentralization

Vahid Oskou
Assistant Professor of Accounting, Faculty of Administrative and Economic Sciences, Gonbad Kavous University, Gonbad Kavous, Iran.
Email: vahidoskou@gonbad.ac.ir

Majid Moradi
Assistant Professor, Department of Accounting, Nasser Khosrow Higher Education Institute, saveh, Iran
Email: M.moradi@hnkh.ac.ir

Farhad Azizi
Department of Accounting Qeshm, Islamic Azad University, Qeshm, Iran
Email: Azizi.f7@gmail.com

ABSTRACT

Accounting information system is the main information system of the organization that provides the necessary information for planning, decision making and control. The strategy of combining decentralization with the advanced accounting information system will only be more effective in terms of the performance of the accounting information system if the level of job uncertainty is high. The accounting information system design should be commensurate with the degree of decentralization within a company. In other words, an organization needs appropriate information from an accounting information system to achieve a higher level of performance in proportion to its organizational structure. Therefore, based on this argument, the aim of the present study is to design and evaluate the role of adjustment of organizational decentralization on the relationship between the characteristics of accounting information systems and system performance. The results of interviews with financial managers and accounting experts of 60 companies listed on the Tehran Stock Exchange and analysis and analysis of data by structural equation modeling show that the characteristics of the accounting information system affect the performance of the system. It also moderates the impact of accounting information system features on system performance based on the results of the second hypothesis of organizational decentralization.

Keywords: organizational decentralization, accounting information system feature, system performance

1. Introduction

Information is always an important element in human activities. The need for information for the individual and the organization improves with the advancement of technology. Accounting is one of the information or part of the information system (Tokik et al., 2011; Talebi and Bahri Sales, 2017). Recent developments in the field of information technology have been accompanied by very extensive effects on accounting information systems (Haji Jabbari et al., 2012). Accounting information system is one of the main and basic systems of management information system and its task is to provide information needs of different levels of managers in the fields of planning and resource control, performance evaluation and decision making (Hajiha and Nabiuni, 2014). The appropriateness of accounting information quality is considered as one of the qualitative characteristics required by users to make decisions in order to achieve organizational goals (Leadon and Leadon, 2012; Vahioudi, 2018). Therefore, the issue of designing accounting information systems and issues related to its problems has attracted the attention of many researchers and users. Because decision making is one of the tasks of management and the heart of management. Managers' decisions reflect the work required and support accountant information in a particular organization to support decision-making (Effendi et al., 2016). It is also the focus, policy, and procedure that central government, such as ministries and high-ranking administrative officials, usually located in its centers, is in charge of regional affairs and administers local affairs through its subordinate officials, and the lack of organizational focus. Politics is the way in which the authority to make enforceable decisions on affairs is delegated to officials who are relatively independent of the central government by law (Subarvin, 2008).

Management is a systematic activity to achieve the goals of the organization, and economic enterprises, by being in a special competitive environment in terms of environment and technology, must also have a competitive advantage in decision-making and decision-making (Chiu et al., 2019). In the information age, the economic aspect of things has changed, and managers are looking for ways to do information cheaply for valuable and expensive resources such as manpower, inventory, cash, land and factories, and information processing equipment. Strategically enable the organization (Miguel et al., 2018). In a situation where the pace of environmental change is rapid and organizations are growing, the organization's managers face many problems on a daily basis that they must make decisions about, while if the decision-making speed is not appropriate, the organization will face many problems. This prevents the organization's management pyramid from making all the decisions themselves. As a result, there is a lack of focus on decision-making in organizations. On the other hand, the management of the organization should be informed of the decisions made in the organization in a timely manner and be able to examine the reasons for making decisions, the results of decisions and the alignment of decisions made in the organization. Jarboy, 2017). However, in most of the internal studies, this issue has been ignored and there is an empty space in the accounting literature for research on this subject, which in itself is an incentive to do this research. Therefore, the present study seeks to design and evaluate the role of adjustment of organizational decentralization on the relationship between the characteristics of accounting information systems and system performance in 1398. Accordingly, in the continuation of the present study, after reviewing the theoretical foundations and background of the research, the research hypotheses were stated; then, the research methodology will be presented and at the end, the data will be analyzed and the results and suggestions of the research will be presented.

2. Literature Review

The subject of accounting information systems and performance appraisal of the system has been considered by researchers and users in this field for many years. Many studies have been conducted on the design and operation of accounting information systems (Gul and Chia, 1994; Gul, 1991; Cho, 1998; Chounhal and Morris, 1986). Text variables are broadly classified into two groups: individual and organizational level variables. At organizational levels, key variables of text, environment, structure, and technology or work are used (Fisher, 1996). From a business perspective, a lack of organizational focus means that business can be decided anywhere. A business unit can choose to use local resources to achieve its goals. Therefore, these units must cooperate with other units in the company (perhaps abroad) and must report to management in a specific

way. However, there is freedom of action for any business. In addition, in a decentralized organization, there should be a central coordination, because without management and control, the organization ends everywhere, and even if this central coordination, such as standardization, can create limitations for each unit, the most important criterion for decentralization is right (responsibility). To form an efficient internal structure in any business unit using local resources to achieve the goals and tasks assigned to it and unit changes in this internal structure should not affect other units. When examining the concept of decentralization and decentralization in information systems, we need to look at different options and analyze them. However, developing a common system for an organization is a centralized approach, and developing and implementing a number of systems in a company on the other hand is not always considered as a decentralized approach. For example, Melanzari and Abdollahi (2010) believe that the relationship between organizational decentralization and accounting information systems can improve system performance. The strategy of combining decentralization with the advanced accounting information system will only be more effective in terms of the performance of the accounting information system if the level of job uncertainty is high. In other words, the effect of task uncertainty on the performance of the accounting information system will be affected by the level of progress of the accounting information systems and the degree of organizational decentralization. A number of researchers argue that information processing capacity must meet the requirements for processing to achieve managerial financial performance (Keller, 1994). The conditional proportionality approach argues that the accounting information system design should be commensurate with the degree of decentralization within a company. In other words, an organization needs appropriate information from an accounting information system to achieve a higher level of performance in proportion to its organizational structure. Chenhall and Morris (1986) stated that aggregated and integrated information is desirable for managers who emphasized the coordination of units operating in a decentralized organizational environment. Chiu (2019) also believes that information with a wide range of time and aggregation, along with high user engagement in the

design of the accounting information system, has a positive effect on the performance of decentralized organizations. He said that in decentralized organizations, more time is spent producing information for different decisions to coordinate and control organizational units. As a result, the manager's response time increases. Therefore, a high-performance accounting information system should provide information in a timely manner to counteract the problem of information delay.

3. Experimental background

Ghasemi et al. (2019) in a study examined the effectiveness of management accounting systems in Iranian government organizations. Their study identified the relationship between technology and management performance with management accounting systems. Their research findings show that it is possible to guide the managers of financial organizations to improve their performance through the management accounting system using new technologies and according to internal and environmental factors. Pena - Miguel et al. (2018) in their research examined new accounting information systems as a request as a fundamental social advantage in Spain. In their findings, they found that accounting information on social benefits was based on the scope of management in the general social budget. The information in the budget may be appropriate, but it is probably not enough to compare the amount that should be done with the company's financial statements for previous periods and with other people's financial statements. Carlos Yoshikani and Louise Albertin (2018) in their study entitled The Effects of Strategic Information Systems on Competitive Strategy and Performance used a sample consisting of 389 Brazilian companies. Their research findings show that the accounting information system leads to capacity building and flexibility to create competitive strategies in response to environmental change. Accounting information systems can predict a company's performance from a company's strategic perspective. In a study, Effendi and Edji (2016) examined the ambiguity and performance of management according to the role of management accounting system in Indonesian cooperatives. Using 45 questionnaires, they showed that the scope and nature of integration of management accounting system components affect management performance

and ambiguity of management accounting system components does not affect management performance. Based on these findings, it is confirmed that ambiguity is a complex problem that must be solved using a management accounting system. Prasad and Green (2015) in a study provided a definition of the dynamic capability of the accounting information system and its impact on company performance. In their research, the dynamics of accounting information system, structures consisting of flexible accounting information system, business intelligence system and competence of accounting staff in the field of information technology related to accounting information system are considered, then its effects on accounting process performance and overall firm performance . The results of their study showed that in the presence of dynamic accounting system capability, the performance of the accounting process improves and this also affects the overall performance of the firm. In a study, Salah et al. (2013) examined decentralization, environmental uncertainty, management performance, and accounting management system information in Egyptian hospitals, and their findings suggest that decentralization and environmental uncertainty are, to some extent, important factors in design. Effective and efficient information management accounting systems. Hospitals with a decentralized structure make better and more integrated use of management accounting system information, and the living environment in which hospitals operate has a significant impact on the type of management accounting system provided. Amri Asrami and Aghaei (2019) in their research examined the re-formulation of the valuation function based on accounting information using a sample consisting of 172 companies during the years 1388 to 1395. The results showed that the changes in the coefficients of the valuation model in these villages show the effect of previous years' information on current value. In a study, Moradi et al. (2018) investigated the extent to which employers use the capabilities of computer accounting information system in the implementation of analytical methods by auditors. To conduct the research, a questionnaire was sent to the official accountants working, and finally 92 answers were received. The findings indicate the use of computer accounting information capabilities in the implementation of analytical methods. It is also more applicable to the implementation of analytical methods for profit and loss statement items than the balance

sheet. In addition, there is no significant difference between men and women in the use of accounting computer information system capabilities in analytical research; but those with less work experience; they have more education than undergraduates and are more familiar with the computer information system; to a greater extent, the capabilities of computer accounting information systems are used in analytical research. Ashrafi et al. (2018) in the study examined the importance of information systems in organizations with emphasis on decision-making information system and comparison with management information system. They found that the purpose of such systems was to ensure that accurate and reliable information was provided when needed and in good use. Such systems are named information systems. Managers can use this information to control how effective organizational decisions and activities are, and to increase their organization's empowerment by planning and making timely decisions. Understanding the importance and necessity of research that new technologies are now playing a role in improving the quality of managers 'decision-making, the present study aims to understand the role of information technology and information systems in improving the quality of managers' decisions. Arab Mazar Yazdi et al. (2017) in a study examined the effect of flexibility of accounting information system on company performance with a dynamic capabilities approach. The results of interviews with financial managers and accounting experts of 50 companies listed on the Tehran Stock Exchange and analysis and analysis of data by structural equation modeling show that the flexibility of accounting information systems can improve accounting processes and thus on financial performance. The company has also had a significant impact. The findings of this study, in the form of informative guidelines, emphasize the importance and necessity of flexibility in accounting information systems and its functional effects on organizations. Nazaripour (2016) in a study examined the effect of information systems on the compatibility of management accounting. The results showed that the flexibility of information systems is a good stimulus for the compatibility of management accounting. Also, according to the research results, no direct relationship between semantic information systems integration and management accounting compatibility was found. The analysis and additional analysis performed showed that

the flexibility of information systems has a moderating effect on the relationship between the integrity of information systems and the compatibility of management accounting. The research also highlighted the importance of components such as shared knowledge, values and interactions between stakeholders and information systems. Finally, the research results showed that due to the system's ability to provide relevant information continuously, the ability to adapt management accounting can increase the effectiveness of managed accounting, which is consistent with management accounting theory. In their research, Melanzari and Zarabi (2013) examined the appropriateness of accounting information systems.

In their study, they found that proportionality in accounting information systems allowed companies to meet the expectations of system users and managers who are users of information, thereby increasing the company's performance.

4. Research hypotheses

H1: The characteristics of the accounting information system affect the performance of the system.

H2: Organizational decentralization plays a moderating role in the relationship between accounting system characteristics and system performance.
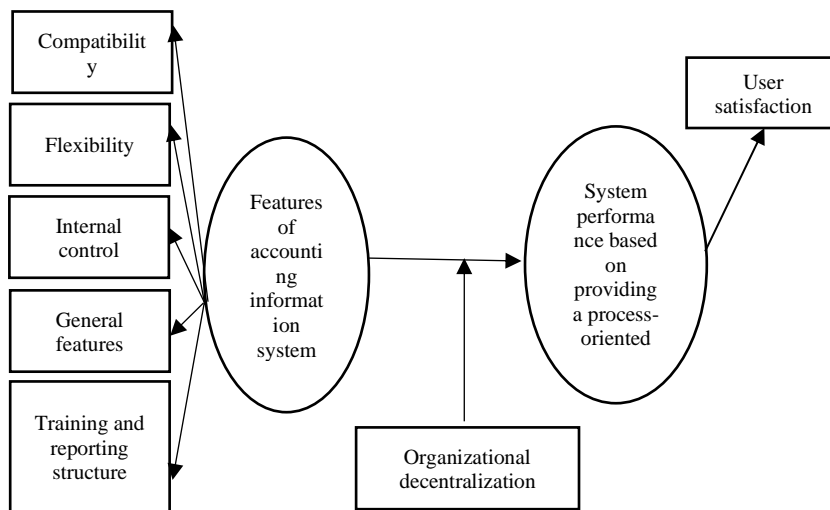
5. Conceptual research model

Figure 1. Conceptual framework of research

6. Research methodology

The prevailing paradigm of information systems studies in recent years has focused more on evaluating users by navigating the impact of a particular information system and then drawing conclusions through a model of structural equations. In this regard, in the present study, the face-to-face interview method was used in the data collection stage and the structural equation modeling method with the partial least squares approach in the inference stage was used. In this study, the companies listed on the Tehran Stock Exchange, which had the following qualifications,

were selected for the statistical population and studied by adopting the census method.

1) The company's financial unit is located in the city of Tehran;
2) The financial year of the company should be as of March 20, 2017;
3) At least one year has elapsed since the last major changes were made to the organization's accounting information systems;
4) The holding companies are not part of the holding company.

In order to conduct interviews with financial managers or accounting experts of the studied companies, 138

companies were referred to the head office or factory within six weeks. There were 73 interviews, of which 13 were rejected due to inadequacy or inaccuracies, bringing the number of correct observations to 60. Regarding the adequacy of sample size in structural equation modeling method, it should be said that in order to obtain valid and generalizable results, according to Chin et al. (2003), sample size should be estimated at least 10 cases per parameter. Bentler et al. (2006) also suggested five items for each parameter; therefore, according to the structural model of this study, the minimum number of observations required is 30, so the available observations (60 cases) are statistically sufficient. In this study, the independent variable (accounting information system) and the adjusting variables (organizational decentralization and unreliability) and the dependent variable (system performance) were measured by semi-structured interview method. The questions in the structured section of this interview are taken from the Prasad and Green Research Questionnaire (2015). In addition, for the development and localization of research tools appropriate to the Iranian environment and its validation, it was used by university professors and activists in the country's software industry. Table (1) shows the information related to the research variables.

Table 1. Specifications of research model variables

Row	Variable	Variable Role	Variable Type	Structure
1	AIS	Independent	Perceptual	Reflection
1-1	Compatibility	Independent	Perceptual	Reflection
1-2	flexibility	Independent	Perceptual	Reflection
1-3	IC	Independent	Perceptual	Reflection
1-4	GF	Independent	Perceptual	Reflection
1-5	TRS	Independent	Perceptual	Reflection
2	OD	Moderator	Perceptual	Reflection
3	SPBPMP	Dependent	Perceptual	Reflection

7. Measure research variables
7.1. Independent variables

Features of the Accounting Information System: Implementing Integrity and Processing the Software Modeling software is an important aspect of a decision support system, which is done by collecting decision models and placing them in an information system (Alipour et al., 2009). Features of an accounting information system in the present study include factors such as adaptability (Bayard and Turners, 2000; Chapman and Kayhan, 2009), flexibility (Evans, 1991; Rezaian, 2001), internal control (Sajjadi, 2006; Jensen, 1983; Simon, 1987; Abyrensi and Ats, 2004) and General Characteristics and Reporting Structure (Jabbari, 2001). Each of these factors has been critiqued using the questions raised based on these characteristics.

2.7. Dependent variable: System performance based on processor model presentation

According to Prasad and Green's (2015) research, it will be used to calculate system performance using the Gupta Questionnaire (2004), which includes tools for job fitness and technology.

3.7. Modifier variables:

Organizational Decentralization: The five criteria of Abken and Hij (1996) have been used to determine the degree of organizational concentration / decentralization.

8. Research findings
8.1. Descriptive findings

Table (2) presents demographic information related to the interviewees. About 60 percent of respondents were CEOs or Chief Accountants. Also, the level of education of half of the interviewees was master's or doctoral. It is worth noting that this group of people had a better participation in terms of accepting the interview and the quality of the response. Two-thirds of the interviews were conducted at the headquarters of the companies located in the center of Tehran and the rest at the factory located within a radius of 25 km from Tehran.

Table 2. Demographic information of respondents

Percentage	Abundance	group	Variable	Percentage	Abundance	group	Variable
17	10	financial manager	Side title	70	42	Man	Gender
52	31	Head of Accounting		30	18	Female	

Percentage	Abundance	group	Variable	Percentage	Abundance	group	Variable
18	11	accountant		10	6	Less than 30	
13	8	Others		53	32	31 - 40	
83	50	1 - 5		32	19	41 - 50	Age
12	7	6-10	Background experience (Year)	5	3	51 - 60	
5	3	11-15		50	30	Expert and lower	
72	43	central office	Activity	42	25	Masters	Level of education
28	17	factory		8	5	Ph.D	

8.2. Descriptive Statistics

Table (3): Descriptive statistics of research components

Variable	Mean	Median	Max	Min	Std.Dev
AIS	2.986	2.948	5.000	1.000	0.816
Compatibility	3.046	3.000	5.000	1.000	0.751
flexibility	2.895	2.763	5.000	1.000	0.604
IC	3.714	2.514	5.000	1.000	0.914
GF	3.612	2.886	5.000	1.000	0.738
TRS	3.021	2.541	5.000	1.000	0.671
SPBPMP	3.021	2.189	5.000	1.000	0.389

8.3. Adaptation of measurement models

The fit of the measurement model also uses the reliability criterion, which is investigated in three ways: measuring factor loads, Cronbach's alpha and combined reliability. The value of the criterion for the suitability of factor load factors is 0.4. Because the higher this value in relation to a particular structure, the higher the index plays a role in explaining that structure (Hansler et al., 2009). According to Table (4), all factor load factors are greater than 0.4, which indicates the appropriateness of the measurement models used in this study.

Table 4. Factor of variable latent research variable

Model Title	Under the structure	Factor load
	Compatibility	0.910
	Flexibility	0.962
AIS	IC	0.983
	GF	0.752
	TRS	0.841
SPBPMP	US	0.883

Cronbach's alpha coefficients and combined reliability also indicate the appropriate reliability of the model if it is higher than 0.7. Since the coefficient of numerical reliability is between zero and one, zero indicates the absence of reliability and a reliability of one hundred percent. Therefore, the closer the level of reliability

and alpha of Cronbach to the number one, the better (Hennsler et al., 2009). According to Table (5), the values for all structures are higher than 0.7, which indicates the appropriate reliability of the research measurement models.

Table 5. Cronbach's alpha coefficients and hybrid reliability of hidden variables

Model Title	Cronbach's alpha coefficients	Combined reliability coefficient
AIS	0.936	0.941
OD	0.877	0.899
SPBPMP	0.971	0.826
Uncertainty * AIS	0.883	0.862

8.4. Fit a structural model

Unlike structural measurement models, the structural model section has nothing to do with the obvious variables, but only the hidden variables of the research along with the relationships between them. The first criterion for examining the fit of a structural model in a study is the R^2 coefficients for the endogenous (dependent) variables of the model. R^2 is a measure of the effect of an exogenous variable on an endogenous variable, and three values of 0.19; 0.33 and 0.67 are considered as the criterion values for weak, medium and strong values of R^2. This means that this index examines the overall predictability of the model; That is, whether the model tested was successful in predicting endogenous hidden variables (Davari and Rezazadeh, 1397). According to Table (6), the value of R^2 has been calculated for the endogenous variable of the research. It should be noted that this coefficient is not calculated for exogenous variables

Table 6. Results of R² endogenous variable criterion

Model Title	R^2
AIS	0.491
OD	0.455
SPBPMP	0.593

The second criterion for examining the fit of a structural research model is the value of Q^2 of the model's endogenous variables. This criterion determines the predictive power of the model (Hennsler et al., 2009). Each of the three values of 0.02, 0.15, and 0.35 for this criterion, respectively, represents the weak, moderate, and strong predictive power of the corresponding structure. According to Table (7), the value of Q^2 of the endogenous variable is greater than 0.15, which indicates the strong predictive power of the model and confirms the appropriate fit of the structural research model.

Table 7. Q² standard results in model prediction

Model Title	SSE	SSO	$Q^2 = 1 - \frac{S}{SSO}$
AIS	48	308	0.863
OD	63	429	0.937
SPBPMP	52	351	0.852

8.5. Fits the general model

After examining the fit of the measurement models and the structural model, the general model of the structural equations of the research should be examined using the Good fit (GOF) criterion. The general model includes both parts of the measurement and structural model, and with the approval of its fit, the fit of the fit in a complete model is examined. To assess the fit of the general model, the GOF criterion is used as follows (Hennsler et al., 2009):

$$GOF = \sqrt{\overline{communalities} \times \overline{R^2}}$$

Where in:

(Communalities)$^{\overline{\ }}$: Average common variable of hidden variables and $\overline{R^2}$: Indicates the multiplier of determining the endogenous variables of the model. Three values of 0.01, 0.25 and 0.36 are considered as weak, medium and strong values for GOF, respectively, for GOFF. It should be noted that the value obtained for the research model is 0.487, so the very appropriate fit of the general research model is confirmed.

9. Hypothesis test results

After examining the fit of the measurement and structural models and having the appropriate fit of the general model and according to Figures (2) and (3), the test results of the research hypotheses are examined, the results of which are presented in Table (8):

As can be seen in the table above, the path coefficient between the characteristics of the accounting information system and the performance of the positive system (0.915) and its t-statistic (5.710) is greater than 1.96, which indicates a significant positive relationship between the characteristics of the information system. Accounting and system performance. Accordingly, the first hypothesis of the research is accepted. Also, the results show that t-statistic related to the variable of the interactive effect of organizational decentralization on the relationship between the characteristics of accounting information system and system performance (8.912) is greater than 1.96 and its path coefficient (0.886) is positive. Is. Thus, the second hypothesis of the study is not rejected at the 5% error level.

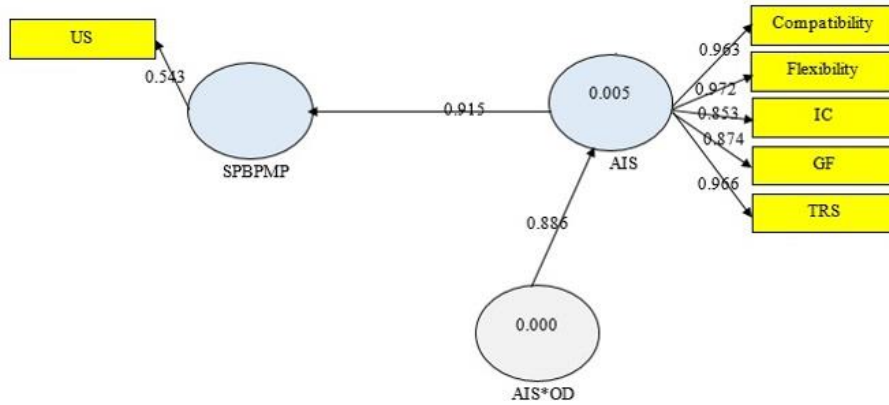**Figure (2) - Research model with standardized path coefficient**
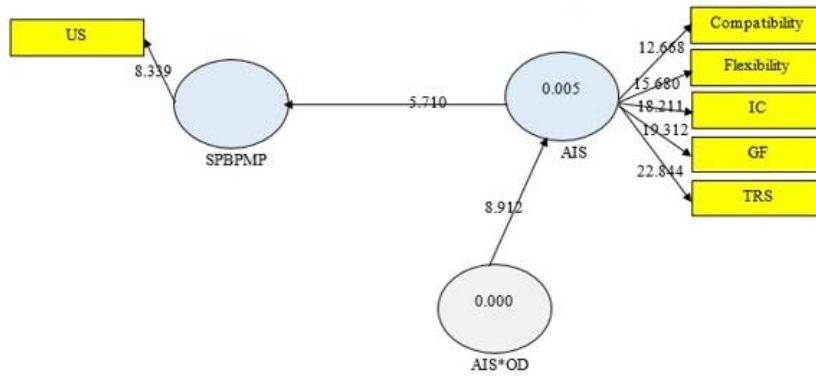

Figure (3) - Research model with t-values

Table 8. Results of the research hypothesis test

Direction	Coefficient	Statistics t	result hypothesis test
AIS ---> SPBPMP	0.915	5.710	Accept the hypothesis
OD* AIS ---> SPBPMP	0.886	8.912	Accept the hypothesis

10. Sensitivity analysis

Internal and external monitoring of managers' behavior and accounting information systems have also not been investigated in internal research. Under conditions of organizational decentralization, the use of large-scale and aggregated information enhances management performance. In the conditional proportionality approach, it is argued that the accounting information system design should be commensurate with the degree of decentralization within a company. In other words, an organization needs appropriate information from an accounting information system to achieve a higher level of performance in proportion to its organizational structure. To investigate the strength and reliability of the research results, the relationship between the characteristics of the accounting information system on the performance of the system and the role of organizational focus adjustment in environments with corporate governance was examined. In this way, accounting information systems can play an effective role in companies with high corporate governance in a strong internal environment. These results mean that when the dominance of a domestic corporation and a high-quality legal environment is sufficient, conditions are created that lead to a greater impact of accounting information systems on system performance.

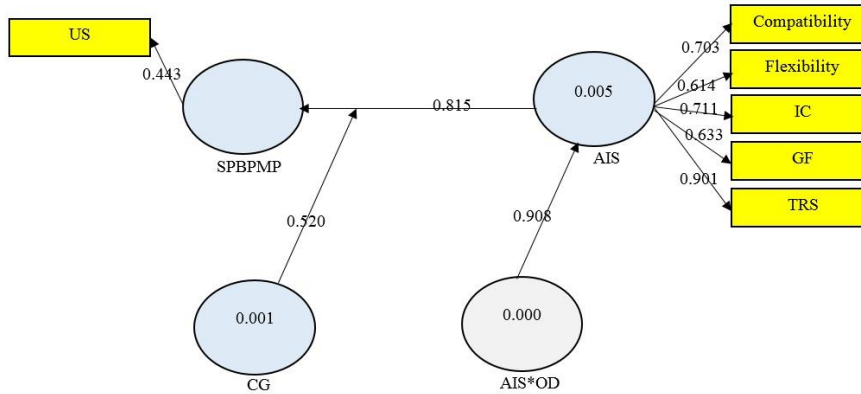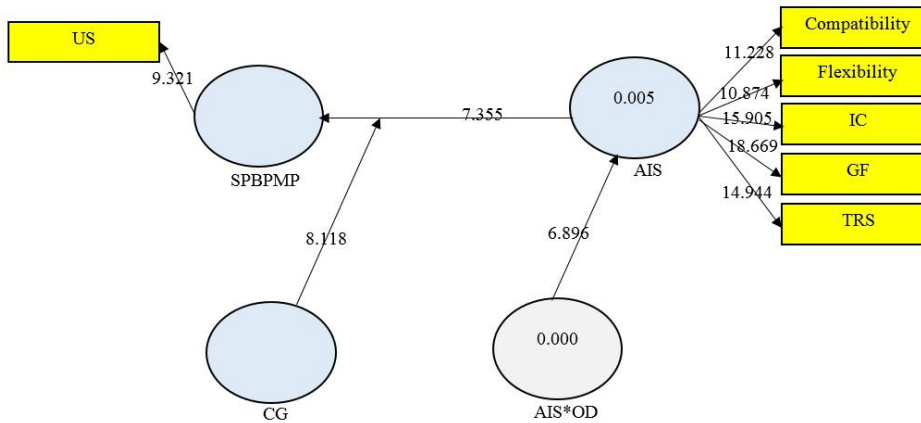**Figure (4) - Research model with standardized path coefficient**

Figure (5) - Research model with t-values

11. Discussion and Conclusions

The main characteristics of accounting in the business world today are the interaction of professional accountants with computer information systems. Accountants, like the main users of accounting systems, must be involved in designing the system and understanding the operations of economic enterprises. Accounting managers need to measure and evaluate the performance of information systems. The information provided to managers by accounting information systems can be customized in many ways. For example, accounting researchers pay special attention to three characteristics called focus, measurement, and time horizon. Focus refers to the extent to which information is internally focused, which indicates the organization (for example, the unit of productivity of the business unit) or external focus on the factors that relate to the environment around the organization (such as economic conditions). In addition, due to new information needs, even the lack of input data to the system and its processing process to produce the required reports will require adjustment and renewal. In such a situation, in order to ensure the achievement of the goals of the organization's accounting system in the form of providing quality information as well as effective management of internal controls, the accounting process must respond quickly and easily to these changes and this can be achieved through flexible accounting. The present study is one of the first studies conducted in the field of accounting information system features on the performance of the system based on process-oriented model with the role of moderating the lack of organizational focus in the Iranian environment. According to the result obtained from the factor load, the variable coefficient of the characteristics of the

accounting information system (0.915) can be stated that the accounting information system has a positive effect on the system performance and t statistic, which is more than the acceptable level of 1.96, indicates a significant effect between the systems. Accounting and system performance information. Therefore, according to the factor load factor and t-statistic obtained, it can be stated that the first hypothesis of the research has been accepted. Regarding the confirmation of the above hypothesis, it can be argued that in the contingency approach it is assumed that the fit between organizational strategies and content variables of organizational structure leads to optimal performance, including the role of accounting information systems that can make a dynamic relationship between strategies. It is even more important to create an organization and common accounting criteria and measure performance from a holistic perspective, because traditional accounting criteria cannot provide a comprehensive assessment of performance due to limited measurement of various variables. Therefore, it is expected that the characteristics of accounting information systems will affect the performance of the system, which is the result of this claim. The result is in line with the research of Ghasemi et al. (2019). In their research, management accounting systems improve the performance of the organization by using new technologies and internal and environmental factors through the effectiveness of accounting information systems. Miguel et al.'s (2018) study also showed that new accounting information systems are a fundamental social advantage. They believe that accounting information on social benefits is based on the scope of management in the general social budget. Carlos Yoshikani and Louise Albertin (2018) argue that strategic accounting information systems affect the competitive strategy and performance of companies. To this end, the accounting information system leads to capacity building and flexibility to create competitive strategies in response to environmental change. Accounting information systems can predict a company's performance from a company's strategic perspective. Therefore, the above research is in line with the result obtained from the first hypothesis of the research.

According to the second research hypothesis, the effect of adjusting the organizational decentralization on the relationship between the characteristics of the accounting information system on the performance of the system was investigated. The results can be argued that organizational decentralization does not imply the separation of organizations based on geographical areas. The focus is on the distribution of decision-making powers, not the geographical separation of the organization. There is absolutely no focus or decentralization in any organization, and it is always necessary to maintain a balance between focus and decentralization, because it is obvious that a central official is not responsible for determining the policy and setting up the general operation plan of the device. If it does not operate, then the organization will disintegrate. Therefore, it is obvious that the goal of decentralization is not always desirable. In some situations, the focus is on not focusing. When a comprehensive view is needed to make a decision, or where it saves significant economic savings, it focuses on specific advantages. In this case, managers are in a better position to see the overall picture of the situation. This allows managers to choose methods that are in line with the overall interests of the organization rather than adapting to specific group interests. In addition, some activities are more efficient when focused. That is why financial and legal decisions must be made in a centralized manner. Because these two conditions affect all organizational activities, and this focus is on special economic savings. Thus, the results are consistent with the studies of Chanhall and Morris (1986), Gul and Jia (1994) and Jia (1995). Based on the results of the present study, it is suggested that the designers of the organization and accounting information systems also pay attention to the effects of uncertainty and design systems that provide information with a wide range of information in terms of task analysis. It is also recommended that managers consider the factors that make up the external environment and pay attention to the characteristics and dimensions of the external environment. Based on the result of the second hypothesis, it is suggested that the appropriate and timely use of information in decision making creates the power to make effective and efficient decisions for managers. Having information with analytical capabilities makes it possible to provide quality accounting information to make correct and logical decisions, and effectively supports managers' decisions, and ultimately encourages managers to

make decisions based on information from accounting systems.

References

1) Abernethy, M. A. and E. Vagnoni. Power, organization design and managerial behaviour', Accounting, Organizations and Society, 2004, 29 (3/4), pp. 207-225

2) Alipour, Mehrdad; Najafi Asadullah; Sajjadi, Hamid. System Analysis and Design, Tehran, 2009, Tehran.

3) Amri Asrami, Mohammad and Aghaei, Mohammad Ali. Re-formulation of valuation function based on accounting information: A case study of companies listed on the Tehran Stock Exchange. Financial Accounting and Auditing Research, 2019, 11 (44), pp. 154-123.

4) Arab Mazar Yazdi, Mohammad; Naseri, Ahmad; Nekouizadeh, Maryam and Moradi, Amir. Investigating the effect of accounting information system flexibility on company performance with a dynamic capabilities approach. Accounting and Auditing Reviews, 2017, 24 (2), pp. 242-221.

5) Ashrafi, Hamidreza; Sharifian, Leila and Shahgholian Ghahfarkhi, Marjan. the importance of information systems in organizations with emphasis on decision-making information system and comparison with management information system. New Research Approaches in Management and Accounting, 2018, 6, pp. 33-48.

6) Byrd, T. A. and D. E. Turner. Measuring the flexibility of information technology infrastructure: Exploratory Analysis of a Construct. Journal of Management Information Systems; summer, 2000, 17(1), 167-208.

7) C. Fisher. The impact of perceived environmental uncertainty and individual differences on management information requirements: a research note. Accounting, Organizations and Society, 1996, 21 (4), pp. 361–369.

8) Carlos Yoshikuni, Adilson, Luiz Albertin. Effects of strategic information systems on competitive strategy and performance", International Journal of Productivity and Performance Management, 2018, 67 (9), pp. 2018-2045.

9) Chapman, C.S. and L-A. Kihn. Information system integration, enabling control and performance. Accounting Organizations and Society, 2009, 34(2): 151-169.

10) Chenhall, R.H and Morris, D.The Impact of Structure Environment and Interdependence on the Perceived Usefulness of Management Accounting Systems. The Accounting Review, 1986, 61 (1), pp. 16 – 35

11) Chin, W. W., Marcolin, B. L. & Newsted, P. R. A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. Information systems research, 2003, 14(2), 189-217

12) Chiu, Victoria, Liu, Qi, Muehlmann, Brigitte & Baldwin, Amelia Annette. A bibliometric analysis of accounting information systems journals and their emerging technologies contributions. International Journal of Accounting Information Systems, 2019, 32, pp 24-43.

13) Davari, Ali and Arash Rezazadeh. Structural Equation Modeling with PLS Software. 2018 Jihad Daneshgahi Publishing Organization.

14) Efendi, David. Adjie, Setyo. Task Uncertainty, Managerial Performance: The Role of Management Accounting System in a Cooperative. International Journal of Management and Social Sciences Research (IJMSSR) ISSN: 2319-4421. 2016, 5 (12).

15) Elaoud, Assawer & Jarboui, Anis. Auditor specialization, accounting information quality and investment efficiency. Research in International Business and Finance, 2017, 42, PP 616-629

16) Evans, J. S. Strategic Flexibility for High Technology Manoeuvres: A Conceptual Framework', Journal of Management Studies, 1991, 28(1), 69–89

17) F. A. Gul and Y. M. Chia. The effect of management accounting systems, perceived environment uncertainty and decentralization on managerial performance: a test of three way interaction. Accounting, Organization and Society, 1994, 19 (4), pp. 413-426.

18) F.A. Gul. The effects of management accounting systems and environment uncertainty on small business manager's performance. Accounting and Business Research, 1991, 22 (85), pp .

19) Ghasemi, Reza. Habibi, Hamid Reza., Ghasemlo, Masomeh & Karami, Meisam. The effectiveness of management accounting systems: evidence from financial organizations in Iran", Journal of

Accounting in Emerging Economies, 2019, 9(2), pp.182-207.

20) Haji Jabbari, Ramin; Yazdani, Sohrab and Dadashi Khasi, Ismail. Investigating the effect of processing the ability of accounting information systems on the organizational performance of Shahin Bonab Steel Complex. Productivity Management, 2012, 6 (23), pp. 125-148.

21) Hajiha, Zohre and Nabiuni, are Shayeste. Investigating the effect of accounting system characteristics on the performance of this system in terms of task analysis. Management Accounting, 2014, 7(2), pp. 58-47.

22) Henseler, Jörg; Ringle, Christian M; Sinkovics, Rudolf R. The use of partial least squares path modeling in international marketing, in Rudolf R. Sinkovics, Pervez N. Ghauri (ed.) New Challenges to International Marketing" Advances in International Marketing, 2009, 20, pp. 277 – 319

23) J.M. Choe. The effects of user participation on the design of accounting information systems, Information and Management, 1998, 34, pp. 185-198

24) Jabbari, Alireza and Heydarinejad, Mohammad Reza. Software Engineering, 2001, Aylar, Tehran.

25) Jensen MC. Organization theory and methodology. Account Rev, 1983, 53:319–39.

26) Laudon, Kenneth C. & Laudon, Jane P. Essential of Management Information System: Managing the Digital System. 2012, Canada: Prentice Hall.

27) Molanazari, Mahnaz & Abdolkarimi, Elahe. The effects of task uncertainty, decentralisation and accounting information systems characteristics on the accounting information systems performance in Tehran Stock Exchang: Three way interaction model. 2nd IEEE International Conference on Information and Financial Engineering, 2010.

28) Moradi, Mehdi; Baqerpour Valashani, Mohammad Ali; Azad, Abdullah and Qanad, Mustafa. The extent to which employers' computer systems accounting information system capabilities are used in the implementation of analytical methods by auditors. Experimental Accounting Research, 2017, 8(1), pp. 134-111.

29) Mulla Nazari, Mahnaz and Zarabi, Atefeh. Proportionality of Accounting Information Systems. Accounting Research, 2013, 3(2), pp. 124-107.

30) Nazaripour, Mohammad. Investigating the Impact of Information Systems on Management Accountability Compatibility. Accounting Knowledge, 2016, 7(27), pp. 158-135.

31) Peña-Miguel, Noemí. Iñaki, Joseba. Peña, De La. New accounting information system: An application for a basic social benefit in Spain. Revista de Contabilidad, 2018, 21 (1), Pages 28-37.

32) Prasad, A. & Green, P. Organizational competencies and dynamic accounting information system capability: Impact on AIS processes and firm performance. Journal of Information Systems, 2015, 29(3), 123-149.

33) R. H. Chenhall and D. Morris. The Impact of Structure, Environment and Interdependence on the Perceived Usefulness of Management Accounting System. Accounting Review, 1986, 61 (1), pp. 16-35.

34) R.T. Keller, "Technology-information processing fit and the performance of R&D project groups: a test of contingency theory", Academy of Management Journal, 1994, 37 (2), pp. 167-179

35) Rezaian, Ali. Management Information System (Information Modeling), 2001, Samat, Tehran.

36) Sajjadi, Seyed Hossein and Tabatabai Nejad, Seyed Mohsen. Accounting Information Systems, Shahid Chamran University, 2006, Ahvaz.

37) Salah A. Hammad, Ruzita Jusoh, Imam Ghozali. Decentralization, perceived environmental uncertainty, managerial performance and management accounting system information in Egyptian hospitals", International Journal of Accounting and Information Management, 2013, 21 (4), pp.314-330.

38) Simons R. Accounting control systems and business strategy: An empirical analysis. Account Org Soc, 1987.

39) Soobaroyen, Teerooven. The Effectivness of Management Accounting Systems", Managerial Auditing Journal, 2008, PP 187-219.

40) Talebi, Bahman and Bahri Sales, Jamal. Investigating the relationship between the components of management accounting system, ambiguity, decentralization and performance of managers of Bonab production companies. Management Accounting, 2018, 11(36), pp. 30-15.

41) TOKIĆ, Marija. ŠPANJA, Mateo. Iva TOKIĆ., BLAŽEVIĆ, Ivona. Functional structure of

entrepreneurial accounting information systems. Annals of Faculty Engineering Hundoara-international journal of Engineering, 2011, pp, 1584-2665.

42) Wahyudi, Ilham. (2018). Accounting Information Quality and Market Reaction: A Survey of Banking Industries Listed in Indonesia Stock Exchange, Research Journal of Finance and Accounting, 2018, 9 (5), P.P 2222-2847