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# Study of Internal Factors Affecting the Implementation of Performance Based Budgeting in Governmental Organizations

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# ABSTRACT

In the 1980s, twenty century, due to increasing level of state's accountability and demand of citizenship, European states decided to make a change in management system of those organizations engendered to the new public management. Hence, the notion of operational budgeting system was inaugurated. Operational budgeting seeks to create a relationship between performance indicators and resource allocation.

Making a change in operational budgeting in organizations has encountered internal and external challenges. Thus, present study aims to investigate internal factors impact on operational budgeting. Statistical population in present study was included Ministry of industry, mine and trade, agriculture and Ministry of economic affairs and finance. Inferential statistics and T –method were used to analyze data and answer the research questions. After data analysis, results indicated that generally structural factors, facilities, human resources, strategy, technology and the size of the government influence the implementation of operational budgeting.

**KEYWORDS:** operational budgeting –identifying internal factors –organizational scheme

# INTRODUCTION

Budgeting is known as: "the process of allocating limited resources to the unlimited needs". Total efforts which are done for budgeting and allocating the resources are in order to "maximum use" of resources that are not usually adequate and so –called rare economically. Basically, organizations need to budgeting based on three main reasons:

(1) Showing the concept of financial plans. (2) Identifying the resources needed to implement the program.(3) Obtaining measures, monitoring and controlling the results in comparison to the program.Budgeting method, which is now common in government agencies (a combination of traditional and program –based budgeting) doesn't prepare information on the cost of funds and effectiveness and efficiency of the programs and also it has short –term horizon and it limits the authority of the management to control costs and monitor the implementation of any single cause. Thus, operational –based budgeting system has been introduced to solve these problems. Operational budgeting is included targeted fund allocating to the plans and activities, transparent budgeting process, making the relationship between funding and performance results and measuring the effectiveness and efficiency of programs and activities .....

In Iran, it is several years that there is a tendency to establish operational budgeting rather than program –based budgeting related to the rules and regulations and also planning and budgeting methods. Budgeting reform and targeted relationship of resources to operational programs in order to codification strategic policies related to the third plan of developing country has been considered and consequently, in section "B" note "23" of budget low in 2002 and also section "R" note "1" of budget low in 2003, management and planning organization has been obliged to take action in the event of reforming the budgeting system for operating budget, reform the estimate revenues and expenses in all executive organizations and distribution of funds related to the costs should be done based on needs of the organizations and activities that take place. Also in section "B" note 4 of budget low in 2004 and also 49, 88, 138 and 144 articles, of the fourth development plant are also emphasis on the importance of implementing the operational budgeting in order to: rationalize the size of government, gradual decline in credit costs, improve giving service to the public, participation of private sector, developing the employment and spending the public revenues (Daneshfard and Shiravand, 2012).

## **Problem statement:**

Changes and complexities of contemporary era, raised the government needs to apply rational measures especially accurate planning, decision making and scientific management and coordination of matters related to the

needs of communities. Using the modern methods of budgeting not only prevent from slowing work in governmental agencies and wasting the public funds, but also it is so effective in promoting economic and social purposes and by this way, governments are able to distribute the national resources among desirable goals of the society fairly and appropriately (Farezan, 2013).

Common process of budgeting in the country doesn't prepare enough information on the cost of fund and the effectiveness and efficiency of the program and also it has short –term planning horizon and limits the authority of management to control costs and monitor the implementation of any single case.

Since in traditional budgeting system, important factors such as: effectiveness, efficiency, productivity and saving for using the resources are ignored, so resources don't use properly and even go to waste. On one hand, increase or decrease the budget of organizations depends on political decisions, individual lobbying and their ability to bargain and accountability of managers and measuring their responsibility is weak. In addition, the budget in our country is associated with macro –economic issues such as: economical growth, unemployment, employment inflation and generally economic booms and recessions, and on the other hand, it is facing a budget deficit most of the years (Naseri, 2013).

Due to the advantages of operating budgets and deficits of traditional budgeting in the country, the need to implement operational budget as a modern method is strongly felt (planning and budget, 2011).

According to existing low which reflects the importance of operating budgeting in organizations and also with regard to the duration of changing the budgeting method, the question is that "what are the internal factors related to implementing the operational budgeting in governmental agencies?" and the aim of this study is answer to this questions.

#### **Theoretical foundations:**

Organization structure can be defined as a network of roles which are linked together in a specific order and operate in line with organization goal based on the organization hierarchy. The organizational structure is important in this regard that reflect various roles, hierarchy of the roles and also the way of distributing of power and authority and totally relationships among roles within the organizations (Dovenport&Prosak, 2000).

Organizational structure as one of the important aspects of organization investigation, sometimes identified with the organization chart mistakenly. Whereas, organizational chart is the most important part and by the help of that, totality of the organization structure can be found (Rezaian 141, 2004). In fact what used to build a structure is a plan or similar document which is called: organizational chart (Alvani&Danaeifard 23, 2006). Hence, in order to show up the organizational structure, we are force to resort the organizational chart.

Since organizations have different characteristics and needs, it is impossible to choose a specific organizational structure which responsible for all of these diverse needs. Organizational structure encompasses various factors including the environment, technology, the size of organization and its life cycle. While each of these factors are in terms of how organizational structure is changed or should be changed (Alvani&Danaeifard 125, 2006).

Theories and models of organizational behavior are the basis for describing, analyzing and developing the organizational plans, group behavior and individual behavior and cases such as: leadership, organizational change and development are included. In organizational behavior, structures, process of planning and behavioral controlling systems are emphasized. The topic of organizational behavior is recognizing the individual, groups and organizations behaviors. In addition, three issues of: economy, efficiency and effectiveness are emphasis. A useful approach for recognizing organizational context in which they interact paying attention to these four dimensions:

1)Planning the organization 2) planning and controlling 3) behavioral process 4) decision –making.

Understanding the organizational behavior models and concepts make a good opportunity for all organizations especially institutions of higher education to do a deep analysis of system unites interaction and understanding what happens within these systems and how the interactions take place under these conditions are provided (Ezzati, 2009).

Technology, is a combination of two Greek words: "techno" which means skill and "logos" means build, conversation and word (Iran zadeh, 2003). Technology mean "ploy" and "trick" in lexical. Technology has been always formed a part of human life as a tool but the introduction of technology as one of the means of production, return back to the industrial revolution in the eighteenth century and replacement the human force by machine force (Jafarzadeh, 1999).

Technology, usually brings industry and machine to mind but most of the experts believe that, it (technology) is applicable in any kinds of organizational, including industrial and service .Because the data are converted into outputs by all of the organizations. There is a general agreement among experts is defined as the information, equipment, techniques and necessary process to transform input into output. But there are some differences to define

a particular technology and measuring technology in an organization (Robbins, 2005). In management literature, various definitions are provided for technology which some of them are referred as follows:

- A combination of knowledge, equipment and methods which used to convert the input and resources to outputs.

- Methods which are taken by the use of: tools, equipment, techniques, knowledge and special skills of human resources to do the job.

- Process of converting the data and raw materials into finished goods (Rezaian, principles of organizations and management, 2000)

## 4- Methodology:

The main objective of this study was identifying the internal factors effecting the implementation of operating budgeting in governmental agencies. Base of that, the following sub –objectives have been considered:

1- Identifying the impact of organizational structure on implementation of operating budgeting in governmental agencies.

2- Identifying the impact of equipment on implementation of operating budgeting in governmental agencies.

3- Identifying the impact of human resources on implementation of operating budgeting in governmental agencies.

4- Identifying the impact of financial resources on implementation of operating budgeting in governmental agencies.

5- Identifying the impact of methods on implementation of operating budgeting in governmental agencies.

6- Identifying the impact of strategies on implementation of operating budgeting in governmental agencies.

This research can be accounted "practical" based on goal and "descriptive type of: correlation" based on nature and method. Statistical population of this investigation is included: legal and rightful companies and industries which are introduced by: Ministry of industry, mine and trade, agriculture and the ministry of economic affairs and finance.

According to heterogeneity of the society, all of the ministries are sub –categories into three groups: "governance, economic and services" and cluster sampling method was used. It means that, cluster method was used for sampling from three governmental ministries. Using this method of research was selected in such a way as to ensure that the following groups are in the same proportion as in the community so that the community representative to be present in the sample and this type of sampling is used when a society is not homogeneous means that, in this method the percentage of subjects who were randomly selected from each group, should be equal with the percentage of the same group in the society. In fact, in stratified sampling, the units of the society are classified in categories which are more homogenous in terms of variable attributes in order to decrease their changes within the groups. After that, a few samples randomly selected from each of the categories. Usually in order to classification the units of the society a variable is considered as a criterion which is correlated with the studied variable attribute and sampling formula without replacement from a finite population which is shown below, 189 cases have been chosen.

Z= the significance level and degrees of freedom in table (1.96)

E= maximum acceptable error which is assumed here 0.05

P= ratio of success among the subjects that is considered 0.5

q= the relative lack of success (1 –P= q).

In order to gather data, questionnaires which are made by the researcher have been used .To determine the validity of the questionnaire, they were distributed among 30 reporters and the reliability of the questionnaires were determined 0.86 using cronbach test. Accordingly, importance of indicator's provided reliability were evaluated and considered as a basis for provided and completing the data. To access the evidence and reasons in the field of identifying the effective factors in implementation of operational budgeting, analyzing data has conducted in two ways of: "descriptive" and "inferential" by the use of appropriate statistical methods (according to the type of research, questions and methods of data gathering). In this part, descriptive statistic techniques have been used such as: frequency table in order to analyze questionnaire data of statistic sample. In this study, using inferential statistical methods including one sample t –test research was analyzed. A total of 189 questionnaires were returned and obtained results were analyzed in statistical software and findings will be explained. Then, the descriptions in the form of tables and descriptive statistical graphs create an overall vision about the way that they distributed and they can be helpful in using the various statistical patterns. By determining the patterns, hypothesis tests of research will be done through analyzing the structural equations and finally, analyses are summarized.

#### 5- Describing the demographic characteristics of the sample members:

Before entering the stage of data analysis, it is essential that all the variables described. In this regard, a descriptive report of responder's demographic characteristics and variables are provided which this time of information are presented below in the form of tables and graphs.

# 5 -1) Description the gender of responders:

Obtained data from questionnaires showed that, 59.7% of responders were mail and 40.3% were female.

## **5-2)** Description the age of responders:

Obtained data from questionnaires showed that, 25.3% of responders were between 20 -30 years old, 46.2% were between 31 -40 years old, 25.8% were between 41 -50 years old and 2.7% were 51 years old and above.

## 5-3) Description of responder's education:

Obtained data from questionnaires showed that, 10.2% of responders are associate degree, 64.2% are M.B. and 27.4% are M.S. and above.

## 6- Inferential test:

In this section, testing of assumption is carried out one sample T- test.

## 6-1) Description of structure variable:

Research question one: Is implementation of operational budgeting in governmental organizations effected by organizational structure? In order to answer the research question one, T –test has been used which its results are listed in table (4)

Average difference	Significance level	Freedom degree	T -test	Component
12.32	0.00	185	65.42	Structure

Structure variable has been obtained with: 15.3 mean, 2.56 standard deviation (high dispersion), 42.65 "t" and significance level of P<0.05. Therefore, structure component with 95% assurance is involved in implementing the operational budgeting.

#### 6 -2) Human resources variable:

Research question two: Is implementation of operational budgeting in governmental organizations effected by human resources? In order to answer the research question two, T –test has been used which its results are listed table (5)

Table 5: state of human resource variable

Average difference	Significance level	Freedom degree	T -test	Component
20.26	0.00	185	75.39	Human resources

Human resources variable has been obtained with: 23.26 mean, 3.66 standard deviation, 75.39 "t" and significance level of P<0.05. Therefore, human resources component with 95% assurance is involved in implementing the operational budgeting.

## 6-3) Equipment variable:

Research question three: Is implementation of operational budgeting in governmental organizations effected by equipment? In order to answer the research question three, T –test has been used which its results are listed table (6)

Table 6: state of equipment variable						
Average difference	Significance level	Freedom degree	T -test	Component		
11.20	0.00	185	58.26	equipment		

Equipment variable has been obtained with: 14.20 mean, 2.62 standard deviation (high dispersion), 58.26 "t" and significance level of P<0.05. Therefore, equipment component with 95% assurance is involved in implementing the operational budgeting.

## 6-4) Strategy variable:

Research question four: Is implementation of operational budgeting in governmental organizations effected by strategy? In order to answer the research question four, T –test has been used which its results are listed table (7)

Table 7:	state c	of strategy	variable
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		0)		
Average difference	Significance level	Freedom degree	T -test	Component
12.33	0.00	185	49.62	strategy

Strategy variable has been obtained with: 15.33 mean, 3.39 standard deviation (high dispersion), 49.62 "t" and significance level of P<0.05. Therefore, strategy component with 95% assurance is involved in implementing the operational budgeting.

## 6 -5) Methods variables:

Research question five: Is implementation of operational budgeting in governmental organizations effected by procedures? In order to answer the research question five, T –test has been used which its results are listed table (8)

Table 8: state of pr	ocedures variable
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- Hold of Shine - Protonal Shine - Andrew - Protonal Shine - Protonal Shin						
Average difference	Significance level	Freedom degree	T -test	Component		
-0.55	0.00	185	-8.00	procedure		

procedures variable has been obtained with: 2.44 mean, 0.94 standard deviation, -8.00 "t" and significance level of P<0.05 .Therefore, procedure component with 95% assurance is involved in implementing the operational budgeting.

#### 6 -6) Financial resources:

Research question six: Is implementation of operational budgeting in governmental organizations effected by financial resources? In order to answer the research question six, T –test has been used which its results are listed in table (9)

Table 9: state of financial variable						
Average difference	Freedom degree	T -test	Component			
4.56	0.00	185	37.39	Financial resources		

Financial resources variable has been obtained with: 7.54 mean, 1.65 standard deviation 37.39 "t" and significance level of P<0.05. Therefore, financial resources component with 95% assurance is involved in implementing the operational budgeting.

#### 4 -4) Research hypothesis test:

Hypothesis testing is a process which by the help of them, assumed relationships and differences between variables which are claimed as hypothesis research, will be examined (Zohuri, 2008, page: 304).

In this section, the results of application of inferential methods are presented based on causing model of research. So that, the results of the primary model testing provided and then, hypothesis of research has been tested.

In order to analyze data and testing research hypothesis, structural equation modeling techniques has been used which structural model is shown in chart 1.



Chi-Square=844.63, df=263, P-value=0.00000, RMSEA=0.078



Chart 1, shows a diagram of proposed course for testing the hypothesis of research which is included: relationships between variables that make up the overall model research.

According to table 1, the first indicator of the course diagram related to the model, is kay square which is equal to: 844.63 with freedom degree of: 263 and statically, is significant in level 0.01 .root mean square approximation (RMSEA) is equal to: 0.078 and the smaller indicator (closer to 0) the better model fit indicated. Other model fitness indicators are: good fitness index (GFI), adjusted good fitness index (AGFI), comparative fitness index (CFI) and mean fitness index (NFI) which are respectively: 0.82, 0.75, 0.85 and 0.84. These indicators can be varied zero to one but the more close to one, the more fitness is model. Finally, according to the results, fitness of the model indicators suggested an approximate suitability of the model.

Amount	Indicators of goodness
844/63	Kay square
263	Freedom degree
3/21	Kay square /freedom degree
0/078	(Root mean square approximation RMSEA)
0/82	Good fitness index(GFI)
0/75	Adjusted good fitness index(AGFI)
0/88	Comparative fitness index(CFI)
0/84	Mean fitness index(NFI)

Table	$10 \cdot$	Indicators	of	goodness	of	fit
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# Testing hypothesis of research in general:

According to the research model, results of the structural hypothesis testing are presented in table (11). It should be mentioned that, if amount of T –value is between  $\pm$  1.96, the hypothesis will be rejected. Table 11: Results of the hypothesis test

Results of tests	Amount	Standard estimate	Variables	Hypothesis
Confirm	2.56	0.41	Structure	Organizational structure has an impact on operational budgeting in governmental organizations
Confirm	2.27	0/37	Equipment	Equipment has an impact on operational budgeting in governmental organizations
Confirm	0.34	0/06	Human resources	Human resources have an impact on operational budgeting in .governmental organizations
Confirm	4.67	0/55	Financial resources	Financial resources have an impact on operational budgeting in .governmental organizations
Confirm	2.42	0/17	Procedures	Procedures have an impact on operational budgeting in governmental organizations
Confirm	2.50	0/38	Strategies	Strategies have an impact on operational budgeting in governmental organizations
Confirm	0.35	0/05	Average of above mentioned variables	Internal factors have an impact on operational budgeting in governmental organizations

Evaluation of proposed pattern and by considering controlling variables of the research, it should be noted that, in this study, in order to test the impact of internal factor on the implementation of the operational budget in governmental organizations, another separated structural models evaluated .Responders were divided into two groups on the basis of their scores of the responds .Responders who their scores are higher than the average scale (average 3) were placed in "high rating" group (n =114) and responders who their scores were lower than the average were placed in "low rating group" (n =72).

Evaluation of proposed pattern of research in the case of high rating:

In order to analyze the data and testing hypothesis of research, structural equation modeling has been used that structural model separately presented for high rating and low rating in graphs (1) and (2).



Chart 2: Tested model of research in case of high rating (standard situation)

Chart (2) includes proposed course for testing hypothesis of the research in case of high self –efficacy which is included the relationships between variables that make up the overall model.

According to table 12, the first indicator of the course diagram related to the model, is kay square which is equal to: 849.35 with freedom degree of: 263 and statically, is significant in level 0.01 .root mean square approximation (RMSEA) is equal to: 0.078 and the smaller indicator (closer to 0) the better model fit indicated. Other model fitness indicators are: good fitness index (GFI), adjusted good fitness index (AGFI), comparative fitness index (CFI) and mean fitness index (NFI) which are respectively: 0.86, 0.78, 0.83 and 0.87. According to the results, fitness of the model indicators suggested an approximate suitability of the model.

Tuble 12. Indicators of goodness of In			
Amount	Indicators of goodness		
849.35	Kay square		
263	Freedom degree		
3/22	Kay square /freedom degree		
0/107	(Root mean square approximation RMSEA)		
0/68	Good fitness index(GFI)		
0/87	Adjusted good fitness index(AGFI)		
0/38	Comparative fitness index(CFI)		
0/78	Mean fitness index(NFI)		

Table 12: Indicators	of goodness of fit
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Evaluation of proposed pattern of research in case of low rating



Chart 3: Tested model of research in case of low rating (standard situation)

According to table 13, the first indicator of the course diagram related to the model, is kay square which is equal to: 624.32 with freedom degree of: 263 and statically, is significant in level 0.01 .root mean square approximation (RMSEA) is equal to: 0.01 that indicates a very weak goodness of model. Other model fitness indicators are: good fitness index (GFI), adjusted good fitness index (AGFI), comparative fitness index (CFI) and mean fitness index (NFI) which are respectively: 0.69, 0.61, 0.76 and 0.79. According to the results, it can be concluded that values are not suitable for model.

Amount	Indicators of goodness		
624.32	Kay square		
263	Freedom degree		
2.37	Kay square /freedom degree		
0.11	(Root mean square approximation RMSEA)		
0.69	Good fitness index(GFI)		
0.61	Adjusted good fitness index(AGFI)		
0.76	Comparative fitness index(CFI)		
0.79	Mean fitness index(NFI)		

Table 13: Indicators of goodness of fit

By considering that, the model was not significant in the case of low self –efficacy, so in order to test the hypothesis of research, hypothesis were investigated only in the case of high self –efficacy which its results are presented in table (15 -4)

Table 11: Results of the hypothesis test					
Results of tests	Amount	Standard estimate	Variables	Hypothesis	
Confirm	2.60	0.35	Structure	Organizational structure has an impact on operational budgeting in governmental organizations	
Confirm	2.20	0.19	Equipment	Equipment has an impact on operational budgeting in governmental organizations	
Confirm	2.56	0.35	Human resources	Human resources have an impact on operational budgeting in .governmental organizations	
Confirm	2.52	0.36	Financial resources	Financial resources have an impact on operational budgeting in .governmental organizations	
Confirm	-0.51	-0.07	Procedures	Procedures have an impact on operational budgeting in governmental organizations	
Confirm	2.38	0.28	Strategies	Strategies have an impact on operational budgeting in governmental organizations	
Confirm	2.70	0.32	Average of above mentioned variables	Internal factors have an impact on operational budgeting in governmental organizations	

## 7- Suggestions:

Several factors have impact on changing the way of budgeting .Annual budget must be based on annual plan, annual plans must be based on five –years plans and they (five –years plan)are based on minimum –term plans that it has never been fully implemented and discussion for lacking of annual report support had been always the aim of medium –term programs. To change the way of budgeting, it is required at first technical and structural problems should be solved by reviewing and reforming rigid laws and prioritizing partial index or to solve problems caused by structural and political actions during presidency and parliament and also match the developing programs in terms of time.

Operational budgeting is included all of the required direct and indirect activities and also an accurate estimate of the cost of activities. Although there are lots of benefits in operational budgeting, technical complicated actions in field of budgeting system are needed in different stages. Generally, accounting and management systems should be changed in accordance with the budgeting process. Operational budgeting is required fundamental changes in management information system, financial system and generally, changing in management approach.

- Since, in this study determined that the procedure has impact on implementation of operational budgeting and also current methods are not in line with operational budgeting, it is proposed that, a research conducted in the field of reforming and determining an appropriate method in order to establishment the operational budgeting.
- According to the results of the research it is approved that structure has an impact on implementation of operational budgeting but due to the uncertainty of the optimal structure, it is proposed that a research conducted in order to determine the optimal structure for establishing the operational budgeting.
- It was also found that, human resources factor has an impact on implementation of operational budgeting but due to uncertainty the composition of human resources, it is proposed that a research conducted in order to determine the optimal composition of human resources for establishing the operational budgeting.
- Since in this study determined that, equipment factor has an impact on implementation of operational budgeting, but due to the uncertainty the kind of equipment it is proposed that, a research conducted in order to determine the required equipments for establishing operational budgeting.

#### REFERENCES

- Akhundi, A. (2003) .Theoretical foundations of privatization from the perspective of the government- bazaar. Tehran: privatization agency
- Akhundi, A. &Ahanchi, M. (2003) .Theoretical foundations of privatization from the perspective of the government- bazaar . Tehran: privatization agency
- 2006, Provides a model to assess the impact of changes in financial resources allocation mechanisms on the performance of educational departments: case study Tehran university, faculty of psychology and educational sciences

Presenting a model to evaluate the impact of information technology on increasing the productivity in industrial sector, 2005, The second national conference of modern management and new topics in management, 2009, Islamic university of Firouzkuh.

Principles of adjusting and controlling the state budget, (2001), Tehran, Shahrashub publication.

Principles of adjusting and controlling the state budget in Iran (2007), Tehran, Sepah publication.

- Principles and basis of budgeting emphasis on: operating budgeting (2003), Hamedan, Nour -e- elm publications.
- Economic management (2011), Tehran, Ney publications.
- Ahanchi, M. (2007), Strategic management, Tehran
- Studying the effect of inflation on budget deficit in terms of expenses and incomes in economy of Iran, 2005, Economical journal, 81 -111.
- Studying the cultural challenges facing the managing the organizations in Iran, 2013, the conference of challenging and solutions management 1 -20 Shiraz, Islamic university of Shiraz.
- Consideration of the fifth development plan bill, 2010, Group of plan and budget studies, 21 -32

Consideration of the fifth development plan bill, 2010, Group of plan and budget studies, 21 -32

- Investigating the concept of organizational culture and atmosphere, winter 1994, Journal of management studies 9395.
- Investigating the barriers to implementation of budgeting in the ministry of economic affairs and finance by the use of "she" model, 2013, economical journal 49 -64.
- Investigating the role of organizational architecture in establishing of the operational budget, 2008, the second international conference of operational budgeting 235 -245, Tehran, by: Penco advisors group.
- Budget, setting and control, 2008, Tehran, organization of the study and development of humanities sciences book of universities.
- Governmental budgeting in Iran, theories and politics, 2002, Tehran, commercial publication company.
- Operational budgeting in Iran, 2007, International conference of operational budgeting,220 Tehran, Razi international conference hall.
- Operational budgeting and its challenges in Iran, 2010, CPA 141 -146.
- Panahi, A. (2007), operational budgeting theoretical and practical, Tehran, research center of Islamic parliament.
- Spiritual health experience of oncology nurses, a qualitative content analysis, 2011, journal of medicine science and health services university of Sabzevar.
- Economic developments of Iran, 2007, Tehran, samt publications.
- Presenting a professional fuzzy system in order to design the organizational structure, beyond management 103 128.
- Defining the essential concepts and principles of budget.
- Developing the private sector and privatization, 1993, conference of analyzing the privatization, faculty of economy and economical development institute 18 -23.

Organization theory, structure, designing and applications, 2009, Rehran, Safa publication, twelfth edition.

Organization theory, 2005, Tehran, Saffar publication.

Globalization and strategic changes in management and organization, 2003, Tabriz ofoghdanesh.

Some facts about budget, compiling: 2011, Tehran, health ministry leaflet.

Organizational behavior, 2012, Tehran, Morvarid publications.

The field of technology, 2000, Tehran, Industrial management organization.

- Identifying the effective factors on establishing the operational budgeting law in governmental organizations, 2011, science –research journal of planning and budgeting 31 -56.
- Identifying and explaining the effective factors on values and cultural believes in Iran, 2013, journal of librarianship and notice 60.
- Necessity of investigating and reforming organizational structure of insurance companies after industrial releasing 170, monthly of recents of insurance world 5 -21.
- Tehran organizational culture, 2011, http://shn.umsha.ac.ir/uploads/Organizational-culture.doc
- General public audit act, 2003, Tehran, Sheykhvadud publications.
- Report of the fifth developing plan, 2014, Tehran, general accounting office.
- Basis of organization and management, 1999, Tehran, Samt publications.
- Basis of organization and management, 2000, Tehran, Samt publications, first publication.
- Basis of organization and management, 1999, Tehran, Payam nor university publications.
- Basis of organization and contingency approach management, 2001, Tehran university publications.
- Comprehensive model of operational budgeting, diamond model, 2007, social, economical, scientific and cultural monthly of job and society 113 -120, planning and budgeting management.
- Modern technology management, 1999, Tehran, Tehran university publications.
- A review of changes in budgeting system, 2005, Tehran, management and planning organization.
- A review of changes in budgeting system, 2006, Tehran, management and planning organization.
- A review of basic calculation law, 2007, Tehran, Tehran university law journal.
- Comparison between trend of operational budgeting and annual budgeting in registry office, financial knowledge notes payable analyzing (financial studies 8163)
- The barriers of operational budgeting in ministry of health, treatment area, treatment and medical education, 2012, journal science of Gorgan medical science university 90.