



## Present a pattern of financial planning based on management performance auditing

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### ABSTRACT

The current research aims to provide a financial planning model based on management performance audit, and tries to identify the effective factors in this field. They provide the necessary background for the proper performance of financial planning (operational accountability responsibility) of public sector executive bodies. So, in order to achieve this goal, the effective components and indicators were identified with the theoretical foundations and previous research. Then, in order to confirm and screen the effective factors; A designed questionnaire was given to the experts by conducting a semi-structured interview. The answers of the experts were analyzed using the Delphi technique and in Excel 2016 According to the acceptance threshold of the results (0.7), all indicators were accepted. Therefore, based on the research findings, the most important factors for fulfilling the appropriate accountability in the public sector include components such as the development of a culture of meritocracy in the employment of managers and employees, strategic planning, fulfilling corporate social responsibility, accountability and development of software-hardware infrastructures.

**Keywords:** Financial planning; Management performance Auditing; Operational accountability; Performance based budgeting.



## 1. Introduction

Over the last three decades, criticism of government performance has surfaced around the world from all corners of the political spectrum. Critics have accused the government of being inefficient, ineffective, too big, too expensive, too bureaucratic, burdened by unnecessary rules, unresponsive to public wants and needs, undemocratic, intrusive on citizens' private rights, self-serving. Fiscal pressures are also plaguing many governments and increasing calls for cheaper government, greater efficiency, and increased responsiveness (Elfajri et al., 2023).

Therefore, the development of a government system that changed governance from traditional to the concept of new public management (NPM) since, created better services to the public and gave the government authority to manage budgets loosely based on performance (Marthin and Gamayini, 2021).

Indeed, NPM is an international phenomenon whose practices and studies are always monitored. Although these reforms spread quickly, research by past researchers has shown that NPM has resulted in a wide variety of practices. Analysts have found that the new public finance management has not been as uniform, a global movement as the spirit of reforms that have focused on embedding private sector financial practices into public sector decision making. NPM has emphasized new standards in financial reporting, accrual accounting, debt and surplus management, and capital investment strategies that were previously missing from many government decision making. These techniques have been widely applied (Elfajri et al., 2023).

According to Marthin and Gamayini (2021) and Christensen and Lægreid (2015) performance measurement system that is implemented properly and appropriately by the government will make it easier to carry out efficiency and effectiveness of public services, allocation of resources and decision making in the end can increase accountability and organizational performance. Along with the adoption of NPM reforms and the economic and financial crisis, the public sector around the world has been under pressure to improve its performance in pursuit of higher efficiency and to revive citizen confidence in government (Marthin & Gamayini, 2021; Raudla et al., 2015) and lead to the accountability of the government towards its performance (Marthin & Gamayini, 2021; INTOSAI (3910) Guide, 2019).

currently, the European Union (EU) in order to fulfill the public accountability in regard to financial issues and increasingly non-financial issues such as sustainability and the environment, governance, transparency, rule of law, fraud and corruption and other social issues, seeking to reinforce transparency through brings a more public value-oriented approach. This approach is part of the public value logic considered by new public governance (NPG) (Grossi et al., 2023).

In one classification, accountability in the public sector includes operational (financial planning or performance based budgeting) and financial (public sector financial decision making or reporting). The operational accountability obliges the public sector to submit reports in order to convince the stakeholders about the extent of achieving the operational goals, in terms of efficiency and effectiveness and the consumption of financial resources in order to achieve the relevant goals, and information whether the realization of the goals can be predicted in the future or not.

The main tool of accountability and financial supervision of the government is "audit". Indeed, given its failure to generally demonstrate an improvement in public services or a more cost-efficient manner of public management, NPM was questioned by academia after 2000. Society then started experiencing what Power (1997) named "the audit explosion" as a benchmark for accountability (Grossi et al., 2023). Throughout history with the development of the concept of accountability and changes in the basics of its goals; various types of auditing have also been used (Zareei & Fazelinejad, 2016).

In other words, public sector managers in order to improve their level of accountability to the people and their representatives are looking for more information beyond the information contained in the financial statements. Doing this requires a systematic process called management performance audit (Babajani et al., 2018). In fact, in management performance audit; The purpose of reporting is to help management or officials about performance and results (Nokhbe-Fallah et al., 2021; Gord et al., 2019; Brenninkmeijer et al., 2018; Daujotaite and Adomaviciute, 2017). Indeed, conducting performance audits leads to activities with added value, focusing on performance, generating a clearer message for citizens and decision makers,

thereby to ensure that public funds are spent thoughtfully, and scrutinizing matters of pressing interest (Grossi et al., 2023).

Therefor, it can be expressed that management performance audit has the necessary potential for enriching operational accountability and helps Supreme Audit Institutions for operational development to improve the efficiency and effectiveness of public management. in fact, management performance audit is able to improve performance by helping government officials as well as improving the communication of supervisory institutions; promote accountability (D-Parker, 2019; INTOSAI (3910) Guide, 2019). in recent decades, the provision of performance (or value for money) audit assessing the effectiveness, efficiency and economy of public sector organizations, is now an integral part of public sector external audit and relates to the nature of providing assurance (Hamid, 2023).

Hence, auditing the management performance with the aim of helping proper governance, accountability and transparency; it examines the implementation of programs, government activities and the use of resources from the point of view of effectiveness, efficiency and economy (Marthin & Gamayini, 2021).

regarding the adapting the management performance audit with the operational accountability (financial planning or performance based budgeting), it can be stated that the similarity between these two areas is that the submission of the government's annual budget bill to the parliament must contain a comprehensive annex of long term and annual goals and plans. indeed, The budget is considered not only as one of the most important financial policies in the country as a whole and in micro form in the form of one-year planned programs at the level of executive bodies, but also as the most important It is an integral and necessary component for the implementation of other public programs and policies. This means that without financial resources and budgets, the implementation of any public policy is not possible and the importance of credit is always the most basic element of the implementation and implementation of public programs and policies (Abiri et al., 2022).

Also, the annual performance management report should be one of the comprehensive annexes of the long term and annual goals and plans, and should be an inseparable part of the budget bill. this will not be achieved unless the performance based budgeting

system, which is based on performance indicators, is established in government agencies, and the budget deduction system is changed from the traditional system and compliance audit to a system based on performance indicators (i.e. performance audit) (Mahmoudkhani and Ahmadi, 2017).

indeed, performance based budgeting include systematic use of performance information to inform budget decisions, either as a direct input to budget allocation decisions or as contextual information to inform budget planning. therefor, its purpose is to instil greater transparency and accountability throughout the budget process by providing information to government officials, legislators, and the public on the purposes of spending and the results achieved (OECD, 2023).

performance based budgeting and management performance audit have a close relationship with each other in terms of goals and are moving towards the same goals, in such a way that both of them revolve around three axes of efficiency, effectiveness and economy; and as the main components of the financial reporting system in order to fully realize its goals, they have equifinality and are complementary to each other, and only in the shadow of the participation of these two, the usefulness of the government financial reporting system has increased and this system can be a powerful tool for the government in its accountability (Mahmoudkhani and Ahmadi, 2017).

Hence, planners need a tool by which they can express the future in the form of predictable elements and uncertainty (Tootchi Fatidehi et al., 2023). The ambiguity or shortage of information results in mis-allocation of resources and increases transactions costs (Kokabi et al., 2023). therefor, performance information included in the budget should be presented in a clear and understandable manner alongside financial information. linking performance information and financial information improves the ability of decision makers to properly assess the performance of a programme or action and make informed decision (OECD, 2023). be Also, for the complete and accurate response of the government sector; and in order to succeed in the performance based budgeting system, it is necessary to change and develop the government audit system and implementation management performance audits (Mahmoudkhani and Ahmadi, 2017).

since with the establishment of performance based budgeting, the system of agreements in the government changes from project agreements and cost commitments to management agreements and performance commitments, then only by establishing management performance audits in supervisory bodies (such as the Supreme Audit Court) and settlement of budget, such a worthy goal can be achieved.

Now this question is raised whether management performance audit precedes performance based budgeting or vice versa? Since performance based budgeting is a type of ongoing process that, by specifying its objectives, programs and quantitative indicators, can be a suitable basis for evaluating government activities by various organizations and individuals. To help the high auditing institutions to audit the performance of the management in relation to the activities of the public sector.

Therefore, performance based budgeting is the basis of management performance audit, because; first, the costs and specific results are determined, and then the obtained results are evaluated through management performance audit. the realization of this evaluation process requires obtaining high quality performance information, because; high quality information on performance and results is the foundation of performance budgeting. The way performance information is developed has an impact on its relevance and quality; it should be based on the priorities of the government and structured logically, specific criteria for developing the information should be used, and the quality and relevance of the information should be ensured (OECD, 2023).

Therefore, creating a performance measurement and reporting system provides a path for management performance audit executives to focus on the short term and long term goals that are raised in the programs; reach an agreement. also, around the selection of performance criteria; discuss and exchange opinions and reach an agreement, and also examine the questions and debates that are raised, and overcome the doubts that exist around performance based budgeting. Therefore, there is a wide connection between the performance based budgeting system and the management performance audit system, and in the meantime, management accounting through the performance based budgeting system provides a strong infrastructure and foundation for the correct and optimal implementation of performance auditing

(Rahnamy-Roodposhti and Zandi, 2019; Mahmoudkhani and Ahmadi, 2017).

On the one hand, with the spread of modern budgeting research in Iran, especially the emphasis on the implementation of performance budgeting in high level documents such as general policies of the Fifth Development Plan, Annual Budget Laws and etc , and on the other hand, considering the increasing development of management performance audit in the government sector and the requirement to implement the management performance audit process in Article (218) of the Fifth Development Plan Law and considering that the Supreme Audit Court has officially started auditing the performance of management since in the implementation of its legal duties, it is necessary to pay attention to this matter (Mahmoudkhani and Ahmadi, 2017). performance auditing is an area where the public sector audit function is very effective and has contributed significantly to public accountability (Hay & Cordery, 2021). many Supreme Audit Institutions (SAIs) engage in performance auditing (Grossi et al., 2023).

Performance auditing in the public sector is strong in settings where there is already a well developed financial auditing function, and where the auditing function is well resourced (Hay & Cordery, 2021). its effectiveness can also depend on the model of SAI adopted in a country (Grossi et al., 2023). performance auditing is the most widely researched area of public sector auditing (Mattei et al., 2021). in line with the two functions of a public audit function in providing assurance of information either for a wide public group (public accountability), or mainly for the executive (management control) there are variations in the extent with which performance audits are reported to the public (e.g. in Korea) or to the cabinet (e.g. in Japan) (Yamamoto and Kim, 2019).

But, theoretical foundations and implementation of management performance audit due to the complexity of the public sector caused by factors such as the provision and use of significant financial resources, factors of national culture, heterogeneity in the provision of public services, increasing demand for the quality of public services, multiple stakeholders, asymmetry Information always faces substantial challenges in the public sector (Grossi et al., 2023; Dragusin et al., 2021; Antipova, 2019); as such, many researchers (Grossi et al., 2023; Marthin and Gamayini, 2021; Bushatia and Dalloshib, 2021;

Dragusin et al., 2021; Antipova, and Russia, 2019; Antipova, 2018 and 2017) state that management performance audit is a relatively new issue in the public sector of countries, compared to other fields, and its implementation is associated with many challenges.

The use of performance auditing has increased in recent decades (Ferry et al., 2023). indeed, public sector accounting, and auditing, is based upon a complex set of agency relationships in which there is a chain of agency relationships “from citizen to politician to bureaucratic subordinate and on down the hierarchy to the lowest-level bureaucrats who actually deliver services to citizens”(Moe, 1984). the expectation gap from civil society and politicians alike between what an audit provides and what the users expect is often discussed as an “expectation gap”. the advent of performance audit helps bridge this gap but more is needed in the future (Hamid, 2023). an audit can be expected to contribute to both forms of accountability. a performance audit is also expected to provide both public accountability and management control, and is relevant to a wide audience (Grossi et al., 2023).

The challenges faced by the function of performance audit include questions about its claims of neutrality, observations of the limitations to its effectiveness, and outright accusations that it is subject to political influence (Grossi et al., 2023). auditors aim for performance auditing to be perceived as a neutral evaluation of policies vis a vis their stated objectives (Barrett, 1996). However, it is often viewed as a potentially political activity that either supports or opposes government policy. Performance audits can be seen as a form of investigation that operates within constraints to avoid challenging the government, ultimately legitimising its activities (Broadbent and Laughlin, 2003).

as noted by Funnell (2015), the choice of audit topics is influenced by the government itself. additionally, Mattei et al. (2021) argue that performance auditing is sometimes utilised to legitimise government activities. furthermore, Morin (2016) comments that performance auditing may give citizens a false sense of security. critics have gone so far as to contend that performance audits merely serve to placate taxpayers, creating an illusion of change without substantial impact (Morin, 2001). notably, norway has experienced an increasing debate

surrounding performance audits in recent years (Nesbakk and Kuruppu, 2018). while performance audits can potentially influence civil servants, the extent of their influence depends on how the audited civil servants perceive the audit process (Reichborn-Kjennerud, 2013). As a result of these threats, there is a potential for performance auditing to be undermined by political conflict, or to be seen as fundamentally flawed as a means of legitimizing government policies (Grossi et al., 2023).

Therefore, according to the current challenges facing the governments such as realization of accountability, the formation of the basic transparency of the government's plans, the objective analysis of the activities and also the provision of the information needed by the public sector to make the necessary decisions to help create a better future, the supervision that is carried out by the Supreme Audit Institutions and the Supreme Audit Court through management performance audits is more vital than any other time (GAO, 2021) and requires the development of necessary laws and regulations in this area (Nesbakk and Kuruppu, 2018; Jeppesen, et al., 2017). Therefore, in accordance with INTOSAI (3910) guideline (2019); creating a sustainable capacity to management performance audit requires attention to these challenges, and therefore; the successful implementation of this audit approach requires audit support, appropriate regulations, leadership and active management participation; Also, Supreme Audit Institutions should ensure the adequacy of the budget and look for partners that will help them for capacity building and quality control.

In general, these challenges are classified into two main categories, environmental and surrounding. environmental challenges include things such as macroeconomic policies, macroeconomic problems, laws and regulations, etc., which are not under the control of auditors. However, the surrounding challenges are mainly under the control of the auditors. They consist of two categories of challenges related to the status or characteristics of the auditors and challenges related to the performance audit stages. In another classification, the most important challenges in this field are cultural-social barriers, economic barriers, and technical barriers (Habashi et al., 2021; INTOSAI (3910) Guide, 2019). table (1) presents the most important and effective challenges regarding the implementation of management performance audit in the research environment of Iran.

**Table 1: Theoretical and implementation challenges of management performance audit in Iran**

Researchers	Challenges
Nokhbe-Fallah et al. (2021) & Kamiabi et al. (2017)	the spread of these issues and challenges in the world arena is due to reasons such as the nascentness of management performance auditing in Iran, lack of sufficient knowledge of domestic researchers, professional associations and organizations such as the Supreme Audit Court, Planning and Budget Organization, Ministry of Asset & Economic Affairs, Auditing Organization, auditors as well as managers of executive bodies in this area, excessive emphasis on financial audit and compliance instead of management performance audit, inappropriate definition and measurement of efficiency, effectiveness and economy indexes, unfavorable implementation of management techniques including balance score card (BSC), total quality management (TQM) and activity based costing (ABC), inappropriate implementation of performance budgeting, low quality of public sector financial reporting,
Nokhbe-Fallah et al. (2021) & Mahmoudkhan i and Ahmadi, (2017)	the lack of proper professional rules and standards, the lack of transparency and clear vision and goals of the public sector, not using the appropriate accounting system, lack of sufficient knowledge and skills, the lack of use of independent experts in performing performance audits, and the lack of scope of investigation, the lack of appropriate indicators to measure indexes, the inappropriate framework for performance audit reports, the low quality of financial reporting in the public sector, the lack of precise definition of the goals of executive bodies and the lack of specific indicators to measure operations, the abstractness of indexes and their lack of fit with existing conditions, the increase trust in the executive bodies, lack of appropriate powers of managers and employees, lack of culture of public accountability, lack of effective professional organizations and increase in administrative corruption,
Amoozesh et al. (2023)	given the legal and organizational restrictions of auditors, there are many internal and external pressures to ignore some of the requirements,
Tootchi Fatidehi et al. (2023)	ignoring the impact of political, social, economic conditions and emerging or newfound technologies in human life or neglecting the driving forces, uncertainties and key factors affecting the facilitation of future problems or challenges,

The challenges mentioned in the table above and other factors that will be identified by conducting this research; It has caused that the need and necessity of conducting a research that can provide a financial planning pattern based on management performance audit is very important in the current situation of the country for the formation of accountancy and accountability system. in today's world, where the speed of change is very high, it is necessary to prevent the occurrence of possible adverse futures by drawing appropriate scenarios (Tootchi Fatidehi et al., 2023). Therefore, conducting this research can answer the auditors' needs in determining the management performance audit components, which is in accordance with the nature of the activities of the executive bodies under review in a result oriented, system oriented format, problem oriented dimensions and other components that are identified and determined through this research. on the other hand, it will help the managers of the executive bodies of the public sector in order to properly fulfill their operational accountability (financial planning or performance based budgeting).also, by conducting this research, it is expected that the needs of legislative institutions and regulatory bodies such as the Supreme Audit Court of Iran, Ministry of Economic Affairs and Finance, Planning and Budget Organization, the Audit Organization and etc., in approving laws and Effective

regulations for the optimal implementation of the management performance audit and the proper realization of the operational accountability of the managers of the executive bodies of the public sector should also be provided.

## Literature review and Theoretical Foundations

Traditionally, accountability has been conceptualized as a hierarchical chain that runs opposite to the chain of delegation. citizens are the ultimate principals who 'have transferred their sovereignty to popular representatives, who, in turn, have transferred the drafting and enforcement of laws and policy to the government. ministers and executive bodies under their authority are also hierarchically accountable to the parliament and finally to the citizens (Boer, 2023). in order to promote a result-oriented performance culture across government, clear roles and responsibilities should be established. As shown in table (2), the ministry of finance plays a key role in coordinating performance budgeting across government and is primarily responsible for providing guidance to spending entities on how to develop, collect and report on performance. Spending entities are accountable for the performance information they develop and coordinate with the ministry of finance

when setting performance objectives and associated targets to ensure quality and consistency. There must be a relationship of mutual trust between the two bodies for performance budgeting to be effective (OECD, 2023). accountability can be said to function properly in this model when every actor is required to give account to its superior so that a single accountability chain runs from policy implementers all the way up to voters (Boer, 2023).

Due to the reforms of the public sector in recent years, this method of accountability has been put under

pressure and a wide range of new accountability have been introduced to remedy accountability problems caused by the structural disaggregation of the public sector that has taken place over the last couple of decades. in response to these changes, many new concepts have been proposed with the aim to align the accountability idiom with the new empirical reality (Boer, 2023). in table (3) the recent accountability concepts in the public sector are classified and compared.

**Table 2: Roles of key stakeholders in performance budgeting**

<b>Ministry of Finance</b>	Develops the performance budgeting framework, Develops guidelines for the implementation of performance budgeting, Develops templates for collecting performance information, Ensures the consistency, Analyses what spending entities produce, Organises capacity-building activities, Initiates relevant updates to the IT systems,
<b>Spending entities</b>	Coordinates with the finance ministry in setting up programmes and their objectives, developing performance indicators and targets, Ensures the operational execution of performance budgeting (i.e. monitoring, reporting), Sets meaningful and relevant indicators that reflect the priorities of the Government, Ensures high-level sign-off (by a minister, and/or permanent secretary) of performance information to ensure political,
<b>Parliament</b>	Oversight and accountability, Analysing and confirming the budget, Use performance information for deciding and discussing resource allocation, Use performance information to hold ministries accountable, Have discussions with stakeholders to improve the information provided in the budget, Sectoral committees should play a particular role in reviewing performance budgeting for their portfolios.
<b>Audit offices</b>	Assesses the structure and soundness of the overall performance framework, Assesses whether reported information, regarding performance and results, is accurate and substantiated, Compliance with legal requirements in regard to performance information and budgeting.

(source: OECD Performance Budgeting Framework, 2023)

**Table 3: Overview of recent accountability concepts**

<b>Informal</b>	The unofficial expectations and discretionary behaviors that result from repeated interactions among network members in recognition of their interdependence in pursuit of their shared goal(s),
<b>Social</b>	Citizen-led action for demanding accountability from providers,
<b>Extended</b>	Interdependent relationships within the regulatory space . . . acting as constraints on [the actor] to explain and justify its actions and decision,
<b>Media</b>	Accountability of [Independent Regulatory Agencies] before the media,
<b>Mutual</b>	Key stakeholders in dialogue to determine responsibilities, authorize discretion, establish reporting procedures, and create review processes for the relationship,
<b>Dynamic</b>	Open data systems that allow citizens and stakeholders to use the data to hold governments accountable,
<b>Citizen-initiated</b>	An initiative . . . from citizens who may also use their own observations and data to summon authorities to action or hold them accountable for their policies,
<b>Web-based</b>	Any online reporting, feedback, and/or stakeholder input and engagement mechanisms that serve to demonstrate or enhance accountability,
<b>Citizen</b>	Mechanisms and practices where public sector organisations directly account for their conduct in the broadest sense of the words to citizens, clients or more generally to societal stakeholders,
<b>Stakeholder</b>	Forms of accountability that start from the notion of stakeholders as accountability forums,
<b>Participatory</b>	The degree that citizens are enabled to oblige an accountee to explain or justify his or her conduct, pose questions and pass judgment, and define and apply possible consequences,
<b>Direct</b>	Forms with no or few formal rules for information provision . . . no format for debate . . . [and] no formal sanctions’.
<b>Horizontal</b>	Forms of accountability where the accountee is not hierarchically superior to the accountant,

(source: Boer, 2023)

If in the accountability process, the role of the budget is also considered as the basis of accountability, then a clear picture of the accountability system will be revealed. The main user groups (citizens and their

representatives) evaluate the public accountability of the government using audited financial reports of the public sector (Azer and Habashi, 2017; Babajani, 2011). in other words, accountability from the two

sides of "operational accountability" & "financial accountability" has been considered. Operational accountability (financial planning or performance based budgeting) obliges the government and other public sector institutions to submit reports to convince the stakeholders about the amount and achievement of operational goals such as the effectiveness, efficiency, provision and consumption of the budget in order to achieve the relevant goals and provide information about whether the realization of these goals can be predicted in the future (Nasri and Nik-Andish, 2015).

This accountability has a long history and emphasizes on education and proper use of financial resources. Operational accountability is a part of managerial accountability, and on this basis, executive authorities in governments and large public sector institutions are required, in addition to complying with laws and regulations in the acquisition and proper use of public financial resources, to use these resources efficiently, effectively and economically and be responsible in realizing these things (Nasseri et al., 2016; Babajani, 2009).

Accountability for the results achieved by spending entities is a key element of a strong performance budgeting framework. In a well-functioning performance budgeting framework, spending entities set ambitious performance targets and are ready to discuss and explain if these targets are not achieved. This should allow spending entities to have higher discretion to allocate funds within their spending ceilings. However, finding an optimal arrangement incorporating managerial flexibility and control can be challenging and take some time to settle (OECD, 2023).

One way to increase accountability within the performance budgeting framework is to have high-level sign-off of performance information by a minister, as this may limit the risk of performance setting being merely a tick-box exercise that has no real political relevance. In addition, creating monitoring mechanisms, such as reporting on performance in annual end-year reports where the same performance targets are presented in the budget and in the end-year reports, may help promote accountability for the results achieved (OECD, 2023).

The development of public sector accounting was now propelled by stakeholder demands on bureaucratic performance, accountability and transparency, to pay close attention to tax revenues and expenditures with

due regard to financial governance through positive auditing results (Kahar et al., 2023). In December (2015), the Australian Auditing Standards Board published an appropriate version of the audit, which included a revision of the standards section in order to increase the transparency and value of audit reports (Nasseri et al., 2016, Babajani, 2009). Also, in the case of modern government development and its tie with auditing, useful results can be achieved in the field of performance assessment (Ferry et al., 2023). One of the most important issues that has long been raised in the field of improving and enhancing the performance of organizations is performance appraisal (Abiri et al., 2022).

In Australia, the review of management performance from the perspective of accountability includes legal accountability, process, performance, planning, and policies and methods. Also, in addition to managerial performance accountability, other types of accountability include public, financial, political, professional, social, and operational accountability. The implementation of operational accountability has caused governments to use the criterion of measuring the flow of economic resources and full accrual basis in preparing their integrated financial statements.

In other words, the criterion for measuring the flow of financial resources is a political point of view and can be summed up in the decision making environment based on the approved budget. While the measure of economic resources benefits the management environment, emphasis on long-term periods and the use of accrual accounting basis in the preparation of comprehensive financial statements at the government level will increase the operational accountability by ensuring the recording of income and expenses in the relevant financial period (Nasseri et al., 2016, Babajani, 2009).

According to the Australian performance audit report (2015), the management performance audit from the perspective of accountability and performance improvement can be compared and includes ideas such as the political approach versus the approach used by the manager, the management performance audit from the perspective of disclosure versus the recognition approach; and the audit of management performance should be from the perspective of formality versus the approach of stakeholders (Babajani et al., 2018; Babajani, 2009).

Indeed, from the point of view of modern state theories consensus around audit as an assessment of government quality that meant performance audit is increasingly popular (Ferry et al, 2023). the quality of auditing and factors affecting it have received a lot of attention by investors, managers, financial analysts and researchers from long ago. a high quality auditing improves reliability and credibility of financial reporting (Kokabi et al., 2023). in other words, the performance audit is seen in general as a purposeful and organized examination of the performance of the government agency, program, activity or function to provide information that improves public accountability and facilitates decision making (Abdulabass et al. 2023).

Management performance audit as a part of the audit system that uses advanced methods to evaluate the effectiveness, efficiency and economy of public financial resources and the performance of executive bodies; it plays a role in evaluating types and levels of accountability as described above (Noush-Azar et al., 2016; Babajani, 2009). indeed, auditing fulfils a public interest role for public spending, which is important to underpin the state and democracy. however, public sector auditing is under increasing public scrutiny and political pressure, especially following crises that challenge public finances including at state and local level (Ferry et al, 2023).

Hence, it is necessary to look for the advantages of establishing performance audit in response to the needs of evaluating the responsibility of operational accountability. in fact, management performance audit came into existence in response to some of the needs of realizing modern public management and its main focus is on evaluating effectiveness, efficiency and economy in the use of public resources, which plays a significant role in the process of evaluating the operational accountability of governments. (Rostami et al., 2019; Babajani, 2009).

A brief look at the levels of accountability considered by Stewart, known as the "ladder of accountability", reveals the capacity of management performance auditing in the evaluating different levels of the ladder. this type of audit will be active in the process of evaluating three of the five levels of accountability (including process, performance and program accountability) (Babajani et al., 2018; Umor et al., 2016).

Thus, the performance audit process is considered one of the most important administrative functions that the economic unit should perform to measure the success of the plans that were developed in advance by comparing the actual performance with the planned performance in order to identify weaknesses and take the necessary corrective measures to address them and work to ensure that they are not repeated in the future (Abbas et al, 2020). strengths points and working to support and generalize them on the aspects in which weaknesses appeared, which leads to improving the performance of the economic unit by reaching the best levels of efficiency and effectiveness in the exercise of its various activities, and therefore performance audit enjoys a high degree of importance for all countries alike and its importance is increasing in developing countries, especially those that strive to accelerate the development process through the optimal use of their resources, despite the problems they suffer from, whether they are technical, lack of information, scarcity of capital, as well as the lack of efficient organization (Kareem et al, 2022).

Therefore, the establishment of management performance audit, if the conditions are met, will improve the performance of executive bodies, the level of financial supervision; to be promoted to financial and operational, to be effective in the development of other sub systems such as budgeting, accounting, reporting and performance evaluation, and to change the ruling approach of supreme audit institutions to perform a supervisory role in addition to its advisory role in performance evaluation use executive institutions (Azer and Habashi, 2016; Babajani, 2011). in other words, it can be inferred that performance audits have an influence on corporate value (Sinaga et al, 2023).

Indeed, the management performance auditing will bring the necessary results when performance based budgeting; be done, because the principles and criteria of performance based budgeting are such that, in addition to creating the possibility of effective monitoring in the execution of operations, it provides the background for the realization or measurement of the basic components of performance audit (Mahmoudkhani and Ahmadi, 2017).

Today, in the public sector supervisory systems, especially in developed countries, in order to implement the performance audit system and create integration between performance based budgeting and

performance audit from models such as balanced scorecard, organizational excellence model; total quality management (TQM) and comprehensive performance measurement index (Balance Score Card (BSC)) are used. the total quality management and growth measurement index has become the company's performance criteria and thus provides the possibility of creating an accurate evaluation in all dimensions. budgeting systems based on quality indicators, such as performance based budgeting, are systems that seek to replace management performance audits instead of compliance audits (Rahnamy-Roodposhti and Zandi, 2019).

Indeed, performance based budgeting is part of a wider set of reforms that aim to change the behaviour of key players in the budget process, shifting the focus

away from inputs (how much funding will I receive?) towards measurable results (what can be achieved with the funding I received?). countries have reported a number of benefits of using performance budgeting, including more efficient allocation of funds and a better understanding of government priorities, as well as greater transparency and accountability throughout the budget process (OECD, 2023).

The measure of how government agencies achieve results is one of the requirements of management performance audit; because, annual financial resources are allocated according to the amount of achievement of the executive bodies to the results and the volume of their success (Rahnamy-Roodposhti and Zandi, 2019).

**Table 4: Similarities and differences of Management performance auditing and performance based budgeting**

Factor	Management performance auditing	Performance based budgeting
Management paradigm	Performance and result oriented management	Performance and result oriented management
Planning horizon	Long term	Long term
operational period	yearly	yearly
Costing system	Management/costing based activity	Management/costing based activity
Type of execution system	Systematic and realistic	Strategic and forward looking
output	Management performance audit report	Budget bill
The producer	Parliament (Supreme Audit Institutions: Supreme Audit Court)- other auditors	Government -government agencies
The macro unit of analysis	Plan	Plan
Budgeting process	Evaluation- Budget liquidation	Preparation - Compilation and Approval
Control consequences	Accountability- measuring quality indicators	Transparency- Continuous improvement and Service quality

(source: Mahmoudkhani and Ahmadi, 2017; Amiri et al., 2013)

## Research methodology

In terms of the method of analysis and the method of presenting the results, this research is considered to be mainly descriptive in the background study section, and in the question section, it is considered an analytical type of research. In terms of the time scale, it is cross sectional (as opposed to time series and panel data), because; Searching and exploring takes place at a point in time. In terms of the purpose of the research, it is of an applied developmental type; finally, by examining the obtained results, a model for financial planning based on management performance audit is predicted and presented.

Therefore, since the issue of management performance audit and financial planning has not been comprehensively publicized in the public sector of Iran, in the first step; In order to identify the

influencing factors on this pattern, by conducting library studies and examining the theoretical foundations and research background, (5) dimensions, (13) components and (67) indicators were identified. Then, in order to obtain the general theoretical consensus of the country's public sector experts (auditors, supervisors, accountants, managers, etc.), a questionnaire was designed and semi-structured interviews were conducted with experts based on the Fuzzy Delphi technique (FDM); The indicators were studied from the point of view of acceptance and screening.

one of the most important features of this technique compared to the Delphi method is that this technique is a suitable tool to deal with ambiguity and uncertainty in the decision-making process (Habibi et al., 2015).

**Statistical population, statistical sample and sampling method**

- **Statistical population:** in determining the statistical population, in addition to describing and examining organizations and persons who are faced with objective cases of performance audit. In order to pay attention to the performance of financial planning, managers of government executive bodies and public non-government institutions will also be investigated. Therefore, the statistical population of this research includes auditors of the Supreme Audit Court, auditors of the Audit Organization and the Association of certified public accountants, accountants and financial managers of the executive bodies of the public sector, expert of the Planning and budget organization, expert of the treasury as well as other experts in the field of performance auditing who have been very close to the subject and encountered it in examples of their work,
- **Sampling method:** In this research, purposeful sampling based on the snowball technique is used. The concept of purposive sampling is used in qualitative research, which means that the researcher selects the people and the place of study for the study, which can be effective in

understanding the research problem and the central phenomenon of the study. In this sampling strategy, decisions are made in connection with the following cases who and what should be sampled? What type of sampling should be used? And how many people or locations should be sampled? in addition to this, the researcher should pay attention to whether his sampling is consistent with the information required for his research approach or not (Marshall and Rossman, 2006),

- **Sample size:** Considering that in this research, Fuzzy Delphi technique is used for data analysis, therefore; An important point in implementing the Delphi technique is the size of the panel of experts. There is no consensus regarding the required panel size for traditional Delphi and fuzzy Delphi (Mullen, 2003). But the usual size of the panel of experts is 8 to 12 people (Cavalli-Sforza and Ortolano, 1984) or between 10 and 18 people (Okoli and Pawlowski, 2004). Therefore, according to the statistical community of the research, the minimum sample size in order to achieve theoretical saturation in the subject of the research; It includes 18 people with the composition presented in the table below:

**Table 5: Sample size**

Expert	Auditors of the Supreme Audit Court	Expert of the Planning and budget organization	Expert of the treasury	Accountants and financial managers of the executive bodies of the public sector	Auditors of the Audit Organization and the Iacpa	Academic professors and experts
Size	3	3	3	3	3	3

**Data collection tool**

Data collection is done using two library and field methods. In a library, it was done by examining the theoretical foundations and research background of the factors affecting the presentation of the audit-based financial planning model. These factors include (5) dimensions, (13) components and (67) indicators.

since the issue of management performance audit and financial planning in Iran's public sector has not been found comprehensively, then in the first step; after identifying the influencing factors in the study section, in the field section. using semi-structured

interviews with the desired experts with the aim of helping to identify and introduce experts who are experts in this field or operationally. opinions of experts will be discussed and asked for opinions. In the semi-structured interview, the findings are preceded by the interview and all the respondents are asked the same questions; But they are free to answer in any way they want. How come the interview guide does not mention the details of the interview, the manner of expression and how they are. These items are determined in the interview process (Delavar, 2004; Babi, 2005). in general, based on the studies of the theoretical foundations and the identification of the

influencing factors as suggestions of the researcher, it has been used to ask the opinion of experts through Fuzzy Delphi. In using the Delphi technique, two types of qualitative research should be distinguished. Some studies are exploratory and innovative. In such studies, researchers seek to identify the most basic elements of a phenomenon. Some studies are also carried out with the purpose of prediction, in which the Fuzzy Delphi technique implementation algorithm is proposed in each case based on previous research (Habibi et al., 2015).

Therefore, in the current study, the Fuzzy Delphi method is used to confirm and screen the identified indicators. One of the major advantages of the Fuzzy Delphi technique compared to the traditional Delphi technique for screening criteria is that one stage (round) can be used to summarize and sort the cases.

**Research Goals and Questions**

According to the main goal of the current research, including "providing a financial planning model based on management performance audit"; The special objectives of the research are as follows:

- 1) Identifying the dimensions, components and indicators of the compliance of the financial planning area with the management performance audit,
- 2) determining the influencing factors on the compliance of the financial planning area with the management performance audit.

Due to the fact that this research is considered to be mainly descriptive in terms of analysis method and method of presentation of results, and analytical research in question section. Therefore, in order to achieve the goals of the research, the following questions were raised:

- 1) What are the dimensions, components and indicators of compliance of financial planning with management performance audit?
- 2) What factors affect the compliance of financial planning with management performance audit?

**Data Analysis**

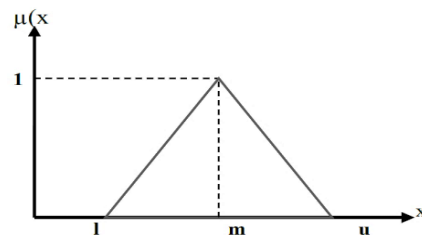
Identifying the systematic structure of data collection using a qualitative method is an important matter that should be considered by the researcher before any action for data collection. Creswell (2019) expresses

the necessary activities in this direction in a conceptual map. According to this conceptual map, data collection activities begin with determining the location of the interview, determining the location of the interviewees, and end with data storage. Therefore, in this research, based on the semi-structured interview method using the Fuzzy Delphi technique, the influencing factors were identified on the presentation of the financial planning model based on performance auditing. In the Fuzzy Delphi method, membership functions are used to show the opinion of the experts. The advantage of the Fuzzy Delphi method is to pay attention to each of the opinions and integrate them to achieve group agreement. The membership function of a triangular fuzzy number is as follows:

Relation 1- membership function of a triangular fuzzy number

$$u_M(x) = \begin{cases} \frac{x-l}{m-l} & l \leq x \leq m \\ \frac{u-x}{u-m} & m \leq x \leq u \\ 0 & otherwise \end{cases}$$

In this function, triangular fuzzy number is shown. Triangular fuzzy number is a fuzzy number which is represented by three real numbers as  $F=(l,m,u)$ . The upper bound denoted by ( $u$ ) is the maximum value of the fuzzy number. The lower bound indicated by ( $l$ ) is the minimum value of the fuzzy number ( $F$ ). ( $m$ ) is the most probable value of a fuzzy number. The triangular fuzzy number  $F=(l,m,u)$  is shown geometrically in figure 1:



**Figure 1: Triangular fuzzy number**  
(source: Alharbi et al., 2021)

The Fuzzy Delphi technique is a combination of the traditional Delphi method and the data analysis of each stage using the definitions of fuzzy set theory. The algorithm of the fuzzy Delphi technique includes the

following steps (Alharbi et al., 2021; Habibi et al., 2015):

$$\text{Crisp} = \frac{a + b + c}{3}$$

Therefore, based on this algorithm; A questionnaire containing (67) indicators affecting the presentation of the financial planning model based on the management performance audit was given to the members of the

expert group, and they were asked to give their opinion about each indicator in the form of verbal variables of the (7) degree spectrum listed in the questionnaire.

In the next step, to fuzzify the numbers; using Excel (2016); Based on the answers of the members of the expert group, the number of answers to each rank of the (7) degree spectrum for each index was calculated according to table (6) and was considered as a fuzzy number for the limits below each rank.



Diagram 1: Phases of fuzzy Delphi technique (source: Alharbi et al., 2021; Habibi et al., 2015)

Table 6: Quantification of experts' opinions in the form of fuzzy numbers (source: research findings)

Number of responses with a																					Indicators
complete high degree			Very high degree			high degree			Medium degree			low degree			very low degree			complete low degree			
u	m	l	u	m	l	u	m	l	u	m	l	u	m	l	u	m	l	u	m	l	
1	1	0.9	1	0.9	0.7	0.9	0.7	0.5	0.7	0.5	0.3	0.5	0.3	0.1	0.3	0.1	0	0.1	0	0	67
5	5	5	8	8	8	4	4	4	1	1	1	0	0	0	0	0	0	0	0	0	
5	5	5	9	9	9	3	3	3	0	0	0	1	1	1	0	0	0	0	0	0	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4	4	4	8	8	8	0	0	0	3	3	3	3	3	3	0	0	0	0	0	0	

After this stage, based on the relations (2), (3) and (4), the fuzzy average of scores (fuzzy numbers) was obtained, and finally, according to the relation (5), the definite number it was calculated from fuzzy averages.

Relation 2: 
$$a_j = \sum \frac{a_{ij}}{n}$$

Relation 3: 
$$b_j = \sum \frac{b_{ij}}{n}$$

Relation 4: 
$$c_j = \sum \frac{c_{ij}}{n}$$

In the above relationships, index (i) refers to the expert, index (j) refers to the decision-making index and (n) refers to the number of experts. Also, the defused value of the average fuzzy number is

obtained from the following relationship (Rahadari and Nasr, 2016).

The results of all fuzzification calculations according to fuzzy Delphi method show that considering that the absolute score of all research indicators; It is more than the threshold number considered in this research, i.e. (0.7). So all the indicators were confirmed.

**Table 7: Fuzzy Delphi technique analysis of influencing factors**

Accept or reject the indicator	definite number (non-fuzzy number)	Fuzzy average			Index code	row
Accept	0.849	0.964	0.872	0.711	A1	1
Accept	0.846	0.956	0.869	0.714	A2	2
...	...	...	...	...	...	...
Accept	0.744	0.875	0.756	0.711	E9	67

(source: research findings)

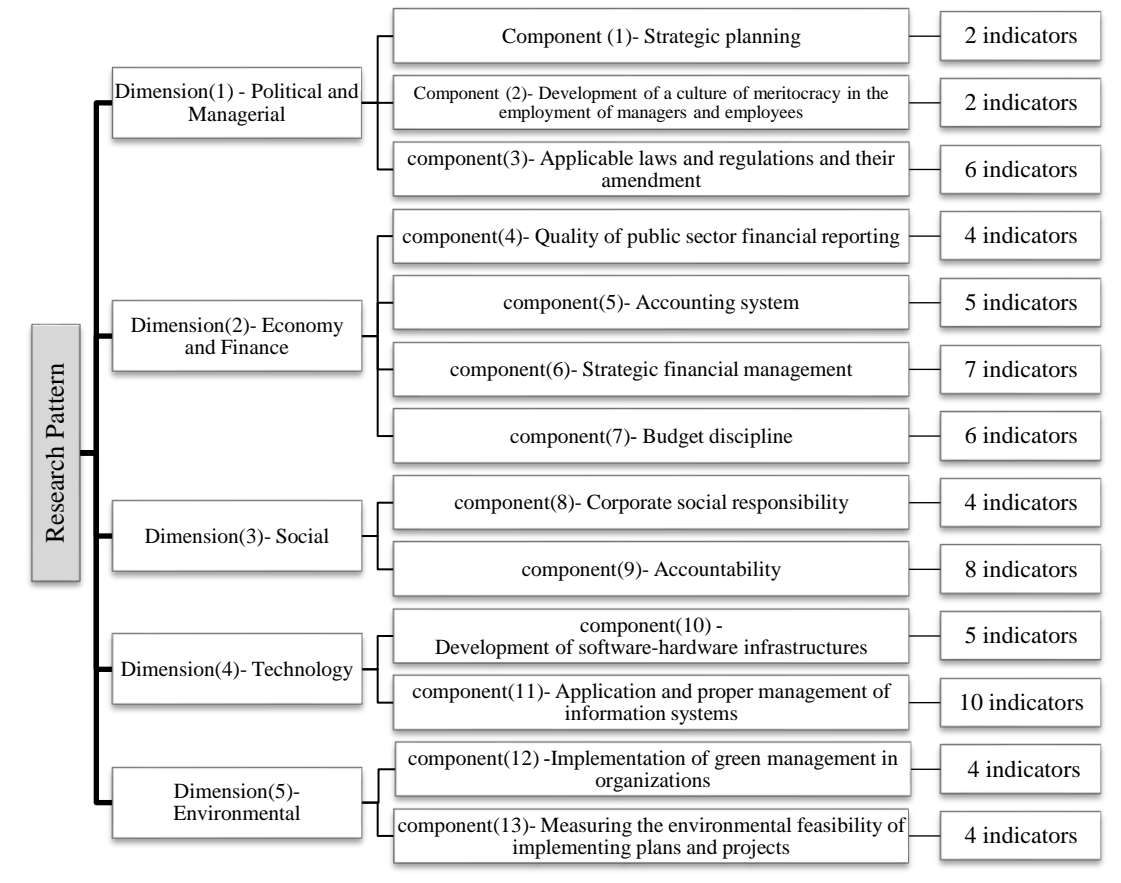
## Results

Due to the fact that this research is presented in terms of the method of analysis and analysis, it is considered to be an analytical type of research in the descriptive Literature review study section and in the question section. To achieve the research, the questions asked.

- In response to the first question, by using library studies and examining the theoretical foundations and research background, the factors affecting the presentation of the financial planning model based on management performance audit were identified. These factors include (5) dimensions, (13) components and (67) indicators.
- In response to the second question, since the topic of management performance audit and financial planning has not been comprehensively publicized in the public sector of Iran, therefore; In the first step; After identifying the influencing factors in the library study section, in the field section; using semi-structured interviews with the experts in order to help identify and introduce experts who are experts in this field or have worked operationally; The views of the experts will be taken and asked for opinions. At this stage, a questionnaire including (67) indicators was given to the members of the expert group. In order to confirm and screen the indicators, the answers of the experts were analyzed using the fuzzy Delphi technique. Considering that the absolute score of all research indicators; It is more than the threshold number considered in this research, i.e.(0.7). so all the indicators were accepted.

Therefore, According to research findings; Components such as the development of a culture of meritocracy in the employment of managers and employees, strategic planning, fulfilling corporate social responsibility, accountability, development of software-hardware infrastructures and budget discipline are among the most effective factors for planning. Finance and performance of operational

accountability are placed in the executive bodies of the public sector, and other components, including strategic financial management and the implementation of green management in organizations, are allocated to the lower classes. Therefore, in diagram (2) of the research model which is designed and presented according to the research findings; It shows the dimensions, components and indicators affecting the adapting of public sector financial planning (operational accountability or performance based budgeting) with management performance audit.



**Diagram 2: Research Pattern**  
(source: Research findings)

### Discussion and Conclusions

In a parliamentary democracy, accountability is a salient concept. the legislature holds the ministers accountable to citizens (Nesbakk & Kuruppu,2018; Power,1994). accountability incorporates processes embedded in conditions that may enable certain outcomes and constrain others. these processes offer a platform and opportunities within a social space for influencing government (Cordery et al., 2023). in fact, management and officials entrusted with public resources are responsible for performing public duties and providing services to people in an effective, efficient, economy, ethical and fair manner within the framework of the legal boundaries of the government's special program (GAO, 2021). ethical rules indicate the behavior, responsibility of profession members towards society, each other and third parties. Observation of these principles increases social capital

responsibility level and individual responsiveness (Zand et al., 2023).

In this process of accountability,"doing an audit seems as natural and necessary as the existence of the police in the society appears to be important"(Nesbakk & Kuruppu, 2018).at any organisation, auditing plays a pivotal role in shedding light on whether malpractices have occurred in the process of making decisions and deploying resources (Grossi et al., 2023). external audit reviews show how the government has used public resources to provide services to citizens, although it may not reflect the results desired by public respondents due to insufficient attention to operational issues (Nesbakk & Kuruppu, 2018). role of independent public auditors in the architecture, maintenance, and sustenance of accountability in the intersection of sustainable development and democratic institutions at a country level is crucial.

hence, public audit are vital to realize the potential for meaningful deliberations within contextual conditions enabling accountability (Cordery et al., 2023).

in other words, Audit, as an active system in the audit process, examines and evaluates the financial and non-financial information of the reports presented at the beginning of the response process, and presents the report containing the comments to the representatives of the right holders to provide them with a basis for judgment. to be The executive authorities of large public sector institutions are responsible for accountability from various aspects regarding the consumption of public financial and economic resources, therefore, they are obliged to prepare reports according to the type and levels of accountability to enter the accountability process and for consideration and evaluation and giving comments to the selected auditors. respondents should provide. in such a situation, the audit system must have the necessary capabilities to provide the required services (Babajani et al., 2018).

Nevertheless, according to the new public management trend, government auditors focus more on results (Nesbakk & Kuruppu, 2018). indeed, in modern public management; the main axis; the study of administrative reforms is in the realm of public sector and public administration (Kurdestani & Fatahi, 2021).

The most obvious feature of modern public management, as well as modern financial reporting in the public sector, is the emphasis on effectiveness, efficiency and economy in the consumption or use of public resources, which is the same direction as the content concept of management performance audit. this management model uses a set of techniques and strategies that, while improving the performance level of public sector institutions, improve the ability and capabilities of these institutions to achieve results (Majbouri-Yazidi et al., 2017). however, ensuring accountability and transparency, defining clear roles and responsibilities, and improving scrutiny and public access to performance information require significant effort and time (OECD, 2023).

In recent years, the focus and scope of many public and private sector audits have undergone changes and it is stated that due to the shortcomings of financial statements to ensure the responsiveness of management information needs, managers in the government and private sectors will need more

information in order to evaluate and judge the quality of operations and operational progress (Rahnamy-Roodposhti & Zandi, 2019). evaluation is an activity designed in the policymaking process and is one of the steps taken to judge the impact of government policies or programs. the new public policy approach emphasizes focusing on performance oriented public affairs management from a citizens' perspective and ultimately through accountability to citizens (Abiri, 2022). as a result, the creation of such fields by the new public management; there will be a significant increase in the need for management performance audit techniques to evaluate effectiveness, efficiency and economy (Rahnamy-Roodposhti & Zandi, 2019).

On this basis, the European Organization of Supreme Audit Institutions (EUROSAI) and its members as a basic measure following the new public management process. The answer to the auditors' focus on the concepts of effectiveness, efficiency, economy and strengthening of rationality in the government sector based on the implementation of management audits has been done (Jeppesen et al., 2017). The performance audit plays an essential role in ensuring the sustainability and the accountability of public sector entities (Dragusin et al., 2021). indeed, Performance audits can provide an overview that holds agents to account and reveals things that traditionally have not been possible (Cordery et al., 2023).

The requirement and necessity that every organization needs to know how close or deviant its plans are to the predetermined goals and that this organization uses minimal resources in reaching the assigned goals or resources are not important to them, is in the realm of management performance audit. in fact, the answer to such a question, which implies the minimum guarantee for continuous organizational improvement, should be said that the realization of this goal is possible only by auditing the performance of management. Therefore, previous audit services; little attention has been paid to the benefits of long term planning, maximum use of employees' abilities, and evaluation of management methods and performance. in response to the need to solve this gap, performance audit has been created as one of the management tools. management performance audit because it is designed to observe how operations are carried out, evaluate the efficiency of activities, controls and assure the management in relation to compliance with policies and methods, control effective plans and goals, review

new opinions, new developments and determining the usefulness of the activities of public sector institutions at all levels has been in the service of management (Davodi et al., 2018).

Although the implementation of this audit approach in different countries has led to controversial disputes (Funnel, 2015), which may have unwanted consequences, which The management performance audit does not lead to the accountability of the government to the parliament and citizens as much as it is expected. Therefore, at times; increasing audit controls of management performance will lead to its inefficiency and the pressure of accountability, especially in the case that people are audited unfairly. Therefore, only when in any country; transparency becomes a norm or custom; It can be expected that the auditees will not show negative reactions to being audited (Nesbakk and Kuruppu, 2018).

According to the European Court of Auditors Management Performance Audit Guideline (2017), the purpose of management performance audit is to conduct quality audits and improve the professional competence of auditors in this field. in other words, the concept of this guideline is based on responding to the needs of auditors and managers in line with how to audit the performance of management, planning, implementation and reporting (Dragusin et al., 2021). in addition, the UN's report on "Our Common Future" has underscored the need of undertaking performance audit to reveal what has been done by individual nations to assure the sustainable consumption of renewable and nonrenewable resources. similarly, as the sustainable development goals (SDGs) anchored on the principle of leaving none behind focus their attention on wellbeing of the present generation and future generations, national SAIs should perform additional audit examinations to report whether the political executive and the bureaucracy make authentic efforts to attain the SDGs prioritised by the government (Grossi et al., 2023).

In fact, the management performance audit in an effort to improve the governance and management of public institutions (Marthin & Gamayini, 2021) and accountability for the effective way of spending the budget for public organizations (Antipova & Russia, 2019), is the optimal accountability of the public sector. it strengthens and provides suggestions that can strengthen the effectiveness of the organization's areas and help the management in the desired use of

resources and obtaining effective results. Also, performance audit; it focuses management broadly on those things it is trying to do (Brati et al., 2022).

The operational accountability (planning or performance based budgeting) obliges the government and other public sector institutions to submit reports through which the right holders can be informed about the extent and achievement of operational goals such as effectiveness, the efficiency, supply and consumption of the budget in order to achieve the relevant goals, and provide information about whether the realization of these goals can be predicted in the future (Nasseri and Nik-Andish, 2015).

Using performance information, which is the center of performance based budgeting; it leads to the development of political discussions and decision making, informing decision makers in all stages of the budgeting process, increasing accountability through strengthening communication and transparency, improving public services and further promoting public awareness (Bahadri et al., 2019; Hejal Morabi, 2019). therefor, performance information (goals, outcomes, targets, indicators, benchmarks) should be structured in a logical and clear manner, where performance indicators clearly measure the progress towards achieving certain goals and outcomes. performance information should be benchmarked towards high-level objectives that reflect the priorities of the government. setting a limit on the number of objectives and indicators is necessary as it helps to avoid the overflow of data, which can hinder the usefulness of performance budgeting. hence, ensuring good quality of performance information is important for the integrity of the performance budgeting framework. In order to promote autonomy and accountability of spending entities, it is important that they are responsible for the information they produce and present (OECD, 2023).

In addition, improving the monitoring system, promoting accountability, developing better use of resources, increasing productivity, and providing recommendations for correcting deficiencies and irregularities are other main goals of performance auditing (Marthin Gamayini, 2021). The effectiveness of the management performance audit in the public sector refers to the review of the program, performance, operations or systems and management approaches of government organizations or the public sector; to evaluate based on that whether the business

unit is effective, efficient and economy in using budget resources or not? (Antipova, 2019).

In other words, without suitable monitoring tools, it is not possible to measure the performance quality of government institutions. all executive bodies need to measure the impact of various events on the resources under their control. in order for an organization to perform well and be far from risks, it needs proper and efficient evaluation. on the other hand, public sector managers must be accountable for their performance and are also responsible for ensuring the accurate implementation of the internal control system and its disclosure in reports. therefore, in order to fulfill the accountability of managers and create information transparency and establish financial order and discipline and fight against economic and financial corruption; it is necessary to the performance audit of government institutions and organizations, achieve transparency and increase the operational and financial accountability capacity with strong and effective reporting (Davoudi et al., 2018). elected and appointed officials in the public sector and especially in the government are responsible for complying with the rules and regulations regarding financial acquisition and its correct use in the legal place and with the restrictions governing the annual budget (Nasseri et al., 2016; Babajani, 2009).

Therefore, the implementation of management performance audit is done by evaluating the adoption and implementation of decisions by legislators and government officials from the point of view of effectiveness, efficiency and economy as well as by examining the level of awareness and understanding of taxpayers and citizens regarding the value of money. also, management performance audit can increase transparency by paying attention to legislators, government officials, taxpayers and other financial sources and targeting them based on government and media policies (insight into management and the results of various government activities) (D-Parker, 2019; INTOSAI (3910) Guide, 2019). indeed, in the vive point of new public management (NPM) and Managerial logic; performance audit focus on focus on output and ad hoc efficiency and financial performance control (Grossi, et al. 2023).

Hence, the establishment of management performance audit, if the conditions are met, will improve the performance of executive bodies, the level of financial supervision; to be promoted to financial

and operational, to be effective in the development of other sub systems such as budgeting, accounting, reporting and performance evaluation, and to change the ruling approach of higher auditing institutions, in addition to performing a supervisory role, from its advisory role in evaluating the performance of the institution (Azer and Habashi, 2016; Babajani, 2009).

According to the research findings, one of the most important factors influencing the presentation of the financial planning model based on the management performance audit and the proper realization of the responsibility of accountability of the executive bodies of the public sector is paying attention to the dimensions including "Political and Managerial", "Social" & "Technological". these dimensions are compared to other research dimensions (i.e. Economy and Finance, and Enviromental), as the most important elements in fulfilling of the operational accountability of the executive bodies of the public sector and the realization of correct, accurate and financial planning.

## Research Proposals

According to research findings in the field of dimensions of political and managerial, social and technological is suggested that the legislative, regulatory and executive institutions of the public sector, such Supreme Audit Court, Ministry of Economic Affairs and Finance, Planning and Budget Organization, the audit organization and other executive bodies to implementation financial planning and operational accountability, carry out extensive measures in the following areas:

- 1) Employing managers and employees in the executive bodies of the public sector based on meeting the general and specific legal conditions,
- 2) Determining departmental, inter-departmental and extra-departmental long term, mid term and short term goals, missions and tasks in the executive bodies of the public sector,
- 3) Proportionate changes in the goals, missions and tasks of the executive bodies of the public sector with the size and nature of the government's macro plans,
- 4) Reporting the triple bottom line (three dimensional view) of social development, economic stability and environmental sustainability by the executive bodies of the

- public sector in order to maintain and develop the social sustainability of the organization,
- 5) Full and timely presentation of the text of contracts for medium and major transactions of executive bodies in the government's electronic procurement system,
  - 6) Infrastructure investments in the fields of communication technology in order to accelerate the process of establishing integrated information systems in accordance with the organizational strategy of public sector executive bodies,
  - 7) Comparison between the budget figures and the performance of the executive bodies of the public sector and reducing the discrepancy between them,
  - 8) Forming specialized working groups in the executive bodies of the public sector and holding question and answer sessions of their managers with the mass media to follow up and solve the problems of the beneficiaries,
  - 9) Request for electronic money from the executive bodies of the public sector related to deposit, general and special funds through the country's electronic treasury system,
  - 10) Carrying out the plans and projects of the executive bodies of the public sector based on the defined scale of different geographical areas,
  - 11) Approving clear and explicit laws and regulations in the field of auditing management performance,
  - 12) Compilation of specialized instructions on how to carry out environmental impact assessment studies of various plans and projects,
  - 13) Registration of quarterly information of all debts and claims of the executive bodies of the public sector in the management system of public debts and financial relations of the government,
  - 14) Increasing the moral credibility of the executive bodies of the public sector in the society by carrying out fair and transparent activities that go beyond their legal duties and are expected and needed by the society,
  - 15) Increasing the transparency of MPs' votes regarding legal plans and bills,
  - 16) Adherence to the laws and regulations by the executive bodies of the public sector by

reducing the clauses of cases of non compliance with the laws and regulations, preventive measures and internal control weaknesses in the audit report of the Supreme Audit Court regarding their performance.

- 17) Increasing the volume of electronic exchanges of information between the executive bodies of the public sector and responding electronically to the inquiries needed by the beneficiaries on the platform of the national information network and for free.

### **Proposals for next researches**

In this research, the executive bodies of the public sector in a comprehensive, general and cross-sectoral manner, and without separating into different and diverse areas of this sector, from ministries, organizations and institutions and universities and other public sector institutions have been studied. considering the specific nature of each of the public sector areas, It is suggested that this research should be investigated in each of the public sector institutions and its findings should be investigated in order to achieve results with higher generalizability,

In this research, the "law" element was considered as one of the sub-components of the "political and managerial" dimension and has an effect on the compliance of performance audit with planning and decision-making areas. It is expected to separate this element from the "political and managerial" dimension and consider it as an independent dimension; lead to more accurate findings and more operational mechanisms,

Considering the spatial extent of the research in the public sector of Iran, it is not possible to generalize the research findings to the private sector due to the specific nature of that sector, therefore; It is suggested that this research be investigated in the public sector institutions as well,

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