Abstract
Purpose – The purpose of this paper is to examine the reason for the failure of implementing performance-based budgeting (PBB) at Iranian public universities and research institutes (PURI). This examination focuses on the actors participating in the budget processes and their perceptions.
Design/methodology/approach – The study uses grounded theory and employs deep semi-structured interviews of budget preparers at Iranian PURI.
Findings – The results indicate a loose coupling between perceived and regulated budgeting process. This leads to budgetary slack as a barrier for authentic information flow and indeed PBB implementation. In the analysis of the results, the authors suggest some ways to improve the current situation of the budgeting processes at Iranian PURI.
Practical implications – Public organizations that desire to transform their budgeting system need to consider their actors’ perceptions regarding the budgeting process. By explicitly considering their perceptions the organization may be able to solve any loose coupling as a result of internal, external and behavioral conditions.
Originality/value – This research examines issues that arise in the transformation of organizational processes. The focus on budget processes is critical for organizations which receive most, if not all, of their operational funds from a central authority. This research highlights the role of budget actors’ perceptions in transforming the budgeting process. An important result of this analysis is documenting the existence of loose coupling in the current budgeting process at Iranian PURI. This loose coupling results in slack creation and restricts the implementation of a PBB system. Additionally, this loose coupling limits the flow of authentic information.
Keywords Public budgeting, Budget negotiation, Budget slack, Loose coupling, Performance-based budgeting
Paper type Research paper

1. Introduction
Universities and other research institutes comprise the science, research and technology sector of Iran. These institutions have the primary responsibility for developing human resources, supporting science and technology development and fostering sustainable home-grown development (Sarkar et al., 2014). As such these organizations are crucial for Iran’s societal improvement. Public universities and research institutes (hereafter PURI) are primarily regulated and monitored by the Ministry of Science, Research and Technology (hereafter, MSRT) and their financial resources come primarily from the public/governmental budget in Iran. Recently, the PURI budgeting process has come under increased scrutiny, as their
budgeting method needs to change from traditional to performance-based budgeting (hereafter PBB) in accordance with Iran’s fourth to sixth Five-Year Development Plans[1] (hereafter, FYDP). Additionally, the FYDP requires PURI to calculate the cost of standard training and research (similar to the relative funding method in Australian universities) Moll and Hoque (2011), in order to obtain funds from the government. While PBB has been “required” for PURI for ten years, our investigation into its budgeting process indicates that the traditional incremental budgeting method is still employed. Some researchers have discussed the failure to implement PBB in Iran (for instance Amiri et al., 2010; Keshavarzi et al., 2014; Arab Salehi and Hatampoor, 2015), and determined whether the required infrastructure changes to implement a PBB system are in place. However, these studies have not been able to conclude the reason for lack of implementation of PBB, from its actors’ point of view.

Reviewing PBB research illustrates that there are different challenges in PBB implementation (Shaw, 2016). These challenges are not just limited to infrastructures and technical matters, but also cover issues related to the culture of budget actors (Schick, 2014). Furthermore, it has been suggested that executive organizations should be surveyed in order to understand the reason for the failure of PBB implementation (Schick, 2014; Shaw, 2016). The budgeting literature also suggests that social and humanistic aspects of budgeting needs to be consider before developing theories of budgeting processes (Gibran and Sekwat, 2009; Neuby, 1997; Ahrens and Chapman, 2006). In addition, recent studies emphasize that budget actors have an important impact on budgeting changes (Covaleski and Dirsmith, 1983, 1988; Moll and Hoque, 2011; Ozdil and Hoque, 2017; Covaleski et al., 2013). Indeed, the failure in PBB implementation from the perspective of budget preparers’ perceptions is a gap in PBB literature, and therefore is considered in this research.

The focus of this research is on PURI’s budget actors, as they play a central role in providing performance information (Schick, 2014; Shaw, 2016) as executive organizations. Similarly, Tomkins and Groves (1983) focused on budget actors, and argued that accounting research needs to understand practitioner’s challenges in order to reach findings applicable to practice. To address PURI’s practitioner challenges, this research considers the budget as a social construct (Berger and Luckmann, 1967), i.e. the budgeting process is a social phenomenon which is produced and reproduced via its actors’ perception. Budgeting research also requires a thorough understanding of the actors who are responsible for preparing the budget (Covaleski et al., 2017).

In this research we clarify how the public budget preparers at PURI understand the budget and identify the consequences of this perception on PBB implementation. The data for our investigation were obtained through deep semi-structured interviews with actors involved in the preparation of PURI’s budgets. The results reveal a noticeable loose coupling (Goddard and Mkasiwa, 2016; Perez and Robson, 1999) between actions required for PBB implementation and the current budgeting process. Our results clarify that budgeting is perceived mainly as a negotiation process by budget actors at PURI and forms their budgeting routines. This explains one of the impediments to transform the budgeting processes in the Iranian PURI. Our results also show “slack” creation in PURI budgets as a consequence of actors’ current perceptions which are based on a loose coupling in the process.

This study makes contributions to the budgeting literature in a few ways. First, to our knowledge this is the first study about the effect of budget actors’ perception on PBB implementation. The results illustrate a loose coupling between budget actors’ perceptions and regulated procedures, and show that budget changes are not only affected by external and technical factors, but also by budget actors’ perceptions of the reality of budgeting in their organizations. Second, similar to previous experimental studies (Fisher, Frederickson and Peffer, 2002; Fisher et al., 2000; Arnold and Gillenkirch, 2015) regarding negotiation in corporate budgeting, this research uses qualitative methods and provides evidence of the
linkage between negotiation and slack creation in public sector budgeting. Finally, our results imply that slack can be considered as an obstacle for PBB implementation, because it is an impediment for authentic information flow; a primary requirement for PBB (Schick, 2014; Shaw, 2016).

The remainder of this paper is organized as follows. First the context of the study, the budgeting process and actors at PURI, is presented. Following this, the literature on PBB as well as budgeting from social perspective is reviewed as a basis for our research questions. The fourth section presents research methodology. The fifth section discusses our results. Finally, the findings are discussed with implications for future practice.

2. PURI budgeting background: organizations and actors

PURI in Iran primarily work under the supervision of MSRT and Ministry of Health and Medical Education. These institutions use public funds provided in the annual public budget. The survey of recent budget documents indicates that in recent years, about 2.5 percent of the country’s budget went to PURI, and nearly half of this amount belongs to institutions which operate under MSRT’s supervisory. It is these institutions which is the focus of this study.

The budget structure (usage and sources of resources (Schick, 1985)) at PURI in Iran can be determined using their budget documents. A review of PURI budget documents illustrates that the use of resources at PURI is categorized into seven different categories: compensation for employee services, goods and services usage, property and assets costs, subsidies, grants, social welfare services and other expenses. PURI budget sources include governmental funds (more than 80 percent in 2017 and 2018), and private revenue from education or research. All resources are allocated to PURI according to the annual public budget. Figure 1 displays the process in which this budget is prepared and proposed. The universities and research institutes are required by the FYDP to prepare their budgets using PBB procedures. However, the budgeting process at PURI still uses some form of incremental budgeting based on last year’s expenses and expenditures.

At PURI, the budgeting process is initiated by budget circulars which are developed and published yearly by the Management and Planning Organization[2] (hereafter MPO) (Jalali and Gal, 2018). Using these circulars, executive organizations including PURI, prepare and send the required information to MSRT. This includes budgetary information based on the number of students in each budget department within each university and research institute. Using the information about the number of students and research proposals,
MSRT calculates the PURI’s budget. Then this information is transferred to the authorities of the MPO. Based on this information and MSRT’s proposed budget, MPO finalizes the budget reports. The process is presented in Figure 1.

In each step of the budgeting process, there are actors who are involved in budget preparation and their perceptions and actions can affect budgeting process. At PURI, budget experts in the department of planning and budgeting and the budget office provide information to the process. This information is effected by the director and the deputy of planning and budgeting department or the head of budget office depending on the organizations’ structure. The data for this research come from interviews with actors in PURI budgeting process, to understand how they perceive budgets as a social construct.

3. Literature review

3.1 PBB: implementation and difficulties

According to a general definition, when budget is prepared based on the output per unit it can be considered as PBB (Schick, 2007). Based on this, many governmental institutions employ a PBB system. On the other hand, a stricter definition of PBB requires a linkage between increases in budgeted expenditures with an increase in budgeted outputs. While some organizations can claim to adhere to this more strict definition, few countries can claim that they truly practice PBB (Schick, 2007, 2014).

Various countries indicate they are moving from traditional to rational budgeting. For instance, a performance-type approach was suggested in 1912 at US institutions of higher education and seriously followed after the 1950s (Borgia and Coyner, 1995). Although governments adopted various rational budgeting systems in USA after 1950s, the traditional budgeting practices still predominated even during the 1990s (Borgia and Coyner, 1995). Outside the USA other governments have also attempted to move toward PBB systems. The Government of Indonesia adopted “budget system based performance” in 2003 (Jatmiko Wahyu Prabowo et al., 2017). This was done to eliminate deficits which were deemed to be the result of traditional budgeting. China began its budget reform using standardized budgeting procedures and formats in 1999 (Liou, 2011). Finally, Ozdil and Hoque (2017) describe that Australian universities use performance-based funding.

While PBB is considered a desirable budgetary practice, it is difficult to put into practice (Schick, 2007). An investigation of five OECD countries by Shaw (2016) concluded that with few exceptions PBB has not been incorporated in budgeting procedures, and is just helpful in budgeting decisions. There are at least two reasons for this failure. First, implementation of PBB requires information on outputs. This is an important barrier in countries that lack performance measures and accrual systems (Schick, 2007). Second, in countries where PBB is supposed to be practiced, establishing PBB takes time due to its compulsory provisions and adjustments (Schick, 2014). Finally, the half century of experience on PBB implementation demonstrates that the budgeting systems cannot be transformed without cultural considerations (Schick, 2007). Therefore, it is important to study the issues related to PBB in a different context in order to understand how cultural differences in other countries impact PBB implementation.

Shaw (2016) emphasized that the initiatives to implement PBB is usually done through executive branches as a response to pressures from parliaments. In most cases, the performance information needs to be prepared by executive branch departments, and this is the area in which most countries have problems (Shaw, 2016). Also, in OECD countries, ministries and not central governments have the most important role in creating PBB infrastructures such as those that prepare performance information (Schick, 2014). The importance of the executive branch departments is the reason that we have chosen to investigate their role in the PURI budgeting process. The PBB literature suggests that PBB implementation challenges are not only infrastructures, but also cultural and related to
actors perception (Schick, 2014). Additionally, the literature indicates that concentration should be on executive organizations in order to find out the reasons for failure of PBB implementation (Shaw, 2016). Indeed, there is a gap in the research on the failure in PBB implementation from the perspective of budget actors’ perceptions.

3.2 Budgeting as a social phenomenon

An examination of the budgeting literature illustrates that budgeting is a topic which has attracted research from different perspectives. This variety is evident by referring to the multiple definitions which have been given to budgets and the budgeting process. Table I presents some of the perspectives on budgeting research.

Some budgeting research has focused on describing budgeting processes and outcomes, while other studies have attempted to develop normative theories of the budgeting process. Figure 2 provides a view of the distinction between normative and descriptive theories of the budgeting process. Normative theories tend to consider budgeting as a rational process (Rhee, 2009), which ignores the human side of budgeting (Grønhaug and Ims, 1991). In contrast, descriptive theories are more concerned with the factors that impact the budgeting process (Rhee, 2009), including individuals (Grønhaug and Ims, 1991), and the organizational environment (Gibran and Sekwat, 2009). From a decision theory perspective, budgeting is a choice among possible alternatives with respect to specific rules and principles of the organizations (Grønhaug and Ims, 1991). In this research we examine budgeting not as a normative process, but as a social phenomenon which is under internal and external pressures.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Researcher’s name</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Economic approach</td>
<td>Gonçalves (2014)</td>
<td>Budgeting is directly related to planning and controlling management’s activities. Hence, it is important to balance the revenues and expenses and allocate the resources in an efficient way in order to maximize the welfare.</td>
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<tr>
<td></td>
<td>Covaleski and Dirsmith (1986)</td>
<td>Budget is a tool to ease the process of resource allocation and consumption to achieve the organization goals.</td>
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<td></td>
<td>Buck (1920)</td>
<td>Budget as a control tool decreases the waste of resources, corruption and aberrance.</td>
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<td></td>
<td>Hofstede (1968)</td>
<td>Budget is a work program.</td>
</tr>
<tr>
<td></td>
<td>Gonçalves (2014)</td>
<td>A series of documents which contains some description of revenue and expenses of an institution which are in a close connection with achievement of special goals in a special time.</td>
</tr>
<tr>
<td>Political and power approach</td>
<td>Kelly and Rivenbark (2003)</td>
<td>Budget is an open system which is variable to show the public opinions and is a control tool which limits and eases the governmental intervention in public and private issues.</td>
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<td></td>
<td>Wildavsky (1964)</td>
<td>An effort to allocate financial resources through political processes for human goals.</td>
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<td></td>
<td>Covaleski and Dirsmith (1983)</td>
<td>Budget is a tool for control over mid-level and low-level activities of organization trough up to down side of information.</td>
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<tr>
<td></td>
<td>Covaleski and Dirsmith (1983)</td>
<td>Budget is a negotiation tool.</td>
</tr>
<tr>
<td></td>
<td>Schick (1966)</td>
<td>Budget is a tool for political purposes.</td>
</tr>
<tr>
<td></td>
<td>Covaleski and Dirsmith (1988b)</td>
<td>Budget negotiations are ways for expressing social expectation and changing the organizations.</td>
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<tr>
<td></td>
<td>Neuby (1997)</td>
<td>Budget is a social phenomenon with many social variables. There is a need to know it deeply before theorizing.</td>
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<tr>
<td></td>
<td>Gonçalves (2014)</td>
<td>Budget is prepared as a rule and misdemeanor leads to fine.</td>
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<tr>
<td></td>
<td>Fozzard (2001)</td>
<td>Budgeting is a tool for legitimate control of decision about government resource allocation. It is done by dividing the responsibility and authorization for control of allocation process.</td>
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</table>

Table I. Budgeting definition from three different perspectives.
Thus, we will look at budgeting as a social phenomenon that is produced and reproduced according to the actors’ perception.

As Markey (1926) states: “Social phenomena is considered as including all behaviour which influences or is influenced by organisms sufficiently alive to respond to one another” (p. 733). In this regard, Niskanen (1989) considers Wildavsky as the “Adam Smith” of the budget process, because of his attention to strategic interaction between actors involved in the budget process (Imbeau, 2006). Early interpretive accounting research (Hofstede, 1968; Argyris, 1952) as well as recent research (Ozdil and Hoque, 2017; Covaleski et al., 2013; Goddard, 2004; Moll and Hoque, 2011) also considered actor’s interactions. Gibran and Sekwat (2009) present a theory of public budgeting using open system theory, and conclude that the main reason for the lack of explanatory power of certain theories of budgeting processes is that they consider the process to be only instrumental and rational. The problem occurs when studies attend only to the “how” instead of “why” of the budgeting processes (Gibran and Sekwat, 2009). This is the reason that Neuby (1997) believes that the budgeting process should be viewed as a social phenomenon with many social variables, and requires a deep examination before theorizing about its processes. Ahrens and Chapman (2006) also argue that budgeting has various purposes beyond its role as a tool to support rational decision making, and could be viewed as a social phenomenon which gives legitimacy to the organization and state’s social values (Covaleski et al., 2013). Indeed, instead of considering budgeting as a neutral and technical process for planning and rational decision making, it can be studied as a piece of organizational, social and political reality that is constructed through social interactions (Perez and Robson, 1999). This perspective is the basis for our research, to gain a deep understanding of Iran’s PURI budgeting process from a social point of view. For this study the focus is less on how budgets are prepared, and more about describing and gaining a deep understanding of “why” certain budgeting processes are used at PURI in Iran. This understanding will help fill the literature gap on PBB implementation failures.

3.2.1 Actors in budgeting. From a social perspective, actors in the budgeting process are considered as effective and central factors (Covaleski et al., 2013) which show purposeful behavior (Grønhaug and Ims, 1991). From this perspective, budgeting cannot be discussed without its actors as they build and rebuild the social reality about budgeting as a social phenomenon (Covaleski et al., 2013). For instance, Ozdil and Hoque (2017), Moll and Hoque (2011) and Covaleski and Dirsmith (1988) argue that the budgeting participants have an important role in changes to the budgeting process. Covaleski and Dirsmith (1988) argue that the traditional budgeting procedures at universities are rejected by internal actors due to its inconsistency with the university’s objectives. Furthermore, Moll and Hoque (2011) expand on this rejection to include actors’ reactions to budgeting systems as they overestimate or underestimate portions of the proposed budget. The main emphasis of Moll and Hoque (2011) is the determinative role of budget actors and their perception of the budgeting system as part of a process which legitimizes the results, despite the potential rejections. Using this perspective this research surveys the role of actors’ perception on the failure in the PBB implementation.
In the next two sections, literature regarding negotiation and slack creation in budgeting will be reviewed. Although negotiation and slack were not an initial focus of this research, the essence of the research method made it evident that these issues were important and were related to previous budgetary research processes (Strauss and Corbin, 1998). Therefore, an important part of the results of this research is an understanding of the importance of negotiation and slack as a social construct in the PURI budgeting process.

### 3.2.2 Negotiation in budgeting

One effect of actors in budgeting, which has been discussed in previous budgeting literature, is their impact through negotiation process. Preparing budgets via a negotiation process is something popular in budgeting research as a kind of communication or budgeting process type. In order to solve (understand) the conflict between superiors and subordinates, examining negotiation as a part of budgeting processes is critical and helps to determine the actual budget target (Arnold and Gillenkirch, 2015; Fisher et al., 2000). Budget negotiations arise for different reasons. For example, internal reasons are organizational structure and budgeting process (Wolfe and Murthy, 2005; Fisher et al., 2000, 2006), information asymmetry (Fisher, Frederickson and Peffer, 2002), interaction of budgeting functions (Fisher, Maines, Peffer and Sprinkle, 2002) and exogenous constraints like opportunity costs and financial pressures (Arnold, 2015).

Different aspects of negotiation in budget preparation have been considered by researchers. Arnold and Gillenkirch (2015) considered the effect of conflict between performance evaluation and planning on agent’s negotiation behavior. Rankin et al. (2008) discussed the effect of superior control on the negotiation outcome. This is similar to Fisher et al. (2000) who examined whether negotiation affects budgetary outcomes, such as slack or performance. Additionally, the possibility of future negotiations (Fisher et al., 2006) and financial pressure on the superior (Arnold, 2015) have been mentioned as a situation which leads to more cooperative negotiation behavior. In OECD countries, budgeting negotiations primarily occur between ministries and the central government (Schick, 2014). Shaw (2016) concluded that budget performance information is not widely used in these negotiations. From an executive’s perspective, the goal is not just to avoid decreases, but to obtain increases in their allocation. From the other side, central government negotiators focus more on government’s priorities and limitations (Schick, 2014).

### 3.2.3 Slack in budgeting

The literature about slack in budgeting from Niskanen (1971) and Onsi (1973) to Church et al. (2019) provides different definitions and aspects of slack. From an economic theory perspective, Onsi (1973) and Merchant (1985) define slack as the difference between the resources available and the resources required by the organization. Niskanen (1971) considers slack as an average behavior of bureaucrats and the result of personal utility maximization. Slack can also be considered as an honesty issue, as the difference between proposed budget and the true budget forecast (Busch, 2002). On the other hand, Moulick and Taylor (2017) definition is based on a PBB perspective as they define slack in terms of an excess of the amount needed to generate an expected output. Similarly, Daumoser et al. (2018) define slack in terms of underestimating revenue and overstating expenses.

There are both positive and negative views regarding slack. From Wildavsky’s (1964) point of view, slack can be viewed as the opposite of efficiency (Jones, 1997). However, slack can create an environment for creativity and innovation which may lead to a fair process and better decisions. From the negative perspective, slack is an immoral use of superior information to gain an advantage (Douglas and Wier, 2000). Other researchers have argue that, in conformity with the public choice theory, slack is an inefficiency (Niskanen, 1971), and is not essential for organization’s purposes (Moulick and Taylor, 2017). Overall, the value of slack from Onsi’s (1973) point of view depends on the way in which mangers use the resources (Wiersma, 2017). When they use slack resources to their self-interest, it can affect managers’ honesty (Church et al., 2019).
Reviewing the literature, the slack creation is explained via different causes. These include environmental and behavioral causes. In terms of environmental issues, existence of uncertainty (Dunk and Nouri, 1998; Daumoser et al., 2018) and information asymmetry (Niskanen, 1971; Daumoser et al., 2018; Fisher et al., 2000; Fisher, Frederickson and Peffer, 2002) as well as cultural values (Lau and Eggleton, 2004) has been surveyed. Also, issues like difficult budgetary control (Van der Stede, 2000), type of negotiations with subordinates (Wiersma, 2017) and managers’ unfavorable perception about budgeting process (Kinnersley and Magner, 2008) have been explained as reasons for slack creation. In terms of behavioral causes, political interests as well as self-interests (Kinnersley and Magner, 2008; Wiersma, 2017; Busch and Gustafsson, 2002) and the power of the budget negotiator (Fisher et al., 2000) have discussed as slack creation causes.

3.3 Research questions

According to the literature, there are difficulties in PBB implementation in a wide variety of countries. In each case there are different barriers and limitations that can impact the implementation. Among the different factors, it is suggested that PBB implementation depends on cultural situations (Schick, 1978) and the role of internal actors is as important as external actors (Ozdil and Hoque, 2017). There is a broad agreement that budgets are a social phenomenon, and that the budget reality is constructed via actors’ perceptions (Ozdil and Hoque, 2017; Covalesski et al., 2013; Goddard, 2004; Moll and Hoque, 2011). Our research uses this perspective, understanding budget actors’ perceptions, to fill the literature gap on failures in PBB implementation. In order to do this we need to consider the executive organizations to find the reasons for PBB failure (Schick, 2014; Shaw, 2016). This leads to the following research questions:

RQ1. What are the perceptions of the budget preparers at Iranian PURI about the budgeting process?

RQ2. What are the causes for existing perception about the budgeting process at PURI?

RQ3. What are the consequences of the actors’ perception about the budget process on PBB implementation?

4. Research methodology

Each research strategy has its own philosophical background that contains ontological hypotheses about the nature of reality and epistemological hypotheses about the way to know that reality (Blaikie, 2009). Among the research strategies introduced by Blaikie (2009), the retroductive strategy has been chosen for this research. The retroductive strategy was selected because our goal was to discover actors’ understanding about their reality and their way of building concepts and meanings for their social world. This research seeks to understand the budget preparers’ perceptions and understanding of the budget process. In addition, we focus on the interpretation paradigm because it argues that understanding the social reality occurs through interpretation (Jun, 2007). This paradigm has been successfully employed in other accounting research (Chua, 1986), and has made valuable contributions to the study of accounting phenomena (Lukka and Modell, 2017). It is noteworthy that the initial research in interpretive research within accounting focused on budgeting (Hofstede, 1968; Argyris, 1952; Hopwood, 1973).

As we seek to extract a theory of the budgeting process from the research subjects, grounded theory is an appropriate research method (Strauss and Corbin, 1998). In this research method, relevant theoretical frameworks and literature are reviewed to become familiar with concepts and discussions in the domain of study (Strauss and Corbin, 1998).
The methods used in grounded theory research allow the researcher to extract relevant variables and constructs. Therefore, in this study we examined theoretical frameworks and literature about budgeting and definitions from various perspectives. In the grounded theory method, data gathering will be continued along with other research stages (coding and analyzing the data) simultaneously, which leads to theoretical sampling as one of the important features of this research method. Ignorance of this issue is one of the weaknesses of previous research which uses this method (Gurd, 2008).

4.1 Research data

Data were gathered through semi-structured interviews with individuals in charge of PURI’s budget preparation. The length of interviews varied from 30 min to 2 h. As suggested by Elharidy et al. (2008), in these interviews the participants were asked to describe not only the budgeting process in their organization, but also their experience with the process that helped them in their everyday roles. Interviews were recorded except for one which was not permitted by interviewee. Using these recordings the interviews were then converted to a text document for use in the coding procedure.

The interviewees were chosen among directors and deputies of planning and budgeting departments, the head of the budget office and the budget experts at selected universities and research institutes. Participants in this research included one director of the department of planning and budgeting, five heads of the budget office and three budget experts at PURI as per Table II. The interviewees covered all the different levels of the individuals engaged in budgeting process. The participants were experts in the budgeting at PURI, and therefore completely familiar with the process. The selection of individuals was done according to subjects’ availability and their willingness to participate. Interviews were conducted until a theoretical saturation was achieved (Strauss and Corbin, 1998). Gathering and analyzing the data was done in parallel, and sampling continued until the data saturation. As a main concept in grounded theory studies, theoretical saturation indicates a point at which no new dimensions, or relationships arise, during analysis for identification of new categories (Strauss and Corbin, 1998).

4.2 Data analysis

The interviews were recorded completely (except one) and transcribed into text files. Then text files were coded. The coding methods used for this research were chosen according to Strauss and Corbin (1998) as follows.

4.2.1 Open coding. In this stage, an analytical process was done to extract concepts and their attributes and dimensions. For this purpose, concepts in the text were identified and named to generate various categories and meanings. The number of extracted open codes is presented in Table III. This stage was done using two open coding methods: vivo

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number of participants</th>
</tr>
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<tbody>
<tr>
<td>Department of Planning and Budgeting director</td>
<td>1</td>
</tr>
<tr>
<td>Department of Budgeting head</td>
<td>5</td>
</tr>
<tr>
<td>Department of Budgeting expert</td>
<td>3</td>
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<td>Table II.</td>
<td></td>
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<tr>
<td>Research participants role</td>
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<thead>
<tr>
<th>Institutions</th>
<th>Number of interviews</th>
<th>Number of open codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>6</td>
<td>387</td>
</tr>
<tr>
<td>Research institutes</td>
<td>3</td>
<td>246</td>
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<tr>
<td>Table III.</td>
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<tr>
<td>Extracted open codes</td>
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<td>per each institute</td>
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and constructive. Vivo codes were taken from the transcribed text, but constructive codes were rooted in the literature. An example of a constructed code is included in the following extract from an interview:

The budget for different organizations of MSRT is prepared based on their last year budget [Incremental Budget] […] Incremental budget was a constructed code and comes from budgeting literature. This was the way in which the concepts were recognized and categorized at this stage.

4.2.2 Axial coding. This is a process for linking categories to subcategories. This coding is conducted in the axis of one category and connects the categories according to their attributes. In this research all the open codes were decreased to 60 categories, and some of them were used to develop the paradigm model. The codes were selected according to their frequency and their relation to the paradigm model.

4.2.3 Selective coding. This final stage in coding is done to integrate identified concepts and generate the paradigm model, which is presented as Figure 3. This conceptual framework contains causal conditions, axial phenomenon, action/interaction strategies and consequences. The budgeting process is constructed from an analysis of the coding at this stage, and is explained in next sections.

5. Results

The results of the selective coding revealed the core perceptions of PURI budget actors along with the causes and consequences of these perceptions. These are presented as a conceptual framework in Figure 3. The recognized central phenomenon, “budgeting as a negotiation process,” demonstrates the most frequent perceptions of individuals responsible for PURI budgeting in Iran. This perception can be described using causal conditions, including internal, external and behavioral and lead to action/interaction concepts that arise from the core phenomenon of “relationship” and “recognition.” These concepts illustrate that budget preparers choose to communicate more and make more relationships with others as an interaction strategy in order to acquire more financial

![Figure 3](image-url)

**Figure 3.** Conceptual model for budget preparers' perception

Lack of authentic information and PBB implementation postpone
resources in a “negotiation” game. Finally, these actions/interactions create “slack” in a proposed budget, which is discussed as an obstacle for authentic information flow and PBB implementation.

5.1 RQ1: the perception of budget preparers at Iranian PURI
The answer to the first research question is the central phenomenon of the paradigm model. The extracted axial phenomenon in this research is “budgeting as a negotiation process.” It implies that budget preparers at PURI perceive negotiation as a central phenomenon in budgeting process. For instance, a university budget deputy explained that:

[the] Role of negotiations and the ability to highlight the role of universities in comparison with other sectors and make them the priority, will affect the budget allocation [at the] macro level.

In this regard, being talented in negotiation is considered more important than planning. This is evident from an observation of a university budget expert:

They [MPO] don’t ask about our plans; it [the allocated budget] is more related to the negotiation power of institutions.

While the PURI in Iran is supposed to move toward PBB (according to the FYDP), central perception of its actors about the process illustrated that there is a gap between the expected budgeting process and what they perceived. The perception that the ability to negotiate is central to budgeting is a social construct that is produced and reproduced via actors practice and perception. According to the previous research, this result can be explained as a decoupling (Perez and Robson, 1999) or loose coupling between rules and routines, as rules are formal and legal but routines are informal (Lukka, 2007). In this research, the evidence of the loose coupling between expected budgeting process embodied in specific legislation and what is the perceived as the actual budgeting process can be explained using the causal conditions found in data. The next section will examine our second research question in an attempt to understand the basis for this loose coupling in Iran’s PURI.

5.2 RQ2: causes for the perception of “budgeting as a negotiation process”
The axial phenomenon explained in the previous section was interpreted as a loose coupling between rules and routines in the budgeting process. This phenomenon roots in some causal conditions uncovered in the interview data that can be classified into three main categories: internal, external and behavioral causes.

5.2.1 Internal causes. Internal causes are issues which arise within PURI and lead toward the central phenomenon: negotiation in budgeting. These internal causes are “budgetary comparisons,” “budgeting process deficits” and “internal pressures,” which are described as follows.

5.2.1.1 Budgetary comparison. One factor in the budgeting negotiation at PURI is that budget authorities disregard all critical factors at the time of budget resource allocation. Within the institutes, there is an argument that the amount of resources allocated by the budget for all similar PURI should be the same. Indeed, the budget preparers at individual institutions within PURI insist on comparing their organization’s budget with others. This comparison leads to negotiation on the budget differences as opposed to discussion of performance differences. For instance, a university budget expert mentioned that:

We compare our budget with universities which have the same plans. We check their increase percentage in budget. Then we protest and defend.

Indeed, as explained by participants, some part of budget negotiation is about protesting differences when budgets are compared. Although institutions are not comparable due to
their vastly different missions and responsibilities, the budgets differences still motivate institutions to negotiate around these differences.

5.2.1.2 Budgeting process deficits. While all differences motivate negotiations, budget deficits induce individuals to choose negotiation instead of complying with the strict regulated budgeting procedures. When deficits occur negotiators point out issues such as the use of incorrect indexes. They mention idiosyncratic conditions at their institution as a basis for deficits in established budgeting processes. For example, a budget expert at a research institute noted that:

We have problem with indexes, because the indexes are defined according to a university standard and our main activity is different from [other] universities. So, we need to negotiate with authorities.

This implies that negotiation arises because preparers perceive that the budgeting process is not adjusted for the unique activities and purposes at their institute.

5.2.1.3 Internal pressures. Internal pressures were mentioned by participants as another important reason for using negotiation in the preparation of budgets within PURI. Internal pressures relate to internal units’ claims in order to receive more resources in a proposed budget. A budget deputy at a university pointed out that:

We are under pressure, for example the cultural department put pressure on the board of directors to receive extra budgeted resources. We receive the budget according to our students and this extra budget request forced us to discuss their request.

Internal negotiators declare that they have information which is necessary to include in budget negotiations. In many cases, internal pressures force the budget experts at PURI to negotiate for more budgeted resources so they can put an end to internal discussions.

5.2.2 External causes. 5.2.2.1 Superior organizations’ weakness. The MSRT and the MPO are the main organizations in charge of budget preparation for PURI. Although they have a noticeable role in budget preparation for PURI, participants in this study did not believe that they are powerful bodies in this process. For instance, a university budget deputy stated that:

MSRT doesn’t have the ability to help the universities and other research institutes in policy making and planning. Not only the experts, but also the managers. Indeed, universities are in a direct connection with experts at MPO.

This suggests that these organizations are not perceived to have sufficient authority to control and monitor the PURI budgeting process. Thus, institutions prefer to discuss their budget issues through direct negotiation with MPO. This lack of authority is a very serious issue that must be addressed from a macro level if new budgeting methods are to be instituted. In the situation in which the organizational hierarchy seems not to be helpful for each organization’s improvement, the subordinate organizations (PURI) will bypass the superior organization (MSRT) and negotiate with MPO directly.

5.2.2.2 Neglecting the macro plans. Allocating the budgeted resources based on the plan is a factor that could reduce the amount of negotiation during budgeting. The results indicate that because budgeting at PURI is not based on official plans (such as those at FYDP), the allocated budgetary amounts can be increased through negotiation. For instance, a budget expert at a research institute explained that:

Here [the university] is the same as all part of the country. We do not believe the plan […] they allocate the budget as we want.

This implies that priorities regarding education and research at PURI are not planned precisely and may change each year. This points out the importance of negotiations as budget prepares at PURI look at this activity as a way to change the priorities.
5.2.3 Behavioral causes. 5.2.3.1 Mutual distrust. The results of the budgeting process benefit departments and organizations differently. This situation can increase distrust between groups when their resources are diminished as compared to other areas of the institution. Our data demonstrate the existence of mutual distrust between budget preparers and beneficiaries at PURI. This distrust can impact the use of negotiation methods during the budgeting process. When actors do not trust each other, conflict appears and impacts the negotiation process. For instance, a director of planning and budgeting department at university noted that:

In the case of trust, the empathy and companionship will be created, otherwise like the previous years, we prefer to negotiate with parliament in order to prove our calculations.

5.2.3.2 Self-interest. Another behavioral factor extracted from the interviews is the existence of self-interest among budget actors. Self-interest can be explained by agency theory (Jensen and Meckling, 1976), and is rooted in economics, decision and political theories. In particular, there are budgetary actors whose efforts will impact resources received by individuals who are not part of the process. In contrast the budget will also provide rewards to certain actors who negotiated these rewards. The results of the interviews illustrate one aspect of self-interest which can impact the negotiation in budgeting. For example, a budget deputy at a university stated that:

When you look at the system it is obvious that budgeting became really personal and regional. So, each person that could receive budget for universities in special region, records this as an achievement for himself and after that they could gain more positive votes in elections. These kinds of efforts have [an] effect on budgeting.

Existence of self-interest in the budgeting process illustrates that decision making in budgeting is accompanied with bounded rationality through which actors look for satisfaction instead of optimization. Thus, it is expected that decision makers will behave according to their self-interest (Fozzard, 2001), and for budget preparers to negotiate to improve not just their budgeted resources, but also for other benefits.

5.2.3.3 Power-interests. The political dimension of budgeting was mentioned by participants as another potential impact on budget negotiations. The political power of individuals could impact the amounts allocated in the budget process to PURI. Using their political power, institutions will negotiate for a level of resources which is greater than their needs. A university budget expert makes this point:

[A] Budget is a powerful tool that gives superiority to a group and allows that group to control other subordinate individuals and maintain their command through increasing or decreasing their resources. Accordingly, only those who make strong relationships can benefit from them.

Indeed, when budgeting is converted to game of power, negotiation appears as an inseparable tool in the process. Political power is one of the important budgeting factors, as it can control and lead others or it can change their intellectual perception of reality (Yaisawarng and Burgess, 2006).

5.3 RQ3: the consequence of actors’ perceptions about the budget process in the budgeting system

Examining the axial perception among budget actors at PURI, it is clear that a loose coupling exists between the established budgeting rules and actual routines. This section looks at the consequence of existing budget actors’ perception on budgeting process. Analyzing the data illustrated that while PURI budget preparers perceived budgeting as a negotiation process (central phenomenon), “slack” in budget preparation appeared as the most important consequence. Participants in our research mentioned that “slack” in PURI
Budgeting is created through intentional increase in budgeted expenses and decrease in forecasted revenue. This can be seen in a university budget expert's observation:

We have a habit to increase our budget via negotiation, especially when we know that they [government] will not provide us the amount of budget we requested.

Also, from data it was apparent that slack in PURI budgeting is accrued not only through increase in expenses, but also via decrease in the budgeted revenues. For instance, a budget expert at university explained that:

When we cannot increase our budget, we try to decrease budgeted private revenue for the next year. Indeed, slack phenomenon in budgeting at PURI occurred as an important consequence of the current loose coupling between budget actors' perceptions and budget legislation. When actors perceive budget as a negotiation process, they put slack in their budget to ensure their negotiation outcomes will include sufficient resources. This, along with other deviations in the budgeting process, creates a vicious cycle that leads to PBB lack of implementation.

6. Discussion and conclusions

Starting with Argyris (1952), the interpretive research paradigm has emerged as an accepted method in accounting and budgeting research. This line of research focuses on individuals' interpretations and the effect of these interpretations on accounting and budgeting as a social phenomenon (Lukka and Modell, 2017). This paper, using grounded theory, presents a practical investigation of the actors' perception of the budgeting environment at PURI in Iran. This is consistent with university budgeting literature that suggests the focus should be on internal budgeting actors (Covaleski and Dirsmith, 1988; Moll and Hoque, 2011; Ozdil and Hoque, 2017; Covaleski and Dirsmith, 1983). PURI of Iran has been selected for this research for two main reasons. First, PURI obtain most of their financial resources from the government. Hence, the amount of budgeted resources assigned annually is critical from the research and education perspective. Second, according to the fourth, fifth and sixth FYDP (from 2005 to 2020), PURI are supposed to prepare their annual budget using PBB and receive their public budget from the government according to capitation students and projected cost of standard training and research activities. Despite the normative requirement for PBB, our study indicates that this is not the process currently used.

The PBB literature suggests that the most challenging part of its implementation in public sectors of OECD countries is the challenge of providing necessary information by executive organizations (Schick, 2014). Thus, the main focus of this research is on the initial level budget actors at PURI and not on the actions of the central government. For this purpose, interviews were done with different levels of budget preparers at PURI. Our findings indicate that the main perception of budgeters at PURI is the importance of "negotiation" in budgeting process. Indeed the axial perception can be stated as "budgeting as a negotiation process," whereas the axial phenomena in previous grounded theory research into budgeting have been "struggling for conformance" (Goddard and Mkasiwa, 2016) and "accountability perceptions" (Goddard, 2004). Therefore, our study provides a different insight into the budget preparation process.

Our study enumerates internal, external and behavioral casual conditions for the perception among budgetary actors and finally talks about the consequence of this perception which is the creation of "slack" in the proposed annual budget request to the government. Our results also explain the existence of a gap in perceived and legislated budgeting practice in Iran. Although macro policies and requirements prescribe a move toward new budgeting methods (according to FYDP), at the micro level and among actors, the budgeting procedure is perceived as a flexible and negotiable process. This gap between what is prescribed and what is perceived and performed at Iranian PURI can be the result of
loose coupling among rules and routines practices in budgeting which refers to the gap between saying and doing in budgeting practice (Perez and Robson, 1999). This can be interpreted as an important factor for failure in PBB implementation at PURI. Our results support the conclusions of Goddard and Mkasiwa (2016), who referred to a gap between established formal rules and actual practice in public budgeting in Tanzania. They concluded that this occurred when there is a power conflict or self-interested of parties to the negotiation. The lack of specific rules or institutional mechanism also contributes to the loose coupling between expected vs actual budgeting processes (Goddard and Mkasiwa, 2016). This loose coupling is probably more evident in public sector organizations, due to the presence of more political influence over their actions (Perez and Robson, 1999).

Another important conclusion of this research is the indication that the creation of “slack” in proposed budgets is a consequence of actors’ perception of budgets as a negotiation process. Previous slack literature illustrated that slack is affected by different factors including negotiation power and agreements (Fisher et al., 2000; Fisher, Frederickson and Peffer, 2002; Wiersma, 2017), behavioral factors (Kinnersley and Magner, 2008; Wiersma, 2017; Busch and Gustafsson, 2002), managerial issues like control and performance measurement (Van der Stede, 2000; Daumoser et al., 2018) and environmental issues such as uncertainty and information asymmetry (Dunk and Nouri, 1998; Daumoser et al., 2018; Niskanen, 1971) as well as cultural values (Lau and Eggleton, 2004). In this research we concluded that budget actors put slack into the budget proposal because, according to internal, external and behavioral factors, they perceive budgeting as a negotiation process. This means that instead of putting realistic numbers in the proposed budget, they overestimate their future expenses and underestimate their future private revenues in order to receive more budgeted funds from the government, so as to maximize their personal utility (Niskanen, 1971). Stated differently, the executive organizations do not only obey the PBB rules in order to prepare their budget proposal, but also create a proposal with unrealistic numbers, as a consequence of perceiving budgeting as a negotiation process. Indeed, actor’s perception of budgeting as a negotiation-based process, even with government’s effort is to implement PBB, leads to lack of authentic information presentation for decision-making purposes (Figure 3). As PBB is heavily based on information, this unrealistic information flow can postpone PBB implementation, and cannot be changed unless the executive organizations cooperate in sending their information (Schick, 2014).

This results can be interpreted from cultural values point of view as well, because the experience of PBB implementation in OECD countries illustrated that the culture is really important in this regard (Schick, 2014), and budgeting systems cannot be transformed without cultural consideration (Schick, 2007). This is because there are informal cultural rules and values among budget actors that can be considered as barriers for PBB implementation (Schick, 2014). In this study we did a deep survey on budget actors’ beliefs at PURI in order to find out their informal rules regarding budgeting. Certainly, from cultural perspective, the result of this research can be connected to cultural values in Iran. In Hofstede’s (1984) cultural studies, Iran has been considered as a country with high power distance and high uncertainty avoidance culture. The slack literature suggests a connection to uncertain situations as one of factors creating budgetary slack (Dunk and Nouri, 1998). This uncertainty has been found in societies with high power distance level and when individuals have a low level of trust and cooperation (Hofstede, 1984). Actually, as Iranian culture can be characterized as having high power distance, organizations and uncertainty avoidance, slack creation in budgets can be expected.

To the best of our knowledge, this research for the first time considers budget actors’ perceptions as the basis for the failure of PBB implementations. The results of this research illustrates that what is perceived by budget actors (negotiation-based budget) is a social construct which is not determined in budgeting process at PURI. This is the reason that we
interpreted this phenomenon as loose coupling between rules and routines. Indeed, from PBB literature perspective, the contribution of this research is the explanation of the failure in PBB implementation due to budget actor’s perception as a cause of unfavorable conditions in PBB implementation (Schick, 2014). Also, the perception of budget actors regarding negotiation-based budgeting encourages slack creation in their proposals, and this postpones PBB implementation. Indeed, what this study adds to the slack and negotiation literature is the role of these budgeting behaviors in PBB implementation. The question which arises is whether slack in PBB is stronger than in traditional budgeting methods or not. The answer that can be extracted from the result of this research is that slack creation can be interpreted as the reason for failure in PBB implementation (Figure 3), because lack of truthful information is an elementary outcome for slack creation, and authentic information flow is a primary requirement for PBB (Schick, 2014; Shaw, 2016).

General implication of this research is that organizations consider their budget actors’ perceptions as an important factor in transition of budget processes. Also, to improve the current situation in PURI budgeting, this study suggests to start from the casual factors of this vicious cycle. Thus, internal, external and behavioral causes that create the negotiation perception, and the loose coupling between rules and routines, need to be considered. Also, executives need to feel more certain about receiving their proposed budget. This uncertainty is one of the behavioral causes of mutual distrust. As a practical conclusion, it is suggested that MPO and MSRT put more effort on executive budget actors training, as an attempt to remove the loose coupling between rules and routines in budgeting practice at PURI. Admittedly, the cultural values and the political situation, along with the current perceptions of budgeting process, make the situation for budgeting system transformation more challenging. All of these factors need to be considered in legitimation and training efforts. Overall, our research suggests that the budgeting needs to be considered as a process in which individuals and their perceptions are important to make processes effective. Establishing required structures and rules is not sufficient in order to transform the whole process, unless the actors’ perception and their effect are considered. Although this research was done in the context of Iran, its results and suggestions can be generalized for any kind of budgeting transformation in different contexts.

An important limitation of this research is related to the number of interviews and also participants’ potential feeling of constrains to express their feelings and ideas. For the future research, the perception of other organizations contributing to and engaging in PURI budgeting can be investigated. The extracted comprehensive model will be beneficial for understanding budgeting process not only from executive organization actors’ perspective, but also from government point of view.

Notes
1. Economic, Cultural and Social Development Plans are laws that set out the objectives and goals to be achieved by the country over the next five years and are approved by the Iranian Parliament. The Law on the Sixth Five-Year for 1396–1400 (2016–2021) was approved on March 2017.
2. MPO is the governmental organization in the budget preparation process for all organizations that receive public funds in Iran.

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