THE DESCRIPTION AND COMPARISON OF BUDGET SYSTEMS: THE CASE OF TURKEY (1924-2018)

Haydar Lütfü EJDER¹

Melek Sena CANGİR²

Abstract

The budget is an important economic policy tool for policy-makers, as well as its classical functions. Countries choose of budget systems according to their political, economic and social aspects is important in terms of economic, effective and efficient use of public resources. In this study, the positive and negative aspects of budgetary systems are specified and they are compared on the basis of performance criteria. In this context, the actual budget system changes in Turkey were examined whether they are Assoc.d with budget deficits, growth and unemployment. Examination of the tables created from time series of the mentioned macro variables, It was concluded that there was a parallelism between the system changes and budget deficits, system canges were followed by an increase in extra-budgetary expenditures while there was no noticeable relationship with the other two variables.

Keywords: Budget, Budget Systems, Comparison of Budget Systems, Performance Criteria

JEL Code: H61, H62.

1. Introduction

Budget is the main tool for the control, management, and production of interactions between macro-level financial instruments and institutional financial instruments. The budget system that is compatible with the political, social, economic and financial structure not only forms the macroeconomic and institutional financial instruments in that direction but also ensures the economic, effective and efficient use the public resources. In this study, budget systems used in Turkey and the necessity of using them is explained by pointing to the positive and negative aspects of these systems. Additionally, the impact of the budget system changes on macro economic variables and on the financial control as a whole is analysed.

Budget systems, respectively, are presented as the traditional budget system, performance budget system, program budget system, planning-programming-budgeting system.

2. Budget Systems

Budget system is an important tool that both forms the preparation, implementation, and control of the budget and ensures the system efficiency as a whole. Additionally, budget systems have emerged and diversified within the development process of the economy in accordance with the demand of the society from the state. (Bülbül vd., 2005: 56)

¹ Asst. Prof., Ankara Hacı Bayram Veli University, haydar@gazi.edu.tr

² Graduate Student, Ankara Hacı Bayram Veli University, Department of Finance.

2.1. Traditional Budget System

Traditional budget system has two important elements. The first one is concerned with which resources are allocated to which expenditure unit while the second one is related to the administrative dimension of spending process. As the grants are given at the unit level, these budgets are also called the “organization budgets”. In the literature, the name “expenditure items budget” is also used. The focus of the traditional budget system is on the amount that is to be spent. The logic behind and expected benefits of the expenditures on the other hand is not taken into account. (Tüğen, 2007: 107)

Table 1. Advantages And Disadvantages Of Traditional Budget System

Traditional Budget System	
Advantages	Disadvantages
It provides a framework of control	Disconnection from strategic plan
Makes it easier to manage activities	Causes waste
Functional	Causes inefficiency in resource allocation
It accommodates the need to decentralise	Low change responsiveness
Annual forecast is easy	Doesn't encourage innovation
Provides stability	Repeats incorrect estimates
Provides consistency	Application causes a loss of time
It is part of organisational culture	Performing only financial audit (Account audit)
Specialization	Prone to data entry errors

Source: TRG International, How To Create An Advanced Budgeting System, 2009:5-6. (Compiled by author.)

2.1.1. Traditional Budget System: The Case of Turkey [1924-1972]

Turkish public financial management to a large extent depends on law no 1050 which dates back to the beginning of the Republic of Turkey. This law, which entered into force in 1927, was implemented with very few amendments near to eighty years. However, over time, especially after 1980s, rapid changes in economic and social economic areas made it necessary to reconsider the public financial management system. The budget deficits during 1970s ve 1980s is one of the clearest indicator of this fact.

Graphic 1. Consolidated Budget Income, Expense and Balance [1924-1972]

Source: BÜMKO Statistics, 2018.

2.2. Performance Budget System

The priority of performance (business) budget is on the way a public service is performed, while on the macro level it aims to increase efficiency in public administration.

The performance budget focuses on what government does and achieve, rather than what it buys. Thus, the benefits earned or provided from a particular expense is important. Expenses that serve specific purposes in the performance budget are collected in the same programs and the costs and benefits of each program are calculated. The value of the performance budget comes from the fact that it is a management tool. It is a tool that administrators can use to ensure efficiency and effectiveness. (Edizdoğan, 2004: 388).

Table 2. Advantages and Disadvantages of Performance Budget System

Performance Budget System	
Advantages	Disadvantages
Clear purpose	Subjective
It becomes easier to assess the performance and correct the deviations	Monetary value of social projects is difficult to calculate
Transparency is in the foreground	Costs may vary from institution to institution
It helps to increase the accountability	Need a strong evaluation system
Performances are evaluated periodically	The performance budget requires a strong system of accounting
Performance measurement based on outputs	The reporting system needs to be accurate and complete
Performance measurement is subjective	There is a possibility of changing the data
Improvement in performance	Existence of implementation difficulties in long-term projects
Efficiency-oriented	It makes difficult to measure the results of the projects in long-term

Source: Efinancemanagement- Budgeting- Performance Budget, 2018. (Compiled by author.)

The experimentation with and experience of performance budgeting are wide ranging. Because performance budgeting develops at various stages in terms of how performance information is used in the budgeting process, this chapter distinguishes performance budgeting in four categories:

Performance-reported budgeting (PRB) presents performance information as part of the budget documentation, but budgetary actors do not use it for resource allocation.

Performance-informed budgeting (PIB) refers to a budgeting process that takes program performance into account but uses the information only as a minor factor in making decisions.

Performance-based budgeting (PBB) implies that performance information plays an important role for resource allocation, along with many other factors, but does not necessarily determine the amount of resources allocated.

Performance-determined budgeting (PDB) means that allocation of resources is directly and explicitly linked to units of performance (Shah & Shen, 2007: 153).

2.2.1. Transition Process to Performance Budget System: The Case of Turkey [1973-2005]

Performance-based budgeting was introduced in Turkey in 2006 with the law numbered 5018. Looking at macro variables such as budget balance, growth, and unemployment can a connection be observed between the system change and the performance of these variables? In that connection what is seen in the data is the rise of the budget deficit just before the system change. (See Chart 6. Consolidated Budget Income, Expense, and Balance (1973-2005))

However, there seems to be no discernable correlation between the system change and the other variables.

2.2.2. Performance Budget System: The Case of Turkey [2006-2018]

Performance based budgeting was put into effect within the framework of the following principles:

- Determination of measurable targets in accordance with the policies set out in Law No. 5018.
- Calculating the cost of the identified targets (resource allocation).
- Providing administrative and financial flexibility to managers and organizations in achieving the targets.
- Monitoring the results by taking into consideration the targets set at the beginning.

It appears that performance-based budgeting is intended to ensure efficiency both at resource allocation and resource utilization level together.

Graphic 2. Central Government Budget Income, Expense and Balance [2006-2018]

Source: BÜMKO Statistics, 2018.

Graphic 3. Turkey Gross Domestic Product [2006-2016] (US \$ / Capita)

Source: OECD Data, 2016: <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm#indicator-chart> *Data were calculated using purchasing power parity

Graphic 4. Turkey Annual Growth Rates (%) [2006-2017]

Source: OECD Data, 2016: Growth rates are composed of investment expenditures. <https://data.oecd.org/fr/gdp/investissement-fbcf.htm>

Graphic 5. Turkey Unemployment Rate (%) [2006-2017]

Source: TÜİK, Labor Force Statistics 2017: <https://biruni.tuik.gov.tr/isgucuapp/isgucu.zul>

As regard to effect of the system change on the macroeconomic variables during that period, the following observations are in order:

The first significant deterioration in the budget balance was realized in 2009. The deterioration trend, which started again in 2013, continued until 2018, which is the last year with realized data. The striking point here is that the worsening of the budget balance was accompanied by the transition to the program-based performance-based budget system in 2017-18.

There is no discernible relationship between changes in the budget system and other data.

2.3. Program Budget System

Program budget aims, in addition to performance, also to determine what is to be done optimally in terms of cost and welfare.

Table 3. Advantages and Disadvantages of Program Budget System

Program Budget System	
Advantages	Disadvantages
Makes priority rankings	Late adaptation to changes
Reduces costs	It is difficult to adapt resource changes to the budget
Prevents waste	Changes in spending may cause budgeting of double spending
Gives management and responsibility to all levels of the institution	Multiple layers of administrators govern a project
Encourages innovation	Decision-making is difficult
Incorrect estimates do not repeating	Idea differences can prolong the decision process
Ensures efficiency and effectiveness in resource allocation	It causes a loss of time
Adds accountability to the organization	Difficult to measure costs
Allows performance measurement	The performance of the project is difficult to assess

Source: Program Budget, 2018. (Compiled by author.)

In that connection it ranks the targets that are determined by the public authorities. For that reason, programs and sub-programs are made on the basis of activities/projects. This hierarchical program structure covers also the classification of analytical budget.

2.3.1. Transition Process to Program Budget System: The Case of Turkey [1924-1972]

It is possible to make the following conclusion regarding the consolidated budget balance during the period of 1924-1972: Until 1967, it followed a relatively stable course. However, after 1967, a visible deterioration is observed. On the other hand, at the beginning of the 1970s transition to program budget had started. This seems to suggest that there may be a correlation between deterioration in the budget balance and the attempts to change the system (See Chart 1. Consolidated Budget Income, Expense, and Balance [1924-1972]).

2.3.2. Program Budget System: The Case of Turkey [1973-2005]

In 1973, the program budgeted was adopted and the traditional budget system was repealed. The aim behind of this system change was to establish a link between the budget and the development plans and as a result to facilitate monitoring of objectives of the plans (BÜMKG, Türkiye’de Bütçeleme).

Graphic 6. Consolidated Budget Income, Expense and Balance [1973-2005]

Source: BÜMKO Statistics, 2018.

Graphic 7. Turkey Gross Domestic Product [1973-2005] (US \$ / Capita)

Source: OECD Data, 2016: <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm#indicator-chart>

* Data were calculated using purchasing power parity.

Graphic 8. Turkey Annual Growth Rates (%) [1973-2005]

Source: OECD Data, 2016: Büyüme oranları, yatırım harcamaları kaleminden oluşturulmuştur. <https://data.oecd.org/fr/gdp/investisment-fbcf.htm>

During the implementation of the program budget period, the worst performance in terms of budget balance was recorded in 2003-2004. Performance based budget system, on the other hand, was put into effect in 2006. This point, which may imply a possible correlation, has already been noted.

2.4. Planning-Programming-Budgeting System (PPBS)

PPBS is a more comprehensive form of performance and program budget within modern budget systems and is based on coherence between planning and budgeting. Considering the planning, programming and budgeting stages, the stages must be in order and the causal link between them should be present.

Table 4. Advantages and Disadvantages of Planning-Programming Budgeting System

Planning-Programming Budgeting System	
Advantages	Disadvantages
Fully compliant with the democracy	Not in full accord with the legislation
Supports decision-making process of executives	It's hard to write what is the best alternative
Can be used in all decision processes	Budget preparation process is difficult to harmonize with law
Creates a sense of responsibility	Easy to glimpse at, but hard to master
Easy to set up source-result relationship	Depends greatly on good operation
Pragmatism (mission oriented)	Big and complex
It can help reducing casualties	Labor intensive
Flexibility in optimization	Although it is theoretically perfect system, it is not true (Completely tied to Money)
Great for forecasting	Has not yet have the chance to actually prove its full potential in huge scale conflicts

Source: Ursoiu, A.B., 2010:101-109 (Compiled by author.)

2.4.1. Planning-Programming and Budgeting System (PPBS): The Case of Turkey

With adoption of Public Financial Management and Control Law (law number 5018) in 2003 it was envisaged to establish a more efficient, effective and economic use of public resources. Among the aims was also to establish a link between programs and the budget (BÜMKG, Budgeting in Turkey).

For realization of that aims beginning at the years 2017-2018 works for transition to a program and performance based budget system have started. This work is included in the New Economy Program prepared by the Ministry of Treasury and Finance for the period of 2019-2021.

3. Comparison of Budget Systems

In public administration, the use of resources refers to the stages of public input. When budget systems are taken into consideration, there are four performance criteria: cost, input, output, and outcome.

Figure 1. Performance in context

Source: Performance Budgeting in OECD Countries, 2007: 194

Each criterion forms the basis of four different budget systems.

Table 5. Comparison of Budget Systems

	Traditional Budget System	Performance Budget System	Program Budget System	PPBS
Performance in context	Inputs	Resources	Outputs	Outcomes
Use of Resources	Resource purchase expenditures	Resource purchase expenditures	Expenditure for optimal service output	Expenditures for social purposes
Purpose	Audit	Production	Governance	Audit- Production- Governance
Classification	Organic	Functional	Program	Functional
Period	Short term	Long term	Long term (3 Year Forecast)	Long term (5 Year Forecast)
Weightiness	Financial Balance	Efficiency	Efficiency- Effectiveness	Economy- Efficiency- Effectiveness
Application Area	Public Sector	Public - Private Sector	Public - Private Sector	Public Sector

Source: Compiled by author

4. Conclusion

The budget systems applied by the countries varies due to historical, economic, social, cultural and demographic differences. Similarly, the reasons behind a country's choice of a budget system, the scope, areas and principles of the budget are different. In this study, budget systems are dealt with under four headings and explained on the basis of the Turkish experience. According to the criteria of emergence date, budget systems are listed as the traditional budget system, performance budget system, program budget system and planning-programming budgeting system respectively. As the case of Turkey is concerned it seems that this ranking is not exactly followed.

When the data related to budget balance and budget system changes are evaluated together, there seems to be a remarkable parallelism between system changes and budget deficit. Similarly, there is an increase in extra-budgetary expenditures following the system changes. On the other hand, two major disadvantages caused by the increase in extra-budgetary expenditures should be noted. The first one is the fact that the expenditure control goes beyond the control of legislature which damages "budget rigt". The second is that the budget techniques remain out of practice.

There is no significant relationship between budget balance and macroeconomic variables.

References

- Bülbül D., Ejder H.L. & Şahan Ö. (2005). *Devlet Bütçesi*, Gazi Kitabevi, Baran Matbaası, Ağustos.
- BÜMKO (2018). Statistics, Budget Size and Budget Realizations, Budget Expense and Income Realizations (1924-2018) <http://www.bumko.gov.tr/TR,4461/butce-gider-gelir-gerceklesmeleri-1924-2018.html> (14.02.2018).
- BÜMKO (2018). Budgeting in Turkey, <http://www.bumko.gov.tr/TR,2518/turkiyede-butceleme.html> (19.02.2019).
- Edizdoğan N. (2004). *Kamu Maliyesi*, 8.Baskı, Bursa: Ekin Kitabevi.
- OECD Data (2016). Investissement (FBCF), Turkey and OECD - Total <https://data.oecd.org/fr/gdp/investissement-fbcf.htm> (19.02.2019)
- OECD Data (2016). Gross domestic product (GDP), Turkey and OECD - Total <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm#indicator-chart>(19.02.2019)
- Performance Budget, (2018). <https://efinancemanagement.com/budgeting/performance-budget> (14.02.2019).
- Performance Budgeting in OECD Countries (2007) Part II Chapter 12 United Kingdom. ss.194 https://read.oecd-ilibrary.org/governance/performance-budgeting-in-oecd-countries_9789264034051-en#page196 (18.02.2019)
- Program Budget (2018). <https://efinancemanagement.com/budgeting/program-budget> (14.02.2019).

- Shah, A & Shen, C. “A Primer On Performance Budgeting”, (Anwar SHAH (Ed)), Budgeting and Budgetary Institutions, The World Bank Public Sector Governance and Accountability Series, 2007, ss.153 https://www.researchgate.net/publication/265231080_A_Primer_on_Performance_Budgeting (18.02.2019).
- TRG International (2009). How To Create An Advanced Budgeting System, Traditional budgeting approach: advantages and disadvantages https://cdn2.hubspot.net/hub/125873/file-16819701-pdf/whitepapers/pm/wp_advancedbudgetingsystem_en.pdf (08.02.2019).
- Tüğen K. (2007). *Devlet Bütçesi* (Gözden Geçirilmiş ve Genişletilmiş Altıncı Baskı), Bassaray Matbaası Çamdibi, İzmir.
- TÜİK, İşgücü İstatistikleri (2017). <https://biruni.tuik.gov.tr/isgucuapp/isgucu.zul> (20.02.2019).
- Ursoiu, A.B. (2010). “The Advantages And Disadvantages Of The PPBES”, Planning, Programming, Budgeting, Evaluation System—Benefits And Challenges, Bucharest, ss.101-109 <http://research.dresmara.ro/resurse/research/workshop2%202010/workshop%20PPBS.pdf> (15.02.2019).