



SPENDING REVIEW AS A POLICY TOOL FOR ENSURING EFFICIENCY IN PUBLIC EXPENDITURES AND ITS IMPACT ON FISCAL BALANCE

KAMU HARCAMALARINDA ETKİNLİĞİN SAĞLANMASI İÇİN BİR POLİTİKA ARACI OLARAK HARCAMA GÖZDEN GEÇİRME VE BU YÖNTEMİN MALİ DENGE ÜZERİNDE ETKİSİ

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ABSTRACT

The evolving role of the state as an economic actor, the emphasis on efficiency in public expenditures, the need to expand fiscal space, and the spending-increasing tendencies following 2008 crisis have necessitated the development and implementation of effective policy tools in public financial management. This article examines the spending review method, a policy tool aimed at ensuring the efficient use of public resources and conducting public expenditures on a rational basis, to determine whether it contributes to enhancing the efficiency of public spending. The analysis section of the study is based on 25 OECD countries that have integrated this method into their public financial management systems, although the practices vary from country to country, and the budget balance is acknowledged as the primary indicator of fiscal balance. The study finds that there has been a favorable shift in the formerly negative impact of public spending on budget balance since the spending review approach was implemented.

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ÖZ

Devletin bir aktör olarak ekonomi içerisinde değişen rolü, kamu harcamalarında etkinlik yaklaşımının ön plana çıkması, mali alanın genişletilmesi ihtiyacı, 2008 krizi sonrasında harcama artışına neden olan eğilim; kamu mali yönetiminde etkin politika araçları geliştirip uygulamayı zorunlu kılmıştır. Bu makalede kamu kaynaklarının etkin kullanımı ve kamu harcamalarının rasyonel bir zeminde yürütülebilmesi adına uygulama bulan politika araçlarından biri olan harcama gözden geçirme yöntemi incelenerek, sistemin kamu harcamalarının etkinliğinin sağlanması noktasında bir sonuç doğurup doğurmadığı ortaya konulmaya çalışılmıştır. Çalışmanın analiz kısmı bu yöntemi kamu mali yönetim sistemlerine dahil etmiş -uygulaması ülkeden ülkeye farklılık gösteren- 25 OECD ülkesi temelinde yürütülmüş ve mali denge olarak bütçe dengesi esas alınmıştır. Çalışma sonucunda, kamu harcamalarının bütçe dengesi üzerinde var olan bozucu etkisinin, harcama gözden geçirme uygulamasına geçildikten sonra pozitif yönde etkilenecek şekilde iyileşme yönünde değiştiği tespiti yapılmıştır.

Keywords: Spending Review, Fiscal Space, Efficiency in Public Expenditures, Budget Balance

Anahtar Kelimeler: Harcama Gözden Geçirme, Mali Alan, Kamu Harcamalarında Etkinlik, Bütçe Dengesi

INTRODUCTION

Ensuring efficiency in the use of public resources is a primary fiscal policy objective. The increased intensity of governmental intervention and the changing role of the state in the economy following the 2008 global crisis have led to an expansion of public expenditures. This increase in public intervention has amplified the visibility of concepts like efficiency, effectiveness, and productivity in resource utilization, placing greater responsibility on the administration for the usage of public funds. The policy goal of enhancing efficiency in public expenditures has also brought the concept of fiscal space into the discussion. Fiscal space can be defined as the budgetary capacity that allows the administration to allocate resources for a desired purpose without compromising its sustainable financial position (Heller, 2005:3).

Expanding fiscal space is closely tied to public expenditure efficiency, aiming to create savings opportunities and allocate public resources to new and priority policy areas. A contraction in fiscal space would increase fiscal vulnerability and limit the capacity to implement flexible fiscal policies. Commitment to achieving these objectives has driven administrations to develop and implement various policy tools, with spending review emerging

as an administrative support tool designed to enhance the efficiency of public expenditures. Spending reviews involve the systematic and detailed evaluation and analysis of public expenditures, aiming to identify and eliminate inefficient expenditures and reallocate existing resources to new, effective policy areas. Ultimately, the primary goal is to bring the utilization of public resources onto a rational basis, achieving efficiency and fostering savings in public expenditures.

The intended savings in public resource utilization are expected to improve budget balance, establish fiscal discipline, strengthen the macroeconomic structure on the foundation of sustainable growth, and enhance the quality and standards of public service delivery to meet societal expectations. Although there is no single methodology for this approach, good practice criteria are established based on the outcomes and data from country-specific applications.

This study first discusses the framework of the spending review at the conceptual and theoretical level, then conducts a panel data analysis to determine whether this method contributes to the efficiency of public expenditures. In the analysis section, assuming that efficient use of public resources will have a positive impact on fiscal balance -budget balance- 25 OECD countries that have integrated the spending review system into their financial management were selected, with budget balance as the key indicator. The positive trend in budget balance observed following the spending review is associated with the assumption that public resources are used efficiently.

This study is limited to OECD member countries. The primary reason for this limitation in the study is that most of these countries, which are also EU members, generally share similar levels of economic development and progress. Additionally, OECD member countries are seen as the first and longest-standing implementers of this method. Türkiye, an OECD member, has adopted a policy of systematically integrating this approach into its financial system, which forms the basis of this study. Türkiye, committed to establishing and implementing the spending review method in a systematic manner in both international organizations and high-level policy documents, has been undertaking activities in this direction as of 2024.

1. INTENSITY OF PUBLIC INTERVENTION AND THE COURSE OF PUBLIC EXPENDITURES

Although the primary element in representative democracies is the citizen, individuals often lack the power and capacity to independently address collective problems; thus, it is the State's responsibility to provide solutions (Atiyas & Sayin, 1997: vii). In this context, the concept of the state has been examined by various theories, which generally regard it as a protective institution. The state is defined as an entity responsible for establishing and maintaining the rule of law within its borders and ensuring security externally. Atiyas and Sayin (1997: 8) introduced the concept of a competent state, outlining conditions for competence such as abandoning high spending habits, preventing bureaucratic and political rents, and producing public goods. Oppenheimer approached the concept of the state by shaping it around what it is not, based on various definitions (Oppenheimer, 1997: 34-36). Although the formation of the state has been theoretically examined from different perspectives, the question of the optimal level of state presence remains a debated issue in economics and public finance literature. State intervention is also a response to various fiscal and social imperatives, including ensuring sustainable growth, achieving equitable and efficient income distribution, and improving human capital.

An expansion in public intervention quantitatively corresponds to an increase in public expenditures. The primary reason for the rising trend in public expenditures throughout the 19th century is attributed to world wars. In the literature, one of the main indicators for measuring the size of public intervention in the economy is the share of public expenditures in Gross Domestic Product (GDP). From this perspective, the expansion observed in public intervention suggests that the Welfare State concept of the 1960s and 1970s led to significant growth in the public sector. Examining the share of public expenditures in GDP over different periods reveals that this ratio was around 10% in the 1870s, rose to 28% by the 1960s, and reached approximately 46% by the end of the 1990s.

Table 1: Trends in Public Expenditures (1870-1996)

GENERAL PUBLIC EXPENDITURES (%)	End of the 19th Century	Before WWI		Before WWII	After WWII			
	1870s	Pre-1913	Post-1920	1937	1960	1980	1990	1996
Australia	18.3	16.5	19.3	14.8	21.2	34.1	34.9	35.9
Austria	10.5	17	14.7	20.6	35.7	48.1	36.6	51.6
Canada	...	...	16.7	25	28.6	38.8	46	44.7
France	12.6	17	27.6	29	34.6	46.1	49.8	55
Germany	10	14.8	25	34.1	32.4	47.9	45.1	49.1
Italy	13.7	17.1	30.1	31.1	30.1	42.1	53.4	52.7
Ireland	....	...	18.8	25.5	28	48.9	41.2	42
Japan	8.8	8.3	14.8	25.4	17.5	32	31.3	35.9
New Zealand	...	....	24.6	25.3	26.9	38.1	41.3	34.7
Norway	5.9	9.3	16	11.8	29.9	43.8	54.9	49.2
Sweden	5.7	10.4	10.9	14.5	31	60.1	59.1	64.2
Switzerland	16.7	14	17	24.1	17.2	32.8	33.5	39.4
United Kingdom	9.4	12.7	26.2	30	32.2	43	39.9	43
USA	7.3	7.5	12.1	19.7	27	31.4	32.8	32.4
AVERAGE	10.8	13.1	19.6	23.8	28	41.9	43	45

Source: Tanzi and Schuknecht (2000).

By the 1990s, the diversification of social needs -driven in part by population growth- and advancements in technology brought the Welfare State approach back into focus, shifting the public sector’s diminishing role in the economy towards an increase (Hançer, 2018: 10). Since the late 1990s, the concept of governance within the framework of new public management or new public financial management has emphasized factors such as efficiency, accountability, transparency, and openness in the use of public resources. Governance refers to how public authority interacts with other entities and engages with citizens, focusing on decision-making processes. It encompasses how societies or organizations make significant decisions, who is involved, and how accountability is established (Graham et al., 2003: 2). The concept, foundational to the new financial management approach, gained attention when the World Bank described Africa’s economic situation as a “governance crisis” in 1989 (Çulha Zabcı, 2002: 151). The necessity of ensuring efficiency in public resource utilization and public expenditures has become a central focus for financial management. In this regard, the spending review system, recognized as a management and policy tool for ensuring efficient use of public resources, can also be seen as a product of this new financial management approach.

2. PUBLIC EXPENDITURE EFFICIENCY IN THE CONTEXT OF EFFICIENCY

The core concepts introduced by governance in public financial management are efficiency, effectiveness, and productivity. One of the clearest distinctions between these three concepts is that while efficiency is about “doing things right,” effectiveness is about “doing the right things” (Grünberg, 2007: 47). The recent discourse in public financial management emphasizes not the size of the public sector but the efficiency of public expenditure resulting from its expansion. Literature commonly addresses public sector efficiency within the context of governance. Good governance is described as the result of effective government, whereas poor governance stems from ineffective government, emphasizing the importance of understanding the components of effective management (Quibria, 2006: 4). The World Bank’s Development Report emphasized that an effective state is essential for development and established effective governance as a foundation for sustainable development (The World Bank, 1997: IV).

Most studies in the literature that discuss public sector efficiency aim to determine the optimal size of the public sector. In this regard, the measurement of public sector presence within the economy, typically defined by the share of public expenditures in Gross National Product (GNP), is essential and the debate over what level is optimal continues in the literature. Given the limitations of this article, it is not possible to provide a comprehensive review of the literature on public expenditure efficiency in this section. However, Karras’s 1996 study can serve as an example. The study found that the share of public expenditures in GDP optimal for effective public administration was 23%, with a range from 14% to 33% for OECD and South American countries (Karras, 1996: 202).

The subsequent section of this study will focus on the spending review system as a policy tool aimed at ensuring the efficient use of public resources in response to the intensified public intervention, exploring its systematic framework.

3. SPENDING REVIEW AS A POLICY TOOL FOR ENSURING PUBLIC EXPENDITURE EFFICIENCY

The need to reduce public deficits and achieve fiscal consolidation has made the concept of fiscal space a topic of debate. Expanding fiscal space enhances the capacity to address economic crises, while its contraction deepens economic issues, increasing the vulnerability of national economies to crises (Ministry of Development, 2018: 42). By expanding fiscal space, the aim is to create savings opportunities, provide effective options for resource allocation, end inefficient expenditures, identify new and priority policy areas, and ultimately improve fiscal balance -budget balance- to achieve fiscal discipline and sustainable growth. To prioritize the creation of fiscal space, mechanisms and policy tools have been developed to make public expenditures efficient and ensure the effective and equitable distribution of public resources based on societal needs and priorities, with spending review recognized as a policy tool aligned with these objectives.

Since the 2008 crisis, spending review has increasingly been adapted by many countries as a management tool to address rising public expenditures and budget deficits. Initially limited to a few countries, such as the Netherlands and Denmark in the 1980s, this method became a fundamental element of public financial management in the United Kingdom by the 1990s and has since gained traction, driven by the fiscal consolidation demands of the 2008 crisis. This study examines the spending review method with a focus on OECD countries. In 2011, 16 OECD countries included spending review in their financial management systems; by 2020, this number had increased to 31. According to an OECD report, Türkiye, the Czech Republic, Belgium, and Switzerland have committed to integrating the review process into their financial systems (OECD, 2021). As of 2023, two of these countries have initiated the implementation of this method. Türkiye, committed to fully developing a systematic approach for this structure and establishing it as a policy tool in 2024, has outlined this intention in high-level policy documents and is actively working towards this goal.

3.1. Conceptual and Theoretical Framework of Spending Review

In the literature, spending review is defined as a budget revision process that includes an analytical assessment of all costs, with savings as the ultimate

goal (Catalano & Erbacci, 2018: 11). While it serves as a policy tool to ensure fiscal discipline and create fiscal space, it is also implemented to enhance the effectiveness of the medium-term expenditure framework and budget, thereby ensuring the legitimacy of budget rights. Through the reassessment of policy priorities, this method functions as a fiscal responsibility tool, with spending reviews expected to contribute to the budgeting process (European Commission, 2016: 13). Spending review provides a mechanism for re-prioritizing expenditures and serves as a tool for evaluating public policies (Bova et al., 2020: 8). Aimed at offering savings options, this approach plays a crucial role in improving the quality of public spending and fostering a management culture within the public sector.

According to OECD reports, the objectives of spending reviews are:

- To control the rising level of public expenditure
- To allow for the reallocation of expenditures according to government priorities
- To enhance the efficiency of programs and policies

At the conclusion of the review process, the savings identified are expected to contribute to fiscal consolidation by replacing inefficient public expenditures with more productive and effective spending areas, thus increasing value for money. Spending reviews have become increasingly important for building management capacity over time and have been adapted and implemented as an integral part of planning, budgeting, and evaluation systems by policymakers (Pradhan, 1996: 2).

Savings are a fundamental aspect of the spending review process. The intended savings can be categorized into two main types in the literature. The first, referred to as strategic savings, involves reducing or eliminating programs to achieve savings by reducing services offered to society. The second type, known as efficiency savings, involves altering the production methods of outputs to reduce expenditures while delivering the same quality and quantity of goods and services at a lower cost (Robinson, 2018: 306).

Figure 1: Examples of Country Savings

United Kingdom; 2004 HGG - Real savings of 2.5% in departmental expenditures

United Kingdom; 5% cut in departmental budgets, with real savings of 3% in departmental expenditures

France; Review of all general policies over a three-year period, achieving 10% savings

Canada; Strategic Review; Nominal savings of 5% over a three-year period

Source: The World Bank (2018: 16).

Examples of savings approaches are provided in Figure 1. At the outset of the process, clearly defining all elements, setting objectives, and specifying anticipated savings rates are recommended as best practices. During the spending review process, the development of savings options can vary based on the distribution of roles between central authorities, such as the Ministry of Finance, and other spending units. The “top-down” approach, where savings options are primarily determined by a central authority with limited influence from spending ministries, contrasts with the “bottom-up” approach, in which spending ministries propose alternative savings suggestions to those recommended by the Ministry of Finance. Additionally, a collaborative review process, which requires cooperative determination of options, is also recognized (Robinson, 2013: 4).

A review of the literature primarily reveals country-level applications of spending reviews. Early examples of these practices date back to the 1980s. In these structured frameworks, the process is guided by certain fundamental questions. Countries generally outline their spending review processes by addressing the following guiding questions:

- Do the government-funded activities align with government priorities?
- Should the government be involved in funding this activity?
- Does the activity add economic value?
- Is it feasible for this activity to be provided by alternative methods, such as through the private sector, voluntary organizations, or other partnerships?

- Could local governments, like the central government, provide this service or activity?
- Could this activity be conducted more efficiently and at a lower cost? (Boyle, 2011: 17)

Similarly:

- *Who is responsible for the spending review?*
- *What is the scope of their responsibility?*
- *What criteria are used?*
- *What is the scale of the review? (Lindquist & Shepherd, 2023: 251)*

These questions, along with the responses they elicit, lead to variations in the design and implementation of the system across countries. Responding to these questions, Shepherd et al. note that the scope of responsibility can be either broad or specific, responsibility can rest with an independent authority, and the scale may be limited to a single agency or span central-local administration levels. Furthermore, the system may be limited to specific spending and policy areas, such as transfer payments or capital expenditures (Lindquist & Shepherd, 2023: 251). According to Robinson, the question sets designed to guide spending reviews toward their objectives can be summarized as follows:

Figure 2: Sample Question Sets

Target Audience/Relevance	Does the program aim to achieve an outcome important to society?
Duplication	Is there duplication with another government unit, different program, or the private sector?
Effectiveness	Does the program achieve the intended outcome? If not, can it be adjusted to do so?
Efficiency	Can the service or process be provided at a lower cost – without compromising quality?
Equity	Is the distribution of the service or transfer payments fair across different recipient categories?
Market Failure	Is the government performing tasks that could be handled by the private sector or community organizations?

Source: Robinson (2018: 306).

Spending reviews can be conducted in different ways. While annual reviews are carried out in some countries, periodic reviews are observed in the others. For example, as of 2023; Belgium, Denmark, France, Ireland, Italy, Poland, Slovakia have conducted annual spending reviews; while Austria, Australia, Estonia, Canada have conducted periodic reviews. They may be

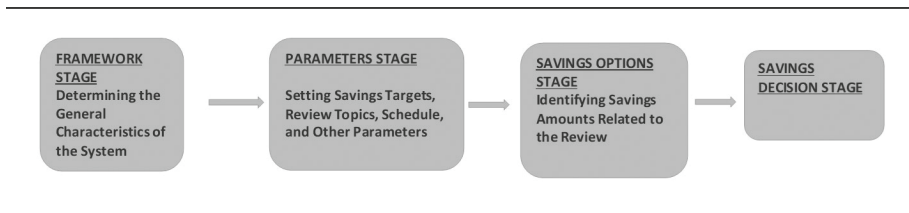
implemented comprehensively, covering the entirety or a large portion of public expenditures, or in a narrower scope, focusing solely on specific types of expenditures. In this context, the process is classified as broad or narrow based on the extent of public expenditures included in the spending review. When 20% to 100% of public expenditures are subject to review, it is termed a comprehensive spending review -CSR- (OECD, 2017: 130). Comprehensive spending reviews have typically been applied during periods when fiscal consolidation needs are significant; however, this classification is not rigid in the literature. For example, in the Netherlands, the review process conducted annually with specific goals also included comprehensive reviews in 1981 and 2009, when there was a heightened need for consolidation (Doherty&Sayegh, 2022: 4).

Defining the scope of the spending review is considered a strategic decision within the literature, and political approval is essential in this regard (Bova et al., 2020: 9). Therefore, the political dimension is one of the core elements of the process. It is not accurate to separate the process from political priorities, as political commitment, or “policy ownership” is crucial to the success of the system.

Another important aspect of spending reviews is the stages through which the process is conducted. The process is typically classified into four stages, as outlined below (Robinson, 2013: 4):

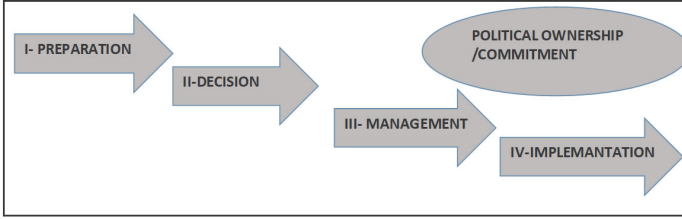
- Framework Stage
- Parameter Stage
- Savings Options Stage
- Savings Decision Stage

Figure 3: Stages of Spending Review



This approach, summarized in Figure 3, can also be referred to as preparation, decision, management, and implementation, as depicted in Figure 4.

Figure 4: Spending Review Process Flowchart



Source: The World Bank (2018).

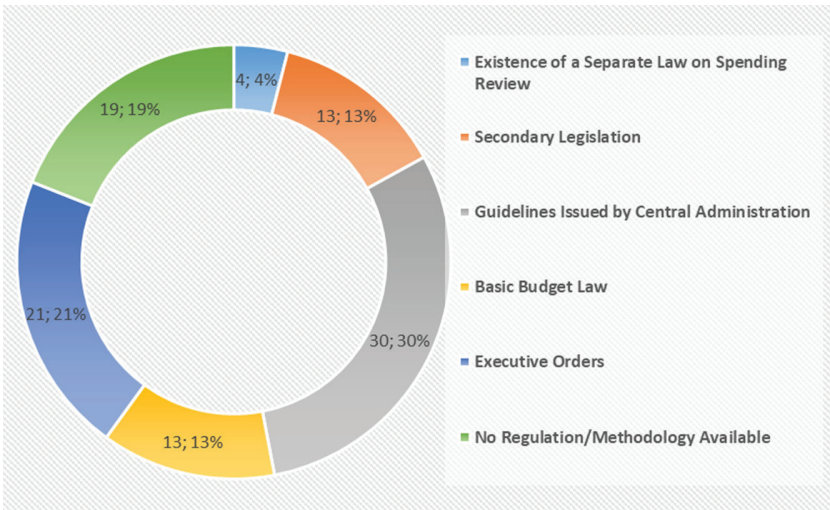
In the initial phase, referred to as the preparation stage, rules are established for how savings options related to the spending review will be developed, what types of analyses will be conducted, and how administrative and organizational structures, such as working groups or management teams, will be determined. The roles of the participating administrations must be outlined at this stage. In addition to public institutions, the inclusion of external experts in the process may be beneficial, as effective coordination is paramount. The management stage involves data collection and the development of savings options. In this phase, public institutions in managerial roles are responsible for reviewing spending areas and identifying savings options, and, if necessary, proposing reform suggestions (Bova et al., 2020: 9). The decision stage includes reporting the status of savings options and their outcomes to the decision-making group or management. The implementation stage refers to incorporating the findings and results of spending reviews into high-level policy documents, including the budget document, to guide policy priorities accordingly (The World Bank, 2018: 12-13).

The focus of the spending review process is crucial. Spending reviews may target an administration, program, sector, or activity. In this context, horizontal and vertical reviews are defined. Vertical reviews may examine a specific administration or program, while horizontal reviews focus on multiple administrations restricted to a particular issue or process. Thus, spending reviews can also be classified as:

- Program review
- Policy area review
- Process review
- Agency-unit review (Robinson, 2014: 14-15).

Another emphasized factor for the effective operation of the spending review process is the presence of a legal framework that provides a foundation for the process's elements and functions. Establishing the system on a legal basis is essential to guide the entire process and ensure its smooth functioning.

Figure 5: Legal Framework for the Spending Review Process



Source: Zielinski et al. (2019: 32).

Figure 5 summarizes the legislative framework underpinning the spending review process. Only a small percentage of countries (approximately 4%) have dedicated legal regulations in place. Directives and guidelines issued by central administrations constitute the primary legal foundation. In about 19% of implementing countries, however, there were no formal legislative frameworks for spending reviews as of 2018.

International organizations have identified challenges within the spending review system and process. According to the findings from 2018, one of the primary challenges countries face is the lack of performance data

and the inability to produce high-quality information. Additionally, the lack of political ownership scores high on the risk scale (OECD, 2019: 115).

3.2. Actors in the Spending Review Process

The roles and responsibilities of certain key actors are defined within the spending review process. Given that political commitment is a top priority, the cabinet plays a primary role in ensuring political ownership. The coordination role of a central authority is crucial in the system. Among OECD countries, it is common for the process to be managed by the central budget authority, with a strong central role observed in countries like the United Kingdom, Canada, Ireland, France, and Belgium. In a limited number of countries, such as Australia, the spending review process is directed directly by the prime minister or president (OECD, 2017: 130).

As the spending review process is closely linked to the budget, ministries of finance or treasuries generally serve as central and essential actors within the system. As of 2020, spending review topics are approved by the president, prime minister, or cabinet in 15 countries, while in 8 countries, ministries of finance, either alone or in cooperation with relevant ministries, are responsible for approving spending review topics and final reports (OECD, 2021: 130).

In some countries, central authorities collaborate with spending units, while in Australia, for instance, final spending review decisions must be submitted to the cabinet. In Denmark, the United Kingdom, and Slovakia, the ministry of finance or treasury plays an active, guiding role at each stage of the process (Doherty&Sayegh, 2022: 6).

Another key actor in the process is the working groups. Consisting of the ministry of finance, spending ministries, and external stakeholders, these groups are engaged in all stages of the process until completion. The primary duty of these working groups is to analyze spending review topics. A separate entity known as the steering group is responsible for guiding the working groups and presenting findings and recommendations to relevant ministers as potential reform options. Ensuring effective information exchange between the coordinating unit and related authorities and maintaining balance in power dynamics throughout the process are essential.

3.3. Connection Between Spending Review and Budgeting

While budgeting is generally accepted as a process that adapts to changes in political and economic conditions (Schick, 1988: 523), the budget itself is not a policy document designed to create savings options. The spending review, however, is typically implemented to limit the increase in total budget size and resource allocation, which tend to rise compared to the previous period. At the end of the review process, identifying savings and improvement recommendations and concretely incorporating these policy suggestions into the budget document is crucial to ensuring a rational process.

The requirements for resource allocation may vary at the end of the process. In some OECD countries, the savings identified through spending reviews are directly included in the budget law. Australia is a notable example in this regard (Bova et al., 2020: 10). Although the necessity of coordinating the spending review and budget processes is frequently emphasized in the literature, it is also noted that few countries have successfully integrated this structure regularly into their budgeting processes (Lindquist & Shepherd, 2023: 4).

4. PANEL DATA ANALYSIS ON THE IMPACT OF THE SPENDING REVIEW METHOD ON FISCAL BALANCE

The budget document, regarded as the primary financial plan of the executive branch, is an estimate of government revenues and expenditures (Taylor, 1948:17). Since budget documents are policy documents that materialize the areas of public service and corresponding public resources, achieving efficiency in the use of public resources is directly linked to the budget.

In this context, the question, "Can spending review be considered an effective policy tool for financial management?" is the primary focus of the analysis in this section. No studies within the literature have been identified that examine the impact of spending review on fiscal balance or budget balance as in this study. Kneller's research on the long-term impact of comprehensive spending review on economic growth is considered significant in this regard. In this study, Kneller analyzed whether spending reviews conducted in the UK in 1998, which focused on health, education, and capital expenditures, led to

an increase in potential economic growth. The study concluded that changes in the spending plans announced in the reviews impacted growth by an annual rate of 0.1% (Kneller, 2000: 94).

In this panel data study, the ratio of budget balance to GDP² is taken as the primary variable. If an improvement in budget balance is achieved following the spending review, this outcome is assumed to indicate effective use of public resources and validate spending review as a well-structured and sound decision-making method. In this study, when determining the dependent variable -the numerical data published by the OECD - which was accepted as the most accurate data - was intended to be taken as basis. The main reason for this necessity is that any country that is not a member of the OECD is not included in the model. In this context, the variable published by the OECD and defined as general government deficit (budget deficit-budget balance) was intended to be taken as the dependent variable. This variable is defined by the OECD as the general public deficit, which shows the balance between the revenues and expenses of the public sector, which includes capital revenues and capital expenditures. If the numerical data is positive and the number of public budget surpluses is negative, it means that the public has a deficit and needs resources from other sectors to close this deficit.

The budget balance, regarded here as fiscal balance, is represented as a ratio of each country's gross domestic product (GDP) and is used as the dependent variable in the regression analysis.³ Through a literature review on the determinants of budget deficits, certain macroeconomic variables were identified as independent (explanatory) variables in the model. This study was limited to countries for which it is known exactly when they started their expenditure review system.

In this model, a dummy variable is included to differentiate and analyze the periods before and after the spending review, in addition to the dependent and independent variables. A literature review on the determinants of budget deficits revealed that some studies focus on political and institutional determinants of fiscal deficits. The independent variables in the model are identified based on studies within this focus.

2- <https://data.oecd.org/gga/general-government-deficit.htm>

3- Fiscal balance is generally understood as the difference between budget revenues and expenditures.

Table 2: Determinants of Budget Deficit / Budget Balance

AUTHORS	YEAR	COUNTRIES	PERIOD	FINDINGS/EXPLANATIONS
Batavia ve Lash	1983	Turkey	1950-1985	Positive bidirectional relationship between inflation and budget deficit.
Roubini ve Sachs	1989	15 OECD Countries	1960-1985	Positive bidirectional relationship between inflation and budget deficit; coalition governments show an increasing trend in deficits post-1973, while single-party governments are more supportive of fiscal policy.
Chaundhary ve Parai	1991	Peru	1973-1988	Budget deficits contribute to inflationary effects through increases in money supply.
Al-Khedar	1996	G-7 Countries	1963-1994	Budget deficits have a positive impact on growth in some industrialized countries; in the short term, deficits raise interest rates.
Barışık ve Kesikoğlu	2006	Turkey	1987-2003	Positive bidirectional relationship between budget deficit and inflation; bidirectional causality between budget deficit, current account deficit, and growth.
Kneller, Bleaney ve Gemmell	1999	22 OECD Countries	1970-1995	Public spending channeled to productive areas has a positive effect on growth.
Gwartney, Holcombe ve Lawson	1998	OECD	1960-1996	Negative relationship between public spending and growth; a large public sector leads to lower growth.
Egeli	1999	23 Countries	1995	Negative relationship between budget deficit and inflation; increased external borrowing capacity reduces borrowing costs, helping to lower the budget deficit. A 1% increase in public spending increases the budget deficit by 1.17%.
Vieria	2000	France-Belgium-Italy	1950-1996	Relationship between budget deficit and inflation: negative in France, positive in Belgium and Italy.
Woo	2003	57 Countries	1970-1990	Income inequality, assassinations, cabinet size, and centralization are significant determinants of budget deficits. Countries with better administrative governance have lower deficits. Income inequality and political instability have a negative impact on the budget surplus, and ineffective administrative structures significantly influence the budget deficit.
Catao ve Terrones	2003	107 Countries	1960-2001	Strong positive relationship between budget deficit and inflation in developing countries.
Tujula and Wolswijk	2004	OECD/EU Countries	1970-2002	Positive relationship between budget deficit and growth; high interest rates adversely impact budget balance. A 1% increase in interest rates deteriorates budget balance by 0.14% of GDP. Higher national income positively affects the budget.
Yanık	2006	Turkey	1985-2005	Budget deficit and current account deficit move in the same direction in the long term; causality runs from the current account deficit to the budget deficit.

AUTHORS	YEAR	COUNTRIES	PERIOD	FINDINGS/EXPLANATIONS
Castro	2007	15 EU Countries	-	Weak fiscal stance, low economic growth, parliamentary elections, and mostly left-leaning governments contribute to high budget deficits in these countries.
Huynh	2007	Asian Countries	1990-2006	Positive relationship between budget deficit and growth; as the deficit increases, growth worsens. However, productive expenditures positively impact economic growth, while inefficient public spending adversely affects growth.
Beetsma, Giuliodori ve Klaassen	2008	EU Countries	-	A 1% increase in public spending leads to a 1.6% increase in GDP and a 0.7% increase in the budget deficit.
Adak	2010	Turkey	1972-2006	Changes in the budget deficit have a 24% negative impact on growth, mainly due to high-interest borrowing by the government, which crowds out investment
Shahid ve Naved	2010	Pakistan	1972-2008	Budget deficit/GDP between 3% and 4% supports positive economic variables. Beyond a certain threshold, increasing deficit has a negative effect, leading to serious macroeconomic consequences.
Ezeabasili, Tsegba ve Herbert	2012	Nigeria	1970-2006	Negative relationship between budget deficit and growth; a 1% increase in the fiscal deficit decreases economic growth by 0.023%.
Folorunso ve Falade	2013	Nijerya	1970-2011	Positive effect of budget deficit on debt in the short and long term; a 1% increase in deficit results in a 0.08% increase in public debt
Maltritz ve Wüste	2015	27 EU Countries	1991-2011	High levels of borrowing positively impact budget balance.
Brima ve Mansaray-Pearce	2015	Sierra Leone	1980-2014	Positive relationship between budget deficit and inflation; a 1% increase in inflation raises the deficit by 0.354%. Inflation is identified as a cause of increasing budget deficits.
Bangura, Tarawalie, Fofanah ve Macarthy	2016	Sierra Leone		A 1-unit increase in real GDP reduces the budget deficit by 3 units due to lower costs. Growth enhances the government's revenue-generating capacity, reducing expenditures and deficits.
Barışık ve Barış	2017	123 Countries	2002-2014	Political stability and accountability in governance significantly reduce budget deficits, but no definitive relationship was found between budget deficit and government effectiveness.
Reed, Najarzadeh, Sadati	2019	Iran	1974-2015	Long-term relationship between budget deficit, current account deficit, and debt management. Sustainable debt management requires reducing the budget and current account deficits.
Sadıklı	2021	37 OECD Countries	2009-2016	Public sector size leads to budget deficits, while higher public debt levels improve budget balance.

AUTHORS	YEAR	COUNTRIES	PERIOD	FINDINGS/EXPLANATIONS
Bradbury ve Crain	2001	24 Countries		Negative relationship between parliamentary size and public spending; larger parliaments correlate with reduced public spending, especially in unicameral legislatures.
Tutar ve Tansel	2011	Turkey	1960-1996	Increase in the number of parties in coalition governments and organizations responsible for economic management raises budget deficits; elections have little effect on budget deficits.
Kneller	2000	United Kingdom	1998	Analysis of spending reviews in health, education, and capital expenditures revealed a 0.1% annual positive growth effect linked to changes in announced spending plans.
Hatunluoğlu ve Tekeli	2013	Turkey	1975-2010	The level of democratization influences the budget deficit; governments tend to increase public spending through expansionary policies to ensure re-election.

Source: Compiled by the author

4.1. Methodology and Data Set

The analysis section of this study focuses on OECD countries that have incorporated spending review (SR) processes into their financial management systems. Although almost all OECD countries have integrated the SR process into their fiscal systems, the analysis includes 25 countries for which the exact date of system adaption is accessible. Considering that the spending review system gained prevalence after the 2008 crisis, the study focuses on the period from 2009 to 2022. The primary objective is to measure whether there was an improvement in the budget balance of these 25 countries after they adapted the SR system.⁴

The independent variables in the model are determined by the established determinants of budget deficit in the literature and include:

The ratio of general government expenditures to GDP,

The ratio of general government revenues to GDP,

The ratio of general government debt stock to GDP,

The inflation rate⁵,

4- The 25 countries included in the analysis are: Austria, Australia, Belgium, Czech Republic, Canada, Chile, Colombia, Denmark, Estonia, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Luxembourg, Slovakia, Slovenia, Spain, Japan, Norway, Poland, Netherlands, and the United Kingdom.

5- <https://databank.worldbank.org/source/world-development-indicators>

The growth rate⁶,

The year-over-year change in the ratio of imports and exports to GDP.

The spending review is included in the model as a dummy variable. Additionally, to account for the impact of the COVID-19 pandemic, which significantly affected the global economy, a COVID variable is also introduced as a dummy variable. The COVID variable is coded as (1) for the years 2020, 2021, and 2022, and (0) for all years in the 2009-2019 period across all 25 countries included in the model.

Table 3: Model Variables

Variables	Definition/Description	Data Source
Dependent Variable		
General Government Deficit/GDP (Budget Balance/GDP)	The General Budget Deficit is defined as the balance of government revenues and expenditures, including capital income and expenditures. This indicator is included in the model as percentage of GDP. The General Government Deficit/GDP variable obtained from OECD data is included in the model as Budget Balance/GDP	OECD - Data General Government Deficit
Independent/Explanatory Variables		
General Government Expenditures /GDP(%)	Data for this variable is obtained from the IMF database	IMF - World Economic Outlook-
General Government Revenues / GDP(%)	Data for this variable is obtained from the IMF database	IMF - World Economic Outlook-
General Government Debt Stock / GDP(%)	Data for this variable is obtained from the IMF database	IMF - World Economic Outlook-
Inflation Rate (%)	Inflation rate is obtained from The World Bank data and are based on annual (%) values	World Bank -World Development Indicator-
Growth Rate (%)	Growth rate is obtained from The World Bank data and are based on annual (%) values	World Bank -World Development Indicator-
The year-over-year change in the ratio of export to GDP.	GDP data for countries is obtained from The World Bank in current US dollars, and export of good and services is obtained on the same basis. The year-over-year change in the export ratio to GDP, which is more closely related to the development level of countries, is included in the model as a Control Variables	World Bank -World Development Indicator-

6- <https://databank.worldbank.org/source/world-development-indicators>

Variables	Definition/Description	Data Source
The year-over-year change in the ratio of import to GDP.	GDP data for countries is obtained from The World Bank in current US dollars, and import of good and services is obtained on the same basis. The year-over-year change in the import ratio to GDP, which is more closely related to the development level of countries, is included in the model as a Control Variables	World Bank -World Development Indicator-
SR (Spending Review) - Dummy Variable	Defined as '1' or '0' based on each country's spending review adaption date.	
General Government Expenditures -Dummy Variable	General Government Expenditures/ GDP ratio, one of defined independent variables, is coded as '0' for tre pre-SR period, and the numerical value of the variable is used for the post-SR period.	
General Government Debt Stock-Dummy Variable	General Government Debt Stock/ GDP ratio is similarly coded for pre and post SR periods to measure the effect of SR on fiscal balance.	
Covid 19 Dummy Variable	To measure the impact of the Covid 19 period on fiscal balance, this variable is coded as '1' for the years 20020--2021-2022 and '0' for all years in the 2009-2019 periods	

Source: Compiled by the author

To determine whether there has been any fiscal balance change after countries adapted the spending review process, a fixed dummy variable has been added to the model. Based on the year each of the 25 countries began the process, the post-adaption period is coded as (1), and the pre-SR period is coded as (0).

Additionally, dummy variables have been defined for two independent/ explanatory variables to track budget balance changes following the adaption of the spending review. These two dummy variables -representing the ratio of public expenditures to GDP and the ratio of public debt stock to GDP- are included as interaction variables in the model. The values of "public expenditures / GDP" and "public debt stock / GDP" for each of the 25 countries in the years before and after adapting the spending review are included in the analysis.

The expected outcome of including these two dummy variables in the model is to observe if the potentially negative effect of public expenditure increases on budget balance (i.e., deficit expansion), holding other variables

constant, changes after adapting spending reviews. Similarly, the ratio of public debt stock to GDP, defined as a dummy variable, is included to analyze whether there is a significant change in the impact of public borrowing on budget balance in the post-spending review period. The regression equation representing the relationship between the model variables is as follows:

$$\text{Budget Balance}_{it} = \beta_0 + \beta_1 \text{Public Expenditure}_{it} + \beta_2 \text{Inflation}_{it} + \beta_3 \text{Growth}_{it} + \beta_4 \text{Public Debt}_{it} + \beta_5 \text{Public Revenue}_{it} + \beta_6 (\text{Public Expenditure}_{it} \times \text{SR}) + \beta_7 (\text{Public Debt}_{it} \times \text{SR}) + \beta_8 \text{SR}_{it} + \beta_9 \text{Export growth}_{it} + \beta_{10} \text{Import growth}_{it} + \beta_{11} \text{COVID}_{it} + u_{it}$$

In this model, the subscript (t) represents the time dimension, and (i) denotes the units. According to theory, a unit root test, which assesses stationarity in a time series, should be conducted if $t > 20$; however, in this study, $t = 14$, so unit root analysis is not applied. Before proceeding with the model estimation, the Hausman Test was used to determine whether fixed or random estimators are suitable for this panel study. Firstly, the correlation matrix showing the relationship among the model variables is presented in Table 4.

Table 4: Correlation Matrix

	BB	GE	Inf	Growth	Debt	GR	GE-SR	GD-SR	SR	EXP	IMP	Covid
Budget Balance (BB)	1.000											
General Public Expenditures (GE)	-0.2274	1.000										
Inflation (Inf)	0.0867	-0.1146	1.000									
Growth (G)	0.3101	-0.3655	0.1711	1.000								
General Public Debt (Debt)	-0.3352	0.3240	-0.1719	-0.1803	1.000							
General Public Revenue (GR)	0.3018	0.8375	-0.0727	-0.1848	0.1197	1.000						
General Public Expenditures -SR	-0.1453	0.2910	-0.0081	-0.0006	0.2837	0.1930	1.000					
General Public Debt-SR	-0.2701	0.1548	-0.1537	-0.0678	0.8206	-0.0027	0.6746	1.000				
Spending Review-SR	-0.1021	0.0662	0.0270	0.0895	0.2464	0.0006	0.9571	0.6621	1.000			
Export	0.0630	0.0282	0.3479	0.3715	0.0810	0.0427	0.0911	0.0904	0.1022	1.000		
Import	-0.0174	0.0259	0.3540	0.4458	0.1090	0.0204	0.1137	0.1419	0.1116	0.7305	1.000	
Covid 19	-0.1072	0.1355	0.4211	0.0207	0.0697	0.0365	0.3569	0.2070	0.3357	0.1825	0.2005	1.000

Source: Obtained using Stata 13 software

4.2. Model Estimation and Evaluations Based on Findings

This study utilizes the panel data method, which includes two different approaches: the Fixed Effects Model (FE) and the Random Effects Model (RE). The fixed effects model assumes that differences between units can be captured by differences in the constant term. In the literature, the random effects model is considered appropriate if the error term is assumed to be uncorrelated with the explanatory variables, while the fixed effects model is preferred if there is an assumed correlation between the error term and the explanatory variables (Gujarati and Porter, 2012: 606).

One of the most commonly used tests to decide between fixed effects and random effects models in panel data analysis is the Hausman Test. In the Hausman test, if there is no correlation between the explanatory variable X_{it} and the random variable u_i , the random effects model is appropriate. Conversely, if there is a correlation between the random variable u_i and the explanatory variables X_{it} the fixed effects model is more suitable (Hausman, 1978: 1263).

In the analysis of this study, Hausman test was applied to determine which estimator was appropriate for the model. The hypotheses for the Hausman test related to the model are as follows:

H_0 : The Random Effects Model is Appropriate

H_1 : The Fixed Effects Model is Appropriate

Table 5: Hausman Test Statistics

VARIABLES	COEFFICIENT VALUES		
	Fixed Effects	Random Effects	Differences
General Public Expenditures	-1.032876	-1.017577	-.0152987
Inflation	-.0226636	-.0264284	.0037647
Growth	.0563705	.0490639	.0073066
General Public Debt	.048577	.0124286	.0361484
General Public Revenues	.7116524	.9832821	-.2716297
General Public Expenditures-Dummy (SR)	.1121949	.0539141	.0582808
General Public Debt-Dummy (SR)	-.0209716	-.0144297	-.006542
Dummy (Fixed)	-3.771687	-1.685935	-2.085752
Export/GDP Growth	.0605761	.0529113	.0076648
Import/GDP Growth	-.0562087	-.0532928	-.0029159
Covid	.5472303	.7587634	-.2115331
	Test Statistics	Prob.	
Hausman	37.99	0.0001	

Source: Obtained using Stata 13 software

Since the Hausman test result is prob value < 0.05, fixed effects model is appropriate in the analysis. Given that this study involves a model with $N > T$ and that Driscoll-Kraay methods are known for yielding reliable results even in the presence of standard errors, this approach was selected. The Driscoll-Kraay fixed effects model, which uses standard errors resistant to autocorrelation, heteroskedasticity, and cross-sectional dependence, was employed for estimation.

For research on whether all horizontal section units in the analysis data are equally affected by a shock effect in the series (in the literature, cross-section Breush-Pagan (1980) LM (Lagrange Multiplier) test, Pesaran (2004) scaled LM test and Pesaran CD tests are used) which test will be preferred is determined according to the unit and time values included in the model series. In this model, since the data section in the data set subject to analysis was larger than the time section, the correlation between units was tested with the Pesaran CD test (Pesaran, 2004).

Hypotheses of the model;

H_0 : There is no cross-sectional dependence -horizontal cross section is independent-

H_1 : There is a cross-sectional dependence,

and the test result was found as follows.

Test Name	Test Statistics	Probability Value
Pesaran CD	8.330	0.0000

Since the probability value was found to be < 0.05 , the H_0 hypothesis was rejected and it was concluded that there is a cross-sectional dependence between the units. After determining cross-section dependence, which is one of the standard errors, analysis was carried out with the Driscoll-Kraay model, which can produce meaningful and consistent data even under standard errors.

Accordingly, the model was tested for heteroskedasticity and autocorrelation using various tests from the literature, and it was determined that all three types of standard error conditions were present. In the literature, Driscoll-Kraay is described as a non-parametric covariance matrix estimator that produces consistent standard errors (Hoechle, 2007: 282). As defined in theory, the xtscd program, used in the model, generates Driscoll-Kraay standard errors for linear panel models. This approach thus serves as an estimator that ensures efficiency even in the presence of standard errors. The analysis results are presented in Table 6.

Table 6: Model Results Summary

Driscoll-Kraay Regression Fixed Effect Model				
Observations :	350			
Number of Groups :	25			
R-squared :	0.7949			
BUDGET BALANCE	Coefficient Values	Drisc/Kraay Standard Errors	t statistics	p > |t|
General Public Expenditure:	-1.032876	.0388512	-26.59	0.000*
Inflation	-226636	.0250298	-0.91	0.374
Growth	.0563705	.0277832	2.03	0.054**
General Public Debt	.048577	.0139769	3.48	0.002*
General Public Revenues	.7116524	.1199587	5.93	0.000*
General Public Expenditures-Dummy (SR)	.1121949	.0359447	3.12	0.005*
General Public Debt-Dummy (SR)	-.0209716	.007317	-2.87	0.009*
Dummy (SR)	-3.771687	1.220467	-3.09	0.005*
Exports/GDP (Growth rate)	.0605761	.0305544	1.98	0.059**
Imports/GDP (Growth rate)	-.0562087	.0254041	-2.21	0.037*
Covid 19	.5472303	.1914531	2.86	0.009*
Constant	9.919004	5.111963	1.94	0.064**

Note: *, ** indicate significance levels at 5% and 10% respectively (prob < 0.05, prob < 0.10).

Model results were obtained using Stata 13 software.

Based on the probability values in Table 6, all model variables, except inflation, are statistically significant. The results obtained from the model are summarized as follows:

Public Expenditures and Budget Balance: A significant and negative correlation between public expenditures and budget balance was found. This negative relationship aligns with expectations, as expenditure items, which imply fiscal burdens, tend to worsen the budget balance. Specifically, a 1-percentage-point increase in the ratio of general public expenditures to GDP deteriorates the budget balance by 1.032 percentage points.

Growth and Budget Balance: A significant positive relationship between growth and budget balance was found. A 1-percentage-point increase in the growth rate improves the budget balance by 0.056 percentage points. This finding aligns with studies in the literature that indicate a positive correlation between budget balance and growth. For instance, Castro (2007) found that strong growth improves revenue, reduces unemployment, and lessens the government's need for spending on job creation, thus positively affecting the budget balance. Herath (2012) noted a positive relationship between public expenditures and growth, and Bangura et al. (2016) concluded that growth increases revenue-generating capacity, which reduces expenditures and consequently lowers the budget deficit.

Public Revenues and Budget Balance: A significant positive relationship was found between public revenues and budget balance. A 1-percentage-point increase in public revenues improves the budget balance by 0.711 percentage points. This is consistent with expectations that increased revenues will improve the budget balance by financing projected government spending.

Public Debt and Budget Balance: A significant positive relationship was observed between public debt and budget balance. A 1-percentage-point increase in the ratio of gross public debt to GDP improves the budget balance by 0.048 percentage points. This positive relationship between borrowing and budget balance aligns with studies in the literature, including Maltritz and Wüste (2015), who found that large amounts of borrowing positively affect budget balance, and Egeli (1999), who noted that increased access to external borrowing reduces borrowing costs, thereby having a positive impact on the budget deficit.

Similarly, channeling the resources obtained by the public through borrowing to high value-added areas such as R&D expenditures or investment expenditures within the economy will ensure that borrowing will have a positive effect on the fiscal balance.

Import/Export Ratios and Budget Balance: The import and export ratios to GDP, included as year-over-year changes, also yield significant findings. A 1-percentage-point increase in export growth improves the budget balance by 0.060 percentage points, while imports negatively impact the budget balance by 0.056 percentage points.

COVID-19 Period and Budget Balance: The COVID-19 period showed an average budget balance improvement of 0.54 percentage points. This result does not entirely align with expectations given the serious crisis during this period. Therefore, it is believed that the spending review process contributed to this observed improvement.

The primary goal of this study is to observe the direction of change in the dependent variable, defined as budget balance/GDP, following the implementation of the spending review. The model distinguishes between the years when countries systematically incorporated spending reviews into their fiscal management systems and the years before these systems were in place. The coefficient for the variable defined as general public expenditures-SR (interaction variable) was found to be positive, significant, and valued at 0.112. The aim of this variable is to determine whether the effect of public expenditures on budget balance undergoes a significant change with the adaption of the spending review system. This positive and significant result suggests that the 1.032 percentage-point negative impact of a 1-percentage-point increase in public expenditures on budget balance is reduced by 0.112 percentage points after the dummy variable is applied. Thus, the 1.032 percentage-point negative impact decreases to 0.920 percentage points with the implementation of the spending review. It is an important goal for fiscal policy to eliminate the need for additional borrowing by financing the expenses undertaken by the public with revenues. In this context, an increase of, 1 percentage point in the budget after the expenditure review, which was implemented to eliminate the disruptive effect of public expenditures on the budget balance and to discipline expenditures, will limit the deterioration in the budget balance to 0.92 percentage points.

This result indicates that the spending review method, as a policy tool, has a meaningful and expected positive effect on reducing the adverse impact of increasing budget expenditures on the budget balance. However, for countries that adopted the spending review, the model indicates a reduction in the positive impact of the debt/GDP ratio on budget balance after the spending review process. Thus, unlike the positive impact on budget balance seen with public expenditures, a similar improvement was not observed for debt following the implementation of the spending review. This result is not consistent with expectations.

CONCLUSIONS

As the state takes on a greater role as an economic actor and a spending entity, guided by societal expectations, it has increasingly assumed a central position within the fiscal system. This shift, alongside the rising intensity of public intervention, has necessitated the inclusion of various policy tools in financial management systems to ensure the efficient use of public resources. The preparation of budget documents -policy statements that essentially declare public expenditures -on an efficiency basis has become a natural outcome of this process, and spending review has emerged as a tool and policy instrument, expected primarily to create fiscal space and enhance budget effectiveness.

The aim of this study was to summarize the methodology and framework of the spending review method and empirically assess whether this approach has led to an improvement in budget balance as a fiscal policy tool. The primary expectations from the spending review process can be summarized as controlling public spending levels, enabling the reallocation of expenditures according to changing policy priorities, increasing the effectiveness of current policies, and redirecting resources from inefficient areas of public spending to more productive ones.

As a policy tool, the spending review process is expected to contribute to fiscal consolidation by creating savings options and increasing the value of money. Although there is no single methodology for the spending review system, its structure is shaped by country-specific applications. This study first presented the theory regarding the structure, rules, and functioning of the system. The analysis focused on 25 OECD countries that integrated the spending review system into their financial management. The time period of the study is 2009-2022 and the spending review defined as a dummy variable in the model.

The analysis found that the negative impact of increasing public expenditures on budget balance decreased to a certain extent with the application of the spending review method. Specifically, while public expenditures were observed to have a negative impact on the budget balance, worsening it by 1.032 percentage points, this effect showed an improvement of 0.112 percentage points after the adaption of the spending review. One of

the assumptions in the model was that increases in public expenditures would negatively affect the budget balance, thereby worsening the budget deficit. The analysis results supported this assumption. Thus, it was observed that in the countries included in the analysis, adapting the spending review as a policy and management tool helped mitigate the negative trend in budget balances caused by increased public spending. This outcome confirms the initial hypothesis posed at the beginning of the study: "Given the increasing adaption of spending review among countries, can this approach be considered an effective fiscal policy instrument?"

In conclusion, it can be claimed that almost every country bears a social cost while implementing expansive policy sets in the area of fiscal policy. At this point, the spending review method is seen as an important and useful policy tool to help offset this cost.

REFERENCES

- Adak, M. (2010). Kamu Açıkları ve Ekonomik Büyüme: Türkiye Örneği. *Maliye Dergisi* (159), 233-243.
- Al-Khedair, S. (1996). *The Impact of the Budget Deficit on Key Macroeconomic Variables in The Major Industrial Countries*. Florida: Florida Atlantic University.
- Atiyas, İ. & Sayın, Ş. (1997). *Siyasi Sorumluluk, Yönetmelik Sorumluluk ve Bütçe Sistemi: Bir Yeniden Yapılanma Önerisine Doğru*. TESEV- Türkiye Ekonomik ve Sosyal Etüdler Vakfı.
- Bangura, A., Tarawalie, A., Fofanah, L. & Macherty, S. (2016). *Macroeconomic Determinants of Budget Deficit: Evidence From Sierra Leone*.
- Barişık, S. & Barış, A. (2017). *Impact of Governance on Budget Deficit in Developing Countries*. *Theoretical and Applied Economics*, XXIV(2), 111-130.
- Barişık, S. & Kesikoğlu, F. (2006). *Türkiye'de Bütçe Açıklarının Temel Makroekonomik Değişkenler Üzerine Etkisi- (1987-2003 VAR,Etki-Tepki Analizi,Varyans Ayrıştırması)*. Ankara Üniversitesi SBF Dergisi, 61(4), 59-82.
- Batavia, B. & Lash, N. A. (1983). *Self-perpetuating Inflation: The Case of Türkiye*. *Journal of Economic Development*. 8(2), 149-166.
- Beetsma, R., Giuliodori, M. & Klaassen, F. (2008). *The Effects of Public Spending Shocks on Trade Balances and Budget Deficits in the European Union*. *Journal of the European Economic Association*, 6(2), 414-423.

- Bova, E., Ercoli, R. & Bosch, X. (2020). Spending Reviews: Some Insights from Practitioners. European Commission.
- Boyle, R. (2011). Better Use Of Public Money, The Contribution of Spending Reviews and Performance Budgeting. State of The Public Service Series. Institute of Public Administration.
- Bradbury, J. C. & Crain, M. W. (2001). Legislative Organization and Government Spending: Crosscountry Evidence. *Journal of Public Economics*, 82(3), 309-325.
- Brima, S. & Mansaray, E. (2015). Budget Deficit and Macroeconomic Variables in Sierra Leone: An Econometric Approach. *Journal of Economics and Sustainable Development*, 6(4).
- Castro, V. (2007). The Causes of Excessive Deficits in the European Union. NIPE Working Paper Series(13).
- Catalano, G. & Erbacci, A. (2017). A Theoretical Framework For Spending Review Policies At A Time of Widespread Recession. *OECD Journal on Budgeting*(2), 9-25.
- Catao, L. & Terrones, M. (2003). Fiscal Deficits and Inflation. *Journal of Monetary Economics*, 52(3), 529-554.
- Choudhary, M. A. & Parai, A. K. (1991). Budget Deficit and Inflation: The Peruvian Experience. *Applied Economics*, 1117-1121.
- Çulha Zabcı, F. (2002). Dünya Bankası'nın Küresel Pazar İçin Yeni Stratejisi: Yönetişim. *Ankara Üniversitesi SBF Dergisi*, 57(3), 151-179.
- Doherty, L. & Sayegh, A. (2022). How To Design and Institutionalize Spending Reviews. Washington: International Money Fund.
- Egeli, H. (1999). Gelişmekte Olan Ülkelerde Bütçe Açıkları. *SDÜ İktisadi ve İdari Bilimler Dergisi*(4), 293-303.
- European Commission. (2016). Quality of Public Finance Spending Reviews For Smarter Expenditure Allocation In The Euro Area. Directorate General Economic And Financial Affairs.
- Ezeabasili, V., Tsegba, L. N. & Ezi-Herbert, W. (2012). Economic Growth and Fiscal Deficit: Empirical Evidence from Nigeria. *Economics and Finance Reviews*, 2(6), 85-96.
- Folorunso, B. A. & Falade, O. E. (2013). Relationship Between Fiscal Deficit and Public Debt in Nigeria: An Error Correction. *Journal of Economics and Behavioral Studies*, 5(6), 346-355.
- Graham, J., Amos, B. & Plumtre, T. (2003). Governance Principles for Protected Areas in the 21 th Century. Ottawa: Institute on Governance.

- Grünberg, T. (2007). Performance Improvement: A Method to Support Performance Improvement in Industrial Operations. Stockholm: Royal Institute of Technology.
- Gujarati, D. N. & Porter, D. C. (2012). Temel Ekonometri. (Ü. Şenesen, & G. Şenesen Günlük, Çev.) Literatür Yayınları.
- Gwartney, J., Holcombe, R. & Lawson, R. (1998). The Scope of Government and The Wealth of Nations. *The Cato Journal*, 18(2), 163-190.
- Hançer, S. N. (2018). Modern Bütçeleme Teknikleri: Vatandaş Bütçesi ve Türkiye Üzerine Bir Değerlendirme. Ankara: Ankara Üniversitesi Sosyal Bilimler Enstitüsü.
- Hatunluoğlu, H. & Tekeli, R. (2013). Budget Deficits and Democracy: The Case of Türkiye. *Sosyoekonomi*, 9(19), 335-351.
- Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica: Journal of The Econometric Society*, 46(6), 1251-1271.
- Heller, P. S. (2005). Understanding Fiscal Space. Washington DC: IMF.
- Herath, S. (2012). Size of Government and Economic Growth: A Nonlinear Analysis. *Economic Annals*(194), 7-30.
- HM Treasury. (2007). Meeting The Aspirations of The British People, 2007 Pre-Budget Report and Comprehensive Spending Review. London. London: HM Treasury.
- Hoechle, D. (2007). Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence. *The Stata Journal*, 281-312.
- Huyhn, D. (2007). Budget Deficit and Economic Growth in Developing Countries: The Case of Vietnam. Kansai Institute for Social and Economic Research.
- Karras, G. (1996). The Optimal Government Size: Further International Evidence on the Productivity of Government Services. *Economic Inquiry* (34(XXXIV)), 193-203.
- Kneller, R., Bleaney, M. & Gemmell, N. (1999). Growth, Public Policy and The Government Budget Constraint: Evidence From OECD Countries. 98(14). School of Economics Discussion Paper.
- Lindquist, E. & Shepherd, R. P. (2023). Spending Reviews and The Government of Canada: From Episodic to Institutionalized Capabilities and Repertoires. *Canadian Public Administration*, 66(2), 151-278.
- Maltritz, D. & Wüste, S. (2015). Determinants of Budget Deficits in Europe: The Role and Relations of Fiscal Rules, Fiscal Councils, Creative Accounting and The Europe. *Economic Modelling*(48), 222-236.
- Ministry of Development. (2018). Efficiency in Public Expenditures Working Group Report. 11th Development Plan Special Expertise Commission Report. Ankara: Ministry of Development.

- OECD. (2017). *Government At A Glance*. Paris: OECD Publishing.
- OECD. (2019). *Budgeting and Public Expenditures in OECD Countries*. Paris: OECD.
- OECD. (2021). *Government at A Glance*. Paris: OECD Publishing.
- Oppenheimer, F. (1997). *Devlet*. (A. Şenel, & Y. Sabuncu, Çev.) İstanbul: Ergin Yayınları.
- Pradhan, S. (1996). *Evaluating Public Spending A Framework For Public Expenditure-Reviews*. World Bank Discussion Papers, Washington.
- Quibria, M. G. (2006). *Does Governance Matter? Yes, No or Maybe Some Evidence From Developing Asia*. 1-26.
- Reed, M., Najarzadeh, R. & Sadati, S. Z. (2019). *Analyzing The Relationship Between Budget Deficit, Current Account Deficit and Government Debt Sustainability*. *Journal of WEI Business and Economics*(8), 20-31.
- Robinson, M. (2013). *Spending Reviews, 3 th Annual Meeting of OECD Senior Budget Officials Spending Reviews*. OECD Journal on Budgeting.
- Robinson, M. (2014). *Spending Reviews*. 13(2). OECD Journal on Budgeting.
- Robinson, M. (2018). *The Role of Evaluation in Spending Review*, PFM Results Consulting. *Canadian Journal of Program Evaluation*, 32(3), 305-315.
- Roubini, N. & Sachs, J. (1989). *Political and Economic Determinants of Budget Deficits in The Industrial Democracies*. *European Economic Review*, 903-938.
- Sadıklı, O. (2021). *Kamu Kesimi Etkinliğinin Bütçe Dengesi Üzerindeki Etkisine İlişkin Ampirik Bir Değerlendirme*. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Maliye Anabilim Dalı.
- Schick, A. (1988). *Micro-Budgetary Adaptations to Fiscal Stress in Industrialized Democracies*. *Public Administration Review*, 48(1), 523-533.
- Shadid, A. & Naved, A. (2010). *The Effects of Fiscal Policy on Economic Growth: Empirical Evidences Based on Time Series Data from Pakistan*. *The Pakistan Development Review*, 49(4), 497-512.
- Tanzi, V. & Schuknecht, L. (2000). *Public Spending in The 20 th Century A Global Perspective*. Cambridge University Press.
- Taylor, P. E. (1948). *The Economics of Public Finance*. Newyork: The Macmillan Company.
- The World Bank (1997). *World Development Report 1997- The State In A Changing World*.
- The World Bank (1998). *Public Expenditure Handbook Management*.
- The World Bank (2018). *Bulgaria Spending Review Manul*.

- Tujula, M. & Wolsvijk, G. (2004). What Determines Fiscal Blances ? An Emprical Investigation in Determinants of Changes in OECD Budget Balances. Working Paper Series(422).
- Tutar , İ. & Tansel, A. (2019). Political Business Cycles Institutional Structure and Budget Deficit. Economic Research Forum Working.
- Vieria, C. (2000). Are Fiscal Deficits Inflationary? Evidence for the EU. Economic Research Paper (7), 1-16.
- Woo, J. (2003). Economic, Political, Institutional Determinants of Public Deficits. Journal of Public Economics(87), 387-426.
- Yanık, Y. (2006). The Twin Deficits Hypothosis: An Empirical Investigation. Master's Thesis.
- Zielinski, W., Tryggvadottir, A. & Lau, E. (2019). Spending Reviews in OECD Countries: Towards Good Practices. OECD.

KAMU HARCAMALARINDA ETKİNLİĞİN SAĞLANMASI İÇİN BİR POLİTİKA ARACI OLARAK HARCAMA GÖZDEN GEÇİRME VE BU YÖNTEMİN MALİ DENGİ ÜZERİNDE ETKİSİ

NİHAL SELCEN HANÇER

GENİŞLETİLMİŞ ÖZET

Devletin bir harcama birimi olarak ekonomide değişen rolü, kamusal müdahale alanının genişlemesine nedendir. Benzer şekilde, refah devleti yaklaşımı, yönetim olgusu ve bu olgunun sonucu olarak kaynakların verimli-etkin-etkili kullanımına dair gereklilik, mali alanının genişletilmesi ihtiyacı, 2008 küresel krizin ardından yoğunlaşan harcama eğilimi; etkin bir kamu mali yönetimi için yeni politika araçlarının geliştirilmesini gerekli kılmıştır. Harcama gözden geçirme bu noktada, mali alan yaratmaya odaklanarak, kamu harcamalarının etkin yönetimini amaçlayan bir politika aracı olarak uygulanmaktadır.

Bu çalışmanın amacı, harcama gözden geçirme yaklaşımına ilişkin kavramsal ve teorik çerçeveyi özetleyerek bu yöntemin kamu kaynaklarının etkin kullanımına katkı sağlayıp sağlamadığına ilişkin bir değerlendirme yapmaktır.

Harcama gözden geçirme sürecinin mali konsolidasyonu desteklemesi ve tasarruf opsiyonları oluşturarak paranın değerini artırması beklenmektedir. Nihai hedef; kamu harcama seviyesini kontrol etmek, gelişen politika önceliklerine göre harcamaları yeniden tahsis etme imkânı oluşturmak, mevcut politikaların

etkinliğini artırmak ve verimsiz kamu harcamalarını ortadan kaldırarak kamu kaynaklarını daha üretken alanlara yönlendirmektir. Böylelikle kamu kaynak kullanımında öngörülen tasarruflar yoluyla bütçe dengesini iyileştirerek mali disiplini sağlamak, sürdürülebilir büyüme temelinde makroekonomik yapıyı güçlendirmek, kamu hizmet sunumunun kalitesini artırmak amaçlanmaktadır.

Harcama gözden geçirmenin kavramsal ve teorik çerçevesi bu çalışmaya dahil edilen 25 OECD ülkesi temelinde incelenmiş ve özetlenmiştir. Harcama incelemeleri yıllık veya periyodik olarak gerçekleştirilmekte, dar veya kapsamlı olarak yürütülebilmektedir. Süreç genellikle maliye bakanlığı gibi merkezi bir otorite tarafından koordine edilmekte ve diğer kamu idareleri, parlamento, kamu dışından paydaşlar olmak üzere farklı aktörlerin süreç içerisinde rol ve görevleri bulunmaktadır. Çalışma grupları ve yönlendirme grupları olarak adlandırılan iki farklı yapı, sistemin etkin işletilebilmesi adına gerekli olup aktif role sahiptir.

Gözden geçirme sürecinin; hazırlık, karar, yönetim ve uygulama olarak sınıflandırılan her bir aşamasında rol ve sorumlulukların açık, net ve şeffaf bir şekilde tanımlanması ve yürütülmesi önemlidir. Sürecin başında tasarruf hedeflerinin belirli olması, sistemin rasyonel yürütülebilmesi için temel gerekliliklerdendir. Süreç sonunda elde edilen tasarrufları bütçe ve harcama kararlarına dahil etmek ve kaynak tahsisinde yönetime alternatif oluşturmak önemli olduğundan siyasi taahhüt sistem için temel gerekliliktir. Süreç sonunda elde edilmesi umulan tasarruf seçeneklerinin kaynak tahsisi noktasında etkin kullanımı ve reform seçeneğine zemin oluşturmasına yönelik beklenti, sürece ilişkin politik sahipliği gerekli kılmaktadır.

Sistemin unsur ve bileşenleri ile işleyişi, modele dahil edilen 25 ülke özelinde incelenmiş olunmakla birlikte, ülke uygulamalarına çalışmanın sınırlılıkları dahilinde yer verilememiştir. Çalışmanın analiz kısmı harcama gözden geçirme sistemini mali yönetimlerine entegre etmiş 25 OECD ülkesinde 2009-2022 dönemi esas alınarak yürütülmüştür.

Kamu kaynaklarının etkin kullanımının mali dengelyi -bütçe dengesi- iyileştireceği varsayımıyla, çalışmaya dahil edilen ülkelerin bütçe dengesi analizde bağımlı değişken olarak belirlenmiştir. Harcama gözden geçirme yöntemi modelde kukla değişken olarak tanımlanmış olup bağımsız değişkenler ise literatürde bütçe açıklarının belirleyicisi olarak belirlenen makroekonomik göstergeler incelenerek tespit edilmiştir.

Analize ilişkin en temel bulgu, artan kamu harcamalarının bütçe dengesi üzerindeki olumsuz etkisinin, harcama gözden geçirmenin bir politika aracı olarak uygulanmasının ardından belirli ölçüde iyileştiğidir. Kamu harcamalarının bütçe dengesi üzerindeki 1.032 yüzde puan olarak tespit edilen olumsuz ve bozucu etkinin harcama gözden geçirme süreci sonrasında 0.112 yüzde puan iyileştigiğine yönelik sonuca ulaşılmıştır. Harcama gözden geçirmenin bir yöntem olarak kamu mali yönetim sistemine dahilinden sonra elde edilen bütçe dengesindeki bu olumlu değişim, harcama gözden geçirmenin kamu kaynaklarının etkin kullanımında olumlu etkisi olduğuna yönelik varsayımla örtüşmektedir. Bu sonuç çalışmanın başlangıcında ortaya konulan "Ülkeler genelinde harcama gözden geçirmenin giderek daha fazla benimsenmesi göz önüne alındığında, bu yaklaşım etkili bir mali politika mıdır" yönündeki savı destekler niteliktedir. Sonuç olarak denilebilir ki ekonomik büyümenin sağlanması ve toplumsal refah artışına ulaşılabilmesi amacıyla uygulanan genişletici mali politikaların toplumsal bir maliyeti vardır ve harcama gözden geçirme yöntemi bu maliyeti bertaraf etmek adına anlamlı ve önemli bir politika ve yönetim aracıdır.