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PhD DISSERTATION

Özlem BAPBACI



T.C.

ANKARA YILDIRIM BEYAZIT UNIVERSITY

THE INSTITUTE OF SOCIAL SCIENCES

**THE ROLE OF SPENDING REVIEW IN DETERMINING
FISCAL PERFORMANCE: AN EMPIRICAL ANALYSIS FOR
THE OECD COUNTRIES**

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Prof. Tekin AKDEMİR

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Ankara, 2025

APPROVAL PAGE

The thesis, prepared by Özlem BAPBACI and titled “The Role of Spending Review in Determining Fiscal Performance: An Empirical Analysis for the OECD Countries” is accepted as a doctoral thesis at Ankara Yıldırım Beyazıt University, Graduate School of Social Sciences, Department of Public Finance by unanimous vote.

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Director of Graduate School of Social Sciences

PLAGIARISM PAGE

I hereby declare that all information in this thesis has been obtained and presented by academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.
(2025)



Signature

Özlem BAPBACI

DEDICATION

To my beloved family.

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ABSTRACT

The Role of Spending Review in Determining Fiscal Performance: An Empirical Analysis for the OECD Countries

Throughout history, transformations and developments in the economic functions of states have significantly increased public expenditures, resulting in a more active and interventionist role for governments in the economy. In particular, demographic changes, global crises, and unforeseen events such as pandemics have underscored the importance of efficiency and effectiveness in public spending, especially in OECD and EU member countries. Growing macroeconomic instability and increasing budgetary pressures have also contributed to adoption of spending reviews as a policy tool.

Following the 2008 Global Financial Crisis, the role of spending reviews in OECD countries expanded significantly. Originally a method for evaluating the efficiency and effectiveness of government programmes, spending review has evolved into an independent policy instrument in public financial management. In many countries, existing public expenditures have been systematically and comprehensively reviewed to identify inefficiencies, enabling governments to reallocate, reduce, or eliminate spending in alignment with medium-term policy priorities facilitating the identification of inefficient spending areas. As a result, spending reviews have been increasingly utilized as a systematic process to reallocate and reduce public resources or eliminate public spending in line with the medium-term policy priorities. This thesis aims to examine the impact of spending reviews, recognized as a key fiscal policy instrument in many OECD and EU countries, on the primary budget balance. To this end, the study analyses the spending review systems of 31 OECD member countries, explores their integration into the budget process, and establishes a comprehensive theoretical framework for their implementation. The analytical section of this study employs dynamic panel data analysis to examine the effects of spending reviews on the primary budget balance across mentioned countries between 2000 and 2020. Given the absence of prior studies directly addressing the impact of spending reviews on the primary budget balance, the

study seeks to fill a significant gap in the literature and presents the first econometric analysis on the topic, aiming to make an original contribution to the field.

Keywords: Spending Review, Budget Savings, Primary Budget Balance, Fiscal Discipline, Dynamic Panel Analysis.



ÖZET

Harcama Gözden Geçirmesinin Mali Performansı Belirlemedeki Rolü: OECD Ülkeleri İçin Ampirik Bir Analiz

Tarihsel süreç içerisinde devletlerin ekonomik fonksiyonlarında yaşanan dönüşümler ve gelişimler, kamu harcamalarının artmasına sebep olmuş ve devletlerin ekonomik hayatta daha etkin ve müdahaleci bir rol üstlenmesine yol açmıştır. Özellikle demografik değişiklikler, küresel krizler, pandemi ve salgın gibi öngörülemeyen değişkenler birçok OECD ve AB üyesi ülkede kamu harcamalarında etkinlik ve verimlilik kavramlarının ön plana çıkmasına neden olmuştur. Yaşanan makroekonomik istikrarsızlığın ve bütçe baskılarının zamanla artması, harcama gözden geçirme uygulamalarının da gündeme gelmesini sağlamıştır.

2008 Küresel Finansal Krizi sonrası, OECD ülkelerinde harcama gözden geçirme incelemelerinin rolü önemli ölçüde artmış, hükümet programlarının etkinliğinin ve verimliliğinin değerlendirilmesi sisteminin bir unsuru olmaktan çıkıp, kamu mali yönetiminde bağımsız bir politika aracı haline gelmiştir. Pek çok ülkede mevcut kamu harcamaları kapsamlı ve sistematik bir şekilde gözden geçirilerek verimsiz harcama alanlarının belirlenmesinin önü açılmış, orta vadede hükümet politikalarının öncelikleri doğrultusunda kamu kaynaklarının yeniden tahsisi, azaltımı ya da tavsfiye edilmesini sağlayan sistematik bir süreç olarak kullanılmaya başlamıştır. Bu tezde, temel amaçları kamu harcamalarında etkinliğin ve verimliliğin sağlanmasına katkısı olan ve birçok OECD ve AB üyesi ülke için maliye politikası aracı olarak kabul edilen harcama gözden geçirmelerinin, birincil bütçe dengesi üzerindeki etkisinin incelenmesini sağlamaktır. Bu kapsamda, harcama gözden geçirme uygulamalarını hayata geçiren 31 OECD üyesi ülkenin sistemleri analiz edilmiş, bütçe süreciyle entegrasyonları araştırılmış ve uygulamalara yönelik kapsamlı bir teorik çerçeve oluşturulmuştur. Çalışmanın analiz bölümünde, söz konusu ülkelere 2000-2020 yılları arasında uygulanan harcama gözden geçirme süreçlerinin birincil bütçe dengesi üzerindeki etkileri dinamik panel veri analizi yöntemiyle incelenmiştir. Literatürde harcama gözden geçirmelerinin birincil bütçe dengesi üzerindeki etkisini doğrudan ele alan herhangi bir çalışmaya rastlanmaması, bu alandaki önemli bir boşluğu doldurma gerekliliğini ortaya

koymuřtur. Bu baęlamda, alıřma, harcama gzden geirmelerinin birincil bte dengesi zerindeki etkilerini inceleyen ilk ekonometrik analiz olma nitelięi tařımakta ve literatre zgn bir katkı sunmayı hedeflemektedir.

Anahtar Kelimeler: Harcama Gzden Geirme, Bte Tasarrufu, Birincil Bte Dengesi, Mali Disiplin, Dinamik Panel Veri Analizi.



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ABBREVIATIONS

AIReF	: Independent Authority for Fiscal Responsibility
BB	: Budget Balance
CAPB	: Cyclically Adjusted Primary Budget Balance
CBA	: Cost-Benefit Analysis
CPMA	: Central Project Management Agency
CRE	: Comprehensive Review of Expenditure
CSR	: Comprehensive Spending Reviews
DPER	: Department of Public Expenditure and Reform
EFD	: Economic and Financial Document
EMP	: Employment Rate
ENF	: Inflation Rate
EU	: European Union
FY	: Fiscal Year
GDP	: Gross Domestic Product
GR	: Growth Rate
GNAT	: Grand National Assembly of Türkiye
GMM	: Generalized Method of Moments
GPRA	: Government Performance and Results Act
GRU	: Government Revitalization Unit
IBO	: Interdepartementaal Beleids Onderzoek
IGEES	: Irish Government Economic and Evaluation Service
IMF	: International Monetary Fund
MoF	: Ministry of Finance
MTEF	: Medium-Term Expenditure Framework
NIS	: New Israel Shekel
OECD	: Organisation for Economic Co-operation and Development
OMB	: Office of Management and Budget
PBB	: Primary Budget Balance

PbR-SED	: Presupuesto basado en Resultados Sistema de Evaluación del
Desempeño	
PD	: Public Debt
PPBS	: Planning, Programming, Budgeting System
PSA	: Public Service Agreement
SD	: Strategic Document
SR	: Spending Review
SRSS	: Structural Reform Support Service
SRU	: Spending Review Unit
TEI	: Total of imports and Exports
TO	: Trade Openness
TSI	: Technical Support Instrument
UK	: United Kingdom
WB	: World Bank

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1. INTRODUCTION

The evolving economic functions of states over time have elevated the importance of the interventionist state model, leading governments to assume a more active role in economic life. The rise of the welfare state approach in the 1960s combined with the economic crises and fiscal pressures experienced since the 1970s led to a significant increase in public expenditures. Expansionary fiscal policies implemented during these periods resulted in growing budget deficits, while economic stagnation and demographic changes significantly increased fiscal demands. This transformation has led to an increase in budget deficits, economic recessions that intensify fiscal pressures, underscoring the need for a sustainable public finance structure. This has led many countries, including Türkiye, to intensify their efforts to ensure fiscal sustainability. In this context, reforms aimed at enhancing the efficiency and effectiveness of public expenditures, ensuring fiscal discipline and prioritising market mechanisms have come to the forefront. In most OECD countries, reducing public expenditures and reallocating resources based on strategic priorities have gained importance.

Public expenditures stand out as a fundamental instrument through which modern states fulfil their economic and social responsibilities. However, the scarcity of public resources and the need for their effective utilization have brought the concepts of efficiency, effectiveness, and resource allocation to the center of public finance discourse. In both developed and developing countries, the repercussions of public expenditures on the economy and the management of these expenditures are crucial for ensuring fiscal discipline and promoting economic growth. The efficiency of public expenditures depends on expanding fiscal space, identifying areas for savings, and the judicious allocation of expenditures to prioritized, innovative, and effective policy areas. The pursuit of these goals has necessitated the development and adoption of various policy instruments.

In response to these fiscal challenges, the need for a systematic analytical process aimed at improving the efficiency and rationality of public expenditures grew. For example,

reforms such as Zero-based Budgeting (ZBB) and Planning, Programming, Budgeting Systems (PPBS) in the United States in the 1950s and 1960s allowed public spending to be evaluated in a more analytical and strategic framework, moving beyond the traditional incremental budgeting approach. These innovations marked a significant change in public finance, promoting greater transparency, efficient use of resources, and improved fiscal discipline. The fiscal pressures of the 1970s—characterized by oil shocks, rising inflation, growing fiscal deficits, increasing unemployment, sluggish economic growth, and escalating public debt—further underscored the need for robust expenditure control mechanisms, which facilitated the emergence and adoption of the spending review approach in countries' budget management. During this period, the core functions of spending reviews included identifying inefficiencies, reassessing budget priorities and pinpointing potential savings through a reassessment of existing expenditures. Thus, spending reviews were initiated in Denmark and the Netherlands in the 1980s and later adopted in the United Kingdom in the late 1990s, evolving into key instruments of fiscal and budgetary management. In the Netherlands, the expansion of spending review mechanisms since the 1980s, has contributed to more efficient use of public resources in areas such as social assistance and infrastructure. Similarly, the United Kingdom's spending review programmes, initiated in 1998 provided a successful model, particularly in prioritizing public spending and identifying inefficiencies. These countries sought to manage public spending more effectively and efficiently through the spending review processes, ultimately achieving substantial savings. The positive outcomes observed in a limited number of countries in the 1980s encouraged wider adoption of spending reviews across other nations in the 1990s.

A spending review is a process that systematically and thoroughly analyses public expenditures to enhance the efficiency of the expenditure structure and promote more rational use of public resources. This method facilitates the prioritization of public expenditures, the identification of inefficient areas, and the redirection of resources to more productive areas. However, spending reviews should not only be regarded as a tool for achieving savings but also as a policy instrument aimed at improving the quality of public services and maximizing societal benefits. For instance, the spending review processes introduced in the United Kingdom in 1998 -and regularly implemented thereafter- have resulted in savings of up to

10% in public expenditures. These resources redirected to priority sectors such as education and health. Similarly, comprehensive spending review processes implemented in the Netherlands since the 1980s have played a crucial role in optimizing social security expenditures and enabling increased investment in infrastructure.

The Global Financial Crisis that erupted in 2008 had a profound impact on public expenditures and budget management of the period. The crisis prompted a renewed debate on the need for state intervention in market economies and marked the beginning of a period characterized by a substantial increase in public spending. During this crisis, governments adopted policies such as social assistance programmes, infrastructure investments, and fiscal stimulus packages to mitigate economic stagnation and rising unemployment. These interventions, however, led to increases in budget deficits. In OECD countries, the average ratio of public expenditures to GDP, which had stood around 40% before the crisis, exceeded 50% in some countries following the crisis. This upward trend raised concerns about the efficient and effective use of public resources as well as the identification of inefficient spending areas. The crisis exerted considerable pressure not only on the private sector but also on the public finances. In light of limited public resources, the need to plan expenditures in accordance with the principles of efficiency, effectiveness, and impact became increasingly apparent. Key policy objectives included ensuring the efficient use of public expenditures, reallocating public resources on a rational basis, and minimising inefficient spending. At this point, spending review mechanisms were adopted as a key tool. Consequently, the implementation of spending reviews became increasingly widespread across a growing number of countries.

In the aftermath of the unforeseen COVID-19 pandemic in 2019, expansionary fiscal policies led to accumulated fiscal deficits, a surge in public expenditures, and economic stagnation. These developments prompted many countries -including Türkiye- to intensify efforts aimed at ensuring sustainable fiscal balance. In this context, spending reviews have gained increasing importance and have become more widespread as part of initiatives to promote sound financial management. Notably, while only 16 countries had implemented spending reviews in 2011, this number increased to 34 by 2023. These countries have pursued

spending review mechanisms with the goal of enhancing the sustainability of their fiscal structures and improving the efficiency and effectiveness of public expenditures (Bapbacı & Akdemir, 2024).

In Türkiye, the impact of economic crises on fiscal policies has further highlighted the importance of spending review mechanisms. The crises of 1994, 2001, and 2008 underscored the need for more effective public expenditure management. Although improvements in public finance were observed in the aftermath of these crises, issues related to sustainability remained unresolved, and the public debt stock continued to grow. The economic pressures triggered by the COVID-19 pandemic in 2019 once again brought the necessity of careful public expenditure management to the forefront. The increase in social assistance and healthcare expenditures during the pandemic emphasized the need for a fiscal policy framework focusing on the efficient allocation and utilization of public resources. In response to these challenges, Türkiye has committed to initiating and incorporating the spending review process into its fiscal management system, as reflected in the OECD surveys conducted between 2011 and 2020, as well as in its reports published in 2021 and 2023.

Although the spending review method has been widely adopted as a policy tool globally, it has not yet been fully implemented in Türkiye. However, commitments to institutionalize this practice and ensure its applicability have been articulated in the 12th Development Plan and the 2024 Savings Measures Circular. Additionally, in line with these commitments, the Spending Review Coordination Department has been established. To build institutional capacity and align with international best practices, training programmes and workshops on the design and implementation of spending reviews have been carried out in collaboration with the World Bank and the OECD. These initiatives have targeted personnel from various ministries and public institutions who are involved in spending review (SR) efforts. Furthermore, it has been pledged the focus will shift toward defining the procedures and principles governing spending reviews, thereby ensuring more effective implementation. Additionally, the preparation of spending review reports has been prioritized. These reports will include analyses of expenditure areas, along with reform proposals and recommendations, and will be submitted to steering committees for evaluation.

The systematic implementation of this method in Türkiye, as observed in other countries, would represent a critical step toward strengthening fiscal discipline and directing public resources to areas that yield the highest social welfare. Thus, the widespread adoption of spending reviews will become a key element in achieving efficiency, effectiveness, and productivity in public finance.

Despite being considered a critical gap in the literature, spending reviews do not follow a standardized methodological framework. Instead, countries have adopted diverse strategies and approaches tailored to their specific economic and fiscal contexts. Despite the growing number of countries implementing spending reviews in recent years, empirical studies on the topic remains limited. For this reason, the primary objective of this thesis is to provide a comprehensive examination of spending review processes from both a theoretical and practical perspectives. The study draws upon existing literature, presents case examples from OECD countries, and offers detailed proposals and evaluations addressing the spending review system in Türkiye- an area that remains relatively unexplored in the literature. In this context, the thesis aims to analyse the impact of spending review processes on the primary budget balances of 31 OECD member countries through dynamic panel data analysis, using annual data covering the period from 2000 to 2020.

In the current literature, most studies on spending review processes remain confined to theoretical approaches, with empirical analyses still in their early stages. This gap highlights the absence of concrete data for practical implementation, despite the substantial theoretical knowledge accumulated in the field. The growing interest in spending reviews in recent years underscores the importance of studies measuring the impact of spending review processes on countries' fiscal performance, reflecting efforts to bridge this gap in the literature. This thesis seeks to make a unique and concrete empirical contribution to the literature by conducting a detailed analysis of the impact of spending review practices on primary budget balances. Using a dynamic panel data analysis approach, this study is based on a long-term and comprehensive annual data set covering OECD member countries from 2000 to 2020. Moreover, this thesis distinguishes itself from other studies in the literature by employing the

Generalized Method of Moments (GMM) system for model estimation in dynamic panel data models. The GMM method is particularly noteworthy for its flexibility and robustness in addressing issues such as endogeneity, heteroskedasticity, and autocorrelation within the model. Compared to traditional estimation methods, this approach allows for more reliable and consistent results while accurately capturing the dynamic structure of time series. Furthermore, the advantages of GMM help minimize potential estimation biases, thereby strengthening the alignment between economic theory and applied analysis. Thus, through its methodological innovations and empirical focus, this thesis offers a significant contribution to the literature.

Following the introductory summary, the first chapter of this study provides a comprehensive analysis of the conceptual framework and historical development of the spending review approach. The chapter first defines spending reviews, outlining their objectives and key characteristics. It then explores the typologies and scopes used to understand the implementation of this method across different countries, along with a detailed analysis of the actors involved and the stakeholders responsible for conducting these processes. Additionally, the historical background of spending reviews is discussed, with a particular on on their increased prominence following the 2008 global economic crisis. This section highlights the how spending reviews have contributed to the principles of efficiency, effectiveness, and accountability in public finance. The study examines the entire process, from the preparatory phase to implementation and monitoring, outlining the framework of spending reviews in line with the initial goals and priorities. Subsequently, the key parameters and methodologies used in the identification of policy and reform options are explained. Furthermore, the decision-making processes and the governance structure necessary for implementing these decisions are examined in detail. The chapter also underscores the critical role of monitoring, reporting, and coordination mechanisms in ensuring sustainability. Finally, the relationship between spending review processes and the budgeting system is thoroughly assessed, along with their contribution to fiscal discipline.

The third chapter provides a comprehensive analysis of spending review processes and practices in OECD countries. It begins by examining the timing of the introduction of

spending review processes across all OECD member states, exploring how these practices have evolved over time and identifying commonalities and divergences in their implementation. Following this general overview, the chapter continues with a country-specific analysis of spending review practices across OECD member states. The analysis provides a comparative perspective on institutional approaches, implementation mechanisms, and the varying levels of maturity in spending review systems. While selected cases illustrating specific national practices are briefly summarized in the main text, further details and documentation are presented in the appendices. These case examples highlight key lessons and best practices, contributing to a broader understanding of the design, implementation, and impact of spending reviews across different fiscal and institutional contexts. In addition to examining established spending review practices, this chapter also considers the status of spending review adoption in countries where such frameworks have not yet been fully institutionalized. In this regard, Türkiye's position is analysed based on official commitments, policy declarations, and recent developments related to spending review implementation. The assessment focuses on the government's fiscal policy objectives, institutional readiness, and the extent to which spending reviews are integrated into public financial management strategies. Although a formalized spending review mechanism has not yet been put into practice, ongoing policy discussions and reform commitments suggest potential pathways for its adoption. By positioning Türkiye within the broader OECD context, this analysis offers valuable insights into the challenges and opportunities associated with introducing spending review practices in emerging fiscal frameworks.

The fourth chapter presents the empirical dimension of the study. It begins with a comprehensive review of the literature examining the relationship between spending review practices and fiscal performance, with particular focus on the primary budget balance. This section explores the methodologies, data sets, and variables commonly employed in such studies, identifying the existing gaps and providing the rationale for the methodological approach adopted in this thesis. Following the literature review, the chapter introduces the data set used in the analysis, which includes annual macroeconomic and fiscal indicators for 31 OECD countries spanning from 2000 to 2020. The selection of countries and the timeframe offer a rich comparative perspective, allowing for the examination of both short- and long-

term effects. The primary analytical tool employed is the System Generalized Method of Moments (System GMM), a dynamic panel data estimation technique well-suited to addressing issues such as endogeneity, unobserved heterogeneity, and autocorrelation. The model incorporates lagged dependent variables, a spending review dummy variable, and other explanatory variables such as public debt, economic growth, and crisis indicators. Estimation results are presented, accompanied by a detailed discussion of their significance, direction, and magnitude. The findings indicate that the implementation of spending reviews is positively and significantly associated with improvements in the primary budget balance. These results suggest that countries that institutionalize spending reviews tend to demonstrate stronger fiscal performance, even in the face of external shocks such as financial crises and the COVID-19 pandemic. The chapter concludes with a discussion of robustness checks, including Hansen and Arellano-Bond tests, which validate the reliability of the model and confirm the appropriateness of the instrumental variables used. The presence of autocorrelation in the error terms is tested using AR(1) and AR(2) tests. The results of the empirical analysis not only support the theoretical expectations of the study but also offer evidence-based policy insights for countries considering the implementation or expansion of spending review mechanisms.

This thesis concludes with a comprehensive assessment and policy recommendations. Considering Türkiye's current economic and fiscal conditions, the final chapter outlines the necessary steps and measures for the systematic implementation of spending reviews. It also discusses the broader implications of the study's findings for the existing literature and offers recommendations for future research. By framing the spending review concept within a theoretical perspective, incorporating practical case studies, and offering a detailed evaluation specific to Türkiye, this thesis aims to present a thorough analysis.

2. LITERATURE REVIEW

Public expenditures have gradually increased over the past two centuries due to the rising expectations of the society from the state and the expanding economic functions of the state (Akdemir & İlgün, 2011). The changes in the duties, roles and financial responsibilities of states have laid the foundation for new economic structures, leading to a substantial rise in public expenditures, particularly in industrialized countries since 1870. During this period, the ratio of public expenditures to gross domestic product (GDP) was approximately 10% and remained stable until the onset of the First World War. However, subsequent events—namely the First World War, the Great Depression of 1929, and the Second World War—resulted in a substantial increase in public spending (Tanzi & Schuknecht, 2000). Notably, during the 1960s, the adoption of comprehensive public policies under the framework of the social welfare state such as public pensions, healthcare, education, social assistance, unemployment pension increased the ratio of public expenditures to national income, reaching 50% in many European countries (Tanzi, 2008).

With the transition to Neoliberal policies in the 1980s, the intervention of the state in the economy declined, leading to emergence of policy proposals aimed at ensuring efficiency in public expenditures. These proposals primarily focused on reducing public spending, particularly in the areas of social expenditures and public investments.

After the 2000s, although public expenditures followed a fluctuating pattern, an overall upward trend was observed. In particular, periods following economic crises and wars have been marked by increases in public spending, which, in turn, contributed to rising budget deficits and public debt levels. The expansion of public expenditures has heightened concerns regarding fiscal sustainability. Notably, the surge in public spending during the 2008 Global Financial Crisis marked a turning point in the emphasis on efficiency, prompting more widespread efforts to review and rationalize expenditure programmes.

In the aftermath of the 2008 Global Financial Crisis, the widening gap between the growth of public revenues and expenditures resulted in substantial increases in budget deficits. In particular, increases in mandatory expenditure items such as healthcare, social security, and pensions have heightened budgetary pressures and underscored the need for more effective public expenditure management. The pursuit of fiscal discipline and controlling public expenditures have led to the need for reforms in financial management systems. As an important outcome of these reform efforts, spending reviews have emerged as an important policy tool in many OECD countries.

Similarly, the Covid-19 pandemic, which emerged in 2019, deeply affected the world economies. The pandemic led to deterioration in almost every economic indicator, ranging from growth rates to employment levels. In order to mitigate the adverse effects of the pandemic and provide support to the affected groups, many countries introduced expansionary fiscal policies. However, while these policies made it difficult to control rising public expenditures and growing budget deficits, it also brought inflationary pressures. In this process, the need for more efficient utilisation of public resources once again came to the forefront.

Enhancing the efficiency of public expenditures, reallocating financial resources toward strategic priorities by identifying inefficient expenditure items and creating savings opportunities have increased the importance of expenditure programmes and related review processes. In particular, in countries with Anglo-Saxon governance systems, this process is intended to reallocate public resources in accordance with government policy priorities, improve the efficiency of public service delivery, and minimize waste of resources (Ministry of Development, 2018).

Spending review methods have regained prominence in this period, with their scope of application expanding notably across OECD countries. As a tool that facilitates the comprehensive assessment and evaluation of public expenditures, spending reviews have become an important instrument for creating fiscal space and reallocating public resources toward strategic priorities. In response to fiscal pressures stemming from expansionary fiscal

policies, spending review processes have functioned as a critical policy tool that allows governments to ensure short-term fiscal discipline while supporting long-term sustainability goals. Thus, spending reviews have assumed a central role in contemporary financial governance frameworks, particularly in the pursuit of efficiency and effectiveness in public financial management.

As of 2018, the Presidential Government System model has been implemented in Türkiye, bringing significant changes to the public financial management system. The New Economy Programme (Medium-Term Programme) for the 2019-2021 period announced the introduction of performance-based programme budgeting, aimed at enhancing the monitoring of the effectiveness of public resources utilisation and strengthening transparency and accountability. Similarly, the 2019 Presidential Annual Programme stated that the necessary preparations for the transition to the programme budgeting system would be completed. In this context, aligning the 2021 central government budget with the performance-based programme budgeting system is likely to increase the significance of spending review reports as tools for assessing efficiency and effectiveness.

With the transition to performance-based programme budgeting, spending agencies are expected to undertake a comprehensive review of their existing expenditure functions, eliminate inefficient spending areas, and reallocate the resulting fiscal space to priority expenditures. This approach aims to maintain public primary expenditures at an optimal level (Ministry of Development, 2018). A review of the relevant literature reveals that the practical implementation of spending reviews by countries preceded the development of a conceptual and theoretical framework. In fact, early discussions in the literature predominantly focused on country-specific practices rather than on theoretical foundations. It is widely observed that there is no universally standardised methodology for conducting spending reviews; instead, country-specific approaches have evolved in line with institutional structures and policy priorities.

Although spending reviews became more widespread following the 2008 Global Financial Crisis, their conceptual foundations can be traced back to the 1950s. In particular, a

series of budgetary innovations in the United States during the 1950s and 1960s -especially Zero-Based Budgeting (ZBB) and Planning, Programming and Budgeting Systems (PPBS)-formed the basis for the evolution of international practices in budget management and fiscal consolidation. According to the literature, the first countries to implement spending reviews were the Netherlands and Denmark in the 1980s, followed by Canada, Australia, and the United Kingdom in the 1990s. The scope of spending reviews in these countries varied: some involved comprehensive analyses encompassing most public expenditures, while focused on specific programmes selected for a particular period (Allen & Clifton, 2024; Catalano & Erbacci, 2018). The existing literature on spending reviews often refers to the works of Robinson (2013) and Vandierendonck (2014), experts from the OECD and the European Commission, respectively. Spending reviews, particularly those featured in OECD publications, provide a reference framework for countries by identifying key stages of the spending review process. In the following section of the study, the theoretical framework of the concept of spending review will be discussed, and a comprehensive evaluation of the methods and processes will be presented. First, the definition, purpose, and importance of the spending review method within the context of public financial management will be elaborated. This will be followed by a classification of its types and scope, along with an analysis of its historical development.

The preliminary stages necessary for the effective implementation of spending review processes will be elaborated, followed by an explanation of the key phases involved. In this regard, the process will be examined in four main dimensions, beginning with the establishment of the overall framework and preparatory arrangements. This will be followed by the evaluation of policy alternatives and reform options, the subsequent decision-making stage in which priorities and expenditure adjustments are determined, and finally the implementation and monitoring mechanisms through which the adopted measures are executed and their outcomes assessed. Furthermore, the discussion will address essential elements such as reporting structures, governance arrangements, coordination mechanisms and evaluation tools, all of which are critical for managing the spending review process in a coherent and integrated manner.

In addition, the relationship between spending review processes and the broader budgetary framework will be explored. Special attention will be given to how spending reviews can be integrated into the budget cycle and how they differ from conventional budgeting approaches. This integrated perspective highlights the potential of spending reviews to serve as a more strategic and outcome-oriented tool in public financial management. By providing both a conceptual and practical foundation, the following sections aim to enhance the understanding of the methodological structure and operational dynamics of spending reviews within contemporary fiscal systems.

2.1. Conceptual Framework of Spending Reviews

2.2.1. An Overview of Spending Reviews and Their Objectives

Within the framework of classical economic thought, based on the principle of a neutral and limited state, government intervention in the economy was kept to a minimum. However, the Great Depression of 1929 led to a reassessment of this approach. The profound economic and social devastation caused by the crisis made state intervention in the economy inevitable. During this period, Keynesian economic thinking, emphasizing the importance of expansionary fiscal policies, came to the forefront. In the aftermath of the 1929 Depression, the inadequacy of classical economic theory in the face of insufficient demand, rising unemployment, and deteriorating income distribution led to increased public spending, support for employment and stimulation of aggregate demand as key measures to combat economic stagnation. Thus, public spending became one of the fundamental instruments of economic growth (Şen & Kaya, 2015).

The economic crisis disrupted macroeconomic balances in many countries around the world. Nevertheless, as fiscal policies were perceived as a viable solution to the crisis, discretionary fiscal measures continued to be implemented until the 1970s. These policies also contributed to the persistent upward trend in public spending after World War II. The reconstruction of war-torn economies, investments in infrastructure, establishment of social security systems, and expansion of the welfare state led to an increased scope of public expenditures (Jahan et al., 2014). However, the oil crises of the 1970s slowed down economic growth, accelerated inflation, and placed significant pressure on public finances. As a result,

stagflation became a chronic issue in many economies. In a period when public revenues remained stagnant while expenditures remained high, fiscal sustainability weakened. Consequently, governments increasingly turned to borrowing to finance growing budget deficits, leading to a rapid accumulation of public debt.

In the 1980s, the rapid increase in budget deficits and public debt stocks at the global level extended fiscal challenges beyond regional boundaries and prompted a reconsideration of the state's expanded role in the economy. The inability of discretionary fiscal policies to effectively address these challenges resulted in a shift from Keynesian demand-side policies to those based on the neoliberal approach, which sought to reduce the state's role and scope (Şen & Kaya, 2015). The primary policy goals included reducing public expenditures, implementing privatization programmes, and restoring fiscal discipline. However, the long-term effects of these policies proved to be complex; while social costs increased in some countries, the intended reduction in public debt levels was not fully achieved.

Beginning in the 1990s, fiscal rules were introduced as a key tool for ensuring discipline in public finance. In line with this objective, fiscal rules were institutionalized in many countries, contributing to a decline in public expenditures. However, with the onset of the 2008 global financial crisis, public spending began to rise again as part of efforts to combat the economic downturn (Debrun et al., 2008; Tanzi & Schuknecht, 2000). The global financial crisis of 2008 placed new and significant pressures on public finances, prompting the adoption of expansionary fiscal policies to support national economies. This, in turn, led to an increase in public expenditures. Combined with declining revenues, these developments led to deepening budget deficits. The financing of these deficits through borrowing contributed to a substantial rise in public debt stocks, reigniting concerns about debt sustainability in many countries.

While a full recovery from the 2008 global financial crisis had not yet been achieved, the sovereign debt crises that emerged in Europe in the early 2010s further intensified concerns over public finance. Notably, in 2011 and 2012, the rapid increase in the ratio of public debt to GDP, especially in countries such as Greece, triggered a crisis of confidence in

financial markets and raised concerns about the risk of sovereign debt becoming unmanageable. These developments brought the issue of fiscal sustainability back into sharp focus, underlining the need for governments to manage public expenditures more efficiently and effectively.

Throughout this historical process, particularly during periods of crisis, the expansionary fiscal policies that gained momentum have led to a significant increase in public expenditures, contributing to the widening of budget deficits and the financing of these deficits through borrowing. Consequently, public debt stocks have risen uncontrollably, posing serious threats to the sustainability and soundness of public finance. The diversification of forms of public intervention and the pressures exerted on public spending by global crises have made debates on the effectiveness of fiscal policy and the efficiency of public expenditures more prominent. In this context, as social expenditures have gained greater weight, spending review practices have become increasingly widespread across many countries. A growing number of governments have adopted spending review processes as a key public financial management tool, aiming to align spending with strategic priorities and restore fiscal discipline.

The use of spending reviews as a tool to enhance the efficiency and effectiveness of public expenditures has garnered increasing interest, leading many countries to adopt these practices to achieve greater efficiency in public spending. However, despite their widespread adoption among governments, there is no universally accepted definition of spending review. As a result, while the ultimate goals are similar, the approaches and methodologies employed vary across many OECD countries (OECD, 2011b). The conceptual foundations of the spending review approach have been shaped by the work of renowned experts, including Lau E. (2011), Schick A. (2012), Hawkesworth I., Klepsvik K. (2013), and Robinson M. (2014).

Spending reviews are considered to be one of the most sophisticated methods used by states to consolidate and subsequently stabilize their finances. The earliest studies on spending reviews date back to the 1990s, and since then, numerous definitions have been provided by various authors, as well as by international organisations such as the OECD, IMF, World Bank, and the European Commission. These definitions are summarized in the table below:

Table 2.1. Definitions of Spending Reviews by Researchers and Institutions

(Government of Canada, 2008)	“an ongoing commitment to better manage government spending. This system ensures value for money for all government spending”.
(HM Treasury, 2009)	Spending reviews are operational tools that, “set firm and fixed three-year Departmental Expenditure Limits” and define expected public service outcomes through Public Service Agreements (PSA).
(Lau, 2011)	“spending reviews is an opportunity to reassess government expenditures to reduce fiscal pressures”
(Monacelli & Pennisi, 2011)	“the terms spending review or expenditure review usually refer to a series of procedures and institutions related to the decisions, the management and the control of public expenditure.”
(Robinson, 2013)	“the process of developing and adopting austerity measures based on a systematic review of core expenditures”
(Hawkesworth & Klepsvik, 2013)	“assessments of the strategic orientation of programs and/or the efficiency of spending and are broadly used to reduce and/or (re)allocate budgetary expenditures”
(Vandierendonck, 2014)	“Spending reviews refer to the coordinated and in-depth analysis of baseline expenditures with the prime objective to detect efficiency savings and opportunities for cutting low-priority or ineffective expenditures, for example by examining consequences of alternative funding levels”.
(IMF, 2014a)	“Spending reviews are an essential tool for ensuring the sustainability of public finances and enhancing the efficiency and quality of public spending.”
(Robinson, 2014)	“spending reviews refer to the process of conducting in-depth assessments of existing public expenditure in order to identify opportunities to reduce or redirect spending from low-priority, inefficient, or ineffective spending”.
(OECD, 2017c)	“a collaborative process of developing and adopting policy options by analyzing the government’s existing expenditure within defined areas and linking these

	options to the budget process”

Spending reviews play a critical role in public financial management by systematically assessing and prioritizing expenditures to ensure effective resource allocation. They also function as a tool of fiscal accountability within the budget process, contributing to the overall effectiveness of budgeting (European Commission, 2018). Countries have adopted a range of approaches to the implementation of spending reviews. In this context, it is observed that spending reviews are increasingly being adopted across various jurisdictions and are gathering greater attention in the literature. However, the lack of a universally accepted standard approach has led to diverse classifications, reflecting the distinct institutional structures and policy priorities of individual countries.

In the literature, spending reviews are defined as a budget revision process that involves the analytical assessment of all costs incurred by public institutions. Such evaluations are expected to yield savings (Catalano & Erbacci, 2018). Accordingly, the overarching objective is to support fiscal consolidation, redirect resources to more efficient areas, and reallocate public expenditures toward activities with higher economic value.

The objectives of spending review practices are addressed from various perspectives in the literature. According to Robinson (2013), spending reviews serve two main purposes: first, to shape public expenditures and direct them toward priority policy areas; and second, to enable government decision-makers to have complete control over public spending. This process also contributes to the creation of fiscal space¹ by alleviating fiscal pressures, financing new priorities, and reducing public debt. Additionally, Harris et al., (2013) emphasize that when spending reviews are integrated into the budget planning process, it

¹ The term fiscal space first emerged in the literature in the mid-2000s in preliminary studies conducted by the IMF and the World Bank. In March 2005, Peter S. Heller’s paper, one of the IMF’s policy discussion papers, and in May 2005, the World Bank’s report on the relationship between poverty reduction in the case of Ecuador and the effort to create a fiscal space, aimed to define and describe the term fiscal space, which was mentioned for the first time. Fiscal space is a budgetary capacity that enables a government to allocate resources for specific objectives without jeopardizing its fiscal sustainability (Heller, 2005).

becomes possible to align budgets with program performance, allowing for greater flexibility in adapting to evolving policy priorities

On the other hand, the IMF (2014a) states that one of the main objectives of spending reviews is to achieve higher-quality savings through the identification of strategic fiscal adjustments. Furthermore, IMF notes that when conducted regularly, spending reviews enhance accountability in terms of efficiency and effectiveness of spending units. Unlike traditional performance audits, spending reviews offer a distinct approach by integrating decision-making processes with program performance.

Doherty & Sayegh (2022) state that spending reviews go beyond the narrow objective of achieving savings and improving resource efficiency. They constitute a flexible tool that serves multidimensional objectives. In this context, other key objectives of spending reviews include achieving fiscal consolidation² and ensuring value for money. Fiscal consolidation refers to efforts aimed at reducing the public debt-to-GDP ratio and attaining a budget surplus. Concurrently, the value for money approach emphasizes delivering the same outputs with fewer inputs and identify inefficient expenditure areas. In this regard, spending reviews stand out not only as means of generating budgetary savings but also as comprehensive public financial management tools that contributes to the effective, prioritized, and transparent use of public resources.

Within the framework of the above explanations, it is possible to summarize the spending review objectives in Figure 2.1. Spending reviews include many critical objectives such as setting priorities, effective management of public finance, promoting transparency and accountability, creating fiscal space, improving efficiency in spending processes, enhancing the budget-performance linkage, tackling fiscal challenges, supporting new policy development processes, promoting long-term planning, and evaluating public expenditures in terms of outputs and results. Collectively, these objectives contribute to the strategic and efficient use of public resources, thereby enhancing impact and quality of budget processes.

² Fiscal consolidation refers to economic policies implemented by governments with a strong determination to reduce the budget deficit.

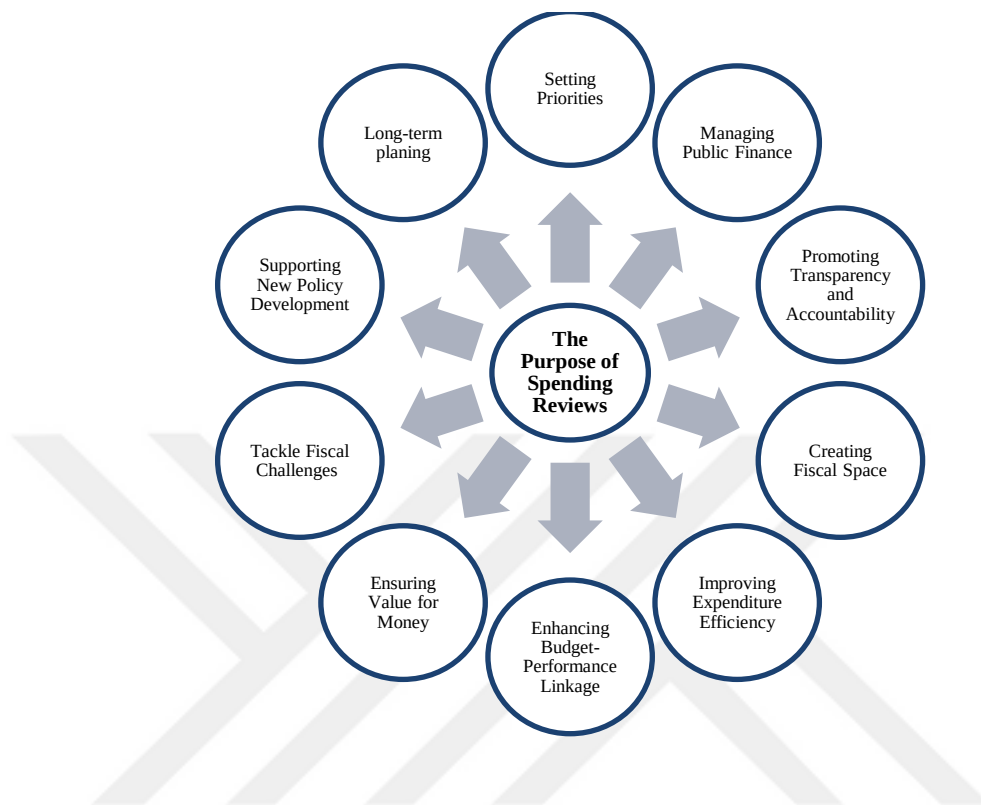


Figure 2.1. The Purpose of Spending Reviews

Source: Prepared by the authors.

Spending reviews are typically conducted to address challenges related to fiscal consolidation and expenditure control (medium-term review) and to facilitate the reprioritization of resources (long-term review). These reviews are embedded within the recovery packages that include a wide range of arrangements such as annual budgets, accountability mechanisms, audit processes, etc. They provide a structured approach to medium-term spending as part of multi-annual planning, while supporting annual budgets that allow for more detailed policy choices and greater oversight of fiscal adjustment (Catalano & Erbacci, 2018; Ferry & Eckersley, 2011, 2012, 2015). What distinguishes spending reviews from other budgetary tools is their systematic analysis of key expenditures, aimed at identifying potential savings.

2.2.2. The Use and Frequency of Spending Reviews in OECD Countries

Spending reviews, recognised as a key strategic tool within the budgeting processes of OECD countries, have been increasingly used to align public resource allocation with government priorities, prevent inefficiencies and promote the effective use of public funds. According to the periodic country surveys conducted by the OECD, the use of spending reviews has expanded considerably between 2011 and 2020.

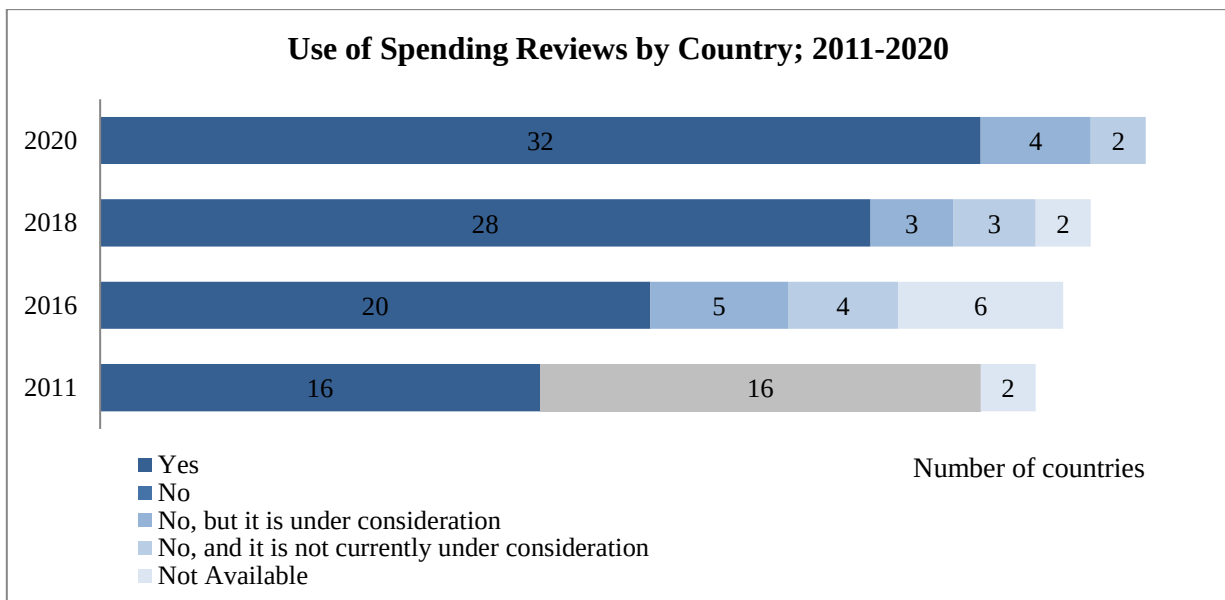


Figure 2.2. Use of Spending Reviews by Country; 2011-2020

Source: Prepared by the authors based on OECD data and surveys: (OECD, 2020a). Question 1; (OECD, 2016). Question; Section 3; OECD, Paris; (OECD, 2018b). Question 36, OECD, Paris. (OECD, 2011a) Question 22.

Figure 2.2 presents the evolution of spending review implementation across countries for the years 2011, 2016, 2018, and 2020, based on data obtained from the OECD Spending Review Surveys. Countries are grouped into three categories: those actively conducting spending reviews, those not engaged in such practices, and those exploring or considering implementation under specific conditions. In 2011, only 16 reported actively implementing spending reviews, while an equal number had not adopted such practices, and only a few countries were in the early stages of consideration. In 2016, the number of countries

conducting spending reviews increased to 20, indicating a growing momentum toward institutionalization. This upward trend continued, with 28 countries implementing spending reviews in 2018, and 32 by 2020. Over time, the number of countries considering adoption also rose, while those with no engagement in such processes has declined.

This trend suggests a significant shift toward the broader adoption of spending reviews as an essential instrument of public financial management. The growing number of countries actively implementing these reviews and the increasing interest among others underscores the expanding recognition of spending reviews as an effective tool to strengthen fiscal discipline, improve expenditure efficiency, and ensure that public spending is more closely aligned with policy priorities.

The frequency of spending reviews is closely tied to the budgeting cycle of a country, particularly the way the government sets its expenditure allocations. In countries where budget allocations are set annually, spending are typically conducted on an annual basis. However, in countries with longer-term budgeting frameworks, such as the UK, where ministerial budget ceilings are set precisely every three years, spending reviews are conducted on a triannual basis. This creates a multi-annual budget preparation process that sets three-year ministerial expenditure ceilings.

The frequency of spending reviews is inherently tied to the structure and cycle of a country's budget preparation process. In countries that adopt annual budgeting cycle, spending reviews are conducted annually; whereas in countries with multi-annual budgeting, where budget allocations are determined for a longer term (such as biennially or triennially), spending reviews tend to occur with similar frequency. The key point is that the timing and frequency of spending reviews directly reflect the rhythm and structure of the country's budgeting process.

2.2.3. Typology and Scope of Spending Reviews

One of the primary objectives of spending reviews is to ensure the efficient and effective use of public resources by identifying potential areas for savings. In this context, it is essential to understand the typology of savings targeted through such reviews. Robinson (2013) classifies these savings into two dimensions: efficiency savings and strategic savings. Efficiency savings aim to provide the same output at a lower cost while maintaining the existing scope of public services. This involves improving service delivery processes, optimizing the use of resources, minimizing waste, and increasing operational efficiency in line with the principle of “value for money”. Strategic savings, on the other hand, involve reassessment of the scope, priorities, or level of services provided. This approach aims to achieve savings by reducing or eliminating areas of public spending that have a lower impact on welfare and reallocating resources to policy areas generating higher societal benefit. Strategic analysis may involve discontinuing outdated or less efficient public services and redirecting resources toward more strategic policy objectives (Pollitt, 2010; Robinson, 2013; IMF, 2014a). Therefore, while efficiency savings focus on reducing the cost of service delivery, strategic savings aim to realign expenditures with policy priorities. Both approaches contribute to fiscal consolidation in different ways and improve the effectiveness of budgetary processes.

Although spending reviews are designed to generate savings, such outcomes rarely materialize in the short term. Even when implemented on a broad scale, the realization of savings often requires a multi-year process (Robinson, 2013; OECD, 2011b). A critical factor in the success of spending reviews is the determination of the scope of expenditures to be examined. Identifying which programmes or spending items will be subject to strategic or efficiency assessments is essential for designing an effective and targeted review process (Doherty & Sayegh, 2022). Based on these distinctions, the OECD classifies spending reviews according to their primary focus. A spending review primarily aimed at achieving efficiency savings is referred to as an efficiency review. In contrast, a spending review targeting both efficiency and strategic savings is categorized as a strategic and efficiency review. This typology allows for a better understanding of the scope and intent of different review

approaches, distinguishing between those aimed at savings through operational improvements and those also involving broader reallocations of resources based on policy priorities (OECD, 2011b). Accordingly, this classification supports the selection of an appropriate review model that aligns with the fiscal context and reform objectives of each country.

Table 2.2. Typology of Savings in Spending Reviews

Type	Focus Area	Description	Example Countries/ Programs
Efficiency Reviews	Efficiency	Explore methods for implementing existing policies with reduced resources.	Finland “Productivity Programme” (2005-15) Greece “Functional review of central ministries” (2010-11)
Strategic and Efficiency Reviews	Efficiency and Prioritization	Evaluate what roles and functions the government should prioritize, potentially phasing out less critical activities.	Australia “Comprehensive expenditure reviews”; “Strategic review” (2007) Canada “Programme Review” (1994); “Strategic Review” (2009) Netherland “Interdepartmental Policy review” (1982; 2009 present) UK “Spending Review” (1998-present)

Source: (OECD, 2011b; Robinson, 2013).

The table above presents the typology of savings in spending reviews as classified by the OECD and Robinson (2013), highlighting the focus areas, key characteristics, and country-specific examples associated with each type. The typology distinguishes between two main categories: efficiency reviews, which concentrate on achieving savings by improving operational processes and reducing costs without altering the scope of services, and strategic and efficiency reviews, which combine operational improvements with the reprioritization of government functions. The latter involves not only cost reduction but also a broader re-evaluation of government functions, potentially phasing out lower-priority or less effective programmes. The table also provides illustrative examples from selected countries,

demonstrating how these types of reviews have been applied in practice. Overall, this classification helps to clarify the varied approaches to spending reviews across different fiscal and institutional settings, underscoring the importance of aligning review methodologies with overarching policy goals and resource allocation strategies.

Since the 1990s, the inclusion of new approaches and elements in public financial management has necessitated the preparation and presentation of budget documents, which serve as a list of public resource utilization and expenditure decisions, in a transparent and accountable manner. Furthermore, the shift toward output- and outcome-oriented budget structures, coupled with the need to identify policy priorities based on comprehensive analysis, has become essential for the effectiveness of public financial management. In this context, spending reviews serve as a critical mechanism for conducting detailed and in-depth analyses of public expenditure areas, thereby providing a robust foundation for budget documents (Hançer, 2024).

Spending reviews can be analysed through four different dimensions: “*political, social, processual, and organizational*”. For instance, when political priorities play a significant role in the spending review process, it is crucial to ensure a high level of political engagement and decision-making authority. Without such involvement, the targets related to savings and resource reallocation are unlikely to be effective (Pollitt, 2010). The social dimension focuses on the degree of public legitimacy in decision-making processes, highlighting a dynamic that redefines the relationship between societal actors (people) and technical intermediaries. It considers how individuals live and work under these conditions (Sillince & Mouakket, 1997). The processual dimension addresses internal factor constraints that affect disciplinary decision-making and the implementation of spending reviews (Shepherd, 2018). Finally, the organizational dimension takes into account the institutional decision-making processes, practices, and the provision of public services by governments (Dunsire et al., 1989).

In the literature, another critical issue emphasized in relation to spending reviews is the determination of their primary focus. A spending review can be structured around a specific

program, sector or activity. In this context, (Robinson, 2013) identifies three fundamental focus areas that are commonly applied in spending reviews:

- **Program Review:** This type of review focuses on specific programmes or government activities, aiming to achieve strategic or efficiency savings. These programmes may include particular services or transfer payments, while efficiency may refer to the reduction of service delivery costs under the scope of the program.
- **Process Review:** Process management is an administrative discipline applied within a process-oriented organization. In this context, process management involves the use of methods and management practices to manage and improve work processes in the public sector (Kirchmer, 2011). Aiming to achieve efficiency rather than strategic savings, the process review examines specific business processes (procurement process) used in the public sector.
- **Agency Review:** This type of review conducts programme and process reviews of an entire government agency.

Program or process reviews can be conducted either within individual institutions or through a horizontal approach. Horizontal reviews typically involve the assessment of programmes across multiple institutions, allowing for a broader evaluation of cross-cutting policy areas and shared service delivery models. The selection of review topics is generally determined ex ante by central decision-makers or designated review teams, ensuring alignment with overarching fiscal policy objectives. In practice, mechanisms such as sectoral and public service contracts, public service pay agreements, and investment reviews can complement spending reviews. These instruments not only contribute to the creation of fiscal space but also reinforce the coherence of expenditure planning and promote more efficient and effective public spending outcomes (Kennedy & Howlin, 2017). Such an integrated approach strengthens the institutional framework of public financial management and enhances the strategic orientation of budgetary decisions.

There is no universally accepted methodology for conducting spending reviews, as their design and implementation often vary according to each country's unique institutional structures, fiscal priorities, and administrative capacities. Spending reviews can be carried out annually or periodically, depending on policy needs and budget cycles. In addition to their frequency, another key distinguishing feature of spending reviews is the breadth and depth of their coverage.

Spending reviews can vary significantly in terms of their scope and focus. In some cases, they are designed to evaluate a broad range of government expenditure areas, while in others, they focus on specific sectors, programmes, or activities. The extent of coverage and the depth of analysis in spending reviews are primarily shaped by each country's institutional structures, fiscal strategies, administrative capacities, and policy priorities. In the literature, spending reviews are typically classified into two main types: Comprehensive spending reviews and targeted spending reviews (also referred to as selective reviews). Comprehensive reviews are broader in scope, assessing a wide range of government spending across multiple sectors, without being confined to predefined expenditure areas. On the other hand, targeted reviews are designed to examine a specific and narrower set of spending categories which are selected based on fiscal priorities, policy reforms, or administrative feasibility (Doherty & Sayegh, 2022).

Although the term “comprehensive” gained prominence, particularly after the 2008 Global Financial Crisis -especially in OECD countries- it remains somewhat ambiguous, as even the most extensive reviews cannot realistically cover the entire spectrum of public spending. To address this ambiguity, the OECD proposes a more refined classification of spending reviews based on the findings of its country surveys, which highlight the variation in scope, objectives, and integration levels of spending reviews across various jurisdictions. According to this typology, comprehensive spending reviews cover between 20% and 100% of total public spending, and broad spending reviews encompass approximately 5% to 20%. In comparison, narrow spending reviews focus on a limited scope of approximately 0% to 5% of total expenditures (OECD, 2018b). This classification helps distinguish the intensity and reach of various spending review approaches and highlights their adaptability according to

countries' administrative capacity, reform agendas, and fiscal consolidation needs. It also underlines that spending reviews can be designed as large-scale evaluations of the entire expenditure landscape or as targeted tools for assessing priority areas in a more focused and resource-efficient manner.

Despite the growing preference for comprehensive spending reviews among OECD countries, the practical challenges and administrative burden they entail have led to the increasing prevalence of selective reviews over time. For instance, in the United Kingdom, comprehensive reviews demand significant effort and coordination among Treasury officials and spending units, often exceeding the routine responsibilities of civil servants. This challenge was clearly articulated by Rt Hon Danny Alexander, Chief Secretary to the Treasury, who led the 2010 spending review in the UK (House of Commons Treasury Committee, 2010):

*“**Danny Alexander:** Given the scale of the task that we faced, and given the significant reductions that we had to make to public expenditure in order to stabilise our public finances, such an **enormous effort** was required. Some 300 or 400 very talented officials in the Treasury worked hard on this process—Ministers, too—and we wanted to engage officials and Ministers in other Departments in this process as well.”*

This statement highlights the technical and administrative complexity of comprehensive spending reviews, which, despite their demanding nature, are regarded as vital tools for achieving fiscal consolidation and improving public spending efficiency. Moreover, the scope and policy orientation of spending reviews often evolve with changes in government and shifts in national priorities, underscoring their dynamic and adaptable nature.

2.2.4. The Historical Development of Spending Reviews

While the formalization of spending reviews as a policy instrument is relatively recent, the systematic evaluation of public expenditure dates back to the 1960. The sharp increase in public spending across many OECD countries during the 1960s and 1970s significantly heightened interest in spending reviews, particularly from the 1980s onward. The United

Kingdom's Public Expenditure Survey in the 1960s and Australia's Portfolio Management and Budget Reform programmes in the 1980s are considered the first modern steps toward public spending reviews (Ajam, 2024). Although these initiatives in the UK and Australia are viewed as the earliest contemporary efforts, the Netherlands is recognized as the first country to initiate work on spending reviews.

While spending reviews were formally introduced in the literature alongside the performance budgeting system in 2002, their origins in the Netherlands date back to the 1970s. However, due to the lack of interest from ministries and their attempts to legitimize, spending reviews were formally established in 1981. These reviews have since undergone various changes by the late 1990s (PEMPAL, 2022).

By the late 1990s, the rising public expenditures prompted the adoption of spending reviews as a critical tool in government budget management. These reviews played an essential role in ensuring fiscal discipline and enhancing the efficient use of public resources. Comprehensive spending reviews were implemented as part of broader public financial management (PFM) reforms in several developed economies, including Canada in 1994, Australia in 1995, and the United Kingdom in 1998. The first comprehensive spending review of the 1990s was introduced in the UK in 1998 as part of the government's budget reform package, with the expectation that it would foster long-term planning (Bartrum et al., 2024).

Spending reviews have been increasingly adopted, particularly by OECD member countries, as a financial analysis tool in response to the economic impacts of the international financial crisis at the end of the 2000s. Initially implemented in countries such as the United Kingdom, Denmark, Finland, the Netherlands, and Sweden -who were pioneers in adopting this approach prior to the 2008 global financial crisis-, spending reviews are considered as a crucial link between policy priorities and funding decisions.

The 2008 Global Financial Crisis had a significant impact on public expenditure and budget management. In the aftermath of the crisis, many countries adopted strategies and budget rules aimed at reducing budget deficits and inefficient expenditure, as well as ensuring

fiscal sustainability by the improving and reorganizing public spending. The emergence of new responsibilities prompted the development of public financial management tools and led to a reassessment of the approach to spending reviews.

In the wake of the 2008 financial crisis, countries such as Spain, Portugal, Italy, France, and Ireland, which required significant fiscal consolidation, introduced spending reviews as part of what can be seen as a second phase of adoption. Starting in 2014, spending reviews began to be used in countries like Malta, Croatia, Slovakia, Slovenia, and Romania, marking a third phase in their development.

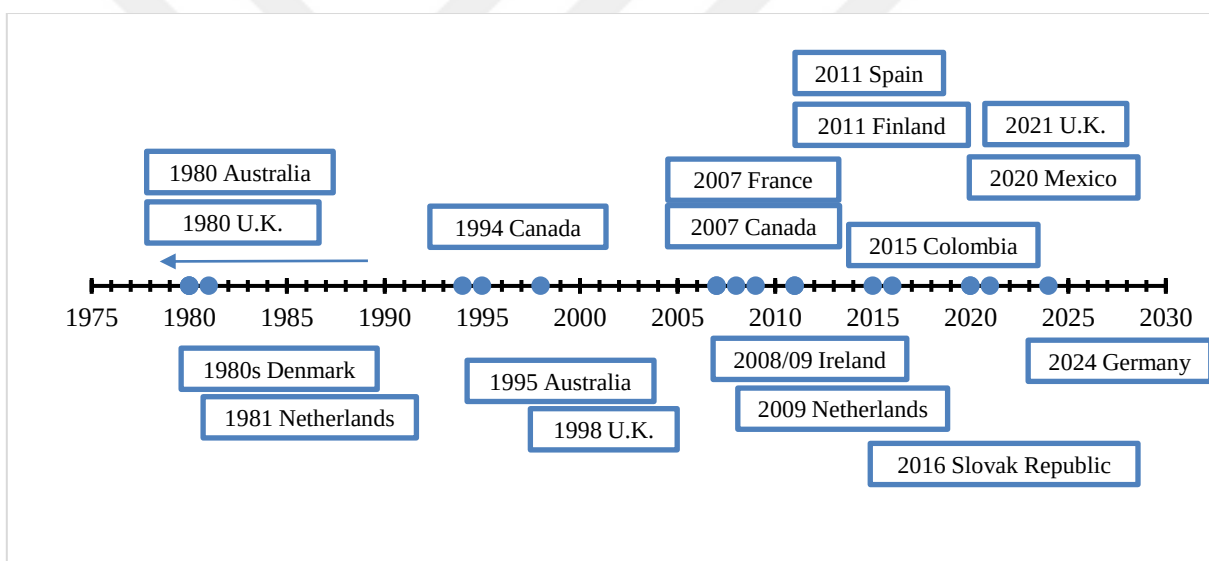


Figure 2.3. Adoption Timeline of Spending Reviews in Selected OECD Countries

Source: The information presented in this timeline has been compiled from the Ministries of Finance of selected countries.

As previously discussed in detail, spending reviews can be categorized into two primary types depending on their scope and purpose: comprehensive and targeted types. Spending reviews are conducted through various approaches across countries, ranging from sector-specific reviews to periodic assessments of overall expenditure. Historically, two primary models have emerged within OECD countries: targeted reviews, as exemplified by practices in the Netherlands, Denmark, and Slovakia, and comprehensive reviews, such as those adopted in the United Kingdom and Ireland (Doherty & Sayegh, 2022). Targeted

reviews focus on specific expenditure areas and can be conducted annually or as part of regular policy assessments. These reviews can be horizontal, evaluating a particular expenditure item across the entire government, or vertical, assessing a specific ministry, agency, or spending category, such as information technology or climate-related expenditures. In contrast, comprehensive reviews offer a broader and more in-depth examination of overall government spending and are typically conducted periodically. The choice between these two review approaches is strategic and often reflects a country's political and institutional context. Notably, countries that have only recently adopted spending review practices tend to favour the comprehensive model, reflecting historical patterns and perceived best practices (Doherty & Sayegh, 2022; OECD, 2017a).

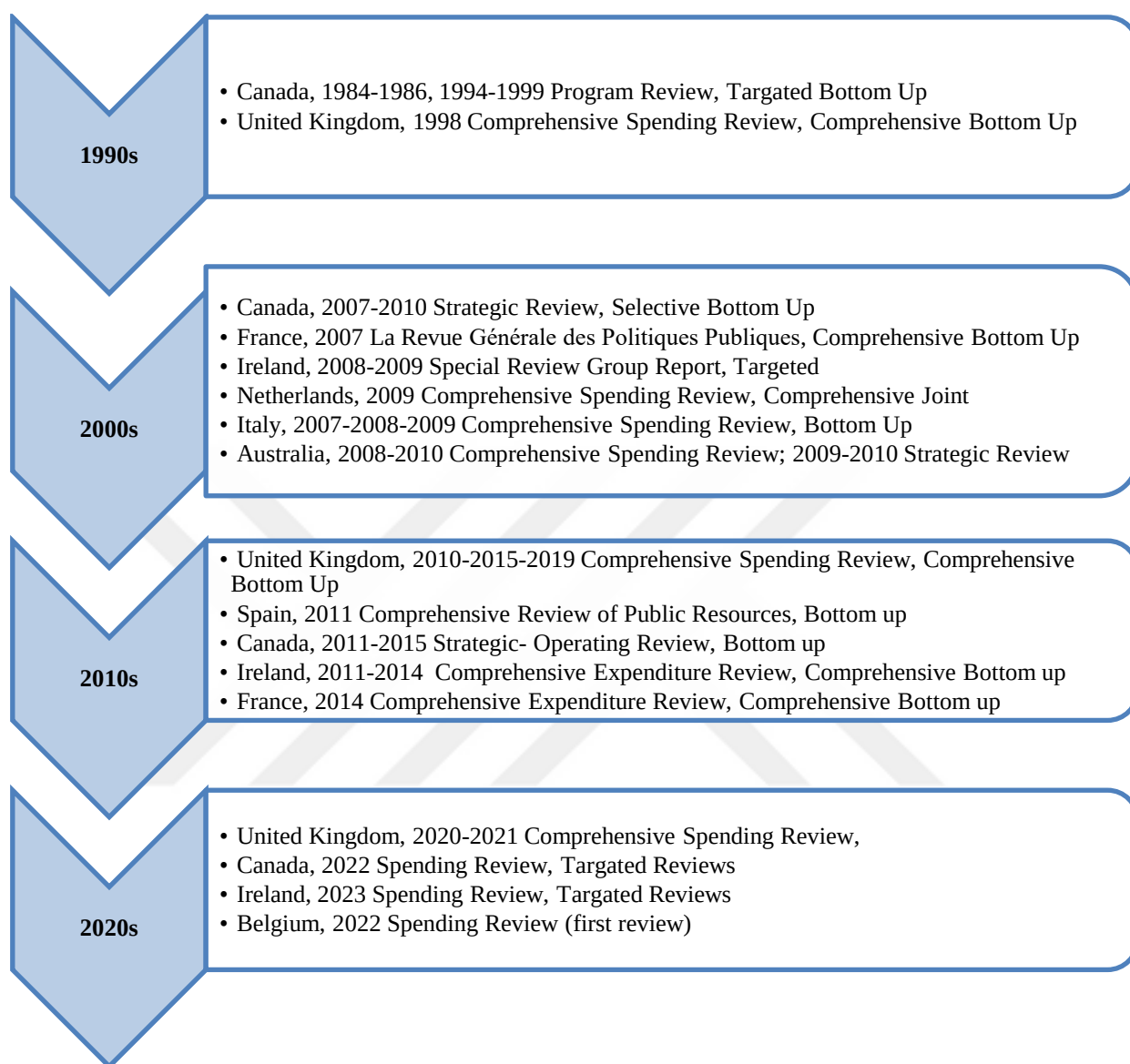


Figure 2.4. Development of Spending Review Types in OECD Countries

Source: Prepared by the authors based on data and classifications from (BOSA, 2023; Government of Ireland, 2023; OECD, 2011a, 2016, 2018b, 2020a).

While the conceptual classification of spending reviews provides a useful analytical framework, Figure 2.5 illustrates how different dimensions of spending reviews have been implemented across OECD countries. Comprehensive spending reviews typically cover between 20% and 100% of total government expenditures, broad reviews encompass 5% to 20%, and narrow reviews focus on 0% to 5% of expenditures. The figure presents the

distribution of these dimensions across OECD countries from 2008 to 2020, based on data collected from the OECD Performance Budgeting Surveys conducted in 2018 and 2020.

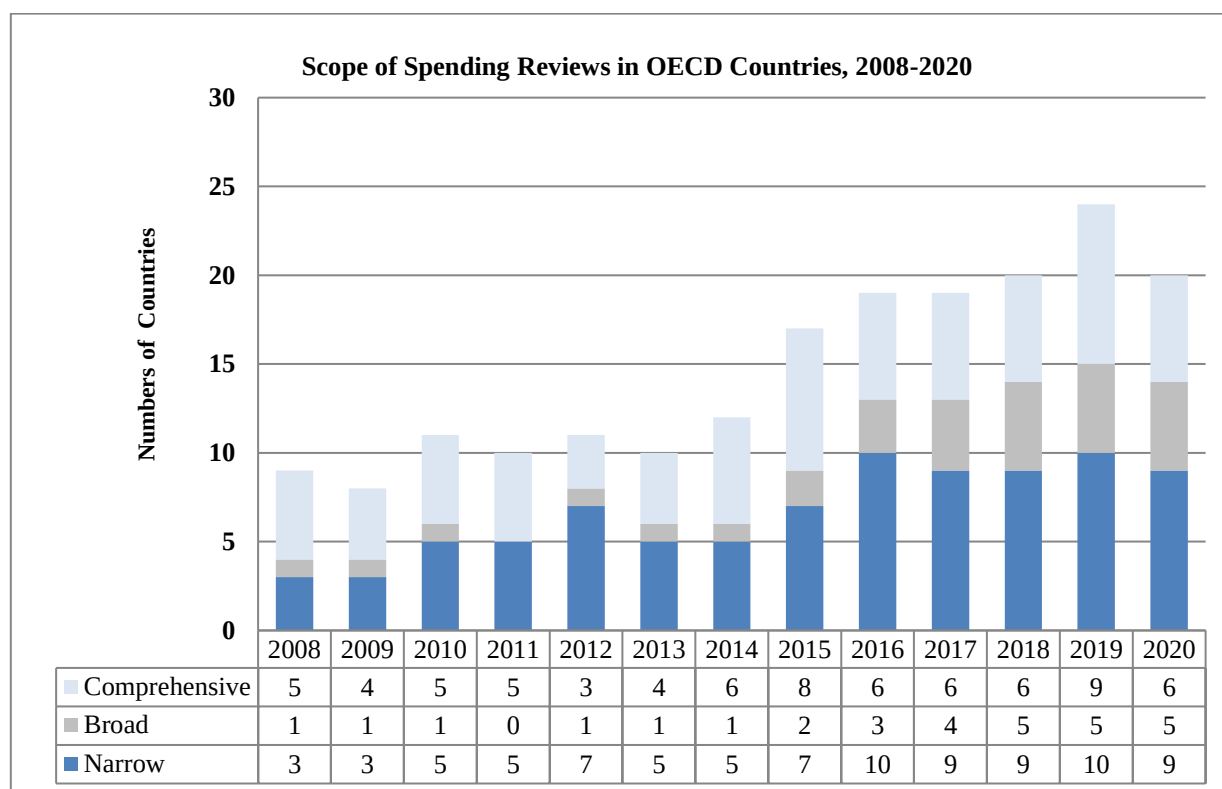


Figure 2.5. Scope of Spending Reviews in OECD Countries, 2008–2020

Source: (OECD, 2018b, 2020a).

The figure illustrates the scope of spending reviews in OECD member countries between 2008 and 2020. Countries like the Czech Republic, Germany, Estonia, the Netherlands, and Slovakia have predominantly conducted narrow reviews. In contrast, comprehensive reviews have been more common in countries like the United Kingdom, Japan, and Spain, reflecting variations in institutional capacities, administrative traditions, and fiscal policy orientations.

This trend may also reflect the varying levels of institutional capacity and technical expertise across OECD countries. Narrow reviews, being more targeted and less resource-intensive, are generally more feasible for countries with limited administrative structures. In contrast, comprehensive reviews require greater inter-ministerial coordination, advanced data

infrastructure, and sustained political commitment, which may explain their relatively limited adoption despite offering a broader analytical scope. Consequently, the choice of review dimension is primarily influenced by fiscal priorities, administrative feasibility, and the overall maturity of institutional frameworks.

2.2.5. Actors Involved in Spending Reviews

Spending reviews are complex processes involving a diverse set of actors, each playing a pivotal role in ensuring the success of the initiative. Drawing on practices from OECD countries, the division of roles among key stakeholders -such as the Ministry of Finance, line ministries, political leaders, and external experts- forms the foundation for effective governance and decision-making in spending reviews (Tryggvadóttir & Park, 2023).

The Ministry of Finance typically leads the spending review process, reflecting its central role in public financial management. Its responsibilities include defining the overarching objectives and scope of the review, coordinating the contributions of various stakeholders, and ensuring that the outcomes of the review align with broader fiscal policies and goals. By taking on a leadership role, the Ministry of Finance ensures consistency and coherence throughout the review process, bridging the link between spending reviews and the budget cycle. Additionally, it provides technical guidance, prepares terms of reference, and monitors progress at every stage of the review.

Line ministries, on the other hand, play a critical role in implementing the recommendations derived from spending reviews. Their involvement spans all stages of the process, from defining specific review objectives to drafting final reports. They bring in specialized expertise related to their policy areas, ensuring that the review addresses practical and operational realities. Furthermore, their active participation ensures buy-in and facilitates the implementation of policy adjustments proposed during the review.

Political leaders, such as cabinet members or prime ministers, are generally engaged during the early stages of the spending review to set priorities and scope. Their involvement

lends legitimacy to the process and ensures that the review aligns with broader government priorities. While they are not directly involved in the detailed work of the review, their decisions at key junctures play a crucial role in shaping the strategic direction and final outcomes.

Steering committees and working groups are fundamental to the operational success of the spending review process. Composed of senior officials from the Ministry of Finance and line ministries, steering committees provide oversight and ensure that the review remains focused and politically neutral. They serve as a link between technical analyses and high-level decision-making and approving key recommendations before they are presented to political leaders.

Working groups, on the other hand, are responsible for conducting the analytical work of the spending review. Comprising representatives from the Ministry of Finance, relevant line ministries, and occasionally external experts, these groups carry out in-depth analyses, prepare recommendations, and draft reports. Their diverse composition of working groups ensures that the review incorporates a wide range of perspectives and expertise. External experts, including academics, private sector consultants, and representatives from audit institutions, are often consulted to provide independent insights and bolster the credibility of the review's findings.

Integrating external expertise adds objectivity, particularly in areas requiring specialized knowledge or where impartiality is critical. Spain serves as a prime example in this regard, where the Independent Authority for Fiscal Responsibility plays a central role in overseeing the spending review process (AIReF, 2024). This institutional arrangement showcases the potential benefits of involving neutral entities to enhance analytical quality, foster transparency, and strengthen the credibility of spending review outcomes.

In terms of composition, working groups are typically small, consisting of 6-10 members to foster substantive discussions while ensuring the inclusion of relevant expertise. These groups are designed to balance diverse perspectives, with representatives drawn from budget and finance units as well as policy specialists (Tryggvadóttir & Park, 2023).

The coordinated involvement of these stakeholders, coupled with clearly defined roles and responsibilities, is crucial to the effectiveness of spending reviews. By fostering collaboration and leveraging expertise, the process not only identifies areas for fiscal adjustment but also improves the overall efficiency and effectiveness of public spending. Ultimately, the success of spending reviews depends on the ability of these actors to work in harmony, guided by a shared commitment to fiscal discipline and policy coherence.

The spending review process is a comprehensive effort that requires the active participation of multiple stakeholders. Each actor involved plays a specific role with distinct responsibilities. Table 3 summarizes the key roles and responsibilities of these actors in the spending review process. These tasks span from defining strategic objectives and developing policy options to implementing and evaluating final outcomes.

Table 2.3. Roles and Responsibilities of Actors in the Spending Review Process

Action	Ministry of Finance	Line Ministries	Political Leaders	Steering Committee	Working Group
Communicate the benefits of SRs to create consensus for introducing SRs	✓		✓		
Formally launch the SR process			✓		
Define the overall objectives of SRs	✓		✓		
Develop topic proposals	✓	✓			
Approve ToR (Terms of Reference)			✓	✓	
Draft final SR report					✓
Decide on which policy options to implement			✓		
Reflect selected policy options in the budget	✓	✓			

(multi-year)					
Monitor the implementation of selected policies	✓	✓			
Ensure political commitment	✓		✓		

Source: (Tryggvadóttir & Park, 2023).

Table 2.3 outlines the allocation of responsibilities, clearly delineating the roles of each actor throughout the various stages of the spending review process. While the Ministry of Finance plays a central role, line ministries, political leaders, and other groups take on different responsibilities to ensure the successful completion of the process. Although the table provides a fundamental framework for the mentioned roles, it is important to note that the distribution and execution of responsibilities may vary across countries.

2.2. The Spending Review Process

The existing literature on spending reviews frequently highlights the contributions of two experts, Robinson (2013) and Vandierendonck (2014), who are affiliated with the OECD and the European Commission, respectively. Their research, particularly as featured in OECD publications, provides a framework that countries can follow to navigate the key stages of the spending review process. According to their findings, successful implementation of spending reviews depends on a systematic and thorough approach, in which each stage is carefully executed and fully completed before progressing to the next.

The stages of the spending review process will be discussed in detail in the following sections. Figure 2.6 provides a visual representation of the key stages involved, drawing on the practical experiences of various countries. These stages demonstrate the systematic and structured nature of the process, which ensures the evaluation, prioritization, and alignment of public expenditures with fiscal objectives and policy goals.

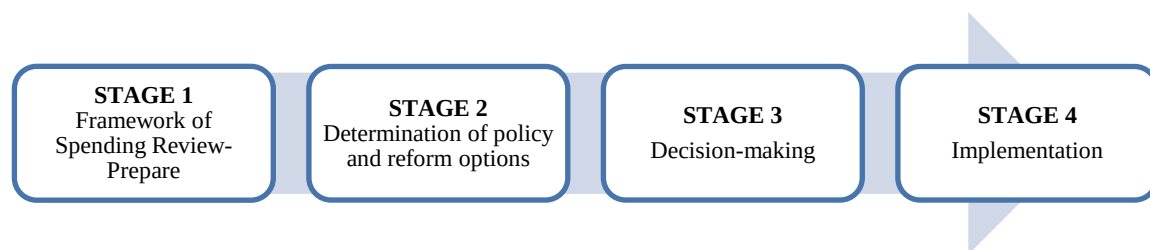


Figure 2.6. Main Process of Spending Review

Source: (IMF, 2019; Robinson, 2013).

As illustrated in the figure, spending reviews typically consist of four distinct stages, each playing a critical role in achieving the overall objectives of the process. The first stage- framework-setting (preparation)- focuses on defining the objectives, scope, and methodology of the review. This phase is essential for ensuring that the review process has clear direction and alignment with broader government strategies. It involves stakeholder engagement, the development of terms of reference (ToR), and the identification of key expenditure areas to be examined (for sample parameters specific to each review, please refer to Appendix 1).

The second stage -identification of policy and reform options (execution)- focuses on developing actionable recommendations. This phase relies on data analysis, performance evaluations, and cross-sectoral comparisons, all of which are identify inefficiencies, redundancies, or areas where public funds can be utilized more effectively. The insights generated during this phase serve as the foundation for shaping potential reforms and policies.

The third stage -decision-making- involves the evaluation of the proposed options and the selection of the most viable and impactful solutions. This phase requires balancing fiscal priorities, political considerations, and technical feasibility. Decision-makers, such as political leaders and senior policymakers, assess the proposed options based on their alignment with fiscal sustainability goals, social equity, and economic impact.

The final stage –implementation- focuses on putting the selected measures into practice. This phase includes allocating resources, setting up monitoring mechanisms, and

ensuring compliance with the approved reforms. Effective implementation is crucial for achieving the intended outcomes of the spending review, such as improved efficiency, cost savings, or improved service delivery. Furthermore, this stage often involves feedback loops to assess the impact of implemented measures and identify opportunities for further refinement.

The four-stage structure presented in Figure 2.6 highlights the key decision points and practical challenges that countries typically encounter while implementing spending reviews. This structured approach allows governments to adapt to changing conditions, such as economic crises or shifts in policy priorities, by modifying or improving specific stages of the process. Furthermore, breaking down the process into distinct phases enhances clarity and transparency, ensuring all stakeholders understand their roles and responsibilities throughout the review cycle.

A detailed analysis of each stage not only enhances the planning and execution of spending reviews but also creates opportunities for continuous improvement. Lessons learned at one stage can influence decisions in others, contributing to a more dynamic and responsive process. In the sections that follow, each stage will be examined in depth, offering a comprehensive understanding of their components, challenges, and practical applications.

2.2.1. Stage 1: Framework of Spending Review (Prepare)

The first stage of spending reviews, known as the framework-setting stage (prepare phase), establishes the fundamental or high-level design process and methodology of the review. This phase is crucial as it defines the focus of the spending review, sets objectives, and assigns roles. Key elements determined at this stage include the identification of relevant data sources, outlining the method for data analysis, clarifying the roles and responsibilities of key stakeholders, establishing the timeline for the review, and setting clear targets and savings goals. Additionally, this stage involves deciding the scope and type of review to be conducted, whether comprehensive or selective, efficiency-oriented or strategic, and broad or specific in

scale. This stage reflects a political-level commitment, signalling a clear decision to proceed with the review (Vandierendonck, 2014).

A report from the European Commission states that three essential prerequisites must be in place before initiating a spending review. The first requirement is securing political commitment. Strong political support is considered crucial for making difficult decisions during the review stages and for ensuring that the outcomes translate into tangible benefits. The second requirement involves establishing a clear mandate in terms of objectives, scope, and timeline. A well-defined mandate helps align the review with national policy priorities and fiscal goals, thereby integrating the expected benefits of the spending review into the budgetary framework. During this phase, several key questions are addressed (Vandierendonck, 2014):

“What are the overarching objectives, in qualitative and quantitative terms?

By what time horizon?

Where do we focus our efforts?

Who will lead the project, politically and operationally, with what funding?”.

Finally, allocating adequate resources to the project is considered equally crucial. Specifically, additional financial support may be required to allow high-level administrative roles to delegate responsibilities to external experts. When existing administrative bodies lack sufficient expertise, it becomes essential to integrate analytical skills, organizational expansion, and project management capabilities to effectively assess the impact of reform options. These skills are vital for ensuring coordination between policies and expenditures, as well as for conducting a thorough analysis of risks and costs (Vandierendonck, 2014).

2.2.2. Stage 2: Determination of Policy and Reform Options (Core Parameters)

The second stage involves defining policy and reform options (also referred to as parameter setting). This stage focuses on conducting analytical work, where the scope and boundaries of the spending review are established. Key elements such as specific expenditure

savings targets, expenditure topics, and the timeline for diplomatic procedures are determined at this stage (IMF, 2019). Consequently, it can be said that the defining characteristics of the initial round of the spending review are shaped. Before the next budget preparation starts, priority review areas, fundamental evaluation criteria, and key analytical questions are identified to guide the review process. As is the case for the framework-setting phase, political leadership and financially responsible ministries play central roles in decision-making at this stage. The finance ministry sets expenditure ceilings for each spending ministry within the overall fiscal framework, thereby enabling the identification of specific savings options and their alignment with overarching fiscal objectives.

In this stage, spending review process is typically carried out in two phases: analyzing expenditures and determining policy and reform options.

- **Analysing Expenditures**

For a thorough evaluation of current expenditures, it is necessary to analyse the alignment of programmes with overarching policy priorities, examine whether these programmes effectively achieve their intended goals, and explore opportunities to achieve similar results with fewer resource or through alternative implementation methods.

Budget offices and Development Ministries must possess sufficient expertise and experience to evaluate the suitability of government programmes. While conducting effectiveness and efficiency analyses, emphasis should be placed on both ex-ante and ex-post evaluations, supported by qualitative and quantitative data. Qualitative evidence (data) may include analyses of relevant legislation, stakeholder interviews, expert consultations, and international case studies. On the quantitative side, analysis should incorporate input indicators (e.g., budget allocations, staffing levels), output indicators (e.g., service units delivered, such as the number of schools built), and outcome indicators (e.g., improvements in literacy rates or reductions in income inequality) (IMF, 2019).

At this stage, various types of analyses³ can be conducted to assess the performance and relevance of public expenditures. These may include cost-benefit analysis, performance evaluations, benchmarking against best practices, and financial impact assessments- all aimed at identifying areas for improvement and optimizing resource allocation. In line with these analytical objectives, a range of methodological tools are employed in spending review processes to systematically assess expenditure performance, identify inefficiencies, and guide reallocation of resources. These analytical tools are generally designed to address four key problem areas identified in the literature: effectiveness, allocative efficiency, technical efficiency, and functional coherence. Effectiveness focuses on whether expenditures achieve their intended policy, program or project objectives; allocative efficiency examines whether resources are directed to their most valuable uses; technical efficiency assesses whether services are delivered at the lowest possible cost; and functional coherence considers the alignment and consistency of responsibilities across institutions and levels of government (Fallov & Georgieva, 2018). A more detailed discussion of these analytical dimensions and analytical tools associated with each is provided in Appendix 2. To provide a concise overview, the main types of analysis typically employed during this stage include the following: (IMF, 2019; Vandierendonck, 2014):

- ✓ **Expenditure Input and Trend Analysis:** This type of analysis facilitates the identification of future expenditure pressures and costs, enabling a detailed review of expenditures based on economic and functional classifications. Cross-country comparisons can further support the identification of low and high-priority expenditures.
- ✓ **Efficiency and Effectiveness Analysis of Expenditures:** This analysis can be conducted by comparing service delivery across countries or within different jurisdictions within the same country.
- ✓ **Data Comparison Analysis (Benchmarking):** This analysis involves comparing cost and expenditure levels across relevant peers or jurisdictions to identify potential

³ Appendix 2 includes examples of tools, techniques, and approaches that can be used for spending reviews.

inefficiencies. These analyses can be adapted to reflect countries’ geographic, institutional, and development characteristics.

- **Identification of Policy and Reform Options**

Following the expenditure analyses, policy and reform recommendations are developed to provide a roadmap for action. At this stage, potential measures to be considered include eliminating unnecessary activities, merging similar activities, implementing incentives through pricing and regulatory measures, better targeting of activities, selecting cost-effective instruments, and preparing a more effective working schedule.

Identifying and refining policy and reform options involves defining a number of criteria. Table 2.4 outlines standard criteria and related questions that can be used to identify savings options. In the subsequent phase, review teams are expected to focus on conducting technically sound analyses of the fiscal impact, feasibility, and effectiveness of each policy option, leaving political judgments to the discretion of decision-makers. The way options are developed may vary depending on the institutional arrangements of the review process.

In Ukraine, for example, divergent views among team members can be formally noted and presented alongside the main recommendations. In contrast, countries such as Germany and the Netherlands apply a “no-veto” principle, which obliges all members to explore and present the full range of options together, ensuring comprehensive deliberation. In Australia, the process allows both the Ministry of Finance and the spending ministry to submit alternative proposals, with final decisions made at the cabinet level (Doherty & Sayegh, 2022).

Table 2.4. Common Criteria for Identifying Saving Options

Relevance	• Are the policies aligned with government priorities? • Do they encompass an outcome that is significant for society? • Is there still a need for the policy activities?
Duplication	• Is there duplication in another program, institution, or the private sector?

	• Is there a way to reduce duplication by merging programs that share similar objectives?
<i>Effectiveness</i>	• Are the programmes achieving their intended outcomes? • If the desired outcomes are not being achieved, is there a need for a reassessment?
<i>Efficiency</i>	• Can the same level of service or output be maintained with fewer resources or lower costs? • Are there alternative methods or delivery mechanisms that could improve cost-effectiveness?
<i>Equity</i>	• Are services and resources distributed fairly among regions, social groups, or income categories? • Is the allocation of benefits to target populations aligned with principles of social justice?

Source: (Doherty & Sayegh, 2022; Robinson, 2018).

Policy and reform options are carefully and thoroughly evaluated during the spending review process, with each proposal being evaluated on a consistent costing basis, taking into account its medium-term implications. Priority will be given to reforms and policies that may have minimal short-term impact but deliver high long-term efficiency and savings. Proposals involving the investment and rationalization of assets must be thoroughly examined to ensure long-term benefits (IMF, 2018). A sound rationale for each policy option, together with a comprehensive evaluation of its potential effects on various societal and stakeholder groups, is a crucial element of evidence-based decision-making. Such evaluations should consider social, economic, and regional impacts, the need for legislative changes, and the extent to which external consultation is warranted. For instance, during the COVID-19 pandemic, certain populations such as women and low-income groups were disproportionately affected (IMF, 2021).

2.2.3. Stage 3: Decision-Making Stage

The third stage of the spending review process involves deciding which policy and reform proposals will be implemented. Two processes are influential at this stage: the approval of identified savings and reallocations, and the final decision-making process involving political authorities. During the identification of savings and reallocation measures, savings options specific to each spending ministry are developed within the allocated expenditure ceilings and presented to the political leadership. Although the political leadership is not prominently involved in the initial technical evaluation, the Ministry of Finance, the implementing ministry, and relevant external actors play a critical role in shaping and reviewing the proposals. If additional fiscal space is identified during the process, new initiatives entailing additional spending may be included in the ministry's policy package (Fallov & Georgieva, 2018).

One of the primary objectives of spending reviews is to develop options for savings. The way in which these options are developed largely depends on the division of roles between the Ministry of Finance -which generally plays a leading and coordinating role- and spending ministries. In this regard, approaches to the allocation roles between the Ministry of Finance and spending ministries in the generation of savings options give rise to three different organizational models: top-down, bottom-up, and hybrid reviews, each reflecting different levels of central control and ministerial involvement in the formulation of savings strategies (Robinson, 2013):

- **Top-Down Review:** This approach places the primary responsibility for developing savings options with the Ministry of Finance, while the role of spending ministries is significantly limited. It is typically preferred in reviews focused on short-term fiscal consolidation and efficiency savings, where strong central oversight is required. Committees or central units may set expenditure ceilings or savings targets for each ministry under this model.

- **Bottom-Up Review:** In this method, spending ministries independently identify and develop their own savings proposals and present them as alternatives to the Ministry of Finance's recommendations. This method is often applied in contexts that promote decentralized decision-making and ministerial ownership over reform initiatives. It is particularly relevant in reviews aiming at structural reforms or long-term improvements in service delivery.
- **Hybrid Review:** Representing a compromise between top-down and bottom-up approaches, hybrid reviews involve collaborative engagement between the Ministry of Finance and spending ministries in developing savings options. This model is commonly used when reviews aim to achieve both efficiency and strategic savings, combining centralized control with broader institutional input.

These role-assignment approaches play a critical role in shaping how decisions are formulated and implemented within the spending review framework. The degree of autonomy granted to spending ministries and the level of involvement of the Ministry of Finance determine not only the development of savings options but also their political feasibility and practical implementation. In this context, the choice between top-down, bottom-up, or hybrid models influences both the technical design of the review and the dynamics of interministerial coordination. Granting spending ministries greater ownership over savings proposals may facilitate smoother implementation; however, it can also make it more difficult to maintain alignment with overarching fiscal targets. Conversely, centrally steered models offer stronger fiscal control but they may face greater resistance at the political or institutional level.

In the decision-making phase, the authority to determine which expenditures will be made or which savings measures will be implemented is vested in the Cabinet. Ministers make informed decisions based on policy proposals developed during the earlier stages of the spending review. These proposals are evaluated for inclusion in the budget and the medium-term expenditure framework. The decision-making bodies ultimately makes the final decision.

Depending on the scope and complexity of the spending review, this phase typically lasts between two to three months (Fallov & Georgieva, 2018).

When strategic savings are the primary focus of spending reviews, political sensitivity becomes a critical factor, particularly in decisions involving the reduction or downsizing of programmes. In contrast, when the focus is on efficiency savings, the final decision-making authority often resides with ministries such as the Ministry of Finance. Regardless of its institutional structure, the Ministry of Finance plays a crucial oversight role, especially when working collaboratively with line ministries. For instance, a 2012 OECD survey revealed that in 12 out of 14 countries, the Ministry of Finance was tasked with auditing and reviewing the reports generated during the spending review process (Robinson, 2013). Similarly, a more recent 2020 OECD survey reported similar findings, with 13 out of 39 countries assigning this role to the Ministry of Finance. These ministries are thus tasked with conducting in-depth analyses of the savings options proposed by spending ministries and may recommend adjustments to these options as deemed necessary.

To support decision-making ministries in making more informed choices among various options, the following elements should be incorporated into each policy proposal (Fallov & Georgieva, 2018):

- Each proposed program should apply a consistent methodology and clearly outline its budgetary impact and financial implications over the next three years.
- The public policy rationale for the proposed and implemented policies should be clear.
- The expected social, economic, and regional impacts—particularly on individuals or groups affected by the proposals—should be thoroughly assessed and understood.
- Relevant legislation and legal frameworks pertaining to the policy proposals should be identified, and, where necessary, stakeholder consultation meetings should be conducted.

- A clearly defined implementation framework should be established, including a detailed timeline and implementation phases, (a sample template for identifying savings options is provided in Appendix 3).

Spending review decisions are made by those authorized to make spending and policy decisions. These decisions, owned by the relevant public authorities, provide concrete diagnoses, estimate potential impacts, and identify preferred reform options. Opinions on the specific reforms selected for the spending review and their anticipated financial impacts are included in multi-year budget planning frameworks. This enhances the credibility and transparency of fiscal targets, gives political weight to spending reviews, and reinforces the commitment to the implementation timeline (European Commission, 2016).

2.2.4. Stage 4: Implementation and Monitoring

Being a critical stage of the spending review process, the implementation phase is carried out in parallel with the regular budget cycle. During this phase, the options identified and selected in earlier stages are translated into concrete reforms and savings measures. Political commitment is essential at this stage; the goal is not merely to produce a report for spending reviews, but to facilitate the implementation of more feasible proposals. While the ultimate responsibility for implementing decisions lies with the relevant line ministry, the Ministry of Finance is also expected to enforce the agreed-upon decisions. Regular reporting on the implementation of spending reviews is crucial for fostering accountability. To promote transparency and accountability, some countries, such as the United Kingdom⁴ and the Slovak Republic⁵, publish spending review findings and officially endorsed policy proposals on the websites of their respective Ministries of Finance.

The implementation process in spending reviews begins with the submission of the budget draft, approved measures, and the final spending review report to the legislature. The

⁴ “<https://www.gov.uk/government/government-spending>”

⁵ “<https://www.mfsr.sk/en/finance/value-money/spend/spending-reviews.html>”

Spending Review Unit (SRU) analyses the report based on the decisions previously issued by the President. Subsequently, the report is reviewed by the budget office and submitted to the legislature together with the budget draft and the identified savings measures. A memorandum of understanding is then signed between the implementing ministries and the President, outlining the key actions required for implementation. If the savings measures included in the spending review necessitate legislative amendments, these are submitted for approval prior to the start of the budget year, with revisions made in consultation with the budget office and the Presidential Secretariat to ensure their timely submission to the legislature along with the budget prepared by the relevant ministry. To ensure that the approved measures are executed as planned, a robust monitoring process must be established. The implementing ministries bear full responsibility for executing the approved reforms, integrating them into future medium-term expenditure ceilings and subsequent annual budgets without delay or renegotiation. They must adhere to the implementation plan⁶ and monitor the reports of the respective ministries. Furthermore, a dedicated monitoring mechanism should be established to evaluate the extent to which the spending review measures yield the anticipated savings. Periodic assessments of implementation outcomes, along with their contributions to broader fiscal targets should be reported to the Budget Director, the Minister of Finance, and the President (IMF, 2019).

2.2.5. Reporting, Governance, Coordination, and Evaluation

Effective implementation of spending reviews requires robust governance, reporting, coordination, and evaluation mechanisms. To promote consistency and comparability across reviews, it is advisable to adopt a standardized reporting format. The spending review reports are typically expected to include an executive summary, a table of contents, a section related to the sector under review, the methodology, and the key questions guiding the review. Furthermore, the report should present responses to these questions, the review's findings, conclusions, and recommendations. The report should also include appendices, a reference list, and a clear outline of key roles and responsibilities (see Appendix 4 for a suggested (sample) spending review report template).

⁶ Legislative, administrative, and information technology systems, as well as departmental resources, are provided with practical implementation plans that include clear milestones for necessary changes. Communication plans can also assist in ensuring the smooth implementation of policy changes.

Moreover, the use of multiple governance schemes plays a critical role in the success of spending reviews. The administrative approach -whether it follows a top-down, bottom-up or hybrid approach- is a key determinant. Regular progress reporting conducted through spending review meetings, typically held several times a year, contributes to the effective functioning of the process by addressing decisions and recommendations. Within the governance structure, decisions should carry significant political weight and be taken at a high level, preferably within a senior management board. In bolster the political authority and legitimacy of spending review decisions, countries such as Denmark and France introduced high-level coordination platforms chaired by the Prime Minister and involving key sectoral ministries. Notable examples include the Economic Committee in Denmark and CMPP⁷/CIMAP⁸ in France. These institutional arrangements have served as models for other countries; for instance, Italy recently established a dedicated cabinet commission led by the Prime Minister (Vandierendonck, 2014; Fallov & Georgieva, 2018).

The spending review coordination task force should operate under a strong and clearly defined mandate to ensure institutional authority and credibility. In addition to administrative expertise, the task force should possess robust technical competencies, including expertise in cost-benefit analysis, change management, and project management, —skills that are particularly crucial during the implementation phase. To enhance effectiveness, several OECD countries have involved private sector professionals, non-political expert groups and external consultants. In the Netherlands, for example, institutions such as the Netherlands Environmental Assessment Agency (PBL)⁹ and the Netherlands Bureau for Economic Policy Analysis (CPB)¹⁰, in collaboration with civil servants, play a pivotal role in the process. Furthermore, the establishment of a network of review leaders across government ministries is widely regarded as a best practice. In France, each ministry appoints a designated official

⁷ “Conseil de modernisation des politiques publiques (CMPP): Committee for the Modernization of Public Policy”

⁸ “Comité interministériel pour la modernisation de l'action publique (CIMAP): Inter-Ministerial Committee for the Modernisation of Public Action”

⁹ “Planbureau voor de Leefomgeving (PBL): Environmental Assessment Agency”

¹⁰ “Centraal Planbureau (CPB): Bureau for Economic Policy Analysis”

responsible for implementing the General Review of Public Policies (RGPP)¹¹ reforms (Vandierendonck, 2014; Fallov & Georgieva, 2018).

2.3. The Relationship Between Spending Reviews and the Budget

Although spending reviews are not considered an indispensable component of the budget process, findings from country experiences clearly highlight their importance. Especially since the 1980s, spending reviews have been increasingly adopted by many OECD member countries, becoming an integral stage in the budget process. These reviews serve as an effective tool for achieving fiscal targets, promoting the efficient use of public resources, reducing costs, creating fiscal space, and evaluating the performance of public institutions. Additionally, they play a critical role in implementing additional and sustainable fiscal consolidation policies. For spending reviews to be integrated into and institutionalized within a country's budgeting frameworks, it is essential to establish a robust legal foundation. Equally important is the alignment of these reviews with the core elements of public financial management systems.

The success of spending review processes is closely tied to their integration with the budget process and performance evaluation systems. Strongly linked to performance-based budgeting, this approach links budget allocation to the outputs and outcomes of public service. In the performance-based budgeting process, public institutions are required to prepare annual performance plans and reports reflecting their strategic goals and measurable performance indicators. The performance data collected during this process serve as a critical source of information for spending review processes. However, the adequacy and accuracy of the data used in performance evaluation systems are key factors determining the effectiveness of these systems. Performance evaluation systems not only improve the management and delivery processes of public services but also serve as a vital tool for identifying spending-saving options.

¹¹ La révision générale des politiques publique (RGPP)

The spending review system should also be analysed in relation to zero-based budgeting (ZBB), a budgeting method that involves a thorough reassessment of all expenditures from scratch during each budget cycle, with each expense item justified. While this approach enables a detailed examination of current and new expenditures, it is often limited in scale due to the high administrative costs and challenges associated with its implementation. Spending review processes, on the other hand, can effectively incorporate the analytical approaches of ZBB while being applied from a broader perspective. Despite the fundamental differences between the two methods, the key distinction lies in their operational focus: ZBB emphasizes the reassessment of all expenditures, whereas spending reviews are geared toward evaluating the efficiency of current expenditures and identifying savings options. In this regard, spending reviews provide a more flexible and targeted framework compared to ZBB (Allen & Clifton, 2024).

In international examples, institutionalization of spending review systems is achieved by integrating them into budget processes, as recommended by the International Monetary Fund (IMF). The IMF suggests incorporating spending reviews into budget systems to establish a link between program performance and resource allocation decisions (Doherty & Sayegh, 2022). Similarly, the European Commission underscores the importance of employing spending reviews consistently as a tool for achieving medium-term budget planning objectives (European Commission, 2016). A prominent example of this approach can be found in the United Kingdom, where spending review processes are conducted through negotiations between the Treasury and line ministries, covering accounting periods of two to five years. These processes are integrated into the country's medium-term expenditure frameworks. Experiences in the UK's experience with institutionalized spending reviews has yielded positive outcomes, including the recalibration of unrealistic performance targets and clarification of interdepartmental responsibilities. These outcomes have contributed to increased efficiency in performance management.

A more sustainable integration of spending reviews into the budget cycle can be achieved through their formal incorporation into the legal framework of public financial management (PFM). Embedding spending review practices within national legislation not

only institutionalizes their use but also ensures coherence with the broader processes of budget formulation and execution. Ukraine revised its Budget Code in 2018 following the successful implementation of targeted pilot reviews. The revision introduced a formal requirement for periodic spending reviews and enable the inclusion of review recommendations in the draft budget. Similarly, countries such as Italy and the Slovak Republic have incorporated spending reviews as a core element of their PFM systems, reinforcing their role in aligning expenditure assessments with the overall budget planning process (Doherty & Sayegh, 2022).

Timelines for spending review processes play a vital role in demonstrating their integration into the budget preparation cycle. These processes typically begin with the formulation of fiscal strategies early in the budget year and proceed through a structured sequence of stages, including analysis, option development, decision-making, and implementation (Doherty & Sayegh, 2022). Figure 2.7 illustrates the alignment of each stage of the spending review process with key phases of the budget cycle. The process begins with identifying the target areas or programmes to be reviewed, accompanied by a clear articulation of the review's primary objectives. This is followed by the establishment of a clear framework and timeline, ensuring that all stakeholders clearly understand their roles and responsibilities throughout the process.

The next step involves a comprehensive analysis of the projects subject to the spending review and the development of policy solutions based on these analyses. This is the most time- and resource-intensive phase of the spending review. The process begins with an assessment of the alignment between the reviewed projects and the government's policy priorities, which is followed by the analyses of the efficiency and effectiveness of the expenditures. Various qualitative and quantitative analyses are conducted during this process, including current situation assessments, impact evaluations, and projections of future spending levels. Subsequently, solutions that can be addressed during the budget process are developed based on these analyses. During this stage, it is crucial to ensure that public value is not compromised by short-term solutions.

Once the findings and recommendations of the spending reviews are finalised, the focus shifts to determining how best to integrate them into the formal budgetary framework. The decision-making body evaluates and implements policy content such as the budget and medium-term fiscal plans. Based on these evaluations, the budget ceilings are established for each ministry. The ministries are then required to submit their budget proposals in line with these ceilings. Once the budget proposals are presented to Parliament, the outcomes of the spending reviews are disclosed, and the relevant ministries implement these decisions.

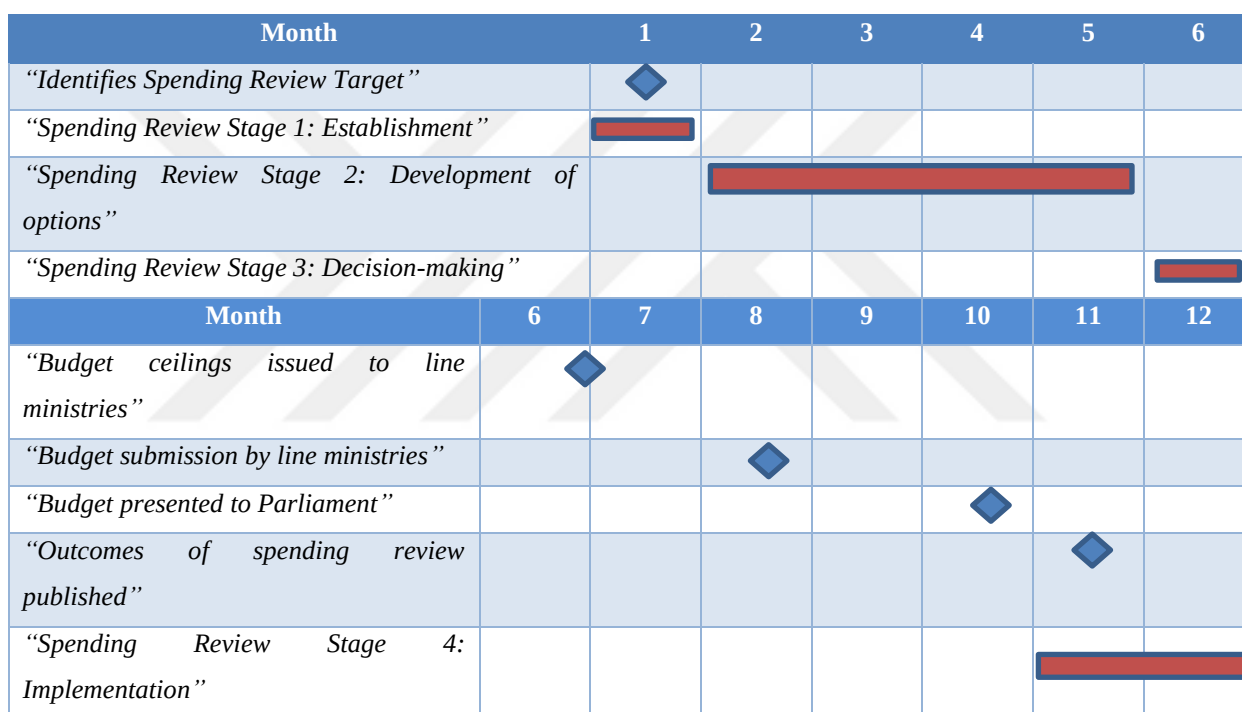


Figure 2.7. Alignment of Spending Review Stages with Budget Preparation Timeline

Source: (Doherty & Sayegh, 2022).

On the other hand, the success of the spending review system is not solely determined by their integration into budgetary processes; its success also depends on its interaction with the external environment and political context. In countries such as the United Kingdom and Canada, external experts and citizens have been included in spending review processes, which has enhanced the transparency and effectiveness of these efforts. Supporting spending review processes with contributions from external stakeholders and citizens helps to rationalize the

delivery of public services. Moreover, these processes can reduce the social costs of fiscal reforms and increase public support for such reforms.

The spending review system aims to establish a fiscally sustainable structure over the long term. To achieve this, it is crucial for the system to be adopted as a regular and integral component of the budget process. Furthermore, transparent dissemination of spending review outcomes to policymakers and legislative bodies enhances the effectiveness of these processes. Spending reviews should not be perceived solely as a tool for budget cuts; rather they represent a strategic tool for budget management aimed at improving resource efficiency and promoting societal welfare. For this reason, the effective functioning of spending reviews, underpinned by performance-based and outcome-oriented approaches is of significant importance.

3. SPENDING REVIEW IN OECD COUNTRIES

Spending reviews serve as essential tools for governments seeking to systematically assess public expenditures, reinforce fiscal discipline, improve public sector efficiency, and align resources with national policy goals and priorities. Beyond identifying inefficiencies and achieving cost savings, they are designed to recalibrate public spending to boost the effectiveness of public services. In the aftermath of the 2008 global financial crisis, which exacerbated economic challenges and fiscal pressures, gained prominence across OECD countries as a strategic response to restructuring public finances. As such, they have evolved into a fundamental instrument for implementing fiscal reforms and ensuring financial sustainability.

This chapter presents a comprehensive overview of spending review practices across OECD member countries. It first explores the fundamental characteristics, core challenges, and procedural dimensions of spending reviews, emphasizing the differences in how they are executed among member countries. The analysis offers a comparative framework that clarifies the structural and functional aspects of spending reviews within the OECD context. Following the general overview, particular attention is given to country experiences that are considered exemplary in terms of the development and institutionalization of spending reviews, due to their well-established practices and influence on shaping international approaches.

The first part of this chapter offers a detailed exploration of the spending review practices across OECD countries. It identifies the key characteristics, areas of focus, and the methodologies employed in their implementation. Notably, the analysis highlights the critical role of institutional frameworks, data analysis capacity, and political commitment. The findings reveal that spending reviews within OECD countries are typically designed to achieve three core objectives: improving efficiency, reprioritizing expenditures, and ensuring fiscal sustainability. Within this framework, the chapter provides a closer examination of selected countries recognised for their well-developed and influential spending review systems. Chosen for their early adoption, strong institutionalisation and mature implementation practices, these

case studies provide valuable insights into best practice. The Netherlands stands out with its systematic approach, inclusive stakeholder engagement, and evidence-based decision-making mechanisms. The United Kingdom shows how spending reviews can be extended to serve both fiscal control and policy priorities. Ireland has used spending reviews as an instrument to support fiscal consolidation and to improve the effectiveness of public service delivery following periods of economic adjustment.

The analysis of each country provides a detailed explanation of the historical development of spending reviews, their methodologies, and the outcomes achieved. It also examines the analytical tools used, the integration of these processes into decision-making mechanisms, and the role of stakeholder engagement. The evidence from these countries highlights the critical importance of a robust institutional framework, extensive data analysis capacity and political ownership for the success of spending reviews.

In conclusion, the experiences of the Netherlands, the United Kingdom, and Ireland demonstrate that spending reviews extend beyond ensuring fiscal sustainability. They also enable the restructuring of public expenditures in line with policy priorities and enhance overall effectiveness. These case studies offer valuable lessons and practical guidance for other OECD member states, providing key insights into how spending reviews can be implemented more effectively.

3.1. General Practices of Spending Reviews in OECD Countries

The increasing aging population in OECD member countries has significantly contributed to rising costs for health care and pensions, thereby intensifying budgetary pressures on governments. In addition, the growing public demand for transparency and accountability in the use of tax revenues has pushed accountability to the forefront of policy agendas. In response, many OECD countries have adopted institutional reforms prioritizing the use of spending review reports to communicate public expenditure allocations transparently (Curristine et al., 2007).

The extent to which spending reviews are integrated into the budget process has been systematically evaluated through International Performance Budgeting Surveys and Spending Review Surveys. The OECD first published country-specific spending review surveys in 2011, followed by subsequent surveys in 2016, 2018, and 2020. These surveys offer comprehensive insights into the design, implementation, execution, and monitoring stages of spending reviews across member countries. According to the survey data, the number of OECD member countries participating in these reviews increased from 34 in 2011 to 38 in 2020, as detailed in Table 3.1.

Table 3.1. Spending Reviews in the OECD member Countries

Countries	Country Code	2011	2016	2018	2020
Australia	AUS	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, but it is not performed on a yearly basis
Austria	AUT	No	No, but under consideration	Yes, it is conducted annually	Yes, but it is not performed on a yearly basis
Belgium	BEL	No	Yes	No, and it is not currently under consideration	No, but it is being considered
Canada	CAN	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, but it is not performed on a yearly basis
Switzerland	CHE	Yes	Yes	Yes, it is conducted annually	No, but it is being considered
Chile	CHL	No	No, and not being considered at this time	No, and not being considered at this time	Yes, but it is not performed on a yearly basis
Colombia	COL	Not a member yet	Not a member yet	Not a member yet	Yes, but it is not performed on a yearly basis
Costa Rica	CRI	Not a member yet	Not a member yet	Not a member yet	Yes, but it is not performed on a yearly basis
Czech Republic	CZE	No	No, and not being considered at this time	No, and not being considered at this time	No, but it is being considered
Germany	DEU	No	Not available	Yes, it is conducted annually	Yes, it is conducted annually
Denmark	DNK	Yes	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Spain	ESP	Yes	Not available	Yes, but it is not performed on a	Yes, but it is not performed on a

Countries	Country Code	2011	2016	2018	2020
Estonia	EST	No	No, but under consideration	yearly basis Yes, it is conducted annually	yearly basis Yes, but it is not performed on a yearly basis
Finland	FIN	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, but it is not performed on a yearly basis
France	FRA	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, but it is not performed on a yearly basis
United Kingdom	GBR	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, but it is not performed on a yearly basis
Greece	GRC	No	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Hungary	HUN	No	No, and not being considered at this time	Yes, it is conducted annually	No, and it is not currently under consideration
Ireland	IRL	Yes	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Iceland	ISL	Not available	Not available	No, but it is being considered	Yes, it is conducted annually
Israel	ISR	Not available	No, but under consideration	Yes, it is conducted annually	Yes, it is conducted annually
Italy	ITA	Yes	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Japan	JPN	No	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Korea	KOR	Yes	No, and not currently under consideration	No, but it is being considered	Yes, it is conducted annually
Lithuania	LTU	Not a member yet	Not a member yet	Not available	Yes, it is conducted annually
Latvia	LVA	Not a member yet	Yes	Yes, it is conducted annually	Yes, but it is not performed on a yearly basis
Luxembourg	LUX	No	Yes	Yes, but it is not performed on a yearly basis	Yes, it is conducted annually
Mexico	MEX	Yes	Yes	Yes, but it is not performed on a yearly basis	Yes, it is conducted annually
Netherlands	NLD	Yes	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Norway	NOR	No	No, but under consideration	Yes, it is conducted	Yes, it is an annual

Countries	Country Code	2011	2016	2018	2020
New Zealand	NZL	Yes	Yes	annually Yes, but it is not performed on a yearly basis	exercise Yes, it is conducted annually
Poland	POL	No	Yes	Yes, it is conducted annually	Yes, it is conducted annually
Portugal	PRT	No	Not available	Yes, it is conducted annually	Yes, it is conducted annually
Slovak Republic	SVK	Yes	Not available	Yes, it is conducted annually	Yes, it is conducted annually
Slovenia	SVN	No	Yes	Yes, but it is not performed on a yearly basis	No, and it is not currently under consideration
Sweden	SWE	No	Not available	Yes, it is conducted annually	Yes, it is conducted annually
Türkiye	TUR	No	No, but under consideration	No, but it is being considered	No, but it is being considered
United States	USA	Yes	Yes	Not available	Yes, it is conducted annually

Source: Prepared by the authors based on data from (OECD, 2020a) Question 1; (OECD, 2016) Question- Section 3; (OECD, 2018b) Question 36, (OECD, 2011a) Question 22.

Spending reviews have emerged as a critical tool for improving public expenditures and identifying areas of efficiency. They enable comprehensive evaluations of revenue and expenditure flows and the government budget. The results of the 2018 OECD survey reveal that member countries view spending reviews as an effective budgeting tool. As shown in Figure 3.1, the main objectives of spending reviews include short-term budget cuts to reduce deficits, re-alignment of spending with government priorities, operational improvements for program efficiency, and medium-term spending efficiency gains. According to the survey, many countries reported that re-aligning spending with government priorities has been both a current and ongoing objective, demonstrating its continuing relevance. In contrast, short-term budget cuts were identified as a more recent priority, reflecting the immediate fiscal challenges faced by some countries.

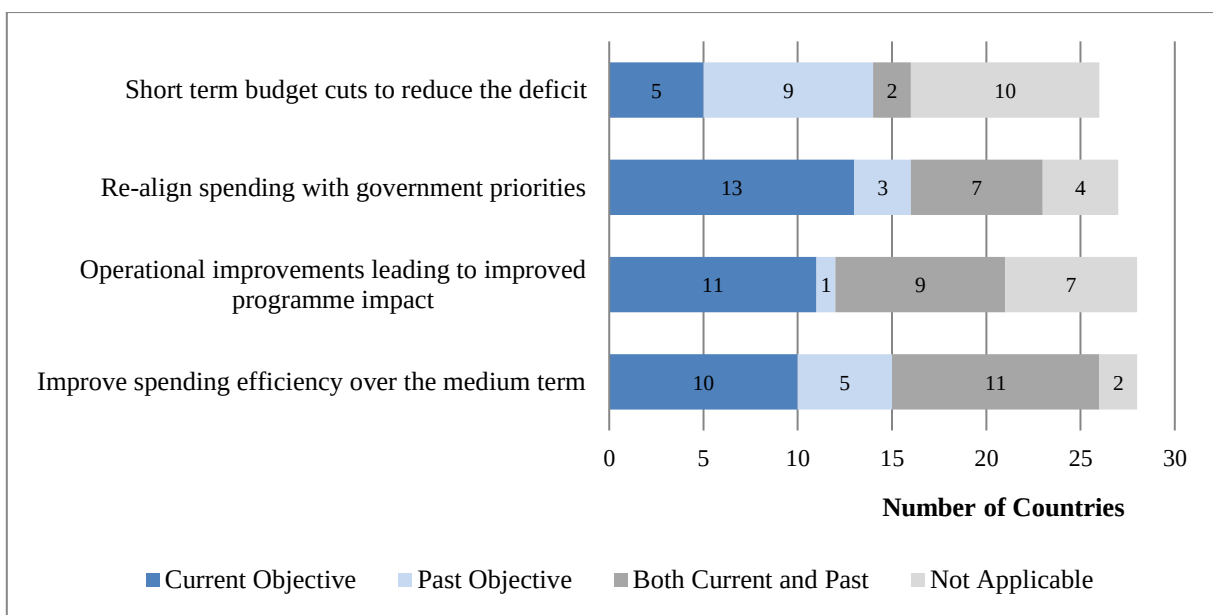


Figure 3.1. Main Objectives of Spending Reviews Over the Past 10 Years

Source: (OECD, 2018b), Question 41.

The practical implications of these objectives are further reflected in Figure 3.2, “Main Results of Spending Review Over the Past 10 Years”, which presents the most commonly reported results of spending reviews. Among these, reallocating expenditures to align with national policy priorities stands out as the most frequently observed and substantial outcome. This underscores the success of spending reviews in ensuring that public resources are directed toward areas that reflect strategic objectives and policy needs. Another important outcome was the improvement of medium- to long-term spending efficiency, demonstrating the role of spending reviews in achieving sustainable fiscal management. While spending cuts aimed at achieving rapid reductions in government expenditures were noted, they were less frequently achieved than reallocations and efficiency gains. Lastly, reported as a less common but prevalent outcome, program elimination was used strategically to address inefficiencies or redundancies in specific public spending areas. These findings highlight the diverse objectives and achievements of spending reviews, which vary depending on the fiscal and policy priorities of OECD member countries.

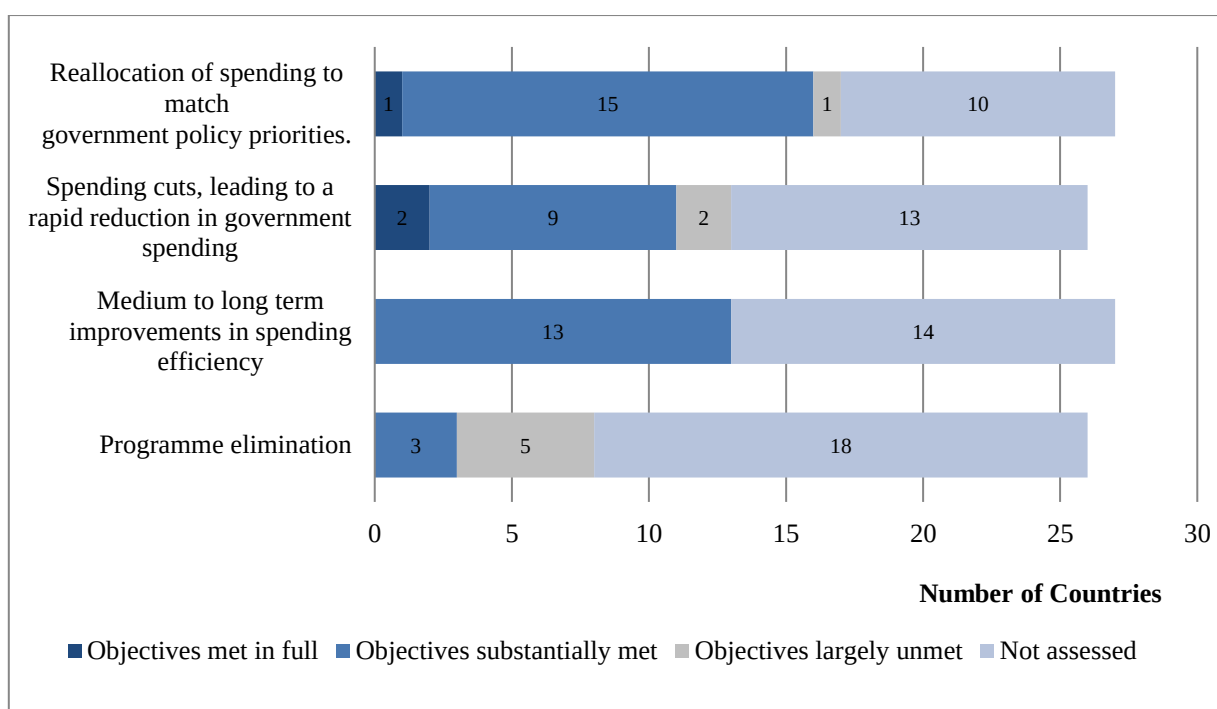


Figure 3.2. Main Results of Spending Review Over the Past 10 Years

Source: (OECD, 2018b). Question 42.

On the other hand, the COVID-19 pandemic, which emerged in December 2019 in Wuhan, China, and is widely regarded as one of the most significant health crises in human history since the Spanish Flu, had a profound impact on social and economic life. Lockdowns were imposed across nearly all regions of the world, resulting in the closure of stores, restaurants, and cafes, the suspension of production in numerous factories, rising unemployment, and significant disruptions to supply and demand dynamics. In response, governments adopted various fiscal policy measures aimed at stimulating economic growth and mitigating the pandemic's socioeconomic consequences. The surge in social spending, coupled with the broader economic challenges, further highlighted the crucial role of spending reviews. For this reason, the 2020 OECD Spending Review Survey was published to evaluate the impact of COVID-19 on spending review practices. Figure 3.3 illustrates the main objectives of spending reviews between 2018 and 2020, based on responses to the mentioned survey. As a complement to the long-term trends discussed earlier, the OECD Spending Review Survey (2020) also provides insights into the main objectives of spending reviews in three years preceding the COVID-19 pandemic. This additional breakdown offers a more

nuanced understanding of the pre-crisis fiscal priorities, revealing the shifting emphasis in spending review practices during the years immediately preceding the pandemic.

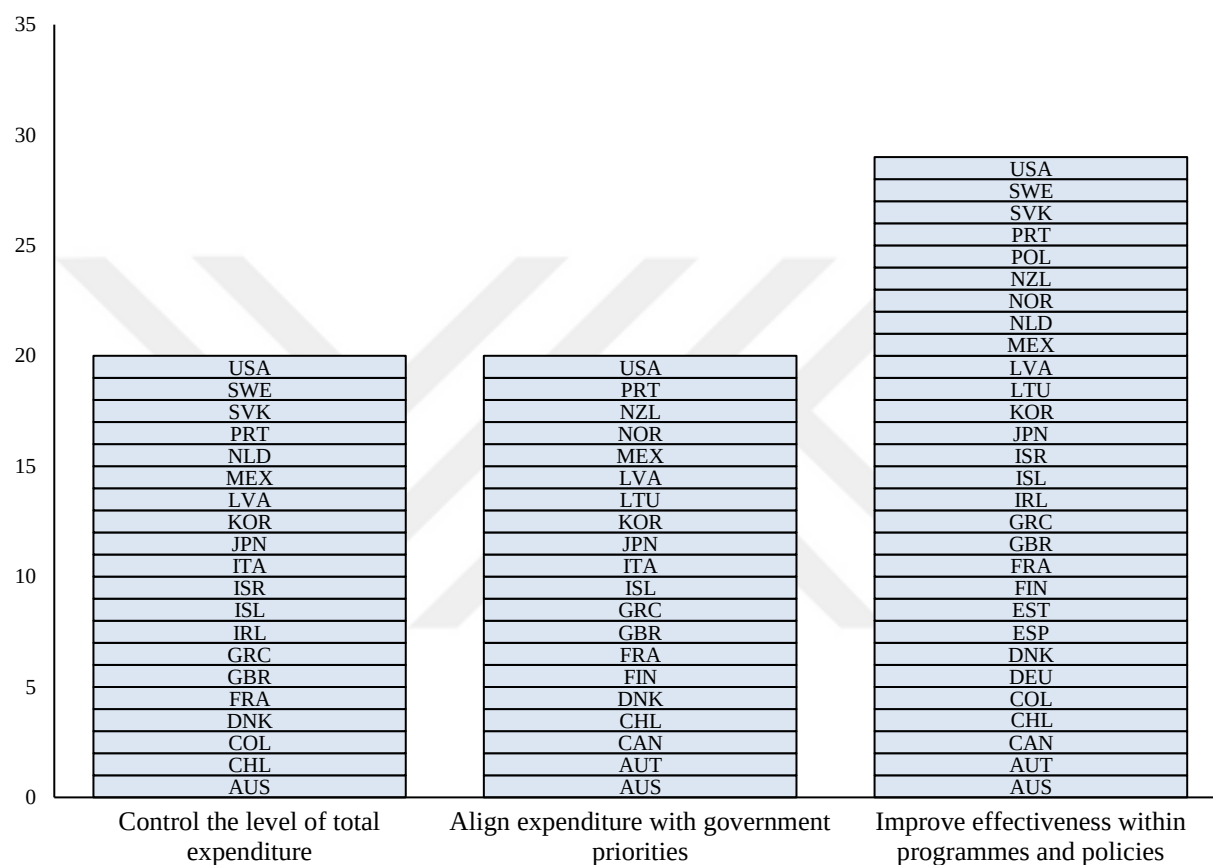


Figure 3.3. Main Objectives of Spending Reviews, 2018-2020

Source: (OECD, 2020a).

As shown in Figure 3.3, the most commonly reported objective was improving effectiveness within programmes and policies, followed by aligning expenditures with government priorities, and controlling the overall level of total expenditure. These findings reflect a growing emphasis on improving spending efficiency and resource allocation even before the onset of the crisis. This trend is particularly evident in countries such as the United States, Australia, Denmark, France, the United Kingdom, Greece, Iceland, Japan, Korea, Latvia, Mexico, and Portugal, where spending reviews are increasingly designed not only as fiscal tools to control budgetary ceilings, but also as mechanisms to enhance the overall

effectiveness and impact of government programmes and policies. In these countries, the role of spending reviews has evolved significantly, extending beyond the traditional focus on identifying savings options and cutting expenditures. They are increasingly employed as instruments for strategic policy evaluation, performance improvement, and evidence-based decision-making. This evolution reflects a broader conceptual transformation in the purpose of spending reviews. Rather than serving solely as tools for short-term budgetary control, spending reviews are now leveraged to drive long-term enhancements in policy effectiveness and overall public sector performance.

The survey also explored whether countries used spending reviews to create fiscal space for COVID-19-related measures. As shown in Figure 3.4, “Countries Creating Fiscal Space for COVID-19 Related Measures in 2020”, spending reviews emerged as a crucial tool for many countries in addressing the unprecedented fiscal challenges triggered by the pandemic. By reassessing existing expenditures and reallocating resources, governments aimed to create fiscal space to finance emergency healthcare responses, social protection programmes, and economic recovery initiatives. Nevertheless, the majority of countries reported that spending reviews were not explicitly designed as instruments for pandemic response, revealing a gap in their integration as rapid-response fiscal instruments. This finding underscores the need for more adaptive and agile spending review frameworks that can be effectively mobilised during shocks or crises. Furthermore, this highlights an opportunity for institutional reform, where spending reviews can be systematically embedded within contingency planning and crisis management frameworks. Such integration would not only improve their responsiveness in times of emergency but also strengthen long-term fiscal resilience by ensuring the alignment of public spending with dynamic policy priorities.

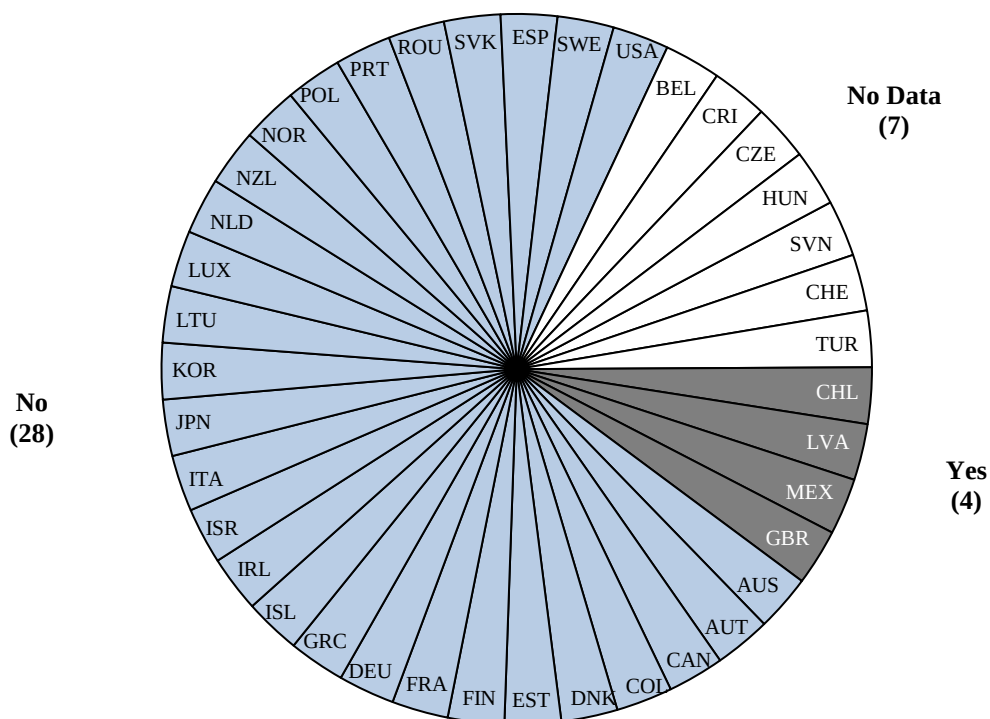


Figure 3.4. Countries Creating Fiscal Space for COVID-19 Related Measures in 2020

Source: Prepared by the authors based on data from the 2020 OECD Spending Review Survey, Question 17 (OECD, 2020a).

In the aftermath of the COVID-19 pandemic, the role of spending reviews has increasingly become central to discussions on fiscal governance and policy reform. According to OECD findings, 25 member countries indicated that the implications of the pandemic would be considered in their future spending reviews, while 10 countries reported that the crisis would have a limited effect on their review processes. This divergence underscores the varying degrees of institutional reliance on spending reviews as a strategic instrument for managing fiscal pressures and addressing medium- and long-term policy challenges. Although a number of countries succeeded in integrating spending reviews into their pandemic response strategies, several practical constraints -such as limited administrative capacity, the urgency of decision-making processes, and insufficient data- restricted the extent to which spending reviews could be employed effectively during the crisis. These challenges underscore the

necessity of building institutional preparedness and developing robust analytical infrastructures to enable spending reviews to operate as timely and effective policy tools in emergency situations.

The experience of the pandemic has further underscored the importance of transforming spending reviews into more agile and flexible instruments capable of functioning effectively under emergency conditions. Future frameworks may increasingly focus on real-time expenditure tracking, rapid reallocation mechanisms, and scenario-based review models, which can enhance governments' capacity to respond to fiscal shocks swiftly and strategically.

In addition, the crisis underscored the critical role of institutional learning facilitated by spending reviews. Countries that had previously institutionalised regular review practices were equipped to rapidly reallocate to and assess programme effectiveness in response to the pandemic. This suggests that spending reviews not only serve immediate fiscal goals but also contribute to long-term improvements in governance and decision-making capacity. Collectively, these insights affirm that spending reviews should be considered not only as routine budgetary exercises, but as dynamic instruments of fiscal governance—tools capable of contributing to both macroeconomic stability and the structural transformation of public sector spending.

3.2. Country-Specific Analysis of Spending Review Practices in OECD Member States

Australia

In Australia, the spending review process has been characterized by the leadership of the Expenditure Review Committee (ERC) since the mid-1970s. Throughout this period, the ERC has been pivotal in the budget preparation process, not only assessing existing expenditures but also scrutinizing new expenditure proposals and contributing to the overarching framework of budget management. Nonetheless, the primary emphasis of these

processes has been on evaluating the services rendered, rather than on achieving cost savings or enhancing fiscal sustainability (Robinson, 2013).

Prior to 2007, Australia maintained a stable fiscal policy environment, marked by a steady decline in public expenditure as a share of GDP. However, a significant shift occurred in 2007 when the Labour government, led by Prime Minister Kevin Rudd, initiated a series of strategic reforms in major policy and fiscal projects. These reforms were the result of collaborative efforts between the Department of Finance and the relevant ministries responsible for regulatory reform (Garnett & Lewis, 2010). In the same year, the Department of Finance and Deregulation introduced strategic reviews as part of its broader government performance and accountability framework. A limited number of high-priority strategic reviews have been conducted annually, assessing the overall efficiency, effectiveness, and appropriateness of key policies and expenditure areas. Characteristically multi-ministerial in scope, the reviews are coordinated by the Ministry of Finance, with substantial input from participating ministries providing detailed programme information (Blöndal et al., 2008).

Following the 2008 Global Financial Crisis, Australia adopted large-scale expansionary fiscal policies, surpassing previous efforts focused on spending reductions, to mitigate the economic downturn. In response to the heightened fiscal pressures, a comprehensive spending review system was implemented to reallocate resources and support new policy initiatives. As part of this process, the Expenditure Review Working Group was established to identify cost-saving opportunities within existing programmes. The comprehensive spending reviews conducted between 2008 and 2010 became a cornerstone of the efforts aimed at improving fiscal sustainability and resource efficiency (Garnett & Lewis, 2010; PBO, 2023).

Australia's spending review system, therefore, comprises two main approaches: comprehensive spending reviews and strategic reviews —applied based on prevailing fiscal conditions and policy objectives. Comprehensive reviews involve wide-ranging evaluations of budget allocations, primarily aimed at identifying cost-saving opportunities. In contrast, strategic reviews focus on specific policies, programmes, institutions, or activities. These

reviews are not necessarily intended to yield immediate savings; rather, they serve to inform policy prioritization and budget formulation. They offer an analytical framework that supports broader spending review processes. The strategic reviews undertaken in Australia, as summarized in Table 3.2, reflect a systematic effort to improve efficiency and assess the relevance and impact of major public programmes (Australian Government Department of Finance, 2024):

Table 3.2. Summary of Strategic Reviews Conducted in Australia

<i>"2008 Strategic Review of Administration of Australian Government Grant Programs</i>
<i>2008 Strategic Review of Australian Government Climate Change Programs (Wilkins Review)</i>
<i>2009 Strategic Review of Future Direction for Australian Government Service Delivery</i>
<i>2009 Strategic Review of Job Capacity Assessments Program</i>
<i>2010 Strategic Review of Indigenous Expenditure</i>
<i>2011 Strategic Review of Geoscience Australia</i>
<i>2012 Strategic Review of Small and Medium Agencies in the Attorney-General's Portfolio</i>
<i>2013 Strategic Review of Innovation in the Payments System</i>
<i>2023 Defence Strategic Review</i>
<i>2023 Independent Strategic Review of the Infrastructure Investment Program"</i>

Source: (Australian Government Department of Finance, 2024).

The strategic reviews conducted in Australia, initially aimed at achieving fiscal savings, have evolved into a comprehensive evaluation mechanism that addresses national priorities. Over time, the strategic review system became an integral part of the budget process, shifting their focus from short-term savings to enhancing the overall efficiency and effectiveness of public resource allocation. Operational efficiency and cost-effectiveness recommendations were provided for multi-ministerial issues, large-scale projects and national priority projects.

With the exception of the 2008 global financial crisis, Australia has not experienced a severe economic recession, and reviews have primarily focused on improve operational efficiency. In terms of the management model, strategic reviews are typically conducted by the Ministry of Finance, although there have been instances where they have been outsourced to third parties. This approach underscores the importance of close cooperation and coordination with the relevant ministries while conducting reviews.

Austria

Since 2016, Austria has been conducting regular spending reviews at the federal level as a means to support the identification of spending priorities and ensure the sustainability of public finances. These reviews have aimed to create a transparent framework for evidence-based strategic decision-making and to improve the quality of information available to guide budgetary decisions (Austrian Federal Ministry of Finance, 2024).

In 2017, the use of spending reviews was further institutionalized under the Intergovernmental Fiscal Relations Act, marking a formal expansion of their application beyond the federal level. Since then, a total of 13 spending reviews have been carried out under the leadership of the Ministry of Finance. Although the reviews have been conducted on a medium-scale scope, most of the individual projects have remained relatively small in scale. Notable examples include reviews on the Disaster Relief Fund, Family Burden Equalisation Fund, Financing of Austrian Rail Services, School Health Services, Urban Water Management, Public Compulsory Schools, the Ministry of Justice, and International Financial Institutions. However, the effectiveness of these processes has been limited, as no formal political decisions were taken based on the review results, and there has been insufficient follow-up or monitoring of implementation outcomes (OECD, 2020a).

Two of the review projects initiated under the Intergovernmental Fiscal Relations framework focused on urban water management financing and school health services (Austrian Federal Ministry of Finance, 2024). The urban water management review (Siedlungswasserwirtschaft) analysed the financing of drinking water supply and wastewater management in detail. Launched in 2017, the project was implemented in cooperation with state and local governments. Its primary objective was to identify potential efficiencies and effectiveness in the current system, analyse the allocation of responsibilities in infrastructure financing, and develop concrete recommendations (Austrian Federal Ministry of Finance, 2019).

The school health review, covering the period 2017-2022, focused on reforms and reviews related to the health, education and development of children and young people. The review intended to improve the school doctor system, facilitate the electronic analysis of health examinations and produce annual evidence-based health reports. These reports will serve as the foundation for planning preventive health programmes in schools. In addition, the review sought to link family support to factors such as school attendance and language learning. Efforts also aimed at expanding health service coverage to reduce the risks of polypharmacy and improving dental services for children (Austrian Federal Ministry of Finance, 2020).

As part of the 2021 Recovery and Resilience Plan (RRP), Austria has implemented spending reviews focussing on green transformation and digital transformation. Although these reviews cover only 5 per cent of public spending, they are in line with sustainable development goals. Austria has committed to conducting six spending reviews by 2026, five of which focus on climate change and one on digitalisation. This process has increased political ownership, improved transparency and strengthened government accountability through the publication of final reports.

Despite these developments, spending reviews in Austria remain narrow in scale and are not fully integrated into the budget process. While some review outcomes are used internally by line ministries, they have not significantly influenced annual or medium-term budget decisions. The lack of integration into the medium-term budgetary framework limits the strategic impact of spending reviews and hinders their potential contribution to align fiscal decisions with broader policy objectives.

Belgium

In Belgium, spending reviews were officially launched in 2021 with three pilot projects focusing on topics such as the impact of expanded teleworking in the federal public administration on organisation and expenditure, tax pre-deduction exemption for employers, and the efficiency of health services. In 2022, spending reviews in areas such as nuclear rust

and federal science policies were completed and the results of these reviews were published. By 2023, spending reviews had expanded to cover judicial expenditures, asylum and migration policies, and cyber security issues. Looking ahead to 2024, planned reviews will address topics such as cooperation options between income tax collection agencies, general evaluation of government subsidies, and the effectiveness of federal government research and development (R&D) support (BOSA, 2024b).

Although the formal adoption of spending reviews in Belgium occurred more recently compared to some other OECD countries, remarkable progress has been achieved at both the federal level and within regional administrations. At the federal level¹², the spending review process was launched in 2019 through a project initiated by FOD BOSA¹³ with the support of the European Structural Reform Support Programme. In co-operation with the OECD, a technical report was prepared explaining how to integrate spending reviews into the federal budget process. At the end of 2020, the Council of Ministers approved the implementation plan and timeline based on the recommendation of the State Secretary for the Budget (BOSA, 2024b). This milestone marked a significant step towards embedding spending reviews in Belgium's federal budgetary framework.

Belgium has committed to implementing spending reviews in a systematic and structured manner, with a focus on the social security sector. At the regional level, the Walloon Region has applied zero-based budgeting and spending reviews to cover all expenditures and revenues. The Brussels Capital Region aims to complete two pilot spending reviews and integrate the results of these reviews into the budget process, with these initiatives expected to be finalised in the last quarter of 2024. In Flanders, efforts are underway to develop an expenditure norm to ensure the permanent integration of spending reviews into the budgeting process (Corti et al., 2022).

¹² Belgium is divided into three geographical regions: the Flemish Region, the Walloon Region and the Brussels Capital Region.

¹³ It is an organisation established in 2017 under the Belgian federal government. FOD BOSA (Federale Overheidsdienst Beleid en Ondersteuning) operates to modernise, improve the efficiency and effectiveness of the federal administration and public services. It supports the formulation and implementation of public policies and provides guidance to the federal government in areas such as human resources management, digitalisation, budget preparation and spending reviews (BOSA, 2024a).

Canada

Canada has integrated the spending review system into its public financial management framework since the early 1980s. This approach has been a key instrument to comprehensively evaluate the efficiency and effectiveness of public expenditures, particularly during fiscal crises. In the early 1990s, Canada faced a serious fiscal crisis due to rising budget deficits and public debt burden. While the public debt to GDP ratio reached 70 percent, the budget deficit rose to 6 percent of GDP, rendering public finances unsustainable (Bourgon, 2009). Interest payments, in particular, constituted a significant portion of the federal government's expenditures, exacerbating the fiscal pressure by increasing borrowing costs. In the same period, the global economic recession and the effects of free trade with the US led to a slowdown in economic growth and a decline in tax revenues. On the other hand, the increase in social welfare expenditures further deteriorated fiscal balances. Under these circumstances, the Canadian government initiated comprehensive reforms aimed at restoring fiscal stability.

Launched in 1994, the Programme Review focused on scrutinizing federal expenditures to prioritize essential government functions and reduce low-priority programmes. As a result of this process, approximately 10 percent of federal spending was cut, capital expenditures were reduced by 35 percent, and 45,000 federal public service positions were eliminated (Scratch, 2010). Additionally, the government devolved certain responsibilities to provincial governments and outsourced some public services to reduce the fiscal burden. These reforms helped Canada achieve a budget surplus by 1997–98, while the public debt-to-GDP ratio declined significantly. Federal expenditures also dropped from 16.8 percent of GDP in 1993–94 to 12.1 percent in 1999–2000. Canada's fiscal turnaround is often cited as a successful example of restoring budgetary discipline through spending reviews and redefining the role of government (Bourgon, 2009).

In 1995, the government further institutionalized its expenditure control mechanisms by introducing the Expenditure Management System (EMS¹⁴). The EMS was designed to

¹⁴ The EMS is a financial management framework designed to ensure that federal spending is managed in a results-oriented manner. The key elements of the EMS are the adoption of results-oriented management in all expenditures, the provision of new expenditures within existing budget limits, and the regular evaluation of

strengthen budget discipline by integrating expenditure reviews and new spending decisions within a single framework. Its objectives included allocating resources to priority areas, financing new initiatives through reallocation, eliminating central reserves, and improving performance information to support evidence-based decision-making (OECD, 2001).

By 2007, the strategic review process had become a central component of Canada's broader expenditure management reforms. The government introduced a Strategic Review process that required federal departments and agencies to conduct a comprehensive examination of their direct program spending on a four-year cycle. The primary objective was to reallocate resources from low-priority and underperforming programmes to high-priority and high-performing ones. This initiative aimed not only to strengthen fiscal discipline but also to improve the efficiency and effectiveness of public spending (Boyle, 2011). Within the scope of the Strategic Review, detailed assessments were conducted on operational expenditures, capital investments, and contributions to third parties, such as Indigenous governments and research institutions. However, certain expenditure items, including transfer payments to individuals and specific Indigenous programmes, were excluded from the review due to legal or constitutional agreements. Initially, federal institutions were permitted to reinvest the savings they generated; however, this flexibility was later curtailed. The Strategic Review ultimately yielded sustainable savings estimated at approximately 3 billion Canadian dollars annually and played a key role in integrating performance-based management principles into the federal budget process (De Vries, 2017).

Although the Strategic Review process in Canada was considered successful, increasing fiscal pressures and budget deficits due to the 2008 global economic crisis prompted the government to conduct a more comprehensive and target-oriented review. In this framework, the Strategic and Operating Review was initiated in 2011 with the primary goal to restore fiscal discipline and achieve budget balance through targeted savings of 4 billion Canadian dollars by the 2014-2015 fiscal year. Unlike the broader scope of the previous Strategic Review, the Strategic Operational Review adopted a short-term, adopted a short-

existing expenditures through strategic reviews. This system has strengthened the principles of accountability and fiscal discipline by ensuring that federal expenditures are reviewed on a performance-based basis (Government of Canada, 2010).

term, focused approach, concentrating on selected areas of federal spending rather than a full review of all expenditures. As part of the reviews, ministries were asked to develop budget scenarios outlining potential savings of 5 to 10 percent. The Strategic Operational Review was led by a Strategic Operational Review Committee reporting to the Prime Minister (Robinson, 2014). This committee reviewed the savings plans submitted by federal organisations and assessed their appropriateness. Emphasis was placed on improving the quality of cost data and increasing the efficiency of individual programmes. In addition, the government engaged private consulting firms, such as Deloitte, to provide assistance on ways to improve efficiency, restructure internal services and reduce costs. Final decisions were made by the Prime Minister and the Minister of Finance (Deloitte, 2013).

Since 2016, in line with the fiscal improvements realized through work programme, strategic reviews, and strategic operational reviews in Canada, the focus has shifted to analyses aimed at increasing the effectiveness of public spending, rather than focusing solely on savings-oriented spending reviews. In this context, improving policy and programme delivery mechanisms, as well as strengthening performance measurement and evaluation systems, have become increasingly important within an evidence-based decision-making framework. To support this shift, the Resource Allocation Review was launched in 2016 as part of the Canadian Government's efforts to modernize spending review practices. Unlike previous reviews that involved broad assessments across all federal ministries, this initiative adopted a more targeted approach through two distinct review formats: departmental reviews and horizontal reviews. Departmental reviews focus on selected programmes within a single ministry and follow a top-down evaluation approach, while horizontal reviews take a more collaborative perspective by examining cross-cutting programmes involving multiple ministries. These two formats allow for more targeted and context-sensitive analysis, depending on the nature of the spending under review. A comparative summary of the structure, focus, and institutional responsibilities of these two formats is provided in Table 3.3 below (De Vries, 2017):

Table 3.3. Comparison of Departmental and Horizontal Review Approaches

Departmental Review	Horizontal Review
A hierarchical (top-down) approach in which ministries analyse their programmes and propose solutions.	Conducted collaboratively with TBS analysis teams and interministerial working groups (Task Forces).
Emphasis on prioritization, performance improvement, and management methodologies rather than savings.	Focused on rationalizing and improving policy and management practices.
Proposed solutions are jointly evaluated by the ministries and the Treasury Board Secretariat (TBS).	The Treasury Board Secretariat develops its recommendations for the Treasury Board by systematically analysing the evidence collected throughout the review process.

Source: (De Vries, 2017).

In 2022, in response to the economic, social, and public health challenges resulting from the COVID-19 pandemic, Canada spent at unprecedented levels, leading to a rapid increase in budget deficits. According to Canada's Department of Finance, the federal net debt-to-GDP ratio rose significantly from 29.8% in 2019 to 47.5% in 2022. In response to this increase, the government outlined its commitment in the 2021 Economic and Fiscal Update to fiscal balance by the 2026-27 fiscal year and to bring the net debt ratio down to 44% (Department of Finance Canada, 2021). However, despite promises of economic growth and improved living standards in the 2022 Budget, the mechanisms for achieving these fiscal targets remained ambiguous. The 2023 Budget, however, introduced specific expenditure reduction measures aimed at addressing the fiscal imbalance. These included \$7.1 billion in savings over five years with a 15% reduction in consulting and travel spending, \$7 billion in cuts over four years with a 3% reduction in ministry and agency spending, and \$1.3 billion in spending reductions in Crown corporations. In total, these measures were projected to yield \$15.4 billion in savings over five years, while new spending of \$43 billion was announced over six years, directed towards priority areas such as dental health care, housing, infrastructure and green technology (Department of Finance Canada, 2023).

Table 3.4. Characteristics of Spending Reviews in Canada

Period	Objectives	Key Results
1984–1986 Task Force on Program Review	- Examine approximately 1,000 government programmes to improve management, enhance citizen access, and decentralize responsibility	- Facilitated citizen access to programmes; promoted decentralization
1994-1999 Program Review	- Restore fiscal discipline and eliminate budget deficit through targeted spending cuts and strategic reallocation	- A budget surplus was achieved in the 1997-98 financial year. - Total federal government expenditure as a percentage of GDP fell from 16.8 per cent in 1993-94 to 12.1 percent in 1999-2000. - Ten percent of the total budget was cut and a budget surplus of 1.8 percent was achieved in the 2000-2001 financial year. - 45,000 people were laid off in the federal government. - Increased funding for indigenous and child support programmes; reduced spending on infrastructure and regional development
2007-2010 Strategic Review	- Identify low-priority and low-performing expenditures for reallocation, - Improve value-for-money and efficiency in federal programmes.	- Four-year expenditure cycles - Introduced “results-based management” tools - Identified savings primarily used for deficit reduction rather than reinvestment.
2011-2015 Strategic & Operating Review	- Restore fiscal balance and reduce structural deficits following the 2008 global financial crisis.	- Direct projects of the federal government totalling 80 billion Canadian dollars were reviewed, - Helped maintain a relatively stable debt-to-GDP ratio (~30%) by 2015, - Emphasis on operating expense reductions and productivity gains
2016-2019 Departmental & Horizontal Reviews	- Increase the effectiveness of public expenditures through improved alignment with government priorities, - Enhance performance and strengthen management practices,	- Improved coordination and prioritization in policy implementation, - Enhanced efficiency in direct public expenditures, especially in operational costs, - Strengthened result-oriented management

	- Promote evidence-based decision-making without imposing predefined savings targets	and performance measurement systems.
2022- Ongoing	- Address the fiscal implications of post-COVID-19 spending and deficits, - Reallocate resources to priority areas through targeted reviews, - Improve the effectiveness of government programmes and services	- Aimed to reduce the budget deficit to 0.4% of GDP by the fiscal year 2026–27 through the control of rising public expenditures in the aftermath of the COVID-19 pandemic, - While pursuing expenditure savings, the review process also prioritized increasing investments in targeted social programmes such as healthcare, housing, and green infrastructure.

Source: (Bourgon, 2009; Lindquist & Shepherd, 2023; Treasury Board of Canada Secretariat, 2020, 2024; Wilson, 1988).

The table 3.4 provides an overview of spending reviews conducted in Canada from 1994 to the present, outlining their objectives and implementation. Each review reflects the evolving fiscal priorities and challenges faced by the federal government, ranging from addressing economic crises and improving fiscal balance to enhancing efficiency and aligning government programmes with national priorities. Collectively, these reviews underscore Canada’s commitment to systematic evaluations of public expenditures to optimize resources and ensure effectiveness in policy implementation.

Chile

In 2019, the Chilean Budget Directorate (DIPRES) initiated efforts to integrate the spending review process into the government budget process and developed a review methodology (Tryggvadóttir & Park, 2023). The primary objective of this initiative is to ensure that a review system is in place to help the country overcome potential future budgetary challenges while also meeting short-term budgetary requirements. In collaboration with the International Monetary Fund (IMF), DIPRES was consulted on the initiation of the spending review process and, as a result of the joint work, decided to launch the first pilot review exercise. The main objective of this exercise is to review expenditures allocated to support activities performed by public services.

The pilot review covered 158 of the 228 public services included in the 2019 Budget Law, representing approximately 29.6 percent of public expenditure on consumer goods and services. With this review, they aimed to achieve budgetary savings in the range of 6.1 to 7.8 percent (Araya et al., 2021; DIPRES, 2021).

In 2020, a second spending review of public sector expenditure on consumer goods and services was conducted, focusing once again on public sector expenditures related to consumer goods and services. This time, however, important learnings from the first exercise were incorporated and the exercise was further integrated into the budget cycle. The evaluation and efficiency analysis resulted in the creation of a fiscal space of approximately USD 2.270 billion, equivalent to 3 percent of the total budget and 15 percent of the variable component (Araya et al., 2021; DIPRES, 2021). Although these gains may appear modest in the face of broader fiscal and social demands, they highlight the structural constraints within Chile's budget formulation and approval processes. The limited fiscal flexibility restricts the government's ability to redefine priorities and shift away from the status quo, posing a significant concern and an ongoing challenge to the realization of strategic policy objectives.

Since the results of the report do not include clear policy recommendations for spending reviews, it was not possible to establish a direct link between the review findings and the budgetary changes introduced in 2021. For future spending review reports to be more effective, it is important that concrete and implementable policy recommendations are directly linked to the findings and that budgetary changes are shaped on the basis of these recommendations. While Chile has made progress in this process, policy recommendations need to be clarified and the implementation process needs to be effectively monitored to make budgetary decisions more coherent and meaningful.

Colombia

Since the early 1990s, Colombia has maintained a robust budgetary framework, particularly in the area of fiscal responsibility. The Organic Budget Law grants significant

authority to the Minister of Finance to control expenditures and ensure debt sustainability, which has supported the country's macroeconomic stability. This framework has been reinforced by instruments such as the Public Expenditure Rationalisation Law No. 617, the Medium-Term Fiscal Framework and the Medium-Term Expenditure Framework. However, Colombia has not paid sufficient attention to the efficiency and quality of spending (Fouad et al., 2018). For this reason, spending reviews have come to the fore as an important tool for the efficient use of public expenditures.

In 2016, Colombia's Department of National Planning (DNP), with support from the World Bank, conducted its first spending reviews in the agriculture and social inclusion and reconciliation sectors. The review assessed the alignment of projects with government objectives and their physical-financial performance, and produced an spending review manual.

The initial objective of the 2016 review was to identify potential savings of up to 10% of the budgetary allocations for each organisation. However, this target was only partially achieved. One of the key reasons for this shortfall was that the 2017 budget had already incorporated expenditure adjustments based on preliminary efficiency measures identified during the review process, thereby reducing the scope for further savings in the subsequent implementation phase. For instance, in the Social Inclusion and Reconciliation Sector (SISR), the projected savings target was 280 billion pesos, while actual savings amounted to 127 billion pesos. Notably, while some institutions, such as the Victim Care and Reparation Unit, surpassed the target, others fell short (World Bank, 2016a).

Following this initial experience, similar studies were conducted in 2017 across various sectors, such as health, education, environment, transport and trade. In the process, a trust-based dialogue was developed between DNP, the Ministry of Finance and the relevant spending agencies, and areas of savings were identified with the support of expert institutions such as Fedesarrollo¹⁵ (Agudelo & Aguilar, 2018). Spending reviews have made critical

¹⁵ Fedesarrollo (Fundación para la Educación Superior y el Desarrollo) is one of the leading independent think tanks in Colombia, conducting research on economic and social policy issues. Founded in 1970, Fedesarrollo works mainly in the fields of economic development, public policies, fiscal reforms, social welfare and macroeconomic analysis. Fedesarrollo's main objective is to provide evidence-based analyses and policy

contributions to the prioritizing public expenditure and promoting its efficient use within budget constraints.

The methodology, reference criteria and proposed policy decisions were developed in collaboration with representatives of the National Planning Department, World Bank experts and Fedesarrollo. These studies were further supported by reports prepared in consultation with the organisations of the sectors in which the expenditure was carried out, and the final documents were published on the website¹⁶. The scope of the study varied depending on the sector and phase analysed, requiring the examination of projects, programmes and various sources of financing. However, the spending reviews jointly carried out in 2016 and 2017 were technical in nature and did not necessarily involve the adoption of recommendations. The results of the study provide guidance on how Colombia can apply spending reviews in the future to make public spending more efficient and sustainable.

According to the results of the review:

- In the education sector, a total of 537 analytical units¹⁷ were reviewed, representing a budget of 33.5 billion pesos. 83% of this budget was allocated to high performance and high priority projects, indicating that the sector's expenditure is generally efficiently used. However, a considerable number of projects were identified as underperforming or requiring improvement. In particular, several projects were flagged for reassessment in terms of budget (Agudelo & Aguilar, 2018).
- In the trade sector, 120 analytical units were reviewed and the total budget of 661 billion pesos. According to the results of the analysis, 58 percent of the budget was allocated to high priority and high performance projects. However, 36 percent of the

recommendations to support Colombia's sustainable development. It is a reference point for the public and private sectors and produces a variety of reports, analyses and research both locally and internationally. Fedesarrollo also contributes to public administration by conducting research that assesses the effectiveness of government policies. In projects such as public spending reviews in Colombia, Fedesarrollo has played an important role by providing technical support and advice, offering expertise in the analytical process, identifying areas for savings and more efficient use of resources (Fedesarrollo, 2024).

¹⁶ "<https://www.repository.fedesarrollo.org.co/handle/11445/5>"

¹⁷ "Analytical units" refer to specific entities such as programmes, projects, institutions, or sub-units that were individually examined during the spending review process.

budget was found not to be in line with government priorities and these projects could be reviewed to make room for new priorities (Agudelo & Aguilar, 2018).

- In the transport sector, a budget of 13.7 billion pesos was analysed and 1,248 analytical units were reviewed. In this sector, unlike others, a significant proportion of the budget was allocated to low-performing and low-priority projects. Differences in performance were particularly noticeable for projects funded under the royal system Sistema General de Regalías (SGR)¹⁸. The vast majority of projects funded directly from the central budget are high priority and high performing. However, SGR projects are not fully aligned with central budget priorities, as they are managed by local governments (Agudelo & Aguilar, 2018).
- In the health sector, a budget of 8.1 billion pesos and 56 analytical units were reviewed. 99% of the budget was allocated to high priority and high performance projects. However, an analysis of the projects found that although most of these projects are prioritised, their financial and physical performance is inadequate. This shows that local governments need to improve their processes of managing SGR resources (Agudelo & Aguilar, 2018).
- In the environmental sector, 248 analytical units were reviewed with a total value of 812.5 billion pesos. According to the results of the analysis, most of the budget is concentrated in high priority and high performance projects. However, 27% of the budget was allocated to projects with low performance and low priority. The majority of these projects were funded from SGR resources and have potential for optimisation (Agudelo & Aguilar, 2018).

¹⁸ The Sistema General de Regalías (SGR) is a public financial management system that regulates the collection, allocation, and utilisation of revenues generated from Colombia's natural resources. Although the SGR is not an autonomous state agency, it functions as a financing mechanism administered and supervised by the central government. The system primarily manages revenues from the mining and hydrocarbon sectors and aims to ensure an equitable distribution of these resources across the country, thereby supporting sustainable development projects and reducing regional disparities (SGR, 2024).

Costa Rica

The 2018 OECD report titled “Estudios Económicos de la OCDE: Costa Rica” highlighted public financial management challenges in Costa Rica and recommended the implementation of spending reviews to enhance budget flexibility, ensure the efficiency of public spending, and prevent deviations in spending (OECD, 2018a). The report emphasized the need to reduce budget fragmentation, reassess funds earmarked for specific purposes, and align decentralized institutions outside the central budget with government priorities. Although some legislative proposals were introduced in 2018 to address these issues, the implementation of the recommended reforms remained limited, and the expected structural changes in budget management were not achieved.

According to the OECD’s 2024 Government at a Glance report, Costa Rica remains among the countries that do not systematically implement spending reviews (OECD, 2024a). Over the past six years, the recommendations to integrate spending reviews into public financial management have not been concretely implemented. This lack of implementation has resulted in continued constraints on budget management and increased pressure on fiscal sustainability. In particular, the absence of spending reviews has hindered the achievement of key objectives, such as improving budgetary flexibility, enhancing public sector efficiency, and ensuring fiscal sustainability.

Nevertheless, Costa Rica continues to regard spending reviews as an essential component of future fiscal reforms. These reviews are seen as a powerful tool to address deficiencies in budget management infrastructure, improve the effective use of public resources, and enhance public sector performance. However, the period between 2018 and 2024 highlights the delay in implementing these reforms, underscoring the need for a comprehensive reassessment of the reform process. In this context, the adoption of spending reviews would represent a critical step towards strengthening Costa Rica’s fiscal management and optimizing the efficiency of its public resources.

Czech Republic

In recent years, the Czech Republic has emphasised spending review processes in order to manage public finances more efficiently and effectively. In 2020, according to the report published in the OECD survey, it was announced that the spending review pilot project would soon be published in the country. In 2021, the process of examining the programme of the Ministry of Health under the state budget heading was launched. This is the first pilot spending review aimed at evaluating public expenditures on postgraduate training programmes for doctors and the results of these expenditures (Ministry of Finance of the Czech Republic, 2022).

The aim of this pilot exercise was to evaluate the expenditure the expenditures and results achieved for doctoral programmes. This step was chosen as a starting point for a more detailed and analytical examination of public expenditure in a specific area. The results of the study revealed that “the number of full-time equivalent doctors in the Czech Republic” has increased in all regions, but the growth rates have varied, increasing regional inequalities. Moreover, the average age of doctors has increased in most specialities, particularly in outpatient services, suggesting a future shortage of doctors. However, the impact of the programme was observed to be limited, as the subsidies did not have a significant impact on changes in the regional or disciplinary distribution of doctors. The programme also lacked clear and measurable objectives, such as addressing the shortage of doctors, suggesting a need for improvement in terms of efficient use of resources (Haas & Gavrikova, 2022).

In the Ministry of Finance press release of 1 November 2023, the government of the Czech Republic announced that it had approved the intention to consider the spending review process for the systematic assessment of state budget expenditure. This initiative aims to make an important contribution to the process of achieving greater discipline in public finances and setting budget priorities (Ministry of Finance of the Czech Republic, 2023). Under the leadership of the Ministry of Finance, spending analyses will be implemented in the form of either comprehensive evaluations or targeted revisions focused on specific sectors or issues.

The process will involve close collaboration with other relevant ministries and public administration institutions will be established, thus broadening the scope of the analyses.

Denmark

In Denmark, the spending review process has played an important role since the 1980s to ensure fiscal discipline, modernise spending and improve the efficiency of public administration (Robinson, 2014). This process has evolved in parallel with Denmark's overall economic and fiscal reforms.

In the 1980s, Denmark adopted a tighter fiscal policy in order to prevent economic instability. The abolition of inflation-linked wage adjustments, while implementing fixed exchange rate policies tied to the euro by a tight margin, signalled a shift to a more disciplined economic management. It was within this context that spending reviews began to take root as a strategic tool for public management. These reviews aimed to enhance the efficiency of resource allocation and modernise expenditure frameworks (Østergaard, 2024).

In the 1990s, an employment-oriented transformation was achieved by adopting policies that made the labour market more active. These reforms included the tightening of unemployment benefits and the promotion of private labour market pension systems. Spending reviews allowed decision-makers to reprioritise expenditures during this period and provided resources to address structural problems in the labour market. Thus, expenditure was managed efficiently while public services were improved (Danmarks Nationalbank, 2009).

In the early 2000s, Denmark implemented major reforms to its pension system. These reforms included reducing early retirement options and indexing the retirement age to life expectancy. Spending reviews have focused on ensuring fiscal sustainability and managing demographic pressures. The fiscal savings generated through reforms helped to offset budget deficits in other areas, particularly unplanned spending in municipalities (OECD, 2015a).

In the 2010s, Denmark implemented employment reforms based on medium-term planning and the introduction of expenditure ceilings. These expenditure ceilings were set based on a 4-year medium-term framework and set fiscal targets for structural balance. Spending reviews became an integral component of the planning process, enabling to prioritise resource allocations, manage insured and uninsured unemployment benefits, and activate pension reforms. This period was an extension of Denmark's objective to strengthen its fiscal sustainability (The Danish Government, 2011).

In the 2020s, the spending review approach evolved toward greater flexibility and policy targeting, particularly in response to economic uncertainty and post-pandemic recovery. Spending reviews were increasingly employed not only as tools to ensure fiscal sustainability but also to finance emerging policy priorities. The focus expanded to encompass next-generation challenges, such as climate change mitigation, green transition projects, and the sustainability of social services. Spending reviews were increasingly aligned with green objectives and were also used to create fiscal space to support recovery spending, particularly in the health and social sectors. At the same time, enhanced scrutiny was applied to municipal and local government expenditures (The Danish Government, 2020).

To date, Denmark has conducted over 50 formal spending reviews, encompassing a broad range of policy areas. However, the number of reviews initiated or undertaken within a given year has fluctuated significantly-with no reviews conducted in some years and up to 34 individual spending areas reviewed in others. The fluctuation mainly reflects the changes in fiscal needs, political priorities, and available administrative capacity. Although the spending review process does not have a formal legal foundation, it has become an integral part of Denmark's budgetary tradition. Spending reviews are strongly embedded in the annual budget formulation process, centrally coordinated by the Ministry of Finance. The ministry works in close collaboration with line ministries, ensuring that sector-specific inputs are adequately considered. A distinguishing feature of the Danish approach is the systematic engagement of external consultants in conducting expenditure analyses. The findings and recommendations from these reviews are integrated directly into the subsequent year's budget planning, influencing both fiscal decisions and policy formulation. Nevertheless, the lack of publicly

available guidance materials limits broader understanding and dissemination of the practical aspects of spending reviews outside the public sector (European Union, 2024b).

In the analytical phase of the spending review process, Denmark employs various technical tools to improve the quality and robustness of the reviews. Cost-benefit analysis (CBA) and benchmarking methods are among the most commonly used instruments. The analytical components are often entrusted to external experts, which contributes to the technical reliability and impartiality of the process. The overarching goals of the spending review system are not only to ensure better expenditure management but also to enhance the efficiency and transparency of public finances. The governance model is structured around a strong centralised framework in which the Ministry of Finance defines the scope, methodology, and content of each review. While line ministries provide critical data and collaborate on the analyses, strategic decision-making lies with the Economic Coordination Committee of the Council of Ministers. This high-level coordination mechanism ensures that spending reviews are aligned with the broader fiscal strategy and political priorities of the government (European Union, 2024b).

Estonia

The Estonian government incorporated spending review processes into the public financial management system in 2016. Initially, four selective reviews were launched, including two pilot projects conducted in 2018 and two additional reviews initiated in 2020. The scope of spending reviews has since been gradually expanded, with four more reviews currently in progress. Spending reviews are conducted on an ad-hoc basis, with the main objective of achieving savings and improving policy efficiency (European Union, 2024b).

In terms of the governance model, spending reviews in Estonia are coordinated by the Ministry of Finance (MoF). While the final decision regarding the identification and initiation of review areas formally lies with the government, in practice the MoF often assumes a leading role. During the review process, working groups are responsible for conducting the

analysis, and line ministries play an active role. Additionally, external experts and other relevant institutions may be involved when necessary.

The implementation of spending review processes in Estonia between 2016 and 2024 has been structured in two phases: “Learning and Doing” (Phase 1: 2016–2020) and “Essential Need” (Phase 2: 2023–...). The first pilot spending review in Estonia was conducted in 2017. This initial review focused on the use of state instruments and was implemented as an “efficiency review”, covering approximately 0.3% of the state budget (Pärenson, 2018).

In 2018-2019, Estonia implemented the second pilot spending review, focused on the performance area “entrepreneurship and innovation” and was carried out on a broader scale, covering approximately 2.7% of the state budget. This strategic review aimed to analyse the strategic effectiveness of innovation and entrepreneurship policies and contribute to policy improvements. In parallel, small-scale effectiveness reviews—although not directly tied to the budget process—were also carried out. Thus, the spending review processes were gradually matured by gaining experience in different areas (Pärenson, 2024).

By 2023, Estonia moved to the second phase of its spending review process, significantly expanding the scope of spending review processes. In this phase, called “Mandatory Need”, spending reviews were planned to cover more than 54% of the state budget. During this period, the activities of critical ministries such as the Ministry of Economic Affairs and Communications, the Ministry of Social Affairs and the Ministry of Finance were comprehensively reviewed. At the same time, a spending review team was established within the Ministry of Finance to support spending review processes with institutional capacity. This team, consisting of two senior advisors and two analysts, aims to ensure that spending review processes are carried out effectively (Pärenson, 2024).

Finland

Since 2009, Finland has consistently faced budget deficits. Demographic changes have increased age-related public expenditures, adversely affecting the sustainability of public

finances. This put considerable pressure on local government budgets and raised the risk stemming from increased public debt. These structural challenges indicate a sustainability gap, where current revenues are insufficient to meet existing expenditure commitments (Ministry of Finance Finland, 2015). This gap represents not only a short-term imbalance but a long-term structural challenge that undermines the sustainability of public finances. Comparisons at the European level show that Finland has relatively high tax and expenditure ratios. As a result, the scope for increasing revenues through economic growth alone remains limited, since rising public expenditures continue to absorb much of the fiscal space.

As public resources become increasingly limited, resource allocation and expenditure prioritization have become central issues in public policy. Decision-making processes require more information about how budget resources are allocated and the outcomes these expenditures generate. In this context, “spending and structural reviews” (meno- ja rakennekartoitukset) have become an important tool for assessing the efficiency and effectiveness of public spending in Finland. However, these reviews have not been conducted on a regular basis. Finland conducted its first descriptive spending review in 2015, followed by updated reviews in 2016 and 2019. This process advanced further in 2023 with a comprehensive spending review. Finland’s engagement with spending reviews spans nearly a decade, although these reviews have been conducted on a largely ad-hoc¹⁹ (needs-based) basis (Ministry of Finance Finland, 2023).

The primary objectives of spending reviews in Finland are to achieve savings and manage overall public expenditure levels. However, these reviews do not operate within a direct legal framework and no publicly available guidance materials are provided. Nevertheless, Finland’s spending reviews have been extensive, typically covering 70-100% of the state budget (European Union, 2024b).

The Ministry of Finance (MoF) acts as the central authority overseeing the spending review process and is responsible for key decisions, including the identification of review

¹⁹ They are one-off or ad-hoc analyses conducted to respond to a specific need, problem or economic condition, without a regular timetable.

areas and the initiation of review activities. Other ministries are involved to a limited extent, mainly by providing data and participating in specific stages of the process. The involvement of external experts or consultants is uncommon; however, written assessments are occasionally provided by research institutes (European Union, 2024b).

The data utilized in spending reviews include financial accounting records, statistics, and policy evaluations, with the Ministry of Finance taking responsibility for conducting these analyses. Although there is no strict methodological framework, the reviews are carried out comprehensively and systematically.

The decisions and goals arising from spending reviews are defined at a high level and communicated to external stakeholders. While implementation responsibilities are delegated to the relevant ministries, the government retains ultimate decision-making authority over the publication and timing of review documents. These documents are overseen by the Ministry of Finance.

In 2021, social security benefits accounted for 35% of public expenditures, representing the largest expenditure category in public finances. These benefits aimed to safeguard livelihoods against social risks. However, analyses suggest that the level and scope of social security benefits should be restructured to alleviate their fiscal burden. Reforms in areas such as general housing assistance, unemployment insurance, and pension systems could yield fiscal savings and enhance employment incentives. For instance, revising the employment duration requirement for unemployment insurance could generate annual savings of €250 million (Ministry of Finance Finland, 2023).

Also in 2021, education, skills, culture, and sports expenditures constituted 16% of the public budget, amounting to €22.6 billion. Changes in population demographics highlighted the need for more efficient allocation of resources in this sector. Proposals such as directing university quotas and vocational education funding toward first-degree students aimed to improve cost efficiency. Additionally, introducing tuition fees for higher education could increase university revenues, shifting part of the financial burden to students. These

adjustments are intended to contribute to public finances gradually and sustainably over the long term (Ministry of Finance Finland, 2023).

During the same year, healthcare and social services accounted for 21% of public spending, reaching €29.7 billion. Accelerating digitalization and integration in healthcare services could save approximately €500 million annually. Proposals included reducing newly assigned tasks and responsibilities in welfare regions, increasing staff efficiency, and gradually raising user fees for health services. For example, lowering the minimum staffing ratio in enhanced care units could save €240 million annually (Ministry of Finance Finland, 2023).

In 2021, agriculture, environment, and nature conservation expenditures made up 1.6% of total spending, amounting to €2.2 billion. Recommendations included transitioning to more centralized and modern agricultural production models while enhancing the effectiveness of conservation funding. Gradual reductions in agricultural subsidies and natural disadvantage compensation could yield annual savings of up to €150 million (Ministry of Finance Finland, 2023).

According to 2021 figures, business, transportation, housing, and construction expenditures comprised 9% of public expenditures, totalling €13.2 billion in 2021. Measures such as postponing infrastructure projects and cancelling certain large-scale railway developments could prevent long-term costs of €12 billion. Redirecting housing and construction subsidies to more impactful areas and eliminating state guarantees for projects without social need criteria were also proposed to strengthen public finances (Ministry of Finance Finland, 2023).

In 2022, the OECD's country report and the International Monetary Fund's (IMF) assessment of Finland's economy recommended conducting regular spending reviews. In response, Finland plans to utilize the European Union's Technical Support Instrument (TSI) program to develop a systematic and sustainable model for spending reviews (IMF, 2022; OECD, 2022). This initiative aims to integrate regular spending reviews into Finland's

budgeting and financial processes by examining best practices from other countries. Spending reviews are considered as a strategic tool for enhancing public finance efficiency, promoting fiscal discipline, and improving the quality of public services.

In the same year, the Ministry of Finance proposed strengthening public finances by at least €9 billion over the next two electoral periods. The decisions and goals emerging from spending reviews are defined at a high level and shared with external stakeholders. Implementation responsibilities are delegated to the relevant ministries, while the government retains ultimate decision-making authority over the publication and timing of review documents, which are overseen by the Ministry of Finance.

In 2023, the findings of the most recent spending review were detailed in a comprehensive report that evaluates social security, education, health, environment, agriculture, transport, and other sectors (Ministry of Finance Finland, 2023). Each sector has been assessed for its budgetary impact, existing fiscal pressures, and potential savings opportunities. The review was conducted to ensure fiscal sustainability and support more efficient resource utilization. The 2023 review not only analysed the current state of public spending but also provided a solid knowledge base for policy and fiscal planning. The review emphasized the need for gradual and carefully analysed implementation of the proposed measures to ensure long-term fiscal stability while maintaining the quality of public services. Consequently, the 2023 spending review serves as a comprehensive roadmap for Finland's fiscal management, aiming to enhance efficiency, discipline, and sustainability in public finances.

France

Although comprehensive and systematic public spending reviews in France began with the “Révision Générale des Politiques Publiques” (RGPP) programme in 2007, the origins of spending reviews date back much further. Initiated in 1946, the “central enquiry committee on the cost and efficiency of public services” constituted one of the first steps towards controlling public expenditure and improving its efficiency. Subsequent reforms further shaped the

landscape: the “rationalisation of budgetary choices” reform in 1968 aimed to make expenditure management more planned, and the “Rocard circular” issued in 1989 aimed to set priorities in expenditures. Adopted in 2001, the “organic law on fiscal laws’ (LOLF) provided the necessary infrastructure for modern spending reviews by making budget processes more modern, transparent and accountable (FIPECO, 2023). Building on this foundation, in 2007, the RGPP programme launched in 2007 marked the beginning of modern spending reviews in France, significantly broadening their scope.

The spending reviews for the 2007-2012 RGPP period aimed to identify possible savings and efficiency gains at central government level. Although it achieved savings of €12 billion in the short term, its impact was limited and not favourable for social dialogue due to controversial methods, such as not replacing one in every two retiring civil servants (Vie Publique, 2023).

The Modernisation de l’Action Publique (MAP) period from 2012 to 2017 focused on simplifying administrative procedures and making public services more accessible to users. However, less than half of the €5 to €7 billion in savings targeted during this period could be verified (Chevallier, 2016).

The Action publique 2022 programme, implemented between 2017 and 2022, was interrupted by social and health crises such as the Gilets jaunes movement and the COVID-19 pandemic. Although the objective was to reduce public spending by three percentage points of GDP and make public services more efficient, the programme failed to achieve these objectives (Assemblée Nationale, 2023). The common objective in all these periods was to contribute to the restoration of national fiscal balances through the rationalisation of public administration and functioning.

By 2023, the French government introduced a new spending review process, aiming to save €15 billion by 2030. As part of this effort, various proposals were presented to increase simplicity and efficiency in public administration. These measures included the rationalisation of the state’s management of real estate, the creation of an ethical oversight mechanism for

transitions to the private sector, the abolition of three old norms in exchange for one new regulatory norm, and the integration of administrative simplification objectives into draft laws (Assemblée Nationale, 2024). Other proposed reforms involved abolishing centralised control over local authorities, merging advisory commissions with similar functions or abolishing redundant ones, and reducing subsidies to small state enterprises.

Germany

Spending reviews in Germany were officially introduced in 2014 following the OECD's comprehensive review of Germany's federal budget system. The report highlighted the positive aspects of Germany's hierarchical (top-down) method of budget preparation but noted that the integration of performance information into the budgeting framework was still considered "underdeveloped" relative to practices in other OECD countries (BMF, 2014). One of the key challenges identified related to designing and systematising a mechanism to link the budget to performance was the strong autonomy granted to line ministries by the basic law, which, combined with the continuous operation of a multi-annual budget process under medium-term fiscal constraints, leaves limited room to reassess existing expenditures. To address these issues, it has been proposed to introduce a structured and institutionalised system of spending review into the existing budget process. In this context, Germany officially introduced its first Spending Review in 2015 (themenbezogene Haushaltsanalyse) (OECD, 2015b).

With the introduction of the hierarchical budget preparation procedure, each ministry has more discretion in selecting policy instruments in its area of responsibility and allocating resources within the total budget allocated to them. However, the Ministry of Finance, as the responsible institution for budget preparation processes, aims to examine whether the prioritisation of inter-ministerial and intra-ministerial policies on the basis of "policy areas" is meaningful and whether there is any room for reallocating the resources in a "performance-based" or "results-oriented" manner (BMF, 2014).

The spending review process in Germany is conducted jointly by the Ministry of Finance and the relevant spending ministries through a two-level operational structure. At the top level is the executive committee (Lenkungsausschuss) consisting of the Deputy Minister of Finance and the deputy ministers of the relevant ministries. This committee establishes working groups for each spending review process, assigns tasks to these groups and defines the procedural framework. The working groups are composed of representatives of the Ministry of Finance and the relevant ministries. They may also receive support from the Court of Accounts (Bundesrechnungshof), review bodies (Bewilligungsbehörde), academics and other experts in specific policy areas. The working groups are also responsible for analysing the activities, policy conditions and objectives of the federal government in the relevant field; measuring the realisation of policy objectives using appropriate indicators and obtaining the necessary data from public institutions, statistical agencies and academia; and evaluating changes in the determined indicators and examining the effectiveness of policy instruments, the cost-benefit ratio and whether the objectives can be achieved with fewer resources (Bach, 2017). Finally, the report prepared by the working group is submitted to the executive committee. The executive committee reviews the findings, formulates recommendations and forwards them to the Cabinet for a final decision. This process is designed to enhance budgetary efficiency and promote a results-oriented approach to public expenditure.

Since the introduction of spending review system in Germany in 2015/16, evaluations have been conducted across various policy areas. The initial review cycle focused on two specific support programmes: “Intermodal Transport” and “Mobi-EU”. These programmes were selected to build institutional capacity in conducting spending reviews and to provide insights into the effectiveness of targeted public support mechanisms. The Intermodal Transport programme aimed to reduce transportation costs by supporting combined transport infrastructure, while MobiPro-EU sought to enhance the labour market integration of young skilled workers from EU countries. As a result of the review, the annual budget of the Intermodal Transport support programme was reduced from €90 million to €20 million (BMVI, 2016).

Table 3.5. Summary of Spending Reviews in Germany

Areas of Review
<i>“2015–2016 review cycle: “Intermodal transport” and “MobiPro-EU – labour mobility for young people”</i>
<i>2016–2017 review cycle: “Climate/energy policy” and “Housing policy”</i>
<i>2017–2018 review cycle: “Procurement of standardised mass goods” and “Humanitarian aid and transitional assistance, including crisis prevention, crisis response, stabilisation and development cooperation”</i>
<i>2018–2019 review cycle: “Management of accounts receivable”</i>
<i>2019–2020 review cycle: “Further education, labour market re-entry and business start-ups”</i>
<i>2020–2021 review cycle: “Personnel budget”</i>
<i>2021–2022 review cycle: “Embedding sustainable development goals in the federal budget”</i>
<i>2022–2024 review cycle: “Improving performance budgeting in the federal budget, with a particular focus on sustainability”</i>

Source: (BMF, 2024).

Since the first implementation of the spending review system in Germany, extensive reviews have been carried out in areas such as “intermodal transport”, “labour mobility for young people”, “climate and energy policy”, “housing policy”, “procurement of standardised mass goods”, “humanitarian aid and transition support”, “accounts receivable management”, “further education”, “labour market re-entry and business start-ups”, “the personnel budget”, “the integration of sustainable development goals into the federal budget” and “the improvement of performance budgeting in the federal budget”.

The spending review for 2022-2024 focused on how performance budgeting and budget tagging could be implemented. This process built on the recommendations of the previous cycle’s review of the integration of sustainable development goals into the federal budget. The ongoing 12th spending review for the period 2024-2025 aims to evaluate the proposals made in the previous review and implement them in specific areas or pilot them in appropriate projects in order to contribute to the development of performance-oriented budgeting. Detailed concepts and requirements for long-term implementation plans should be prepared in advance and the implementation process initiated (Tryggvadóttir et al., 2024).

Greece

In Greece, spending reviews were launched in 2012 in cooperation with the Centre for Planning and Economic Research (KEPE) and the Central Budget Authority (CBA). Initial objective was to optimise public expenditure and make budget processes more efficient. In 2014, spending reviews were conducted by the CBA with the participation of selected ministries, focusing on resource reallocation and strengthening budgetary discipline. Although a new spending review was planned in 2016, its scope could not be fully defined at the time (Anastassakou et al., 2016). Over time, it has become clear that the purpose of spending reviews extends beyond achieving savings, they also aim at improving the quality of public spending and supporting goal-oriented management processes.

Initially, spending reviews were carried out in cooperation with external agencies and ministries. Overtime, however, the process has become more institutionalised over time. According to the 2020 OECD survey, Greece has adopted a strategy of strengthening spending reviews and further institutionalising the related procedures and integrating them into performance budgeting processes. This strategy aimed at using spending reviews as a tool not only to achieve savings, but also to improve the efficiency of spending and modernise budget processes. A key step in this direction was the 2016 initiative by the Ministry of Administrative Reform to introduce a target- and performance-based management system, which was later formalised by the relevant legal regulations (Law 4369, 2016). Under international financial support programmes such as the European Stability Mechanism, certain key performance indicators (KPIs) have been established.

In 2021 and 2022, spending reviews involved collaboration between the General Accounting Office (GAO) and public institutions to enhance performance and optimize resource utilization. During these reviews, sectoral and thematic interventions were implemented, with a particular emphasis on green initiatives aimed at reducing the energy footprint of the public budget (Hellenic Republic, 2022). These reviews have made it possible to improve the quality of public expenditure as well as to adopt a more strategic approach to budgeting processes.

Over time, spending reviews became a regular practice in Greece and formed the basis for the transition to performance budgeting. By 2022, spending reviews and performance-oriented budget management have become an integral part of public financial management process. These reforms have been used not only to achieve fiscal discipline and savings, but also as a transformation tool to improve the quality of public services and ensure that resources are allocated efficiently. This comprehensive role of spending reviews clearly demonstrates Greece's commitment to modernise public finances and establish a sustainable financial management system.

Hungary

In 2021, according to the OECD's Government at a Glance report, Hungary did not conduct spending reviews and did not have a plan in this regard. However, in 2023, the Hungarian government announced a comprehensive reform plan to improve the efficiency of public expenditures, as the budget deficit and public debt reached unsustainable levels.

The primary catalyst behind the reform was the exceptionally high budget deficit recorded in the first quarter of 2023. The deficit amounted to 1,728 billion forints (HUF, the national currency of Hungary), corresponding to 9.8% of the country's gross domestic product (GDP). This indicates that the government had to undertake net borrowing of this amount within the first three months of the year alone (HCSO, 2023). According to data from the Hungarian Central Statistical Office, such a level of first-quarter borrowing has never been observed before. The budgetary imbalance partly reflects the fiscal consequences of the 2022 election year and, highlights the broader challenges facing the government in terms of economic sustainability and fiscal discipline. In response, the Hungarian government launched reform initiatives aimed at improving the efficiency of public spending and achieving a more effective allocation of budgetary resources. These efforts included a comprehensive review and restructuring of public expenditures as part of broader initiatives to address the ongoing economic crisis.

For this reason, Government Decision No. 1262/2023, issued on 4 July 2023, includes a series of concrete steps for the implementation of spending reviews. As part of this initiative, a working group was established under the leadership of the Ministry of Finance to carry out detailed assessments of priority spending areas. The initial focus was placed on key sectors including health, family support, housing subsidies, education, public investments, and various tax benefits. The objective is to evaluate the efficiency, effectiveness, and social impact of expenditures, with the aim of reallocating public resources more strategically. For instance, savings of at least 3 percent are targeted in areas such as health and family support. In addition, a review covering 10 percent of budget expenditures is scheduled for 2023, and a similar review of education and state investments is planned for 2024. Moreover, targeted assessments will be conducted for specific social policy instruments, such as family support and housing subsidies, examining their impact on family formation, household financial well-being, and labor market participation. This reflects a broader shift from input-based budgeting to a more outcome-oriented approach to public expenditure management (1262/2023. (VII. 4.) Korm. Határozata a Közkiadások Hatékonyságának Felülvizsgálatáról, 2023).

The reform is structured around a two-tier institutional model. A Steering Committee, composed of high-level officials from the Ministry of Finance and relevant sectoral ministries, is responsible for providing strategic direction and coordination. At the technical level, Expert Working Groups are tasked with conducting detailed reviews and analyses within their respective policy domains. These groups include experts from ministries and subordinated institutions, along with external specialists. Moreover, Government Decision No. 1263/2023 provides for the formal involvement of key institutions such as the State Audit Office, the Hungarian Central Statistical Office, the Hungarian State Treasury, and the Central Bank of Hungary, which are invited to delegate representatives to the Expert Working Groups. Participation of independent experts, researchers, and academics is also encouraged through nominations by institutions such as the Hungarian Academy of Sciences, the Hungarian Economic Association, and the Eötvös Loránd Research Network (1263/2023. (VII. 4.) Korm. Határozat - Nemzeti Jogszabálytár, 2023).

This reform is an important milestone in Hungary's public financial management. An effective review of spending will not only contribute to ensuring fiscal discipline, but will also make it possible to direct resources toward areas that address the most pressing needs of the society.

Iceland

Following the 2008 global financial crisis, the Icelandic government, like many others, implemented certain austerity measures but failed to curb the rapid increase in public expenditures. Consequently, in 2018, the Icelandic government decided to integrate the spending review approach into its annual budget preparation processes (DPER, 2018). This approach aims to systematically analyse specific expenditures, understand the underlying factors driving these expenditure patterns, and thereby ensure a more effective use of public resources.

The spending review process in Iceland has been developed in accordance with the regulations introduced under the new public finance legislation. This legislation includes medium-term financial planning, the establishment of strategic objectives, and the reinforcement of fiscal discipline. The main objective of initiating this process was to ensure more efficient use of existing budgetary resources and to shift from continuously rising public expenditures towards a more strategic planning approach.

This process is implemented within a defined framework. Each year, the Cabinet Committee identifies the priority areas for spending reviews and establishes an executive group. This group provides guidance to the working group, offering direction on aspects such as the purpose and timeline of the projects. The working group is jointly managed by the relevant ministry and the Ministry of Finance and, when necessary, receives support from external experts.

At the end of 2018, two different areas were selected for evaluation as part of the first spending review projects. This initiative marked a significant step towards the effective

examination of public expenditures and the efficient use of resources in Iceland. In the spring of 2019, the initial findings from this process were incorporated into the financial plan covering the 2020-2024 period. By the fall of 2019, preparations for the next spending review cycle had commenced, demonstrating that the spending review process is conducted regularly and serves as an ongoing policy tool. In the spring of 2020, the financial plan for 2021-2025 was prepared, with findings from the spending review process also integrated into this plan (Government of Iceland, 2024).

Ireland

Ireland stands out as one of the leading OECD countries that conduct detailed analysis in spending reviews. These reviews assess the effectiveness, efficiency, and sustainability of current expenditures and contribute to the shaping of future budget policies as they are integrated into the budget process. The findings from spending reviews are considered in the subsequent budget preparation process, guiding policymakers on the correct allocation of resources. This approach enables Ireland to manage the budget process in a more detailed and evidence-based manner. The results of spending reviews are critical for more effective preparation of future budgets, and the process is considered an important tool for ensuring fiscal sustainability and public policy coherence.

Ireland's budget cycle is based on a comprehensive and regularized planning system that includes annual budget processes and a medium-term budget framework. This process involves coordination at both national and European levels and extends the budgeting process beyond one financial year. Spending reviews play an important role in this cycle, both in analysing the efficiency and effectiveness of existing expenditure items and in identifying the need for reforms in resource allocation.

Ireland prepares and submits a Stability Programme Update to the European Commission in April each year. This document summarizes the country's macroeconomic and fiscal projections for the upcoming three years, demonstrating alignment with the European Union's fiscal rules under the European Semester. In June, the government publishes the

Summer Economic Statement, which provides a medium-term overview of economic and fiscal conditions, offering an updated outlook for public finances. During this period, the National Economic Dialogue is also convened, bringing together various stakeholders to discuss key socio-economic priorities ahead of the formal budget preparation. These discussions are intended to guide both government's and parliament's decision-making processes. By July, the Mid-Year Expenditure Report (MYER) is released, presenting baseline expenditure ceilings prior to the finalization of the budget. In August, Spending Review Papers are published, which offer detailed evaluations of the efficiency, effectiveness, and sustainability of public spending. These analyses serve as a crucial resource to support evidence-based policymaking and the strategic allocation of fiscal resources. In October, key documents such as budget day, budget documents, tax policy changes, and expenditure forecasts are published. Simultaneously, Ireland submits its Draft Budgetary Plan to the European Commission to demonstrate compliance with fiscal guidelines under the European Semester. In November, the European Commission reviews this plan and publishes its formal assessment. Finally, in December, the Revised Estimates Volume (REV) is published, providing further detail on expenditure allocations included in the budget (Government of Ireland, 2020).

The role of spending reviews in the budget cycle is very important. The reports, published mainly in August, provide a basis for optimizing resource allocation and setting spending priorities. This process enhances the transparency of the budgetary procedures and introduces an evidence-based approach to budget processes through spending reviews. Ireland's budget cycle, in addition to aligning with European-level regulations, integrates spending reviews at the national level to achieve more effective budget management and ensure the efficient use of public resources.

Over the years, Ireland has developed a robust system by integrating spending reviews into the budget framework. In the aftermath of the 2008 global financial crisis, Ireland undertook fiscal reforms and introduced the Spending Review system to recover its deteriorating economy. The reviews, first implemented in 2009, focused mainly on spending cuts. However, as economic conditions improved in the subsequent years, the focus shifted to

the efficiency and effectiveness of spending and the reallocation of resources according to national priorities (Kennedy & Howlin, 2017).

Spending reviews in Ireland have their roots in the McCarthy Report published in 2009 (McCarthy et al., 2009). The McCarthy Report provided a detailed analysis of potential areas for savings in public spending and emphasized the importance of evidence-based evaluation processes in fiscal policy. It aimed to address the consequences of the economic crisis and to ensure more efficient use of public resources. However, these early reviews have adopted a more austerity-oriented approach.

Since 2017, Ireland has undergone a significant transformation in its approach to spending reviews. During this process, spending reviews have been institutionalized and systematized. In this new era, the scope of reviews has expanded, and the main objectives are to assess the effectiveness of public policies, improve the efficiency of spending, and ensure that resources are allocated according to national priorities. Spending reviews were strengthened with the involvement of more ministries and supported by annual reports, creating a transparent management mechanism. In this process, spending reviews have evolved beyond being merely reactive tools for addressing fiscal crises; they have assumed a central role in the evidence-based development of public policies. The institutionalization of these reviews in 2017 marked a pivotal turning point, transforming them into a comprehensive spending review mechanism. This shift underscores Ireland's commitment to ensuring long-term sustainability and transparency in public financial management (Government of Ireland, 2017; Kennedy & Howlin, 2017).

Spending reviews in Ireland focus on evidence-based policymaking and expenditure analysis to improve the delivery of public services and create value in public spending. The process is centrally managed by the Department of Public Expenditure, NDP Delivery and Reform (DPENDR), with staff from the Irish Government Economic and Evaluation Service (IGEES) making significant contributions. However, the process is also open to the participation of wider civil service staff. Ministries actively participate in the process by routinely undertaking reviews of their key policies and programmes. Spending reviews focus

on thematic areas, including policy coherence, program effectiveness, cost-efficiency, sustainability, and equity. The overarching objective is to enhance the efficiency of public spending while ensuring its sustainability and consistency with national budgetary priorities (Government of Ireland, 2023).

Guidance templates are employed throughout the review process, guiding each stage from identifying review priorities to preparing final reports. The templates elaborate the scope of the reviews, methodologies used, stakeholder engagement strategies and expected results. The selection of review areas is informed by factors such as expenditure pressures, program sustainability, and performance data analysis, ensuring that the process remains transparent and grounded in evidence (Howlin & Kennedy, 2016).

The methodologies used in spending reviews are diverse, and authors can design their analyses using the most appropriate approaches. These may include, among others, econometric analysis and cost-benefit evaluation. In addition, the quality of the analysis is further strengthened through obtaining feedback from both sub-groups and senior managers throughout the review process. Each spending review is assessed based on key criteria such as the accuracy of the data, the reliability of the techniques used in the analysis, and the scope of the analysis (A. Doyle, personal communication, 2024).

Guidelines and reports prepared by international organizations such as the OECD and IMF assess the effectiveness of the spending review process. These reports contribute to the further development of the spending review mechanism in Ireland by addressing issues such as best practices, operational issues, and lessons for the future.

Since the inception of spending reviews in 2009, Ireland has conducted six reviews. The first, 2009 Special Working Group Report was conducted at a time during a period of severe economic downturn when the unemployment rate surged from 4.7% in 2007 to 12% in 2009. Conducted by external experts, this spending review was based on consultations with the Ministries and the Ministry of Finance, which produced detailed reports on each ministry's budget. While the review process revealed significant challenges, including insufficient data

and information gaps, the report proposed savings amounting to approximately €5.3 billion. In total, 271 savings proposals were presented for all ministries, 42 of which were fully implemented, and 103 of which were partially implemented, resulting in total expenditure savings of around €1.7 billion. The Special Group Report laid the foundations of Ireland's spending review mechanism and was important in ensuring fiscal discipline (Reidy & Oyewole, 2020).

The second spending review in the country is the comprehensive spending review covering the years 2012-2014, which was conducted by the Ministry of Finance. The main objective of the Comprehensive Expenditure Report (CRE) 2012-2014 spending review was to improve the public expenditure allocation to ministries from a medium-term perspective and to assess in detail the efficiency and effectiveness of programmes and institutions to support budget allocation decisions. Introduced in 2011 during the first phase of the EU/IMF program, the review has resulted in significant changes to the spending review procedures. The CRE was integrated into the developed budget management framework, making it part of routine budget and expenditure management processes and designed to support the medium-term financial planning system. The spending reviews during this period covered all expenditure items, and the findings formed the basis for the 3-year multi-annual budget planning. 2014 CRE report introduced a new measure recommending the ministries to implement a specific expenditure savings target, i.e., a 5% cut. While the spending reviews conducted during this period provided the government with various options for potential spending savings, they did not lead to direct reductions in ministry budgets. Instead, necessary spending adjustments were made as part of routine budget processes, considering the overall fiscal situation (Kennedy & Howlin, 2017).

The 2015-2017 Comprehensive Spending Review was implemented in 2014 when the economy was recovering rapidly. It was intended to provide decision-making alternatives to reprioritize government programmes and spending and to align with overall fiscal management objectives. The comprehensive spending reviews were led by a Steering Group chaired by senior managers from the Department of Public Expenditure and Reform (DPER) rather than a special group (Government of Ireland, 2016).

The 2017–2019 Spending Review in Ireland marked a shift toward a selective annual review model, as opposed to the earlier triennial approach. Under this model, one-third of total expenditures are analysed each year, with the aim of evaluating all expenditures at the end of three years. This method increases the level of expertise and reliability of the reviews and ensures that all ministries are involved in the process. The 2017 review placed emphasis on expenditure prioritization and fiscal sustainability, while the 2018 budget was analysed in the short term. The 2018 review focused on more effective and efficient allocation of expenditures and strengthened the integration of reforms into the budget process by addressing inter-ministerial issues. The 2019 review built upon the prior years' insights, with a particular emphasis on evaluating the effectiveness and sustainability of programmes. It also contributed to evidence-based policy development through the Irish Government Economic Evaluation Service (IGEES)²⁰ (Government of Ireland, 2017, 2018, 2019). Over a 3-year period, current expenditure is targeted to be reduced by approximately €55-60 billion (Reidy & Oyewole, 2020).

The main objective of the 2020-2022 Spending Review is to create an evidence-based policy process which aims to increase the use of different data sources, while at the same time ensuring inter-ministerial cooperation. Finally, the formulation of reform programmes in line with the findings of data-based analyses and the initiation of reforms in areas of need are also among the important objectives of the process (IGEES, 2023a). In 2020, the spending review analysed the impacts of the COVID-19 pandemic on the commercial office market and the possible consequences for the government. This review highlighted the potential for telework flexibility to lead to savings in public office rents. Under the 2019 budget, an expenditure of €102.5 million was reviewed and a reduction of up to 46 percent in office rent per capita was projected. Another 2020 spending review focused on the digitization of the court notification procedures. Within the Irish Justice Service, savings of up to €1.97 billion per year were projected through this process (Tryggvadóttir & Park, 2023).

²⁰ Established in 2012, IGEES is an integrated institution that supports policy formulation and implementation through economic analysis and evaluations. Its primary objective is to provide analytical and research support to the Ministry of Finance and later to the Ministry of Public Expenditure and Reform (DPER). The activities of the IGEES are not completely independent; IGEES staff are seconded to the relevant ministries and use their expertise in policy analysis and design (OECD, 2020b).

Finally, the 2023 Spending Review in Ireland continued to advance the integration of evidence-based policymaking into the budgetary process by evaluating public expenditure across a wide range of sectors. The review provided assessments in areas such as health, transport, public services and agriculture. Ireland's Spending Review 2023, published over three different reporting periods (September 2023, December 2023 and February 2024), providing comprehensive analysis on the efficiency and sustainability of public spending (A more detailed discussion of the 2023 review is provided in Appendix 5: Special Case-Spending Review 2023). These reports assess spending trends across a range of sectors and provide policy recommendations to ensure the efficient use of public resources and support economic reforms. These periodic reports include in-depth assessments in areas such as health, transportation, agriculture, energy and public services (Government of Ireland, 2023).

The reviews aim to provide actionable recommendations for policymakers by evaluating the effectiveness, efficiency, and long-term sustainability of existing public spending. They also contribute valuable insights for enhancing public financial management, ensuring optimal resource allocation, and guiding future reform initiatives.

Israel

Spending reviews in Israel represent the government's efforts to enhance efficiency and optimize costs across various sectors. One of the earliest projects initiated under the spending reviews in 2018 focused on reducing energy consumption in public buildings. Strategies were developed to decrease energy usage and implement more sustainable solutions. Measures aimed at improving energy efficiency in public buildings included the installation of modern energy-saving systems and the utilization of renewable energy sources. As part of this project, aimed at reducing energy consumption, a budget of 20.6 million NIS²¹ was allocated. The projected outcome of these measures was an estimated annual savings of 5.2 million NIS (OECD, 2024c).

²¹ NIS: "New Israeli Shekel," the official currency of Israel, is identified by the code ILS in international foreign exchange markets. It was introduced in 1985, replacing the Israeli Shekel. Today, it is used both domestically and in international trade.

In 2019, the Central Bureau of Statistics (CBS) conducted a spending review aimed at enhancing its capacity for online surveys. This initiative facilitated a strategic shift from physical and telephone-based data collection methods to digital solutions. This change resulted in annual savings of 8 million NIS. Additional benefits included the elimination of six positions and a reduction of 9,000 hours of fieldwork. During the same period, a parallel spending review was undertaken by the Israeli Tax Authority focusing on its postal service expenditures (Israel Ministry of Finance, 2019). The review recommended a transition from traditional postal services to digital solutions, significantly lowering operational costs. Notably, the adoption of electronic documents facilitated the development of a time- and cost-efficient system.

In the aftermath of the COVID-19 pandemic, Israel initiated a workforce strategy development process for medical professions in 2020. This effort focused on creating long-term plans to determine the anticipated demand for various healthcare professions and to ensure the availability of adequately trained personnel in key areas of the health system. The strategy aimed to address structural challenges such as workforce shortages and skill mismatches. Its implementation was intended to improve the quality of healthcare services and build a more efficient, responsive, and sustainable health workforce.

Italy

Budget reforms initiated in Italy to improve the quality of public spending gained momentum with the establishment of the Public Spending Commission under the 2007 Finance Act. This process aimed to reform the State Budget and review public spending procedures from a comprehensive analysis and evaluation perspective. This approach in Italy sought to create a structure similar to the practices implemented in countries such as the United Kingdom and Australia (ISTAT, 2007).

The first spending review process in Italy was introduced on a pilot basis in 2007 within the Ministries of Justice, Interior, Infrastructure, Transport, and Education. The new

budgetary structure, developed in collaboration with the Ministry of Economy and Finance and the relevant ministries, involved a reclassification of public resources into two levels of aggregation, referred to as “Missions” and “Programs.” The primary objective of this reform was to better demonstrate the link between allocated resources and their intended policy outcomes, thereby fostering a transition toward a “public policy programming” approach. This initiative represented a departure from a “chapter-based forecasting” system focused solely on periodic expenditure projections (ISTAT, 2007).

Despite these efforts, the spending review process during this early period remained largely symbolic in nature. The budget reform subsequently established 34 Missions and implemented these through 169 Programmes (Legge 31 Dicembre 2009, n. 196, 2009). These Programmes aimed to group similar activities within each ministry to indicate the results targeted under the Missions. By defining the goods and services provided by the relevant administrations, these Programmes provided an opportunity to evaluate the effectiveness of public policies.

Amendments to the accounting and public finance law in 2016 integrated spending review (SR) activities into the budget cycle to strengthen financial planning and establish a more systematic SR process. Under the revised procedure, ministries’ budget proposals were required to align with the objectives outlined in the Economy and Finance Document (EFD) and allocated to ministries via a decree issued by the Council of Ministers. Ministries submitted their proposals, which included new spending requests and revised forecasts, for evaluation based on these objectives (Legge 31 Dicembre 2009, n. 196, 2009).

This new procedure was first operationalized in 2017 for the 2018–2019 budget cycle. However, in the following years, its application became less consistent due to political changes. Although similar mechanisms were informally maintained during the 2020–2022 budget cycle, the comprehensive institutional process established under Article 22-bis of the Law of 31 December 2009, No 196 was not fully implemented. In 2019, the achievement of the targets set for the 2018–2020 spending review period was monitored in accordance with the formal procedure. However, for the 2021–2023 budget cycle, the spending review

framework was not applied. This was primarily due to the extraordinary fiscal demands arising from the COVID-19 emergency, as well as delays in fiscal programming and the definition of macroeconomic objectives in the EFD. Importantly, the absence of a formal spending review during this period did not equate to a complete halt in efforts to improve public spending efficiency. Public administrations continued to pursue targeted structural investments in areas such as digitalisation, energy efficiency, and administrative reform. Although these initiatives were not conducted under a formal spending review framework, they were aligned with long-term fiscal sustainability goals. As a result, they are expected to generate measurable medium-term savings starting from 2023, with estimated fiscal effects of approximately one billion euros. This case highlights that, even in the absence of the formal implementation of spending reviews, strategic public investment initiatives can contribute significantly to expenditure rationalisation and fiscal consolidation (OECD, 2020a; Scinetti, 2024).

Following the pandemic, expenditure cuts were reintroduced with the 2022 DEF and related measures, targeting savings of 800 million euros for 2023, 1.2 billion euros for 2024, and 1.5 billion euros starting in 2025. These targets were mainly limited to reductions imposed on central administrations and local governments. For instance, the 2024 budget included additional cuts for local governments (200 million euros annually for municipalities and 50 million euros annually for metropolitan cities and provinces) (Scinetti, 2024).

Finally, the reforms concerning spending reviews under Italy's National Recovery and Resilience Plan (PNRR²²) were predominantly procedural, with limited practical implementation and impact. However, some measures were implemented during this process. For instance, a scientific committee was established within the Ministry of Economy and Finance, and specific spending review targets were defined (Italian Government, 2021). Additionally, measures such as the classification of expenditures supporting sustainable

²² PNRR is the acronym for Italy's "Piano Nazionale di Ripresa e Resilienza" (National Recovery and Resilience Plan). This plan was developed within the framework of the European Union's Next Generation EU (NGEU) funds, which were established to address the economic and social impacts of the COVID-19 pandemic. Financed through the NGEU, the PNRR includes strategic investments and reforms in areas such as digitalization, green transition, infrastructure modernization, education and research, social inclusion, and healthcare. The plan aims to enhance the resilience of Italy's economic structure, reduce inequalities, and achieve environmental sustainability goals (Italian Government, 2021). Designed in alignment with the European Commission, the PNRR serves as a roadmap to accelerate Italy's economic recovery and to strengthen its long-term structural transformation, thereby improving the country's competitiveness.

development and gender equality goals were incorporated into the budget laws. Despite these efforts, the overall impact was limited, and debates regarding the effectiveness of the spending review process persist.

Japan

There is no centralized or uniform mechanism for comprehensive spending reviews in the Japanese budgetary process. However, since 2001, various evaluation mechanisms have been introduced to enhance the efficiency and effectiveness of public expenditures and to ensure fiscal discipline. These efforts began as part of the Central Government Reform, which involved the restructuring of ministries and the establishment of new administrative bodies (Matsuura et al., 2010; OECD, 2020a).

The primary reason for adopting this system in Japan was the prolonged economic stagnation and increasing budget deficits experienced during the 1980s. These challenges necessitated measures to address fiscal issues and control the rapid rise in public debt.

The Government Policy Evaluation Act, enacted in 2002, provided the legal framework for these reforms. This act established key guidelines for ministries and public institutions to conduct policy evaluations, ensured the incorporation of evaluation results into policy planning and development processes, and mandated the disclosure of information to the public. The Ministry of Internal Affairs and Communications (MIC) played a central role in implementing these processes (Government Policy Evaluations Act, 2022). The MIC developed an evaluation system encompassing inputs, outputs, outcomes, and targets for all ministries. It also conducted strategic evaluations of specific programmes, with results being made available to the parliament and the public.

The Ministry of Finance (MoF) introduced the Budget Execution Review in 2002 to strengthen the link between budgetary processes and evaluation results. This initiative assessed activities based on criteria such as effectiveness, efficiency, and necessity, providing recommendations for improvement. Additionally, the Government Revitalization Unit (GRU)

was established in 2009 to reassess public expenditures from a citizen-centric perspective. The GRU focused on detailed evaluations of public activities, proposing the reduction of unnecessary spending or the restructuring of programmes.

Japan's administrative project review process and budgeting mechanism represent a holistic structure aimed at ensuring the efficient and effective use of public resources. Approximately 5,000 programmes are comprehensively reviewed annually, a process carried out by relevant ministries in alignment with central budget targets. While this broad review is being carried out, specific programmes requiring more detailed scrutiny are selected by the Headquarters for the Promotion of Administrative Reform under the Cabinet Secretariat. These in-depth reviews are conducted by government officials and external experts and are characterized by transparent public meetings. This approach seeks to enhance the efficiency of administrative projects, reallocate resources effectively, and improve the management of public expenditures (Lindquist & Shepherd, 2023).

The budgeting process in Japan, although lacking a comprehensive spending review framework, is guided by current economic and fiscal reform priorities. These priorities are shaped by policy documents prepared by various councils and advisory bodies. Such documents provide guidance for both budget preparation and decision-making processes. By integrating evaluation and review mechanisms, the budgeting system promotes the efficient and effective use of public resources. As a result, Japan has enhanced its budgeting processes and achieved more transparent and accountable public expenditure management.

Latvia

In Latvia, an amendment to the Budget and Financial Management Law in 2015 introduced the legal basis for the spending review process by including a provision on the examination of state budget expenditures. In 2016, spending reviews were formally integrated into the budget system as a component of financial management. Furthermore, in 2018, a separate Budget Development Unit was established within the Budget Department, specifically dedicated to conducting spending reviews (Republic of Latvia, 2022b).

Since then, spending reviews have been conducted on an annual basis and have evolved into a structured and comprehensive assessment mechanism. The process is coordinated within a framework approved by the Cabinet of Ministers and is supported by a permanent interinstitutional working group comprising experts from the Ministry of Finance and relevant line ministries. The reviews aim to ensure that expenditures are aligned with strategic priorities and that public resources are utilized efficiently and effectively (Ketners, 2020).

In 2016, spending reviews in Latvia focused on flexibility tools and financial planning. Legislations on temporary measures were analysed, and expenditure updates were made based on GDP forecasts. The medium-term relationship between market prices, such as heating and fuel, and budget expenditures was examined, revealing irrational spending fluctuations. Challenges in reallocating resources during the years 2013-2015 were highlighted, and performance-based policy changes, particularly in priority areas such as health and education, were recommended (Republic of Latvia, 2020a).

In 2017, Latvia undertook significant steps to optimise budget policy and restructure funding allocation procedures. An evaluation of long-term unfilled positions and support functions was conducted, and relevant measures were taken to improve efficiency. Additionally, zero-based budgeting pilot projects were initiated for the Ministries of Health and Culture, and horizontal adjustments were introduced to enhance the efficient use of internal resources (Republic of Latvia, 2020b).

In 2018, the efficiency of public administration was improved through legislative reforms and the expanded use of automated data processing systems. The focus was placed on the effective utilization of immovable assets owned by ministries, leading to a reduction in administrative costs. Additionally, the optimization of information and communication technologies (ICT) was achieved. As a result of spending reviews, financial efficiency gains of €51.3 million were realized (Republic of Latvia, 2020c).

In 2019, spending review activities centred on the health and education sectors. The efficiency of inpatient care financing, higher education, student loans, and general education systems were thoroughly analysed. Centralized procurement practices, such as telecommunications, printing services, and pharmaceutical supplies, were improved. Administrative burdens were reduced, and zero-based budgeting practices were introduced for specific programmes. Enhanced budget management processes were supported by automated data processing systems and visualization tools. In the 2019 Spending Review, a total of €93.7 million in savings was achieved. A review of the funds allocated for priority measures resulted in savings of €83.6 million. An analysis conducted within the Ministry of Education and Science, covering areas such as higher education, distance education, and school meal programmes, generated savings of €5.2 million. Horizontal reviews of the state budget program, focusing on telecommunications, printing services, pharmaceutical procurement, and internal resources from long-term vacant positions, led to savings of €4.7 million. Additionally, performance improvements in sector museums and small institutions resulted in savings of €0.2 million (Republic of Latvia, 2020d).

In 2020, Latvia undertook a comprehensive analysis of functions financed by the state budget, alongside an evaluation of medium-term spending review. Key outcomes included centralization of support functions, strengthening of information and communication technologies, and aligning expenditures with resources. The aim was to establish a more efficient financial management system. A total of €53.6 million in re-allocable resources was identified. The functions analysis of state financed activities revealed €0.04 million, while a review of the funds allocated for priority measures resulted in €39.0 million. Additionally, expenditure reviews within the Ministry of Health and the Ministry of Education and Science identified €10.7 million and €1.5 million in potential savings, respectively (Republic of Latvia, 2021a).

As part of the 2021 Spending Review, ministry budgets and state budget programmes were analysed to prioritize resource allocation, while process and system improvements aimed to enhance automation in budget management. The 2021 Spending Review achieved total savings of €172.8 million, of which; €103.9 million came from the review of base

expenditures by ministries, €35.3 million from the analysis of development expenditures, €15.2 million from the financing analysis of sector policies, €14.2 million from the analysis of budget underspending, and €4.2 million from updating the price lists for paid services (Republic of Latvia, 2021b).

In the 2022 Spending Review, annual reviews focused on improving the financial policies of ministries, resource allocation priorities, and financial management processes. Medium-term reviews targeted the reduction of real estate costs, enhanced financial management for local governments, and the strengthening of data analysis processes. The 2022 Spending Review achieved total savings of €168.4 million, of which; €154.9 million was from the review of base expenditures by ministries, €9.7 million from surplus own revenues, €2.0 million from the review of priority measure funding, and €1.8 million from real estate optimization (Republic of Latvia, 2022a).

In the 2023 Spending Review, health and higher education expenditures, as well as the performance of research programmes, were analysed. The management of information and communication technologies (ICT) was reviewed, horizontal budget program assessments were conducted, and medium-term analyses of real estate maintenance costs were carried out. The 2023 Spending Review achieved total savings of €112.0 million, with €101.5 million from the review of base expenditures by ministries, €10.3 million from the review of funds allocated to priority measures, and €0.2 million from the horizontal review of individual functions (Republic of Latvia, 2023).

Finally, the 2024 Spending Review focused on implementing performance-based state budget programmes to strengthen the alignment of budget expenditures with policy objectives. Ministries conducted horizontal budget reviews to analyse the financing of priority measures and the application of performance indicators, and prepared recommendations for the 2025 budget and medium-term budgeting. The 2024 Spending Review achieved total savings of €138.1 million, with €116.0 million from the independent review of ministry expenditures²³

²³ The results were approved by the Cabinet of Ministers on August 20, 2024.

and €18.7 million from the review of funds allocated to priority measures by the Ministry of Finance (Republic of Latvia, 2024).

Lithuania

To date, systematic reviews of public expenditure have not been conducted in Lithuania; instead, only pilot projects have been implemented. For instance, in 2019, spending reviews were undertaken in three areas: the costs of equipment (medications, solutions, bandages, and medical supplies) for personal healthcare institutions, the operating costs of social care institutions, and the operational costs of general education schools. In 2020, two additional areas were reviewed: the expenditures related to specific active labor market policy measures and the operational costs of vocational training institutions (OECD, 2020a).

Nevertheless, the adoption of the Strategic Management Methodology by the Government on April 28, 2021, marked a significant step toward establishing a comprehensive legal framework and implementation guidelines for the public spending review process (*Dėl Strateginio Valdymo Metodikos Patvirtinimo*, 2021). Subsequently, a directive issued by the Minister of Finance on June 28, 2021, designated the Central Project Management Agency (CPMA) as the entity responsible for conducting public spending reviews under the direction of the Ministry of Finance. This methodology aims to define spending reviews and integrate them into the budgeting cycle.

In February 2023, Lithuania initiated a project titled “Systematic Review of Public Expenditure and Improvement of Resource Needs Calculation for Continuous Activities,” which is planned to run until August 2024 (European Union, 2024a). The project seeks to enhance the public expenditure planning by evaluating the efficiency of state budget allocations earmarked for financing continuous activities. The findings from these reviews have been utilized to inform both short-term planning and the implementation of long-term systematic solutions.

Luxembourg

Luxembourg presents a noteworthy example of effective public and private sector management through its spending review practices. In December 2013, a newly elected government prioritised public finance reforms, largely in response to the European Union's VAT regulations. Luxembourg faced a projected revenue loss of €1 billion (1.7% of GDP) by 2018, due to new VAT arrangements in the e-commerce sector (Bausch, 2016). This fiscal outlook underscored the urgency of prioritizing public expenditures and enhancing the scrutiny of spending practices.

The spending review launched by Luxembourg in 2014 followed a structured four-phase plan. The design phase took place in February and March, followed by the preparation phase from March to June. The decision-making and consultation phase occurred from June to September, and the implementation phase began in September. This process was managed by the Minister of Finance, with support from the Ministry of Finance and the General Finance Inspectorate (Inspection Générale des Finances). During this process, 20 working groups were established, each proposing cost-saving initiatives under the responsibility of their respective ministers (IMF, 2014b).

In October 2014, the government evaluated 258 proposed measures and implemented those selected. These included an increase in VAT rates and the introduction of a temporary budget-balancing tax. These measures reportedly resulted in savings exceeding €1 billion during the 2015–2018 period (Schneider et al., 2015).

Throughout Luxembourg's spending review process, the principle of “nothing excluded” was adopted, ensuring that all expenditure areas were thoroughly examined. Furthermore, the “no veto”²⁴ principle was implemented, allowing no proposal or measure to be dismissed unilaterally. The process also benefited from the involvement of external

²⁴ The “no veto” principle means that no proposal or measure in the spending review process can be dismissed unilaterally. This principle ensures that all proposals are thoroughly evaluated and discussed transparently. Throughout the process, a strict confidentiality policy was adhered to. These principles ensured the transparent and impartial execution of the review process (Bausch, 2016).

consultants and secretariat support (SGI, 2015). A strict confidentiality policy was maintained throughout, ensuring transparency and impartiality in the review.

Progress reports presented to Parliament in 2016 revealed that the spending review had led to lower-than-anticipated expenditures across all budgets. This process successfully eliminated financial waste through a technical approach, reallocated public funds, and preserved cost-saving ideas for future review and implementation.

In conclusion, Luxembourg's spending review experience represents a noteworthy example for other countries in public financial management. This process not only offered an effective model for managing public finances but also ensured more efficient use of resources and the long-term sustainability of public finances. However, since 2016, Luxembourg has not conducted spending reviews on a regular basis (OECD, 2017b).

Mexico

In 2006, with the enactment of the Federal Budget and Fiscal Responsibility Act, the Performance Evaluation System (“Sistema de Evaluación del Desempeño – SED”) became the cornerstone of the federal government's efforts to enhance the efficiency and effectiveness of public expenditures in Mexico. This system, together with Results-Based Budgeting (“Presupuesto basado en Resultados – PbR”), shifted the focus from analysing inputs and processes to measuring the outcomes achieved by public programmes. PbR-SED aimed to reduce budgetary inertia by linking budgetary expenditures to objectives aligned with the National Development Plan (“Plan Nacional de Desarrollo – PND”) and sectoral strategies (Ibarra Pardo, 2021) .

These reforms were supported by guidelines and tools that facilitated the integration of performance indicators into the budgeting process. Performance information has played a significant role in informing budget programming, thereby enabling policymakers to adopt more evidence-based decision-making practices. In 2008, Article 134 of the Mexican Constitution was amended, making it mandatory for technical entities at the federal, state, and

local levels to evaluate economic resources. Furthermore, the 2012 reforms extended the principles of PbR-SED to subnational levels to assist local governments in developing results-oriented management strategies (OECD, 2016).

The spending review process in Mexico has manifested through various implementations over the years. For instance, the National Program for the Reduction of Public Expenditures (Programa Nacional de Reducción del Gasto Público), implemented between 2010 and 2012, aimed to achieve savings targets in public administration. A restructuring of expenditures took place in 2015, followed by a Public Spending Review conducted by the World Bank in 2016. These efforts were designed to enhance the alignment of budgetary programmes with government objectives and increase efficiency (World Bank, 2016b).

The 2016 spending review examined the operational activities, performance indicators, and goal attainment of budgetary programmes, resulting in the merger or discontinuation of some programmes in order to enhance the efficiency and effectiveness of the public budget (OECD, 2016, 2020a). This process marked a significant step towards aligning budgetary programmes with national objectives and improving the effectiveness of public spending.

Each fiscal year, the Undersecretariat of Expenditures focuses its spending review process on programmable expenditures, which accounts for about 18% of the federal budget. This process begins each year in May with an examination of the federal government's program structure. In 2016, a major restructuring of the program structure occurred with the transition from Results-Based Budgeting to Zero-Based Budgeting. In 2020, a second spending review was conducted in response to the COVID-19 pandemic, necessitating the reallocation of resources and the development of new public policy instruments to strengthen the health sector and mitigate the economic crisis (OECD, 2020a).

The Undersecretariat of Expenditures, under the Ministry of Finance, plays a central role in the spending review process. It comprises various sub-units, including the Budget Policy and Control Unit, the General Directorate of Programming and Budgeting, the

Investment Unit, the General Directorate of the Expenditure Law, the General Directorate of Government Accounting, and the Performance Evaluation Unit. This structure, coordinated under the leadership of the Undersecretary, involves 884 public officials (OECD, 2020a).

The spending review process is conducted by the Undersecretariat of Expenditures, with contributions to the SR Report (*Exposición de Motivos*) from the Economic Planning Unit, line ministries, and public administration institutions. However, the frequent changes in the indicators used in this process hinder effective medium- and long-term monitoring of outcomes (OECD, 2020a).

The COVID-19 pandemic profoundly influenced both the allocation of public resources and the development of new policy instruments, including social and fiscal budgetary initiatives. These measures were crucial for strengthening the health sector and addressing the economic crisis. Despite being conducted with a structured approach, the spending review process faces challenges due to insufficient monitoring indicators, which remain a critical limitation to its effectiveness (OECD, 2020a).

Netherlands

The Netherlands is one of the countries with the longest experience in the use of spending reviews among EU and OECD member states (Schoch & Broeder, 2013). Spending reviews in the Netherlands can be traced back to the “Planning, Programming, and Budgeting System (PPBS)”, which was introduced in the 1970s. The PPBS adopted a top-down approach to budgeting, emphasizing the evaluation of budget programmes and performance information from a hierarchical perspective (De Jong et al., 2013).

In the Netherlands in the late 1970s and early 1980s, problems such as high budget deficits of up to 8 percent of GDP and inadequate budgetary discipline necessitated the adoption of severe austerity measures. These developments highlighted the limitations of traditional budget management methods and underscored the need for an alternative and more structured approach to expenditure control. In response, a new institutionalised procedure for

systematically reviewing public expenditures was introduced. This process was designed to move beyond the conventional incremental approach of applying uniform percentage cuts across all spending areas. The traditional method was increasingly seen as ineffective, as it failed to reflect government priorities and often preserved outdated or ineffective policies. In addition, it allowed public institutions to pass budget cuts down to subordinate units or local authorities in a proportional and mechanical manner, without addressing underlying inefficiencies (Kraan, 2010).

The first spending review introduced in 1980 was developed on the basis of the experience of failed spending cuts in internal audits in the 1970s. In the first Spending Review experience, spending ministries conducted their own internal evaluations, but the desired results were not achieved. As a result of the failure of the ministerial process to cut strategically unrealistic expenditures, an alternative method of assessment was proposed and named as “reconsideration of public expenditure (heroverweging)”. Within the established institutional framework, the Minister of Finance would put forward possible topics for review, which would then be selected by the Council of Ministers. The primary objective of each review was to generate alternative policy options that could yield to measurable savings, ideally through increased efficiency. Each review was expected to include at least one scenario proposing a reduction in spending of at least 20% relative to the projected multi-year baseline (Van Nispen, 2015; Van Nispen & Klaassen, 2010).

In 1980, the Chancellor of the Exchequer sent Parliament a list of 30 policy areas for scrutiny of expenditure, resulting in 31 reports in 1981, and shortly afterwards a new monitoring group was set up in 1981 to carry out a further 18 reviews. Each review was required to achieve savings of at least 20 percent of budgeted expenditure over four years. The spending review methodology was institutionalised through high political interest and the budgeting community’s focus on multi-year budgeting. Each review was supervised by a secretariat composed of budget inspectors from the Budget Directorate of the Ministry of Finance. As a result of the audits, it was observed that the new spending reviews reduced expenditure and improved efficiency in spending (PEMPAL, 2022). As the economic outlook improved in the late 1980s and early 1990s, the task of developing a 20 percent savings option

was cancelled in 1992 and the spending review research reports were renamed (Interdepartementaal Beleids Onderzoek or IBO). This was seen as an attempt to increase efficiency and effectiveness in spending rather than spending cuts. Thus, by the 2000s, the number of spending review topics had been reduced and the number of IBO reports had been reduced to around five (Kraan, 2010).

Spending reviews in the Netherlands evolved into the Interdepartmental Policy Reviews (IBOs), which were officially institutionalized in the mid-1990s (Debets, 2007). The public policy evaluation system in the Netherlands includes ex-ante and ex-post evaluation processes, along with a separate reforms and savings component. This component includes spending reviews and expert analyses of selected expenditures (Postuła, 2014).

The spending review process in the Netherlands is conducted on the basis of the terms of reference and procedures defined by the Ministry of Finance (MoF) and approved by the Cabinet. The Minister of Finance is responsible for leading the spending review efforts, which are overseen by a high-level civil committee comprising members from all major departments. This committee ensures that spending reviews adhere to the terms of reference and procedures established by the Minister of Finance and the Cabinet (Kabel, 2015). All analytical work in the Netherlands is typically conducted by politically neutral task forces led by an independent leader, often a senior department head from another policy area. The expertise of the task force leader is crucial for developing high-quality review options. Task force members include officials from spending ministries and the MoF, as well as external experts. The team integrates strong policy skills with in-depth portfolio knowledge, combining expertise from financial and economic affairs divisions that are familiar with the review process (De Jong et al., 2013; Shaw, 2015). A distinctive and critical feature of task force management is the non-veto principle. Recommendations made by any member of the task force cannot be blocked by others, including the leader (De Witte & De Jager, 2020). All recommendations are published in detailed reports, which are made available to both Parliament and the public. These reports summarize the savings generated, the outcomes achieved, and implementation issues. Given that spending reviews often dwell with politically sensitive issues, the system promotes the development of a wide range of policy options. This approach helps to mitigate potential

conflict within the review process and ensures that different stakeholder perspectives are reflected. By promoting transparency and participation, this system enhances public trust and democratic legitimacy in decision-making (Van Nispen, 2015).

Governments in the Netherlands are usually multi-party coalitions and negotiations on the national budget are conducted through a “coalition agreement” at the beginning of the four-year term of government. This agreement contains detailed information on programmes and spending areas. The annual budget process is conducted within the parameters set in the Coalition Agreement and addresses implementation issues, overspending, underspending and contingencies each year. It is rare for new policies to be implemented that were not agreed at the beginning of the cabinet term. The Coalition Agreement has three main components: the budget deficit target from which the medium-term budget framework is derived and fiscal principles are established; budget discipline rules which are established to deal with contingencies; and information on policy programmes that helps to prioritise spending by providing information on the relevance, effectiveness, efficiency and cost of government programmes (Schoch & Broeder, 2013). A well-established process is in place for reaching agreements on the medium-term budget framework and rules for budget discipline. Since 1971, the Advisory Group on Fiscal Policy has prepared annual advisory reports on fiscal principles and objectives. These reports are based on the economic and public finance forecasts of the independent Netherlands Bureau for Economic Policy Analysis (CPB). Although a new government is free to adopt or ignore these recommendations, they have generally been highly influential. Budget discipline rules are adopted at the first Cabinet meeting of the new government. The prioritization of expenditures is the most challenging component to organize. To this end, information is provided on the appropriateness, effectiveness, efficiency, and cost of government programmes. The evaluation system can utilize performance indicators; but evaluations are fundamental, particularly for assessing the effectiveness and efficiency of current and future policies. In conclusion, the Dutch budget process is shaped by the collaboration of coalition governments and the established rules. While a well-established process is followed for agreeing on budget deficit targets and budget discipline rules, prioritizing expenditures and evaluating policy programmes require a more

complex and detailed approach. These processes aim to enhance the effectiveness and efficiency of fiscal policy (Schoch & Broeder, 2013).

In 2007, problems in the subprime mortgage market in the United States resulted in rising interest rates and many homeowners found themselves in financial difficulties and were unable to make their mortgage payments. Many US and European banks that had invested in US mortgages were quickly affected by this situation, and with the collapse of Lehman Brothers in 2008, the write-down of subprime mortgages became inevitable. In response, the Dutch government began consultations to mitigate the potential impact of the crisis. Although the Dutch Budget Statement of 2009 projected a budget surplus of 1.2% and a debt ratio of 40%, the unfolding crisis caused the budget deficit to exceed 5% despite the implementation of austerity measures. The sharp fiscal deterioration underlined the need for comprehensive planning to address the growing deficit and prompted the launch of a new round of spending reviews (Ministerie van Financiën, 2024).

Following the global financial crisis, the Dutch government launched a comprehensive spending review initiative in 2009 to identify viable fiscal consolidation strategies. In contrast to previous selective approaches, this round reinstated the requirement to develop options with savings at least 20%. In total, 20 spending reviews were conducted, covering almost 80% of central government expenditures. The resulting reports, published in 2010, outlined potential budget reductions amounting to €40.7 billion- well above the initial target of €35 billion (Van Nispen, 2015).

By 2019, the parliament has again resorted to comprehensive spending reviews in order to continue the success of the efforts to create fiscal space a decade ago. This was seen as preparation for a possible future recession or economic crisis and policy options were determined accordingly. This comprehensive review aimed to increase the economic resilience of the Netherlands by identifying savings options and additional spending options in expenditure areas (Ministerie van Financiën, 2019). The spending review processes carried out during this period have reinforced the Netherlands' success in maintaining the long-term sustainability of its fiscal policies and enhancing budgetary flexibility. These processes have

served as an effective tool for reducing budget deficits while at the same time contributing to increased economic resilience.

As the comprehensive spending review reports for the 2020/21 period coincided with the onset of the Covid-19 pandemic, policy discussions during this period largely focused on emergency measures to address the health crisis. During this period, an approach based on increased public spending was adopted rather than austerity-oriented policies. The Dutch government introduced two major emergency packages and took extraordinary economic measures to support employment and the economy in March 2020 and May 2020. These support and spending policies during the pandemic played a crucial role in preventing economic stagnation and protecting public health. In late 2020 and throughout 2021, the government continued to implement, update and expand these packages. In 2022 and beyond, recovery strategies and sustainable development goals were prioritised and fiscal discipline was restored (Rijksoverheid, 2021).

The Netherlands has implemented about 5 main support packages²⁵ throughout the pandemic and these packages have been updated with different versions. The total cost of these interventions reached billions of euros. However, it was not possible to reduce expenditures during this period, and health-related spending is projected to increase further in the coming years. From 9.1 percent of GDP in 2018, collective health spending is expected to rise to 9.8 percent in 2021 and 10.4 percent in 2025. This shows the long-term impact of increased health expenditures on the economic balance during the pandemic (Rijksoverheid, 2020g). The decisions taken during this period reflect the efforts to maintain health and

²⁵ For instance, the NOW (Noodmaatregel Overbrugging Werkgelegenheid) program, or Temporary Emergency Measure for Work Retention, was a significant support initiative introduced by the Dutch government during the COVID-19 pandemic. The primary aim of the program was to prevent businesses experiencing substantial revenue losses due to the pandemic from laying off employees and to protect employment. Under this program, businesses with at least a 20% decline in revenue were eligible to receive government support covering up to 90% of their wage costs. The level of support was determined based on the extent of the revenue loss. The NOW program was implemented in three phases: NOW 1.0, NOW 2.0, and NOW 3.0. Each phase was adapted to the prevailing economic conditions and the needs of businesses, ensuring a gradual and responsive continuation of support. The total cost of these three phases exceeded €20 billion, playing a critical role in stabilizing the labor market. In addition to the NOW program, other support measures such as TOZO (Temporary Bridging Scheme for Self-Employed Entrepreneurs), TVL (Reimbursement of Fixed Costs), and TONK (Temporary Support for Necessary Expenses) were also implemented. The combined cost of these support packages amounted to over €50 billion by the end of 2021. This underscores the significant efforts of the Dutch government in addressing the economic impacts of the pandemic and supporting its citizens (Ministerie van Financiën, 2020).

economic stability, while demonstrating the need to restore fiscal discipline in line with sustainable development goals.

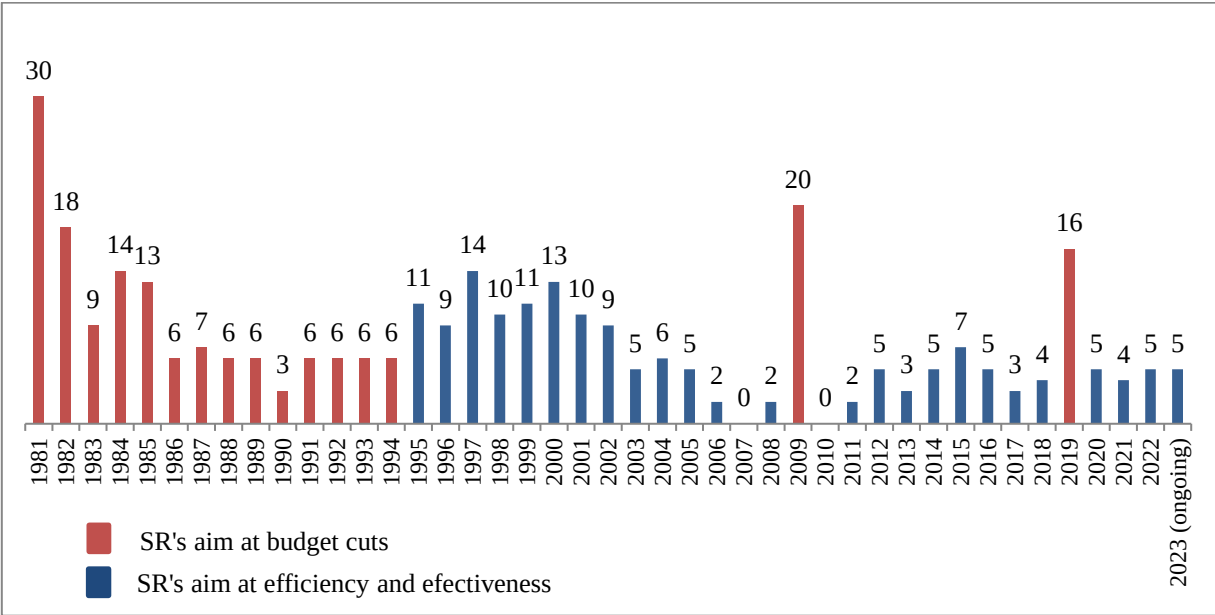


Figure 3.5. Numbers of Spending Review in the Netherlands (According to the Year of Commencement)

Source: (PEMPAL, 2022; Schols, 2016; Schoch & Broeder, 2013).

Figure 3.5 shows the spending review processes carried out in the Netherlands since 1981, along with the objectives of these reviews. The Dutch spending reviews are divided into two main categories: reviews aimed at budget cuts (red columns) and reviews aimed at improving efficiency and effectiveness (blue columns).

Between 1981 and 1994, spending reviews primarily focused on achieving budget savings and reducing the delivery of public service. During this period, a large number of spending reviews were conducted each year. In 1981, for example, a comprehensive spending review was carried out covering 30 major spending areas. From 1995 onwards, the focus of spending reviews shifted to improving efficiency and effectiveness. In these years, there were fewer reviews, but they adopted more detailed and analytical approach. In 2009, following the global financial crisis of 2008, a comprehensive spending review was conducted, covering 20 major spending areas and accounting for 80% of total government expenditures. The

comprehensive review conducted in 2019 covered 16 major spending areas and was designed to align with current economic conditions. With the exception of special cases in 2007 and 2010, typically between 2 and 18 public spending groups were reviewed each year. In 2023, the review of 5 major spending areas is ongoing (Brussels Instituut voor Statistiek en Analyse (BISA), 2023; Nispen, 2014; Postuła, 2014). The figure indicates that the Netherlands has produced a total of 332 reports over a period of 42 years, all of which have been published on online platforms. This process demonstrates the country's disciplined and efficient approach to public financial management.

The fact that the Netherlands was one of the first countries to apply this method has enabled the reviews to be handled comprehensively and innovative solutions to be developed in various policy areas. Within this long-standing tradition, the 2019/20 Comprehensive Spending Review stands out as a valuable case for understanding how the country responds to evolving economic conditions and global challenges. Moreover, the Netherlands' disciplined and analytical approach to public financial management provides a model framework for other countries. A detailed examination of the 2019/20 spending review- including its key methodological features and implications for fiscal management- is provided in Appendix 7, where the country's historical leadership in this area is also discussed in context.

New Zealand

New Zealand spending reviews, also known as “baseline reviews”, are an in-depth review of ministries' financial performance. Since 2018, they have been conducted as part of the annual budget cycle. They are conducted jointly by the Department of Treasury and line ministries and aim to review 90 percent of total government expenditure over a four-year cycle (PEMPAL, 2021). This review process aims to more effectively identify areas where government spending can make the greatest contribution and to analyse in detail how institutions use their core resources.

Spending reviews are selective (targeted), focusing on specific areas or sectors. They last about six months and may be longer or shorter depending on the objectives set (PEMPAL, 2021).

The 2018 spending review assessed the New Zealand Ministry of Social Development's (MSD) \$1.4 billion expenditure budget. The review covered departmental and non-departmental operational and capital expenditure. An addendum to the terms of reference was published in the same year, discussing changes to the Ministry's spending model and areas for reprioritisation. An interim report was published in the same year, presenting data on the Ministry's administrative burdens and increasing demands. Directions for future strategic investments and programme management were assessed. The final report was published in 2019 (The Treasury New Zealand, 2019).

In 2020, the focus was on the review of New Zealand's defence budget (The Treasury New Zealand, 2019). This review was undertaken to understand the financial pressures and strategic needs of the Ministry of Defence and the New Zealand Defence Force, with an emphasis on sustainability of existing resources, infrastructure gaps and changes to the operating models. It pointed to mismatches between defence policy and fiscal sustainability, and suggested different funding options.

Norway

In Norway, spending reviews, also known as “program area reviews” (områdejennomganger), are an evaluation tool used to manage public expenditures more effectively and efficiently. OECD's implementation reports in this field have served as a significant reference for Norway's adoption of this approach. In 2013, the OECD recommended that Norway implement spending reviews, which led to the initiation of various related efforts in the country (Sætren, 2009).

In Norway, the level of public expenditure remains considerably high, largely due to the extensive welfare system and strong commitments to regional development. However,

institutional issues that undermine cost-effectiveness and a fiscal system reliant on substantial oil revenues create a long-term unsustainable outlook. Considering the depletion of oil resources and the fiscal implications of an aging population, spending reviews have become one of the primary policy tools for Norway to contain public spending and improve efficiency (OECD, 2024b).

Spending reviews (Områdejennomgang av Norges forskningsråd) have been integrated into the budgetary process in Norway since 2016. These reviews provide an opportunity for conducting long-term and comprehensive analyses aimed at evaluating the current use of resources, proposing measures to improve resource utilization, and better targeting these measures. Spending reviews are not limited to cost-cutting; they also reflect an effort to modernize public administration and align it with broader societal modernization goals (Technopolis, 2019; DFØ, 2020).

The spending review process typically consists of four main phases: preparation, decision-making, implementation, and finalization. The selection of topics is based on recommendations from both the Ministry of Finance and the relevant ministries, with final decisions taken at the political level. The reporting and implementation of the results of the review are carried out through government budget conferences. The aim of these reviews is not only to make savings but also to improve the quality of public services. For instance, in order to reduce rental costs in government offices, a standardized allocation of office space per employee was introduced. This measure limited the office space used by each employee to a certain square metre, thereby preventing excessive use of space and reducing unnecessary rental costs (DFØ, 2020).

The reviews have been conducted using different methods and involving various stakeholders in specific years. In 2016, a review targeting the Norwegian Research Council was carried out by an expert group, with the Ministry of Education and Research (KD) involved in the process. In the same year, a review on environmental management was conducted by a group encompassing multiple ministries, with an external project leader

appointed. The Ministry of Climate and Environment (KLD) was responsible for this review (KRD, 2017).

In 2017, a specialized group conducted an evaluation of targeted grants provided to municipalities, involving both the Ministry of Local Government and Modernisation (KMD) and other relevant ministries. In the same year, a review of roads was carried out by an external practitioner, with the Ministry of Transport (SD) participating in the process. Another study on climate policy support programmes was conducted by an external practitioner and involved several ministries, including the Ministry of Climate and Environment (KLD), the Ministry of Petroleum and Energy (OED), the Ministry of Agriculture and Food (LMD), and the Ministry of Trade, Industry and Fisheries (NFD) (DFØ, 2020).

In 2018, a review of overseas trade incentives was conducted by an external practitioner, involving the Ministry of Trade, Industry and Fisheries (NFD) and the Ministry of Foreign Affairs (UD). That same year, an examination of building and real estate policies in the civil sector was undertaken, also by an external practitioner, and included the participation of KMD and other related ministries (DFØ, 2020).

In 2019, a study addressing business incentives was carried out by an external practitioner and involved the Ministry of Trade, Industry and Fisheries (NFD), the Ministry of Education and Research (KD), the Ministry of Agriculture and Food (LMD), the Ministry of Petroleum and Energy (OED), and the Ministry of Local Government and Modernisation (KMD). In addition, a review of identity management was conducted, involving the Ministry of Justice (JD), the Ministry of Finance (FIN), KMD, and SD, with an external practitioner leading the process. These reviews reflect Norway's efforts to manage public expenditures more efficiently and effectively (DFØ, 2020).

In 2020, a review focused on housing and healthcare services for the elderly aimed to develop recommendations to ensure these services remain sustainable and accessible. In 2022, a study leveraging lessons from the pandemic focused on innovation and enhancing problem-

solving capacities, alongside a review of employment policies aimed at improving labor market practices (DFØ, 2023).

In 2023, a comprehensive review was conducted to improve coordination relationship between municipalities and public administrations. Moreover, a focused review of the police force's budget and financial management was carried out in 2024 (DFØ, 2023). All these reviews have provided critical insights to improve the performance of spending programmes and ensure optimal use of public resources, guiding future expenditure decisions. Norway's spending review processes have systematically progressed, with each review contributing significantly to the improvement of public policies.

However, while spending reviews are well integrated into the budget process in Norway, their limited scope has hindered the achievement of significant efficiency gains and their effectiveness in constraining overall expenditures. Additionally, retrospective evaluations have been initiated since 2023 to assess whether the outcomes of spending reviews have been effectively implemented. This highlights the need for comprehensive spending reviews to play a more prominent role in the decision-making processes.

Poland

Conceptual work on spending reviews in Poland began in 2010 (Paczyński, 2015). During this period, ideas and studies were developed to design spending reviews as a tool aimed at ensuring the efficient and effective use of public resources. The importance of such tools for prioritizing expenditures and ensuring the sustainability of public finances was emphasized.

By 2014, the Ministry of Finance decided to build capacity and launch pilot spending reviews to support the process of spending reviews. In line with this objective, the Ministry of Finance underwent a reorganization in July 2014, resulting in the establishment of the Expenditure Policy Department. This newly created unit played a key role in coordinating spending review activities and shaping the methodological framework (Paczyński, 2015).

Additionally, studies were conducted during this process to determine the scope of the reviews and select priority spending areas.

Since 2015, spending reviews in Poland have started to take on a more systematic and institutionalized structure. The first pilot reviews, initiated during the 2014/2015 transition period, served as an important foundation for testing the methodological approach and evaluating the practical application of spending reviews (Ministry of Finance Republic of Poland, 2015) During this period, the scope of the pilot reviews focused on the effectiveness of policy objectives and the efficiency of expenditures.

In 2020, the Polish Ministry of Finance requested technical assistance from the European Commission under the Technical Support Instrument (TSI) to revise the methodology of spending reviews in line with OECD practices. In 2021, follow-up support was received to conduct two pilot spending reviews in the areas of healthcare and innovation support for SMEs. In the context of the COVID-19 recovery process, these reviews aimed to enhance the quality of public expenditures (European Union, 2021).

Comprehensive reviews have been conducted in various areas as part of the public spending review process in Poland. These reviews covered a wide range of topics, such as supporting employment, preventing unemployment, salaries of public sector employees, inland water transport, fisheries, and maritime sectors. With regard to the public budget, analyses were conducted on the structure and levels of various expenditure categories, and legal factors and mechanisms determining fixed expenditure levels were evaluated. The education sector was also included in the scope of the reviews, with analyses focusing on teachers' career development and motivation systems. Policy recommendations were developed in areas such as supporting low-income families, public administration expenditures, and social spending (Ministry of Finance Republic of Poland, 2024). Additionally, the effectiveness of national funds financing highways was evaluated, and infrastructure projects outside the scope of public-private partnerships were examined. In the agricultural sector, the financial impact of subsidies for elite or qualified seed materials was analysed. Furthermore, an analysis of budget flexibility was conducted in collaboration with

the OECD, and the results were shared. Recommendations were made for cost reduction and efficiency improvement measures (Ministry of Finance Republic of Poland, 2024).

Findings and recommendations from these reviews have provided significant insights for improving the efficiency of public expenditures and enhancing budget flexibility. In particular, policy proposals were developed in areas such as social spending and support for low-income families, while comprehensive reports have been prepared on specific topics such as housing policy. All these efforts have laid an important foundation for a more effective utilization of public resources.

Portugal

The spending review processes in Portugal have been implemented through different approaches over different time periods, aiming at fiscal consolidation and efficiency gains in expenditures. The process started in 2010 and has gone through three phases (European Commission, 2024). The first phase, from 2010 to 2016, focused on key expenditure areas such as social protection, health, education, and security within the framework of the International Monetary Fund's (IMF) economic and financial adjustment program (IMF, 2016). This period was characterized by expenditure cuts and efficiency gains, aimed at strengthening public finances in the aftermath of the Global Financial Crisis.

Between 2017 and 2019, a task force was established under the leadership of the Ministry of Finance to institutionalize spending review processes, with the aim of strengthening their connection with the budget cycle and collecting savings and efficiency proposals from spending entities (European Commission, 2019). A mechanism including financial and non-financial rewards was also developed to incentivize public administration.

During the third spending review process from 2020 to 2022, GPEARI²⁶ led the efforts and achieved savings and efficiency gains in areas such as health, education, and

²⁶ Office for Planning, Strategy, Evaluation, and International Relations, operates under Portugal's Ministry of Finance. This office is responsible for developing strategies, preparing evaluation reports, and coordinating international cooperation in the field of public finance (OECD, 2023).

administrative modernization. However, challenges such as complex processes, insufficient monitoring, and lack of participation by sector ministries persisted. In line with the European Commission's recommendations and the commitments of the Recovery and Resilience Plan (RRP), the Ministry of Finance, with the support of the OECD, launched a project to enhance spending review processes (The Portuguese Court of Audits, 2019). This project, with the support of OECD, improved Portugal's spending review framework, benchmarked it against best practices, and developed an action plan. The capacity of the Ministry of Finance and sectoral ministries were strengthened through methodological guidance and workshops, resulting in the completion of 9 out of 17 recommended actions. The new framework was integrated into the budget cycle, with the scope of spending reviews increasing from 2% to 7%, and projected total savings from the first and second rounds of reviews estimated at €247 million (European Commission, 2024).

In 2023, Portugal introduced a revised framework for conducting spending reviews, supported by the European Commission through the Technical Support Instrument (TSI). The legal foundation for this framework was established with the enactment of Ministerial Order No. 7690/2023 in July of the same year. This regulatory instrument outlines the objectives of spending reviews and formalizes a structured governance model. The model is organized in three tiers: Thematic Teams, a General Coordination Team, and a Permanent Technical Monitoring Team. The framework enhances ownership by sectoral ministries while maintaining oversight by the Ministry of Finance. Policy options are intended to be developed before setting expenditure ceilings under the Medium-Term Budgetary Framework (MTBF), with provisions also made for ex-post evaluations. Supported by the TSI, the spending review process has become more institutionalized and effective, with continued implementation planned in the coming years (GPEARl, 2024b).

In 2024, spending review efforts focused on areas such as health and the ECO.AP 2030 program. Within the health sector, sub-sectors including dialysis, physical medicine, rehabilitation services, and generic and biosimilar medicines were analysed. Under the ECO.AP 2030 program, initiatives were taken to improve resource efficiency in public administration, focusing on reducing energy, water, and material consumption while lowering

carbon emissions. Despite these efforts, limited institutional participation and technical capacity have limited the program's effectiveness. These spending reviews aim to improve the efficiency of public spending and ensure budget sustainability. Proposed policies include optimizing high-cost treatment processes, increasing the use of internal resources, and implementing centralized procurement to generate savings. The ECO.AP program is expected to achieve approximately €16 million in savings by 2024 (GPEARI, 2024a).

Although spending reviews have been conducted in Portugal for over a decade, the process has yet to achieve a sufficient level of institutional consolidation or operational effectiveness. Since their inception, four distinct initiatives have been undertaken, with only the most recent one currently ongoing in 2024. However, no tangible outcomes have been achieved thus far. According to the Portuguese Court of Audits, the main obstacles to progress include a lack of institutionalization, limited transparency, and insufficient political commitment (Portuguese Court of Auditors, 2024).

Slovak Republic

Spending reviews in Slovakia are among the reform processes initiated to ensure the more effective and efficient use of public resources. Launched by the Ministry of Finance in 2015, the process has become a significant tool, particularly after the 2016 elections, aligning with the government's manifesto²⁷ objectives (European Commission, 2017). Known in as the "Value for Money" project, Slovakia's spending review framework seeks to optimize public spending, support evidence-based policymaking, and reduce costs while enhancing service quality.

²⁷ The Manifesto of the Government of the Slovak Republic 2016–2020 represents the official document outlining the policies and priorities the Slovak government aimed to implement during this period. The government manifesto sets forth the plans, reform areas, and strategic objectives of the newly elected administration following the elections. The manifesto for the 2016–2020 term includes the government's primary reform and development priorities (Government of the Slovak Republic, 2016). One of the significant initiatives of this period was the Value for Money (VfM) project, launched to enhance the efficiency of public spending. The government aimed to conduct systematic spending reviews to ensure the more effective use of public resources. This process evaluated the use of public funds based on efficiency and effectiveness criteria, while also improving fiscal transparency (Ministry of Finance of the Slovak Republic, 2024b).

Established in 2016, the Value for Money unit (VfM unit), initially operated with three full-time employees and has since expanded to fifty-one staff members. To date, the unit has conducted nineteen spending reviews and developed 755 recommendations. Approximately 200 investment projects are reviewed annually, with their costs evaluated as a percentage of the gross domestic product (Haluš, 2024).

During this process, the support provided by the Structural Report Support Service (SRSS), IMF, and independent experts played a critical role in the success of the reforms. Assistance was provided through on-site missions, workshops, remote consultations, and expert contributions. These efforts offered technical and advisory support in areas such as the design and organization of spending reviews, capacity building, and the identification of cost-saving measures (European Commission, 2017) .

Since 2016, spending reviews have been conducted in critical sectors such as energy, public transportation, healthcare, education, defense, social policies, agriculture, culture, and the environment. These reviews are tailored to the specific needs of each department (Ministry of Finance of the Slovak Republic, 2024b). During this process, areas for the efficient use of public expenditures are identified, and necessary adjustments are made to ensure budgetary efficiency. For instance, reviews in the energy and public transportation sectors aim to enhance the cost-effectiveness of infrastructure investments, while reviews in the healthcare and education sectors focus on improving the quality of public services.

In Slovakia, spending reviews are conducted not only on a sectoral basis but also through cross-sectional analyses. These reviews address broad issues such as subsidies, research and development, employment, and wages in public administration with the aim of improving the efficient use of resources, with recommendations developed accordingly (Ministry of Finance of the Slovak Republic, 2024b). Social assistance for vulnerable groups, public IT projects, and financial reporting are also evaluated within these reviews to promote social and economic equity. One of the most recent spending reviews, published in 2024 focused on primary and secondary education institutions (Ministry of Finance of the Slovak Republic, 2024a). Slovakia ranks among the lowest in the European Union in terms of

education spending, a key factor contributing to poor educational outcomes. According to PISA results, Slovak students significantly underperform relative to international benchmarks, with students from socioeconomically disadvantaged backgrounds being disproportionately affected. The education system is funded through both normative and non-normative financial mechanisms. Normative funding is based on per-student allocations, while non-normative funding focuses on special projects and infrastructure investments. However, these financing mechanisms are criticized for being complex and sometimes inequitable. For instance, small schools operate at higher costs but lag in educational quality. The report highlights the financial burden and weak performance of over 600 small-scale schools, where student numbers fall below the legally defined minimum, leading to additional costs for the system. Moreover, vocational schools at the secondary level fail to meet labour market demands, limiting graduates' employment opportunities. Educational investments are crucial for a sustainable infrastructure, but the condition of Slovakia's educational facilities is deteriorating due to a lack of sufficient funding. This underscores the need for long-term and strategic investments in education (Ministry of Finance of the Slovak Republic, 2024a).

Slovenia

Due to the structural vulnerabilities of Slovenia's fiscal framework, sustained efforts in fiscal consolidation have been essential to safeguard long-term debt sustainability. In light of the limited progress in implementing comprehensive structural reforms and increasing pressures to roll back temporary fiscal measures, the need for a more systematic and in-depth evaluation of public spending has gained prominence. Accordingly, a more structured spending review process was introduced in 2015, focusing primarily on key expenditure areas such as health, education, and social welfare (Olden et al., 2015).

Within the framework of the European Union's Cohesion Policy 2021-2027, the Slovenian government plans to adopt certain simplifications in implementation procedures and methods that include spending reviews in order to ensure the efficient use of European funds. This approach stands out as a significant step toward achieving more effective use of funds and attaining the set objectives. The program facilitates Slovenia's access to €3.2 billion in

European funds for various policy objectives until 2029. Slovenia aims to guarantee the efficient utilization of these funds through spending reviews and simplified procedures. The program allocates funds to areas such as green and low-carbon transitions, research and innovation, social inclusion, sustainable transport, local development, and the phasing out of coal (Republic of Slovenia, 2022). This strategic approach demonstrates Slovenia's commitment to managing public resources more effectively and supporting fiscal sustainability.

South Korea

The Korean economy experienced rapid growth until the late 1990s, driven by industrialization, technological progress, and the expansion of international trade. However, from the late 1990s, Korea's economic momentum began to weaken, accompanied by emerging signs of stagnation. This shift prompted the government to reassess its fiscal policy in order to establish a more sustainable and resilient economic structure (Nowook, 2017).

In this context, spending reviews have emerged as a key instrument for promoting fiscal sustainability and improving the effectiveness and efficiency of public expenditure. In South Korea, spending reviews are mainly carried out at the central government level and primarily focus on discretionary expenditures rather than mandatory ones. Applications at the sub-national level remain limited (Nowook & Joung-Jin, 2015).

Spending reviews in Korea consist of detailed evaluations of budgetary programmes. In addition, self-assessment processes conducted at the level of individual sub-programmes are also regarded as a form of periodic spending review. These reviews cover both mandatory expenditures (such as legally mandated transfer payments) and discretionary expenditures (managed through budget appropriations). Notably, 73% of spending reviews in Korea cover both types of expenditures, while the remaining 27% focus exclusively on discretionary expenditures (Nowook & Joung-Jin, 2015).

The results of spending reviews in Korea reflect efforts to improve the efficiency and effectiveness of public expenditures. Programme reviews conducted between 2008 and 2013 classified evaluations as effective, adequate, or ineffective. The results indicate that the proportion of programmes deemed ineffective consistently exceeded 20%, leading to budget constraints and reallocation of resources. In 2008, 103 programmes were identified as ineffective, resulting in a 19.3% budget cut, while in 2012, this figure was 18.4%. Lessons learned from detailed evaluation processes have led to recommendations in areas such as program consolidation, design, and improved implementation. Between 2008 and 2012, 329 recommendations were made, most of which have been addressed through follow-up actions. For instance, the ESCO (Energy Service Company) program, designed to promote energy efficiency, offered subsidies and tax exemptions for energy savings renovations. However, the subsidies were found to cause problems of double counting in accounting practices. As a result, recommendations were made to rectify this issue, and necessary adjustments were implemented (Nowook, 2017).

In their early stages, spending reviews in Korea were primarily aimed at achieving budget cuts. However, following the global financial crisis in 2008, the objectives of these reviews shifted to emphasizing the enhancement of allocative efficiency through the spending prioritization. In South Korea, this approach was further developed through comprehensive fiscal reforms implemented in 2014. To improve the effectiveness of strategic spending reviews, it has been emphasized that the focus of analysis and evaluation needs to shift from micro-level projects to broader categories such as sectors, areas, and programmes. In this context, strengthening mechanisms such as the Medium-Term Expenditure Framework (MTEF) and top-down budgeting was considered crucial. These approaches not only ensure more efficient resource allocation but also allow for more strategic decision-making within the budgetary process.

In response to the growing demand for more strategic and cross-cutting reviews, Korea introduced a pilot Strategic Spending Review in 2019, covering 12 major spending areas and 71 sub-sectors. Although this initiative drew upon the international best practices—particularly those of the United Kingdom, the Netherlands, and Ireland—its implementation

revealed key limitations, particularly in achieving macro-level prioritization. The focus remained largely on micro-level projects, reducing the intended impact of the reviews. Furthermore, the sharp rise in COVID-19-related expenditures has raised concerns about long-term fiscal sustainability. In response, the Ministry of Economy and Finance has placed greater emphasis on using performance information to identify savings opportunities and support fiscal consolidation efforts. This integrated approach is intended to ensure fiscal sustainability in the post-pandemic context (Cho, 2023).

Spain

The spending review process in Spain was initiated based on country-specific recommendations issued by the European Commission in 2013, 2014, and 2017. These reviews laid the groundwork for 2017, and the Independent Authority for Fiscal Responsibility (AIReF)²⁸ was tasked with carrying out the process at the request of the European Commission. During the 2018-2021 period, the scope of spending reviews was expanded to assess a range of central government expenditure areas. These areas included key sectors such as healthcare, transportation infrastructure, tax incentives, education scholarships, and public enterprises. A total of €108 billion in expenditure was reviewed in three phases during the 2018-2021 period (Casado, 2024).

In the first phase, €33 billion of expenditures were reviewed, including subsidies, medical prescriptions, active labour market policies, higher education scholarships, measures to strengthen business competitiveness, programmes promoting talent and employability in R&D, and the Public Postal Office. In the second phase, €57 billion in larger expenditure items were reviewed, including tax expenditures, hospital pharmacy and capital investments, hiring incentives, and transportation infrastructure. Finally, in the third phase, €18 billion of

²⁸ AIReF (Autoridad Independiente de Responsabilidad Fiscal) is Spain's Independent Fiscal Responsibility Authority. Established by law in 2013, AIReF is a relatively young institution tasked with overseeing fiscal supervision and policy evaluation processes in Spain. The primary objective of the organization is to ensure budgetary stability and fiscal sustainability. AIReF also plays a key role in implementing spending review processes in line with the European Commission's country-specific recommendations, thereby contributing to Spain's fulfillment of its fiscal responsibilities. The institution's independence, transparency, and evidence-based analytical approach have made it a vital component of Spain's public financial management system (AIReF, 2024).

expenditures was evaluated, focusing on financial instruments supporting productive sectors (internationalization) and municipal waste management (Ministerio de Hacienda, 2024).

With the 2022-2026 period, the spending review process has been consolidated, and €10 billion of expenditures are currently under review (ongoing). This phase is part of the EU's Recovery and Resilience Plan. New areas under review include financial instruments supporting productive sectors and healthcare services for public employees. These two areas have been prioritized in the first phase. For future phases, official development assistance, employment policies, the 2014-2020 Multiannual Financial Framework, and temporary disability benefits have been identified as priority areas for evaluation (Casado, 2024).

Regarding the status of spending reviews, some reviews have been completed (2018-2020 phases), while others are still in progress (2022-2026). Within the scope of the 2022-2026 phase of Spain's spending review strategy, key thematic areas have been selected for detailed analysis. These include temporary disability benefits, international development assistance, and the minimum income scheme. The reviews aim to examine not only financial aspects but also governance structures, administrative efficiency, and the broader socio-economic impact of these programmes. For example, issues such as the effectiveness of benefit delivery systems, dynamics of resource allocation, and the reasons for limited program uptake are evaluated. In addition, the methodological framework applied by AIReF incorporates both qualitative and quantitative tools- ranging from econometric analysis and microsimulation to benchmarking and stakeholder interviews. These reviews, which build upon the earlier 2018-2020 phases, are part of an ongoing institutional effort to enhance the quality and accountability of public spending in Spain (AIReF, 2025).

Sweden

Although various evaluations are conducted to assess expenditures in Sweden, none of these are directly integrated into the budget process. Research commissions operate with a broader perspective, not limited to budgetary issues alone. Therefore, Switzerland lacks a well-established history of spending reviews. Between 2016 and 2018, a pilot spending review

was implemented by the Ministry of Finance. In 2016, two projects were targeted, and four to five reviews were planned for 2017. These reviews involved assessments across multiple ministries (Downes et al., 2017). However, due to the limited scope of the review, the desired fiscal consolidation could not be achieved.

Switzerland

Switzerland's federal budget system currently lacks a standardized framework for conducting systematic spending reviews. While newly introduced policies are subject to rigorous economic justifications and cost-benefit analyses, there is no institutionalized or regularly applied mechanism for assessing existing expenditures. According to OECD country surveys, Switzerland does not conduct annual spending reviews; instead, such evaluations are undertaken on an ad hoc basis, driven by specific needs or contextual factors. Notably, approximately 80% of Switzerland's federal expenditures consist of subsidies, which are reviewed every six years by the responsible organizational units. These evaluations typically address aspects such as the focus area, legal basis, control mechanisms, design, and potential areas for improvement for each subsidy (OECD, 2020a).

Lacking a regular review system, Switzerland has initiated an evaluation process to develop and consistently apply a spending review mechanism. The Swiss government plans to implement this spending review process initially within its administrative domain (i.e., the federal public administration). This approach aims to examine how expenditures are conducted within public institutions and to identify opportunities for optimization (efficiency gains).

Türkiye

In Türkiye, reform efforts for the effective, economic and efficient use of public expenditures gained a new dimension with the enactment of the Public Financial Management and Control Law No. 5018 in 2003. This law marked a significant shift by introducing a performance-based budgeting system and adopting modern financial management tools, such as

corporate planning and accrual-based accounting. Additionally, the law introduced key medium-term fiscal planning instruments, including the Medium-Term Program (MTP) and the Medium-Term Fiscal Plan (MTFP), which have significantly enhanced budgetary and fiscal policy coordination. Despite these developments, it was observed that the monitoring and decision-making processes concerning performance information acquired through this system, which was implemented between 2004 and 2019, were not executed effectively. A critical limitation was the insufficient linkage between budgets prepared under the analytical budget classification, stemming from the lack of a program-based classification. As a result, resource allocation decisions continued to reflect an input-oriented approach, characteristic of traditional budgeting practices. Moreover, the global financial crisis of 2008 hindered the anticipated progress of reforms during the second phase of implementation. This period revealed shortcomings in the transition to a program budget structure and emphasized the need for a more effective and results-oriented application of the performance-based budgeting system.

To address these shortcomings, a dedicated project team was established in 2012, within the Budget and Fiscal Control Directorate General of the Ministry of Finance to facilitate the transition to program budgeting. The team conducted a situational analysis of the current system and examined international practices in 11 countries, including the United States, France, and South Korea. Based on this review, the team developed a program budgeting model tailored to Türkiye's institutional context and shared it with relevant public institutions. Workshops were organised with technical support from the IMF, and in 2014, the "Draft Guide on Program Structure and Program Justification" was prepared and disseminated. Capacity-building activities continued under World Bank and EU-supported projects, which also included the development of methodologies and tools for costing, monitoring, and evaluation (Presidency of Strategy and Budget, 2024).

Following the adoption of the Presidential Government System through the 2017 referendum and its implementation starting in 2018, significant institutional restructuring was undertaken. That same year, the Presidency of Strategy and Budget was established, assuming responsibility for the preparation and implementation of the budget. Under the new system,

the president became the head of the executive and the Council of Ministers was abolished (Decree Law No. 698, 2018). Additionally, as part of this reorganization, the number of ministerial organizational laws was reduced from 26 to 16 through a harmonization decree, and the Ministry of Finance was restructured as the Ministry of Treasury and Finance (Decree Law No. 703, 2018). The responsibility for budget preparation was officially transferred to the Strategy and Budget Presidency (SBB), operating under the Presidency (Presidential Decree No. 13, 2018).

Building on prior initiatives, program budgeting efforts were launched under the Presidency in 2019. The 2020 Budget Preparation Guide officially announced the transition to the program budget model to enhance the effectiveness of performance-based budgeting. From 2021 onward, Türkiye's central government budgets have been implemented under this new system, now referred to as the Performance-Based Program Budgeting (Presidency of Strategy and Budget, 2024).

The new system aims to align public resources with strategic priorities and enhance fiscal transparency and accountability. Under this framework, budgets are organized at the program, sub-program, and activity levels, and performance data are utilized to inform decision-making processes. As part of the reform agenda, the concept of spending reviews was introduced in the “Report of the Working Group on Efficiency in Public Expenditures,” which emphasized their role in eliminating ineffective expenditures and reallocating funds toward priorities (Ministry of Development, 2018).

Türkiye’s journey toward the implementation of a spending review process is reflected in OECD surveys conducted in 2016, 2018, and 2020, which highlight the country’s intentions to adopt spending reviews in the future. The integration of spending reviews into Türkiye’s program budgeting system has gained importance as a second-generation public finance reform. In this context, enhancing the quality of planning and programming documents, ensuring that fiscal consolidation policies are grounded in robust analysis, and requiring public institutions to evaluate the effectiveness of allocated resources are among the primary necessities.

Spending review encompasses budget revision processes in which the assets and resources of public institutions are assessed with an analytical approach, aiming to ensure the effective and efficient use of public resources. This process entails the reallocation of public resources within the framework of a program-based budget structure and includes detailed evaluations at the program, sub-program, and activity levels. OECD practices reveal that spending reviews are typically conducted across these three main levels within the program budgeting system. Programs are directly linked to policy objectives, while sub-programs provide more focused analyses in specific areas, and activities offer data related to the final outputs of service delivery. In this context, the success of spending reviews relies heavily on the effective design and articulation of the program structure. In particular, clearly defining the roles and interrelationships of programs, sub-programs, and activities is essential for setting strategic priorities in resource allocation and ensuring fiscal discipline.

With the transition to the program budgeting system in Türkiye, the implementation of spending review processes has become inevitable. Program budgeting enables the classification of expenditures at the program, sub-program, and activity levels and aligning them with overarching policy objectives. This structure forms the fundamental basis of spending review processes. The volatility of economic conditions and the need for efficient use of public resources further increase the necessity of adopting spending review practices in Türkiye. Particularly during economic downturns, ensuring the effective allocation of resources is critical, while in periods of economic expansion, it is equally important to review expenditures to maintain fiscal discipline. As such, the implementation of this mechanism is becoming increasingly vital. In this context, there is a growing emphasis on the need for structural reforms aimed at enhancing the effectiveness of public expenditures and bringing a strategic perspective to the budgeting system in Türkiye.

Presidency of Strategy and Budget and the Ministry of Treasury and Finance have stated that, during Türkiye's transition to the program budgeting system, institutional expenditures should primarily be comprehensively reviewed in line with their core functions. However, although this objective was included in the 11th and 12th Development Plans.

Additionally, concrete implementation tools, such as regulations, circulars, or guidelines, have yet to be published.

Nevertheless, a significant institutional development took place with the establishment of the Spending Review Coordination Department under the Directorate General of Public Financial Management and Transformation at the Ministry of Treasury and Finance. According to the Ministry's 2024 Institutional Financial Status and Expectations Report, training programs and workshops were conducted in collaboration with the World Bank and the OECD to share international experiences regarding the design and implementation of spending reviews. Although a guideline has been reportedly prepared, it has yet to be officially published. Furthermore, a pilot spending review was launched within the Ministry of National Education, and a working group was established to examine street and avenue lighting expenditures. According to the Ministry of Treasury and Finance's 2025 Performance Program, only one regulation on spending reviews was planned for that year, indicating that the institutional framework for such reviews is still in the early stages of development (Ministry of Treasury and Finance, 2024).

United Kingdom

As is the case for the Netherlands, the system of spending review has a long and systematic history in the United Kingdom. The Labour government came to power in 1997 and introduced fiscal reforms, based on the Finance Act of 1998, aiming to improve fiscal soundness and accountability by redefining the basic principles of public expenditure plans. Introduction of a spending review on a three-year cycle played a key role in these reforms. This was the first time that the UK introduced a three-year medium-term fiscal plan, the spending review, and the first Comprehensive Spending Review (CSR). In this process, principles such as the Golden Rule, under which the Government would only borrow to invest throughout the economic cycle, and the reduction of public debt-to-GDP to 40 percent were adopted (Finance Act 1998, 1998). Thus, fiscal and budgetary reforms were prioritised, with a shift from the annual expenditure plan to the medium-term expenditure plan and results-oriented performance-based management and budgeting.

Until the Finance Act, the UK government's expenditure plans were included in the Autumn Statement, the annual expenditure report, and there was no separate medium-term expenditure plan (HM Treasury, 1998). The lack of a medium-term plan meant that the government had difficulty in determining the level of budget cuts necessary to reduce the deficit across all its ministries. This shortcoming led to the introduction of the spending review system at a time when the need for the government to make budget cuts to cover all government expenditures in the medium term was increasing (Boex et al., 1998). The spending review system contributes to making budget management more effective by enabling more efficient and sustainable planning of expenditures to be made in a given period.

On the other hand, the 1998 reform introduced Public Service Agreements (PSAs), for the first time for government spending programmes. PSAs were developed to reduce costs and allocate resources based on performance. PSAs function as a strategic management instrument in the UK, designed to enhance the performance and efficiency of public services. PSAs are agreements that set out the government's priority objectives and provide performance indicators to measure the success of public services in achieving these objectives. Each PSA contains detailed information on targets for a specific public service area and the resources needed to achieve them. The purpose of PSAs is to ensure more transparent, accountable and efficient management of government spending. They also provide a framework for clarifying the government's policy priorities and promoting a results-oriented approach to public administration. PSAs set targets for specific departments and, in some cases, cross-departmental issues. For example, they set specific targets to improve performance in areas such as education²⁹, health or the environment. The PSA system was abolished under the ruling of Conservative/Liberal Democrat coalition government and replaced by a more flexible system based on business plans (Gay, 2005).

²⁹ An example of a PSA in the field of education is the UK government's strategy to increase the adult literacy rate by 2020. The government could set a target to increase adult literacy worldwide and ensure equality of opportunity in education. For example, it would aim to increase the literacy rate to 89% by 2011 and 95% by 2020. In the measurement phase, a focal point is appointed to identify and control data sources. In the delivery phase, a joint plan is drawn up in consultation with the Ministry of Education, and finally, in the consultation phase, reports are made by the National Audit Office (NAO) (Hughes, 2008).

In June 2010, “the newly formed conservative-liberal democrat coalition government” replaced the PSA with the Public Expenditure Committee (PEX), frequently described as the “Star Chamber”. The Ministry of Finance and departments have created a system for a joint effort to reduce spending. This committee advises the Cabinet on high-level decisions that can be considered in the spending review. The committee was composed of senior cabinet officials, including the Chancellor of the Exchequer, the Chief Secretary to the Treasury, the Foreign Secretary, and ministers overseeing public administration. It became widely recognized within government circles as a central forum for making tough fiscal decisions. Other ministers are eligible to serve as members of the committee once their department’s budget allocations have been finalized. The UK government has also established and executed the “Spending Review Challenge Group” with a view to ensuring that the spending review achieves the best results. This group, made up of top experts from inside and outside government, provides innovative ideas on how to reduce public spending and challenges government to ensure that cost savings do not compromise the quality of public services (Webb & Allen, 2010).

Since 1998, the United Kingdom has conducted 12 spending reviews at 2-5 year intervals during the terms of a Labour government, a coalition government and a Conservative government.

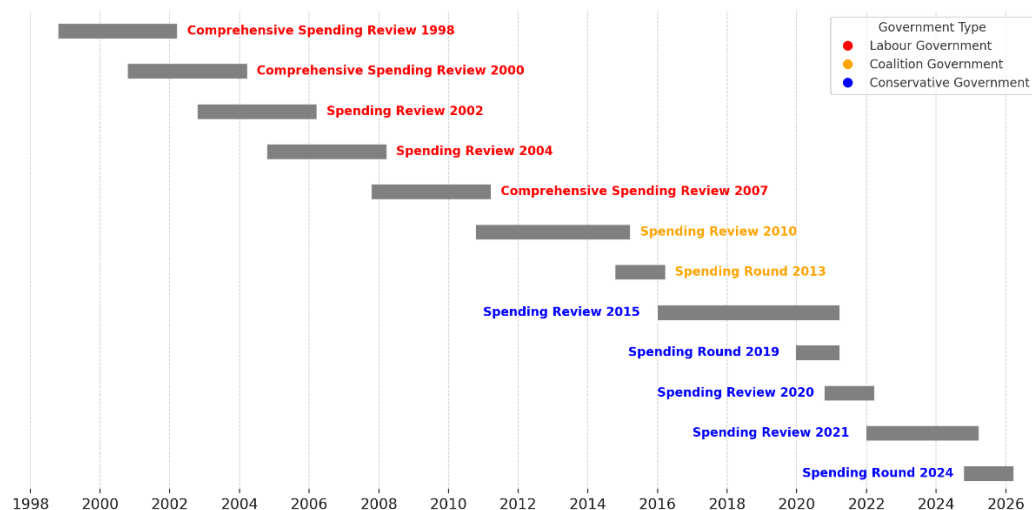


Figure 3.6. Timeline of Spending Reviews in the United Kingdom from 1998 to Present

Source: Prepared by the authors based on the data from HM Treasury (HM Treasury, 2024b).

Figure 3.6 shows the historical development process of spending reviews in the United Kingdom since 1998. During the period in question, spending review systems have been analysed under three headings: Comprehensive Spending Reviews, Spending Reviews, and Spending Rounds. These reviews do not differ cyclically but include some differences in the methods used.

- The Comprehensive Spending Review is a comprehensive process of zero-based review of each ministry's budget allocations and was implemented in 1998, 2000 and 2007. Budgets were formulated by setting policy priorities according to the expenditure limits (DELs, Departmental Expenditure Limits) set for each ministry. According to Gordon Brown, the most important innovation of the Comprehensive Spending Review is to move away from the short-term approach of the annual cycle and to prepare public spending on a three-year basis rather than on a one-year basis (*The Chancellor's Speech Announcing the Comprehensive Spending Review*, 1998).
- The Spending Review differs from the Comprehensive Spending Review in that it is a review of each ministry's budget allocations, taking into account increases or decreases from the previous year's allocations. It has been conducted 6 times in total to date, in 2002, 2004, 2010 and 2015, 2020 and 2021.
- The short-term Spending Round is very similar to the spending review, but differs from other reviews in that it allocates spending for only one year, rather than over multiple years. Spending rounds design fiscal plans for one year and have only been conducted three times in the UK-in 2013, 2019 and 2024. The 2013 spending round was a short-

term spending review that produced a spending plan for the 2015-16 fiscal year (Alexander & Osborne, 2013).

In 2008, the global financial crisis also had an impact on the United Kingdom, leading to economic stagnation. As a response to the crisis, 2010 Fiscal Responsibility Act was enacted, which primarily aimed to reduce the net debt ratio of the public sector to half of its 2010 level by 2014 (Fiscal Responsibility Act 2010, 2010). Following the financial crisis, the surge in public debt caused by excessive spending on economic stimulus measures led to the establishment of the Office for Budget Responsibility (OBR) as an independent unit tasked with fiscal and economic forecasting (Keep, 2024). The OBR is authorised to provide fiscal and economic forecasts at least twice in each fiscal year and to conduct assessments of fiscal sustainability. Notably, the OBR has comprehensive access to information across all government organizations. Furthermore, it has encouraged overall cost reductions at the national level by proposing additional budget cuts for ministries and limiting public sector recruitment.

In the UK, spending reviews are a component of the budget process and determine the way each department uses its resources. The expenditure set by the budget is called Total Managed Expenditure (TME) and is categorized into two types: The Departmental Expenditure Limit (DEL) and the Annually Managed Expenditure (AME). Departmental Expenditure Limits are known as pre-planned and fixed expenditure items and institutions are obliged to stay within the limits set by spending reviews. These typically include spending on public services such as health, education, justice and transportation, as well as long-term investments such as infrastructure projects, and account for about half of total government spending. In contrast, Annually Managed Expenditures are budgets with variable line items and are unpredictable or uncontrollable expenditures that typically fluctuate depending on the economic conditions and public needs. Examples include social benefits, payments to EU institutions (prior to Brexit), central government interest expenditures and expenditures financed by local governments' own revenues (OECD, 2004; HM Treasury, 2010; Brien, 2024).

The spending review system encompasses the government's fiscal policy, orientation, priorities regarding public expenditures, and departmental spending limits for the next three years over a three-year horizon, forming the foundation for annual budget planning (NAO, 2018). Although spending reviews are carried out by the Treasury, decisions to reduce expenditures are made with a collective approach, which involves a mixed structure composed of Treasury officials, external experts from the public and private sectors, and prominent individuals, engaging in discussions that span several months. The Treasury allocates budgets to the relevant departments and sets the rules governing the management and expenditure of public funds. The spending review process is formally initiated by the Chancellor of the Exchequer by sending letters to the departmental secretaries, requesting them to apply in their budgets. These letters outline the key areas of focus (HM Treasury & Sunak, 2021a).

The spending review process covers a long-term planning period aimed at directing public resources more effectively toward priority areas. At the initial stage of this process, the Treasury provides guidance to departments and is responsible for coordinating and identifying spending options. Additionally, the Treasury involves independent experts to enable a more comprehensive evaluation. Departments are responsible for setting their program priorities within the limits established by the Treasury. During the budget preparation process, they are empowered to reallocate resources from lower-priority programmes to higher-priority areas by scaling down or discontinuing less critical programs. The overall management and daily operations of the process are determined by senior officials and ministers in the Treasury prior to each spending review period. This process is executed by the central General Expenditure Policy team, which coordinates the Treasury's overall spending policies and the spending review program. The team collaborates with colleagues across various forums within the Treasury to develop recommendations for ministers. Facilitated by working groups, the process is led by policy officials and regular board meetings, ensuring the smooth functioning of the review (OECD, 2020a).

The 1998 comprehensive spending reviews covered a wide range of ministries and departments in the UK. More than 300 targets were identified for the comprehensive spending review. These included ministries that manage core public services, such as the "Department

for Education and Employment (DfEE)", the "Department of Health (including Personal Social Services)", the "Department for the Environment", "Transport and the Regions (DETR)", and systematic reviews such as the "Cross-Departmental Review of Local Government Finance" and the "Cross-Departmental Review of the Criminal Justice System". In addition, security and justice related areas were covered, such as the "Ministry of Home Affairs", "Law Departments", "Inter-Departmental Review of Illicit Drugs". Assessments were conducted on the spending plans of departments of national and international strategic importance such as the "Ministry of Defense (MoD)", "Foreign and Commonwealth Office (FCO)", "Department for International Development (DfID)", "Department of Trade and Industry (DTI)". Ministries managing a range of social and economic policy areas, such as the "Ministry of Agriculture, Fisheries and Food (MAFF)", the "Department for Culture, Media and Sport (DCMS)", and the "Department for Social Security (DSS)" were also reviewed. Departments with a focus on regional government, such as the Scottish Office (including the Forestry Commission), the Welsh Office, the Northern Ireland Office, were also assessed. Finally, central government departments such as the Chancellor's Departments and the Cabinet Office/Office of the Civil Service were also part of the spending review. These wide-ranging reviews aimed to improve the efficiency of public spending and allocate resources in line with government priorities (HM Treasury, 1998). In education, for instance, the government committed to increase spending on education by 5.1% per year, doubling capital spending on schools and reducing sizes of the classes of 5 to 7 year olds to below 30. Access to education and higher education was increased for children from low-income families through a pilot Education Maintenance Allowance. These reforms aimed to raise standards in literacy and numeracy by age 11 and reduce truancy rates by a third (HM Treasury, 1998).

By the year 2000, the number of targets had been reduced from over 300 to 160, and this number continued to decline in the subsequent years. By 2007, the 110 departmental targets were further reduced to just 30. This progression reflects a strategic shift in the spending review process, emphasizing greater focus and alignment with key governmental priorities. Indeed, the performance targets exceeding 300 in 2000 indicates that setting such a wide range of targets made effective prioritization challenging for the government. The large number of targets diluted the government's focus and resources, making it difficult to identify

strategic priorities. This explains the UK government's subsequent steps to gradually reduce the number of performance targets in the subsequent years. By 2007, the number of performance targets was reduced to 30, transforming them into broader, more comprehensive goals that reflected the government's main priorities and required cross-departmental collaboration (Balls, 2019). This shift was intended to enable the government to use its resources more effectively while strengthening public accountability. By narrowing its focus to strategic priorities, the government was able to concentrate more clearly on its strategic priorities and contributed to making the targets more meaningful and actionable. As a result, the targets evolved from being a nominal list into a functional instrument for policy development and implementation. This transformation enhanced their utility in driving policy-making and ensured their practical relevance in achieving governmental objectives.

Following the 2008 global financial crisis, overspending in the United Kingdom resulted in a surge in public debt and the need for a Comprehensive Spending Review in 2010. In response to the economic crisis, an Emergency Budget was announced, targeting budget savings of around £81 billion over four years. To achieve these savings, the government implemented strategies focused on enhancing efficiency. This included reduction or discontinuation of some policies and projects. Furthermore, it widened the scope of spending to include transfers to regional governments, tax expenditures, capital spending, and current expenditures. In 2010, the government introduced a set of fiscal measures that combined budgetary restraint with selective investments. These measures involved cuts in welfare expenditure, a suspension of public sector wage increases and lower debt service obligations. However, funding was preserved or even expanded in areas considered strategically important for economic growth, low-carbon economy, including the education sector and transportation infrastructure. The Office for Budget Responsibility projected that these policy choices would lead to the reduction of approximately 500,000 jobs in the public sector by the 2014/15 fiscal year (Vandierendonck, 2014).

For instance, in the 2010 review of education spending, the annual education budget was set at £57.6 billion. A 3.4% reduction in current spending and a significant 60% decrease in capital spending were projected. However, direct funding for schools in England was

protected from these cuts, with real-term increases of 0.1% per year planned, taking school funding from £35 billion to £39 billion. Despite this, spending on school buildings was cut by 60%. Additionally, £2.5 billion was allocated as a pupil premium to provide teaching support for disadvantaged students, and a new system was introduced to replace Educational Maintenance Allowances. The Sure Start program was preserved in cash terms. These adjustments in education also involved structural changes, including the closure of five public bodies (quangos). These reforms reflect a focused effort to balance fiscal responsibility with maintaining investment in critical areas (HM Treasury, 2010).

The United Kingdom has had three Spending Rounds, in 2013, 2019, and 2024. Unlike a Spending Review, which allocates spending over for several years, a Spending Round focuses on funding allocations for a single year. For instance, the 2013 Spending Round determined departmental budgets for the 2015–2016 fiscal year, the 2019 Spending Round set budgets for the 2020–2021 fiscal year, and the 2024 Spending Round established budgets for the 2025–2026 fiscal year.

The 2013 Spending Round achieved significant savings, most notably a £6 billion annual reduction in public debt servicing costs. The government prioritized boosting economic growth by increasing infrastructure investments, leading to plans for over £300 billion in infrastructure projects. Key areas targeted for increased investment included transportation, science, schools, and healthcare. Additionally, a series of efficiency savings was introduced for the public sector, which included reducing the number of public sector employees and curbing tax expenditures. Public sector pay increases were capped at 1% for the 2015–2016 fiscal year, and automatic pay increases were abolished to enhance efficiency. It was estimated that public sector employment would be reduced by an additional 144,000 positions (HM Treasury & Osborne, 2013).

The 2019 Spending Round was designed to navigate Brexit³⁰ uncertainty and stimulate economic growth through a comprehensive fiscal plan. The government allocated £2 billion

³⁰ Brexit, a term derived from the combination of “Britain” and “exit”, refers to the United Kingdom’s departure from the European Union (EU). This process was initiated following the 2016 referendum, in which a majority of UK voters opted to leave the EU. Brexit emerged as a movement aimed at strengthening the UK’s national

for Brexit-related spending, including preparing businesses for Brexit and ensuring port infrastructure compliance. Chancellor Sajid Javid announced a £13.8 billion increase in public spending for 2019, marking the fastest growth in spending in 15 years after adjusting for inflation. While maintaining fiscal discipline, significant budget increases were earmarked for policing and criminal justice, including £750 million to recruit 20,000 new police officers. Critical sectors such as health and education were prioritized, with school spending increasing by £7.1 billion and an additional £700 million allocated for children with special educational needs. The health sector saw a £6.2 billion budget increase, and £432 million in additional funding was directed toward infrastructure investments. In the environmental sector, new funds were allocated to combat climate change (HM Treasury & Javid, 2019).

The differences among the 2013, 2019, and 2024 spending plans were shaped by the government's economic goals and the challenges it faced in each period. The 2013 Spending Round emphasized savings and cuts to sustain economic recovery and reduce public debt. In contrast, the 2019 Spending Round focused more on addressing post-Brexit uncertainties and meeting the country's social needs, with an emphasis on increased spending to promote growth. While the 2013 plan prioritized deficit reduction and spending cuts, the 2019 plan focused on investing in public services and strengthening social welfare. The 2024 Spending Round, on the other hand, focused primarily on managing the impacts of rising inflation, wage pressures in the public sector, and the effects³¹ of the war in Ukraine (HM Treasury, 2024a). Although efficiency savings and budget discipline were common objectives across all three periods, the 2019 plan provided broader fiscal support for social welfare and infrastructure investment.

sovereignty, independently shaping its trade policies, and freeing itself from EU regulations. However, this departure process brought with it numerous legal, economic, and political challenges, leading to profound changes in the UK's relationship with the EU (HM Treasury, 2018).

³¹ The military operation launched by Russia against Ukraine on February 24, 2022, deeply impacted the global security environment (NATO, 2022) and led many countries to reshape their defense policies. In response to these developments, the United Kingdom decided to increase its defense spending. In a statement made in 2024, Prime Minister Rishi Sunak announced the UK's target of raising defense spending to 2.5% of GDP by 2030. These increases are viewed as measures taken in response to the security threats and instability caused by the war in Ukraine. With this increase in the defense budget, the UK aims to strengthen its national security and fulfill its international obligations. Consequently, influenced by the war in Ukraine, the UK's 2024 spending plans not only focus on domestic public services and infrastructure investments but also address the growing need to manage increased spending in areas such as foreign policy and defense, driven by global crises and the effects of the ongoing conflict (Sunak, 2024).

The United Kingdom’s extensive experience with spending reviews reflects its institutional commitment to strategic fiscal planning. While the most recent comprehensive review was carried out in 2021, a more limited “spending round” was conducted in 2024, covering only the 2025–26 fiscal year and focusing on short-term goals due to its limited scope. Given its comprehensive scope, strategic importance, and relevance to current fiscal challenges, the 2021 Spending Review will be examined in greater detail as a special case study in Appendix 8, offering further insights into the UK’s public finance management practices.

United States

The Budget and Accounting Act of 1921 laid the institutional foundation for federal budgeting in the United States by centralizing the budget process under the President and establishing the Bureau of the Budget (currently the Office of Management and Budget) and the General Accounting Office (GAO). This was followed by the Budget and Accounting Procedures Act of 1950, which emphasized the use of functional classifications in budget documentation and aimed to improve the link between financial planning and administrative performance. In 1949, the Hoover Commission proposed reforms to enhance government efficiency, including the introduction of a performance-based budgeting approach. Over the subsequent decades, several initiatives were launched to strengthen the connection between performance and budgeting. These included the “Planning-Programming-Budgeting System (PPBS)” under President Lyndon B. Johnson in 1965, “Management by Objectives (MBO)” under President Richard Nixon in 1973, and “Zero-Based Budgeting (ZBB)” initiated during President Jimmy Carter’s administration in 1977 (Schick, 1966; Brackett et al., 1983; Lee et al., 2013).

In the United States, spending reviews are a comprehensive method used by the federal government to ensure the more efficient and effective use of financial resources. The Government Performance and Results Act (GPRA) of 1993 provided an important framework for this approach. GPRA was designed to improve the efficiency and effectiveness of

programmes by establishing a system to set performance goals and measure the extent to which these goals were achieved. This act is based on three fundamental requirements. First, every federal agency is required to prepare strategic plans covering a minimum of five years and submit them to the Office of Management and Budget (OMB) and Congress. These strategic plans must include the mission and objectives that encompass the agency's fundamental functions and operations, specific goals, and the methods to achieve these goals. Second, annual performance plans are appended to the federal budget, specifying measurable performance goals that reflect the expected performance levels of each program's activities. Third, agency heads are required to submit program performance reports to the President and Congress at the end of each fiscal year. These reports compare the performance goals outlined in the annual performance plans with the actual outcomes of the programmes and provide evaluations. Where necessary, they also explain the reasons for any failures and propose solutions for achieving future goals (Government Performance and Results Act, 1993).

The number and scope of spending reviews in the United States have generally remained consistent over the years. While some spending reviews focus on analysing “general management processes”³², others assess “crosscutting expenditures”³³, evaluating detailed spending across different institutions or programmes in specific areas. These two approaches complement each other in ensuring that resources are used more efficiently and effectively. Spending review teams identify potential opportunities for improvement through benchmarking analysis and then determine mechanisms to implement these opportunities. This process typically involves financial and operational analyses, in-depth discussions with practitioners, and expert knowledge. The Office of Management and Budget (OMB) provides internal guidance on the conduct of such reviews. Spending reviews are conducted within the OMB through processes known as “Director's Reviews.” In these reviews, the OMB Director

³² **General Evaluations (Focusing on Management Processes):** Some spending reviews focus on the general functioning, organizational structure, and management processes of governments or institutions. The primary aim of these reviews is to enhance the efficiency and effectiveness of these processes. Examples include evaluations of human resource management, information technology systems, and overall budget management.

³³ **Crosscutting Expenditures in Specific Areas:** Other spending reviews concentrate on expenditures that occur across different programs or units. These are referred to as crosscutting spending and involve analysing expenditures by different ministries or units that share common or similar objectives. The goal is to ensure better coordination, identify unnecessary overlaps, and optimize resource utilization. For instance, expenditures by both the Ministry of Education and the Ministry of Health on child health programs can be assessed as crosscutting spending.

evaluates budget options and balances priorities within each agency. The process begins with a review of agency budgets, after which the OMB returns (“passes back”) the budgets to federal agencies, reviews their appeals, and finalizes spending decisions for each agency and program. The final decisions are reflected in the President’s Budget request to Congress and supplementary agency materials. Spending reviews typically start in early September and conclude with the finalization of the President’s Budget request in early February. Individual agency reviews are typically conducted in October and consist of briefing materials ranging from 30 to 80 pages and meetings lasting 1-2 hours (OECD, 2020a).

The implementation of GPRA revealed challenges such as coordination deficiencies, insufficient feedback mechanisms, and weak linkages between performance and individual goals, highlighting the need for a more comprehensive approach. In response, the GPRA Modernization Act (GPRAMA), enacted in 2010, introduced an integrated and collaborative approach to federal spending reviews. The act reinforced performance evaluations with tools such as Cross-Agency Priority Goals and Agency Priority Goals, while also promoting transparency by making performance management outputs accessible through online platforms³⁴ (GPRA Modernization Act of 2010, 2011).

GPRAMA aims to strengthen the link between budget allocations and program performance by aligning all federal activities with long-term strategic objectives. In this context, the OMB collaborates with agencies every four years to set long-term goals in a limited number of policy areas at the federal level. Progress toward these goals is monitored through quarterly performance review meetings, allowing for strategic adjustments as needed. With GPRAMA, spending reviews have transitioned from focusing solely on individual program performance to adopting an integrated management approach encompassing all federal government units. This system serves as a comprehensive tool for reassessing existing projects and prioritizing new ones. The institutionalization of spending reviews at the federal level has enhanced the efficiency and effectiveness of public financial resource utilization in the United States.

³⁴ <https://www.performance.gov/>

4. ANALYSIS OF THE IMPACT OF PRIMARY BUDGET BALANCE ON OECD MEMBER COUNTRIES IMPLEMENTING SPENDING REVIEWS

4.1. Theoretical Literature

As defined by Lionel Robbins, “*economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses*” (Robbins, 1932). Individuals, as well as societies and therefore states, have various specific needs. The state is required to meet these needs with certain revenues and provide them to the public through expenditures. A balanced budget occurs when budget revenues equal to expenditures. When revenues fall short of expenditures, a budget deficit occurs (-). Conversely, when revenues exceed expenditures, the result is a budget surplus. (+).

All revenues collected by states within constitutional limits to fulfil their public functions, whether derived from sovereignty rights or not, are collectively referred to as “public revenues”. Among these, tax revenues are the most well-known, while sources such as tax-like revenues, money printing and borrowing also constitute public revenues. On the other hand, public expenditures refer to the expenditures made by states to achieve economic, social, cultural, etc. objectives and to fulfil their obligations towards citizens as outlined in the diverse definitions of the state found in the literature. In the budget, actual expenditures are referred to as “non-interest expenditures”. In cases where public revenues are supplemented through borrowing, the associated costs—namely, the payments made on debt—are classified as “interest expenditures”, reflecting the financial burden of public debt (Kadıköylü, 2022).

Primary budget balance refers to the difference between public revenues and primary expenditures. It serves as a key indicator of the government's fiscal position by measuring the extent to which revenues can cover expenditures, excluding interest payments on public debt. The primary budget balance is calculated by subtracting all non-interest public expenditures from total public revenues. A negative value obtained by subtracting non-interest expenditures

from public revenues indicates a primary deficit, while a positive value indicates a primary surplus. The primary balance also represents a fiscal response of governments to debt increases or decreases. Specifically, when debt levels rise (or fall), the typical policy response involves increasing (or decreasing) revenues or reducing (or expanding) expenditures (Akbayır & Yereli, 2020). The exclusion of interest payments from this calculation allows for a clearer assessment of the current fiscal stance by isolating the operational budget from the cost of servicing existing debt.

Although the primary budget balance varies depending on the financial structure of countries and institutions, it is basically the measurement of how the institutional structure achieves the targets envisaged for the relevant period (Emil & Yılmaz, 2023). The size of the primary budget balance depends on variables such as public expenditures and public revenues; however, it is also one of the key indicators used to ensure fiscal discipline and to assess the efficiency of public spending. This indicator is particularly useful in countries with high levels of public debt, as it helps determine the overall fiscal position by also taking into account the scale of public expenditures.

The primary budget balance is also crucial for ensuring fiscal discipline and fiscal performance. The need for establishing fiscal discipline generally stems from budget deficits. Therefore, the most fundamental criterion for ensuring fiscal discipline is the achievement of the primary budget surplus. The primary surplus is regarded as the savings made by the government, and this surplus is used to reduce the debt stock. In this way, debt ratios, such as the ratio of public debt to GDP, are expected to improve. An important goal of fiscal discipline is to accelerate economic growth. Reducing government borrowing is expected to stimulate investment and consumption by lowering interest rates and creating expectations of lower taxes in the future (Aslanoğlu, 2015).

Increasing budget deficits and the rising burden of public debt, driven by the continuous expansion of public expenditures, represent a major challenge for both developed and developing countries. This poses a problem not only for the sustainability of public finances but also for the maintenance of the overall dynamism of the economy. In response,

some restrictions or sanctions have been imposed on public financial management through legal and institutional regulations on managing public expenditures and budget deficits worldwide. In particular, with the impact of the global financial crisis of 2008, governments increased public spending significantly, and, leading to unpredictable levels of public debt. This situation called for a stronger understanding of fiscal discipline and debt sustainability. However, comprehensive and binding rules in this regard have not been implemented in the same way in all countries. While some countries have sought to control budget deficits and debt levels through strict fiscal rules, others have prioritized supporting growth and employment through flexible approaches. These different approaches have led to ongoing debates on the feasibility, effectiveness, and long-term implications of fiscal rules.

In this context, governments have introduced various policy packages and programs aimed at ensuring fiscal discipline. A prominent example is the implementation of the criterion that the ratio of public debt-to-GDP ratio should not exceed 60%, a standard upheld by European Union (EU) member and associate member countries. On the other hand, the IMF attaches considerable importance to the primary budget balance in its stand-by agreements with countries. These agreements is made on the condition that this criterion is met (Committeri et al., 2019).

While fiscal discipline is commonly assessed through the lens of the overall budget balance, alternative indicators are also utilized. Among these, the primary budget balance is frequently cited as a key indicator of fiscal discipline. In practice, however, three alternative measures stand out particularly in practice. The first is the cyclically adjusted primary budget balance proposed by Blanchard (1990); the second is the budget balance adjusted for potential growth rates (structural balance) used by Ortiz et al. (2007); and the third is the cyclically adjusted operational budget balance indicator also proposed by Blanchard (1990) (Özatay, 2008). However, using the primary budget balance is often considered a sound method to calculate the fiscal impact given that interest payments lie outside the immediate control of the government and are shaped as a result of the implementation of fiscal policies in previous years (Blanchard, 1990; Ortiz et al., 2007; Çebi & Özlale, 2011).

When evaluating the impact of fiscal policy on economic fluctuations, it is crucial to analyse the budget balance not only in nominal terms but also in its cyclically adjusted form. The cyclically adjusted budget balance is particularly important for determining whether fiscal policy assumes a discretionary and counter-cyclical role in stabilizing the economy. This indicator is derived by excluding budget components that are sensitive to cyclical fluctuations from the actual budget balance. In other words, the cyclically adjusted budget balance represents the budget position that would prevail if the actual level of national income were equal to its potential output (Cebi & Özlale, 2012).

Several key factors affect the primary budget balance. These include macroeconomic factors (such as economic growth, inflation, interest rates, and public debt stock), fiscal policy components (including tax policies, public expenditures, and automatic stabilizers), structural factors (such as demographic dynamics, debt sustainability, fiscal rules, and discipline mechanisms), and external factors (including global economic conditions like recessions, trade contractions, and crises, as well as exchange rate fluctuations, external debt levels, and unexpected shocks such as natural disasters, pandemics, or wars).

The objective of this thesis is to evaluate the effectiveness of the spending review mechanism in OECD member countries by analyzing its impact on the primary budget balance, along with the variables affecting this balance. In this context, the primary budget balance is defined as the dependent variable, while the factors affecting it are examined as independent variables. Before conducting the econometric analysis, a review of both domestic and international empirical studies on the primary budget balance was carried out. These studies are summarized in Table 4.1 under the heading Literature Review.

4.2. Empirical Literature

A review of the empirical studies in the literature shows that there are a number of studies analysing the effects of the primary budget balance on key economic variables. This

function is used to identify the existence, intensity, and direction of the primary balance's response to changes in public debt levels. The fiscal reaction function is designed to reveal the relationship between the primary balance set by governments and many economic and non-economic determinants, in particular public debt. More precisely, this reaction function reveals whether the primary budget balance, together with other determinants, responds positively (or negatively) to increases (or decreases) in the debt level. The first analytical examination of the fiscal response of the primary balance to multiple determinants, particularly debt, was conducted by Bohn in 1998 (Akbayır & Yerele, 2020). Fiscal response is a function that allows governments to anticipate some macroeconomic changes and respond to these changes with fiscal instruments such as revenue and expenditure policies, tax regulations and debt management. This function is sensitive to the impact of factors such as economic growth, inflation, debt dynamics and business cycles, and plays a crucial role in government decision-making to ensure fiscal sustainability and maintain economic stability.

Bohn (1998) evaluated fiscal sustainability by testing the intertemporal budget constraint of the United States for the period 1916-1995 and evaluated fiscal sustainability using the model-based sustainability (MBS) test. Bohn (1998) analysed whether the primary budget surplus is an increasing function of the public debt ratio, including war expenditures and business cycles as control variables. According to Bohn's findings, the public debt ratio returns to its mean level and the reaction coefficient of the public debt ratio has a significantly positive sign. Therefore, it is concluded that the fiscal policy of the United States is sustainable (Bohn, 1998). After Bohn's study, many studies have been conducted on different groups of countries.

Prati and Drudi (1999) investigated the reasons why governments delayed debt stabilization and deviated from optimal fiscal policy in Italy, Ireland, Belgium and Denmark over the period 1979-1998 by formulating a signalling model. The study argues that the primary balance and public debt are closely related to countries' creditworthiness and tests the theory in selected countries. The results of the study suggest that sovereign credit ratings are positively correlated with the primary balance and negatively correlated with the debt-to-GDP ratio. It was concluded that countries with a small debt stock can have a high credit rating even

if their primary deficit is high, while countries with a large debt stock need to run a primary surplus to achieve the same credit rating. Credible but not fully creditworthy governments want to reassure the markets by tightening fiscal policy when the debt stock reaches a certain level and therefore adopt a signalling strategy by raising the debt level to a certain threshold (Prati & Drudi, 1999).

Ballabriga and Martinez-Mongay (2002) analysed the response of the primary budget surplus to the output gap and debt accumulation for 13 EU member states using annual data from 1979-1998 using the non-linear GMM method. It was found that all countries respond to debt accumulation by increasing the primary surplus, the response is statistically significant in 11 countries, the estimated response to the output gap is significant in most countries and has the expected positive sign except for one country, implying that the fiscal stance is countercyclical. The maximum response to debt accumulation is 1.04, and the minimum response is 0.02, while the maximum response to the output gap is 1.46 and the minimum response is -0.09 (Ballabriga & Martinez-Mongay, 2002).

IMF (2003) found a non-linear relationship between primary balance and debt for 54 countries (34 emerging and 20 industrial countries) for the period 1990-2002 using the Generalized Least Squares (GLS) model. What distinguishes this study from others is the inclusion of a new factor, “oil prices”, in addition to variables such as debt and output gap, which are considered to be among the determinants of the primary balance. According to the results of the study, the response of the primary balance to an increase in the debt level is weaker in industrial countries and stronger in emerging markets (IMF, 2003).

Abiad and Ostry (2005) analysed 31 emerging market economies over the period 1990–2002 using the Generalized Least Squares (GLS) model and found a non-linear relationship between the primary balance and public debt. The study examined how both economic and institutional factors affect the primary surplus. The economic variables included the “output gap”, “inflation”, “oil and non-oil commodity prices”, while the institutional and policy-related determinants included the existence of a “fiscal responsibility law”, the “medium-term fiscal framework”, and non-economic factors, namely “election year” (dummy

variable), “IMF-supported program” (dummy variable), and “separation of powers principle”. In this context, the study also examined the role of fiscal rules -such as fiscal responsibility laws and medium-term frameworks- in strengthening fiscal discipline and shaping fiscal behaviour. To capture non-linearities, a spline function was introduced into the model, which allowed the slope of the debt effect to change when the debt-to-GDP ratio exceeded 50%. This approach provided better explanatory power than alternative specifications and showed that fiscal effort tends to weaken when debt levels exceeds this threshold, emphasizing the importance of institutional fiscal frameworks in ensuring sustainability (Ostry & Abiad, 2005).

Bohn (2005) analysed the sustainability of fiscal policy in the United States for the period 1792-2003. In this study, he tested whether the primary balance and the public debt to GDP ratio are integrated by rejecting unit root tests. This study was consistent with Bohn’s 1998 study and showed that there is a statistically significant and positive relationship between the primary balance and the debt to GDP ratio (Bohn, 2005).

Celasun et al (2006) analysed 34 emerging economies over the period 1990-2004 using LIML regression and System GMM to examine the relationship between primary balance and public debt. Possible factors affecting the primary balance other than debt include “output gap”, “oil prices”, “institutional quality index”, “sovereign default status” and “IMF-supported programmes”. Accordingly, the positive relationship between the primary balance and debt has a bracket around 50% of the debt-to-GDP ratio. When the debt-to-GDP ratio is below 50%, the government’s response to debt is stronger. However, the response to economic fluctuations is asymmetric. In particular, the deterioration in fiscal balances during recessions is larger than the improvement during growth periods. This shows that the negative impact of recessions on fiscal policy is more pronounced than that of economic recovery processes (Celasun et al., 2006).

Claeys (2008) analysed the sustainability of fiscal rules by using the GMM method in a study on Sweden for the period 1970:1-2006:4. The main findings show that the government has not increased the primary surplus sufficiently to pay off its existing debt and that the response of the primary surplus to debt is not statistically significant. Moreover, the negative

sign indicates that an increase in the debt level increases the budget deficits and that the public debt in Sweden is not sustainable (Claeys, 2008).

Turrini (2008) estimated fiscal response functions for 11 EU countries over the period 1980-2005 using the LSDV (Least Squares Dummy Variables) method. The change in the cyclically-adjusted primary surplus is used as the dependent variable, while lagged values of the dependent variable, debt and output gap are used as independent variables, as well as dummy variables that take the value 1 after 1992 and 1999. The increase in the cyclically-adjusted primary expenditure-to-GDP ratio appears to be more limited in countries with stronger spending rules. This finding supports the expectation that expenditure rules can contain the pro-cyclical trend of spending in good times (Turrini, 2008).

Debrun et al. (2008) evaluated the performance of the fiscal rule in 25 EU member states over the period 1990-2005. The dependent variable is cyclically-adjusted primary budget balance; the explanatory variables are a lag of the dependent variable, the debt lag, the output gap, two dummy variables that take the value 1 after 1992 and 1999, and the fiscal rule coverage index. The study finds that fiscal rules have a positive impact on the CAPB, which is used as the dependent variable (Debrun et al., 2008).

De Mello (2008) estimated fiscal reaction functions using OLS techniques on Brazilian data for the period 1995-2004. The results suggest that governments react strongly to changes in borrowing and adjust their primary budget surplus targets accordingly. Using the primary surplus as the dependent variable, his analysis shows that the primary surplus responds positively and strongly to changes in the debt level. Moreover, the positive sign of the output gap suggests that lower primary surpluses may occur in periods of economic contraction (De Mello, 2011).

Golinelli and Momigliano (2008) analysed data from 1978-2006 and used the GMM method to identify three fundamental forms of fiscal policy reaction functions in 11 EMU countries. The analysis evaluates the impact of different modelling choices, data sources and time periods on the results, highlighting the significance of these factors in policy analysis.

Three primary models of fiscal policy behaviour are identified, including variables such as public debt and budget deficit, as well as the output gap. Regarding the dependent variable, the first and second models consider changes in the cyclically adjusted primary balance, while the third model examines changes in the primary balance. As for the independent variables, in addition to the debt and the output gap, the first model includes the lagged value of the cyclically adjusted primary balance, while the second and third models include the lagged value of the primary balance. The findings highlight that the estimated parameters related to initial fiscal conditions are generally stable across specifications and that the choice between concurrent and lagged output gap values has limited impact on most estimates, except for a partial sensitivity observed cyclical response of the third model (Golinelli & Momigliano, 2008).

Mendoza and Ostry (2008) considered a large panel of 56 economies (34 emerging economies and 22 industrial countries) for the period 1990-2005. Using panel data analysis, the study examined the responsiveness of the primary budget balance to public debt, including “GDP at current prices” and “real GDP” as additional explanatory variables. The variables “output gap” and “government expenditure gap” obtained with the HP filter were included. As the coefficient of the fiscal response is significantly positive, the fiscal solvency condition is satisfied. Accordingly, fiscal response functions have been estimated for both developing and developed countries, and the results indicated that the fiscal solvency condition was satisfied, as the fiscal response coefficient was significantly positive. In developed countries, an increase of 100 basis points in the debt/GDP ratio leads to an increase of 3.8 units in the primary balance/GDP ratio. In emerging economies, on the other hand, the primary balance is sensitive to the debt ratio. The responsiveness of the primary balance to debt is found to weaken significantly when the debt-to-GDP ratio exceeds 50% (Mendoza & Ostry, 2008).

Fatas and Mihov (2009) estimated the fiscal rule or reaction functions of 22 OECD member countries over the period 1970-2007. The authors used the primary balance and the countercyclical adjusted balance as dependent variables, and a lagged value of debt, the output gap, and a lagged value of the dependent variable as independent variables. Using the primary balance as the dependent variable, the coefficient of the output gap is found to be 0.156 for the

euro area (12 countries). The coefficient of the output gap is estimated to be 1.096 at the highest and -0.194 at the lowest. The coefficient on the output gap is found to be negative for only 2 countries and significant for 9 countries (Fatas & Mihov, 2009).

Doi et al. (2011) analysed the response of the primary balance to the increase in the debt ratio in Japan over the period 1980-2009. The study is based on the Hodrick-Prescott filtering method and finds that the primary balance does not respond to the increase in the debt-to-GDP ratio. According to the results, there are two regimes in which the primary balance responds differently to an increase in the public debt. In Regime 1, the coefficient on the debt ratio is negative. This implies that an increase in the debt ratio leads to a decrease in the primary balance. The coefficient on the GDP deficit is positive and statistically significant. This suggests that the primary deficit is highly sensitive to the business cycle. In Regime 2, the estimated coefficient on the debt ratio is positive. This result suggests that fiscal dynamics may be sustainable. However, as the coefficient estimate is small, it is not statistically different from zero. The coefficient on the GDP gap is also not significantly different from zero. This suggests that the impact of countercyclical fiscal policy is rather weak (Doi et al., 2011).

Zandi et al. (2011) used panel regression techniques to examine the relationship between the primary budget balance and public debt, as well as market interest rates, endogenous interest rates, debt ceilings, and fiscal space, for 30 advanced economies over the period 1985–2007. A large number of demographic and economic variables were tested and a non-linear relationship between primary balance and public debt was found. The fiscal space values obtained are related to the credit ratings of the rating agency Moody's Investors Service Inc., which also takes into account debt default. This provides an assessment of which of the 20 advanced economies have exhausted their borrowing capacity and which have fiscal space. (Zandi et al., 2011).

Afonso and Jalles (2011) examined the relationship between primary balance and public debt for OECD member countries over the period 1970-2010. Using 2SLS, IV-GLS, and GMM, the study found statistically significant and positive coefficients for the lagged

first-differenced debt ratio in the fiscal policy response function. This suggests that governments increase the primary surplus in response to high debt levels in the previous period. Moreover, the positive impact of the output gap on the primary balance provides evidence of countercyclical fiscal policy. In addition, above-trend economic growth in the past has been associated with a reduction in the public debt levels (Afonso & Jalles, 2011).

Sakuragawa and Hosono (2011) examined the relationship between the primary budget balance and public debt using OLS to study fiscal sustainability in Japan over the period 1981-2009. The model took into account the evolution of interest rates, growth rates, and public debt over time, with a particular focus on the sensitivity of the primary budget to debt. The main findings of the study are that if Japan does not respond to the current fiscal crisis, the debt-to-GDP ratio will rise rapidly and public debt will become unsustainable in the long run. The study shows that debt can be brought under control if the primary budget is in surplus for a period of time. For example, if the primary budget deficit is turned into a surplus within 10 years and a surplus of 2.2% of GDP is achieved within 20 years, the debt-to-GDP ratio can be stabilized at a certain level (Sakuragawa & Hosono, 2011).

Jooste et al. (2011) examined how the government in South Africa responded to changes in the debt balance from a historical perspective over the period 1974-2008. The study, which considered the primary budget balance and debt, used a variety of methods, including Ordinary Least Squares (OLS), Vector Autoregression (VAR), General Method of Moments (GMM), and Vector Error Correction (VECM), and estimated the fiscal response function using Threshold Autoregressive (TAR) and State-Space models to assess nonlinearities. The study finds that the South African government adjusts the primary budget balance in response to the level of public debt, indicating debt sustainability. Counter-cyclical fiscal policies have been implemented particularly during periods of economic recession. As economic conditions changed after the 1970s, the fiscal response to debt increased. In the long run, the primary budget balance has been positive and debt sustainability has generally been achieved. However, in some periods, such as the 1990s, pressure on debt levels has increased. By 2014/15, the debt-to-GDP ratio is expected to remain below 50% and hover around 40% (Jooste et al., 2011).

Lukkezen and Rojas-Romagosa (2012) examined the fiscal response to debt in seven OECD member countries (the United States, the United Kingdom, the Netherlands, Belgium, Spain, Portugal, and Iceland). The time period for which the data was analysed varies across countries and the study uses OLS, YVAR and GVAR methods. It is found that in some countries, the primary surplus responds positively to increases in the arrears ratio, while in others, a negative response is observed. While the coefficient of debt is positive and significant in the US, the UK, the Netherlands and Belgium, it is insignificant in Spain, Portugal and Iceland. The study found non-linearities in the relationship between the primary balance and the debt-to-GDP ratio in both directions (Lukkezen & Rojas-Romagosa, 2012).

Tapsoba (2012) analysed the effect of fiscal rules on fiscal discipline in 74 developing countries over the period 1990-2007, using the cyclically adjusted primary budget balance to GDP ratio. The effect of fiscal rules (FR) on fiscal discipline was found to be positive and significant. Budget balance rules (BBR) and expenditure rules (ER) contribute to fiscal discipline, while the impact of debt rules (DR) is uncertain. The effectiveness of fiscal rules depends on factors such as the stability of the government, the duration of the rules and the existence of supranational fiscal rules (Tapsoba, 2012).

Hajnovic and Zeman (2012) found a non-linear relationship between primary balance and debt in a study of EU member states for the period 1995-2008. Before the crisis, the decline in debt was associated not only with economic growth but also with low interest rates. The acceleration of debt growth during the global crisis was attributed to the rapid deterioration of all factors affecting debt. The combination of a negative primary balance, a rising cost of debt and a slowdown or decline in nominal GDP poses a serious risk to fiscal sustainability (Hajnovic & Zeman, 2012).

Mauro et al (2013) analysed the fiscal response function of countries using a comprehensive data set covering 55 countries for the period 1950-2011, and found that the overall response coefficient is 0.02. The response of the primary budget balance to changes in government debt is found to be significantly related to long-term real GDP growth rates and

secondary market interest rates on long-term government bonds. On the other hand, an increase in the cost of sovereign borrowing induces policymakers to tighten fiscal policy. In addition, a rise in interest rates increases governments' efforts to improve the primary budget balance (Mauro et al., 2013).

Baldi and Staehr (2013) assessed the fiscal response function of the primary balance for different EU groups (some of the countries are classified according to the level of integration into the EU structure, others according to the severity of the countries' economic distress in the post-2008 crisis) over the period 2000-2012. The findings indicate that the primary budget balance has a stabilizing effect on the debt stock, with a positive and significant impact observed for the whole sample. However, this relationship is not evident for the Euro Area and the Central and Eastern European (CEE) countries. The fiscal policy response to the debt stock seems to have strengthened after the global crisis. Furthermore, the primary budget balance is found to be countercyclical in the overall sample and in the Euro Area, but not in the CEE countries (Baldi & Staehr, 2013).

Ghosh et al. (2013) estimated the fiscal reaction function for 23 advanced economies between 1970 and 2007 and found a non-linear relationship between primary balance and debt. The analysis suggests that while the relationship is positive at moderate debt levels, it tends to weaken as debt increases. When the debt-to-GDP ratio exceeds 150%, the relationship approaches zero or becomes negative- an outcome referred to as fiscal fatigue (Ghosh et al., 2013).

Zdravković et al. (2013) used GMM regression to examine the effect of government debt on the primary balance of 21 countries in the Central, Eastern, and Southeastern Europe (CESEE) region over the period 1995-2012. The study finds that both lagged debt and output gap are positively related to primary balance and fiscal fatigue, which is a non-linear relationship. Both lagged debt and output gap are positively related to the primary balance in all CESEE countries analysed (Zdravković et al., 2013).

Bastos and Pineda (2013) examined the relationship between the primary surplus and debt levels in 26 Brazilian states and the Federal District over the period 2000–2011, using the System GMM method. The analysis revealed a non-linear relationship between the primary surplus and debt levels. The government expenditure gap was found to be negative and significant, indicating that increased government expenditure has a negative impact on the primary surplus. The output gap and inflation had no statistically significant impact. Furthermore, fiscal vertical imbalance had a negative and significant impact, suggesting that unequal cost-sharing arrangements between central and local governments negatively influence the primary surplus (Bastos & Pineda, 2013).

Afonso and Guimarães (2014) analysed the impact of fiscal rules on budget balance and public revenues in 27 EU member states for the period 1990-2011, using a panel data methodology. They concluded that fiscal rules, especially expenditure rules, contribute to reducing budget deficits and had a significant impact on primary expenditure. However, it is concluded that government bond yields of countries implementing fiscal rules decreased. Simulation results show that the same rules applied in different countries have different effects, especially due to the initial level of primary expenditure (Afonso & Guimarães, 2014).

Zeng (2014) analysed the relationship between the primary balance and its determinants using panel data covering 61 countries (29 advanced economies, 22 emerging market economies, and 10 low-income countries) for the period 1990-2007 using fixed effects and dynamic panel data (DPD) methods. The main results of the fixed effects model are as follows: The impact of real growth on the primary balance is positive and significant. When the real GDP growth rate increases by 1 percent, the primary balance improves by 0.53 percent of the GDP. The coefficients of the debt-stabilizing primary balance and public debt stock variables are statistically significant and positive. When the primary surplus required for debt stabilization increases by 1%, the primary surplus reported by countries increases by 0.3%. In the dynamic model, this effect is 0.2% in the short run, but increases to 0.5% in the long run. The direct effect of public debt on the primary surplus is small, yet positive and significant. The effect of inflation on the primary balance is positive and significant (Zeng, 2014).

Égert (2014) analysed the pro-cyclical behaviour of fiscal policy instruments using least squares dummy variables and GMM for 25 OECD countries over the period 1970-2008. They found evidence of asymmetric and non-linear effects on public debt. Primary balances were found to be counter-cyclical. Countries with public debt/GDP ratios above 90% tend to have pro-cyclical policies, while countries with deficits above about 3% of GDP tend to be pro-cyclical (Égert, 2014).

Cordes et al. (2015) analysed the effects of expenditure rules and fiscal performance in 57 developed and developing countries with and without expenditure rules between 1985 and 2013. They examined whether countries with expenditure rules performed better in terms of primary budget balance and primary expenditure. As a result of the study, it was found that countries with expenditure rules had, on average, a better performance in terms of primary budget balance compared to other countries, and the volatility of public expenditures decreased after these countries started to implement expenditure rules (Cordes et al., 2015).

Kurniawan (2015) analysed the sustainability of fiscal policy in Indonesia over the period 1990-2010 by examining the response of the primary budget balance to changes in the debt stock, as proposed by Bohn (1998) in his Model-Based Sustainability approach. The study found that the response of the primary balance to the debt stock was positive and statistically significant. It concluded that the response of the primary budget balance to fluctuations in the debt level has stabilized over time and that Indonesia's fiscal policy has followed a positive path in terms of sustainability (Kurniawan, 2015).

Yang et al. (2015) used panel regression analysis to test the effect of changes in the primary balance on macroeconomic variables in 20 OECD countries over the period 1970–2009. According to the results of the study, an increase in the primary balance of 1% of GDP in the previous year reduces the probability of fiscal adjustment by 2.2%, suggesting that economies with strong fiscal positions are less likely to implement further corrective measures. In contrast, the relationship between the debt-to-GDP ratio and fiscal adjustment appears to be weak and statistically insignificant. Moreover, changes in the primary balance

have been found to have a short-run contractionary effect on economic growth (Yang et al., 2015).

D'Erasmus et al. (2015) estimated the fiscal reaction function for 25 advanced economies and 33 emerging market economies over the period 1951-2013 and found a non-linear relationship between debt and primary balance. They found that, on average, the fiscal policies of these countries were sustainable, but with large variation depending on the model estimated (D'Erasmus et al., 2015).

Nerlich and Reuter (2015) analysed the impact of fiscal rules on fiscal space for 27 EU countries over the period 1990-2014. Fiscal rules contribute to increasing fiscal space by disciplining the primary budget and increasing credibility by reducing the country's interest payments. This is because fiscal rules keep the country's overall debt level under control and ensure that the debt limit is raised before the debt becomes unsustainable. To control for other factors affecting the primary budget, the analysis includes variables such as "output gap", "government expenditure gap", "trade openness", "inflation", "age dependency ratio", "future age dependency ratio", "oil prices", "government fragmentation", "IMF arrangement", and "fiscal rules". Countries with spending rules were found to have higher primary budget surpluses and lower debt levels (Nerlich & Heinrich Reuter, 2015).

Baldi and Staehr (2016) estimated the fiscal response function for the period 2001-2014 using quarterly fiscal data for 27 EU countries. Analysing the pre-crisis period 2001-2008 and the post-crisis period 2009-2014, the effect of debt stock on the primary budget balance before the crisis was positive for the EU27 group. With the onset of the crisis, the relationship between debt stock and budget balance turned negative. In other words, countries started to implement stronger fiscal policies to reduce budget deficits as their debt levels increased (Baldi & Staehr, 2016).

Şahingöz (2016) analysed the short-run and long-run effects of primary balance on "economic growth", "inflation", and "unemployment" in the Turkish economy for the period 1980-2015 using ARDL and Toda-Yamamoto causality tests. Although there is a long-run

relationship between primary balance and growth in the ARDL bounds test, the long-run and short-run coefficients are statistically insignificant. No short-run causality was found in the Toda-Yamamoto causality test. The impact of the primary balance on inflation was analysed using the Toda-Yamamoto approach, and a causality relationship was found from the primary balance to the inflation rate. The direction of the effect was found to be negative (Şahingöz, 2016).

Fournier et al. (2017) examined the relationship between primary budget balance and debt using a panel regression model for 31 OECD member countries for the period 1985-2013. The study found that the primary budget balance shows a non-linear response to rising debt. When public debt reached 120% of GDP, fiscal authorities implemented substantial corrective measures to limit further debt accumulation. However, as the debt ratio approached 170% of GDP, the responsiveness of fiscal policy weakened, indicating the onset of fiscal fatigue. Nevertheless, the overall fiscal stance remained countercyclical in response to economic fluctuations (Fournier & Fall, 2017).

Checherita-Westphal and Žďárek (2017) examined the relationship between primary budget balance and debt using GMM, fixed effects, and IV methods for 18 European countries for the period 1970-2013. The study found that for every 1% increase in the debt-to-GDP ratio, the primary budget balance improved by about 0.03-0.05. This effect on the primary balance increased with the 2008 crisis and the response to the debt stock became stronger. The effect of the output gap on the primary balance is not statistically significant. However, when using the GDP growth rate or excluding crisis years, fiscal policy appears to be countercyclical to a limited extent (Checherita-Westphal & Žďárek, 2017).

Icaza (2018) analysed the response of the primary budget balance and debt for 15 Euro Area countries over the period 1980-2013. Using OLS and GMM methods, the analysis showed that negative output gaps and rising government debt persist despite improvements in the primary budget balance. The study also examined the impact of institutional factors and economic growth on the primary budget balance as the level of debt rises, and provides evidence that this interaction can lead to positive results. When the level of debt interacts with

institutional strength or economic growth, the primary budget balance is positively affected. However, when debt interacts with a negative output gap, the impact on the primary budget balance becomes more negative (Icaza, 2018).

Lankester-Campos et al. (2020) estimated the fiscal response function for Costa Rica for the period 1974–2018 and evaluated the impact of public debt on the primary balance. The study employed OLS, VAR, VECM, TAR, and GMM methods. The results of the analysis showed that the response of the primary budget surplus to the previous year's public debt ratio was positive and significant. However, in the short run, the effect of the public debt on the primary balance was negative. The main reasons for this outcome were inefficient tax collection efforts, ineffective use of debt to support economic growth, a low growth rate of capital expenditures, and a faster increase in debt interest payments compared to tax revenues. Furthermore, it was found that fiscal sustainability was not achieved when control variables were not included in the model, highlighting the importance of these variables in evaluating fiscal performance (Lankester-Campos et al., 2020).

Aldama and Creel (2020) analysed the response of the primary balance to public debt in France over the period 1965-2013. Using French data, the study hypothesized that fiscal policy could switch between sustainable and unsustainable regimes using a Markov switching model. The results show that when traditional sustainability tests (such as Bohn's Model-Based Sustainability (MBS) tests) are used, French public finances are found to be unsustainable. However, when a new test that takes regime variability into account (the Regime-Switching Model-Based Sustainability Test, RS-MBS) is applied, France is found to have achieved long-term fiscal sustainability. In estimations based on fixed-parameter fiscal rules, the impact of public debt on the primary surplus is mostly insignificant or negative. However, the output gap and temporary public expenditures have a significant impact on the primary balance. Estimation with Markov models taking into account regime variability shows that French fiscal policy operates in two different regimes. In the sustainable regime, the effect of debt on the primary surplus is positive and significant, while in the unsustainable regime, the level of debt has no significant effect on the primary surplus (Aldama & Creel, 2020).

Ramos-Herrera and Prats (2020) studied fiscal sustainability in 20 EU countries over the period 2000-2019 using a panel autoregressive distributed lag (ARDL) model. The main results of the study show that fiscal sustainability is achieved in the short run, but the debt stock does not react adequately in the long run. In other words, governments react to changes in debt in the short run but fail to ensure debt sustainability in the long run. Moreover, the primary balance deteriorates above a certain debt threshold. The threshold is set at 93.01%, below which debt is sustainable and above which fiscal sustainability is at risk (Ramos-Herrera & Prats, 2020).

Small et al. (2020) investigated the fiscal response to the debt-to-GDP ratio using an unbalanced panel data analysis covering 53 developing countries over the period 1990-2017. In the study, “primary balance”, “fiscal effort”, “central government revenues”, “tax revenues”, and “primary spending” are considered as dependent variables, while “lagged debt-to-GDP ratio” is used as an independent variable. According to the results of the study, the primary balance and tax revenues respond positively to debt increases, while primary spending responds negatively. In particular, when the debt-to-GDP ratio exceeds 90%, countries show a more aggressive fiscal response by increasing the primary balance, tax effort and revenues, but reducing primary expenditure (Small et al., 2020).

Mupunga and Ngundu (2020) examined the fiscal response functions in 34 SSA countries over the period 2000-2016 using methods such as GMM and OLS. In general, there is a positive relationship between the primary fiscal balance and public debt in SSA countries. However, this relationship is stronger in the 2000-2008 period than in the 2009-2016 period. According to the findings of the study, as public debt increased in SSA countries, fiscal authorities acted to improve the primary balance, but this response level remained at a lower level compared to other developing and developed countries (Mupunga & Ngundu, 2020).

Ayyubi and Saputra (2021) analysed the impact of government debt on the primary balance in Indonesia for the period 1980-2018. The study used the Autoregressive Distributed Lag (ARDL) method and found that government debt had a positive impact on the primary balance in the long run. In the short run, government debt has a negative impact on the

primary balance. This is due to poor tax collection, inefficient use of debt and low investment. The study also finds that inflation and investment increase the primary balance. The exchange rate is found to have a negative impact on the primary balance in the short run, but a positive relationship in the long run. The current account deficit is found to reduce the primary balance (Ayyubi & Saputra, 2021).

Mitsi (2021) analysed the impact of fiscal rules on the primary balance between PIIGCS and DFGNS countries in the period 1996-2018. In his study, he considered the factors affecting the primary balance proposed by Bohn (1998). The empirical analysis is based on panel data using fixed effects and random effects models. The results show that the “previous period’s primary balance”, “debt”, “real growth”, “inflation”, “the fiscal rule index”, and the “fiscal councils” have a positive and statistically significant effect on the primary balance. In particular, a change in the fiscal institutional structure is found to significantly improve the primary budget balance in PIIGCS countries (Mitsi, 2021).

Uçal (2021) analysed the effect of primary surplus on economic growth in Türkiye for the period 1998-2013 using cointegration analysis. According to the results of the study, primary surplus is positively related to economic growth in the long run. In the long run, a 1% increase in primary surplus increases economic growth by 0.73%. In the short run, according to the coefficients obtained from the error correction model, a positive and significant relationship was found between primary surplus and economic growth (Uçal, 2021).

Martin and Savatier (2021) tested the fiscal response function in the euro area for the period 1995-2019 using fixed effects panel regression. They found that governments increase the primary budget surplus when interest payments of the previous year increase. When variables such as the debt-to-GDP ratio and the long-term interest rate are added, the relationship between interest payments and the primary balance weakens slightly. The impact of interest payments on the primary budget depends mainly on the debt-to-GDP ratio, and the interest rate component seems to have little effect (Martin & Savatier, 2021).

Abindaw Nabieu et al. (2023) used unbalanced panel data to assess the current status of public debt, fiscal balance and debt sustainability in SSA countries over the period 1980-2017. OLS, QR, IVQR, GMM and PVAR were used in the study. The lagged primary budget balance is found to be positive and statistically significant in all estimation methods. This suggests that the primary budget balance is stable over time. The impact of government debt on the primary balance gives mixed results: In OLS estimations, the debt coefficient is positive but statistically insignificant. In IV estimations, the debt coefficient is positive and statistically significant at the 10% significance level. In SGMM estimations, the debt coefficient is negative but statistically insignificant. These results indicated that the primary fiscal balance of SSA countries is not fully responsive to debt and that the impact of debt levels on the primary balance is limited. In the IV estimates, the coefficient on the output gap is positive and statistically significant, suggesting that the primary budget balance is procyclical. However, this result is not consistent with other estimation methods (Abindaw Nabieu et al., 2023).

Woldu & Kanó (2024) examined the response of the primary balance to public borrowing in 40 SSA countries over the period 2000-2019 using various estimation techniques such as GMM, Prais-Winsten regression, bias-corrected FE, regression with Driscoll-Kraay standard errors, and FE (within) regression with AR(1) disturbances. In the study, the relationship between primary balance and debt is non-linear. When debt levels are relatively low, governments are able to maintain primary surpluses and ensure debt sustainability. However, as the debt-to-GDP ratio rises, primary surpluses tend to decline. The analysis suggests that up to a threshold of 55% debt-to-GDP, countries can generate sufficient surpluses to sustain debt, while beyond this point, the primary balance becomes inadequate to stabilize debt levels, undermining fiscal sustainability (Woldu & Kanó, 2024).

Although limited in number, some studies in the literature addressed spending reviews. Among these, the study by Kneller (2000), which examined the effects of spending reviews on macroeconomic variables, stands out. This study focused on the long-term effects of the Comprehensive Spending Review implemented in the United Kingdom in 1998 in the areas of education, health, and capital expenditures. The analysis was based on parameter estimates

presented in the works of Devarajan et al. (1996) and Bleaney et al. (2001) (Devarajan et al., 1996; Bleaney et al., 2001). Both studies found that the Comprehensive Spending Review was expected to add around 0.1 percentage points each year to the economic growth rate. However, differences in the sizes of the sub-components and the presence of margins of error indicated limitations regarding the precision of these estimates (Kneller, 2000).

Căpraru et al. (2024) analysed the effects of public spending reviews on the efficiency of public expenditures in the presence of fiscal institutions across 28 EU member states over the period 2000-2020. The study used Data Envelopment Analysis (DEA) to measure the efficiency of public spending and a panel Tobit regression model for econometric analysis covering all EU countries. Macroeconomic control variables included “debt per capita”, “GDP per capita”, “trade per capita” and “inflation”. The findings indicate that spending reviews have a positive and significant impact on the efficiency of public expenditures (Căpraru et al., 2023).

Among the few empirical studies on the fiscal effects of spending reviews in the context of Türkiye, Hançer (2024) is the first attempt to assess their impact on budgetary outcomes. Using a panel data set covering 25 OECD countries between 2009 and 2022, and applying the Driscoll-Kraay robust fixed effects model, the study finds that the negative impact of rising public expenditures on budget balances is mitigated in the presence of spending review mechanisms, highlighting their role in enhancing fiscal discipline (Hançer, 2024).

Given the growing need for spending reviews in the context of public expenditure management, this thesis examines the impact of spending review (SR) practices on the primary budget balance using a panel data set covering 31 OECD member countries over the 2000-2020 period. By incorporating a wide range of economic and fiscal indicators and applying macro-level panel data analysis, the study aims to offer a comprehensive and comparative evaluation of the fiscal implications of SR adoption. In this regard, the thesis contributes to the empirical literature by providing updated, statistically sound evidence on the

role of spending reviews in improving fiscal performance-particularly with respect to the sustainability of primary budget balances.

The primary balance has long been recognized in the literature as a critical indicator of fiscal discipline and debt sustainability, and has thus attracted considerable attention from both national and international scholars. More recently, empirical research on spending reviews – which are gaining momentum in the field of public expenditure management- has begun to explore their impact on fiscal outcomes, including the primary balance, expenditure efficiency, and long-term debt dynamics. The key empirical findings from both traditional studies on the primary balance and more recent analyses focusing on spending reviews are presented collectively in Table 4.1, with each study summarized individually to highlight its methodology, scope, and main conclusions.

Table 4.1. Comparative Analysis of the Empirical Literature on Primary Budget Balance

Study	Sample/Period	Data	Method	Main Findings
Bohn (1998)	1916-1995 United States	Primary balance	OLS	A positive relationship is found between the primary balance and the debt/GDP ratio.
Prati and Drudi (1999)	1979-1998 Italy, Ireland, Belgium and Denmark	Primary balance	Signaling model	Countries' credit ratings are positively related to the primary balance and negatively related to the debt/GDP ratio.
Ballabriga and Martinez-Mongay (2002)	1979-1998 13 EU Countries	Primary balance	GMM	Countries' primary surpluses have generally responded positively to debt accumulation.
IMF (2003)	1990-2002 54 countries (34 emerging markets and 20 industrial countries)	Primary balance	GLS, IV Fixed effects	A non-linear relationship is found between primary balance and public debt.

Abiad and Ostry (2005)	1990-2002 31 emerging market countries	Primary balance	GLS	A non-linear relationship is found between primary balance and debt.
Bohn (2005)	1792-2003 United States	Primary balance	OLS	A positive relationship is found between the primary balance and the debt/GDP ratio.
Celasun et al. (2006)	1990-2004 34 countries	Primary balance	LIML, System GMM	The positive relationship between primary balance and debt has a peak around 50% of the debt/GDP ratio.
Claeys (2008)	1970:1-2006:4 Sweden	Primary balance and Cyclically adjusted budget balances	GMM	The response of the primary surplus to debt was found to be statistically insignificant, and it was concluded that debt is not sustainable in Sweden.
Turrini (2008)	1980-2005 11 EU countries	Cyclically adjusted primary balances	LSDV	The increase in the cyclically adjusted primary expenditure-to-GDP ratio is more limited in countries with stronger expenditure rules.
Debrun et al. (2008)	1990-2005 25 EU countries	Cyclically adjusted primary balances	LSDV, OLS, IV	It is concluded that fiscal rules have a positive effect on CAPB, which is used as the dependent variable.
De mello (2008)	1995-2004 Brazil	Primary balance	OLS	The primary surplus responds positively and strongly to changes in debt, while the output gap has a positive sign.
Golinelli and Momigliano (2008)	1978-2006 11 EMU countries	Cyclically adjusted primary balances	System GMM, Dif GMM, OLS, 2SA	The initial fiscal conditions (lagged debt and budget deficit) have been found to have a strong and significant impact on fiscal policies.

Mendoza and Ostry (2008)	1990-2005 56 countries (34 emerging markets and 22 industrial countries)	Primary balance	Panel regression models	In both groups of countries, there is a positive relationship between the primary balance and government debt.
Fatas and Mihov (2009)	1970-2007 22 OECD countries	Primary balance	OLS, IV	It shows that the primary balance is more sensitive to the growth rate of real output than to the output gap.
Doi et al. (2011)	1980-2009 Japan	Primary balance	Markov switching and Tobit model	It is found that the primary balance does not respond to an increase in the debt ratio.
Zandi et al. (2011)	1985-2007 30 advanced economies	Primary balance	Panel regression models	A non-linear relationship is found between the primary balance and government debt.
Afonso and Jalles (2011)	1970-2010 OECD countries	Primary balance	2SLS, IV-GLS, GMM	The response of the primary balance to government debt is positive and countercyclical.
Sakuragawa and Hosono (2011)	1981-2009 Japan	Primary balance	DSGE	A primary budget surplus over a given period implies that the debt level can be brought under control.
Jooste et al. (2011)	1974-2008 South Africa	Primary balance	OLS, VAR, GMM, VECM, TAR, State-Space Model	In the long run, the primary balance is positive and debt sustainability is generally achieved.
Lukkezen and Rojas-Romagosa (2012)	7 OECD countries US, 1792-2009 UK, 1691-2009 Netherlands, 1816-1939, 1948-2009 Belgium, 1830-1913, 1919-1939, 1955-	Primary balance	OLS, YVAR, GVAR	There are non-linearities in the relationship between the primary balance and the debt-to-GDP ratio in both directions.

	2009 Spain, 1850-1935, 1940-2010 Portugal, 1852-2010 Iceland, 1908-2010			
Tapsoba (2012)	1990-2007 74 developing countries	Primary balance	PSM, 2SLS	The effect of the output gap on the primary balance is positive.
Hajnovic and Zeman (2012)	1995-2008 EU countries	Primary balance	Panel data analysis with fixed effects	There is a non-linear relationship between primary balance and debt.
Mauro et al. (2013)	1950-2011 55 countries (24 advanced and 31 non-advanced economies)	Primary balance	Panel regression models	The response of the primary budget balance to changes in government debt is found to be significantly related to long-term real GDP growth rates and secondary market interest rates on long-term government bonds.
Baldi and Staehr (2013)	2000-2012 EU countries	Primary balance	Panel data analysis	The response of the primary budget balance to the debt stock is positive and significant.
Ghosh et al. (2013)	1970-2007 23 advanced countries	Primary balance	Panel data analysis with fixed effects	The positive relationship between the primary balance and the public debt ratio weakens at high debt levels.
Zdravković et al. (2013)	1995-2012 21 CESEE	Primary balance	GMM	Both output gap and lagged debt are positively related to the primary balance in all CESEE countries.
Bastos and Pineda (2013)	2000-2011 26 Brazilian States and the Federal District	Primary balance	Panel data analysis with fixed effects	A non-linear relationship is found between the primary surplus and the debt level.
Afonso and Guimarães	1990-2011 27 EU countries	Cyclically adjusted primary	Panel data analysis,	Fiscal rules are found to improve budget balances and

(2014)		balances	OLS, IV, 2SLS	have significant effects on primary expenditure. In particular, strong fiscal rules are found to improve debt sustainability and lower long-term government bond interest rates.
Zeng (2014)	1990-2007 61 countries (29 advanced, 22 emerging market economies and 10 low income countries)	Primary balance	Fixed effects, OLS and GMM	-The effect of real growth on the primary balance is positive and significant. - The coefficients of the primary balance and public debt stock variables are statistically significant and positive.
Égert (2014)	1970-2008 25 OECD countries	Primary balance	LSDV, GMM	Primary balances are countercyclical.
Cordes et al. (2015)	1985-2013 57 advanced and developing economies	Primary balance	Dynamic panel estimation	Expenditure rules contribute to the maintenance of primary surpluses by strengthening fiscal discipline.
Kurniawan (2015)	1990 – 2010 Indonesia	Primary balance	OLS	The response of the primary balance to the debt stock is positive and statistically significant.
Yang et al. (2015)	1970-2009 20 OECD countries	Primary balance	Fixed-effects panel model	A 1% of GDP increase in the previous year's primary balance reduces the probability of a fiscal adjustment by 2.2%.
D'Erasmus et. al (2015)	1951-2013 25 advanced and 33 emerging economies	Primary balance	Panel data analysis	There is a non-linear relationship between debt and primary balance.
Nerlich and Reuter (2015)	1990-2014 27 EU countries	Primary balance	Panel data analysis	There is a non-linear relationship between the

				primary balance and debt.
Baldi ve Staehr (2016)	2001-2014 27 EU countries	Primary balance	OLS	The response of the primary balance to debt is found to be significant and positive in the full sample, but the relationship is not significant for the euro area and the CEE countries.
Şahingöz (2016)	1980-2015 Türkiye	Primary balance	ARDL, Toda Yamamoto	The ARDL bounds test between the primary balance and growth shows a long-run relationship, but the long-run and short-run coefficients are not statistically significant. The Toda-Yamamoto causality test finds no short-run causality.
Fournier et al. (2017)	1985-2013 31 OECD countries	Primary balance	Panel regression models	The primary balance shows a non-linear response to rising debt.
Checherita-Westphal and Ždárek (2017)	1970-2013 18 EA	Primary balance	Fixed effects, GMM, IV	The primary balance responds positively to increases in debt.
Icaza (2018)	1980-2013 15 Eurozone countries	Primary balance	GMM, OLS	Despite improvements in the primary balance, the negative output gap and rising public debt persist.
Lankester-Campos et al. (2020)	1974-2018 Costa Rica	Primary balance	OLS, GMM, VECM, VAR, TAR	The response of the primary budget surplus to the government debt ratio of the previous year is positive and significant. However, its effect on the primary balance is negative in the short run.
Aldama and Creel (2020)	1965-2013 France	Primary balance	Markov-switching	Using French data, a Markov switching model assumes

				that fiscal policy can switch between sustainable and unsustainable regimes.
Ramos-Herrera and Prats (2020)	2000-2019 20 EU countries	Primary balance	Panel ARDL	It is found that fiscal sustainability is achieved in the short run, but the debt stock does not respond sufficiently in the long run.
Small et al. (2020)	1990-2017 53 developing countries	Primary balance	GMM	The primary balance and tax revenues respond positively to debt increases, while primary expenditures respond negatively.
Mupunga and Ngundu (2020)	2000-2016 34 SSA countries	Primary balance	GMM, OLS	The response of the primary balance to increases in public debt is positive and statistically significant in SSA, but lower than in advanced and emerging economies.
Ayyubi and Saputra (2021)	1980-2018 Indonesia	Primary balance	ARDL	Government debt has a positive effect on the primary balance in the long run and a negative effect in the short run. Inflation and investment are found to increase the primary balance, while the exchange rate has a negative effect.
Mitsi (2021)	1996-2018 PIIGCS and DFGNS countries	Primary balance	Fixed effects and random effects	It confirms that fiscal rules and fiscal councils have a positive impact on the primary budget balance in both PIIGCS and DFGNS countries. Moreover, real growth, inflation and trade openness are found to be

				important determinants for both groups of countries.
Uçal (2021)	1998- 2013 Türkiye	Primary balance	Co- integration analysis	The primary surplus is positively associated with economic growth in the long run.
Martin and Savatier (2021)	1995-2019 Eurozone Area countries	Primary balance	Fixed effects	The impact of interest payments on the primary budget depends mainly on the debt-to-GDP ratio, and the interest rate component has a small impact.
Abindaw Nabieu et al. (2023)	1980-2017 Sub-Saharan African countries	Primary balance	IV, QR, IVQR, GMM, PVAR	The lagged primary balance is positive and statistically significant in all estimation methods.
Woldu and Kanó (2024)	2000-2019 40 SSA countries	Primary balance	GMM, Prais- Winsten, FE, Driscoll- Kraay, AR(1)	The relationship between primary balance and debt is non-linear. While governments can run a primary surplus when debt levels are low, it is observed that the primary surplus declines as debt increases.
Kneller (2020)	1998 United Kingdom	Spending Review	Simulation- based analysis using parameter estimates from existing growth models	The Comprehensive Spending Review was projected to contribute approximately 0.1 percentage points annually to long-term economic growth, though estimate precision is limited.
Căpraru et al. (2024)	2000–2020 28 EU Member Countries	Spending Review	Data Envelopment Analysis	Spending reviews have a positive and significant impact on the efficiency of

			(DEA) and Panel Tobit Regression	public spending in the presence of fiscal institutions.
Hançer (2024)	2009–2022 25 OECD Countries	Spending Review	Driscoll- Kraay Robust Fixed Effect	Evidence suggests that the negative impact of rising public expenditures on budget balance is mitigated when spending review practices are adopted.

4.3. Research Methodology

This study investigates the relationship between spending review practices of certain countries and their primary budget balance in OECD member countries, employing the panel Generalized Method of Moments (GMM) method. The analysis is based on panel data from 31 OECD countries covering the period from 2000 to 2020. The study period is limited to 2020 because OECD spending review surveys are only available up to that year. The tests and analyses were conducted using Stata 17. The exclusive focus on OECD countries is motivated by their widespread implementation of spending review practices.

The analysis began with testing the stationarity of the variables using several panel unit root tests, which include the Im, Pesaran, and Shin (IPS) test and the ADF-Fisher Chi-square test. A lagged variable was then incorporated into the model, and the GMM estimation method was employed to address potential endogeneity issues. This section provides an overview of the panel unit root tests and the GMM method.

4.3.1. Unit Root Tests

4.3.1.1. ADF Unit Root Test

As the real and nominal values of most macroeconomic data increase over time, the means and variances of the series do not remain constant. With the rapid development of time series analysis, studies on the non-stationarity of data and its consequences have intensified.

The ADF test, which was developed in 1981 to solve the problem of autocorrelation and changing variance in the Dickey-Fuller (1979) test, was created as an extended version by adding lagged differences. These tests can be used to determine whether the time series is stationary or not, and if it is not stationary at its level value, how many times it becomes stationary when it is differenced (Yavuz, 2011).

The unit root test establishes the relationship between the value of the variable in period t and its value one period ago. This equation represents what is commonly known as a first-order autoregressive AR (1) model.

$$Y_t = \rho Y_{t-1} + u_t \quad 4.1$$

In the equation, u_t is referred to as the “white noise error term” because it is an error term with zero mean, zero variance, and no collinear dependence. In the AR(1) model, which shows the value of the variable in period t and the value of the variable in the previous period, a unit root problem arises when $\rho = 1$. We see that this is a non-stationary process. If $\rho < 1$, the process is stationary. Since the t-test is highly biased in the case of a unit root, $\rho = 1$ cannot be tested. Therefore, by subtracting Y_{t-1} from both sides of equation (5.1.), we obtain the following equation (Gujarati & Porter, 2009):

$$\begin{aligned} Y_t - Y_{t-1} &= \rho Y_{t-1} - Y_{t-1} + u_t \\ &= (\rho - 1)Y_{t-1} + u_t \end{aligned} \quad 4.2$$

alternatively, it can be written as follows:

$$\Delta Y_t = \delta Y_{t-1} + u_t \quad 4.3$$

where $\delta = (\rho - 1)$ and Δ is the first difference operator.

ΔY_t is then equal to $Y_t - Y_{t-1}$. This tells us that ΔY_t is the first difference of the Y_t series. Also, since $\rho - 1 = \delta$, $\delta = 0$ in case $\rho = 1$. When $\delta = 0$, the equation becomes $\Delta Y_t = u_t$ and the series is stationary in the first difference. Dickey-Fuller is estimated in three different ways (Gujarati & Porter, 2009):

Y_t , is a random walk;

$$\Delta Y_t = \delta Y_{t-1} + u_t \quad 4.4$$

Y_t , is a random walk with drift;

$$\Delta Y_t = \beta_1 + \delta Y_{t-1} + u_t \quad 4.5$$

Y_t , is a random walk with trend;

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + u_t \quad 4.6$$

Here, t denotes the time or trend variable. The hypotheses for all three cases are given below (Gujarati & Porter, 2009).

Null hypothesis: $H_0: \delta = 0$ (the series is unit-rooted, the series is non-stationary)

Alternative hypothesis: $H_1: \delta < 0$ (the series has no unit root, the series is stationary)

To remove autocorrelation among the error terms, Dickey-Fuller (1981) extends these models by adding lagged values of the dependent variable ΔY_t to the three equations expressed in the Dickey-Fuller (DF) unit root test (Gujarati & Porter, 2009):

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^m \alpha_i \Delta Y_{t-i} + \varepsilon_t \quad 4.7$$

Where ε_t is the error term in the clean sequence. If there is a correlation problem between the error terms, the lagged value or values of the dependent variable are written on the right-hand side of the equation to overcome this problem. The equation thus extended is called ADF (Gujarati & Porter, 2009).

As is the case for the Dickey-Fuller (DF) unit root test, $\delta = 0$ and there is a unit root in the augmented Dickey-Fuller (ADF) unit root test (Dickey & Fuller, 1981).

4.3.1.2. Im, Pesaran and Shin (IPS) Unit Root Test

The panel unit root test of Im, Pesaran, and Shin (IPS) (2003) is one of the most commonly used first-generation panel unit root tests. First-generation panel unit root tests do not take into account the cross-sectional dependence between the series. The IPS test allows for heterogeneity in both the error term and the autoregressive coefficients while assuming that error terms may be correlated across series and that variances may differ. This test is typically applied when the time dimension (T) is larger the cross-sectional dimension (N) (i.e., $T > N$). The IPS test conducts individual unit root tests for each cross-section, calculates their respective t-statistics, and then averages them to derive a panel-wide result. The IPS test is based on the following Augmented Dickey-Fuller (ADF) regression model (Im et al., 2003):

$$\Delta Y_{it} = \alpha_i + \beta_i y_{i,t-1} + \sum_{j=1}^p \rho_{ij} \Delta y_{i,t-j} + \varepsilon_{it} \quad 4.8$$

$$i = 1, \dots, N$$

$$t = 1, \dots, T$$

4.3.1.3. Fisher ADF Unit Root Test

Fisher ADF and Fisher Phillips-Perron (PP) panel unit root tests are methods used to assess the stationarity of variables in panel data sets. Fisher-type tests combine the results of

individual unit root tests to produce an overall panel test result. These tests were developed by Maddala and Wu (1999) and Choi (2001) and are based on Fisher's combination principle (Maddala & Wu, 1999; Choi, 2001).

Fisher-type panel unit root tests are widely used in panel data analysis because of their advantages and flexibility. One of the most important features of these tests is that they do not require balanced panel data. While some other panel unit root tests require an equal number of observations in all cross-sections, Fisher tests can be applied to unbalanced panel data sets. This flexibility allows them to be implemented in panel data structures with different cross section lengths. In addition, Fisher tests accommodate missing observations in individual time series. This feature provides greater flexibility compared to other tests. Since the p-values obtained from individual ADF or PP tests in each cross section are combined using Fisher's combination method, missing observations do not hinder the analysis process. Another key advantage of Fisher tests is their asymptotic validity as the time dimension (T) approaches infinity. This property is particularly advantageous for panel data sets with long time series (Tatoğlu, 2020b).

The Maddala and Wu (1999) panel unit root test, known as the Fisher ADF test, is calculated using probability (p) values obtained from individual unit root tests. The test statistics for the Fisher ADF is represented as follows (Choi, 2001):

$$\lambda = -2 \sum_{i=2}^N \ln(p_i) \rightarrow X_{2N}^2, \quad 4.9$$

$$Z = \frac{1}{2\sqrt{N}} \sum_{i=1}^N (-2\ln(p_i) - 2) \rightarrow N(0,1) \quad 4.10$$

Bu testin hipotezleri de;

$H_0 = |\rho| = 1$ The series is non-stationary for all cross-sections

$H_0 = |\rho| < 1$ The series is stationary for all cross-sections.

4.3.2. Arellano-Bover/Blundell-Bond Dynamic Panel Estimation (GMM) Model

Panel data analysis is a widely used econometric method for analysing both static and dynamic processes. In dynamic panel data models, the endogeneity problem arises when past values of the dependent variable are included in the model as independent variables. Since the traditional Least Squares (LS) estimator can produce inconsistent and biased estimates due to this endogeneity problem, the Generalized Method of Moments (GMM) estimator is commonly used.

The GMM estimator was first developed by Hansen (1982) and applied to panel data models by “Holtz-Eakin, Newey, and Rosen (1988), Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998)”. The GMM estimator is a widely used tool in the panel data analysis and typically manifests itself in two primary forms: the Difference GMM and the System GMM estimator (Arellano & Bond, 1991; Arellano & Bover, 1995; Blundell & Bond, 1998; Hansen, 1982; Holtz-Eakin et al., 1988; Roodman, 2009). The Generalized Method of Moments estimators developed by Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998) are also widely used in the estimation and analysis of Dynamic Panel Data Models. In addition to these estimators, approaches such as bias correction methods developed for estimating Dynamic Panel Data Models are also used. The System GMM method estimates using a two-equation system that includes both levels and first differences of the model.

The dynamic panel data model developed by Arellano and Bond (1991) is specifically designed for panel data sets characterized by a small time dimension (T) and a large number of individuals (N). This model facilitates the estimation of parameters using the Generalized Method of Moments (GMM), a technique that accounts for advanced endogenous variables and lagged dependent variables. The methodology involves transforming the instrumental variable matrix into a first difference model. Subsequently, the estimated model is derived

using the generalized least squares method (Arellano & Bond, 1991). The dynamic panel data model is illustrated in the following equation.

$$Y_{it} = \delta Y_{i,t-1} + \beta' x_{it} + u_{it} \quad 4.11$$

$$u_{it} = \mu_i + v_{it} \quad 4.12$$

In this equation 4.11, δ represents the scalar term, x'_{it} denotes the matrix structure of independent variables, and β is the vector of regression coefficients. The error term (u_{it}), generally consists of fixed term unit effects (μ_i) and a time-varying error component (v_{it}). In dynamic panel data models, the problem of endogeneity may arise when the lagged value of the dependent variable is included as an independent variable. This may lead to correlated errors, necessitating the use of alternative estimation methods such as the Generalized Method of Moments (GMM). The GMM, a two-stage estimation method, is consistent under two basic assumptions: the validity of instrumental variables and the assumption of autocorrelation. The validity of the instrumental variables is assessed using the Sargan test, while the presence of autocorrelation is determined through the (AR1) and (AR2) tests developed by Arellano Bond (1991). These tests are performed using the residuals obtained from the first-difference model (Tatoğlu, 2020a; Yıldız Akbulut, 2020). The validity of the overidentification restrictions in the model is checked using the Sargan test.

$$m = \Delta \hat{v} W \left(\sum_{i=1}^N W_i' \Delta(\hat{v})_i (\hat{v})_i' W_i \right)^{-1} W' \Delta \hat{u} \sim X_{p-K-1}^2 \quad 4.13$$

The presence of first-order autocorrelation in the first differences model $E(v_{it}v_{i(t-1)}) = 0$ is insignificant for the GMM estimator to be efficient; the absence of second-order autocorrelation ($E(v_{it}v_{i(t-2)}) = 0$) is essential. Arellano and Bond (1991) use the residuals from the first differences model to test for autocorrelation. The test statistic developed by Arellano and Bond can be expressed as follows (Mete, 2021; Tatoğlu, 2023).

$$m_2 = \frac{\hat{v}_{-2} \hat{v}}{\frac{1}{\hat{v}^2}} \tilde{a}N(0,1) \quad 4.14$$

The Arellano-Bover / Blundell-Bond estimator extends the Arellano-Bond model by combining the relevant regressions specified in first differences and levels. The Arellano-Bover / Blundell-Bond estimator assumes that the differences of instrumental variables are not correlated with fixed effects. This assumption allows for the use of more instruments, which can significantly increase statistical efficiency. The System GMM method is an analysis method that can be used when the number of countries is greater than the time period ($N > T$). The System GMM method provides reliable and consistent results in cases where autocorrelation and endogeneity problems exist. In this respect, it is widely used in analyses (Roodman, 2009).

4.4. Data Analysis

This thesis analyses the impact of the spending review (SR) on the primary budget balance in countries that have adopted SR practices, using a comprehensive set of economic and fiscal indicators collected from OECD member countries. The primary objective of this study is to identify the impact of a spending review on the primary budget balance in the context of other economic conditions and a comprehensive model. It, thus, aims to provide a deeper understanding of the contribution of spending reviews to fiscal performance.

The study employs a comprehensive dataset comprising economic and fiscal indicators collected from 31 OECD member countries over the period 2000 to 2020. This extensive time period and the inclusion of large number of countries facilitate the examination of changes in economic structures and the identification of long-term trends. The study uses an annual basis for the analysis, which allows for time series analysis and the identification of long-term trends.

Stata 17 software was used for the tests and analyses of the study. This software effectively applies econometric models and statistical methods. In particular, panel data analysis methods were used to analyse in detail the differences between countries and changes

over time. In this way, the impact of spending reviews on the primary budget balance can be more clearly identified.

The fact that only OECD countries are considered in this study does not mean that other countries do not attach importance to the review; on the contrary, it is becoming increasingly important in many European Union Member States. In practice, however, the limited scope of the OECD countries was established in order to minimize data loss in the estimation phase, given the presence of OECD member countries and the available data. Table 4.2 shows the variables used in the model and explains the data sources.

Table 4.2. Data Set and Sources

Variables	Abbreviation	Variables Name	Scale	Source
Dependent Variable	pbb	Primary Budget Balance	Percent of GDP (% of GDP)	IMF
	pd	Public Debt stock	Percent of GDP (% of GDP)	OECD data
	gr	Economic Growth rate	GDP growth rate	OECD data
Independent Variables	sr	Spending Review	Spending Review (1), (0)	OECD Spending Review Surveys
	kofe	Economic Globalization	Index	KOF Swiss Economic Institute

Table 4.2 presents the dependent and independent variables used in the study, along with the data sources of the variables employed in the dynamic model. The variables, both dependent and independent, are derived from data sets provided by various international organizations. The dependent variable of the model is the primary budget balance, which is of great importance for spending reviews. The PBB refers to the primary budget balance and plays a crucial role in assessing countries' fiscal performance. The PBB is measured as a percentage of GDP (%) based on IMF data. This variable is used as a key indicator to assess countries' fiscal discipline and public debt sustainability (Şen et al., 2007).

The independent variables used in the model include public debt stock (pd) and growth rate (gr), both of which were obtained from the OECD database. Economic globalization data (kofe) were sourced from the KOF Swiss Economic Institute.

These variables are included in the model in order to comprehensively analyse the determinants of the primary budget balance, with a particular focus on assessing the impact of factors such as debt levels and spending review practices. The impact of the independent variables employed in the study on the primary budget balance may vary depending on several factors. The budget balance itself is a factor that has a direct impact on the primary budget balance. If a country is running a budget deficit, the interest burden tends to escalate due to increased borrowing, which can adversely affect the primary budget balance. Conversely, a budget surplus can have a favourable impact on the primary budget balance by reducing the public debt and thus the interest burden.

Public debt stock has been used as a measure to assess the impact of the debt burden of countries on fiscal balances. Although it is widely accepted that an increase in the debt stock can have a negative impact on the budget balance by raising interest rates, the impact of the debt level on the primary budget balance can exhibit both positive and negative consequences. As debt levels rise, the primary budget balance may improve if the debt is sustainable. In such a scenario, governments may take measures to achieve a primary surplus in response to the rising debt. Suppose, however, that debt becomes unsustainable and governments find it

difficult to offset this increase with primary surpluses. In that case, fiscal fatigue sets in, and the increase in debt may have a negative impact on the primary budget balance (Kepez, 2023).

Economic growth has a significant impact on the primary budget balance. Increased tax revenues resulting from growth reduce social expenditures by lowering unemployment, thereby improving the primary balance. Conversely, in an environment of primary surplus, the debt burden will be reduced, and the need for borrowing will reduce real interest rates, encouraging the private sector investments. These investments will have a positive impact on economic growth.

This study employs the KOF Economic Globalization Index to better assess the impact of globalization on economic growth. Although various indices have been developed to measure the economic, political, and social dimensions of the impact of globalization on countries, one of the most widely used indices is the KOF Globalization Index, developed by Dreher in 2002 and included in the database of the Swiss KOF Economic Research Institute (Dreher, 2006). The economic globalization index used in this study is based on the databases prepared by the KOF Swiss Economic Institute. A review of the literature on the relationship between the KOF Globalization Index and fiscal performance shows that there is no consensus, particularly with regard to the studies using the sub-indices of this index. The impact of globalization on fiscal performance may vary depending on a country's level of development and income status. Moreover, the direction of this effect may differ depending on which factors dominate the globalization process in a given economy. From a fiscal perspective, globalization has had profound and lasting impacts on tax systems and policies. In particular, the fiscal gaps created by globalization in the area of taxation may have a negative impact on public revenues, leading to a deterioration primary budget balance (Kepez, 2023).

The variable that allows the assessment of spending reviews as a policy instrument, which is the main objective of this study, was defined as a dummy variable. Based on the years in which countries conducted spending reviews, an evaluation was conducted for 31 countries. A classification was made for 31 OECD member countries, covering the period 2000-2020. Years in which spending reviews (SR) were implemented were assigned a value of

1, while years without implementation were assigned a value of 0, and these values were included in the model. In addition, two dummy variables, *cri_dumm* and *cov_dumm*, were included in the model to reflect the impact of the 2008 global financial crisis and the COVID-19 pandemic in 2019. These structural breaks caused abrupt and persistent changes in economic indicators, significantly influencing fiscal performance and macroeconomic dynamics. Therefore, they were included in the model as exogenous variables to control for their potential impact.

Table 4.3. Descriptive statistics of variables from 2000-2020

	Observations	Mean	Std. Dev.	Minimum	Maximum
pbb	640	.4905358	4.285214	-28.17485	20.57039
pd	617	75.5358	45.27099	6.65372	256.9916
gr	651	2.224727	3.520045	-16.04002	24.61557
kofe	651	72.90783	10.6918	34	92
sr	651	.2995392	.4584084	0	1
cri_dumm	651	.0952381	.2937692	0	1
cov_dumm	651	.047619	.2131226	0	1

Table 4.3 presents the descriptive statistics of the variables used in the analysis for the period 2000-2020 for 31 OECD member countries. These statistics summarize the number of observations, mean, standard deviation, minimum, and maximum values for each variable, providing a comprehensive overview of their distribution and variation.

The primary budget balance (*pbb*) has been included in the model as the dependent variable, with 640 country-year observations. The minimum and maximum values of the primary budget balance are -28.174% and 20.57039%, respectively, indicating considerable variation across countries and years. The mean value of around 0.49 suggests a slight average surplus, while the standard deviation of 4.28 reflects the considerable fiscal fluctuations among OECD member countries.

The debt burden increased significantly over the period, with the ratio of general government public debt stock to GDP reaching a maximum of 256.9916% and a minimum of 6.65372%. Looking at the growth variable, the highest value recorded is 24.61557%, while the lowest is -16.04002%. In the study which includes the KOF economic globalization index, the highest value observed is 92, and the lowest is 34, with an average coefficient value of 72.90783.

In addition, spending reviews, the 2008 financial crisis, and the 2019 COVID-19 indicators were included in the study as dummy variables, with values of 0 or 1 in the model. The spending review dummy variable (sr) reflects whether a country had a spending review in a given year. With a total of 651 observations, the mean value of .2995392 implies that a spending review was in effect in about 30% of the country years. The data set also includes two dummy variables to account for major structural shocks: cri_dumm for the 2008 global financial crisis and cov_dumm for the 2019-2020 COVID-19 pandemic. Both variables have 651 observations. The cri_dumm variable has a mean of 0.095, indicating that roughly 9.5% of the observations fall within the crisis years, while the cov_dumm mean of 0.0476 reflects the years affected by the pandemic. These variables are included to capture the disruptive effects of these global events on fiscal outcomes.

In summary, the descriptive statistics illustrate considerable heterogeneity in fiscal and economic conditions across OECD countries over the 2000-2020 period. The integration of structural shock dummies and policy indicators such as spending reviews provides a comprehensive framework for analysing their impact on the primary budget balance.

Table 4.4. Correlation matrix of variables from 2000 to 2020

	pbb	pd	kofe	sr	cov_dumm	cri_dumm	gr
pbb	1.0000						
pd	-0.2334	1.0000					
kofe	0.1339	-0.2976	1.0000				
sr	-0.0738	0.2600	0.1147	1.0000			
cov_dumm	-0.2856	0.1283	0.0364	0.1685	1.0000		
cri_dumm	-0.1173	-0.0572	-0.0242	-0.0800	-0.0742	1.0000	

gr	0.3403	-0.2848	0.1109	-0.1119	-0.4054	-0.3661	1.0000

Table 4.4 shows the correlation between the variables used in the model for the period 2000-2020. Correlation coefficients range between -1 and 1: positive values indicate a direct (positive) relationship between two variables, i.e. as one variable increases, the other tends to increase as well. Negative values indicate an inverse (negative) relationship between two variables, i.e. as one variable increases, the other tends to decrease.

According to the correlation matrix, where the primary budget balance (pbb) is included as the dependent variable in the model, there is a negative correlation (-0.2334) between the primary budget balance and the public debt stock (pd). This indicates that an increase in public debt stock adversely affects the primary budget balance, i.e. the budget balance tends to deteriorate as the debt level increases. A positive correlation (0.1339) is observed between economic globalization (kofe) and the primary budget balance, suggesting that increased globalization has a slightly positive effect on the budget balance. There is a positive correlation (0.3403) between the growth rate (gr) and the primary budget balance, indicating that economic growth contributes to improving the budget balance. As economic growth increases, tax revenues rise, and public spending becomes more efficient, strengthening the primary budget balance. A slightly negative correlation (-0.0738) is observed between the spending reviews (sr) and the primary budget balance, indicating a weak inverse relationship between the spending reviews and the budget balance, although this relationship is insignificant.

The dummy variable representing the COVID-19 period (cov_dumm) shows a negative correlation (-0.2856) with the primary budget balance, demonstrating the strong negative impact of the COVID-19 pandemic on public finances. Similarly, the dummy variable representing the 2008 global financial crisis (cri_dumm) also shows a negative correlation (-0.1173) with the primary budget balance, indicating that the 2008 crisis had a detrimental effect on the budget balance.

There is a negative correlation (-0.2848) between public debt stock (PD) and growth rate (gr), indicating that countries with higher public debt stock tend to have lower growth rates. The increase in public debt may negatively affect economic growth by increasing interest burden and fiscal pressure. In addition, a negative correlation (-0.2976) between public debt stock and economic globalization (kofe) suggests that more globalized countries tend to have relatively lower public debt stocks. It is observed that countries with high public debt levels resort to spending reviews more often, which is supported by the positive correlation (0.2600) between public debt stock and spending reviews (sr). There is also a positive correlation (0.1339) between the economic globalization index (kofe) and the budget balance (pbb), indicating that globalization has a slightly positive effect on the budget balance. Similarly, a positive correlation (0.1147) is observed between economic globalization and spending reviews, suggesting that the practice of spending reviews is more prevalent in highly globalised economies. However, the negative correlation (-0.2976) between globalization and public debt stock confirms that countries with higher levels of globalization tend to have relatively lower levels of public debt stocks.

There is a positive correlation (0.2600) between spending reviews (sr) and public debt stock, suggesting that countries with higher levels of public debt tend to have more frequent spending reviews. However, spending reviews and the budget balance show a weak negative correlation (-0.0738).

The dummy variable representing the COVID-19 period (cov_dumm) has a negative correlation (-0.2856) with the budget balance (pbb), showing that COVID-19 had a negative impact on fiscal balances. The negative correlation (-0.3661) between economic growth (gr) and the COVID-19 also shows the negative impact of the pandemic on economic growth. Similarly, the dummy variable representing the 2008 global financial crisis (cri_dumm) shows a negative correlation (-0.1173) with the budget balance, indicating that the 2008 crisis negatively affected the fiscal balance. Likewise, there is a negative correlation (-0.3661) between the financial crisis and economic growth, indicating that economic growth tends to slow down in times of crises.

Table 4.5. OECD countries and Number of Spending Review Applications (2000-2020)

Cross Number	Country	Num of Times	Cross Number	Country	Num of Times
1	Australia	10	17	Latvia	5
2	Austria	3	18	Lithuania	2
3	Canada	11	19	Luxembourg	1
4	Chile	2	20	Mexico	5
5	Colombia	2	21	Netherlands	22
6	Denmark	21	22	Norway	5
7	Estonia	3	23	Poland	5
8	Finland	3	24	Portugal	8
9	France	3	25	Slovak Republic	4
10	Germany	6	26	Slovenia	3
11	Greece	7	27	South korea	5
12	Iceland	2	28	Spain	6
13	Ireland	9	29	Sweden	5
14	Israel	3	30	United Kingdom	9
15	Italy	8	31	United States	5
16	Japan	13			

Source: Prepared by the authors based on OECD Spending Review Surveys (2018; 2020) (OECD, 2018b, 2020a).

The values in this table correspond to the countries for which data are available for 2000-2020 period. As explained before, the data have been assessed and analysed in the context of the spending reviews. The study only includes the countries for which complete and consistent data are available, thereby increasing the accuracy and reliability of the analysis. The data used are integrated into panel data models to examine the efficiency and effectiveness of public spending. The study includes a model covering 31 OECD countries, but excludes Belgium, Costa Rica, the Czech Republic, Hungary, New Zealand, and Türkiye as they did not conduct spending reviews during the relevant period.

4.5. Empirical Model and Results

The thesis establishes an equation with a model in which the primary budget balance is considered as the dependent variable. The equation showing the regression relationship between the variables of the model is as follows:

$$pbb_{it} = \alpha pbb_{i,(t-1)} + \theta_1 sr_{it} + \theta_2 pd_{it} + \theta_3 kofe_{it} + \theta_4 gr_{it} + \lambda_1 cov_{dumm_{it}} + \lambda_2 cri_{dumm_{it}} + \mu_i + \varepsilon_{it}$$

The model is organized within the dynamic panel data analysis framework, using the Arellano-Bover/Blundell-Bond System GMM method for estimation. The primary objective of the model is to examine the impact of spending review practices and other economic variables on the primary budget balance, which constitutes the scope of this thesis. In the model, the parameters i and t represent the panel data structure, where “ i ” denotes countries and “ t ” represents the time dimension. This framework allows the analysis of changes over time for each country. The dependent variable of the model, the primary budget balance (pbb), is defined as the difference between non-interest revenues and non-interest expenditures. The model includes a lagged dependent variable, $pbb.L1$, representing the primary budget balance in the previous year. This lagged variable allows for the analysis of the impact of past budget balance developments on the current period.

The independent variables in the model include public debt (pd), economic globalization ($kofe$), and growth rate (gr). The public debt variable is included in the model to analyse its impact on the primary budget balance. Economic globalization is included to assess the impact of globalization on fiscal discipline and budgetary outcomes. Economic growth is examined to determine its impact on the primary budget balance, as higher growth is expected to improve fiscal performance. Spending review variable (sr) is included to assess the impact of spending review practices on budget performance, particularly in enhancing the efficiency and effectiveness of public spending. The model also includes dummy variables representing crisis periods. The COVID-19 dummy variable (cov_dumm) assesses the impact of the pandemic on fiscal performance, and the 2008 global financial crisis dummy variable (cri_dumm) examines how fiscal outcomes change during economic downturns. To account for country-specific economic and fiscal structures, the model includes fixed effects (μ_i). Furthermore, the error term (ε_{it}), which captures random effects not explicitly included in the model, is also part of the estimation framework.

The estimation of this study is conducted using the System GMM method, which is designed to address endogeneity issues that may arise due to the presence of a lagged dependent variable in dynamic panel data models. Endogeneity concerns arise from the correlation between the lagged values of the dependent variable and the independent variables in the model. The System GMM approach mitigates this problem by using lagged levels and first differences of the dependent variable as instrumental variables. It also enhances the reliability of estimates by addressing statistical challenges such as autocorrelation and heteroskedasticity.

The model estimated using this methodology evaluates the impact of public debt, economic globalization, growth, and spending review practices on the budget balance. The inclusion of the lagged dependent variable (pbb.L1) allows for the examination of the impact of the past budget balance performance on the current period. Variables such as spending review practices (sr) and economic globalization (kofe) are included into the model to assess their role in promoting fiscal discipline and influencing budgetary outcomes.

Moreover, the model includes dummy variables representing crisis periods, such as COVID-19 (cov_dumm) and the 2008 global financial crisis (cri_dumm), to evaluate the impact of economic shocks on fiscal performance. By controlling for fixed effects (μ_i) and including the error term (ε_{it}), the model ensures that country-specific structural characteristics and unobserved factors are properly accounted for in the estimation process.

4.5.1. Panel Unit Root Tests

Panel unit root tests, specifically the Im, Pesaran, and Shin (IPS) test and the Augmented Dickey-Fuller (ADF) Fisher Chi-square test, were conducted to determine whether the variables exhibit stationarity. These tests assess the presence of a unit root in the panel data set, which is crucial for econometric modelling.

In all unit root tests, the null hypothesis states that the series contains a unit root (i.e., non-stationary), while the alternative hypothesis suggests that the series is stationary. A p-value below 0.05 indicates the rejection of the null hypothesis, suggesting that the series is stationary. Table 4.6 the study discusses the results of the panel unit root tests.

Table 4.6. Panel Unit Root Test Results

Variables	Test Type	include	Statistic	Prob**	Cross-sections	Obs
pbb	Im, Pesaran and Shin W-stat	Panel Means	-2.02817	0.0213	31	594
	ADF-Fisher Chi-square		79.8870	0.0627	31	594
pd	Im, Pesaran and Shin W-stat	Panel Means	-1.98470	0.0236	31	548
	ADF-Fisher Chi-square		79.2780	0.0687	31	548
gr	Im, Pesaran and Shin W-stat	Panel Means	-5.12522	0.0000	31	607
	ADF-Fisher Chi-square		122.538	0.0000	31	607
kofe	Im, Pesaran and Shin W-stat	Panel Means	-4.94396	0.0000	31	598
	ADF-Fisher Chi-square		114.644	0.0001	31	598

**Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality

The results for pbb and pd are mixed. The Im, Pesaran, and Shin (IPS) test gives p-values of 0.0213 and 0.0236, respectively, indicating stationarity at the 5% significance level. However, the ADF Fisher Chi-square test fails to reject the null hypothesis, as its p-values exceed 0.05. This discrepancy suggests that the stationarity conclusion for these variables may depend on the specific test applied.

For gr, all tests strongly reject the null hypothesis at the 1% significance level, confirming its stationarity. The IPS test produces a p-value of 0.0000, while the ADF Fisher Chi-square test gives highly significant values, reinforcing the conclusion that gr does not contain a unit root and can be directly included in econometric modelling.

Similarly, kofe is found to be stationary across all tests. The IPS test and the ADF Fisher Chi-square test both produce p-values below 0.05, indicating that kofe has a stable mean and variance over time. This result suggests that the variable can be used directly in econometric analyses without the need for transformations such as differencing.

These findings are crucial for econometric modelling, as the inclusion of non-stationary variables without appropriate transformations may lead to spurious regression results. As stationarity is confirmed for some variables, they can be used directly in dynamic panel data analysis. Furthermore, unit root tests indicate that none of the series has a unit root, confirming that all variables are stationary at their levels. As a result, the model proceeds with the variables in their level form without the need for differencing or further transformation.

4.5.2. Arellano-Bover/Blundell-Bond Dynamic Panel Estimation (GMM) Model

Given the shortcomings of standard econometric models, such as Ordinary Least Squares (OLS) and Fixed Effects (FE) regressions, which are inadequate due to endogeneity, autocorrelation, and unobserved heterogeneity, this study uses the Arellano-Bover/Blundell-Bond (1998) System Generalized Method of Moments (GMM) estimator to address these issues (Arellano & Bover, 1995; Blundell & Bond, 1998).

The Arellano-Bover/Blundell-Bond (1998) dynamic panel data model extends the Arellano-Bond (1991) Difference GMM approach by incorporating additional moment conditions, improving efficiency, and reducing potential bias in small samples. This model is particularly suitable for panel data with a small time dimension (T) and a large number of individuals (N), allowing for more robust estimation by accounting for endogenous explanatory variables and the lagged dependent variable. The primary reasons for employing the Arellano-Bover/Blundell-Bond System GMM estimator in this study are as follows (Arellano & Bover, 1995; Blundell & Bond, 1998):

1. Dynamic Structure of Fiscal Policy

The Primary Budget Balance (PPB), the dependent variable in this study, is influenced by its past values, indicating a time-dependent fiscal policy structure. However, the inclusion of lagged dependent variables in standard regression models introduces endogeneity, as past values of the dependent variable may be correlated with the error terms. The Arellano-Bover/Blundell-Bond System GMM estimator addresses this issue by using instrumental variables, which mitigate bias and ensure consistency in the estimation.

2. Addressing Endogeneity

Several key explanatory variables, including public debt (pd), economic growth (gr), and spending reviews (sr), are potentially endogenous, as they may be correlated with unobserved country-specific effects. This could lead to biased estimates due to simultaneity or measurement errors. To address this, the System GMM estimator employs lagged values of endogenous variables as instruments and applies a system of equations that combines both level and first-difference transformations. This methodology improves efficiency compared to the standard Difference GMM approach.

3. Suitability for Panel Data Structure

The data set covers 31 OECD countries over 21 years (2000–2020), where $N > T$. In such cases, traditional estimation methods face difficulties due to heterogeneity, autocorrelation, and dynamic effects. The Arellano-Bover/Blundell-Bond System GMM estimator is explicitly designed for panels where the cross-sectional dimension (N) exceeds the time dimension (T). In addition, by controlling the number of instruments, System GMM improves estimation efficiency, making it suitable for this study.

4. Model Validation

To ensure the validity of the System GMM estimator, the study applies autocorrelation tests (AR(1) and AR(2)) and the Hansen test for instrument validity (Arellano & Bond, 1991; Hansen, 1982). The AR(1) and AR(2) tests assess the presence of autocorrelation in the

model. Since first-order autocorrelation (AR(1)) is expected in dynamic panel models due to the inclusion of lagged dependent variables, it should be significant, while second-order autocorrelation (AR(2)) should be absent to confirm that the moment conditions are correctly specified and the model remains valid (Roodman, 2009).

The Hansen test, an extension of the Sargan test, evaluates the validity of instrumental variables (Hansen, 1982). A non-significant p-value ($p > 0.05$) indicates that the instruments are valid and not overidentified, supporting the robustness of the estimation. As the Hansen test does not reject the null hypothesis, it indicates that the instrumental variables are correctly specified and meet the necessary restrictions on overidentification, ensuring the reliability of the GMM estimation (Baum et al., 2003)

These considerations justify the use of the Arellano-Bover/Blundell-Bond System GMM estimator in this study. As shown in Table 4.7, the estimation results of the dynamic panel data model confirm the appropriateness of this methodology.

Table 4.7. System GMM Dynamic Panel Data Model Results

Variable	Coefficient	Corrected std. Error	P> z	[95% conf. interval]	
pbb	0.7747017	0.037119	0.000***	0.7019498	0.8474537
L1.					
pd	-0.0032921	0.0013727	0.016**	-0.0059825	-0.0006017
gr	0.1067747	0.0493165	0.030**	0.0101161	0.2034333
kofe	0.0023257	0.0025692	0.365	-0.0027099	0.0073613
sr	0.4047194	0.1841574	0.028**	0.0437775	0.7656612
cov_dumm	-5.085924	0.7060979	0.000***	-6.469851	-3.701998
cri_dumm	-2.786115	0.4657291	0.000***	-3.698927	-1.873303
Wald Test	608.88				
	0.000				
Hansen Test	13.24				
	0.352				
AR (1)	-2.24				

	0.025
AR (2)	0.75 0.456
Number of obs.	581
Number of groups	31
Number of instruments	19

Note: The primary budget balance is the dependent variable outlined in the data section.

*, ** and *** respectively denote statistical significance at the 10%, 5% and 1%.

Table 4.7 presents the results of the system GMM method for 31 OECD countries over the period 2000–2020. The study assesses the impact of debt, economic growth, economic globalization, spending reviews, and crisis periods on the primary budget balance. The first column shows the results of the regression model. The Coefficient, Corrected Standard Error, and $P > |z|$ (p-value) columns presented in Table 4.7 are crucial for understanding the econometric significance of the estimates obtained from the system GMM model. These three components serve as fundamental statistical criteria for determining the impact of the variables on the primary budget balance.

The coefficient indicates the direction and magnitude of the effect of independent variable on the dependent variable. A positive coefficient indicates that the variable increases the dependent variable, while a negative coefficient suggests a decreasing effect. The corrected standard error measures the precision of the coefficient estimates. A smaller standard error implies that the estimated coefficient is closer to the true value, indicating more reliable estimates. Conversely, a larger standard error reduces the precision of the estimates and weakens the ability of the model to accurately determine the effect of the variables. The p-value tests whether a variable's effect on the dependent variable is statistically significant. A p-value below 0.05 indicates statistical significance, suggesting that the coefficient is significantly different from zero. If the p-value is below 0.01, the coefficient is considered to be highly statistically significant. A p-value below 0.1 indicates that the variable is significant at the 10% level.

According to the model results, the lagged primary budget balance (pbb L1) variable has a coefficient of 0.7747, which is statistically significant ($p=0.000$). This finding indicates that past values of the primary budget balance has a strong impact on current values. A high primary budget balance suggests that fiscal discipline can be maintained in subsequent periods and that past performance has a significant impact on fiscal policies.

The spending review (sr) variable has a coefficient of 0.4047, which is positive and statistically significant at the 5% level ($p=0.028$). This result suggests that spending review practices are associated with improvements in fiscal performance. By improving the efficiency of public expenditures and reducing unnecessary spending, spending reviews contribute to budgetary discipline and fiscal sustainability. The positive impact highlights the importance of institutionalized expenditure evaluations in achieving long-term budgetary stability.

The variable debt (pd) has a coefficient of -0.0033, which is negative and statistically significant at the 5% level ($p=0.016$). This result suggests that an increase in debt levels has a deteriorating effect on the primary budget balance. This result suggests that a one-unit increase in debt deteriorates the primary budget balance by 0.003 units. Rising government debt may lead to higher interest payments and impose additional fiscal costs, underlining the importance of effective debt management for fiscal sustainability.

The growth (gr) variable has a coefficient of 0.1068, which is positive and statistically significant at the 5% level ($p=0.030$). The coefficient of 0.1068 ($p=0.030$) indicates that a one-unit increase in economic growth improves the primary budget balance by 0.10 units. Higher growth rates contribute to increased tax revenues, strengthening fiscal balance and supporting fiscal sustainability.

The variable economic globalization index (kofe) has a coefficient of 0.0023, indicating a positive effect, yet it is not statistically significant ($p=0.365$). This result suggests that economic globalization does not have a clear impact on the primary budget balance. As globalization can affect public revenues and expenditures through various channels, its effect

is expected to be ambiguous. For instance, increased globalization may facilitate capital mobility and promote economic growth, but it may also lead to a shrinking tax base and a decline in public revenues.

The dummy variable representing the COVID-19 period (*cov_dumm*) has a coefficient of -5.0859, which is negative and statistically significant at the 1% level ($p=0.000$). This result clearly indicates the deteriorating effect of the COVID-19 pandemic on fiscal indicators. The increase in public spending and the decline in tax revenues during this period significantly worsened the primary budget balance. In response to the economic contraction, governments adopted expansionary fiscal measures, which contributed to higher budget deficits and increased pressure on the long-term fiscal sustainability.

The dummy variable representing economic crises (*cri_dumm*) has a coefficient of -2.7861, which is negative and statistically significant at the 1% level ($p=0.000$). This finding suggests that economic crises have a deteriorating effect on the primary budget balance. Increased public expenditures and reduced tax revenues during crises contribute to larger budget deficits and weaker fiscal balances.

According to the model results reported in Table 4.7, the Wald test confirms that the model is statistically significant overall and that the estimated variables have a significant impact on the primary budget balance. This suggests that the model is well-constructed and effectively captures the relationships between the key fiscal and macroeconomic variables. The result of the Hansen test ($p=0.352$) indicates that the null hypothesis cannot be rejected, confirming that the overidentifying restrictions in the model are valid. This means that the instrumental variables used in the system GMM estimation are appropriate and not overidentified, ensuring the reliability of the model's estimates. In addition, the results indicate the presence of first-order autocorrelation ($AR(1)$, $p=0.025$) but the absence of second-order autocorrelation ($AR(2)$, $p=0.456$). While $AR(1)$ is expected in dynamic panel data models due to the inclusion of lagged dependent variables, the absence of $AR(2)$ confirms that the error terms do not exhibit serial correlation beyond the first order, demonstrating that the model has been correctly specified and that the GMM estimator remains consistent.

Another critical point is that, in all models, the number of instrumental variables remains smaller than the number of groups (countries). This is a fundamental condition in GMM estimation because an excessive number of instruments can lead to overfitting, which reduces the efficiency of the estimator and make the results unreliable in finite samples. Since the model satisfies this condition, it increases the robustness of the findings. Overall, these results validate the reliability and consistency of the model. The findings suggest that the model successfully captures the impact of debt, growth, spending reviews, and crisis periods on the primary budget balance and provides meaningful insights into the dynamics of fiscal policy in OECD countries.

More importantly, the analysis shows that spending review practices have a statistically significant and positive impact on the primary budget balance, indicating their relevance as a tool to enhance fiscal discipline. This underlines that spending reviews can contribute not only to expenditure efficiency but also to fiscal sustainability at the macro level. Given this evidence, countries seeking to improve their fiscal performance -both within and outside the OECD- should consider systematically integrating spending reviews into their public financial management systems.

Globally, a growing number of countries have adopted spending reviews as part of their fiscal reform agendas, often in response to pressures such as rising debt levels or the need to optimize spending in times of economic uncertainty. Successful country cases such as the United Kingdom, the Netherlands, and Ireland share certain critical features: high-level political ownership, clear institutional mandates, alignment with the budget calendar, use of evidence-based data in decision-making, and strong monitoring and follow-up mechanisms.

To be counted among these successful examples, Türkiye must move beyond limited-scale pilot initiatives and prioritize the institutionalization of spending reviews. This process requires the adoption of formal legal and administrative frameworks, developing national guidance documents, ensuring the timely integration of reviews into the budget process. Moreover, the establishment of a dedicated unit tasked with coordinating and overseeing

spending review activities is essential. The strategic incorporation of SR outcomes into both medium-term budgeting and annual budget formulation will be essential to fully harness their potential for strengthening fiscal performance.

Furthermore, it is also important that the Turkish public financial management system promotes a culture of evaluation and learning. Embedding spending reviews in a performance-based budgeting framework not only improves spending efficiency, but also increases transparency and accountability the allocation and use of public resources. This, in turn, can enhance public trust in fiscal institutions and support broader economic policy objectives. For spending reviews to realise their full potential, they need be seen not as a one-off exercises or cost-cutting tools, but as an integral component of evidence-based decision-making and strategic resource planning.

In conclusion, the empirical findings of this study offer robust evidence that spending reviews can serve as a powerful tool in strengthening fiscal discipline. For Türkiye and other countries seeking to ensure sound fiscal governance, the integration of SR practices represents not just an administrative reform but a strategic imperative for long-term economic stability. In the face of increasing fiscal pressures around the world, institutionalizing spending reviews offers a way to build more resilient, efficient, and performance-oriented public finance systems.

5. CONCLUSION AND POLICY RECOMMENDATIONS

In recent years, global economic recessions, climate-related disasters, unforeseen pandemics such as COVID-19, mass migration movements, and increasing fiscal pressures arising from aging populations have forced governments to focus more on maintaining the continuity of public service delivery and the sustainability of fiscal structures. The rise of the welfare state since the 1960s, coupled with subsequent economic crises and growing fiscal demands from the 1970s onwards, led to a substantial increase in public expenditures. However, the shift to neoliberal economic policies in the 1980s brought a significant change in the role of the state, emphasizing market mechanisms and reducing public spending.

During this period, reforms aimed at reducing public expenditures and emphasizing market mechanisms came to the fore. In many OECD member countries, the reduction of public expenditures and the pursuit of greater efficiency emerged as key priorities in public financial management. The introduction of the single European currency in 1992 and the need to meet the criteria for participation in the monetary union made spending reviews crucial in many OECD and EU member countries. During these years, countries such as the Netherlands, Denmark, and the United Kingdom implemented spending review programmes for the first time, and the necessity to ensure the efficient use of public resources enabled an increasing number of countries to adopt spending review practices over time. In 2008, the global crisis that deeply affected the entire world led more countries to adopt spending review practices. Spending review is a measurement and evaluation-based approach that aims to improve the quality and efficiency of spending, fiscal discipline, and fiscal sustainability. It is designed to improve the efficiency of public finance and make budget processes more transparent and accountable. Fiscal discipline rules and spending review mechanisms are complementary tools that promote the systematic evaluation and strategic prioritization of public spending to enhance fiscal responsibility. In this regard, spending reviews serve as a crucial instrument to support the implementation of fiscal rules and play an important role in ensuring compliance with budget balance and debt regulations. Spending review systems are

considered as a critical policy tool for improving the efficient use of public resources, ensuring fiscal sustainability, and achieving long-term fiscal objectives.

Over the years, spending reviews have become increasingly important in ensuring the effective management of public budgets and maintaining fiscal sustainability. Although the diversity of public financial management systems across countries makes it difficult to develop a standardized methodology and approach for spending reviews, the successful experiences of OECD and European Union countries have demonstrated how effective this process can be in developing fiscal savings measures and improving budget efficiency. International best practices emphasize that for spending reviews to be effective, certain basic principles should be followed. These principles include conducting the spending review regularly as part of the budget process and integrated into the budget calendar, assessing savings options in parallel with new budget commitments, clearly defining the roles and responsibilities of the various competent bodies, and ensuring the necessary institutional preconditions.

This study covers 31 OECD countries from 2000 to 2020 and examines the impact of spending reviews on fiscal sustainability and budgetary performance using the system GMM method. The thesis consists of four main chapters. Following the introductory remarks, the second chapter presents a comprehensive literature review to enhance the understanding of spending reviews. As a relatively new concept, the objectives, scope, process, and implementation stages of the spending review system are examined. The third chapter provides an overview of spending review practices in all OECD member countries. While the focus is on countries that have adopted and implemented spending reviews in a more detailed manner, information is also provided regarding countries that have not adopted in such practices. For these countries, the chapter refers to their official positions and commitments as reflected in OECD surveys or other formal statements. This broad mapping contributes to a comprehensive understanding of the diffusion and institutionalization of spending reviews in different contexts. Particular attention is paid to the Netherlands, the United Kingdom, and Ireland, which were among the first countries to institutionalize spending review practices. It is well known that these countries designed and implemented fiscal reforms in the 1980s and

1990s in response to high budget deficits. Given the pressing need to contain public expenditure, maintain macroeconomic stability, and ensure the delivery of essential public services at an adequate level in times of crisis, the adoption and subsequent spread of spending review mechanisms have contributed to improving the efficiency of public spending. Moreover, the expansion of spending reviews to countries that had not previously employed such tools has helped to promote a more comprehensive and strategic approach to public financial management. Detailed information on the most recent spending reviews conducted in these countries can be found in the appendix section. The fourth chapter, which constitutes the analysis phase, first examines the theoretical framework of studies on the primary budget balance. Then, using dynamic panel data analysis for the period 2000-2020, it assesses the impact of spending reviews on the primary budget balance in both countries that have implemented them and those that have not.

Before proceeding to the analysis section, the determinants of the primary budget balance were identified from the existing literature. In this context, studies based on the primary budget balance were analysed and independent and control variables were identified. The final objective of the study is to assess whether countries that implement the spending review system have an impact on the primary budget balance and thus on fiscal discipline and debt sustainability, and whether it can be a part of the public financial management system for Türkiye.

Based on a data set covering 31 OECD countries over the period 2000 to 2020, the empirical findings of this study suggest that spending reviews are associated with improvements in fiscal performance, particularly in terms of the primary budget balance. According to the model results, the lagged primary budget balance (pbb L1) variable has a coefficient of 0.7747 and is statistically significant at the 1% level ($p=0.000$), indicating a strong influence of past fiscal performance on current budgetary outcomes. Most notably, the spending review (sr) variable has a coefficient of 0.4047, which is positive and statistically significant at the 5% level ($p=0.028$), underscoring the positive contribution of spending reviews to fiscal discipline and sustainability. The analysis also shows that public debt (pd) has a negative and significant impact on the primary budget balance (-0.0033 , $p=0.016$), while

economic growth (gr) supports fiscal improvement (0.1068, $p=0.030$). Moreover, dummy variables capturing the effects of the COVID-19 pandemic and economic crises show strong negative effects, highlighting the importance of resilient fiscal instruments such as spending reviews during periods of fiscal stress. The results obtained from the system GMM estimation suggest that the spending review dummy variable has a statistically significant and positive coefficient, indicating a potential link between spending reviews and improved budgetary outcomes. These findings imply that spending reviews may help to strengthen the fiscal discipline and improving the efficiency of public spending. However, the analysis also suggests that the effectiveness of spending reviews depends on institutional design, political commitment, and their integration into the budget process. Evidence from IMF studies and various country experiences suggest that these factors are critical for embedding spending reviews within the fiscal governance framework and ensuring their long-term effectiveness.

The findings also highlight the impact of external shocks for fiscal policy, particularly the 2008 global financial crisis and the COVID-19 pandemic. The COVID-19 dummy variable has a highly significant negative effect on the primary budget balance, reflecting the severe fiscal pressure caused by increased government spending and revenue losses. Similarly, the economic crisis dummy variable confirms that fiscal crises result in significant budget imbalances. However, countries with established spending review mechanisms were better able to mitigate these fiscal pressures, reinforcing the role of spending reviews in crisis management. While public debt has a negative impact on fiscal performance, economic growth contributes positively to improving budget balance. However, economic globalization does not have a statistically significant impact, suggesting that globalization alone does not directly influence fiscal outcomes but may interact with other policy factors. These findings are consistent with previous literature and confirm the importance of spending reviews in promoting fiscal discipline, optimizing public spending and promoting long-term fiscal sustainability.

The results underscore the need to institutionalise spending reviews as an integral part of modern fiscal governance. Countries that systematically integrate spending reviews into their budgetary processes tend to be more resilient to fiscal shocks and show improved

expenditure efficiency. Accordingly, the integration of spending reviews into medium-term budgetary frameworks and broader fiscal planning mechanisms should be considered a strategic priority. In this context, spending reviews and fiscal rules should not be seen in isolation, but rather as mutually reinforcing instruments. While fiscal rules set quantitative constraints for sound public financial management -such as limits on deficits or debt ratios- they may not be sufficient to guide the qualitative allocation of expenditures. Without regular and structured evaluations, fiscal rules alone may lack the flexibility or insight needed to adapt to evolving fiscal conditions. Spending reviews complement fiscal rules by providing the necessary analytical underpinnings for aligning expenditure decisions with fiscal targets, thereby enhancing compliance and improving the quality of fiscal adjustment. This synergy ensures that fiscal discipline is achieved not only through control but also through strategic reprioritization of public spending.

Spending reviews should be supported by analytical tools and performance evaluation mechanisms. The development of expenditure tracking systems, cost-benefit analysis methodologies, and impact assessments will improve the outcomes of spending review. Governments should invest in data infrastructure and institutional capacity to ensure that spending reviews produce reliable policy insights. Spending reviews should be expanded beyond crisis response and used as a proactive fiscal tool. The analysis confirms that countries often implement spending reviews in times of fiscal distress, but their long-term benefits suggest that they should be conducted regularly as part of the budget cycle. Moving from a reactive to a proactive spending review framework will ensure continuous improvements in expenditure management.

In Türkiye, demographic changes, financial sector vulnerabilities, the ongoing consequences of regional and global conflicts, the rise of protectionist policies, and the impacts of emergencies such as pandemics and natural disasters are rapidly increasing the fiscal burden and public debt. Therefore, Türkiye needs a more proactive public expenditure system and must focus on forward-looking expenditure management. One of the most important budget system reforms is the systematic implementation of spending reviews. Spending reviews will strengthen fiscal discipline, support capacity building in public

administrations, and improve budget processes. This process will encourage ministerial teams to work more creatively and effectively, ultimately increasing the benefits delivered to the public. Moreover, the successful implementation of spending reviews requires the creation of key institutional conditions. Although the idea of spending reviews has gained attention in recent years, the system has not yet been fully institutionalized in Türkiye. While the Spending Review Coordination Department has been established within the Ministry of Treasury and Finance and pilot practices have been initiated -most notably in the Ministry of National Education-, official guidelines and a comprehensive legal framework have not yet been introduced. In this respect, the 2024 Savings Measures Circular represents the first concrete step towards integrating spending reviews into the budgeting system. Drawing on international practices, particularly those observed in OECD countries, Türkiye's implementation of spending reviews should go beyond mere savings targets and adopt a broader strategy aimed at improving the efficiency and effectiveness of public expenditures. Developing clear implementation guidelines and ensuring alignment with the budgetary calendar and decision-making processes, as emphasized in examples like the Bulgarian spending review guide, would provide critical support for establishing a sustainable system. In this context, Türkiye must further prioritize the institutionalization of spending reviews as an essential element of its fiscal reform agenda.

According to the 2025 Performance Programme published by the Ministry of Treasury and Finance, the number of spending review regulations is limited to one for the year 2025 (Ministry of Treasury and Finance, 2025). In order to effectively implement spending review processes, international examples recommend the preparation of implementation guidelines and the establishment of a comprehensive roadmap. For instance, the spending review guide developed in the context of Bulgaria elaborates the critical stages of the process. This guide addresses topics such as the definition and scope of spending reviews, the key stages of the process, the roles and responsibilities of key actors, integration with the budget calendar, data collection methods, and analysis of spending patterns. Additionally, elements such as how decision-making mechanisms will work and how reporting and communication strategies will be structured are also explained in detail. Adopting a similar approach in Türkiye is important for establishing a systematic and sustainable spending review process. A review of practices in

other countries shows that spending review processes are typically initiated with pilot projects, which form the basis for broader implementation. In this context, spending review processes should not be limited to savings targets alone but should be addressed as part of a comprehensive approach that also aims to improve the effectiveness and efficiency of public services. The successful implementation of these processes will contribute significantly to the achievement of the reform objectives of the Turkish budgetary system.

While the primary objectives of spending reviews are to create fiscal space, ensure debt sustainability and generate resource savings, the fiscal space allows the government to redirect the resources to priority spending areas and emerging policy objectives. Moreover, the expansion of fiscal space enhances the countries' flexibility and mobility, particularly in times of crisis. In this regard, it is recommended that the Turkish Ministry of Treasury and Finance integrate spending reviews to enhance the objectivity and transparency of the budget preparation process.

Spending reviews have been identified as the most feasible and highest priority option in the implementing countries. Within this framework, the spending review system should be developed and its use expanded, taking into account issues such as setting policy priorities, the use of financial performance information, and the identification and implementation of spending options. In particular, objective assessments by external experts should be used in setting policy priorities, while taking into account the strategic objectives of the government. Fiscal performance data are produced by relevant departments within the Ministry of Treasury and Finance and can be used in the budget preparation process. In this way, existing data can be integrated directly into the budget preparation process without the need to establish a separate spending review process. Second, spending reviews should be included in the Public Financial Management and Control Law No. 5018 and this structure should be strengthened. In this way, medium-term fiscal projections, budget allocation plans, and expenditure reduction strategies can be identified. In this context, spending review processes can be integrated into the budget process in a binding manner, with a more robust analytical framework. The main recommendation is to prioritize the integration of spending review into the budget preparation process in Türkiye. This would increase the transparency and

accountability of the current budget process. Next, spending reviews should be included in the budget process of the Grand National Assembly of Türkiye and in the cost analysis of legislative proposals. The inclusion of spending reviews in the budget deliberation process of the Grand National Assembly of Türkiye is proposed as a step towards a more comprehensive review of spending in the light of political and technical considerations. However, strengthening the cost analysis mechanism for legislative proposals would allow for the up-front calculation of long-term fiscal liabilities. Recommendations also include the establishment of a permanent spending review mechanism to improve fiscal sustainability and the evaluation of tax reforms to ensure revenue fairness. Overall, the integration of the expenditure review system into the budget process in Türkiye aims to ensure more efficient public expenditure management and fiscal sustainability. This process requires the development of a management approach that highlights the efficiency and prioritization of expenditures, rather than relying solely on spending cuts. In the long run, the institutionalization of the spending review will contribute to building a more resilient fiscal structure in Türkiye's and foster more efficient use of public resources.

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7. APPENDIX

7.1. Appendix 1: Spending Review Framework and Guidelines (Terms of Reference)

Purpose	The purpose is to create fiscal space to achieve medium-term fiscal targets and more stable policy. The spending review process for 20(aa) will assess expenditures in (a) to evaluate the effectiveness and efficiency of implemented activities and identify potential austerity measures for inclusion in the 20(aa) budget and subsequent budgets.
Scope	The scope of the review covers a significant part of general government expenditures (...). The relevant cost base of the spending review amounts to [a] billion currency units, which is (a) percent of GDP.
Terms Of Reference	1. Spending reviews will identify the extent to which current spending in the (X) Ministry align with policy objectives. 2. As a result of the spending reviews, the following outcomes will be achieved: 2.1. Low-priority expenditures, which contribute to fiscal consolidation, will be identified, enabling ministries to focus on higher-priority spending. 2.2. An assessment will be made to determine whether the efficiency of expenditures can be improved and/or whether activities can be delivered at a lower cost. 2.3. Spending priorities will be set, and an assessment will be made to

	determine whether policy objectives are being met by improving incentives. 2.4. The appropriateness of fees paid by beneficiaries of current expenditures will be assessed, and revisions will be recommended if necessary. 2.5. Duplication across expenditures will be eliminated, and/or programmes will be consolidated to prevent redundancy. Spending reviews will identify potential savings measures to be presented to the President for assessment and approval. These measures will allow the government priorities to be redirected toward more effective areas. The savings identified will allow the (a) Ministry to utilize up to (X percent) of these resources. 3. For policy reform proposals, the following information will be provided: • Medium-term fiscal outcomes • Detailed explanation of policy proposals • Rationale for policy implementation • Impacts of policies on affected groups • Requirements for policy implementation and legislation 4. Spending reviews will also identify the expected expenditures that will have an impact on the budget. 5. Spending review reports to be prepared will include: • An overview of current spending activities and future spending potentials • A detailed spending analysis based on the above-mentioned

	criteria • Policy recommendations related to expenditures and a consolidated summary table³⁵ of spending pressures. • A consolidated summary table of policy proposals with regard to spending and expenditure pressures
Organization and Timeframe	Spending reviews will be designed and conducted by dedicated working groups. Each working group will include (a) representatives from the Budget Directorate and (a) representatives from the Ministry of (a). A senior official from the Budget Directorate will chair the group. Independent experts and external analysis groups will also be used to review expenditures and make proposals, as necessary. During the preparatory framework phase of the spending reviews, Ministries will share information with the working groups to define their terms of reference. The working group will consist of a steering committee composed of the Minister of Finance, the Budget Director and Minister (a). The role of this committee will be to provide strategic guidance to the spending review process and approve the final spending review report. The timeline for the spending review will be as follows: • By (date); the analyses, benchmarks and indicators to be used in

³⁵ Spending pressure refers to the state's involvement in economic activities. In the case of local governments, it refers to the demands for goods and services provided by municipal organizations. These demands are usually represented by socio-economic factors such as "*size, total number, and density, and total number per surface area in km2*" (Alam et al., 2019). Spending pressures are more severe in countries with relatively larger government participation in economic activities. This relative size of the public sector is due to the prominence of state intervention and control over economic variables such as output, prices and interest rates.

	the spending review will be finalized. • By (date), policy options will be identified and agreed for implementation in Budget 20(aa). • By (date), the preliminary report of the spending review will be submitted to the Budget Directorate for technical review and then discussed and approved by the (Steering Committee). • By (date), the final report will be sent to the Ministry of Finance for submission to the President for final technical review.

Source: (IMF, 2019).

7.2. Appendix 2: Tools, Techniques, and Approaches for Spending Reviews

Analysis	Questions to be Used in the Analysis	Possible Tools and Techniques
Spending Description		
Determining the scope of expenditure programmes and activities	• What is the purpose of expenditure? • What is the public logic for expenditure programmes and activities and how does it work?	• Identification and listing and ranking of activities • Identification of those who will benefit from the activities • The rationale for the programme and/or activity at the time of its implementation and the purpose of future reforms
Spending Analysis		
Analysis of expenditure inputs and outputs	• What are the overall outputs of activities and programmes? • What is the area in which the largest item of expenditure in the budget is being used? • What are the main components of expenditures?	Outputs: • Definition of outputs • Activity, target, cost centre Inputs: • Number and composition of employees Analysis of total expenditure: • Economic classification

	• How are expenditures prioritised?	• Activity classification • Government level classification • Target and action categorisation • Classification by cost centre and production unit Impact of government expenditure: • Event analysis³⁶
Expenditure trends	• Is there an increase or decrease in expenditure? • Are there any sudden decreases or increases in expenditure? • Are all elements of expenditure developing in the same way? • Are there areas where	Expenditure analysis: • Growth rate of expenditure • Comparison of budget with actual expenditure • Differences between inputs and outputs

³⁶ Incidence analysis of spending: It is an analysis that brings together the supply and demand elements of public services and provides information on inefficiencies and inequalities in the state's resource allocation to social services and the public use of these services. It is an easy-to-use tool for both ex ante design as well as ex post monitoring and evaluation of the effectiveness of social expenditure programmes. Ex ante design, as well as ex post monitoring conducted in many countries, typically includes the evaluation of beneficiaries/recipients by income group, the share of resources received by income group, and the average value of benefits by income group (Tiongson et al., 2003).

	expenditures are insufficient? • Are there any expenditures other than exceptional circumstances (disasters, epidemics, etc.) that were not foreseen in the budget?	• Changes in external factors (international commitments, international markets, global commodities)
Short- and long-term cost drivers	• Which areas have seen large increases in expenditure in the short and long term? • What is the general reason for the large increases? • What will be the status of these expenditures going forward? • How will demand be affected?	Supply side: • Quantitative development of services (number of applicants, number of beneficiaries, etc.) • Quantity and price comparison of costs (purchase costs of goods and services, changes in unit costs) • Impact of expenditure items on growth Demand side: • Analysis of long-term expenditure (pension

		payments) • Impact of demographic structure and changes • Developments in demand with technological developments • Requesting new needs
Comparison	• What are the implications of international comparisons of expenditure? • How should national comparisons be made?	• Comparison of significant discrepancies in international benchmarking (such as volumes being 5-10% higher or lower than other countries) • Determining the difference between the best performing countries in the comparison (such as the countries with the best cost / best results)

		• Comparisons between different municipalities (e.g. comparisons of cost and production composition)
Program Evaluation		
Expenditure eligibility assessment	• Are programmes and activities in line with government priorities? • Are the needs identified at the outset still needed?	• Government statements (for policy objectives and priorities) • Identification of new factors influencing expenditure (changes in factors such as new technology and social preferences)
Evaluation of expenditure efficiency	• Are the expenses for the activities undertaken cost-effective? • Are there low-cost alternatives to the activities? • What are the similarities	• Evaluation of alternative technologies for the same service • Evaluation of similar target programme activities and outputs

	with other government programmes? • Can output costs be benchmarked in units such as ministries or municipalities that provide the same or similar services?	• Identifying idle resources and including them in the process • Evaluation of staff working time and capacity
Evaluation of expenditure effectiveness	• What are the current activity objectives? • Are policy objectives aligned with activities? • Are expenditure programmes well managed?	• Output value of total expenditure provided to recipients • Assessment of achievement of the key performance indicator and desired impact

Source: (IMF, 2019)

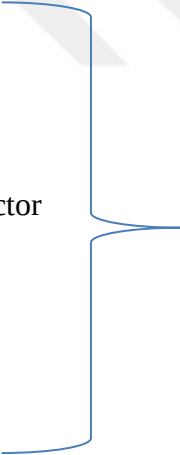
7.3. Appendix 3. Example Savings Decision-Making Template

Programs							
Budget Impact (\$m) cost (-) / saving (+)	2023 Baseline	2024 Budget	2025 FY1	2026 FY2	2027 FY3	Total	Recommended Option and Reason Recommendations of the Steering Committee for CoM's consideration
Option X – Overview of Policy Adjustment							
Option Y – Overview of Policy Adjustment							
Option Z – Overview of Policy Adjustment							
Brief: Existing Resource Allocation							
Details							
Policy Overview	Explanation of the policy proposal						
Justification for Public Interest	Providing public policy justifications for the policy proposal						
Impacted Stakeholders	Detailed assessment of the policy change: those to be affected, number affected, financial impact on those affected, regional or sectoral impact						
Additional Considerations	Identification of other sensitivities involved, e.g. are there any negative social or economic consequences of the changes? Are the policy changes						

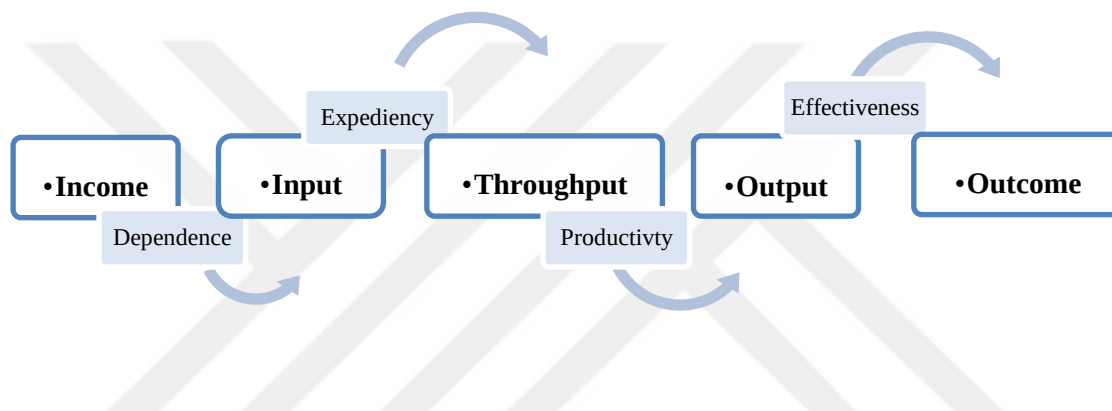
	consistent with previous government policies? Do the policy changes have an impact on other programmes?
Execution Plan	Legislative change needed/not needed. When will the legislation be implemented? Does the policy change require consultation with third parties? Over what timeframe will implementation be managed and by whom?
Expected Response from External Stakeholders	Detailed stakeholder response: are there lobby groups or think tanks/institutions that will advocate for or against the policy change?

Source: (Falloo & Georgieva, 2018)

7.4. Appendix 4. Suggested Template for Spending Reviews

Cover Page and Title	
Publication Date	
Table of Contents	
List of Figures, Tables and Boxes	
Abbreviations/ Acronyms	
Foreword	
Acknowledgements	
Executive Summary	
• Context • Analysis • Conclusions and Recommendations	
Section 1: Overview • Legal Basis for Spending Reviews • Policy Aims and Objectives of Spending Reviews • Supported Programs • Overview of Expenditures and Revenues in the Sector • Key Actors and Responsibilities • Reforms Realized • Methodology and Research Questions • Structure of the Spending Reviews Report	 could include:
Section 2: Analysis • Presentation of the topic covered • Efficiency • Effectiveness • Country comparisons	 could include:
This section also discusses the framework used for the analysis. For example, the spending review of the Dutch National Police, published in 2017, the analysis included the	

functioning of all parties in the police system in its analysis in order to obtain an integrated picture of the functioning of the police system. In conducting this analysis, for the purpose of the analysis, the IBO working group worked with a five-pillar model as an arm of the analysis. The model takes into account the social and administrative context of the police and provides insights into the police and police management. For the purpose of the analysis, the framework for the analysis of the spending review is shown below (Ministerie van Financiën, 2017).



The figure above shows how the pillars relate to each other and how they are interconnected.

Income refers to the environment in which the police work and has an impact on the potential demand for police services. The police have no direct influence on this.

Input refers to the work and resources (including people) made available to the police by the Minister of Security and Justice. The balance between the supply of work and resources is the responsibility of politicians and authorities (prioritisation). Efficient use of resources is important to maximise productivity and thus output.

Throughput refers to the execution of the concrete work delivered by the police, as determined by the authorities.

Output is the results achieved by the police: for example, it can be measured for example, in terms of arrests and, to a lesser extent, in terms of prevention.

The outcome is all the social impacts resulting from the police's performance. This means the contribution to safety and confidence in the police. Effectiveness is the extent to which the policy achieves the intended effects within the set framework.

Section 3: Conclusions, Policy Options and Recommendations

This section concludes the public spending reviews and makes recommendations. It sets out policy recommendations for savings and summarises how and by whom short- and long-term reforms should be implemented. Overall, the spending review provides options for reducing spending or achieving better value for money.

Source: (Fallov & Georgieva, 2018).

7.5. Appendix 5. Special Case: Ireland's 2023 Spending Review Experience

Ireland's Spending Review 2023, published over three different reporting periods (September 2023, December 2023 and February 2024), provides a comprehensive analysis of the efficiency and sustainability of public spending. These reports assess spending trends across a range of sectors and provide policy recommendations to ensure the efficient use of public resources and support economic reforms. These regular reports include in-depth assessments in areas such as health, transport, agriculture, energy and public services. Highlights of the reports published over three periods are as follows (Government of Ireland, 2023):

September 2023 Report

Reports published in September focused on general policy analyses, including public service innovation, disability benefits, and public employment services. The most important report during this period was the review of the "Public Service Innovation Fund." This report analysed the impact of the fund, which will be used to strengthen innovation in public services between 2019 and 2021. Out of 743 applications, 70 projects received funding, totalling approximately €2.1 million. Notably, digital transformation projects accounted for 36% of the allocated funds. The innovative solutions implemented led to time and cost savings, making public services more efficient (IGEES, 2023b).

The number of beneficiaries under the Disability Allowance Program increased by 55% between 2012 and 2022, becoming the main driver of expenditure growth. However, the reasons for this increase have not been fully identified. The majority of beneficiaries are under the age of 30, with most reporting mental and behavioural disorders. In addition, the labour force participation rate is low, but it increased to 15.5% in 2022. It has been emphasized that greater collaboration with individuals, employers, and the education sector is necessary to provide better employment opportunities for recipients (IGEES, 2023b).

A review of the Public Employment Service (PES) found that 58% of individuals registered with employment support services participate in active job search programmes, while 42% engage in community-based employment initiatives or training and job placement programmes (IGEES, 2023b).

The Hospital Performance Report examined the upward trend in emergency care services between 2017 and 2022. Since 2010, emergency care admissions have increased by 45%, requiring a reallocation of healthcare resources to adequately meet the needs of an ageing population. The analysis indicated that older patients experience comparatively longer waiting times, which may compromise patient safety. Increased investment in community-based health services was recommended to alleviate pressure from low acuity cases (IGEES, 2023b).

December 2023 Report

The Spending Review 2023 reports, published in December, focused on comprehensive analysis of the effectiveness and sustainability of public spending across different sectors. These reports assessed spending trends and made recommendations to support policy decisions in areas such as transport, agriculture, trade and major capital projects.

The Public Service Obligation (PSO) for Public Transport Funding report examined the growing role of public support in funding public transport services. In 2019, Treasury support accounted for 32 percent of PSO costs, rising to 53 percent in 2023. This is attributed to rising fuel and energy costs, as well as the impact of new transport services and tariff reductions for young people. In the future, funding mechanisms for transport infrastructure development and tariff sustainability will need to be reassessed (IGEES, 2023c).

The Adopting a Well-being Approach to Assessing Climate Action in the Transport Sector report assessed the well-being impacts of climate policies in the transport sector. The well-being framework considers the direct and indirect benefits of climate policies, such as

carbon reduction, to society (IGEES, 2023c). This approach emphasized the contribution of transport policies to social welfare beyond economic indicators.

The Market Access for Irish Agri-Food Exports report analysed the impact of market diversification efforts and external market access strategies on Irish agri-food exports. The importance of post-Brexit trade strategies, the resources used to increase access to export markets, and the contribution of this access to the agricultural sector are discussed in detail. Ireland's exports to world markets increased by 36 percent in real terms between 2016 and 2022. Changes in the regional composition of exports were highlighted and it was suggested that a holistic food systems approach should be adopted to support the sustainability of increased exports, particularly in markets outside the European Union (IGEES, 2023c).

The Review of Capital Expenditure in the Enterprise Sector report examined capital expenditures in the trade and enterprise sector between 2013 and 2022. During this period, Ireland allocated €4.7 billion to capital spending, providing significant support to respond to asymmetric shocks such as Brexit and COVID-19 (IGEES, 2023c). The report analysed the impact of investments in priority areas such as innovation, digitalization, and green transformation on the sector. An Analysis of Cost Forecasting in Major Capital Projects & Programmes report focused on issues related to cost forecasting in major infrastructure projects and proposed solutions to address these challenges. Drawing on international examples, the report emphasized the critical role of accurate cost forecasting in project success and highlighted problems such as strategic misrepresentation. It also recommended the use of modular construction techniques and modern technologies to achieve more effective cost estimation (IGEES, 2023c).

February 2024 Report

In Ireland, the 2023 Spending Review focused on the analysis of energy prices and supports, as well as nursing home support programmes for people in need of long-term care.

The review of energy prices evaluated the factors affecting household energy bills during the energy crisis and the measures taken by the government. In particular, the sharp increase in wholesale gas prices starting in the second half of 2021, and its impact on electricity prices, has a significant impact on both households and businesses. In 2022, gas prices rose to nearly ten times the average of the past two decades, leading to substantial increases in energy bills. In response, the government introduced measures to mitigate energy costs, including a €200 energy credit in the spring of 2022 and a total of €800 in energy support through three separate payments in 2023 budget. While these supports considerably reduced household energy bills, the persistence of energy prices above pre-pandemic levels highlighted the need for long-term solutions. Despite reduced consumption, some households struggled (IGEES, 2024). This situation underscored the need for more targeted policy interventions.

The review of the nursing home support program addressed the functioning of the system that provides financial support for long-term care needs. The system which was introduced in 2009 aimed to provide equal access to individuals based on their financial situation. As of 2023, 81 percent of nursing home bed capacity was provided by private, 16 percent by public and 3 percent by voluntary organizations. While the share of support for private nursing homes is increasing, it was noted that more evaluation is needed on the effective use of public resources and the reasons for cost differences. During the COVID-19 pandemic, significant support was provided to private and voluntary nursing homes through temporary support programmes. These mechanisms provide valuable guidance for responding to similar crises in the future (IGEES, 2024).

Both reviews have important implications for policymakers to improve the efficiency of public spending, ensure fiscal sustainability and enhance social welfare. These assessments provide critical information for designing more effective and targeted policy interventions.

7.6. Appendix 6. Special Case: The Netherlands' (2019/20) Comprehensive Spending Review Experience

Although the Netherlands is a medium-sized country in terms of population compared to other European nations, it has a high GDP³⁷ per capita and is governed as a constitutional monarchy based on a multi-party parliamentary system. The state structure consists of the King and the Council of Ministers. The Dutch Parliament consists of two chambers: the Senate and the House of Representatives (De Tweede Kamer, 2024).

The budget process in the Netherlands begins with the preparation of budget proposals by the ministries. These proposals are then presented to the Senate and the House of Representatives in the form of a legislative bill. The Senate and the House of Representatives first evaluate, discuss, and approve the bill. Only after approval by both chambers does the budget enter into force. The Dutch budget process, the main actors involved, and the key dates and procedures within this process are illustrated in Figure 7.1 below.

³⁷ In 2024, the population of the Netherlands is reported to be 17.92 million, with a GDP per capita of \$63,075 (IMF, 2024).

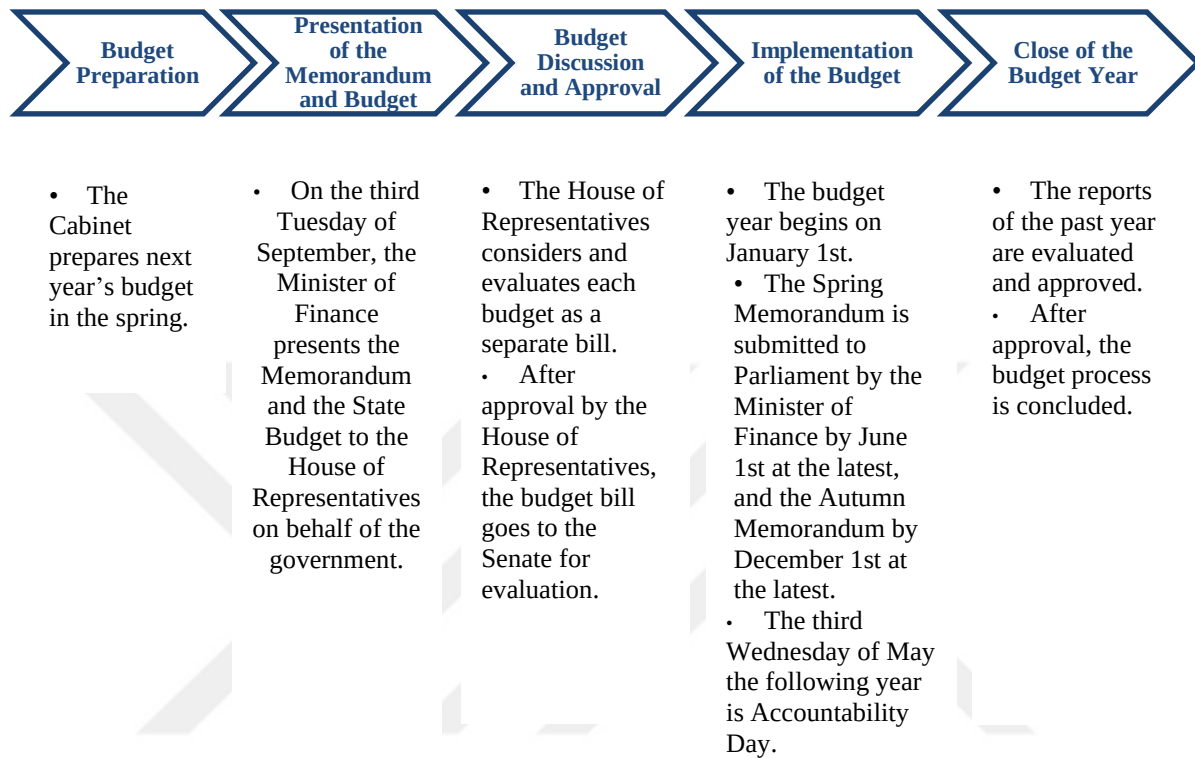


Figure 7.1. Timeline of the Annual Budgetary Process in the Netherlands

Source: (Rijksoverheid, 2024a).

The budget process in the Netherlands lasts about 1.5 years, including the preparation, presentation, audit and closure of the annual accounts. The process begins in the spring with the cabinet's budget preparations. On the third Tuesday in September, the Minister of Finance presents the budget memorandum and the national budget to the House of Representatives on behalf of the cabinet. This budget includes all ministerial budgets and is checked for consistency with the rules of the Coalition Agreement. The Budget Memorandum (Miljoenennota) provides an overview of the financial and economic situation and outlines key policy decisions and spending priorities. Upon approval by the House of Representatives, the budget proposal proceeds to the Senate for final adoption by the end of the year (Rijksoverheid, 2024a).

Following parliamentary approval, ministries begin to implement their budgets on 1 January. The Minister of Finance is responsible for submitting interim reports during the fiscal year: the Spring Memorandum (Voorjaarsnota) by 1 June and the Autumn Memorandum (Najaarsnota) by 1 December. These reports monitor budget implantation and allow for any necessary supplementary appropriations (Rijksoverheid, 2024a).

An important feature of the Dutch fiscal framework is the Accountability Day (Verantwoordingsdag), which is held annually on the third Wednesday of May. On this day, the House of Representatives reviews the previous year's budget execution. Ministries submit their annual financial and performance reports, which are consolidated into a National Annual Report by the Minister of Finance. The Court of Audit evaluates this report, and following its approval, the results are submitted to the Parliament for final evaluation and formal closure of the fiscal year (Rijksoverheid, 2024a).

The Netherlands integrates spending reviews into its budget process through annexes in the Budget Memorandum and specific review mandates. Each year, the "Review Mandate Document (Taakopdracht IBO's)" outlines the terms of reference for spending reviews to be conducted (Rijksoverheid, 2024b).

Spending reviews in the Netherlands are conducted through Interdepartmental Policy Reviews (IBOs), a long-standing institutional mechanism. IBOs are coordinated by an independent chair and carried out by working groups that include representatives from relevant ministries, the Ministry of Finance, and external experts. These groups analyse specific policy areas and propose alternatives to improve efficiency and fiscal sustainability. The findings, together with the government's official position, are presented to the House of Representatives. For instance, five new IBOs were launched in 2022 and their mandates were included as an annex to the 2023 Budget Memorandum. Prior to the COVID-19 crisis, a Broad-Based Social Reassessment (BMH³⁸) was conducted for the 2019/2020 period. The

³⁸ BMH (Broad-Based Social Reassessment- Brede Maatschappelijke Heroverweging) is an evaluation initiative in the Netherlands aimed at preparing for future economic crises or downturns by identifying effective policy options and reforms. Its purpose is to provide a comprehensive analysis of the pros and cons of various policy

Dutch House of Representatives requested the Ministry of Finance, as part of its preparations for the next economic downturn or crisis, to map out effective policy options and reforms, consisting of pros and cons, based on past experiences with broad reassessments. Covering areas ranging from refugee issues to national security, and from education to employment programmes for unemployed youth, the 2019/20 comprehensive spending review considered a structural expenditure reduction of 20% across all spending areas (Tweede Kamer der Staten, 2019).

These comprehensive reviews received significant public attention and underscored the Netherlands' commitment to evidence-based policymaking and proactive fiscal planning. For the 2019/20 period, sixteen key public sector policy areas were selected for in-depth review, including education, healthcare, national security, labour market integration, climate adaptation, and government service delivery. In response to a request from the House of Representatives, the government was tasked with identifying policy options that include both advantages and disadvantages to better prepare for future economic crises, while external experts were also invited to contribute to the process. This broad-based assessment demonstrates the country's strategic use of spending reviews not only for fiscal consolidation but also for enhancing the effectiveness and quality of public service delivery (Ministerie van Financiën, 2022, 2023). A summary of expenditures based on the 16 main topics identified in the 2019-2020 spending reviews is as follows (Tweede Kamer der Staten, 2019):

1. Providing high-quality education with opportunities for all: Funding for educational institutions is mainly provided through the “lumpsum bekostiging” method, which means that school administrations independently determine their spending on personnel and materials. However, this system has been criticized for lacking sufficient accountability in terms of financial responsibility and achievement of objectives. The working group was tasked with developing a variant that included a 20% reduction in the education budget. This variant highlights the inherent trade-offs between improving the quality of education and maintaining equal access for all students. Nonetheless, it aims to maintain essential educational services as

and implementation options, enabling the government to make more informed and evidence-based decisions. The process does not comment on the desirability or feasibility of the options but focuses solely on delivering a detailed assessment (Rijksoverheid, 2019).

much as possible. The review found that reducing the annual teaching hours in primary and secondary education to 800 hours would save €568 million and €486 million, respectively by 2025, with long-term savings reaching €1,136 million and €971 million. Eliminating programmes such as teacher grants, free school books, educational visits to Parliament, and religious and humanist education would save €48 million by 2025 and €54 million in the long term. Abolishing additional allowances for small primary schools and funding for average school sizes would save €75 million by 2025 and €150 million in the long term. These cuts and measures aim to achieve total annual savings of approximately €4,010 million from 2025 onwards (Rijksoverheid, 2020b).

2. A future- proof healthcare system: The spending review indicates that healthcare spending is expected to rise in the coming years. In a potential disaster scenario, healthcare spending is projected to rise from 9.1% of GDP in 2021 to 9.8% in 2025 and 10.4% thereafter. Under such a scenario, spending is expected to increase from €85 billion to €100 billion over the next five years. According to the National Institute for Public Health and the Environment (RIVM), current spending is expected to almost double by 2040, reaching €174 billion (approximately 16.4% of GDP). Demographic changes, particularly ageing, are identified as significant contributors to this increase. Additionally, wage and price increases in the healthcare sector are expected to exceed general inflation, leading to an annual expenditure increase of 0.5%. The review concludes that implementing strict efficiency and cost-effectiveness tests could result in substantial long-term structural budget cuts, with potential savings estimated at €5.75 billion (Rijksoverheid, 2020g).

3. Ensuring a safe environment: The recommendations focus on optimizing the forensic care system in the Netherlands and implementing budget cuts aimed at achieving 20% savings across four different variants. Optimization measures include Simplified Organization, Results-Oriented Financing, and Reorganization of the System's Foundations. Additional strategies, such as Improving (Digital) Collaboration, Reducing Administrative Burdens, Making the Labor Market More Attractive, and Developing a Clear and Transparent Communication Strategy, are expected to yield savings of €47 million in 2024, €48 million in 2025, and €39 million in 2026 (Rijksoverheid, 2020n).

4. Fair work: The spending review emphasizes protecting workers' rights, ensuring fair working conditions, and improving inspection processes. Measures discussed include budget-neutral actions, those requiring budget concentration, and cost-saving initiatives. Proposed solutions include simplifying labour laws, restructuring the labour market, and strengthening oversight and inspections. Enhancing supervision and oversight could reduce illegal practices, promote fair competition in the labour market through measures at the European level, and improve housing conditions for migrant workers. A 20% reduction in existing inspection and oversight activities could result in short-term annual savings of €15 million (Rijksoverheid, 2019).

5. Utilizing talents in the labour market: Various education and employment policies aimed at improving labour market efficiency are evaluated. The report analyses the budgetary implications of current labour market policies and makes recommendations for future improvements. It examines the potential for a 20% budget reduction in specific areas, particularly through cost-effective measures in education and labour market programmes. The proposed cuts include reducing budgets allocated to secondary and vocational education institutions, cutting unemployment insurance payments, increasing external funding for research projects while reducing state funding, delaying campus development and renovation projects, and limiting administrative and management expenses. The total savings from these measures amount to €0.5 billion (Rijksoverheid, 2020i).

6. Moving towards an inclusive society: The measures and policies adopted by the Dutch government to increase social participation and reduce social exclusion are described in detail. The review explores reforms and measures to increase the efficiency of social services and make public spending more effective, particularly during economic crises. Key areas of focus include increasing the participation of various social groups and integrating social services, addressing long-term unemployment, debt, poverty, low literacy rates, the integration of foreign nationals, and health issues (Rijksoverheid, 2020f).

7. Space for living: Problems in the Dutch housing market are addressed, and policies to address these problems are developed, with a focus on increasing housing supply and reducing costs. The impact of financial support measures, such as rent subsidies and mortgage interest relief, as well as the potential impact of changes to these policies are evaluated. For example, abolishing the mortgage interest relief (HRA³⁹) and the owner-occupied value deduction (EWF) could generate savings of about €2.7 billion by 2025 and structurally €3.1 billion in the long term. In total, the annual structural budgetary gain would be around €4.8 billion (Rijksoverheid, 2020j).

8. Ready for climate change: Adaptation strategies for climate change and the budget, regulations, and capacities required for their implementation are addressed. The review discusses how to respond to future climate crises. To make infrastructure resilient to climate change, an annual investment of approximately €63 million is planned for the period 2021-2025. By adapting to climate crises at an early stage, it is intended to prevent larger and more costly damages in the future (Rijksoverheid, 2020d).

9. Innovative society: Strategies and policies aimed at fostering innovation and research to address large-scale societal challenges are evaluated, with the goal of creating an innovative society (Rijksoverheid, 2020c).

10. Towards a more sustainable food system: Policies aimed at creating a sustainable food system are assessed, with a focus on identifying policy options that could be effective during economic crises. The review emphasizes the need to change or eliminate current policies that do not contribute to sustainability. Measures under consideration include transferring a larger share of the Netherlands Food and Consumer Product Safety Authority (NVWA) inspection and enforcement costs to businesses, abolishing transfer tax exemptions for agricultural land and tax exemptions on agricultural profits, removing energy tax

³⁹ HRA (Hypotheekrenteaftrek): In the Netherlands, the HRA is a tax deduction that allows homeowners to deduct mortgage interest payments from their taxable income. This system permits homeowners to offset the interest payments on their mortgage loans against their annual income taxes. It acts as an incentive to promote homeownership and provides a significant tax advantage, particularly for high-income individuals. The deduction is applied by subtracting the interest paid on a homeowner's mortgage loan from their annual taxable income, thereby reducing borrowing costs and encouraging homeownership (Rijksoverheid, 2020j).

reductions for the greenhouse horticulture sector, restructuring energy tariffs, and introducing new taxes (e.g., taxation of vegan products). For instance, imposing a 30% tax per liter on sugary beverages is expected to generate annual savings of €810 million starting in 2023. Additionally, a special consumption tax⁴⁰ is planned to reduce the negative health⁴¹ and environmental⁴² impacts of meat consumption, which is projected to save €850 million annually by 2025 (Rijksoverheid, 2020k).

11. Towards a waste-free economy: This review explores the requirements for transitioning to a circular economy⁴³ and the policies needed to facilitate this shift, while also examining its potential economic impacts in the coming years. Measures considered include extending the lifespan of products to reduce waste, establishing agreements with the private sector, and creating a joint financing fund to support the circular economy. On the other hand, it has been estimated that approximately €4 million in annual savings could be achieved by discontinuing national circular economy policies and complying only with regulations mandated by the European Union (Rijksoverheid, 2020e).

12. Future-proof mobility: The report presents a comprehensive analysis of the efficient use of existing transport infrastructure, new investments, regulations, and tax policies. In line with the Paris Agreement, a 49% reduction in greenhouse gas emissions is targeted by 2030. While investments in transport infrastructure impose additional budgetary burdens, savings are expected from the cancellation of certain projects and investments. Project cancellations are expected to save €5 billion, and cuts in broad subsidies could result in €0.5 billion in savings, potentially achieving budget savings of up to 20%. As a result, the

⁴⁰ Increasing the VAT Rate on Meat from 9% to 21% (Rijksoverheid, 2020k).

⁴¹ The Dutch Health Council establishes a link between the consumption of red and processed meat and certain nutrition-related diseases such as stroke, diabetes, colon cancer, and lung cancer. In its “Good Nutrition Guide 2015”, the Health Council recommends limiting the consumption of red and especially processed meat (Gezondheidsraad, 2015).

⁴² A reduction in meat production contributes to decreasing greenhouse gas emissions, water and land usage, acid rain, and eutrophication. With a 21% VAT rate, greenhouse gas emissions are expected to decrease by 706 million kg CO₂-eq. Additionally, with an environmental impact tax, greenhouse gas emissions could be reduced by 1,973 million kg CO₂-eq (Rijksoverheid, 2020k).

⁴³ The Circular Economy model is defined as a framework that enables the reuse of products and materials, eliminates or significantly reduces waste and pollution, and promotes structural changes in the economy (Bibas et al., 2021).

budgetary impact of the austerity package is expected to be €635 million by 2024 (Rijksoverheid, 2020l).

13. Better government services for citizens and businesses: This review addresses the planning and delivering of improvements for citizens and businesses. Measures such as increasing digital government services and improving accessibility for citizens and businesses have been identified as key steps to improve services. For example, measures to enable citizens or businesses to quickly communicate their requests, complaints, or appeals to the government are expected to incur an additional budgetary cost of €1 million in the first year. However, this cost is expected to decrease in subsequent years, leading to annual savings of €16 million. Another example is the mandatory use of data and the provision of general digital infrastructure services, which are expected to result in €34 million in annual savings by 2027 due to decreasing costs (Rijksoverheid, 2020a).

14. Towards a flexible migration chain: This review analyses existing migration policies in the Netherlands and provides strategies and reform options for possible future migration scenarios. For instance, measures such as limiting medical services for refugees are projected to save €1.9 million per year starting from 2021 and €2.4 million by 2025. Similarly, restricting education opportunities for refugee children is estimated to save €2.3 million per year starting from 2021 and €1 million annually by 2025 (Rijksoverheid, 2020h).

15. Security and changing power relations: Security policies and military expenditures in Europe and the Netherlands have been evaluated, along with budgetary and financial savings measures to address potential security threats. For example, the closure or downsizing of embassies and consulates in certain countries is aimed at reducing costs, with expected savings of €105 million in 2025 and €105 million annually in the following years. Another area of review is the reduction of the operational expenditures of intelligence and security agencies, which is expected to save €62 million in 2025 and €62 million annually in subsequent years (Rijksoverheid, 2020m).

16. Competitiveness and national security in an open economy: The review examined competitiveness and the public interests in an open economy, proposing a series of cost-saving measures to reduce expenses and improve efficiency in various areas. For instance, it assessed measures to improve the digital security of small and medium-sized enterprises (SMEs) and to protect critical national infrastructures -such as water, electricity, telecommunications, healthcare, transportation, and finance- against cyber threats. The potential budgetary impact of mitigation strategies was also outlined. Specifically, reducing programmes and training sessions, along with cutting operational expenses (e.g., personnel and office costs), are expected to generate annual savings of €5 million.

7.7. Appendix 7. Special Case: The United Kingdom's 2021 Spending Review Experience

The United Kingdom is a country with a governance system based on a constitutional monarchy and parliamentary democracy. The King or Queen has a symbolic role as the head of the executive and judiciary, while real political decisions are made by the Prime Minister, who is the head of government, and the cabinet. The government operates based on the principle of cabinet responsibility in a parliamentary system, with the Chancellor of the Exchequer playing a key role in managing the country's fiscal policies. The Parliament consists of two chambers: the House of Lords and the House of Commons. The Treasury, the most significant institution in economic governance, functions as the principal authority responsible for controlling national expenditures and managing budgetary processes (Bogdanor, 1995).

Unlike other European countries, the United Kingdom does not have a constitutional framework defining the roles of the legislative body, the government, and civil servants in the budgetary process. Instead, the budget process is conducted through primary and secondary legislation, agreed conventions, and published guidelines. The foundation of the United Kingdom's fiscal legislation was the Finance Act 1998, which laid the foundations for the modern fiscal structure and directed the operation of the budget process. In addition, there are other key pieces of legislation related to the budget process. One of these is the Supply and Appropriation Act 2011, which governs the financing of public expenditures and spending authorizations. The Government Resources and Accounts Act 2000 introduced provisions concerning the management of public resources and accounting systems, while the Budget Responsibility and National Audit Act 2011 aimed to strengthen budgetary accountability and increase transparency in the audit process (UK Parliament, 2024). These laws constitute the main elements of the legal framework that governs and oversees the budgetary process.

The United Kingdom's budget cycle reflects a systematic and well-established process, shaped by years of experience. It is structured around four key stages -Planning, Budget, Estimates, and Reporting- that guide the process from expenditure planning to appropriation

and final fiscal reporting. Each stage is designed to promote efficiency, accountability, and transparency in public financial management (Besly & Goldsmith, 2023).

- **Planning Cycle**

The planning cycle, which is the foundation of the fiscal cycle and its first stage, begins with the Spending Review. Conducted every 2–3 years, the Spending Review ensures that public spending policy is addressed with a medium- to long-term perspective. Unlike traditional annual spending plans, the Spending Review not only focuses on expenditures for a single fiscal year but also provides an opportunity to evaluate the long-term impacts and sustainability of government policies. This approach allows for a more strategic planning process in public finance, analysing not only the amount of resources allocated to departments, but also the types of outcomes and policy objectives that will be achieved with those resources. Departmental Expenditure Limits (DELs) represent the spending areas controlled by the government and are shaped in alignment with government policies for each department. In addition to DELs, Annually Managed Expenditures (AMEs), which cover less predictable and demand-driven departmental spendings, also form part of the Total Managed Expenditure (TME) framework. However, unlike DELs, AMEs are not directly used as a measure of departmental financial management performance (HM Treasury, 2021b). Together, these two types of expenditure provide a comprehensive framework for public finance management.

As well as setting financial limits, the Spending Review also sets performance targets for departments through Public Service Agreements (PSAs). These agreements clearly outline the government’s policy priorities for each department and the types of spending required to achieve these priorities. Public Service Agreements differ from traditional budgeting processes by focusing more on outputs and outcomes rather than inputs. For instance, specific targets such as that included in the 2004 Spending Review for the Department for Education and Skills- “to reduce school truancy rates by 8% by 2008 compared with 2003”- illustrate this approach, which seeks to establish a strong link between budgets and policies. Similarly, the 2010 Comprehensive Spending Review included goals such as “a 60% reduction in capital spending on school buildings”, further reflecting this focus (HM Treasury, 2004, 2010).

The success of the planning cycle has a direct impact on the subsequent stages of the budget cycle. The Spending Review is typically concluded in July and serves as the starting point for the government's budget cycle. The outcomes of the Spending Review provide financial plans for departmental spending in specific areas. These plans not only serve as a roadmap for departments to achieve their specific targets but also contribute to the achievement of the government's broader fiscal objectives.

Overall, the Spending Review has enabled the UK to adopt a longer-term perspective on public finances, linking policy objectives to budgets and aiming to improve the efficiency of government spending. However, criticisms such as the implementation of the process and the inadequacy of data measurement systems suggest that this structure needs further improvement. The Spending Review has become one of the cornerstones of public financial management in the UK and is recognised as a model of good practice worldwide.

- **Budget Cycle**

The budget cycle is one of the most critical processes in the UK fiscal cycle. It consists of three main documents- the Pre-Budget Report, the Budget and the Finance Bill- each of which strategically shapes the government's fiscal policies. The budget cycle begins with the Pre-Budget Report which is published in November or December each year. This report sets out the government's assessment of the economy and how the tax and spending plans for the financial year relate to the broad economic strategy. It also indicates possible tax adjustments that could be made in the next budget (House of Commons, 2007). As well as explaining the government's economic forecasts and policies, the Pre-Budget Report is scrutinised by the National Audit Office to check the assumptions underlying the fiscal forecasts. This process enhances government accountability and provides a strong basis for parliamentary debate.

Budget Day in March is one of the most important stages in the budget cycle. It begins with the Budget Speech by the Treasury Secretary to Parliament. The first part of the speech analyses the state of the national economy in the global context, while the second part

provides a detailed explanation of how the government will raise the necessary funds. Following the Budget Speech, the Treasury publishes the Financial Statement and Budget Report, commonly known as the “Red Book”. This report sets out the economic and fiscal strategies by detailing the current state of the national economy and future goals. The National Audit Office re-examines the fiscal projections and assumptions presented in this report, adding to its credibility. At the end of the Budget Speech, certain tax increases or adjustments temporarily take effect under the Provisional Collection of Taxes Act 1968 (House of Commons, 2007; Hansard Society, 2022). These temporary measures allow tax adjustments to take effect immediately, pending the approval of the Finance Bill. However, as the arrangements under this law is of limited duration, the Finance Bill must receive Royal Assent within the specified time limit.

The Finance Bill is drafted to provide the legal basis for the budget and contains important provisions related to the government’s revenue management. This include changes to the tax types and rates of taxes, provisions for the administration of the tax system and the renewal of existing taxes. During the second reading in Parliament, the bill is debated, and the most important and controversial provisions are examined by the Committee of the Whole House. Other less controversial clauses are examined by a standing committee. After the process in the House of Commons, the Bill is sent to the House of Lords. This stage is usually a formality, as the House of Lords has no power to amend or reject the bill. Finally, the bill receives Royal Assent and becomes law (House of Commons, 2007).

The budget cycle is scrutinised by Parliament through both debates and scrutiny. However, it is rare for the House of Commons to reject the government’s budget proposals, as this would usually lead to a loss of confidence in the government. Nevertheless, Parliament’s role in scrutinising the budget is very important. The Treasury Committee analyses the impact of the budget and takes written and oral evidence from academics, the private sector and the Treasury. In addition, the National Audit Office conducts a review process to test the reliability of budget estimates. These mechanisms increase the transparency and accountability of the budget cycle. Overall, the budget cycle in the UK is a process that enables the government to strategically shape its fiscal policies and provides an efficient framework for

the management of public revenues. Documents such as the Pre-Budget Report, the Budget and the Finance Bill strengthen not only the process of implementing government policies but also the oversight mechanisms in this process (House of Commons, 2007). This cycle supports the UK's success in public finance by creating a structure based on transparency and accountability in financial management.

- **Estimates Cycle**

In the UK, the estimates cycle is a fundamental process by which the government obtains approval from Parliament for the resources necessary to carry out public expenditure. It sets out and legislates for the amount of funding and cash required by government departments during a financial year. The estimates cycle aims to ensure the efficient and accountable management of public resources through a variety of tools such as Main Supply Estimates, Supplementary Estimates and Excess votes (House of Commons, 2007).

Supply estimates are a mechanism by which the government is authorised to draw funding from the Consolidated Fund for specific purposes. The process involves the government presenting spending requests to Parliament, which are approved by the House of Commons and authorised by the House of Lords. The Main Estimates are usually presented to Parliament in April or May following the budget process and are largely informed by data from the Spending Review process. These estimates for each department are made up of separate allocations, called Request for Resources (RfR). RfRs represent the funding requested by departments for specific areas of expenditure and no transfer of funds from one RfR to another can be made without the approval of Parliament. In some cases, departments may submit Supplementary Estimates to request additional funding over and above previously approved amounts or to transfer funds between Resource Requests. These supplementary estimates are usually presented to Parliament three times a year, in summer, winter and spring. However, summer supplementary estimates are rare, as they must be submitted immediately after the Main Estimates. When the estimates are debated in Parliament, departments provide the relevant select committees with a detailed memorandum explaining the reasons for and implications of changes to the estimates. These memoranda enable Parliament to scrutinise the

requests more closely. The Scrutiny Unit provides support to select committees to ensure that this process is more effective (House of Commons, 2007).

The estimates cycle sets resource, cash and capital limits for departments. Although government accounting is primarily resource based, cash limits are also used to control the cash flow of the Consolidated Fund. Revenue and capital limits are managed in accordance with the Treasury rules. While revenue funding can be used for capital purposes, the use of capital funding for revenue purposes requires specific Treasury approval. In addition, departments may be authorised to spend funds from certain revenue sources within certain limits. However, revenue in excess of these limits must be transferred to the Consolidated Fund. It is possible for departments to request fund transfers with the approval of the Treasury in order not to exceed the limits set. However, Parliamentary approval is required if they wish to change the resource, cash or revenue limits (House of Commons, 2007).

To ensure accountability in the budget process, Excess votes are presented to Parliament. This occurs when a department spends more than the amount approved by Parliament or uses funds for an unauthorised purpose. Excess votes are scrutinised by the National Audit Office and presented to Parliament in an Excess Votes Statement. Votes on Accounts are also presented to Parliament in November to allow the government to spend in the first four months of the financial year. These votes cover approximately 45% of the estimated expenditure for the next financial year and allow the government to provide interim funding until the approval of the Main Appropriation Bill in July (House of Commons, 2007).

Finally, requests such as estimates, Excess Votes and Account Votes are legalised through the Consolidated Fund or Appropriation Bills. These bills provide the legal basis for government spending requests and ensure the proper management of public resources. The estimates cycle plays a critical role in ensuring accountability, efficiency and fiscal discipline in public finances and is a key element of the UK's financial management system (House of Commons, 2007).

- **Reporting Cycle**

The final stage of the budget cycle, the reporting cycle, is the stage at which the government evaluates its budget execution and holds itself to account to the public. It includes a variety of tools, such as Departmental Reports, Autumn Performance Reports, Resource Accounts, and the National Audit Office's (NAO) Value for Money (VFM) reports. Each aims to increase accountability by analysing departments' use of resources and how successful they are in achieving policy objectives.

The Departmental Reports, published in April or May each year, provide a comprehensive assessment of departmental performance. They summarise progress against Public Service Agreement (PSA) targets in standardised terminology and enable benchmarking across departments. They also detail progress in implementing the efficiency programme, provisional spending results for the previous financial year, final spending data for the previous four years, and planned spending for the next three years based on the latest Spending Review. The Departmental Reports should provide a balanced and objective assessment, addressing weaknesses in policy implementation and gaps in data systems in meeting PSA targets, rather than simply highlighting departmental achievements. Treasury guidance on the format and content of the reports helps to maintain standards in this process (House of Commons, 2007).

In addition to the Departmental Reports, the Autumn Performance Reports, published in December each year, are interim reports that assess the performance of departments during the year (House of Commons, 2008). These reports monitor the level of achievement of PSA targets and the implementation of the efficiency programme. Although less detailed, they provide up-to-date information on departments' progress during the year.

The National Audit Office's Money for Value reports are important tools for analysing the effectiveness of government spending. Approximately 60 reports are presented to Parliament annually, assessing the use of public resources with respect to economy, efficiency and effectiveness (NAO, 2024). In these reports, the NAO identifies areas of scrutiny based on

risk analyses and may conduct additional scrutiny on specific issues upon the request of the Public Accounts Committee (PAC) or Members of Parliament. The PAC usually scrutinises these reports in detail and makes recommendations on the government's financial management.

Resource Accounts are prepared using a resource-based accounting system to enable better monitoring and evaluation of department's financial management. Under the Government Resources and Accounts Act 2000, all government departments are required to produce these accounts and they are audited by the NAO. This system ensures that expenditure and liabilities are properly accounted for in the period in which they are incurred. For instance, if a department signs a contract for consultancy services in one financial year, but the services are delivered and completed in the following financial year, the expense is recorded in the accounts for the year in which the consultancy services are provided. This method of accounting also reflects the depreciation of capital assets over their useful life and gives a more accurate picture in financial management. Parliament plays an active role in scrutinising and auditing these reports. The Scrutiny Unit assists select committees in analysing the reports and seeks to improve their quality by identifying examples of good practice (House of Commons, 2007).

As a result, the reporting cycle in the UK is a fundamental tool for ensuring transparency and accountability in public financial management. Ministerial Reports, Autumn Performance Reports and Resource Accounts provide important tools for assessing departments' performance in meeting policy objectives and the use of public resources. The NAO's VFM reports and PAC's audits ensure that public resources are used effectively, while Parliament's role in this process is a key element in strengthening accountability. This cycle enables the UK to establish a system of control and management of public finances based on the principles of economy, efficiency and effectiveness.

The UK budget cycle consists of a number of interconnected stages and elements. The table below provides a concise visual summary of the process and its key components.

Table 7.1. The Budget Cycle of the United Kingdom

Timetable	Planning Cycle (Spending Review)	Budget Cycle	Estimates Cycle	Reporting Cycle	
April		Finance Bill- 2nd Reading			
May		Finance Bill Committee Debate	Presentation of the main budget plan for the next financial year and the summer budget plan for the current year	Presentation of Departmental Reports	Resource Accounts submission
Jun					
July	Spending Review Process (every 2-3 years)	3rd reading of the Finance Bill Approval of the Finance Bill	3rd Estimates Day Debate Passage of Appropriation Act No. 2		
November		Submission of Pre- budget Report	Presentation of Winter Supplementary Estimates and Vote on Accounts	Submission of Autumn Performance Reports	
December			1st Estimates Day Debate Approval of the Consolidated Fund Act		
January					
February			Presentation of the Spring Supplementary Estimates		
March		Budget Speech and Debate Publication of the	2nd Estimates Day Debates		

		draft financial law		

Note: In the United Kingdom, the financial year begins on 1 April and ends on 31.

Source: The table has been prepared by the author using the information from the source Financial Scrutiny Uncovered. This source provided essential insights into understanding and organizing the details of the UK budget cycle.

In the UK, Spending Reviews have been a regular process since 1998 aiming to improve the efficiency of public spending and ensure budget sustainability. It is a comprehensive assessment process that takes place every three or four years, setting ministerial spending limits and shaping policy priorities. The 2021 spending review is crucial to ensure economic recovery and fiscal stability after COVID-19. In this period, spending on key areas such as healthcare and social services was prioritized and long-term sustainability was targeted (HM Treasury & Sunak, 2021b). The 2021 Spending Review set spending limits for the fiscal years 2022-23 and 2024-25, clarifying the priority spending areas in the government's budget. These annual periods are critical to ensure that the UK economy manages the restructuring process in a sustainable manner.

The 2021 Autumn Budget and Spending Review was announced in a speech to Parliament on 27 October 2021 by the Treasury Minister, Rishi Sunak. The speech highlights the important steps the UK has taken to combat the effects of the Covid-19 pandemic and continue the economic recovery. It also sets out the steps to be taken to achieve the country's future economic growth targets. Sunak's speech discussed the measures to be taken in critical areas such as economic growth, improving public services and strengthening public finances (HM Treasury & Sunak, 2021b).

The Chancellor's letter to departments on 7 September 2021 sets out the focus for spending. The 2021 Spending Review sets out how to meet the priorities of the British people and deliver for the better by delivering strong and innovative public services, increasing opportunity across the UK, leading the transition to a net zero carbon zero economy,

promoting Global Britain⁴⁴ and delivering the growth plan. The SR21 call to institutions set out the government's overall spending targets, which will increase by an average of 4% per year in real terms. SR21 projected a cash increase of £140 billion by budget year 2024/25, the largest real-terms increase over the Parliament's term. In addition, over £600 billion of public sector investment is planned over the period (HM Treasury, 2021a).

The SR21 also addressed economic growth and public finance targets. Growth is projected at 6.5% in 2021, followed by 6.0% and 2.1% in 2022 and 2023, respectively. Borrowing is projected to decline from 7.9% of GDP in 2021 to 2.4% in 2023. It was announced that more than £44 billion would be invested in health care by 2024/25, as well as significant investment in education, housing, justice and other areas. Investment in R&D and reducing regional inequalities were also highlighted. These measures include a range of measures to meet the UK's objectives of economic recovery, environmental sustainability and reducing regional inequality (HM Treasury, 2023).

Departmental Spending Limits are expected to increase by more than £100 billion a year in cash terms. This represents an average annual real increase of 3.3% from 2021-22 to 2024-25. Meanwhile, total managed expenditure, which represents the total amount of money spent by the government through departments, local authorities, other public bodies, and the social security system, is projected to peak at 53.1% of GDP in 2020–21 and decline to 41.6% of GDP by the end of the forecast period (HM Treasury, 2023).

⁴⁴ The United Kingdom's departure from the European Union on January 31, 2020, marked a pivotal moment for the country to redefine its position in global politics (Walker, 2021). This process necessitated a comprehensive reassessment of not only its economic relationships but also its foreign policy strategies, trade policies, and defense and security interactions. Following its exit from the EU, the UK embarked on a strategic restructuring process aimed at diversifying its role in international relations. This restructuring prioritized a new approach focused on diversifying the country's trade agreements. After ending its partnership with the EU, the UK pursued numerous independent trade agreements globally, particularly with Asia, North America, and Commonwealth countries. This external trade policy aimed to secure access to international markets through new agreements, with a specific emphasis on increasing trade opportunities and expanding trade volume in emerging markets. In foreign policy, the UK adopted a more independent stance. Leaving the EU enabled greater flexibility in its foreign policy tools and strategies, allowing the country to act more autonomously on the international stage. The UK intensified efforts to forge new alliances and strategic partnerships to strengthen global diplomacy and collaboration (European Council, 2025). In conclusion, the UK's exit from the EU represented not only an economic realignment but also a comprehensive strategic transformation aimed at redefining its role in international relations. This transformation spans a wide spectrum, from trade to foreign policy and from defense strategies to global partnerships, demonstrating the dynamic nature of the UK's post-Brexit evolution.

The Economic and Fiscal Outlook projected that inter-ministerial spending limits would steadily fall from 2023 onwards as a result of spending reviews. Following the publication of the 2021 spending review, the March 2022 Economic and Fiscal Outlook, which includes forecasts for the economy, and the latest March 2024 Fiscal Report show the impact of the policies in 2022 Budget. The post-pandemic increase in the UK public spending has largely been driven by departmental spending, which is expected to continue to grow by around 1% of GDP, along with current and investment spending. Social assistance spending, on the other hand, has stabilized slightly above pre-pandemic levels (Bapbacı & Akdemir, 2024).

According to the report published in 2024, government expenditures are projected to decline in 2025/26 and beyond, due to lower interest costs on debt and slower growth in ministry spending, as well as reduced social assistance spending and spending elements. As annually managed expenditure is largely driven by unfunded student loans, pensions and environmental taxes, these expenditures are also expected to decline. On the other hand, the 3.6% annual increase in health spending, the target to keep defence expenditures above 2% of GDP (NATO minimum), the target to keep official development assistance (ODA) at 0.5%, and the commitments to reduce per pupil expenditures in school expenditures with the SR21 all point to a downward trend in spending. The government's spending plans have increased significantly above the Office of Budget Responsibility's forecasts, especially as the last spending review is approaching, putting the Office of Budget Responsibility's forecasts at risk. In the run-up to the two Spending Reviews in November 2015 and October 2021, governments have worked to improve public sector productivity, which has fallen sharply and is now 5% below pre-pandemic levels. Estimates suggest that a 5% increase in public sector productivity would raise around £20 billion in additional government funding (OBR, 2024).

7.8. Appendix 8. Glossary of Terms

Terms	Definition and Explanation
Baseline Expenditure	The estimated expenditures for the continuation of current government programmes and activities without any adjustment.
Benefit-Cost Ratio (B/C)	The ratio used to summarise the overall relationship between the relative costs and benefits of a proposed project (the total proposed cash benefits of a project divided by the total proposed cash costs of the project).
Consolidated Fund	The Consolidated Fund is the account held by the UK Government with the Bank of England. Audits and regular reports to Parliament on the accounts of all public bodies and authorises public bodies to spend public money within limits approved by Parliament.
Cost-benefit Analysis	The CBA involves comparing each regulatory option on a monetary measure of costs and benefits, and identifying the regulatory option with the highest net benefit.
Cost-effectiveness analysis	A budgeting method that aims to maximise service output while minimising costs by identifying the most appropriate and effective option among alternative ways to achieve planned objectives. In this approach, a common impact is defined for all the options being compared, and this impact is measured in natural units (e.g. increase in literacy levels, educational continuity rates or improvement in exam results).
Effectiveness	An evaluation criterion that measures how best to achieve the output or outcome resulting from an activity and includes the extent to which the objectives of an intervention (policy, programme or project) have been achieved. It is therefore not only about achieving the highest level of output, but also about analysing the performance and consequences of the

	output achieved. It is assumed that if resources are not used effectively, social needs cannot be met to a large extent and this will lead to waste of resources. In this context, the efficient use of public resources is of great importance.
Efficiency	Measure that assesses how economically resources (such as money, expertise, time, human resources, physical resources, natural resources, information and data, management capacity, social capital) are transformed into results. The criterion examines not only the correct use of resources, but also at whether those resources are producing results in the most efficient way. For example, in the field of education, the impact of the training budget allocated to teachers and the technological infrastructure used in a school can be evaluated in terms of improving student performance. If the same budget and resources can reach more students or produce better learning outcomes, it can be said that the resources are being used effectively. Similarly, increasing the expertise of teachers can lead to more effective learning processes in the classroom. In this context, efficiency aims to use limited material, human and physical resources in public services in a way that maximises efficiency and thus benefits for society.
Impact	The overall impact of a policy, programme or activity on individuals, society or systems, and usually involving far-reaching and long-term changes. It goes beyond outputs and outcomes and addresses social, economic or environmental changes. Impact is often more complex to measure because it can also include indirect effects. For example, the impact of an education reform may not be limited to increased student achievement rates, but may also include its contribution to reducing social inequality.

Inputs	The resources used to carry out a policy, programme or activity. These resources include elements such as manpower, funds, equipment, time, information and technology. In the field of education, examples of inputs include teachers, teaching materials, classrooms, digital platforms and budget allocations. For example, the number of teachers per class in a school, books and computers provided to students are educational inputs.
Medium Term Budget	A document containing the total revenue and expenditure forecasts for the next three years, the target deficit and borrowing status, and the ceilings for the proposed appropriations of public administrations.
Outcomes	Wider and longer-term changes resulting from the implementation of a policy, programme or activity. Outcomes differ from outputs in that they focus on the impact of those outcomes on individuals, society or systems, rather than on directly measurable results. In education, outcomes are used to assess how the impact of a programme are reflected over time in students' lives, social equity or workforce skills. For example, a math education programme implemented in a school that improves students' exam results is considered an output, while the fact that these skills improve students' problem-solving abilities and enable them to access better job opportunities is an outcome. Similarly, as a result of implementing a digital literacy programme, the fact that students not only benefit from the programme but also develop their digital literacy skills and access to more job opportunities can be considered an outcome.
Outputs	Direct and measurable results achieved at the end of a policy, programme or activity. In education, outputs are expressed in concrete data such as student level of learning, exam results,

	graduation rates or participation rates. For example, the output of implementing a digital education programme in a school could be an increase in students' skills in using technology or an improvement in exam success rates.
Performance Measure	A method of impartially assessing how successfully the tasks specified in the delivery of a product, service or process have been performed with a predefined set of objectives and a programme. It is a critical tool for assessing the effectiveness and efficiency of processes. The main purpose of performance measurement is to measure the level of achievement of the set objectives, to identify the strengths and weaknesses of the processes and to identify areas for improvement. This involves not only focusing on outputs but also analysing the quality and sustainability of processes. In education, for example, performance measurement can be assessed on criteria such as the extent to which a school improves the academic performance of its students, the efficiency of its educational processes are, and the effectiveness of its teachers in achieving its goals. Metrics such as student pass rates, teachers' professional development levels or classroom participation rates can be part of this measurement. Performance measurement provides concrete data on how to improve the education system based on these data and an important basis for strategic planning. In conclusion, performance measurement is a goal-orientated evaluation method that makes it possible to understand not only the results of an activity, but also how these results are

	achieved.
Savings	Reducing expenditures or achieving more output with the same budget by using public resources more efficiently, effectively and economically. This includes eliminating unnecessary expenditures, reducing costs or favouring lower-cost alternatives. For example, reducing energy costs by implementing energy efficiency projects in public buildings can lead to direct savings. In addition, practices such as process improvement and digitalisation can generate indirect savings by speeding up operations and enabling more efficient use of resources.
Value for Money (VfM)	A concept that refers to achieving the best balance between economy, efficiency and effectiveness. It is seen as a way of thinking that aims at the most efficient use of resources and is not limited to a specific tool or method. In general, cost-benefit analysis is used to assess the net economic impact of a project. In this analysis, expected benefits are adjusted for the rate of inflation, expressed in a monetary value and compared with the project costs. This method is widely used in both developed and developing countries to measure the economic impact of projects such as large-scale infrastructure investments. The VfM approach plays a prominent role particularly in public services such as education. For example, in a project to improve the digital infrastructure of a school, the contribution of each unit of resources spent to student achievement, the rate of access to technology or the quality of learning processes is assessed. In this way, the best balance is achieved between the benefits and costs of the investment, ensuring the efficient use of resources.

The concept of VfM first emerged in the UK and was widely adopted, particularly during the public sector reforms of the 1980s. During this period, the reports by the National Audit Office (NAO) and other audit units in the UK emphasised the need to evaluate public expenditures in terms of economy, effectiveness and efficiency. The aim was to ensure that public funds were being used in the best possible way to achieve maximum social benefit.

Over time, the approach was adopted by other countries and began to be used in various sectors such as education, health and infrastructure. Today, Value for Money has become a widely used evaluation tool not only in public spending but also in the private sector. It aims to achieve long-term benefits for the society through the economical, efficient and effective use of resources.