

An Analysis of Sectoral Tax Performance and Financial Resilience During Economic Crises: The Case of Türkiye

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Abstract

Economic crises significantly impact the structure and sustainability of tax revenues by creating macroeconomic instability and uncertainty in national economies. This situation disrupts the balance of public finances, directly affecting the effectiveness of crisis exit strategies and fiscal policies. In developing countries such as Turkey, economic shocks can transform into real crises-particularly through channels such as foreign trade, credit, and confidence-leading to serious deterioration in economic indicators. In this context, global economic crises and debt crises have negatively impacted Turkey's export-dependent economy, thereby reducing the stability and quality of tax revenues. This situation has been clearly observed during periods such as the 1994, 2000-2001 national crises, the 2008 global crisis, and the 2020 COVID-19 pandemic. During these crisis periods, public expenditures and tax revenues followed a volatile trajectory; in particular, efforts were made to establish fiscal discipline through the "Transition to a Strong Economy Program" implemented following the 2001 crisis. While the 2008 global crisis was mitigated through interest rate cuts and liquidity support, fiscal policy tools such as tax incentives and increased health expenditures played a critical role in reducing the crisis's impacts during the pandemic. The effects of fiscal rules implemented particularly in the periods following the 2008 global financial crisis and the 2001 domestic crisis on the budget deficit and public debt stock are significant for understanding fiscal performance in crisis management. This study will examine Turkey's fiscal resilience in detail by evaluating the adaptability of tax policies to crises and the stability of sectoral tax revenues. In this context, tax dynamism analyses reveal the capacity of discretionary tax policy adjustments to influence national income and the sectoral effects of using taxes as a fiscal policy tool beyond their primary revenue-generating purpose.

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1. The Relationship Between Economic Crises and Public Revenues

Economic crises disrupt the balance of public finances by having both direct and indirect effects on tax revenues. In this context, contractionary fiscal policies tend to increase tax rates or cut public spending, particularly in the post-crisis period, with the aim of reducing the public debt stock; however, this carries the risk of slowing economic growth (Göker, 2014; Üstün & Dulupçu, 2024). However, during crises, reducing indirect and income tax rates as part of expansionary fiscal policies can stimulate economic activity by increasing aggregate demand and boost individuals' purchasing power (Canbaz, 2019). However, the effectiveness of tax revenues in financing public expenditures may vary depending on factors such as the flexibility of tax structures, the size of the informal economy, and the prevalence of tax compliance (Noyan & Samanci, 2022). In particular, fiscal policies supported by budgetary measures aimed at ensuring fiscal sustainability can strengthen fiscal discipline by curbing unnecessary public expenditures (Canbaz, 2019). In the case of Turkey, the tax-heavy nature of public finance and structural fiscal adjustment processes make tax measures more advantageous compared to other fiscal tools (Özker, 2009). The strong link between tax revenues and economic activity causes these revenues to fluctuate during crises, and this situation differentiates the impact on direct and indirect taxes (Onur, 2024). Therefore, the adaptation of tax policies during economic crises should not be aimed solely at revenue generation but should also be considered as a tool to support economic stability and enhance sectoral resilience (Tabar & Tokathioğlu, 2018). In this context, creating fiscal space through tax regulations and enhancing the efficiency of public revenue collection are of great importance (Didinmez, 2025; Şahin, 2016). Indeed, regulations such as fiscal rules play a critical role in establishing fiscal discipline and ensuring the sustainability of public finances by enhancing the effectiveness of countries' fiscal management (Bozdoğan & Buyrukoğlu, 2012). Particularly in developing countries like Turkey, the relationship between tax revenues and public expenditures has been a constant topic of debate regarding the management of budget deficits and the maintenance of economic stability (Karas' et al., 2023). This situation necessitates a thorough examination of the factors influencing tax capacity and the interaction between tax revenues and macroeconomic variables (Eroğlu, 2018; Yildiz, 2025).

1.1. The Concept of a Crisis and Fiscal Policy

Crises can lead to significant disruptions in public finances by bringing about macroeconomic instability and uncertainty, thereby necessitating a reorientation of fiscal policy's both short- and long-term objectives (Bozdoğan

& Buyrukoglu, 2012). During such periods, while fiscal policies are traditionally used to mitigate economic contraction and accelerate recovery, they must also strike a delicate balance between controlling budget deficits and ensuring the sustainability of public debt (Canbaz, 2019; Güneş, 2018). Indeed, the expansionary measures implemented by governments through fiscal policies during crises can lead to increased public spending despite declining tax revenues, and this situation can trigger vulnerabilities in public finances (İçen, 2021). In the case of Turkey, the impact of fiscal policy implementations on the economic cycle-and particularly the role of tax revenues within these dynamics-has been examined using econometric models that account for regime shifts (Tüzün et al., 2018). These models are generally regarded as a critical tool for assessing the flexibility of tax revenues in response to economic shocks and evaluating governments' fiscal maneuvering space (Bulut & Cura, 2023). In this context, the implementation of fiscal rules aims to strengthen fiscal discipline by imposing permanent constraints on fiscal policy indicators such as public spending, tax rates, and borrowing (Tari & Güneş, 2021).

However, high budget deficits and rising public debt caused by economic and financial crises have led to the deterioration of fiscal positions in many countries, making it imperative to examine fiscal sustainability (Özkök & Yildiran, 2017). This situation requires not only the cyclical flexibility of fiscal policies but also optimal parametric equilibrium values regarding changes in tax revenues and public expenditures (Özker, 2009), and it is emphasized that fiscal sustainability can be achieved in the short, medium, and long term through the management of budget deficits and the servicing of debt (Dökmen & Boz, 2017). In this context, the tendency of countries to pursue fiscal consolidation to control budget deficits during periods such as the global financial crisis represents a key view of orthodox economists (Çelik & Çelebi, 2021). In particular, Keynesian economists have argued that fiscal policies should serve a countercyclical function in response to economic fluctuations (Akşehirli, 2024; Tarim & Tuncer, 2022). This approach proposes stimulating aggregate demand through expansionary fiscal policies during recessions and curbing inflationary pressures and public deficits through contractionary policies during economic recovery periods (Tarim & Tuncer, 2022). In contrast, monetarists and public choice theorists have questioned the effectiveness of discretionary fiscal policy and emphasized the importance of rule-based fiscal policy by highlighting the constraints on policymakers and bureaucrats regarding policy instruments (Güler et al., 2018). In this context, rule-based fiscal policy gained prominence as a response to the economic and intellectual changes that emerged particularly after the 1970s and began to be implemented in many countries as restrictive rules in public finance starting in the 1990s (Yıldız,

2010). These rules aim to establish fiscal discipline, maintain macroeconomic stability, and ensure an environment of confidence and predictability in the economy (Aktan, 2025). In this context, the primary objective of fiscal rules is to minimize budget deficits by increasing governments' fiscal responsibility and to ensure long-term fiscal sustainability (Yıldız, 2010).

1.2. Tax Elasticity and Automatic Stabilizers

Tax elasticity is a parameter that measures the extent to which a specific type of tax or total tax revenue responds to a one-percent change in economic aggregates, and this directly affects governments' revenue forecasts and fiscal sustainability analyses, particularly during times of crisis. The interaction between fiscal and monetary policies, which is critical for macroeconomic stability, plays a decisive role in economic recovery processes, particularly during crises (Wang, 2025). In this context, the automatic stabilizer function of tax revenues in response to economic cycles curbs demand-driven inflation by generating a budget surplus during expansionary periods, while creating a supportive effect on the economy by leading to a budget deficit during contractionary periods (Tabar & Tokatlıoğlu, 2018). This mechanism reflects a countercyclical fiscal policy approach, aiming to mitigate the severity of economic fluctuations and ensure macroeconomic stability (Tarim & Tuncer, 2022). The flexibility of the tax system fulfills this stabilization function through active and passive mechanisms; active flexibility is provided by legal regulations, while passive flexibility is provided by the system's own automatic stabilizers (Yegen, 2019).

While automatic stabilizers may cause budget deficits to rise independently of fiscal policy changes during cyclical fluctuations (Günel & Aktaş, 2020), fiscal policy rules aim to ensure macroeconomic stability by reducing political abuse and the politicization of the economy (Güler, 2019). These fiscal rules aim to establish fiscal discipline by imposing permanent constraints on various fiscal instruments such as taxes, expenditures, budget deficits, and debt stock (Güneş, 2018). Such rules help governments maintain control over budget deficits and support long-term fiscal sustainability by increasing fiscal accountability (Lehtimäki, 2025). In this context, tax elasticity refers to the situation where a one-percent increase in national income or output leads to an increase in tax revenue of more than one percent, and it serves as a key indicator for understanding the effects of fiscal policy on the budget balance (Kutbay & Aksoy, 2020). This elasticity coefficient determines the extent to which the tax system is sensitive to changes in economic growth, while also revealing the strength of automatic stabilizers (Cornevin et al., 2024). In this context, fiscal policy's alignment with the established fiscal

anchor to support monetary policy contributes to boosting growth by lowering inflation and interest rates (Al, 2019), while during crises, the implementation of a comprehensive policy package aims to mitigate economic contraction and support domestic demand (Ahmadzada & Safa, 2025). Therefore, the countercyclical application of fiscal policy aims to mitigate or eliminate the contractionary effects of the economy during periods of economic instability through a dynamic combination of public expenditures and tax policies (Günel & Aktaş, 2020). In this context, in accordance with the established principle of flexibility, structuring taxes in a way that causes significant fluctuations in revenue throughout the economic cycle plays a critical role in reducing economic fluctuations through automatic stabilizers that affect aggregate demand more rapidly (Özkan, 2025; Sevgi, 2018).

Indeed, automatic stabilizers are triggered rapidly based on the sensitivity of tax revenues and certain categories of public spending to output and possess a self-reversing characteristic (Daniel & JDaniel@imf.org, 2006; Jalles et al., 2024). This feature provides a crucial mechanism for maintaining macroeconomic stability by mitigating the effects of economic shocks and enhances the effectiveness of fiscal policies (Ertuğrul, 2024). This situation offers a critical mechanism that reduces the impacts of economic shocks and safeguards macroeconomic stability by enhancing the effectiveness of tax policies (Özker, 2009). Especially during inflationary periods, tax bracket shifting can act as an automatic stabilizer by reducing aggregate demand, while a flexible tax system can influence the economic growth process by closely tracking changes in Gross Domestic Product (Biçaksız & Hazman, 2022). Furthermore, if a tax's income elasticity is greater than one, it can act as an automatic stabilizer by generating a proportionally larger increase in tax revenue in response to rises in monetary income, thereby mitigating excessive economic momentum during inflationary periods (Engin, 2010). In this context, the fact that public expenditures also possess an automatic stabilizing function contributes to the preservation of economic activity by supporting disposable income-particularly through items such as social security payments-and thereby limiting the decline in consumption during recessions (Baylan, 2015).

2. Periods of Crisis and the Fiscal Structure in Turkey

An examination of the Turkish economy's tax performance by sector during periods of crisis is of critical importance for assessing the resilience of the tax system against economic shocks and the effectiveness of fiscal policy. This analysis highlights the sectoral impacts of external shocks, such as the COVID-19 pandemic, on tax revenues and the extent to which fiscal policies

can act as a buffer against these effects (Akşehirli, 2024). Thus, the long-term effects of fiscal policies implemented during crises on macroeconomic stability and the variations in sectoral resilience can be thoroughly understood. In this context, the implementation of expansionary monetary and fiscal policies (Firat, 2020) has disrupted macroeconomic balances by increasing the burden on the public budget and intensified inflationary pressures, particularly alongside the rise in credit volume (Çelik, 2022; Güney & Hopoğlu, 2021). Furthermore, the increases in the current account deficit resulting from these policies, coupled with the impact of the trade deficit, have further deepened economic vulnerability and accelerated the depreciation of the national currency (Konak, 2018; Taymaz & Voyvoda, 2023).

2.1. Sectoral Distribution of Tax Revenues and Dynamics of Change:

This section will address the structural changes in the sectoral composition of tax revenues during different crisis periods and the underlying macroeconomic factors driving these changes. This analysis will assess the flexibility and collection performance of direct and indirect taxes during economic crises, particularly focusing on the effects of indirect taxes-such as value-added tax and excise taxes-on income distribution (Ay & Güneş, 2022). Additionally, the tax restructuring policies implemented during significant economic shocks in Turkey's history-such as the 1929 crisis, the 2001 crisis, and the 2008 global financial crisis-and their effects on sectoral tax performance will also be evaluated (Demirci & Dayar, 2022). In this context, the tax vitality analysis will assess the tax system's adaptability and revenue-generating function by revealing the effects of discretionary tax policy adjustments on national income throughout the history of the Republic of Turkey (1924-2022) (Çaşkurlu, 2023). This analysis provides a critical framework for understanding Turkey's fiscal flexibility and the effectiveness of its revenue policy during various crisis periods (Karaca, 2014). In particular, analyses of tax dynamism covering the 1924-2022 period reveal how the effectiveness of public finance has diminished as taxes have transformed into a competitive tool amid globalization and financial liberalization processes (Çaşkurlu, 2023). This situation is also closely linked to the failure of the external- and import-driven growth model to generate sufficient employment and its reduction of tax effectiveness due to rising debt burdens (Çaşkurlu, 2023). In this context, changes in the sectoral distribution of tax revenues during crisis periods are of great importance for understanding the heterogeneous effects of economic shocks on different sectors and the resilience of the tax base (Esener et al., 2019).

Furthermore, the increasing prominence of indirect taxes since the 1980s and the introduction of new tax types such as VAT and excise taxes during the EU harmonization process have caused both positive and negative shocks on economic growth (Zararsız & Barlas, 2024). This situation necessitates a comparative analysis of the potential effects of Turkey's tax burden on foreign direct investment and its alignment with global competitive conditions (Değirmenci et al., 2025). Therefore, a detailed assessment of the effects of tax incentives and exemptions implemented during crisis periods on sectoral investments and employment is essential for determining optimal fiscal policy strategies.

2.2. Changes in the Tax Base During Crisis Periods: The effects of economic contraction on the tax base.

In this section, the extent of tax base erosion, particularly during economic crises, how different sectors are affected by this erosion, and policy tools aimed at preserving the tax base will be discussed in detail (Demirci & Dayar, 2022). In this context, tax flexibility and the sensitivity of tax revenue to the economic cycle will be evaluated as key indicators of fiscal sustainability during periods of economic instability. The flexibility of tax systems, the prevention of the informal economy, and the promotion of tax awareness are of critical importance for mitigating the effects of economic crises on tax revenues and enhancing fiscal resilience (Noyan & Samanci, 2022). Furthermore, adjustments made by governments to indirect taxes (Özlem, 2011) or tax cuts (Tabar & Tokatlıoğlu, 2018) during crises to maintain budget balance and stimulate domestic demand provide analytical depth regarding their effects on the sectoral dynamics of the tax base. In particular, while reductions in consumption taxes have a positive impact on sales and production in sectors such as the automotive and white goods industries, the long-term sustainability effects of such interventions on the overall tax base must also be examined (Karakoyun, 2023). The Turkish tax structure's reliance on indirect taxes leads to significant declines in these tax revenues during economic crises (Ertürk & Yurtsever, 2020), while in endogenous growth models, the tax structure can also influence growth rates through external effects on the accumulation of physical and human capital (Özden et al., 2023). In this context, the decline in tax compliance during crisis periods and the expansion of the informal economy lead to a further narrowing of the tax base and a decrease in government tax revenues (Bilginer & Yardımcıoğlu, 2022).

2.3. Policy Tools to Enhance the Sustainability of Public Finance: Integration of new policy frameworks for crisis resilience.

In this context, green budgeting and green budget labeling practices, in particular, stand out as innovative tools for ensuring environmental sustainability by tracking the environmental impacts of public expenditures and aligning budget decisions with climate goals (Özdemir, 2025). These methods enable more effective management of environmental risks and the adoption of sustainable fiscal decisions by transparently revealing how much of public funds is allocated to environmental goals (Özdemir, 2025; Ulucak, 2024). This integrated approach guides governments in achieving long-term environmental goals, such as reducing greenhouse gas emissions and accelerating the transition to renewable energy (Ulucak, 2024), while also ensuring that fiscal policies are consistent not only with economic but also with ecological objectives (Ağcakaya & Kaya, 2022). In this context, monitoring the environmental impacts of public budgets and aligning them with climate goals enhances governments' accountability in fulfilling their environmental commitments (Özdemir, 2025; Ulucak, 2024). In this context, the use of environmental assessments and performance indicators enhances the effectiveness of the green budgeting process, enabling the evaluation of the environmental impacts of public expenditures both ex ante and ex post (Ulucak, 2024). In line with the principles of transparency and accountability, the public's ability to track the alignment of budget decisions with environmental goals through detailed reports enables civil society organizations and environmental groups to hold the government accountable for its environmental commitments (Ulucak, 2024). Furthermore, international cooperation and information sharing play a critical role in overcoming implementation barriers to green budgeting policies (Ulucak, 2024). This international cooperation can create synergistic effects in achieving global sustainable development goals by promoting the effective use of green finance policy tools, particularly environmental taxes (Ağcakaya & Kaya, 2022; Ulucak, 2024), incentives, and subsidies (Özdemir, 2025). In this context, international examples such as the European Union's Green Deal and Canada's climate-focused federal budget underscore the importance of aligning fiscal policies with environmental objectives (Ulucak, 2024). Additionally, for green budgeting approaches to be implemented, programs included in the central government budget must be structured to incorporate environmental priorities, sustainable development goals, and policies to combat climate change (Tepekule & Köslü, 2023). These adjustments aim to achieve sustainability goals—such as reducing greenhouse gas emissions, protecting biodiversity, and transitioning to a circular economy—

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3. Tax Elasticity During Times of Crisis

Tax elasticity is a key metric for evaluating the performance and flexibility of the tax system during times of crisis by measuring how sensitive tax revenues are to changes in economic variables (Ay & Güneş, 2022). A high tax elasticity indicates that tax revenues respond more quickly during periods of economic growth or contraction, while a low elasticity suggests that tax revenues are less sensitive to economic fluctuations (Hayo et al., 2022; Özker, 2009). Especially during crises, analyzing tax elasticity enables fiscal authorities to make more accurate revenue forecasts and develop appropriate fiscal policies (Kutbay & Aksoy, 2020). In this context, determining tax elasticity highlights the potential for restructuring the tax system by considering the effects of both direct

and indirect taxes on public expenditures (Günel, 2019; Onur, 2024). For example, while it has been observed that the impact of indirect taxes on public expenditures is lower during economic crises, public expenditures themselves have been found to play a more decisive role (Onur, 2024). This situation underscores the strategic importance of public expenditures in determining fiscal policy, even though tax revenues serve as a critical funding source for supporting public expenditures (Sağdıç et al., 2020). Therefore, tax elasticity analyses play a central role in designing tax reforms that will enhance fiscal resilience against economic shocks. In this context, the strong relationship between indirect and direct tax revenues and inflation, as well as their effects on economic growth in the case of Turkey, provide a more comprehensive assessment when integrated into tax elasticity analyses (Akduğan, 2020; Özen et al., 2022). These analyses highlight the negative effects of indirect taxes on basic goods and services-which have low demand elasticity-on income distribution, even when applied in accordance with Ramsey principles (Özlem, 2011). This situation necessitates examining not only the tax system's sensitivity to changes in general price levels but also the resilience of the tax structure against income and consumption shocks. These sensitivities of the tax structure demonstrate that progressive tax components, particularly income tax, play an automatic stabilizing role during economic fluctuations, and as a result, tax revenues can grow faster than economic growth due to the phenomenon of fiscal drag (Biçaksız & Hazman, 2022). In this context, studies conducted in Turkey have revealed that the income tax exhibits a higher price elasticity compared to other taxes, while corporate tax and indirect taxes demonstrate elasticity close to unity (Yılmaz & Süslü, 2015).

4. Sectoral Fiscal Resilience Assessment

In this section, the fiscal performance and resilience of different economic sectors in Turkey during crisis periods, the sectoral distribution of tax revenues, and the resilience of this distribution against economic shocks will be examined. This analysis will highlight the differing responses of sectors to macroeconomic fluctuations based on tax types, with particular attention to the effects of indirect taxes on expenditures

(Genç, 2022). In this context, the significant impact of public expenditures on indirect taxes-particularly during election and crisis periods-will be treated as a key variable in sectoral fiscal resilience analyses (Onur, 2024). For example, while the banking sector demonstrated relative resilience during the 2008 global crisis, demand-driven vulnerabilities in real sector sub-sectors (such as textiles, metals, and automotive) were observed to recover rapidly thanks to sector-specific tax cuts and exemptions, underscoring the necessity of shifting

fiscal policies toward micro-based approaches in crisis management (Çakmak & Öztürk, 2023a, 2023b). This demonstrates that adapting tax policies to the specific structural characteristics of sectors and their varying degrees of vulnerability to crises plays a critical role in accelerating economic recovery. Furthermore, establishing an effective tax collection system and maintaining the fight against tax evasion during crisis periods play a key role in increasing tax revenues and ensuring fiscal resilience (Canbaz, 2019). In this context, the size of the informal economy and its potential to erode the tax base are among the factors directly affecting the effectiveness of tax revenues (Onur, 2024). Given the importance of labor-intensive sectors such as the services sector in terms of tax revenue, the negative effects of informal activities in these sectors on tax performance become even more pronounced (Sağdıç, 2019). This situation necessitates a more accurate assessment of the tax gap as a percentage of Gross Domestic Product (GDP) through the measurement of the informal economy by sector and the analysis of tax compliance levels (Erdoğan, 2016). In this context, preventing tax losses and evasion holds strategic importance for enhancing the effectiveness of fiscal policies, particularly during economic crises, and ensuring sustainable public finance (Bilginer & Yardımcıoğlu, 2022). Furthermore, conducting cost-benefit analyses by breaking down tax incentives and exemptions implemented during crises by sector will more clearly reveal the effects of such measures on the budget and their contributions to sectoral recovery (Çakmak & Öztürk, 2023). Such analyses highlight that policies implemented to address crises are more likely to succeed when public finances are strong (Tabar & Tokatlıoğlu, 2018) and emphasize the importance of fiscal sustainability, which must be supported by budgetary policies (Canbaz, 2019). For example, it is observed that fiscal reforms implemented to mitigate the effects of the 2008 global financial crisis and integrate informal sector resources into the economic system had a statistically significant and positive impact on per capita real tax revenue in both the short and long term (Çelikay & Doğan, 2023). Similarly, the effects of unforeseeable shocks, such as natural disasters, on taxpayers' compliance behaviors should be examined, and the short- and long-term consequences of such situations on tax revenues should be evaluated using both quantitative and qualitative methods (Yelboğa et al., 2025). Furthermore, the estimation of the tax gap and the necessity of correcting it to enable socio-economic policies to restore the economic and legal character of commercial activities play a critical role in ensuring fiscal stability (Akdoğan & Akdoğan, 2023). In this context, the negative effects of factors such as tax evasion and the informal economy on tax revenues (Akdoğan & Akdoğan, 2023; Bilginer & Yardımcıoğlu, 2022) necessitate the adoption of effective measures to ensure fiscal sustainability during crisis periods. In

this context, the development of strategies to enhance tax compliance and broaden the tax base is of vital importance in strengthening fiscal resilience against economic shocks (Bilginer & Yardimcioğlu, 2022). Among these strategies are enhancing the effectiveness of tax audits and implementing tax amnesties while considering their potential risks (Uzunali & Ataker, 2024). Furthermore, maintaining budget discipline while considering the potential impacts of geopolitical risks on public finances, expanding the tax base, and taking proactive measures against tax evasion play a critical role in safeguarding fiscal stability (Köstekçi, 2024). In this context, it is essential that budget policies be supported by fiscal discipline and that unnecessary public expenditures be brought under control to ensure fiscal sustainability (Canbaz, 2019). Indeed, situations such as economic crises and high budget deficits undermine countries' fiscal positions, thereby highlighting the importance of the concept of fiscal sustainability (Özkök & Yildiran, 2017). This situation demonstrates that fiscal policies must encompass not only short-term crisis management but also long-term structural reforms (Dökmen & Boz, 2017).

5. Policy Recommendations and Conclusions

In light of these analyses, policy recommendations can be developed to enhance Turkey's sectoral tax performance and fiscal resilience during economic crises. Particularly in a region prone to frequent disasters, increasing insurance coverage rates, strengthening public infrastructure, and developing early warning systems are among the measures that will enhance fiscal resilience (Kökçü & Biçen, 2025). Additionally, establishing economic confidence is of great importance for ensuring the sustainability of tax revenues; as economic confidence has a positive, albeit weak, causal effect on tax revenues (Han, 2024). In this context, aligning fiscal policy with monetary policy will support economic growth by contributing to the reduction of inflation and interest rates (Al, 2019). In addition to macroeconomic stability, improving the investment environment, implementing predictable business regulations, and increasing the skilled workforce will also boost the economy's productivity level and encourage the transition to the formal economy (Han, 2024). To achieve these goals, education policies that encourage the production of high-value-added goods and services and the development of a skilled workforce are of great importance (Han, 2024). Furthermore, efforts should be made to reduce the informal economy to increase public revenues; while the share of indirect taxes should be reduced to insulate the budget from cyclical effects, the share of direct taxes such as income and corporate taxes should be increased (Dökmen & Boz, 2017). This approach will strengthen tax justice while contributing to the sustainability of fiscal discipline through

the taxation of high-income groups (Direk & Kılınc, 2025). Furthermore, increasing the flexibility of fiscal policy through the reduction of public debt and the expansion of fiscal space will enable governments to have a more effective capacity for intervention during crisis periods (Kasal & Özpençe, 2020). The proactive role of fiscal policy in the face of economic fluctuations will not only manage current crises but also support sustainable development by creating a buffer against future shocks (Çaliyurt, 2022). In this context, designing fiscal rule applications that incorporate prudence into the concept of fiscal discipline and addressing the mismatches between assessment and collection rates to activate tax capacity are of critical importance (Tarim & Tuncer, 2022). In this context, tightening tax audits, improving the quality of public services, and strengthening the fight against the informal economy hold the potential to expand the fiscal space (Yaşa, 2017). Additionally, broadening the tax base and optimizing tax rates are important steps toward ensuring the sustainability of public revenues (Akgül, 2022). These reforms not only enhance fiscal resilience but also have the potential to increase capital productivity by leveraging the country's demographic opportunities and promote inclusive growth (Meno et al., 2025). In this context, reducing the informal economy and encouraging the transition from semi-formal activities to the formal sector will both increase tax revenues and enhance social welfare by supporting skilled employment in the labor market (OECD, 2018). Indeed, a low level of informality is essential for public savings and preventing budget deficits (Akin & Güneş, 2022). Thus, while aiming to eliminate the public finance deficit and ensure fiscal sustainability, a significant step will also be taken toward increasing economic growth and the level of social welfare (Balseven & Erdoğan, 2014). In this regard, tax policies can be designed within a framework that supports economic growth and expands the fiscal space, supported by specific measures such as increasing taxes on high-value-added imported goods (Erdoğan, 2007). Such policies will, on the one hand, contribute positively to the trade balance by reducing import dependency, while on the other hand, they will strengthen economic diversity and resilience by enhancing the competitiveness of domestic production. This transformation requires that fiscal policies be addressed in a manner that ensures the national income equilibrium level based on full employment in the future (Özker, 2016), at the same time, reforms in the tax system-such as reducing indirect taxes and prioritizing direct taxes, enhancing the effectiveness of tax audits, and updating tax rates to encourage taxpayer compliance-will play a critical role in ensuring fiscal sustainability (Al, 2019). Furthermore, broadening the tax base-particularly by lowering the registration threshold for value-added tax and regulating final taxation regimes for micro, small, and medium-sized

enterprises-holds potential for increasing tax revenues (Reinman, 2015). In this context, bringing the informal economy into the formal sector requires urgent fiscal reforms to increase tax revenues and create additional financing opportunities (Aksu, 2017). These measures include broadening the tax base, bringing informal activities under the tax system, and enhancing the efficiency of public spending (Erdoğan, 2016; Uzay, 1996). Thus, to ensure the sustainability of economic growth and development, tax policies must enable the establishment of a simpler, fairer, and broader-based system that promotes employment and reduces the informal economy (Yenipazarlı & Karaca, 2022). This will make it possible to ensure a fair distribution of the tax burden among individuals, broaden the tax base, and reduce the pressure on indirect taxes. Along with these strategies, preventing tax evasion and fully taxing the informal economy will establish sustainable economic growth and fiscal resilience (Cinel, 2021). Increasing the share of direct taxes, such as income and corporate taxes, instead of indirect taxes that exacerbate inequality, will make the tax system fairer and more effective (Cinel, 2018). Indeed, limiting tax exemptions to the most essential cases and effectively taxing sectors that are growing relatively rapidly offers the potential for a steady increase in tax revenues (Kochhar & Devrim, 2012). In this context, the restructuring of core tax components such as corporate income tax and value-added tax within the framework of the principles of fairness and efficiency requires that tax policies be addressed in an integrated manner with economic growth (Sağdıç & Aydın, 2021).

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