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THE IMPACT OF FISCAL POLICY TOOLS ON ECONOMIC GROWTH IN TURKEY IS A PATH TOWARDS SUSTAINABLE DEVELOPMENT

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Abstract

This study attempts to investigate how fiscal policy instruments affect economic growth and how they contribute to Turkey's sustainable development. Fiscal policy is the term used to describe how the government uses taxing, spending, and borrowing to affect the overall state of the economy. The study looks into the unique fiscal policy initiatives put into place in Turkey and assesses their effects on economic expansion with a focus on sustainability. It also covers the Turkish government's opportunities and difficulties in implementing sound fiscal policy to promote sustainable development. The research may influence governments worldwide to cope with similar challenges and opportunities.

INTRODUCTION

Turkey has a diverse and vibrant economy at the intersection of Europe and Asia. Turkey has undergone substantial economic upheaval and growth over the past three decades, emerging as one of the world's emerging market economies (Öniş & Kutlay, 2013). Effective fiscal policies considering the difficulties posed by the quickly altering global economic landscape, are necessary to maintain this growth and ensure long-term economic development (Goodman & Pauly, 1993).

Fiscal policy is the term used to describe how the government uses taxing, spending, and borrowing to affect the overall state of the economy (Al-Thaqeb, Algharabali, & Alabdulghafour, 2022). It is essential in determining economic expansion, fostering stability, and guaranteeing sustainable development. There is a need for specific research focusing on Turkey because fiscal policy tools' effects on economic growth have been extensively researched in many different nations (Sarpong, Wang, Cobbinah, Makwetta, & Chen, 2019).

A thorough analysis of the effects of fiscal policy instruments on economic growth is required due to Turkey's distinct geopolitical situation, cultural diversity, and economic features (Abuselidze & Mamaladze, 2019). This research will shed light on the efficiency and difficulties of fiscal policies in a quickly rising economy by examining the particular setting of Turkey.

The Sustainable Development Goals (SDGs) of the United Nations offer nations a framework for achieving sustainable development (Boluk, Cavaliere, & Higgins-Desbiolles, 2019). The alignment of economic growth with sustainable development goals, such as poverty reduction,

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environmental sustainability, and social inclusion, depends critically on effective fiscal policies (Permatasari et al., 2021). Analyzing how fiscal policy instruments affect sustainable development in Turkey can help the nation move closer to achieving the SDGs.

A solid and durable fiscal policy framework is crucial for preserving economic stability and luring foreign investment (Osborne, 2020). This study will help domestic and foreign investors make educated decisions and promote an environment conducive to investment in Turkey by examining the effects of fiscal policy tools on economic growth.

The effect of fiscal policy on economic growth has been studied before. However, there are not many studies that particularly address Turkey. By filling in this gap and expanding the body of information on fiscal policy and sustainable development in Turkey, this research will contribute to the academic literature. For Turkey to continue progressing and maintaining its stability, it is essential to comprehend how fiscal policy tools affect economic growth. This study will add to the body of knowledge on fiscal policy and economic growth by offering insightful policy recommendations that will improve the effectiveness of fiscal policies and support sustainable development. The following is the fiscal policy tools' effects on economic growth and assuring sustainable development in Turkey, which the study aims to highlight to achieve its goal:

- To examine the specific fiscal tools used in Turkey and how they affected economic expansion.
- To investigate the connection between Turkey's fiscal policy initiatives and sustainable development.
- To determine the obstacles and possibilities the Turkish government must overcome for fiscal policy to promote sustainable development.
- To offer advice on improving fiscal policy efficiency in fostering sustainable growth and development in Turkey.
- The study poses the following queries to achieve this goal:
- What are the precise fiscal policy instruments that the Turkish government uses to support sustainable growth?
- How have these fiscal policy changes affected Turkey's overall economic expansion?
- What obstacles must the Turkish government overcome to match its economic aims with sustainable development?
- What chances does the Turkish government have to improve the efficiency of fiscal policy in fostering sustainable development?
- What legislative suggestions might enhance Turkey's fiscal policy's compatibility with economic expansion and sustainable development?

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This study aims to give a thorough understanding of the effects of fiscal policy tools on economic growth and sustainable development in Turkey. The research will add to the body of knowledge on fiscal policy and offer useful information for economists, politicians, and researchers working to establish financial plans for Turkey's pursuit of sustainable development goals.

LITERATURE REVIEW

Fiscal Policy

Fiscal policy is the term used to describe how the government uses taxing, spending, and borrowing to affect the overall state of the economy (Al-Thaqeb et al., 2022). To accomplish certain economic goals, the government makes decisions and takes measures regarding the creation of revenues, the distribution of expenditures, and the management of debt (Chugunov & Markuts, 2019). Governments use fiscal policy as a crucial instrument to maintain economic stability, foster economic growth, reduce income inequality, and assure sustainable development (Chugunov, Pasichnyi, Koroviy, Kaneva, & Nikitishin, 2021). The main fiscal policy goals are complex and can change depending on a nation's economic priorities and situations. The following are typical goals for fiscal policy: economic growth, income redistribution, public infrastructure investment, sustainable development, budgetary restraint, and debt management (Chugunov et al., 2021).

The function of fiscal policy in promoting economic growth is critical. Fiscal policies are a tool that governments can use to increase investment, productivity, and overall demand (Kamal, Usman, Jahanger, & Balsalobre-Lorente, 2021). Governments seek to promote economic growth, job creation, and entrepreneurship by enacting expansionary fiscal policies, such as raising public spending or lowering taxes.

Sustainable development has risen significantly in relevance on the policy agenda in recent years. Fiscal policy can support sustainable development by including social and environmental factors in decision-making (Guarini, Mori, & Zuffada, 2022). Fiscal policy can assist in addressing environmental issues while preserving long-term economic viability by establishing environmentally friendly taxation, supporting renewable energy efforts, and promoting sustainable habits (Zhan & Santos-Paulino, 2021).

The fiscal policy establishes a stable economic environment, encourages sustainable growth, lessens income inequality, advances social welfare, and attends to long-term developmental demands (ElMassah & Mohieldin, 2020). To accomplish these goals, governments use fiscal policy tools, tailoring them to their various nations' unique economic circumstances and political interests.

Taxation, public expenditure, and borrowing are all fiscal policy tools. Governments use these elements to affect the broader economy and accomplish their economic goals.

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Fiscal Policy's Significance for Economic Development

To encourage economic growth and development, fiscal policy is essential. It is a potent weapon government can utilize to shape and direct the whole economy toward equitable and sustainable growth (Yumei, Iqbal, Irfan, & Fatima, 2021). The fiscal policy supports macroeconomic stability by controlling aggregate demand and minimizing business cycle variations. Expansive fiscal policies, such as higher government spending or tax cuts, can raise aggregate demand during economic downturns or recessions, enhance spending and investment, and promote economic recovery (Danylyshyn et al., 2021). On the other hand, during times of excessive inflation or overheating, contractionary fiscal policies, such as lowering government spending or raising taxes, can aid in bringing down inflationary pressures and cooling the economy (Mattila, 2022).

Additionally, fiscal policy is critical in fostering infrastructure growth and investment, two key factors driving economic growth (Yang, Su, & Yao, 2021). Governments can distribute public funds for investment in vital industries, including transportation, energy, education, healthcare, and technology, enabling productivity improvements and promoting long-term economic development. Governments may draw in domestic and foreign investors, promote innovation, and generate jobs by creating a stable and favorable climate for private investment through fiscal incentives.

Income inequality can be addressed via fiscal policy, advancing social welfare. Fiscal policy can aid in wealth redistribution and provide necessary services to underserved communities through progressive taxes and targeted social investment (Kamal et al., 2021). Governments can reduce income disparities and improve social cohesion by introducing progressive tax systems that ensure the burden of taxation falls proportionately on higher-income persons (Javed, Ahmed, & Cheema, 2021). Healthcare, education, and poverty alleviation programs are examples of social welfare programs sponsored by fiscal policy that support the growth of human capital and foster a more just society (Goldfajn, Martínez, & Valdés, 2021).

Thanks to fiscal policy, governments can provide public goods and services that the private sector might not be able to supply adequately (Birner, Daum, & Pray, 2021). Investment in public infrastructure, including utilities, communication networks, and transportation networks, paves the way for economic development and generally raises people's standard of living. Governments may guarantee that all individuals can access critical services, boosting human capital and productivity, by supporting public healthcare and education systems (Anwar & Abdullah, 2021).

Fiscal policy can be used as a countercyclical intervention during economic downturns or crises to stabilize the economy (Khambule, 2021). By providing income support and stimulating aggregate demand, automatic stabilizers like unemployment benefits and progressive tax structures reduce the negative consequences of economic shocks. Interventions in fiscal policy that are made at the government's discretion, including stimulus packages and public investment plans, can boost the economy, confidence and hasten recovery. To ensure long-term economic sustainability, fiscal policy is vital (Sachs, Woo, Yoshino, & Taghizadeh-

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Hesary, 2019). To maintain fiscal restraint and market confidence, governments must balance their budgets, control public debt levels, and make wise financial judgments. Governments can finance critical investments, advance economic stability, and steer clear of high debt loads that might obstruct possibilities for future economic progress by implementing sustainable fiscal policies (Can & Canöz, 2020).

Generally speaking, fiscal policy is a potent tool governments can use to affect economic growth and development. Governments can address income inequality, encourage investment and infrastructure development, promote macroeconomic stability, provide public goods and services, implement countercyclical policies, and guarantee long-term fiscal sustainability by effectively managing taxation, public spending, and borrowing.

Turkey's Fiscal Policy Tools

The Effect of Taxation Policies on Economic Growth

Taxation policies significantly influence economic growth. Investment, consumption, innovation, entrepreneurship, and overall economic output are just a few of the characteristics of an economy that the formulation and application of taxation laws can impact (Shahzad et al., 2021). Tax policies can impact economic growth by encouraging investment, fostering entrepreneurship and innovation, influencing consumer behavior, and boosting fiscal stability. The effect of taxation policy on economic growth is complicated and context-dependent. The efficiency of administrative processes, the effectiveness of enforcement methods, and the overall institutional and economic climate all affect taxation policies' effectiveness (Abramova et al., 2021). To maximize the beneficial effects of taxation policies on economic growth, the appropriate balance must be struck between generating income, encouraging economic activity, and promoting equity.

Public Spending Trends and the Role They Play In Promoting Sustainability

Public spending habits are very important for promoting sustainable development. Governments distribute funds through public spending to meet social needs, encourage economic expansion, and protect the environment (Zhang, Mohsin, Rasheed, Chang, & Taghizadeh-Hesary, 2021).

Sound planning, fiscal restraint, and efficient monitoring and evaluation systems are needed to create public spending patterns that align with sustainable development goals (Halimatussadiah, 2020). Governments must prioritize investments that balance social, environmental, and economic goals to ensure the long-term welfare of present and future generations.

Borrowing By the Government and Its Effects on Economic Expansion

Prudent management of government borrowing can have an impact on economic expansion. Borrowing by the government can be a way to pay for public projects that boost the economy (Eke & Akujuobi, 2021). Governments can raise money for infrastructure projects, healthcare, education, R&D, and other profitable expenditures by issuing debt instruments like government bonds. These investments have the potential to raise productivity, increase

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employment, and promote sustainable economic growth. It can aid in regulating consumption habits and preserving the financial system (Ribaj & Mexhuani, 2021). Government borrowing enables it to maintain levels of public spending during tough economic times, when private consumption and investment may drop. This maintains demand, supports income levels, and stops the economy from contracting further. Government borrowing can support economic stability and growth by calming the economy. Over borrowing by the government can discourage private investment and have a negative impact on economic growth (Toprak, 2022). Governments that frequently borrow money from the financial markets face competition from private borrowers for the available funds, which raises interest rates. The increased cost of borrowing may deter private investment and limit the money available for companies to grow, innovate, and create jobs. In these circumstances, high levels of public borrowing can stifle private sector activity and limit economic expansion (Falcone, 2020).

Government debt incurs costs for debt payment, which may impact the government's finances and economic expansion (Yusuf & Mohd, 2021). Government revenue must be allotted to servicing interest payments and making principal repayments at a higher proportion as debt levels rise. This wastes money that may have been allocated to public services or productive investments, which might restrain economic growth. High debt payment expenses can also put pressure on the government's budget, resulting in greater taxes or less public spending, which could further hinder economic growth (Desdiani et al., 2022). Government borrowing from outside sources, including foreign markets or international financial institutions, might leave the economy vulnerable to outside threats. The economy may be more vulnerable to changes in international investor mood, exchange rate swings, and global financial circumstances if it heavily depends on foreign borrowing. Unexpected changes in borrowing costs or market perceptions might negatively influence the economy and possibly slow economic growth (Kalemli-Özcan, 2019).

In conclusion, how government borrowing is handled can impact economic growth. Prudent borrowing that supports countercyclical policies finances profitable projects, and upholds fiscal viability can boost the economy. However, economic growth can be hampered by excessive borrowing, competition from private investment, expensive debt servicing costs, and external vulnerabilities. Effective debt management, balanced fiscal policies, and open borrowing procedures are essential to ensure that government borrowing promotes sustainable economic growth.

Fiscal Policy's Effect on Turkey's Economic Growth

Over the years, Turkey's economy has grown at varied rates (Tanrıvermiş, 2020). The country's average annual GDP growth rate from 2010 to 2017 was 6 percent, driven by domestic demand, construction, and exports. However, Turkey has recently experienced economic difficulties affecting economic growth, such as currency devaluation, rising inflation, and political unpredictability (Chen, Fang, Gozgor, & Pekel, 2022). To understand how different fiscal policy decisions have affected economic growth throughout time, it is critical to study those decisions.

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The Turkish government has introduced several fiscal policy initiatives to encourage economic growth and advance sustainable development (Kaygusuz, 2012). These actions include adjustments to tax laws, public spending habits, and borrowing tactics. For instance, tax reforms have sought to promote consumption, encourage investment, and alleviate economic disparities. Social welfare, education, healthcare, and infrastructure development programs have received public funding. Additionally, government borrowing has been utilized during economic downturns to fund countercyclical measures and finance public spending (Baldacci, Gupta, & Mulas-Granados, 2014).

By evaluating their effect on important economic indicators, fiscal policy tools' efficacy in fostering economic growth in Turkey can be evaluated. These metrics include GDP growth rates, investment levels, employment levels, export performance, inflation rates, and productivity measures. It is feasible to determine how much fiscal policy instruments have contributed to economic growth and development by examining historical data and patterns of these indicators concerning fiscal policy changes.

Economic, social, and environmental factors all influence sustainable development. It is possible to evaluate the contribution of fiscal policy instruments to sustainable development in Turkey by looking at historical data and trends. Examining public spending trends on programs related to infrastructure, the environment, social welfare, healthcare, and education may be part of this research. Evaluation of the effects of taxation policy on income distribution, the eradication of poverty, and environmental sustainability may also be included.

It is crucial to consider outside influences that have affected Turkey's economy and capacity for sustainable growth. Global economic trends, geopolitical dynamics, trade agreements, and financial market circumstances are some of these variables. External shocks can substantially impact Turkey's economic performance and the efficiency of its fiscal policy tools. Examples include changes in commodity prices, currency rate fluctuations, or swings in investor mood.

It is advisable to use reliable sources such as national statistical agencies, central banks, global organizations (including the World Bank and the International Monetary Fund), research institutions, and official publications to examine historical data and trends fully. These resources offer thorough statistics and publications that can help with a thorough analysis of the effects of fiscal policy instruments on economic growth and sustainable development in Turkey.

METHODOLOGY

This study applies both qualitative via literature survey and quantitative research method depending on quantitative data from the international bank.

Evaluation of Fiscal Policy Measures on a Quantitative and Qualitative Basis

It is crucial to remember that a thorough evaluation of fiscal policy initiatives requires quantitative and qualitative methods. While qualitative analysis aids in contextualizing the findings, capturing nuances, and comprehending the wider implications of the policies, the quantitative analysis offers concrete evidence of the impact (Stutterheim & Ratcliffe, 2021).

To undertake a quantitative assessment, it is essential to have access to trustworthy data from respectable institutions like national statistical agencies, central banks, and international organizations. Additionally, econometric techniques and software can facilitate the examination of huge datasets and the assessment of associations between fiscal policy actions and economic consequences.

Various techniques, including interviews, surveys, case studies, and literature reviews, can be used for qualitative assessment. The qualitative aspects of fiscal policy initiatives can be better understood by consulting academic studies, policy papers, and evaluations made by international organizations.

The impact and efficacy of fiscal policy measures in achieving economic growth and sustainable development goals can be fully understood by integrating quantitative and qualitative assessment methodologies.

Fiscal Policy and Gdp Growth Rates Concerning Each Other

GDP growth rates are significantly influenced by fiscal policy. Fiscal policy can boost or limit economic activity, affecting GDP growth by adjusting government spending, taxes, and borrowing. The essential elements of the connection between fiscal policy and GDP growth rates are as follows:

1. Expansionary Fiscal Policy and GDP Growth

Government spending increases on public goods, infrastructure, healthcare, education, and other productive areas can boost the economy. Increased government spending drives up demand for products and services, boosting output and economic expansion.

Tax rate cuts or incentive programs can give people and businesses more disposable income, boosting spending and investment. This boosted economic activity in the private sector may encourage GDP growth and overall economic expansion.

2. GDP Growth with Fiscal Policy Contraction

Aggregate demand may decline when the government cuts spending, particularly during economic overheating or excessive inflation. This decrease in government spending may slow GDP growth rates, but it can help cool down an overheated economy.

Reducing disposable income and consumption can be accomplished by enacting tax increases, such as increasing tax rates or eliminating tax incentives. This decrease in private sector spending may diminish total demand and have a negative effect on GDP growth rates.

3. Counter-Cyclical Fiscal Policy

Fiscal policy can be employed during economic downturns or recessions to mitigate the negative effects of the business cycle and promote economic growth. Governments may

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increase spending or lower taxes to enhance aggregate demand and promote economic activity, which will help GDP growth.

On the other hand, contractionary fiscal policies, such as lowering government spending or raising taxes, can aid in containing inflationary pressures and fostering more sustainable growth during times of excessive inflation or economic overheating.

4. Fiscal Policy and Investment

Investment levels, which are critical for long-term economic growth, can be affected by fiscal policy actions. Governments can promote private sector investment by offering tax incentives or establishing focused investment programs to enhance capital creation, productivity gains, and GDP growth rates. On the other hand, large tax burdens or unreliable fiscal conditions may deter private sector investment, limiting the potential for economic growth.

5. Fiscal Policy and Public Debt

The magnitude and sustainability of public debt can also impact GDP growth rates. Higher debt servicing costs may discourage private investment and impede economic growth if excessive government borrowing is used to pay fiscal deficits.

Prudent fiscal policies prioritizing debt sustainability and effective borrowing can assist economic growth by preserving investor confidence and lowering borrowing costs.

It is crucial to remember that how well fiscal policy affects GDP growth rates depends on several variables, including the economic structure of the nation, international circumstances, the coordination of monetary policy, and the efficacy of policy implementation. Additionally, the timing and scope of fiscal policy actions can greatly impact whether they are successful in accelerating or slowing down GDP growth. Fiscal policy formulation and implementation must be carefully considered and grounded in data to achieve desired GDP growth rates.

Fiscal Policy to Promote Sustainable Development

Fiscal Policy and Incorporation of Sustainability Goals

Economic, social, and environmental factors must be considered during the design, execution, and evaluation of fiscal measures to achieve sustainability objectives.

Policy Coherence: Ensure fiscal policy is consistent with sustainable development objectives, such as those listed in international agreements like the Sustainable Development Goals of the United Nations (SDGs). Prioritize sustainable development goals across many sectors and coordinate budgetary policies with more comprehensive national development initiatives.

Conduct environmental impact analyses of fiscal policies to see whether they may have favorable or unfavorable environmental effects. The lifecycle effects of policies, such as resource use, pollution, and carbon emissions, should be considered in this assessment. It aids in locating political solutions that minimize environmental damage and increase sustainability gains.

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Green Public Expenditure: Direct public funds toward sustainable industries, endeavors, and pursuits. Boost financial support for conservation, waste management, public transit, sustainable infrastructure, and renewable energy activities. Give public spending a higher priority if it will result in sustainable growth.

Implement carbon pricing strategies, such as carbon taxes or emissions trading programs, to internalize the cost of carbon emissions. Additionally, consider enacting environmental taxes and levies on activities that damage the environment, such as resource extraction and pollution. These policies raise money for sustainable development activities while encouraging firms and individuals to adopt sustainable practices.

Review and restructure any subsidies that support unsustainable behavior or harm the environment. Subsidies that encourage the use of fossil fuels, deforestation, or other environmentally detrimental activities should be phased out or redirected. Instead, fund environmental technologies, renewable energy sources, and sustainable agriculture via subsidies.

Integrate sustainability factors into public procurement procedures for sustainable public procurement. Make buying eco-friendly goods and services a priority by considering energy efficiency, recyclable material, and social and environmental certifications. Encourage firms to use sustainable production techniques and support supply chains with sustainable practices.

Socially inclusive fiscal policies should be created to encourage social inclusion and lessen inequality. Ensure that budgetary policies don't unfairly tax disadvantaged groups, and consider how they might affect society. Spend money on social programs to help reduce poverty and improve access to healthcare, education, and social safety nets. Grants, tax rebates, and financial incentives should be available to organizations and people adopting sustainable practices. Promote financial investments in sustainable agriculture, energy efficiency, renewable energy, and clean technologies. Create systems that encourage innovation in sustainable development and reward sustainable conduct.

Transparency and Accountability: Increase transparency and accountability in fiscal policy by disseminating thorough financial reports, revealing data on how policies affect the environment and society, and involving stakeholders in the decision-making process. Create monitoring and assessment systems to determine how well fiscal policies contribute to sustainability goals.

International Collaboration: Exchange best practices and cooperate with other nations to understand how they have successfully incorporated sustainability goals into their fiscal policies. Participate in global initiatives, work with international organizations, share information, and help create capacity.

A comprehensive and multifaceted approach is necessary to incorporate sustainability goals into budgetary policy. It entails considering how policies affect long-term economic development, social progress, and environmental sustainability. Governments may support sustainable development and contribute to a more resilient and equitable future by integrating sustainability into fiscal decision-making.

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Correlations

		V9	V10	V8	V7	V6	V5	V4	V3	V2	V1
GDP growth rate (V9)	Pearson Correlation										
	Sig. (2-tailed)										
	N										
Years (V10)	Pearson Correlation	0.367									
	Sig. (2-tailed)	0.093									
	N	22									
Per capita health expenditure in dollars (V8)	Pearson Correlation	.577**	.863**								
	Sig. (2-tailed)	0.005	0.000								
	N	22	22								
GDP in dollars (V7)	Pearson Correlation	0.026	.584**	.605**							
	Sig. (2-tailed)	0.910	0.004	0.003							
	N	22	22	22							
Government final consumption spending (V6)	Pearson Correlation	.439*	.990**	.908**	.590**						
	Sig. (2-tailed)	0.041	0.000	0.000	0.004						
	N	22	22	22	22						
Total public spending (V5)	Pearson Correlation	.937**	.639**	.795**	0.305	.703**					
	Sig. (2-tailed)	0.000	0.001	0.000	0.167	0.000					
	N	22	22	22	22	22					
Spending on tourism (V4)	Pearson Correlation	.472*	.984**	.920**	.599**	.998**	.732**				
	Sig. (2-tailed)	0.026	0.000	0.000	0.003	0.000	0.000				
	N	22	22	22	22	22	22				
Military spending (V3)	Pearson Correlation	0.107	.898**	.806**	.542**	.898**	0.409	.886**			
	Sig. (2-tailed)	0.637	0.000	0.000	0.009	0.000	0.059	0.000			
	N	22	22	22	22	22	22	22			
General revenue (V2)	Pearson Correlation	-0.007	0.257	0.022	0.004	0.200	0.010	0.175	0.117		
	Sig. (2-tailed)	0.975	0.249	0.924	0.985	0.372	0.965	0.437	0.605		
	N	22	22	22	22	22	22	22	22		
Tax revenue (V1)	Pearson Correlation	.886**	.738**	.845**	0.363	.790**	.988**	.815**	.520*	0.057	
	Sig. (2-tailed)	0.000	0.000	0.000	0.097	0.000	0.000	0.000	0.013	0.800	
	N	22	22	22	22	22	22	22	22	22	

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

1. GDP Growth Rate (V9)

There is a positive correlation of 0.367 with Years (V10), although it is not statistically significant (p = 0.093). The correlation coefficient suggests a moderate positive relationship between GDP growth rate and the number of years.

2. Per Capita Health Expenditure In Dollars (V8)

There is a strong positive correlation of 0.577 with GDP growth rate (V9), which is statistically significant (p = 0.005). The correlation coefficient indicates a positive relationship between per capita health expenditure and GDP growth rate.

3. GDP In Dollars (V7)

There is a positive correlation of 0.584 with Per capita health expenditure (V8), which is statistically significant (p = 0.004). There is also a positive correlation of 0.605 with Government final consumption spending (V6), which is statistically significant (p = 0.003).

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These correlations suggest that GDP is positively associated with both per capita health expenditure and government final consumption spending.

4. Government Final Consumption Spending (V6)

There is a positive correlation of 0.439 with Total public spending (V5), which is statistically significant ($p = 0.041$). There are strong positive correlations with other variables, such as Per capita health expenditure (V8) and GDP in dollars (V7). These correlations indicate that government final consumption spending is positively associated with total public spending, per capita health expenditure, and GDP.

5. Total Public Spending (V5)

There is a strong positive correlation of 0.937 with Tax revenue (V1), which is statistically significant ($p < 0.001$). There are also positive correlations with other variables, including spending on tourism (V4) and government final consumption spending (V6). These correlations suggest that total public spending is positively associated with tax revenue, spending on tourism, and government final consumption spending.

6. Spending On Tourism (V4)

There is a strong positive correlation of 0.998 with General revenue (V2), which is statistically significant ($p < 0.001$). There are also strong positive correlations with other variables, such as military spending (V3) and government final consumption spending (V6). These correlations indicate that spending on tourism is strongly associated with general revenue, military spending, and government final consumption spending.

7. Military Spending (V3)

There is a positive correlation of 0.898 with Tax revenue (V1), which is statistically significant ($p < 0.001$). There are also positive correlations with other variables, including spending on tourism (V4) and government final consumption spending (V6). These correlations suggest that military spending is positively associated with tax revenue, spending on tourism, and government final consumption spending.

8. General Revenue (V2)

There is a positive correlation of 0.257 with Per capita health expenditure (V8), although it is not statistically significant ($p = 0.249$). There are no other strong or statistically significant correlations with other variables.

9. Tax Revenue (V1)

There are strong positive correlations with several variables, including Total public spending (V5), spending on tourism (V4), and military spending (V3). There is a positive correlation of 0.886 with GDP growth rate (V9), which is statistically significant ($p < 0.001$). These correlations suggest that tax revenue is strongly associated with total public spending

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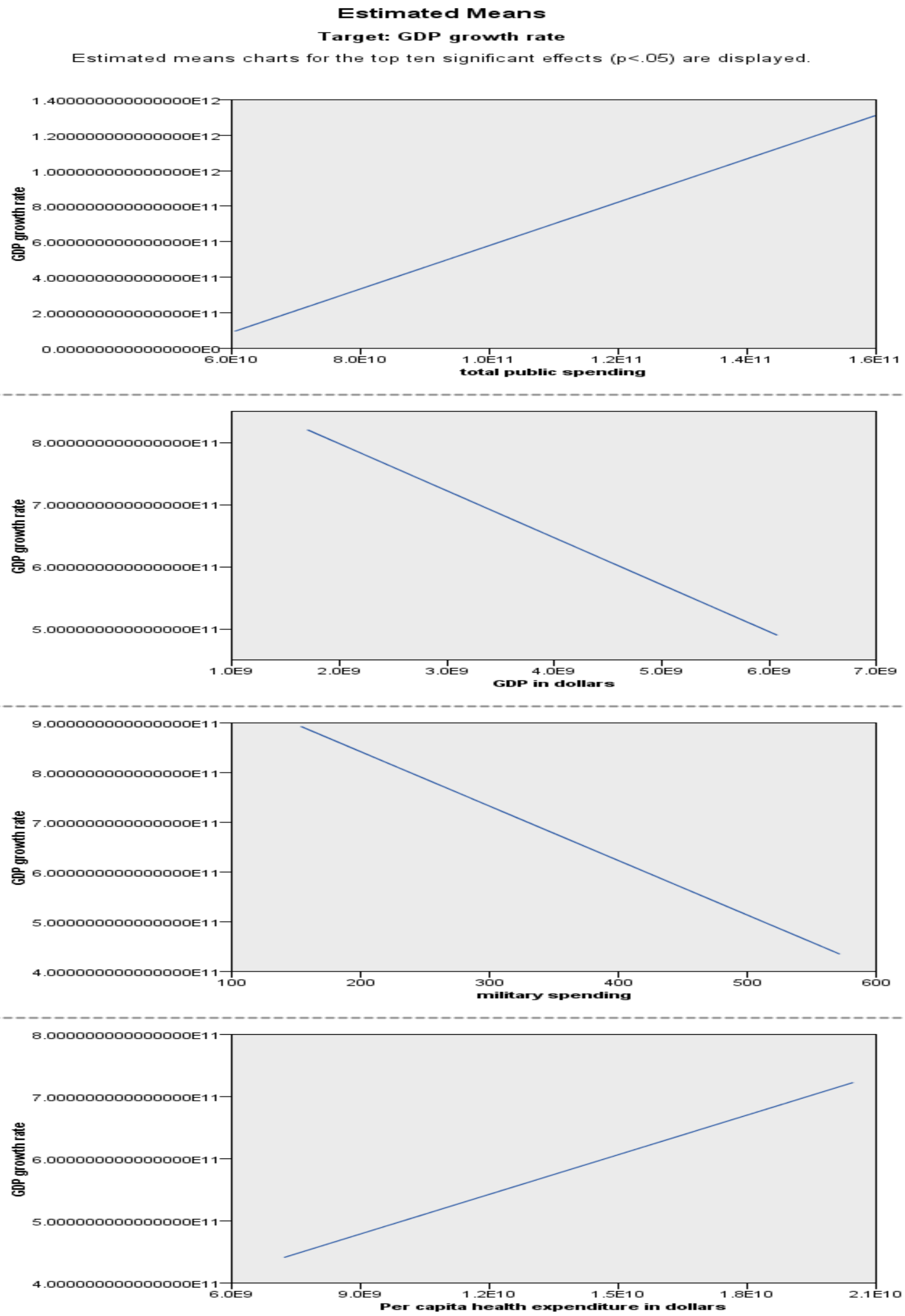

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Model Building Summary

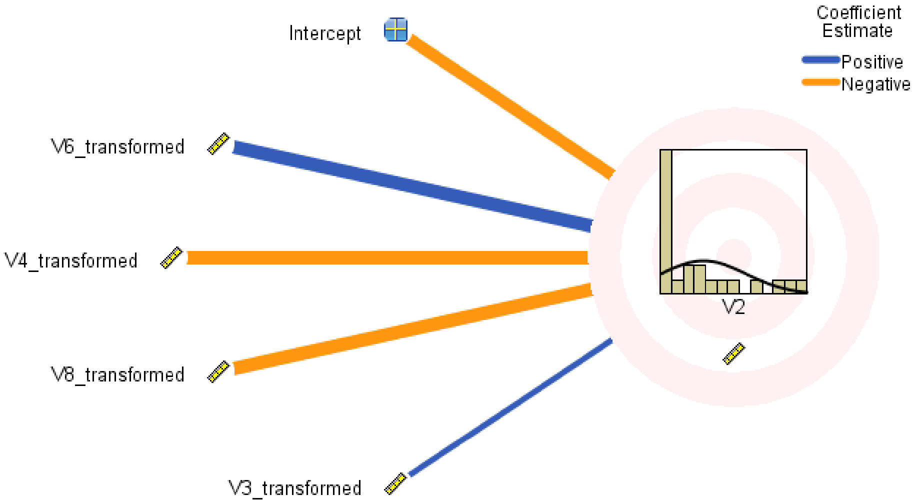
Target: GDP growth rate

		Step					
		1	2	3	4	5	6
Information Criterion		1,133.696	1,100.372	1,086.529	1,084.258	1,082.163	1,078.270
Effect	V6_transformed	✓	✓	✓	✓	✓	✓
	V7_transformed		✓	✓	✓		
	V4_transformed			✓	✓	✓	✓
	V8_transformed				✓	✓	✓
	V3_transformed						✓

The model building method is Forward Stepwise using the Information Criterion.
A checkmark means the effect is in the model at this step.

Coefficients

Target: GDP growth rate



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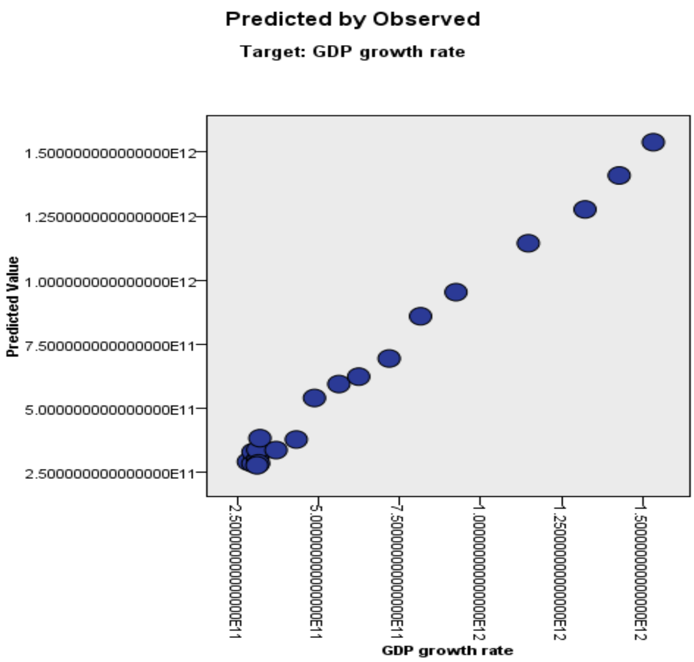

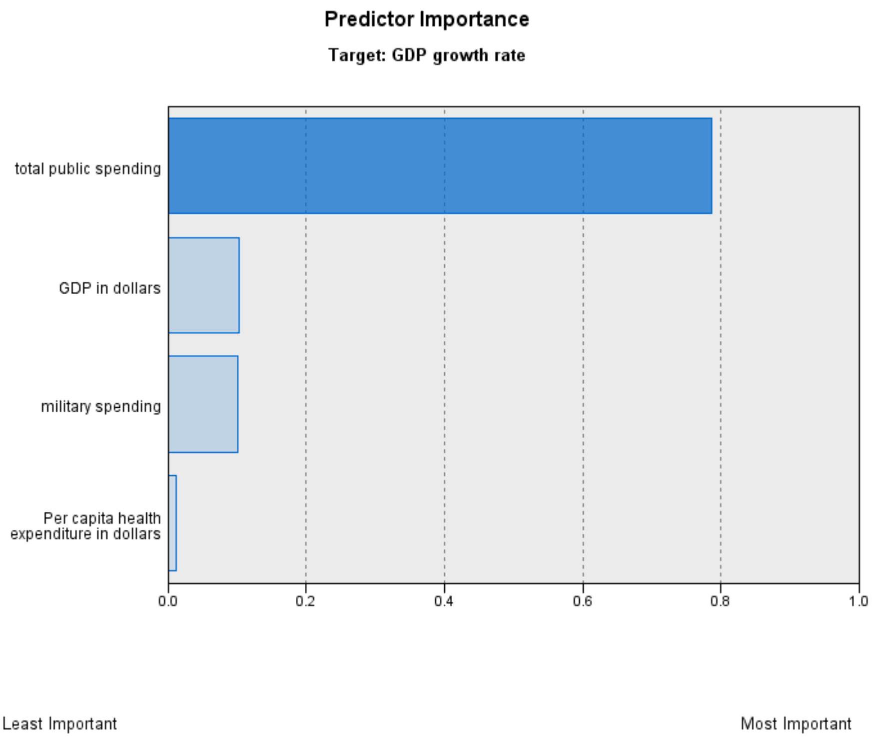

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Comparative and Case Study Analysis

A Review of Other Countries' Effective Fiscal Policy Efforts

Insights and lessons for encouraging sustainable development in Turkey can be gained by looking at successful fiscal policy measures in other nations. Here are a few instances of effective fiscal policy efforts carried out in different nations:

- Germany's Energiewende: The country's comprehensive fiscal policies and incentives, known as the "Energy Transition" are intended to shift the nation's energy sector to renewable energy sources. It comprises research and development grants, tax breaks, low-interest loans, and feed-in tariffs for renewable energy plants. This program has helped Germany become a pioneer in producing renewable energy and has significantly reduced carbon emissions.
- Sweden's Carbon Tax: Sweden introduced a carbon tax in the early 1990s, and it has proven to be quite successful in lowering greenhouse gas emissions while raising money for environmentally friendly projects. The tax is imposed on fossil fuels and applies to areas including heating, industry, and transportation. The money made is invested in infrastructure for public transportation, energy efficiency initiatives, and renewable energy projects.
- The Government Pension Fund Global, also known as the Norwegian Sovereign Wealth Fund, was established by Norway to manage its oil income successfully. This fund concentrates on sustainable investments while investing a portion of the nation's oil wealth in a globally diversified portfolio. The fund incorporates environmental, social, and governance (ESG) factors into its investment selections to support sustainable development worldwide.
- The Green Growth Strategy of South Korea is a thorough framework that incorporates sustainable development objectives into monetary and economic planning. It involves spending on energy-efficient infrastructure, environmentally friendly transportation, and eco-friendly businesses. With the help of this plan, South Korea has significantly increased its capacity for renewable energy and established itself as a pioneer in developing green technologies worldwide.
- The Payment for Environmental Services (PES) Program in Costa Rica The PES program in Costa Rica is an effort in fiscal policy that offers cash rewards to landowners for protecting and repairing ecosystems. The initiative pays landowners in exchange for preserving forest cover, safeguarding biodiversity, and fostering sustainable land use methods. The natural resources of Costa Rica have been successfully preserved, ecotourism has been promoted, and this project has aided sustainable development.
- Development of Wind Energy in Denmark: To assist the growth of wind energy, Denmark has established several fiscal policies. These include tax incentives, feed-in tariffs, and benevolent regulatory regimes. Due to these actions, Denmark now leads the world in generating wind energy, and a vibrant wind energy industry has been

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established, fostering economic expansion, job creation, and environmental sustainability.

- The Emissions Trading Scheme (ETS) in New Zealand is a market-based mechanism to lower greenhouse gas emissions. It assigns a value to carbon and permits participants to trade emissions units. The ETS generates income from the sale of emissions units while encouraging businesses to cut emissions and invest in sustainable practices.

These illustrations show the wide range of fiscal policy efforts put into place in various nations to support sustainable development. Studying these successful programs can teach Turkey important lessons about creating efficient fiscal policies, setting ambitious sustainability goals, encouraging private sector participation, and ensuring transparent and accountable governance, even though each country's particular context and circumstances may differ.

Modifying and customizing these lessons to Turkey's particular socioeconomic and environmental setting is crucial, considering the nation's unique potential and difficulties. The efficiency of fiscal policy actions in fostering sustainable development in Turkey can also be increased by participating in international partnerships, information exchanges, and collaborations.

Lessons Learned and how they relate to the Turkish Situation

Successful fiscal policy initiatives in other nations can teach important lessons applicable to the Turkish environment. The following are some salient lessons and how they relate to Turkey:

It is crucial to modify successful international efforts in light of Turkey's unique economic, social, and environmental circumstances. When creating fiscal policies for sustainable development, consider Turkey's distinctive resource endowments, geographic location, industrial structure, and development priorities. Successful fiscal policy initiatives need a broad vision and a consistent set of rules. Establish precise sustainability goals and guarantee cross-sector and cross-government department policy coherence. Create a thorough and integrated fiscal policy strategy that aligns with Turkey's national development plans. To maximize resources, knowledge, and skills, encourage collaboration between the public and commercial sectors. Engage corporations, trade groups, and organizations representing civil society in the creation and execution of fiscal policies. Encourage the business sector to invest in sustainable initiatives and establish favorable conditions for green entrepreneurship and innovation.

Make that fiscal policy decisions and implementation are transparent and accountable. Publish thorough financial reports and provide data on how policies affect the environment and society. To improve policy efficacy and public trust, implement systems for stakeholder involvement, public participation, and independent oversight.

Phased implementation of fiscal policy allows for progressive changes and experience-based learning. Avoid abrupt policy changes that could undermine investor confidence or cause market uncertainty. Ensure fiscal policy is stable and predictable to entice long-term investments in sustainable development. Invest in projects that develop the capacity of policymakers, government representatives, and pertinent stakeholders. Encourage sharing of best practices and information through international alliances, partnerships, and involvement in international networks and platforms. Create fiscal policies with definite incentives for ethical behavior. Utilize economic tools like tax breaks, grants, subsidies, and market processes to incentivize people and companies to adopt sustainable habits and finance sustainable endeavors. Make sure that these incentives are transparent, well-targeted, and closely controlled. Economic policy for sustainable development should be approached holistically and across all sectors. Recognize the connections between several industries, such as waste management, energy, transportation, and agriculture. Promote synergies, prevent trade-offs, and maximize the overall sustainability impact by coordinating policy across sectors. Take into account the regional context and involve local groups in the formulation and application of fiscal policies. Make certain that laws consider the unique requirements and concerns of various communities and areas within Turkey. Encourage local governments and other stakeholders to get involved in sustainable development programs.

Create effective monitoring and evaluation systems to determine the success and impact of fiscal policies. Regularly assess the results and modify the policy in light of data and user feedback. Track your progress toward sustainability targets and use data and indicators to guide future policy choices.

Policymakers can improve the efficiency of fiscal policy initiatives in supporting sustainable development by applying these principles to the Turkish situation. Considering Turkey's economic interests, environmental concerns, social dynamics, and governance systems, it is essential to adapt and customize these lessons to the country's unique conditions. Effective fiscal policies that support sustainable development in Turkey must be developed and put into practice with a focus on ongoing learning, adaptability, and teamwork.

CONCLUSION

Summary of Key Findings

In conclusion, the study on how fiscal policy instruments affect economic expansion and maintaining sustainable development in Turkey produced the following major conclusions:

- Fiscal policy, which includes taxing, spending, and borrowing by the government, is essential for fostering sustainable growth and development in Turkey.
- Both positive and negative effects on economic growth can be attributed to tax policies. Investment incentives, entrepreneurial support, and income generation for public investments in sustainable initiatives can be achieved through carefully crafted and well-balanced taxation laws.
- Public spending habits have a big impact on sustainable development. Investments in research and development, infrastructure, healthcare, and other sectors of the education and healthcare industries promote long-term economic growth, social progress, and environmental sustainability.

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- Prudent management of government borrowing can promote private sector activity and finance infrastructure improvements to support economic growth. The need for prudent debt management solutions arises because excessive borrowing can result in debt burdens and financial instability.
- The relationship between Turkey's fiscal policy measures and GDP growth rates is clear from historical data and trends. A well-designed fiscal policy framework that balances income generation, public spending, and debt management can positively impact economic growth and sustainable development.
- Sustainability objectives must be incorporated into fiscal policy to achieve long-term economic, social, and environmental goals. Sustainable development concepts must be incorporated into policy formation, implementation, and evaluation to address climate change, resource depletion, and social inequality.
- Environmental taxes can promote ecologically responsible behavior while generating long-term revenue. Businesses and people can be encouraged to lessen their environmental impact by enacting carbon taxes, pollution levies, and other environmental fees.
- Sustainable development requires significant public investment in infrastructure initiatives that support renewable energy, energy efficiency, transportation, and water management. These expenditures boost resource efficiency, increase employment possibilities, and lower greenhouse gas emissions while enhancing the quality of life.
- Prudent government borrowing should take into account future fiscal viability and investment returns. It is essential to balance debt levels, interest rates, and repayment capabilities to prevent any negative effects on economic growth and development.
- Turkey may learn a lot from successful fiscal policy measures in other nations. Effective policy implementation requires policies to be tailored to the national context, provide policy consistency, encourage public-private partnership, transparent governance, and build capacity.

These important conclusions can help Turkey improve its fiscal policy framework, match it to goals for sustainable development, and promote long-term economic growth while protecting the environment and resolving social issues. The impact of fiscal policy instruments on economic growth and sustainable development in Turkey will be examined using a combination of quantitative and qualitative methodologies in this study. The results will be supported by information from official government sources, economic reports, scholarly research, and international organizations, which will also be used to provide a thorough study of the subject. This study will add to the body of knowledge by examining how fiscal policy affects economic growth in Turkey. In addition to offering potential policy recommendations to improve the effectiveness of fiscal measures for long-term economic growth and sustainability, the findings will give policymakers, economists, and researchers insights into how fiscal policy contributes to sustainable development in Turkey.

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References

1) Abramova, A., Shaposhnykov, K., Zhavoronok, A., Liutikov, P., Skvirskyi, I., & Lukashev, O. (2021). The Ecosystem of VAT administration in E-commerce: Case of the Eastern Europe Countries. *Studies of Applied Economics, 39*(5).

2) Abuselidze, G., & Mamaladze, L. (2019). *US-Turkey crisis and its impact on the economy of the black sea region.* Paper presented at the E3S Web of Conferences.

3) Al-Thaqeb, S. A., Algharabali, B. G., & Alabdulghafour, K. T. (2022). The pandemic and economic policy uncertainty. *International Journal of Finance Economics, 27*(3), 2784-2794.

4) Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. *International journal of Engineering, Business Management, 5*.

5) Baldacci, E., Gupta, S., & Mulas-Granados, C. (2014). How effective is fiscal policy response in financial crises. *Financial Crises: Causes, Consequences, Policy Responses*, 431-457.

6) Birner, R., Daum, T., & Pray, C. (2021). Who drives the digital revolution in agriculture? A review of supply-side trends, players and challenges. *Applied economic perspectives policy, 43*(4), 1260-1285.

7) Boluk, K. A., Cavaliere, C. T., & Higgins-Desbiolles, F. (2019). A critical framework for interrogating the United Nations Sustainable Development Goals 2030 Agenda in tourism. *Journal of Sustainable Tourism*.

8) Can, C. K., & Canöz, I. (2020). Testing minsky's financial fragility hypothesis for Turkey's public finances. *Pénzügyi Szemle/Public Finance Quarterly, 65*(4), 497-514.

9) Chen, G., Fang, J., Gozgor, G., & Pekel, S. (2022). Measuring uncertainty in export destinations and its impact on economic growth: evidence from Turkey. *Emerging Markets Finance Trade, 58*(15), 4231-4246.

10) Chugunov, I., & Markuts, Y. (2019). Budgetary policy of the emerging countries in conditions of institutional transformations. *Problems Perspectives in Management, 17*(4), 252.

11) Chugunov, I., Pasichnyi, M., Koroviy, V., Kaneva, T., & Nikitishin, A. (2021). Fiscal and monetary policy of economic development. *European Journal of Sustainable Development, 10*(1), 42-42.

12) Danylyshyn, D., Dubyna, M., Zabashtanskyi, M., Ostrovska, N., Blishchuk, K., & Kozak, I. (2021). Innovative instruments of monetary and fiscal policy.

13) Desdiani, N. A., Sabrina, S., Husna, M., Budiman, A. C., Afifi, F. A. R., & Halimatussadiah, A. (2022). Local budget resilience in times of Covid-19 crisis: Evidence from Indonesia. *Economies, 10*(5), 108.

14) Eke, C. K., & Akujuobi, N. E. (2021). Public debt and economic growth in Nigeria: An empirical investigation. *International Journal of Development Management Review, 16*(1), 178-192.

15) ElMassah, S., & Mohieldin, M. (2020). Digital transformation and localizing the sustainable development goals (SDGs). *Ecological Economics, 169*, 106490.

16) Falcone, P. M. (2020). Environmental regulation and green investments: The role of green finance. *International Journal of Green Economics, 14*(2), 159-173.

17) Goldfajn, I., Martínez, L., & Valdés, R. O. (2021). Washington consensus in latin america: From raw model to straw man. *Journal of economic perspectives, 35*(3), 109-132.

18) Goodman, J. B., & Pauly, L. W. (1993). The obsolescence of capital controls?: economic management in an age of global markets. *World politics, 46*(1), 50-82.

19) Guarini, E., Mori, E., & Zuffada, E. (2022). Localizing the Sustainable Development Goals: a managerial perspective. *Journal of Public Budgeting, Accounting Financial Management, 34*(5), 583-601.

20) Halimatussadiah, A. (2020). Mainstreaming the Sustainable Development Goals into national planning, budgetary and financing processes: Indonesian experience.

21) Javed, S. A., Ahmed, V., & Cheema, S. Z. (2021). Priorities for a fair recovery from COVID-19 in South Asia.

ISSN 1533-9211

DOI: 10.5281/zenodo.8379306

22) Kalemli-Özcan, Ş. (2019). *US monetary policy and international risk spillovers*. Retrieved from
23) Kamal, M., Usman, M., Jahanger, A., & Balsalobre-Lorente, D. (2021). Revisiting the role of fiscal policy, financial development, and foreign direct investment in reducing environmental pollution during globalization mode: evidence from linear and nonlinear panel data approaches. *Energies, 14*(21), 6968.
24) Kaygusuz, K. (2012). Energy for sustainable development: A case of developing countries. *Renewable Sustainable Energy Reviews, 16*(2), 1116-1126.
25) Khambule, I. (2021). COVID-19 and the Counter-cyclical Role of the State in South Africa. *Progress in Development Studies, 21*(4), 380-396.
26) Mattila, M. (2022). Supporting Consumer Purchasing Power Under High Inflation: Competition and Product Market Deregulation.
27) Öniş, Z., & Kutlay, M. (2013). Rising powers in a changing global order: The political economy of Turkey in the age of BRICS. *Third World Quarterly, 34*(8), 1409-1426.
28) Osborne, G. (2020). A new economic model. In *Policy Makers on Policy* (pp. 209-220): Routledge.
29) Permatasari, P., Ilman, A. S., Tilt, C. A., Lestari, D., Islam, S., Tenrini, R. H., . . . Wardhana, I. W. (2021). The village fund program in Indonesia: Measuring the effectiveness and alignment to sustainable development goals. *Sustainability, 13*(21), 12294.
30) Ribaj, A., & Mexhuani, F. (2021). The impact of savings on economic growth in a developing country (the case of Kosovo). *Journal of Innovation Entrepreneurship, 10*, 1-13.
31) Sachs, J. D., Woo, W. T., Yoshino, N., & Taghizadeh-Hesary, F. (2019). Why is green finance important?
32) Sarpong, F. A., Wang, J., Cobbinah, B. B., Makwetta, J. J., & Chen, J. (2019). Energy Strategy Reviews.
33) Shahzad, U., Radulescu, M., Rahim, S., Isik, C., Yousaf, Z., & Ionescu, S. A. (2021). Do environment-related policy instruments and technologies facilitate renewable energy generation? Exploring the contextual evidence from developed economies. *Energies, 14*(3), 690.
34) Stutterheim, S. E., & Ratcliffe, S. E. (2021). Understanding and addressing stigma through qualitative research: Four reasons why we need qualitative studies. *Stigma Health, 6*(1), 8.
35) Tanrıvermiş, H. (2020). Possible impacts of COVID-19 outbreak on real estate sector and possible changes to adopt: A situation analysis and general assessment on Turkish perspective. *Journal of Urban Management, 9*(3), 263-269.
36) Toprak, H. H. (2022). The Composition of Capital Inflows and Optimal Monetary Policy in Sudden Stop Economies.
37) Yang, Y., Su, X., & Yao, S. (2021). Nexus between green finance, fintech, and high-quality economic development: Empirical evidence from China. *Resources Policy, 74*, 102445.
38) Yumei, H., Iqbal, W., Irfan, M., & Fatima, A. (2021). The dynamics of public spending on sustainable green economy: role of technological innovation and industrial structure effects. *Environmental Science Pollution Research*, 1-19.
39) Yusuf, A., & Mohd, S. (2021). The impact of government debt on economic growth in Nigeria. *Cogent Economics Finance, 9*(1), 1946249.
40) Zhan, J. X., & Santos-Paulino, A. U. (2021). Investing in the sustainable development goals: Mobilization, channeling, and impact. *Journal of International Business Policy, 4*(1), 166-183.
41) Zhang, D., Mohsin, M., Rasheed, A. K., Chang, Y., & Taghizadeh-Hesary, F. (2021). Public spending and green economic growth in BRI region: mediating role of green finance. *Energy Policy, 153*, 112256.