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Green Economy as a Strategy for Strengthening Global Economic Resilience: Fiscal and Sustainable Finance Perspectives

Cetrin[1]

[1] Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia

Abstract

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This study analyzes the role of the green economy in strengthening global economic resilience through sustainable fiscal and financial policies. Using a qualitative approach through a literature review of publications from the last five years, this study synthesizes various empirical and conceptual findings from international institutions and indexed scientific journals. The objective is to identify the relationship between green fiscal policy, financial innovation, and sustainable development in the context of global economic uncertainty. The results of the analysis show that the green economy is capable of simultaneously integrating the goals of economic growth, environmental protection, and social welfare. Instruments such as carbon taxes, green budgeting, and green financing play an important role in maintaining macroeconomic stability and increasing resource efficiency. In addition, inter-agency coordination, fiscal governance transparency, and institutional support are determining factors for the successful implementation of green policies. This study confirms that the green economy is not merely a solution to short-term crises, but a new development paradigm oriented towards resilience, inclusiveness, and intergenerational justice.

1. Introduction

The global crisis that has occurred over the past five years has reaffirmed the vulnerability of the world economic system to external shocks such as pandemics, geopolitical tensions, climate change, and financial market volatility. According to Hepburn et al. (2020), the COVID-19 pandemic is not only a health crisis, but also a test for global economic resilience, and at the same time opens up opportunities to reorganize the direction of development towards a more sustainable model. These events show that a global economic system that is overly dependent on the exploitation of natural resources and short-term market mechanisms is unable to cope with multidimensional structural uncertainties. Therefore, there is an urgent need for a new economic paradigm that is more resilient, adaptive, and oriented towards environmental sustainability and social justice.

In this context, the concept of green economy exists as a strategic approach that integrates economic growth, environmental protection, and social welfare into one integrated policy framework. International organizations such as the OECD (2019) and UNEP (2021) affirm that the transition to a green economy is a prerequisite for long-term sustainability, especially in the face of the challenges of climate change, biodiversity decline, and the energy crisis. Conventional economic models based on high resource consumption have been shown to increase social inequality and exacerbate environmental degradation. D'amato and Korhonen (2021) stated that the integration between the green economy, circular economy, and bioeconomy can create an efficient, low-carbon, and socially just production and consumption system.

Furthermore, the increasing global economic uncertainty over the past five-year period, due to geopolitical tensions, high inflation, and rising international interest rates, shows the urgency of a green development-oriented fiscal policy. The IMF (2020) assesses that fiscal instruments such as carbon taxes, renewable energy subsidies, and green budgeting can be the main catalyst in strengthening sustainable economic recovery. Through these policies, the state can internalize the external costs of economic activities that pollute the environment while creating fiscal space to support green innovation and environmentally friendly investments. This approach is in line with the views of Hutagaol et al. (2022) who affirm that strengthening state finances through green economy strategies can increase fiscal resilience and reduce the risk of a global recession.

In addition to fiscal policy, the green finance dimension also plays a significant role in accelerating global economic transformation. Yang (2023) shows that green financing has a positive relationship to high-quality economic growth, especially when supported by efficient, transparent, and accountable fiscal governance. Through mechanisms such as green bonds, sustainable credit, and green capital market instruments, the financial system is able to become the main driving force for economic decarbonization. The synergy between fiscal policy and the green financial system creates a multiplier effect that strengthens economic stability while accelerating the adoption of clean technologies.

The Zachariadis et al. (2021) also emphasizes that post-pandemic economic recovery must be directed towards resource efficiency, clean technology innovation, and inclusive green investment. The principle of "building back better" is used as the foundation to ensure that any recovery policy not only improves short-term economic indicators, but also strengthens socio-ecological resilience. Within this framework, the integration of green economy principles into national and international development strategies is no longer just an alternative, but a necessity for long-term sustainability. Countries that fail to integrate green principles into their economic policies have the potential to face greater economic risks, including fiscal instability and high energy dependence.

Thus, the urgency of the transition to a green economy is rooted not only in ecological awareness, but also in the need for economies to create resilient, fair, and future-oriented systems. The green economy offers a framework that is able to balance economic growth and environmental sustainability, as well as strengthen global competitiveness through innovation and resource efficiency. This study seeks to analyze in depth how green fiscal policies and sustainable finance can strengthen global economic resilience through structural reforms and institutional innovation. The research focus is directed at understanding the role of the green economy as a transformation strategy that not only responds to the risk of a global recession, but also builds a new foundation for an inclusive, resilient, and equitable economic system across generations.

2. Literature Review

2.1. Conceptualization of the Green Economy

The concept of green economy has developed rapidly in the last two decades as a strategic framework for realizing sustainable development that balances economic, social, and environmental aspects. The OECD (2019) defines a green economy as an economic system that aims to improve human well-being and social justice, while significantly reducing environmental risks and resource scarcity. In other words, a green economy is not just an environmental policy, but a development paradigm that directs economic transformation towards energy efficiency, clean technology innovation, and increased productivity based on renewable resources.

This approach demands a fundamental shift from a linear economic model to a circular and low-carbon economy system. According to Alfano et al. (2023), the integration between the green economy, circular economy, and bioeconomy is a prerequisite for building an industrial system that is resilient to climate change and adaptive to global market dynamics. This integration drives innovation in product design, waste management, and clean energy use, ultimately improving competitiveness and economic efficiency.

A study by Hepburn et al. (2020) reinforces this view by showing that the green economy has a multiplier effect on long-term growth through the creation of new jobs (green jobs) and increased productivity in strategic sectors such as renewable energy, green transportation, and sustainable agriculture. In the context of post-pandemic recovery, the green economy is the foundation for countries to rebuild resilient, inclusive, and environmentally sound economies, while reducing dependence on the carbon-intensive sector that has dominated the global economic system.

2.2. Fiscal Policy and Green Economic Transition

Fiscal policy plays a central role in accelerating the transition to a green economy because it is able to influence economic behavior through the regulation of incentives and disincentives to production and consumption activities. Various instruments, such as green budgeting, carbon taxes, the elimination of fossil fuel subsidies, and sustainable investment incentives, are the main tools in directing the economy towards an environmentally friendly path. The IMF (2020) emphasizes that a properly designed green fiscal stimulus can simultaneously integrate economic and environmental goals, namely reducing carbon emissions without sacrificing the pace of economic growth. This policy not only serves as a corrective tool against negative externalities but also as a mechanism to strengthen the country's fiscal capacity in the face of long-term risks such as the energy crisis and climate change.

Zachariadis et al. (2021) added that green fiscal policies need to be directed to strengthen economic resilience through support for renewable energy, clean transportation, and digitalization of the Micro, Small, And Medium Enterprises (MSMEs) sector. This approach has a double dividend: increasing macroeconomic stability while accelerating the structural transformation towards a low-emission economic system. However, its effectiveness is highly dependent on public financial governance and institutional coordination. Wu and Zhou (2021) show that when green fiscal policies are synergized with a strong green financing system and fiscal transparency, the results can drive high-quality and inclusive economic growth. Therefore, the synergy between fiscal policies, green financing, and technological innovation is an important foundation for countries in accelerating the transition to a resilient, productive, and socially just green economy.

3. Method

This research method uses a qualitative approach with a library research design. This approach was chosen because the research focuses on conceptual analysis and empirical findings from various scientific sources regarding the role of the green economy in strengthening global economic resilience. According to Creswell and Creswell (2020), qualitative methods allow researchers to understand phenomena in depth through the interpretation of social, economic, and environmental contexts based on existing literature. Thus, this study does not aim to test hypotheses, but rather to construct a comprehensive theoretical understanding through content analysis of relevant scientific publications.

The main data sources come from Google Scholar-indexed journal articles for the last five years, reports from international institutions (OECD, IMF, World Bank, UNEP), and one empirical reference manuscript, namely Hutagaol et al. (2022), which discusses strategies to strengthen state finances through a green economy in the context of the threat of a global recession. The literature selection is carried out with the following criteria: (1) published within the last five years, (2) relevant to green economy, fiscal policy, or sustainable finance topics, and (3) having credible academic citations. The literature search process is carried out through a combination of keywords such as “green economy”, “fiscal policy”, “green finance”, and “sustainable recovery”.

The analysis stage is carried out systematically. First, the entire literature is classified based on key themes: green economy concepts, fiscal policy instruments, green financing, and sustainable recovery strategies. Second, each literature is analyzed using content analysis techniques to identify similarities in patterns, differences in approaches, and the direction of theoretical and policy development. Third, the results of the analysis are then synthesized to build a conceptual framework that explains the relationship between green fiscal policies, macroeconomic stability, and sustainable development.

To ensure the validity and reliability of the results, this study uses source triangulation by comparing results from scientific articles, institutional reports, and empirical studies that have different contexts. This step aims to avoid interpretive bias and strengthen the reliability of conclusions. The final results of the study are expected to produce an integrative understanding of how green fiscal and finance policies can support long-term economic stability in the face of global recession risks, while strengthening the foundations of socially just and environmentally sound development.

4. Results

The results of the literature synthesis show that the green economy is a development paradigm that is not only oriented towards increasing economic growth, but also on ecosystem sustainability and social justice. The OECD (2019) emphasizes that the green economy aims to create a balance between economic productivity and natural resource conservation through energy efficiency, technological innovation, and carbon emission reduction. This concept emerged in response to the inequality between conventional economic growth that relies on resource exploitation and the need to maintain the carrying capacity of the planet. This approach is in line with the views of D'amato and Korhonen (2021), who consider that the integration of the green economy, circular economy, and bioeconomy is a systemic model that allows economic and environmental sustainability to run simultaneously.

In the global context, the shift towards a green economy gained stronger momentum after the COVID-19 pandemic. Hepburn et al. (2020) show that the pandemic crisis has opened up opportunities to redesign the economic system with the principle of "green recovery", where fiscal stimulus and recovery policies are directed to support low-carbon economic activities. Their results show that green investments have a greater multiplier effect on long-term growth compared to high-carbon-based investments. Similar findings are also reinforced by the Zachariadis et al. (2021), which emphasizes that post-pandemic economic recovery must place resource efficiency, renewable energy innovation, and inclusive development as key pillars of sustainable development strategies.

The analysis conducted shows that fiscal policy plays a central role in supporting the transition to a green economy. The IMF (2020) identified that environmentally-oriented fiscal stimulus can have a positive impact on long-term economic resilience through increased green investment, new job creation, and strengthening the country's fiscal structure. In addition, policies such as carbon taxes, green tax incentives, and green budgeting have been proven to be able to internalize the external costs of economic activities that pollute the environment. When these instruments are applied effectively, economic structures become more resilient to external shocks such as fluctuations in global energy prices or climate change.

The results of the study also show that coordination between fiscal policy and the green financial system is essential to ensure the success of the economic transition. Yang (2023) found that the success of green fiscal policies is strongly influenced by transparent fiscal governance and inter-agency coordination. When there is synergy between the banking system, financing institutions, and the government, the efficiency of capital allocation for green investment will increase. This is in line with the findings of Bai and Lin (2023), who show that the relationship between green finance, technological innovation, and green economic growth is reciprocal: the greater the fiscal support and green financing, the faster the level of innovation and decarbonization of the industrial sector.

On the other hand, the UNEP (2021) report shows that although many countries have adopted green economy policies, the green finance gap is still the main obstacle in achieving sustainable development targets. The total global investment needs for climate change mitigation and adaptation are estimated to reach trillions of dollars per year, while available financial flows are still well below that figure. Therefore, increasing fiscal capacity and innovative financial instruments, such as green bonds and sustainable credit, are key to expanding the financing base for the green economy. The Climate Policy Initiative report (2021) also confirms that global green financing continues to grow, but is still concentrated in developed countries; This poses challenges in terms of equitable access and economic justice for developing countries.

In the context of public finance, research by Dalia and Vitaliy (2021) highlights that the strategy of strengthening state finances through a green economy approach is an anticipatory step in facing the risk of a global recession. The study shows that through the digitalization of MSMEs, food security, and sustainable energy transition, green fiscal policies can broaden the tax base while reducing medium-term fiscal risks. By strengthening fiscal capacity through environmentally friendly instruments, governments not only protect domestic economic stability but also contribute to global economic stability. This view reinforces the argument that green fiscal policy is a strategic instrument to address external shocks while strengthening the competitiveness of the national economy.

The Zachariadis et al. (2021) added that the implementation of green fiscal policies requires a strong institutional design to ensure effectiveness and accountability. Weak or fragmented implementation can hamper policy impact and create fiscal inefficiencies. In this context, the principle of green budgeting is important to direct public spending priorities to sectors that have a positive environmental impact. The OECD (2019) notes that countries that systematically implement green budgeting tend to have better environmental performance and more stable economic growth in the long term.

The results of the analysis also highlight that the green economy not only provides ecological benefits, but also strengthens social and economic resilience. According to Alfano et al. (2023), the integration of green policies into national development strategies is able to reduce social inequality through the creation of green jobs, increased labor productivity, and economic diversification. This transformation allows for a more equitable redistribution of economic benefits while strengthening social cohesion. A similar thing is expressed by Le Quéré et al. (2020), who show that the decline in economic activity due to the pandemic significantly reduces carbon emissions but this effect is temporary unless followed by sustainable structural changes through green policies.

Furthermore, the IMF's findings (2020) emphasize that the effectiveness of green fiscal policies is also influenced by the capacity of fiscal institutions to balance short-term economic needs and long-term environmental commitments. Countries with adaptive and transparent tax systems have a greater chance of attracting green investment and encouraging private sector participation. In this regard, private sector involvement is a key factor in expanding sustainable finance. Wu and Zhou (2021) said that coordination between public and private financial institutions through Public-Private Partnership (PPP) schemes is able to increase the effectiveness of green fund distribution, especially in the energy and transportation sectors.

In aggregate, the results of the study show that the success of the implementation of the green economy depends on four main pillars. First, a fiscal and monetary policy framework that supports decarbonization. Second, inclusive and transparent green financing support. Third, technological innovation that encourages resource efficiency. Fourth, the participation of the community and the private sector in the transition process. These four pillars interact with each other and form the foundation for a resilient global economic system. The study of Hutagaol et al. (2022) confirms that the integration of these four aspects not only increases the effectiveness of national policies, but also strengthens international cooperation in dealing with the risk of recession and global environmental crisis.

Findings from the literature also indicate that green economy adoption can provide significant co-benefits, such as improved public health, energy efficiency, and reduced social costs due to environmental degradation. UNEP (2021) states that every dollar invested in renewable energy generates higher economic and social returns than investments in fossil energy. In addition, the OECD (2019) notes that countries with progressive green policies tend to have higher economic resilience to fluctuations in energy prices and global crises. This proves that the green economy is not only an ecological strategy, but also a foundation for long-term economic stability.

The results of the analysis show that the green economy has great potential to become a comprehensive development strategy in the face of global uncertainty. Green fiscal policies, sustainable finance, and green technological innovation contribute to creating an economic system that is more adaptive, inclusive, and highly resilient to global risks. With strong institutional support and cross-sector collaboration, the green economy can be a driving force for equitable and environmentally sound growth in the post-pandemic era and facing the transition to a low-carbon future.

5. Discussion

The findings of this study confirm that the green economy is a multifunctional development strategy that is able to bridge the interests of economic growth, fiscal resilience, and environmental conservation. In the context of global macroeconomics, the implementation of green policies has evolved from a mere ecological approach to a strategic instrument of long-term development. The OECD (2019) explains that the transition to a green economy does not only focus on reducing carbon emissions, but also includes improving resource use efficiency, sustainable waste management, and building economic systems that are more resilient to external shocks. The success of the transition depends heavily on the country's ability to integrate economic, social, and environmental dimensions into a single consistent and mutually supportive policy framework.

Green fiscal policy is the main pillar in ensuring that the direction of the transition runs effectively and sustainably. The IMF (2020) emphasized that fiscal reforms, such as the implementation of carbon taxes, the elimination of fossil fuel subsidies, and green budgeting, can strengthen the foundations of the national economy while reducing long-term macroeconomic risks. When these policies are implemented systematically, the result is increased fiscal stability, improved economic structure, and the creation of fiscal space for sustainable investment financing. On the other hand, the success of green fiscal reform also relies heavily on political support and public awareness. Without strong social support, policies such as carbon taxes often face resistance because they are perceived to burden certain sectors, especially energy-intensive industries.

This view is reinforced by Yang (2023), who shows that the effectiveness of green fiscal policies is strongly influenced by coordination between fiscal institutions and financial institutions, especially in developing countries that face limited institutional capacity. Poor coordination can lead to policy fragmentation and reduce the efficiency of public resource allocation. Conversely, when fiscal governance is carried out in a transparent and accountable manner, green policies can increase investor confidence and strengthen sustainable financing flows. This shows that the success of the green transition is not only a technical economic issue, but also an institutional and governance issue.

In addition to policy aspects, the synergy between technological innovation and green financing is an inseparable element of the success of the green economy. Bai and Lin (2023) found that the relationship between innovation and green finance is reciprocal: technological innovation drives resource use efficiency and lowers emissions, while green finance provides the capital support necessary to develop and adopt clean technologies. This combination creates a synergistic effect that accelerates industrial decarbonization while strengthening the competitiveness of the global economy. In the long run, this has the potential to reduce dependence on fossil energy and encourage economic diversification towards low-emission sectors.

The results of this study also show alignment with the findings of Hutagaol et al. (2022), which highlight the role of the green economy as a strategy to strengthen the country's finances in facing the threat of a global recession. Through green fiscal policies, countries can increase revenues through the optimization of environmental taxes and minimize fiscal risks due to international economic fluctuations. This approach has been proven not only to strengthen macro stability, but also to support sustainable economic growth by paying attention to ecosystem balance and social welfare.

Thus, this discussion emphasized that the transition to a green economy is a structural imperative for the modern global economy. Consistent implementation requires synergy between fiscal policy, technological innovation, and an inclusive financing system. Furthermore, the success of the green economy is determined by political will, international cooperation, and the collective awareness of the value of sustainability. The green economy is not just an environmental concept, but a new paradigm of global development that places a balance between the needs of economic growth and human ecological responsibility to the planet. If implemented with consistency and integration across sectors, this paradigm has the potential to become a new foundation for a more resilient, inclusive, and long-term oriented world economy.

6. Conclusion

This study concludes that the green economy is a strategic approach that is able to unite the interests of economic growth, fiscal stability, and environmental sustainability in one integrated development framework. Through the integration of fiscal policies, green finance, and technological innovation, the transition to a low-carbon economic system can be achieved effectively and inclusively. This approach emphasizes not only resource efficiency and emission reduction, but also on the creation of new jobs, strengthening fiscal capacity, and improving people's welfare.

The results of the literature synthesis show that the successful implementation of the green economy is highly dependent on inter-institutional coordination, fiscal governance transparency, and strong institutional support.

The implementation of policies such as green budgeting, carbon taxes, and green investment incentives has been proven to have a dual effect on the economy: increasing macro stability while strengthening social and ecological resilience. Conceptually, the green economy is not just a short-term solution to the global crisis, but a new development paradigm oriented towards sustainability across generations. Therefore, every country needs to place the principles of the green economy as a basis in the formulation of economic and fiscal policies. With synergy between government, the private sector, and society, the green economy can be the foundation for a resilient, equitable, and environmentally sound global economic system in the future.

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