

How might the implementation of a Sustainability Policy influence the resilience of economic growth A Case of EU Taxonomy for Sustainable Activities in Germany, Spain, and Italy

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Abstract:

This paper examines how Sustainability Policy influences the resilience of economic growth in Germany, Spain, and Italy. By analyzing the Gross Domestic Product from 2017 to 2022, this paper finds that the three countries experienced economic growth after the pandemic. However, they have economic growth resilience due to the amount of green investment in small and medium enterprises. The more enterprises and investments in the country, the more economic strength there is to resist the challenges of COVID-19 while contributing to the economic recovery. Interestingly, the analysis finds that policy synergies are linked to the strength of economic growth. This study emphasizes that governments need to align their policies with the EU Taxonomy to ensure their economic growth is both resilient and sustainable.

Keywords: EU Taxonomy for Sustainable Activities, COVID-19, economic resilience, Sustainability Policy, policy synergies.

1. Introduction

The COVID-19 pandemic has triggered a crisis that has hit the European economy and the currently existing systems suffered as a result. Sustainability and environmental policies drive economic growth and innovation, particularly by stimulating green industries. These policies promote economic expansion, and enhance resource efficiency, leading to substantial cost savings for businesses. By reducing waste and optimizing material use, companies can lower production costs, which improves profitability and competitiveness. Furthermore, environmental regulations often result in significant public health benefits, which translate into economic gains.

We delve into our case which is The EU Taxonomy. A scientifically verified transparency tool for businesses and investors is the EU Taxonomy. This grading system's goals are to prevent greenwashing and to make the shift in investments easier [1]. The climatic and environmental aims of the EU are translated into criteria for certain economic activities to be used for private investment via this transparency tool, which is based on a classification system. Environmental, social and corporate governance (ESG) investments have grown rapidly in the past 10 years and show no signs of slowing down. The integration of ESG

initiatives into organizations makes excellent commercial sense and leads to more sustainable outcomes and better social benefits.

Treating COVID-19 as a shock, For 2021, Europe continues to implement the budgetary support and accommodative monetary policies initiated in 2020, as uncertainty remains over the continued presence of the virus and the devastating effects of the economic crisis [2]. Moreover, ESG policy helps enterprises internalize external costs and enhance long-term competitiveness and sustainability by promoting the consideration of environmental, social, and governance factors [3]. ESG performance enhances a firm's financial performance during the COVID-19 crisis. It is still a question whether the COVID-19 crisis itself can be seen as a critical moment in the new path to EU climate policy [4].

This article emphasizes how the EU taxonomy for sustainability policy affects differently resilience economic growth in Germany, Spain, and Italy in this research. By comparing the GDP growth rate during 2017-2022 in Germany, Spain, and Italy this paper found that all countries saw a great influence by the Covid shock. The majority of the countries were recovering after COVID-19, but the resilience of economic growth for each country acts differently. This paper aims to find out the reasons for different

economic performance. Answering the implementation of EU taxonomy for sustainability activities is positively associated with economic growth. From green finance and investments to innovation, and policy synergies, three different aspects analyze the extent of economic resilience in Germany, Spain, and Italy. In this research, we found that ESG policy can promote growth in particular niche markets, but also ESG policy can constrain the growth of companies and thus the economy by forcing businesses to internalize externalities.

2. Literature Review

Even while holding excessive amounts of cash and highly liquid assets might raise opportunity costs, undermine profitability, and limit growth prospects, many businesses might choose to invest in green bonds that prioritize long-term economic expansion. For instance, Albuquerque et al. show that non-financial enterprises with higher environmental and social impact ratings have higher returns and lower return volatility, while Garel and Petit Romec find that greener companies are likely to have superior stock returns.

Businesses may rely on the EU taxonomy to help them plan and obtain capital for their climate and environmental transformations, which in turn helps them make investment decisions. Financial companies may create reputable green financial products by using the EU categorization standards. Invest in assets with strong ESG scores and emphasize their stock market liquidity and typical risk-return characteristics to improve their performance. routes by which businesses that prioritize sustainability might strengthen their ability to withstand unforeseen shocks. Because firms with sustainability have performed better on the stock market throughout the COVID-19 epidemic, investors view sustainability as a valued attribute of a company [2]. For businesses to increase shareholder value and their financial performance, sustainability is essential. Furthermore, during COVID, a lot of organizations stepped up their efforts to cut carbon emissions. For instance, cutting down on employee traveling through telecommuting lowers energy expenses at work and lowers carbon footprints. Regarding investment, it had already risen above its pre-crisis levels and had a very favorable impact on Italy's economic recovery. Compared to the pre-crisis level, investment remained low for Germany and Spain.

Moreover, many organizations accelerated their efforts to reduce carbon emissions during COVID. For example, reducing employee commuting through telecommuting reduces carbon footprints while saving on workplace energy costs. In terms of investment, the level has exceeded the pre-crisis level and has made a huge contribution to Italy's

economic rebound. Investment in Germany and Spain remains subdued compared to pre-crisis levels..

By considering ESG policy, businesses can better manage risks, unlock opportunities, and drive positive change within society. For instance, showing their own value proposition to the society that is friendly to the environment. There is a lot of research showing clear guidelines provided by the taxonomy may attract more foreign investments into sustainable projects within Germany, Spain, and Italy, boosting their economic growth.

The cornerstone of the EU's framework for sustainable finance and a crucial instrument for enhancing market transparency is the EU Taxonomy. In line with the goals of the European Green Deal, it makes direct investment in the economic sectors most necessary for the transition easier. In order to achieve the goals of the European Green Deal and fulfill the EU's 2030 energy and climate targets, we need to allocate funds to sustainable initiatives and endeavors. A unified terminology and a precise description of what constitutes "sustainable" are required to accomplish this [3]. For this reason, the Action Plan for Financing Sustainable Growth mandates that sustainable economic activity be categorized using a uniform approach known as "EU Classification." Financial and non-financial businesses may agree upon a definition of what constitutes ecologically friendly economic activities according to the EU Taxonomy. Thus, it contributes significantly to the European Union's efforts to increase sustainable investment by giving investors confidence, shielding individual investors from "greenwashing," assisting companies in adopting more environmentally friendly practices, and minimizing market fragmentation.

In a word, ESG mediates the link between the business cycle, economic performance, and investors' decision-making process. The intake of new energy sources can reduce the price of oil, alleviate the problem of oil shortages, and to a certain extent, avoid the problem of over-dependence on imports from other countries. The EU taxonomy for sustainability policy is a typical policy that helps to reach the SDG goals.

3. Methods

To improve our understanding of the effects of sustainability policy on countries' ability to remain resilient in the face of global crises, this paper selects 3 different similar countries which had enacted the same sustainability policy before the Covid-19 pandemic. In this study, I used qualitative research to examine this relationship.

The three countries that this article selected were Germany, Spain, and Italy. These are ideal countries to compare because they are all members of the EU, subject to the same overarching ESG policy, and thus allow me to ex-

amine other possible factors that might explain the effects of such policy on economic resiliency.

3.1 Data collection

For data collection, this work focuses on gathering information on the EU Taxonomy for Sustainability Policy. This data was found primarily on the EU’s official website. And it gathers information on each country’s additional ESG policies from the United Nations Principles for Responsible Investment (UN PRI). In addition, this article collects data on the GDP and other important country-level performance indicators across the period from 2017-2022.

$$GDP\text{growthrate} = \frac{\text{currentyearGDP}_i - \text{baseyearGDP}_i}{\text{baseyearGDP}_i} \times 100 \tag{1}$$

Gross Domestic Product is an important index that can be considered as the economic growth in the country. This article has been used the the International Monetary Fund (IMF) growth rate data through its World Economic Outlook (WEO) reports and databases. Comparing the GDP growth rates across Germany, Spain, and Italy to evaluate their economic resiliency. And investigating any significant differences or trends in the growth rates that may correlate with the implementation of the EU Taxonomy for Sustainable Activities.

4. Findings

4.1 General analysis

Figure 1 illustrates Italy had a strong strength in the resili-

3.2 Data analysis

For data analysis, this paper firstly collect secondary data from finance. yahoo.com, Global Reporting Initiative (GRI), and Bloomberg to analyze the small and medium-sized enterprises (SMEs) that may benefit from green financing and investment, helping them grow and contribute to overall economic performance across Germany, Spain, and Italy. Next, this work compares the extent of the economic performance of SMEs affects the national level which increases the green bonds investment and reduces the risk of externalities. Finally, I find out the Gross Domestic Product in each country. Using Formula 1 to find the GDP growth rate.

ience of economic growth in 2021, compared to Germany, and Spain. Regarding investment, it had already risen above its pre-crisis levels and had a very favorable impact on Italy’s economic recovery. Compared to the pre-crisis level, investment remained low for Germany and Spain. ESG policies help enterprises internalize external costs and enhance long-term competitiveness and sustainability by promoting the consideration of environmental, social, and governance factors. These policies are particularly important during the COVID-19 pandemic, helping enterprises weather the crisis and achieve stable growth by increasing their resilience and ability to cope. The resilience of economic growth in these countries is different. However, they have all experienced economic growth after 2020 due to COVID shock.

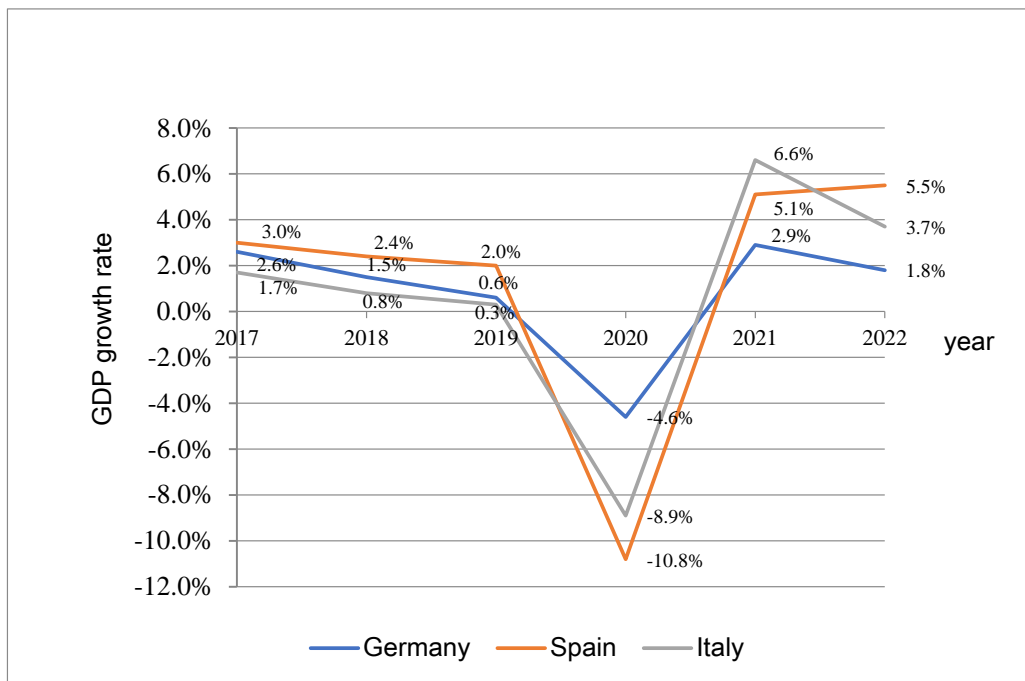


Figure 1 The GDP growth rate between 2017 and 2022

4.2 Green Finance and Investment benefit small and medium-sized enterprises

From the Green Finance and Investments aspect, small and medium-sized enterprises (SMEs) may take advantage of enhanced access to green financing and investment, helping them grow and contribute to overall economic performance. Using an example in each country to represent a clear trend that ESG policy greatly attracts green bond investment leading to economic growth [5,6].

In Germany, Va-Q-Tec is a German SME that specializes in high-performance insulation solutions for various industries, including logistics, healthcare, and construction. It has leveraged green bonds and green loans to finance the development and production of its energy-efficient insulation materials. In 2020, Va-Q-Tec issued green bonds worth approximately €30 million to fund its eco-friendly projects. Moreover, the green financing allowed Va-Q-Tec to expand its production of sustainable insulation products, reducing energy consumption and emissions for its clients. In addition, by accessing green financing, Va-Q-Tec was able to stabilize its operations and continue its growth trajectory despite the pandemic, contributing to the overall economic recovery in Germany.

Turning to Spain, a company called Gestamp is a Spanish SME that designs, develops, and manufactures metal automotive components. The company is known for its commitment to sustainability. Gestamp has utilized green bonds to invest in sustainable manufacturing processes and energy-efficient technologies. In 2021, Gestamp issued €500 million in green bonds to support its sustainable projects. Furthermore, the funds from the green bonds were used to implement energy-efficient manufacturing processes, significantly reducing the company's carbon footprint and operational costs. Finally, Green financing enabled Gestamp to maintain its sustainability initiatives during the pandemic, ensuring continued investment in innovative technologies and contributing to Spain's economic resilience.

In Italy, Epta Group is an Italian SME that specializes in commercial refrigeration solutions. The company focuses on providing sustainable and energy-efficient refrigeration systems. They have accessed green loans and issued green bonds to support their environmental sustainability projects. In 2020, Epta Group secured €20 million in green bonds to finance the development of its eco-friendly refrigeration systems. The green bonds allowed Epta Group to enhance its product offerings with sustainable technologies, reducing energy demand and carbon footprint for its clients. The green financing helped Epta Group navigate the challenges of the pandemic, enabling it to sustain its green projects and contribute to Italy's economic recovery

[7].

The EU Taxonomy facilitates the issue of green bonds by offering a precise framework for what qualifies as sustainable activities. These bonds are financial instruments that have been set aside expressly to fund green initiatives.

4.3 Policy synergies help affect the resilience of economic growth

Looking at policy synergies perspective, different countries displayed different resilience of their economies. For some countries that have different policies act opposite each other would lead to higher costs, inefficient resource use, and distracted management [8,9]. The taxonomy can be coordinated with other EU policies on sustainability and could amplify positive economic impacts, fostering a more integrated and resilient economic growth model across these countries.

For example, Germany has historically subsidized coal mining, particularly in regions like North Rhine-Westphalia. Despite recent efforts to phase out coal, subsidies and financial support for coal-fired power plants have continued, which is a contradictory Policy against the EU taxonomy for sustainability policy. Continued support for coal leads to higher environmental and health costs due to pollution. The Investment in coal diverts resources away from renewable energy projects. As a result, companies and government bodies may struggle to balance conflicting policies on coal and renewable energy.

Italy also shown less resilience in economic growth. On the one hand, Italy continues to grant licenses for offshore oil and gas exploration, particularly in the Adriatic Sea, despite the EU's push for reducing fossil fuel dependency. Environmental degradation and the potential for oil spills increase long-term cleanup costs. Moreover, investment in fossil fuel infrastructure conflicts with renewable energy goals.

However, in Spain, there is a well-known supportive Policy called the National Integrated Energy and Climate Plan (PNIEC) Spain's PNIEC outlines comprehensive measures to achieve climate targets, including expanding renewable energy capacity and improving energy efficiency. drawing capital for environmentally friendly infrastructure and technology, strengthening the economy. Additionally, it encourages the shift to a low-carbon economy, aligning with EU Taxonomy goals which is a comprehensive approach to sustainability and economic development [10].

In economic performance, we found out that the country that the implementation of policies aligned with the EU Taxonomy for Sustainable Activities can contribute to economic resilience and sustainable growth. In contrast, policies that contradict these objectives can lead to higher costs, inefficient resource use, and distracted management,

ultimately hindering progress toward a sustainable future. By aligning national policies with the EU Taxonomy, countries can ensure that their economic growth is both resilient and sustainable.

5. Conclusion and Discussion

One such instrument is the EU Taxonomy, which establishes a uniform vocabulary for green activities by converting the climatic and environmental objectives into precise criteria. It will give businesses and investors a frame of reference [11]. In order to fulfill the goals of the European Green Deal, it will aid businesses in their planning and financing of their transition, assist in reducing market fragmentation, guard against greenwashing, and quicken the financing of projects that are already sustainable and those that are in transition.

National policies should be flexible and inclusive in order to adapt to changing market conditions and ensure sound economic development [12,13]. While this study offers insightful information about how to achieve sustainability since policy affects how resilient economic development is, it's critical to recognize the constraints that might have an impact on how the results are interpreted and used generally. Adopting a long-term perspective in policymaking and using sustainable well-being as a compass would help us break free from the present long-term crisis cycle, in which hasty decisions too frequently result in unfavorable long-term effects. This study will likely contribute to our understanding of how ESG policy can promote greater economic resilience in the face of external shocks, which can be considered by policymakers, social movements, and enterprises. By identifying the policies that have been put into place and the theoretical and operational gaps that needed to be looked into and supported by academics and politicians in order to define the stability and progress of the pillars, the study improved the relationship between the EU Taxonomy and the SDGs.

In the meantime, how to implement the sustainability policy efficiently is important. The policymakers can follow these steps to publish sustainability policy effectively. Firstly, set a clear objective and measurable goals. For instance, using SMART (specific, measurable, achievable, relevant, time-bound) to set actionable targets. Second, engage stakeholders early and often by working with industry groups and government agencies to ensure that policies and regulations are aligned. In addition to this, there may be a time lag in policy and there is a need to anticipate what will happen in the future. Governments enacting policies need to ensure transparency and make necessary adjustments as markets change. Together, these steps ensure that sustainability permeates the entire orga-

nization and society, driving long-term environmental and economic benefits.

One limitation of this study was conducted in specific regions within Germany, Spain, and Italy, which may not fully represent the broader relationship, thereby limiting the generalizability of the results. The use of a controlling variable was necessary due to various factors and constraints, which may have introduced selection bias into the study.

To improve the findings' generalizability, it would be intriguing to incorporate bigger and more varied elements in future research. Additionally, employing randomized sampling techniques could help mitigate selection bias. In summary, although if this study makes a substantial contribution to the effective application of sustainability policy, it is important to take into account the limitations mentioned in order to properly understand the findings. It will be essential to mitigate these constraints in future studies in order to further validate and build upon these findings.

Authors' contributions

This work was solely carried out by Nixin Tang. The study's idea and design, as well as the gathering, processing, and interpretation of the data, fell under the purview of the author. Additionally, the author wrote the manuscript's draft and revisions, making sure it contained all necessary intellectual material. The author oversaw every element of the research and writing process on my own.

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