BUCHAREST UNIVERSITY OF ECONOMIC STUDIES Doctoral School of Finance

THE IMPACT OF SOVEREIGN AND CORPORATE RATINGS ON ECONOMIC GROWTH IN THE EUROPEAN UNION

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Keywords: Rating, Global GDP, GDP/capita, ESG, economic growth, companies' performance, financial indicators, euro zone, European Union, economic crisis, COVID-19 pandemic

Summary

This paper aims to provide an overview of the European Union states from both a financial perspective, including the economic position of the states and the profitability of companies, as well as from the perspective of social and environmental impact. This objective is achieved by presenting the ESG (Environmental, Social, Governance) concept and its current importance. The paper analyzes the impact that ratings have on economic growth, prioritizing economic indicators but also taking into account significant global events such as the financial crisis, the COVID-19 pandemic, and environmental impact.

Chapter 1 provides general information regarding the concepts addressed in the paper, such as rating, economic growth, and corporate performance, along with the current state of knowledge on these topics. The ratings discussed in the paper are issued by the most significant rating agencies, commonly referred to as the "Big Three": Standard & Poor's Financial Services, Moody's Investor Services, and Fitch Ratings, which are also among the oldest agencies, thus possessing the most experience in issuing ratings. Currently, the ratings issued by these agencies play a crucial role in the financial world, influencing various aspects of financial life at both the macroeconomic level (sovereign rating) and the microeconomic level (company rating).

The sovereign rating mainly tracks economic growth, usually expressed using gross domestic product (total or per capita). Governments implement policies to promote economic growth by stimulating economic activity, improving productivity, and developing a favorable environment for investment and innovation. Economic growth is often driven by factors such as investment, technological advancements, productivity increases, consumer spending, and net exports. GDP is a key indicator for assessing a country's economic condition and is used to compare economic performance between different countries, being important for raising living standards, reducing poverty, and creating job opportunities.

The company rating mainly assesses the company's performance, an essential concept in business management. The factors that can influence a company's performance are diverse, including internal and external factors, financial and non-financial, management quality, market conditions, or the ability to develop new and innovative products and technologies.

The key economic indicators in determining a company's performance are:

- financial indicators, such as profitability, measured by the Net Profit Margin (Net Profit/Sales Revenue) or the Return on Equity (ROE - Net Profit/Equity), the Return on Assets (ROA - Net Profit/Total Assets), or the Return on Invested Capital (ROIC -Operating Profit/Invested Capital),
- liquidity indicators, such as Current Liquidity (Current Assets/Current Liabilities) or Quick Liquidity (Current Assets – Inventories)/Current Liabilities),
- ▶ market indicators, such as Earnings Per Share (EPS), an essential indicator for investors.

The evaluation of an entity's financial performance is based on its financial statements, which must contain information that reflects the economic reality of the events to provide a true and fair view of the entity's financial position. Company performance is mainly analyzed through the return on equity due to the complexity of this indicator (ROE).

Chapters 2 and 3 are dedicated to the sovereign rating and its impact on economic growth in the European Union, taking into consideration, with priority, macroeconomic indicators such as global GDP and GDP per capita. The analyses include the evolution of events with significant impact within the European Union, such as the accession of EU member states to the Eurozone, as well as those with a global impact, such as the financial crisis of 2007-2008 or the COVID-19 pandemic, which, although not of economic origin, nevertheless had significant effects on the indicators recorded by EU member states. Regarding the division of countries into developed and developing countries, for the analyzed period, it was considered that the countries that are part of the OECD at the time of analysis are classified as developed states, while non-OECD countries are considered developing, representing a small number of states in the analysis. The chosen time period is generous and contains data starting from 1996 to the present.

Sovereign rating has various implications for governments, investors, and the economy of a country as a whole. Countries with better sovereign ratings attract foreign direct investment because they benefit from lower interest rates on international markets, while states with lower ratings may have difficulties accessing international capital markets or may even be unable to borrow to overcome difficult periods. Additionally, the sovereign rating can influence a country's position in international negotiations. Therefore, a high sovereign rating stimulates investment, improves economic and financial stability and brings a real benefit to the state in international relations.

To study the impact of the Rating on the GDP and vice versa, the analysis in this paper is carried out based on the sovereign rating and the gross domestic product (annual and/or per capita). For this analysis, simple regressions were used on panel data, with cross-section fixed effects, and the values that were the basis of the calculations come from the databases: (i) Thomson Reuters (Refinitive, currently) for the information on the Sovereign Rating and (ii) Eurostat for the information on the annual GDP and GDP/capita indicators. To evaluate the ratings, a linear transformation was used based on the rating scale proposed by Sy, A. (2004).

Furthermore, considering that a well-designed and balanced fiscal policy can stimulate economic growth and ensure long-term sustainability, this paper correlates the studied macroeconomic indicators (Sovereign Rating and GDP) with important fiscal indicators, such as value-added tax (VAT) and corporate income tax.

Chapters 4 and 5 present the company ratings and their impact on financial performance and economic growth. The main credit rating models used by international and national agencies are presented here. For smaller companies, alternative methods are often used, such as probability of default (PD) models.

The paper presents the KMV model, used for assessing a company's credit risk, which was developed by Moody's Analytics and is based on options theory and structural credit risk analysis. Other key credit risk assessment models presented in the paper include:

- a) international models:
 - CreditMetrics (J.P. Morgan),
 - CreditRisk+ (Credit Suisse First Boston),
 - CreditPortfolioView (McKinsey),
 - Fitch Ratings,
 - Platforma FICO.
- b) national models:
 - RisCo Business Intelligence,
 - Confidas.

Chapter 6, the final chapter, introduces a new approach to evaluating performance (of states or companies) compared to the classic method based solely on financial indicators, namely analysis from the perspective of environmental, social, and governance aspects—an analysis based on the ESG (Environmental, Social, Governance) indicator, which is becoming increasingly important in the current global context. This chapter presents the evolution of ESG ratings, particularly the ESG Global Score Indicator issued by Beyond Rating SAS for the analysis of the sovereign risk of European Union states. Additionally, the paper correlates ESG indicators with sovereign ratings issued by the three major credit rating agencies, as well as with GDP and GDP per capita levels in EU countries.

At the company level, there is growing interest from investors in ESG-compliant products. Asset managers and institutional investors are increasingly incorporating ESG factors into their investment strategies, both to meet regulatory requirements and to align with the preferences of their clients. Generally, an ESG framework supports sustainable development while also achieving financial objectives.

This chapter aims to present a comparative analysis of the two indicators (the ESG Global Score Indicator and the Sovereign Rating issued by rating agencies) and to assess the necessity of a cumulative analysis of these two indicators. These ESG ratings are also analyzed in correlation with other macroeconomic indicators such as GDP and GDP per capita in EU member states.

At the company level, credit ratings should be correlated with ESG analyses because traditional financial credit ratings may overlook certain non-financial factors that can significantly impact a company's long-term performance.

Finally, the conclusions drawn from the analyses conducted throughout the thesis occasionally confirm theories from the specialized literature, while in other cases, they challenge the dominance of purely economic analysis in the financial market. Moreover, the results provide additional insights or offer interesting ideas for future research.