

Routledge Studies in the European Economy

FINANCIAL STABILITY, ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT

Edited by

Marc Baudry, Sławomir Ireneusz Bukowski,
and Marzanna Barbara Lament



Financial Stability, Economic Growth and Sustainable Development

Following multiple global crises, there is an urgent need to review our economic and financial paradigms to improve outcomes for the three pillars of sustainable development: economic, social, and environmental. In response, various strands of new economic thinking have emerged such as de-growth, the collaborative economy, solidarity economy, sharing economy and social entrepreneurship. This book explores the various economic and financial dimensions of sustainable development drawing on new and existing theories.

This comprehensive book is divided into four sections, each presenting the results of a team of international researchers, tackling the issue from a global, macroeconomic, and microeconomic approach. The first part examines the determinants of sustainable development in the global economy, while the second looks at enterprise in a sustainable world. The third section analyses the financial markets and the fourth addresses economic policy and sustainable development. A wide array of sustainability concerns are discussed in-depth, from analysing changes in environmental social, and governance reporting and assessing their impact on the information systems and reporting of economic entities; exploring the transition to 'Industry 5.0', and how technological innovation can be deployed to support a better fit and 'win-win' interaction between industry and society, shifting focus from economic and technological factors to important environmental and social dimensions.

The monograph is an invaluable resource for scholars, researchers, and students of applied, development, growth, resource, and welfare economics. The policy recommendations will be of benefit to policymakers concerned with issues of sustainable development generally and the Sustainable Development Goals specifically.

Marc Baudry is a Professor of Economics (ProfTit) in the Department of Economics at the Université Paris Nanterre, France, as well as a research fellow at EconomiX (CNRS) and head of the 'CO₂ pricing and low-carbon innovation' pole at the Climate Economics Chair.

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Preface

Sustainable development has been a major global concern since the beginning of 1990. Climate changes, changes in the society and the social structure, and changes in the mentality of new generations enforce changes in the economies. What will be the changes? We do not think that we substitute market mechanism as the main regulation system by others. There have been some experiments that ended in great tragedy for societies. Market mechanism is eternal, but the problem is how many government regulations and interventions in the reality of market functioning, in the economy. It is not a new problem. We try to develop that in the new context of the world economy, national economies, and modern societies. Books about sustainable development are often controversial. There are many scientists who accept that we as a people destroyed our global climate and the earth. A minority of scientists are not convinced. Our book argues for what we should do from an economic point of view to make our world better. How we should make our economic approach better for the environment, society, governance? We try to answer this question. We analyse the sustainable development problems from the point of view of economic and financial sustainability in global, macroeconomic, and microeconomic scales. Particular chapters present results of our international team research in four fields:

- Determinants of sustainable development in global economy
- Enterprises in a sustainable world
- Financial markets in a sustainable world
- Economic policy and sustainable development

The main goal is to present our international research results which concern different dimensions of economic sustainable development. There are many books about sustainable development, usually not comprehensive but concerning selected aspects, particularly ecological, financial, economic, ethical, and cultural. Our book comprehensively embraces the economic and financial problems of sustainable development. The main thesis is we the people should make our social, economic world better. We should change our paradigms of economics.

This book is about problems of economic sustainability. We should review our paradigms of economics and finance. The sustainable development concept is not only an ecological problem. It concerns also the social relation between employees and management, management of the decision-making process, financing, and relations between government and market.

The book contains four main parts, which comprise 18 chapters.

The first part of book is titled “Determinants of Sustainable Development in the Global Economy” and consist of five chapters.

Chapter 1 presents general problems concerning the connection among sustainable development, entrepreneurship, and business ethics. These have been very pressing concerns for the last 20 years, thus there are many papers which address these issues. In this chapter, we try to link and explain the triad of problems, pillars of sustainable development concerning the economy: sustainable development, entrepreneurship, and business ethics. At the first glance, those problems linked in triad may seem simple. If we deeply analyse those, we can investigate a lot of interesting, detailed problems and formulate conclusions. The main thesis of this chapter is that all three pillars are strictly correlated. The authors try to argue that thesis.

Chapter 2 deals with the economics of moderation as a foundation of sustainable development. The emergence of a new trend in economics the issue of moderation can be seen as a symptom/symbol of a shift in thinking about welfare and prosperity. The problem of moderation is also becoming an indispensable part of solving growing global economic, social, and environmental problems. This is clearly reflected in the Sustainable Development Goals (SDGs) defined by the UN. Failure to recognize them as an economic policy priority could threaten not only the well-being of people, but also the very existence of the planet. The economics of moderation is thus becoming no longer just a recommendation, but a necessity.

Chapter 3 includes the study about credibility of the EU-ETS to decarbonize the European economy. This chapter argues that the EU-ETS has so far mainly induced short-term reductions. To do this, it relies on a theoretical analysis of the distinction between the two types of emission reductions and on the empirical means of distinguishing them. Theoretical analysis leads to refining the measurement of the concept of induced technological change proposed in the literature by distinguishing, on the basis of the evolution of carbon intensity and baseline emissions, between weakly oriented technical progress and strongly oriented technical progress. The results of an analysis by production frontiers applied to data from companies in different sectors regulated by the EU-ETS are presented.

In **Chapter 4**, the authors try to answer the question, is it possible to integrate social and environmental priorities into technological innovation in the context of the transition to industry 5.0? The environment of modern social systems becomes more and more complex. Perhaps the most important features of contemporary societies and economies are unprecedented structural uncertainty, globalization, and intensification of technological progress that

caused substantial changes in job organization, management methods, and methods of production. Uncertainty is placed on the list of the main characteristics of contemporary social and economic systems as a component of the triad: the complexity of the system, its dynamics, and uncertainty. This chapter aims to explore the transition to ‘Industry 5.0’ and to analyse how technological innovation can be deployed to support a better fit and ‘win-win’ interaction between industry and society, shifting focus from economic and technological factors to the important environmental and social dimensions.

Chapter 5 focuses on the financial aspects from macro and microeconomic perspective because these are two sides of the same coin. It could be the academic argument if macro determines microeconomic perspective or vice versa but both perspectives are important. The main research questions raised in this article are, what is the financial impact of COVID-19 on businesses and individual customers or investors? What are the main changes of business and customers’ behaviours about?

The second part of the book is titled *Enterprises in a sustainable world* and consists of five chapters.

Chapter 6 deals with the problem of ESG (*Environmental Social Governance*) reporting in enterprises, which concerns the issue of care for the environment, social conditions, and business management methods. It aims to show the business model, the sustainability processes implemented with their results, and to analyse the risks associated with business relationships, products, or services that may have an adverse impact on the sustainability of the company. On December 14, 2022, the European Commission adopted the Corporate Sustainability Reporting Directive (CSRD) 2022/2464/EU. This directive will replace the current Non-Financial Reporting Directive (NFRD) 2014/95/EU. Directive 2022/2464/EU (CSRD) was announced as part of a comprehensive package of legislative changes for the sustainable financing of economic growth to achieve EU climate neutrality by 2050. Directive 2022/2464/EU (CSRD) makes it mandatory for all companies – both public and private – to report on ESG issues from 2024. It also changes the scope of ESG reports and introduces uniform reporting standards. This means more transparency for citizens, consumers, and investors, but at the same time presents challenges for reporting entities. The introduction of ESG reporting into reporting practice implies the need to modify business strategy and adapt information models to sustainability requirements. The study presents the reasons for the changes in the presentation of sustainability information, and analyses the existing legal regulations, in particular regarding the subject and object scope of sustainability-related reports prepared as non-financial reports under the regulations of Directive 2014/95/EU and as ESG reports under the regulations of Directive 2022/2464/EU. An analysis was also made of the ESG reporting standards promulgated by the European Commission on 31 July 2023.

In **Chapter 7**, the author analyses the impact of the concepts of ‘Society 5.0’ and ‘Industry 4.0’ on the evolution of social responsibility standards on the strategies of the most powerful transnational corporations. The global

economy is constantly changing, affecting all aspects of its functioning as well as the actors involved. A succession of concepts is emerging to highlight the essence of the re-evaluations taking place: ‘Industry 5.0,’ ‘Society 5.0,’ ‘Economy 5.0,’ etc. Central to all 5.0 approaches is that being innovative is necessary, but not sufficient, for success. Indeed, it is necessary to create economic and social value (CSV, Creating Shared Value). The aim of this paper is to highlight the implications of the implementation of the ‘Society 5.0’ concept for the model of social responsibility (CSR, Corporate Social Responsibility) and the new challenges associated with it.

Chapter 8 critically assesses the sustainable finance landscape today and considers what its future might look like. It contains a review of the history of sustainable finance, and how it differs from conventional finance and an analysis of the current major issues that affect its adoption and take-up, and what are the key driving forces behind it. What should companies focus on if they are not just going to meet the minimum expectations from consumers and investors, as well as the regulatory requirements needed? What can they do to add value and gain a return on the investment needed by transforming sustainability initiatives into competitive advantages? In the past, senior business leaders have not connected sustainability initiatives to their core strategies. This is why so many companies have failed to leverage sustainability to create value and competitive advantage. This chapter offers a framework of where we are today, why we are in this position, and what the future might hold.

Chapter 9 deals with the impact of the armed conflict in Ukraine on the constant confusion in the activities of business entities around the world. The leaders of many European countries are asking themselves the basic question where to get energy sources that could permanently replace fuel and coal previously imported from Russia? The aim of the chapter is to try to find ‘the balance’ between destabilization of the financial situation of companies from the energy sector listed on the NewConnect market in Poland and the sustainable development of enterprises consisting in the gradual replacement of fossil fuels with renewable energy sources.

The aim of **Chapter 10** is to examine the effect of working capital management on the profitability of companies in the pharmaceutical industry in Greece. In the environment of intensive competition and the rapid development of technology, the optimization of working capital management is a challenge and a necessity for businesses. The research is conducted based on a sample of companies in the Greek pharmaceutical industry for the period 2011–2020. The main research question is whether the management of working capital and its components affects the profitability of pharmaceutical companies and how the profitability affects the sustainability of the sector.

The third part of the book is titled *Financial markets in a sustainable world* and consists of four chapters.

In **Chapter 11**, the authors deal with the social and environmental challenges on the insurance market development in the EU-15 countries. Climate change, environmental pollution as well as social problems are the

main challenges of sustainable development. They also concern the insurance sector and have a significant impact on it. Insurance companies play an important role as entities hedging against the effects of risk, ensuring conditions for business continuity. They are also an important segment of the financial market and are among the largest institutional investors. A major challenge for insurance companies is climate change and its impact on the insured risks (e.g., increased mortality due to climate change, catastrophic risks, etc.), as well as measures to take into account ESG (*Environmental Social Governance*) risk in the activities of insurance companies. This requires profound changes, developing innovative solutions that are compatible with sustainable development, and engaging in investments that have a positive social and environmental impact. The aims of the chapter is to answer the following questions: whether the insurance markets in the EU-15 countries react against the social and environmental challenges; and whether social and environmental changes affect insurance markets in the EU-15 countries. The chapter reviews the literature on the impact of sustainable development on the insurance market and analyses the legal acts in force, regulating sustainable development issues at the European Union level, and conducts own research to assess the impact of selected environmental and social changes on the development of insurance markets of the EU-15 countries. The study covered the period 2010–2020. The panel data model was constructed and estimated to give precise results of the research. The results of research showed that sustainable development poses a significant challenge to insurance companies and insurance markets and influences its development processes.

Chapter 12 deals with the digitalization process in the modern banking sector in the case of Poland. In the conditions of the information society development and globalization, the relevance of studying digitalization processes is an important part of modern management. Present-day banking transactions are undergoing radical changes under the influence of digitalization: customers are using more and more channels for receiving banking services, enjoying new platforms to interact with banks, so the digitalization of banking processes improves the customer experience. The COVID-19 pandemic and quarantine restrictions have accelerated changes in the payment habits of citizens towards cashless settlements, particularly online. E-banking has gained significant market share because it offers its customers more valuable benefits as opposed to traditional banks. The rapid development of banking digitalization is becoming a source not only of new opportunities, but also of serious threats and challenges for all segments of the population. From this point of view, it is important to determine the impact of electronic banking on the socio-economic development of Poland.

The purpose of Chapter 13 is to analyse the role of capital markets as an element of broadly understood finance in sustainable development. The concept of sustainable development, dating back to the 1980s, occupies an important role in the agendas of many countries and international organizations. At the same time, the role of capital markets is gaining more and more

importance in the idea of sustainable development. This may be driven by increasing interest of various groups of stakeholders in environmental issues in terms of investments through capital markets.

Chapter 14 addresses the issue of equity market integration, which is important for the development of a single financial market in the EU. At present the euro-area member countries represent a relatively high degree of equity market integration because there are no barriers based on the multicurrency systems. Thus, this barrier exists between euro area equity market and the equity markets in other EU markets. In this chapter the ‘measures based on the news’ (econometric models) will be implemented for investigation of the integration degree between equity markets outside the euro area and euro area equity markets.

The fourth part of book, titled *Economic policy and sustainable development*, consists of four chapters.

Chapter 15 introduces a novel approach to measuring the profit rate and addressing challenges in data availability and mathematical coherence that have impeded prior empirical investigations. The conventional approach to calculating profit rates has predominantly concentrated on developed countries, with a primary focus on tracking historical shifts in these rates. Moreover, the inclusion of constant capital as a stock concept and variable capital as a flow concept in the profit rate formula has led to mathematical inconsistencies. To overcome this issue, this study treats capital as a flow variable. By analysing manufacturing industry sectors across 36 countries over an extended timeframe, this research explores both explicit and implicit hypotheses of the theory, offering a fresh perspective on profit rate calculation. The analysis supports the hypothesis of declining profit rates and increasing organic composition of capital across the studied countries, aligning with the theory. However, the connection between OCC measurements and productivity levels proves elusive, casting doubts on OCC’s reliability as a metric for gauging productivity. The empirical examination of hypotheses underscores the complex interactions between profit rates, the organic composition of capital, and productivity. While some support for the theory is found, disparities between OCC and productivity measurements cloud the empirical validation.

The aim of the **Chapter 16** is to assess the progress and final results of the particular 28 EU countries approaching towards the sustainable growth targets in the period 2010–2020. The sustainable growth priority is the pillar of the Europe 2020 strategy assuming positive climate changes and energy sustainability. In 2010, the EU member states (including new members from Eastern and Central Europe) faced the challenge of its implementation. The study uses indices measuring the degree to which economies were able to meet the intended not only national but also EU goals. The overall level of the sustainable growth targets’ implementation, expressed in the author’s sustainable growth summary index for all the examined economies, is also calculated and discussed.

Chapter 17 assesses the relationship between the level of innovation of European countries and the development of the e-commerce sector. This analysis will provide a deeper understanding of the relationship between the two areas and how these differences may affect further economic development in the region. The theoretical and cognitive objective is to isolate and discuss the main determinants of e-commerce market development, while the applied objective is to divide European countries into similar groups based on their level of e-commerce sector development during 2019–2021. The chapter uses data on 22 innovation determinants and eight e-commerce indicators. A study using cluster analysis showed that e-commerce is steadily gaining importance in individual European countries, with the development of this sector coexisting with increasing levels of innovation. The level of innovation of individual countries in Europe is also increasing. The development of the e-commerce sector is most noticeable in those countries that registered the highest values of the analysed indicators in the initial period (i.e., 2019).

In **Chapter 18**, the research focuses on the effects of performance-for-pay schemes (PRPs) on the within-firm gender wage gap. The authors further hypothesize that the intensity of investments in intangibles at the industry level may have a role in the relationship PRP-gender wage gap. The analysis shows that a higher intensity of PRP schemes alleviates the adjusted gender gap. However, this inequality-attenuating effect of PRP materializes only in contexts where intangible capital intensity is low. The result is confirmed if, instead of the aggregate intangibles stock, we replicate the analysis in subsamples of firms belonging to industries with high/low intensity of various intangible capital components (Software and Databases; Innovative Property; Economic Competencies; Organizational Capital; Brand Expenditures). However, investments in training emerge as a notable exception; PRP schemes reduce the adjusted wage gap even in the context of high expenditures in knowledge embedded in firm-specific human capital.

This monograph may be of great interest to scholars, business, and policy authorities concerned with the problems of economic and financial sustainable development.

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2 Economics of moderation as a foundation of sustainable development

Marian Gorynia and Magdalena Śliwińska

Introduction

We may view the re-emergence of the moderation concept in the public discussion of economic processes as a symptom or symbol of a shift in thinking about welfare and prosperity. Moreover, moderation is also becoming an indispensable part of solving growing global economic, social, and environmental problems as evidenced by the UN's Sustainable Development Goals (SDGs). Failure to recognize them as an economic policy priority could threaten not only the well-being of people but also the planet's very existence. Thus, the economics of moderation is no longer just a recommendation but a necessity.

Therefore, this chapter aims to identify some basic concepts, examples, and levels of the economics of moderation as well as the related dilemmas. In the first section, we will explore relations between such concepts as the economics of regulation, global rationality, common good, and sustainable development. These issues are reflected in various dynamically developing economic concepts. Hence, the second section will outline important examples of the economics of moderation in 'new economic thinking', like the collaborative economy, sharing economy, solidarity economy, social entrepreneurship, cooperative economics, or degrowth. The third section will focus on possible levels of introducing an economy of moderation, related dilemmas, and recommendations.

Consequently, we used different methodological approaches. In the descriptive and explanatory layer, we adopted a grid of concepts related to the economics of moderation and their understanding. In the diagnostic layer, we applied the method of critical analysis of the literature. In the normative layer, we structured a recommendation proposal for economic policy and behaviour of companies and consumers in terms of satisfying the postulates of moderation economics.

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