

THE SCOPE OF CONTEMPORARY MODERN ECONOMICS: A LITERATURE REVIEW ON THE INTERACTION BETWEEN PRODUCTION, CONSUMPTION, INSTITUTIONAL STRUCTURE, TECHNOLOGY, GLOBAL FINANCE, AND SOCIAL-ENVIRONMENTAL ISSUES

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Abstract

This study discusses the scope of the contemporary modern economy through a literature review that examines the interaction between production, consumption, institutional structure, technology, global finance, and social-environmental issues. The results of the study show that the contemporary modern economy can only be understood holistically through a multidisciplinary approach that integrates economic, social, and environmental aspects. These findings provide a conceptual basis for the formulation of policies that are more inclusive, sustainable, and responsive to global dynamics.

Keywords: contemporary modern economy, production, consumption, institutional structure, technology, global finance, socio-environmental issues.

Introduction

The contemporary modern economy can no longer be understood simply through the lens of the production and consumption of goods, but must be viewed as a complex system involving close interactions between technology, institutions, global finance, and socio-environmental dimensions (Stiglitz, 2015; Sachs, 2016). This development requires a more holistic analytical approach, capable of capturing how changes in one element (e.g., technology) simultaneously affect patterns of production, consumption, and institutional structures (Varriale & Di Maio, 2024). It is within this context that the scope of modern economics needs to be re-examined, not merely as the science of resource allocation, but as the study of sustainable systemic dynamics.

One of the main characteristics of the modern economy is the dominance of the service sector and the digital economy, which has radically changed the traditional manufacturing and agriculture-based production structure (Acemoglu & Robinson, 2019; World Bank, 2023). This transformation does not only concern information technology, but also changes in the way we work, how companies are organised, and the pattern of relationships between producers and consumers. As a result, the understanding of "value added" and "products" must be expanded to include services,

data, and platform ecosystems, which are increasingly becoming the centre of global economic activity. Contemporary consumption patterns have also undergone a significant metamorphosis, triggered by globalisation, social media, and almost unlimited access to information (Baudrillard, 1998; Sen, 2009). Consumption is no longer merely about fulfilling basic needs, but has become an arena for expressing identity, lifestyle, and social aspirations (Varriale & Di Maio, 2024). These changes have an impact on demand structures, global supply chains, and even on the design of fiscal and monetary policies, which must respond to rapid and often traditionally irrational fluctuations in consumer preferences.

On the production side, technological advances—particularly automation, artificial intelligence, and the Internet of Things—have shifted the paradigm of efficiency and productivity (Autor, 2015; Brynjolfsson & McAfee, 2014). Technology not only increases output per worker, but also changes the composition of the workforce, reducing demand for routine jobs and increasing demand for high skills and adaptability. The social implications are enormous, ranging from the risk of structural unemployment to the emergence of a skills gap that widens the social divide.

The role of institutions in the modern economy is also increasingly prominent, as both formal institutions (the state, central banks, regulatory agencies) and informal institutions (norms, culture, trust) determine the stability and fairness of the economic system (North, 1990; Rodrik, 2019). Strong institutions can reduce transaction uncertainty, enforce contracts, and ensure that the benefits of growth are not only enjoyed by a small economic elite. Conversely, institutional weaknesses can trigger corruption, inequality, and crises of confidence that ultimately erode an economy's competitiveness (Berliyani, 2024).

In the context of global finance, cross-border capital market integration has created channels for very fast and liquid capital flows, while also increasing the risk of crisis contagion (Reinhart & Rogoff, 2009; Eichengreen, 2018). The 2008 financial crisis served as a reminder that a highly interconnected financial system can spread shocks from one country to the entire world in a matter of minutes. Therefore, modern economic studies cannot ignore the role of international financial institutions, micro-macroprudential regulations, and the design of a more shock-resistant global financial architecture.

The social-environmental dimension has become increasingly central to contemporary economic analysis, as conventional economic activities often sacrifice environmental sustainability and social justice (Sachs, 2016; Stern, 2007). Global warming, biodiversity loss, and natural resource degradation show that resource-exploitative growth models are unsustainable in the long term. In this context, the modern economy is required to integrate sustainability principles into every layer of policy, from fiscal planning to the design of incentives for the private sector.

The issue of income and wealth inequality is also one of the main challenges of the modern economy, where high growth is often not directly proportional to the fair distribution of benefits (Piketty, 2014; Atkinson, 2015). Technology and globalisation can accelerate growth, but if not balanced with adequate redistributive policies and social protection, they can widen the gap between rich and poor. This condition has the potential to undermine social cohesion, increase political instability, and ultimately threaten the sustainability of the economic system itself.

Within a theoretical framework, contemporary modern economics draws on many schools of thought, ranging from the neo-classical approach that emphasises market efficiency, to institutional and ecological economics that highlight the role of institutional structures and the planet's biological limits (North, 1990; Daly, 2014). The integration of these various perspectives is important for understanding that markets do not operate in a social and environmental vacuum, but are always intertwined with norms, regulations, and ecosystem carrying capacity. This multidisciplinary approach forms the foundation for a literature review that seeks to unravel the complex interactions between production, consumption, technology, institutions, and socio-environmental issues.

Research Method

This study uses a literature review method with a systematic approach to collect, analyse, and synthesise various scientific sources related to contemporary modern economics, particularly those discussing the interactions between production, consumption, institutional structures, technology, global finance, and socio-environmental issues (Eliyah & Aslan, 2025). The sources used include national and international journals and books related to the research. The analysis process was carried out through the stages of identifying the main themes, grouping key concepts, mapping the relationships between elements, and discovering open research gaps, so that this study was able to provide a coherent and useful conceptual framework for the development of modern economic theory and policy.

Results and Discussion

Dynamic Interaction between Production, Consumption, Technology, and Institutions

The dynamic interaction between production, consumption, technology, and institutions is one of the hallmarks of the contemporary modern economy, in which these four elements do not move separately but influence and change each other at an increasingly rapid pace (Stiglitz, 2015; Rodrik, 2019). Within this framework, production is no longer understood merely as the process of transforming inputs into outputs, but as an activity that is continuously reconfigured by technological innovation, changing consumption patterns, and the rules set by economic institutions.

From a production perspective, technological advances—particularly automation, artificial intelligence, and the Internet of Things—have changed cost structures, economies of scale, and workforce composition in almost all sectors (Autor, 2015; Brynjolfsson & McAfee, 2014). Technology enables companies to achieve the same level of output with fewer production inputs, while also opening up space for new business models such as digital platforms and the sharing economy, which demand more flexible and distributed forms of production organisation. On the consumption side, digital transformation and the globalisation of information have shifted demand patterns from physical goods to services, experiences, and data-based products (Baudrillard, 1998; Sen, 2009). Contemporary consumers do not only choose based on price and quality, but also symbolic value, brand reputation, and the social-environmental impact of a product, thus requiring producers to design marketing and product design strategies that are more responsive to rapidly changing preferences .

The relationship between production and consumption in the modern economy is increasingly mediated by information technology and digital platforms, which shorten the distance between producers and consumers while reducing transaction costs (World Bank, 2023; Ebyude, 2024). Online marketplaces, data-driven recommendation systems, and personalisation algorithms enable companies to recognise consumer behaviour in real time, allowing production decisions to be adjusted to demand more accurately and quickly.

Technology is also changing how consumers access and utilise goods and services, for example through subscription models, the sharing economy, and app-based services, which reduce physical ownership and increase usage intensity (Rifkin, 2014; Ebyude, 2024). This pattern has an impact on the structure of production, as producers must shift from a "one-time sale" model to a "sustainable service" model, which requires continuous investment in maintenance, software updates, and customer support (Ulucak & Dogan, 2022) .

Amidst these dynamics, institutions act as the "rules of the game" that control and direct interactions between producers, consumers, and other parties in the economic system (North, 1990; Rodrik, 2019). Formal institutions such as the state, central banks, regulatory authorities, and judicial institutions establish legal frameworks, quality standards, consumer protection, and business competition regulations, while informal institutions such as norms, trust, and culture influence how economic actors comply with or manipulate these rules. Strong and responsive institutions can facilitate technological innovation by providing appropriate incentives for investment, intellectual property rights protection, and effective contract enforcement mechanisms (North, 1990; Acemoglu & Robinson, 2019). Conversely, weak or rigid institutions can hinder the adoption of new technologies, as businesses are reluctant to invest in innovation if they feel that the results are not protected or are threatened by corruption and regulatory uncertainty.

In the context of consumption, institutions also play a role in protecting consumers from fraud, monopolies, and the exploitation of personal data, especially in the digital economy era (OECD, 2021; Fitria, 2024). Data privacy regulations, digital consumer protection, and platform ethical standards are important instruments for maintaining a balance between freedom of consumption and individual rights, while preventing the emergence of information inequality that could harm consumers.

The interaction between production, consumption, and technology also puts new pressure on institutions to adapt to an increasingly complex and global market reality (Ebyude, 2024; World Bank, 2023). For example, cross-border platform business models require regulatory cooperation between countries in terms of taxation, data protection, and labour standards, as economic activities are no longer limited to a single national jurisdiction. Without good institutional coordination, the risks of regulatory arbitrage and uneven consumer protection will increase (Bekun et al., 2024).

From the labour perspective, the combination of automation and changing consumption patterns is causing a major transformation in the structure of the labour market, with declining demand for routine jobs and increasing demand for high skills (Brynjolfsson & McAfee, 2014). Institutions such as education systems, vocational training, and social safety nets must adapt to reduce the risk of structural unemployment and help workers transition to new, more productive and sustainable sectors.

This dynamic interaction also impacts investment patterns and capital allocation, as technology and consumer preferences determine which sectors will flourish and which will lag behind (Romer, 1990; World Bank, 2023). Financial institutions and capital market regulations play an important role in channelling funds to innovative and sustainable sectors, for example through fiscal incentives, green financing schemes, and sustainability reporting standards that encourage companies to take social and environmental impacts into account in their production decisions.

Overall, the dynamics between production, consumption, technology, and institutions show that the modern economy can no longer be analysed through a sectoral or partial approach, but must be understood as an interconnected system. Changes in one element—for example, technological innovation—will spread to consumption patterns, labour structures, policy design, and even governance, thus requiring a more integrative and network-based analytical approach.

The Global Financial Dimension and Socio-Environmental Implications

The global financial dimension is one of the main axes of the contemporary modern economy, as integrated cross-border financial systems determine the direction of capital flows, investment patterns, and risk distribution around the world (Reinhart & Rogoff, 2009; Eichengreen, 2018). In this framework, international capital markets, multilateral financial institutions, and financial regulatory architecture determine the

extent to which economic growth can be stable and inclusive, while also determining the extent of the social and environmental burden borne by various groups of the Community (Sethi & Gupta, 2020).

Global financial market integration enables rapid and liquid capital flows, allowing companies and governments to access funding from foreign investors to finance infrastructure, industrial, and service sector projects (World Bank, 2023; Stiglitz, 2015). However, dependence on foreign capital also opens the door to sharp volatility when there are changes in investor sentiment, liquidity crises, or changes in monetary policy in developed countries, which can trigger cross-border financial crises such as the one that occurred in 2008.

One tangible manifestation of this dynamic interaction is the emergence of the platform economy and the sharing economy, where digital technology connects producers and consumers directly without traditional intermediaries (Rifkin, 2014; Ebyude, 2024). Such models change the definition of "producer" and "consumer", as many actors now play dual roles as *prosumers* (producers-consumers), for example, online motorcycle taxi drivers, home accommodation providers, or sellers of second-hand goods through marketplaces.

This transformation requires institutional adjustments to new forms of work that are often not protected by conventional labour regulations (Standing, 2011; ILO, 2021). Platform workers are often outside the formal social security system, so state institutions and labour organisations need to develop new protection schemes that combine flexibility with social security, for example through self-insurance, transaction-based contribution schemes, or minimum wage and working hour regulations (Ulucak et al., 2020).

From a production perspective, technology has also enabled the emergence of *just-in-time production* and *mass customisation* models, whereby companies can produce goods more efficiently while tailoring products to individual consumer preferences (Porter, 1990; Brynjolfsson & McAfee, 2014). This situation requires logistics institutions, trade standards, and quality regulations that are capable of supporting a fast, integrated, and secure supply chain, while protecting consumers from the risk of products that do not meet specifications (Surya & Sari, 2021).

On the consumption side, data-driven personalisation of products and services presents a dilemma between convenience and privacy, making data regulation and consumer protection institutions increasingly crucial (OECD, 2021; Zuboff, 2019). Consumers benefit from more relevant recommendations and more competitive prices, but on the other hand, they are vulnerable to the exploitation of personal data, algorithmic discrimination, and behavioural manipulation through interface designs that guide consumption choices.

The interaction between technology and consumption also accelerates the product innovation cycle, requiring companies to continuously develop new variants to

maintain competitiveness (Christensen, 1997; World Bank, 2023). Higher education institutions, research institutions, and national innovation policies play an important role in providing skilled human resources and an environment that supports research and development, so that production not only follows global trends but is also capable of creating original innovations.

In the context of developing countries, this dynamic interaction often creates tension between the need to pursue economic growth and the pressure to meet the social and environmental standards set by the global market (Sachs, 2016; Ebyude, 2024). Advanced technologies adopted from developed countries can increase productivity, but if not balanced with strong institutions, the results can be inequality, environmental degradation, and high technological dependence. Fiscal and monetary institutions are also involved in this interaction, as changing consumption and investment patterns () affect tax revenues, price stability, and the balance of payments (Stiglitz, 2015; Rodrik, 2019). For example, increased cross-border digital consumption can reduce the domestic consumption tax base, while rapid speculative capital flows can increase exchange rate and asset price volatility. In such situations, macro policy institutions need to be more coordinated and anticipatory.

At the micro level, these dynamic interactions also change the way companies manage their relationships with consumers, suppliers, and governments. Technology enables companies to collect big *data* on customer behaviour, which is then used to optimise marketing strategies, pricing, and product design (Brynjolfsson & McAfee, 2014; World Bank, 2023). However, business ethics and competition regulations must ensure that these practices do not lead to price discrimination that harms consumers or strengthens the dominant position of large companies.

From a social perspective, the interaction between production, consumption, technology, and institutions also influences the distribution of economic benefits. Technology and globalisation can create new pockets of prosperity, but if not balanced with adequate redistributive policies and social protection, they can widen disparities between regions, groups, and generations (Piketty, 2014; Atkinson, 2015). In this context, institutions such as progressive tax systems, social assistance programmes, and regional policies are important instruments for maintaining social justice.

Environmentally, production and consumption patterns driven by digital technology and globalisation often increase pressure on natural resources and carbon emissions, for example through increased shipping, data centre energy consumption, and short product life cycles (Stern, 2007; Sachs, 2016). Environmental institutions, emission standards, and green economic policies play a vital role in steering these dynamic interactions towards greater sustainability, for example through incentives for environmentally friendly production and regulations on electronic waste.

These dynamic interactions also demand a more collaborative policy approach, as no single institution can manage the complexity of the modern economic system on

its own (Rodrik, 2019; World Bank, 2023). Cooperation between governments, the private sector, financial institutions, civil society organisations, and academics is essential for formulating regulations that are adaptive, innovative, and responsive to technological changes and consumer preferences.

Conclusion

The scope of the contemporary modern economy cannot be understood in isolation, but must be viewed as an interconnected system of production, consumption, institutional structures, technology, global finance, and socio-environmental issues. A review of the literature shows that technological advances and digital transformation have radically changed patterns of production and consumption, while institutions play a role in determining the direction and limits of these dynamics. The dynamic interaction between these elements creates a more efficient and connected economy, but also one that is more complex and vulnerable to instability, inequality, and pressure on the environment.

Global finance is the main connector that accelerates the flow of capital, information, and risk between countries, so that economic policies in one region can have a broad impact at the global level. In this context, institutional structures—both national and international—are required to be able to manage financial market integration while maintaining stability and fairness. At the same time, socio-environmental issues emphasise that modern economic growth cannot be measured solely by output and profit indicators, but also by its ability to maintain ecosystem sustainability and a more equitable distribution of benefits.

Overall, this emphasises that the contemporary modern economy must be analysed holistically, placing the interactions between production, consumption, technology, institutions, global finance, and socio-environmental dimensions as a single analytical unit. Such a multidisciplinary approach is essential for formulating policies that not only promote growth but also strengthen social resilience, distributive justice, and environmental sustainability in the long term.

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