

# *New Economics for Sustainability*

Pál Péter Kolozsi

Central Bank of Hungary

kolozsip@mnb.hu

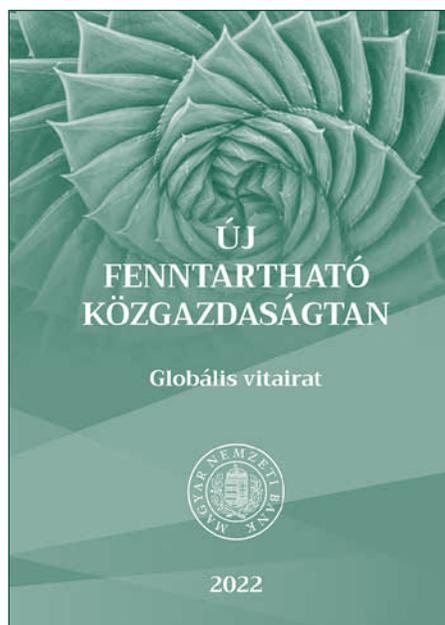
DOI: [https://doi.org/10.35551/PFQ\\_2023\\_1\\_8](https://doi.org/10.35551/PFQ_2023_1_8)

Gergely Baksay – György Matolcsy –  
Barnabás Virág (Ed.)

## *New Sustainable Economics*

*Global Discussion Paper*

MAGYAR NEMZETI BANK, 2022



Economists identify the period of decreased macroeconomic volatility in developed countries, particularly in the United States from the mid-1980s to the global financial crisis of 2007–2008 under a separate name. It is called the *Great Moderation*, which, despite the mistakes and miscalculations of the past decade, gave birth to *mainstream economic thinking* that is still influential today. However, looking at the current geopolitical and economic-financial developments, there can be no doubt that this era has come to an end. The future has become uncertain, perhaps even more so than at any time in recent decades, which calls for a new way of thinking. The time has come to prepare for a new era of escalating tensions – some are already talking about an *Age of Tensions* – which will focus on sustainability issues more than ever before. This new era presents new challenges for all, and the question is: what can economists do to achieve the common good in these new circumstances?

In Hungary, the search for economic paths is led by the Magyar Nemzeti Bank (MNB), where in recent years a number of articles, studies and reference books have been published on how to adapt economic thinking to our changing world. This intellectual work is summarised in a discussion paper published by the MNB in 2022 under the title *'New Sustainable Economics'*, edited by Executive Director *Gergely Baksay*, Governor *György Matolcsy*, and Deputy Governor *Barnabás Virág*. The paper can be accessed online in Hungarian and English on the MNB's website, and an 'easy to digest' abridged version, in addition to the detailed reference book format, is also available.

The discussion paper, whose main contributors are central bankers, consists of 24 chapters that present a framework for new economic thinking, each exploring a different aspect of sustainability. The first chapter, written by Governor *György Matolcsy*, contains 36 theses of novel economic thinking. This chapter can be viewed as a quintessence of the entire paper, with the subsequent chapters supporting these theses with detailed explanations. The key idea of the chapter is that we need a sustainability turnaround for the survival of our civilisation, as it is becoming increasingly clear that the future is based on exponentially expanding knowledge, which, by its very nature, has natural and social limits. Long-term sustainability is therefore the main challenge of the new era ahead, and the process of convergence, guided by new visions for the future, should be organised around this idea. According to *György Matolcsy*, an ideological transformation similar to the Renaissance and the Reformation has already begun in the world. Indeed, we need a new way of thinking with new sustainable economics, because the challenges of the 21st century cannot be addressed using the ideas and tools of the 20th century, and economics can only

provide a valid response to the present and future problems through a holistic approach, integrating the results of other disciplines to expand its toolbox.

The paper by *Balázs Vonnák* presents the limits to the sustainability of economic growth, highlighting the need for a paradigm shift to ensure a robust growth model for the longer term. The key economic challenge for the new millennium will be to identify, understand and push these limits, using the right technology. *'If we ignore the limits, we will have to pay the price of our ignorance and carelessness through economic crises. At the same time, the limits to growth opportunities should not be considered as given, because if we understand their origin and nature, we can change them. This is where sustainable economics can help us'* concludes the author. *Kristóf Lehmann* points out that today's megatrends – digitalisation, the new wave of globalisation and the resulting social changes, and the problems arising from the global exploitation of environmental resources – have posed unprecedented challenges to economic thinking. In this chapter the author explores the renewal of economics over time, and whether it can happen again. The history of financial crises and the responses from economics and economic policy makers to economic and social phenomena in the past provide an analogy to this. In his paper, *Zoltán Szalai* also focuses on the impacts of the new technological era, summarising the history of technological revolutions with their stages and main technological innovations, and the related economic and social transformations that are both the cause and consequence of change. The author concludes that the conditions for a digital and green transition are emerging, but the success and social cost of the transition and its support will largely depend on our social and political choices, as technology alone is non-decisive. This is why success requires the renewal of

economics and acceptance of a sustainability approach. *Balázs István Horváth, Norbert Kiss M. and Pál Péter Kolozi* (who is the author of this review) demonstrate that in order to meet today's challenges multidisciplinary is essential, which means that economists must incorporate the findings and views of other disciplines to be able to grasp, understand and interpret the economic processes as fully as possible. In this chapter the authors explore what economists can learn from other disciplines, in particular quantum physics, biology, environmental sciences, psychology, history, linguistics, network theory and information technology.

The emerging new economy is based on new resources – this is one of the main messages of the discussion paper, which is supported by eight studies. The chapter by *Péter Hugó Asztalos* shows that in the 21st century knowledge will be increasingly valued, with intellectual capital, talent and creativity becoming the source of wealth. Therefore, success will require a responsive education system, lifelong learning and self-improvement, and the ability to make new connections. In the age of the Internet, real value is not derived from acquiring information, but rather from linking pieces of information and establishing new correlations, which also highlights the importance of knowledge. *Tímea Várnai* points out that with the new technological revolution and digitalisation, the role of 'smart' capital, in particular information and communication technologies and intangible assets, has increased, contributing to the success of sustainable convergence as 'smart' investments significantly improve efficiency and productivity. The relationship between capital and economic growth has therefore changed, and shifting the focus from quantity to quality is essential. *Ádám Martonosi* explains one of the radically novel ideas of the book, namely that the law of increasing returns may

become reality through technological progress. Indeed, networking and digitalisation transcend old rules that seemed to form the rock-solid foundations of economics. The main question is whether the technological waves also referred to as the 'fourth and fifth industrial revolutions' will open a new chapter in the world economy, and whether increasing returns will become reality in a wider context. *András Balogh, Réka Margit Hamvai, Gábor Horváth, Ádám Nyikes and Gergő Török* focus on the transformation of one of the most important resources, money, and explore the extent to which central bank digital currencies change access to money. They conclude that the next decades will also be concerned with the revolution of money, along the two key processes of the era, digitalisation and sustainability (the fact that Issue 2022/4 of the periodical *Public Finance Quarterly* is dedicated to central bank digital currency also indicates the importance of the subject). *Bálint Dancsik, Áron Drabancz, Márton El-Meouch Nedim, Koppány Nagy, Richárd Bense, László Török and András G. Szabó* discuss new and sustainable forms of financing the economy. They demonstrate that external financing, which is essential for the functioning of the economy, is only sustainable with a balanced funding structure, and that the key is to find a balance between bank-based and market-based financing, and to properly integrate fintech and Big Tech firms. For sustainable economic development, it is important to increase the size of the institutional investor sector, given its role in financing government debt and economic growth. *Katalin Juhász* discusses natural resources and the economics of environmental sustainability, stating that the theory of long-term sustainable economics is about ensuring that we do not exploit the Earth's resources, but manage them in a sustainable way. In the new economics, the right incentives and regulations to shift

global production and consumption in a more sustainable direction should be found, with new accounting methods that take into consideration the negative externalities ignored so far in calculating the economic costs (or in future, the 'green economic' costs). *Gábor Izsák, Alexandr Palicz, Katinka Szász* and *Balázs Varga* discuss data as a factor of production. They argue that data is the 'new oil', as digital development has generated a huge amount of data, laying a whole new foundation for the functioning of economy and society. However, to reap the benefits, there is need for government involvement to address the risks, for which the data-driven financial sector can serve as a pilot project. Finally, *Dániel Babos* points out that complexity and networking have made trust an additional factor of production. By the 21st century, the economy and society have become a highly complex system, and trust between economic and social actors is essential for efficient functioning. However, global megatrends have led to a loss of confidence, and economic policy makers need to act to rebuild it.

The discussion paper devotes an entire section to answering the question of how 'value' is produced in the 21st century. *Katalin Kis* demonstrates that the sustainable economy of the future will rely on the talent, creativity and risk-taking of the people and companies involved, rather than on traditional resources. In the labour market of the future, everyone will have to add value, and for entrepreneurs, finding a new idea and a niche market will be crucial. *Bálint Danóczy* and *Péter Sajtos* explore new forms of production and services, with a special focus on access, as well as circular and platform economy. For centuries, industries have followed a linear economic model, in which continuous growth and belief in it creates value. But the new sustainable direction of economics is now focusing on

the circular economy, in which resources and products are reused and recycled. *Bence Tringer* argues that the new economy requires a reform of measurement. As the economic contexts are changing ever faster, more and more factors need to be measured even faster. We must keep pace with the changing structure of the economy, supported in particular by the development of data science. The future tools of economic statistics will be organised around long-term sustainability.

A key area for new thinking is to redefine the balance of market and state. *Zoltán Bögöthy* and *Róbert Hausmann* argue for a new, green and sustainable tax system, and that it is time to set the basic principles for family-friendly, digital and green modern taxation. The tax system of the future will be sustainable if it can effectively respond to the green and digital economic transition and the demographic challenges, while meeting economic policy objectives as well. Sustainable tax systems should target environmentally damaging corporate activity, rather than individuals. *Péter Gábrriel* looks at the potential for state and market synergies in delivering innovations. He concludes that the complex challenges of the 21st century are transforming government innovation policies and that, in addition to financing innovation, governments will assume a greater role in setting innovation goals and coordinating innovation projects. *Dávid Papp, Balázs Sárvári* and *Márton Varga* address the issue of sustainable 'green' finance, describing the new link between the financial system and sustainability. The authors draw on the fact that climate change poses new challenges to the financial system and its actors, including central banks. By integrating aspects of environmental sustainability, the financial sector can be a key to financial and economic stability, which is also essential for maintaining price stability. In his paper, *Ferenc Tóth* explores another widely discussed topic,

namely income and wealth inequality. He points out that greater inequality is associated with reduced mobility between income classes, and it limits the harnessing of human capital potential, hindering sustainable growth and the catch-up process. *Ágnes Horváth-Hajzer, Erika Csongrádi* and *Szilveszter Tordai* demonstrate that data protection and data monopolies have become an important issue for legislators and economists in recent years, while seeping into the minds of ordinary people as well. The chapter helps to understand the current developments and regulatory efforts in the field of data management and describes the emergence of monopolies.

The final three papers examine the underlying structures of the economy. *Emese Kreiszné Hudák, Krisztina Zanaty* and *Péter Hugó Asztalos* discuss the economic impact of demographic developments, arguing that demographic trends may have an unprecedented economic and social impact in the decades ahead. The working-age population is expected to decline in Europe, which calls for targeted labour market interventions, with

a need to improve the sustainability of public health and social care services. *György Kocziszky* examines the underdiscussed role of values and culture behind sustainable and unsustainable growth, and whether there is 'good' and 'bad' growth. The final paper by *Norbert Csizmadia* explores geofusion, spatial structure and geopolitics, as these areas are increasingly prominent in the expanding toolbox of 21st century economics. This chapter interprets the global economic and geopolitical processes in an economic and geographic context, thereby creating a new global geofusion map of the 21st century.

The brief summary above shows that changes are now so significant that economic thinking cannot ignore them – the world around us has changed so much that it can no longer be analysed, understood or managed with the existing tools, methods and mindsets. Hence there is need for new sustainable economics, the basic principles of which can be formulated in books and discussion papers such as the one presented here, which I hereby recommend to all interested parties. ■