

Yannis Stournaras: Challenges and prospects for sustainable growth

Keynote address by Mr Yannis Stournaras, Governor of the Bank of Greece, at the Second Sustainability Summit for South-East Europe and the Mediterranean "Challenges and prospects for sustainable growth", Athens, 1 October 2018.

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It is a great pleasure for me to be here with you today and to have the opportunity to share my thoughts on the challenges and prospects of sustainable growth.

The reason why central banks today have an interest in sustainable growth is, in my view, self-evident: because financial stability without a sustainable growth model is simply inconceivable.

Economic growth has come at a growing cost to the environment. It is characteristic that 1 August 2018 marked the Earth Overshoot Day¹, by which humanity had exhausted all the natural resources that ecosystems can renew in a year. At the current juncture, sustainability is highly relevant for our generation as well as for generations to come, as the three pillars of sustainable development, i.e. society, the economy and, of course, the environment, increasingly come under pressure. Therefore, redefining the concept of growth in a sustainability context will be crucial to our future path.

According to the United Nations, a sustainable future hinges on the achievement of 17 goals by 2030. In particular, goals such as global prosperity with no poverty and zero hunger, quality education, equality, decent work, access to clean water, affordable energy, justice, strong institutions and climate action feature prominently on the sustainable development roadmap.

Global prosperity should be a priority for all, and the goals concern all nations, not only the less developed ones. At a time when we are more interconnected than ever, the welfare of nations and their citizens is also interdependent and requires a holistic approach to achieving the common sustainable development goals. Sustainability challenges, especially those relating to climate change, are of a global nature and require cooperation from all countries. Unwillingness to cooperate in climate action is totally unjustified and illogical, given that climate change affects the entire planet.

The cooperation of all is crucial to the achievement of the goals, while public and private sector synergies are necessary to finance this process, which entails considerable cost² but also huge value. There are many challenges and risks along the way, as established growth models will need to be adjusted in order to ensure long-term sustainability.

Under conditions of depletion of natural resources worldwide, a focus on more efficient use and minimisation of waste emerges as the only and urgent option. The model of a “linear” economy prevailing today (sourcing – manufacturing – usage – disposal), on which most economies since the Industrial Revolution have relied, is no longer sustainable. Just like nature, which operates in a “circular” manner, business activity can become sustainable by switching from the “linear” model to a “circular” one. Circular economy means that the value of products, materials and resources is maintained in the economy for as long as possible and waste generation is minimised.

The transition to a circular economy requires interventions on the supply side, such as eco-design and longer life cycles of products, as well as on the demand side, through a change in consumption and dietary patterns and a more efficient management of waste, with appropriate financial incentives and community engagement. This transition is expected to have a positive effect on production, employment, climate, nature, natural resources and social well-being³. For

example, our dietary habits have a devastating effect on the planet's natural resources, land and water reserves. A lower consumption of meat and dairy products would bring substantial savings on cultivated land and water resources, reduce carbon emissions and gradually restore forests and wildlife.

One major challenge in achieving the sustainable development goals relates to decarbonisation, i.e. the removal or reduction of carbon dioxide from energy sources. The current and future impacts on society and sustainable development are such that make the use of fossil fuels prohibitive. Climate change and global warming are linked to anthropogenic activity, in particular the use of fossil fuels and carbon emissions. We need to mitigate climate change by rapidly and drastically reducing emissions, adopting the right energy management and high efficiency practices, by financing green energy, fostering energy-saving investment and promoting a zero-emission economy in the context of the respective European policies. Indeed, it seems that we are rapidly approaching the point of no return, after which even a drastic reduction of carbon emissions will no longer be enough to reverse the trend and stop a global tragedy, for example the accelerated melting of polar ice caps.

Along the road, there are clearly risks, as well as opportunities: physical risks arising from the impacts of climate change, but also transition risks arising from the adjustment to a low-carbon economy. In the process, businesses may face costs, valuation losses and disruptions. Yet, a careful and timely transition will also open up opportunities, associated with the development of new renewable energy and innovative products, investment in energy saving, new infrastructure and new jobs. The transformation of the global economy towards decarbonisation cannot but have a positive net outcome.

Long-term value creation is a matter of effective climate risk management and transition to a zero-carbon economy⁴. For this reason, central banks support transparency and the disclosure of data that will enable markets to lead the transition⁵ so that, with the right information, they can price in the cost of doing business, the climate risk, and, most importantly, evaluate new business opportunities.

The proper assessment and supervision of the financial risks stemming from the transition to a zero-carbon economy are important factors in promoting sustainable development and safeguarding the smooth functioning of the financial system⁶. In addition, commercial banks can play an important role in moving towards a low-carbon economy by reducing their exposures to high-carbon investment, while banking supervisors could take into account sustainability considerations in the calculation of bank capital requirements⁷.

The transformation of cities represents another significant challenge from the perspective of sustainability. As put by Amina Mohammed, UN Deputy Secretary-General, "It is clear that it is in cities where the battle for sustainability will be won or lost"⁸. Today, over 80% of the global GDP is generated in urban areas, which are hubs of collaboration and progress, innovation, culture, science, productivity, exchange of ideas, goods and services, and societal development.

Urban development in a manner that cities can continue to generate jobs, prosperity, social and economic gains without drying up land and resources, is a crucial bet as it is projected that two-thirds of the world's population will be living in urban or suburban areas by 2050. This concentration will exacerbate the existing problems and add new ones, unless best practices are adopted that will make our cities sustainable and inclusive, with highly interconnected networks and "smart" infrastructures, quality services and low environmental and energy footprint.

The advances in technology, innovation and science, which are the driving force of growth through total factor productivity, as well as a catalyst for a sustainable future, also pose a significant challenge. Technological progress and the digital age have created a new landscape, that of the 4th Industrial Revolution, in which digital technology helps to raise productivity,

reduces the costs of production – parts of which are now dematerialized, e.g. printed books are replaced by e-books – increases accessibility and supports urban governance. Although the impact of modern technology on employment and prosperity is expected to be overall positive⁹, there are issues that need to be tackled, mainly relating to the structure of work and to social cohesion. In this regard, policies to ensure that the benefits of technology are equitably shared across society will be key to the achievement of sustainability goals in the long run.

Last but not least, on the path to sustainable development lies the environmental challenge, which is now more important than ever. According to the World Economic Forum's report¹⁰ for 2018, among the top five global risks, three are environmental and all three are associated with climate change¹¹. In this light, the Bank of Greece is committed to invest significantly in UN sustainability goal no. 13, i.e. climate action, a horizontal goal that contributes to the achievement of all other goals. Thus, over the past ten years, the Bank of Greece has been actively involved in research, in-depth dialogue and the provision of scientific documentation through the activities of the interdisciplinary Climate Change Impacts Study Committee (CCISC).

Ecosystem goods and services form the basis of the global economy. Awareness of their economic value and measuring that value in financial terms promotes the sustainable utilisation of natural resources and management of natural systems. Within the CCISC, environmental and energy economists, in collaboration with climatologists, physicists, biologists, engineers and social scientists, study the impacts of climate change on the Greek economy, analyse the economic, social and environmental consequences of climate change in Greece, and suggest ways for the transition of the Greek economy to sustainable growth models.

Overall, the studies highlight the wealth of Greece's natural resources, but also the risks to the country's natural and human environment, and find that the impact of climate change on all sectors of the national economy is adverse to extremely adverse. Under an inaction ("business as usual") scenario, the Greek GDP could, ceteris paribus, fall by 2% annually by 2050 and even further by 2100, while the total cost to the Greek economy could reach a cumulative €701 billion by 2100.^{12 13}

According to a vulnerability assessment¹⁴, which quantifies and ranks the expected climate risks for Greece, agriculture is the sector projected to be the most strongly hit by climate change in Greece, while the impact on tourism and coastal systems will significantly affect household income and the economy as a whole. Of particular importance are water reserves, on which both agriculture and water supply depend.

The work so far undertaken by CCISC has highlighted the importance of a concrete adaptation policy as a necessary damage control measure. For this reason, under a Memorandum of Understanding signed with the Ministry of Environment and Energy and the Academy of Athens, we have drafted the National Climate Change Adaptation Strategy (NCCAS) and we are currently elaborating on its implementation. This strategy sets out the general objectives, guiding principles and implementation tools for an effective and growth-oriented adaptation strategy, in line with European directives and international experience. Moreover, it is the first step in a continuous and flexible process for planning and implementing the necessary adaptation measures at national, regional and local levels and aspires to leverage the capabilities of Greece's public authorities, economy and society at large, in an aim to address the impacts of climate change in coming years.

More recently, last June, the Bank of Greece released a book entitled "The Economics of Climate Change", which provides a comprehensive, state-of-the-art review of the economics of climate change and a literature review in the emerging area of environmental macroeconomics and focuses on the design of economic policy aimed at controlling the climate externality. With this publication, the Bank of Greece aims, among other things, to lay the foundations for addressing the role of monetary policy under conditions of global warming and exploring the link between

monetary policy and climate change, a topic that remains high on our research agenda. It acknowledges, of course, that monetary policy is not the primary tool for tackling climate change but rather plays a supplementary role alongside fiscal, environmental and structural policies.

Scientific research and current developments confirm the need for a dynamic strategy and an action plan to address sustainability challenges. I am sure that the presentations during this first day of the conference, and even more so tomorrow, will shed light on crucial aspects of the path towards achieving the sustainable development goals by 2030 and beyond.

I would like to congratulate the organisers for taking this initiative and wish them the best of success in this conference.

¹ See www.overshootday.org/newsroom/press-release-july-2018-english

² According to the United Nations Conference on Trade and Development (UNCTAD), the achievement of sustainable development goals will cost between 5 and 7 trillion US dollars per annum.

³ European Commission, Implementation of the Circular Economy Action Plan, 2018 Circular Economy Package, available at: ec.europa.eu/environment/circular-economy/index_en.htm και Europa, EU law and publications, Document 52017DC0623, available at: eur-lex.europa.eu/legal-content/EL/ALL/?uri=CELEX:52017DC0623

⁴ Carney, M, “A transition in thinking and action”, speech at the International Climate Risk Conference for Supervisors, De Nederlandsche Bank, Amsterdam, 6 April 2018, available at: www.bankofengland.co.uk/-/media/boe/files/speech/2018/a-transition-in-thinking-and-action-speech-by-mark-carney.pdf?la=en&hash=82F57A11AD2FAFD4E822C3B3F7E19BA23E98BF67

⁵ According to Mark Carney (Governor of the Bank of England) and Michael Bloomberg (chair of the Task Force on Climate-related Financial Disclosures), “... financial disclosure is essential to a market-based solution to climate change. A properly functioning market will price in the risks associated with climate change and reward firms that mitigate them. As its impact becomes more commonplace and public policy responses more active, climate change has become a material risk that isn’t properly disclosed..”, The Guardian, 14.12.2016, available at : www.theguardian.com/commentisfree/2016/dec/14/bloomberg-carney-profit-from-climate-change-right-information-investors-deliver-solutions

⁶ www.ecb.europa.eu/pub/pdf/other/ecb.mepletter171010_Urtasun.en.pdf?utm_medium=email&utm_source=nefoundation&utm_content=8+-+response&utm_campaign=banks-22-Nov&source=banks-22-Nov

⁷ Financing a sustainable European Economy, Interim Report, EU High-Level Expert Group on Sustainable Finance, July 2017, available at: ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf

⁸ See “Battle for Sustainability Will Be Won or Lost in Cities, Deputy Secretary-General Tells High-Level General Assembly Meeting on New Urban Agenda, UN-Habitat”, available at: www.un.org/press/en/2017/dsgsm1080.doc.htm

⁹ Interview of Yannis Stournaras, Governor of the Bank of Greece, with Christos Chomenidis for the newspaper Ta Nea, 17/03/2018, available at: www.bankofgreece.gr/Pages/el/Bank/News/Speeches/Displtem.aspx?Item_ID=513&List_ID=b2e9402e-db05-4166-9f09-e1b26a1c6f1b (in Greek)

¹⁰ World Economic Forum, The Global Risks Report 2018, 13th Edition, available at: wef.ch/risks2018

¹¹ These risks are: (1) extreme weather events; (2) major natural disasters; and (3) failure to mitigate and adapt to climate change (3).

¹² GDP contraction relative to base year GDP at constant 2008 prices.

¹³ CCISC (2011), The environmental, economic and social impacts of climate change in Greece, Bank of Greece, pp. 453–457, available at: www.bankofgreece.gr/BogEkdoseis/ClimateChange_FullReport_bm.pdf

¹⁴ The vulnerability analysis is included in CCISC (2015), National Climate Change Adaptation Strategy (NCCAS), pp. 7-13, available at: www.bankofgreece.gr/BogDocumentEn/National_Adaptation_Strategy_Excerpts.pdf