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## WELCOME REMARKS

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### Viewing the future from the population- consumption-environment nexus

Global Economy Lecture – Jointly organized with The Vienna Institute for  
International Economic Studies (wiiw)

Dear Professor Dasgupta, ladies and gentlemen,,

Welcome to this year's Global Economy Lecture, which is jointly organized by the Oesterreichische Nationalbank and the Vienna Institute for International Economic Studies. Today, we have the pleasure of welcoming a very distinguished speaker who will talk about an exciting, albeit unusual, topic for economists.

Partha Dasgupta is Professor Emeritus at the University of Cambridge with a focus on development and environmental economics. He is well-known for the much-noticed Dasgupta Review on the Economics of Biodiversity, published earlier this year by the Treasury of the United Kingdom.

This review sets out a framework on how to account for Nature in economic science and policy. It makes three basic recommendations: first, shifting economic activities toward eco-friendly activities; second, investing in Nature to raise its productive capacity; and third, investing in resource-efficient production.

The review builds on previously published research on the population-consumption-environment nexus, a topic on which Professor Dasgupta will elaborate today. I would like to open the debate with a few ad-hoc remarks. They might lean a bit on the skeptical side, but this only underlines my great interest in this issue.

Let me be frank: as somebody who very much enjoys Nature and everything Nature has to offer (I am a true mountain man), I am still unsure whether central banks can effectively contribute to maintaining biodiversity. No doubt, the threatening extinction of species has to do with economic activities. But in most cases, this cannot be tackled by macroeconomic policies, but rather by

structural reforms. The responsibility for those lies with the government, involving almost all ministries, regional authorities and communities.

One specific area of responsibility is the fight against corruption. Think of the vested interests of big farmers and logging businesses in exploiting conservation areas, for instance in the Amazonas. Corruption had not been an issue for international economic policy and the development dialogue until James Wolfensohn introduced the C word at the World Bank, at the time I when was working there. Two decades later, one may be critical of what has been achieved. But at least there is now a sense of wrongdoing in the respective businesses, and they now need to consider the risk of prosecution.

The focus is increasingly shifting to the responsibility of financial markets and how they should price in Nature in asset valuations. Yet, this requires a better understanding of the economic mechanisms at work. And when it comes to environmentally justified financial regulation, the question arises of whether compliance is a) feasible, b) effective, and c) efficient.

The actual and potential uses of Nature for commercial ends may come into conflict with each other. I've recently overheard a mountain biologist being disapproving of mountain bikers. I love to bike myself, especially in the mountains where I come from – on dedicated paths, not across country. Tourism is one of the few sectors that is thriving in that region. Wouldn't it therefore be better to have tourists continue to come to that region, and thus help local populations enhance their livelihood? What else should local people make their living from?

Professor Dasgupta's speech will also focus on population developments – and since demographics is an area of research to which I have contributed for quite some years, I'd like to make a few comments on that.

The human population has crowded out other species and is set to continue to do so. There are now more than 7.7 billion of us – only few species have been similarly successful in terms of their sheer numbers, namely chickens and ants, to name just two. Reassuringly, we have witnessed a peak in, or at least a gradual levelling out of, human population growth in many regions of the world, as indicated by the demographic transition model. Europe, China, Latin America and much of East Asia are already reporting a negative demographic growth net of migration.

There is one important outlier, however: there are 1.1 billion people living in sub-Saharan Africa today – a figure that might double until the middle of this century. According to [UN](#) estimates, this figure will range roughly between 3 and 4.5 billion human beings by the end of this century. They would thus account for the by far largest contribution to world population growth, which is forecast to peak at about 11 billion ( $\pm$  one and a half billion) in 2100.

The statistical explanation for this rise in the continent's population is that increasing life expectancy over recent decades has not been matched by fast enough trends observed for falling fertility rates. On the one hand, this simply reflects a very early stage of demographic change. On the other hand, there seems to be a persistence of high fertility rates in some countries, which is not driven by the prevailing religion – be it Islam or Christianity –, but rather by politics which still associate power with demographic size. Historical developments in per capita income show that this is a mistaken perception.

But we should not get trapped in a deterministic view of all those projections. Demographic transition can be accelerated – by empowering women, providing better healthcare and education, and investing in sustainable infrastructure. Sri Lanka, for instance, presents some alternatives in this regard compared to Tanzania. Channeling idle capital from advanced economies to a continent flooded with sunlight and blessed with wind could facilitate a global low-carbon transition. Harnessing the demographic dividend could secure economic well-being and reduce pressure on Nature.

Let me come back to our potential interest in the topic. Central banks are just about to understand the challenges that climate change and climate action pose for price stability and financial systems. We in the Eurosystem are committed to considering the impact of climate change in our monetary policy framework, our supervisory activities, and our reserve portfolios. Of course, we do this in accordance with our mandate and without substituting the activities of governments primarily responsible.

One may, however, wonder whether we should now move on to the next challenge of maintaining biodiversity before having hardly begun to act on the climate issue? Honestly, I am a bit hesitant. Yes, there are many synergies in tackling the two challenges, but there are also important trade-offs. At this stage, I cannot fully dismiss the suspicion of mission creep, deflecting from our primary targets.

Nevertheless, some analytical work is already in progress in the central bank community. Reports of the Network for Greening the Financial System, of De Nederlandsche Bank and the Banque de France try to capture the potential economic and financial impacts of biodiversity loss. Admittedly, these impacts are complex and not yet fully understood. The reports provide first quantitative estimates of dependencies of financial securities on ecosystem services, suggesting that at least one-third of financial securities is highly dependent. They also give an overview of evolving central bank and private financial actors' activities regarding biodiversity issues.

Let me be clear, shedding light on the economics of biodiversity is very interesting, and I am open to any arguments that could convince everyone of its relevance. For you, Professor Dasgupta, this should be an easy task, the floor is yours.