



“ENVIRONMENT AND GROWTH”

TRENTO
2020

24-27 September



AUTONOMOUS PROVINCE OF TRENTO

The topic chosen for this 15th edition of the Festival of Economics was in itself very complex, perhaps the most demanding in our history: how to combine environmental protection and economic growth? In the meantime, the impact of Covid-19 complicated the global scenario enormously.

We cannot yet estimate the precise economic costs of the pandemic, also because it is unclear how the situation will evolve. It is however certain that they will be very high: in Italy, the OECD predicts a fall of at least 11% in the GDP in 2020, and of around 6-7% at world level.

Nor can we currently fully assess the social costs and political consequences of the decisions made necessary by Covid-19. However, some trends are already emerging: the return of the state as a key player; the growth in the role of public welfare services to kick start the economy, create jobs and support the many citizens impoverished by the crisis; the strong stimulus to use new technology, which also brings with it changes to everyday life: here we can consider teleworking, but also the need to keep in touch with our loved ones despite the limitations imposed by the lockdown.

There are still many questions that remain completely open, over and beyond more specifically medical-scientific matters, such as the possible development of a vaccine above all: how will supranational organisations, like the UN, but also the World Bank or the IMF, react in the medium term? What consequences will the pandemic have on globalisation? How many limitations to the freedom we took for granted will citizens still be willing to put up with, if it is necessary to adopt new measures to contain a possible upsurge in the pandemic?

Finally, there is another matter, remaining in the background until now, that we must prepare to deal with: the question raised by the Festival. Indeed, because as far as we know, the Covid-19 pandemic originated precisely in one of the many points of contact – and friction – between the economic activities of man and the environment that surrounds him; like other viruses preceding it moreover, because we can hardly claim there were no warning signs, even recently, to which we gave names such as “avian flu” or “swine flu”. Whether the origin of the pandemic was a market, the outskirts of a large city, intensive animal husbandry, or even “accidental” contact between man and wild animals, it nevertheless has to do with our relationship with the environment; an unsettled, difficult and complex relationship.

We do not know to what extent the measures put into effect, also at European level, will succeed in preventing a lengthy phase of recession. However, we do know what cannot be allowed: putting the environmental question to one side, because it is a luxury that we cannot afford in this phase. Today, not only must economic growth respect the environment, but the signs and reminders that environment sends us can indeed fuel economic growth. Energy, teleworking, the fight against pollution, and management of waste, water, the land and forests: it is areas such as these that represent the challenge in terms of combining development, innovation, wellbeing, socialisation and health. With the help of artificial intelligence, biotechnology and networking, but also with the small, indispensable contribution that each of us can make, through our everyday behaviour. We therefore hope that once again the Festival in Trento can give rise to useful stimuli and starting points for debate, dealing with issues that will have a decisive impact on new generations, the future of the world and the many communities making it up.

President of the Autonomous Province of Trento



MUNICIPALITY OF TRENTO

There has perhaps never been so much discussion about the environment as in the last few decades. However, the mountain of speeches about climate change, the green economy, big and small energy revolutions, and ecological transition that is always a long way off, has not been followed by an equally significant number of concrete actions, measures and long-term programmes.

The consequences are clear to everyone, and not just in remote places far away, with isolated atolls in the Pacific Ocean that risk being submerged, retreating polar ice and increasingly violent hurricanes. We have also seen the results of climate change here in Trentino: one need only recall Storm Vaia and the destruction it brought to our mountains. One need only consider the Coronavirus epidemic, according to many experts closely associated with our impact, increasingly devastating, on natural ecosystems, particularly forests.

«When the trees fall and the native animals are slaughtered, the native germs fly like dust from a demolished warehouse», wrote David Quammen in *Spillover*, the book that became famous for having predicted the current pandemic. Indeed, in a recent report, the WWF underlined how the passage of viruses from wild animals to man is facilitated by the progressive destruction of ecosystems and the penetration of man into the last uncontaminated areas of the planet. So if deforestation is not stopped and violation of the environmental equilibrium is not halted, the current pandemic could thus be just the first of a long and ominous series.

In the face of these apocalyptic forecasts, I believe that the arguments of those who affirm that we cannot afford the costs of environmental policies and of safeguarding ecosystems are shown up for what they really are: preconceived notions, or worse still deceitful information, often paid for by powerful lobbies, who in order to prosper defend the undefendable, from fossil fuel and crude oil to pesticides and disposable plastic.

Today the prospect of green development is no longer one of several possibilities, nor is it a luxury, as some believed until a few years ago. Green development is an obligation, a necessary prerequisite for guaranteeing a future for the Earth. I hope that the Festival of Economics will help us to clarify our ideas, once again this year, and above all to understand how to rapidly change our economies, our public policy and our individual behaviour. The scientists have already warned us: time is running out.

Mayor of Trento



The topics of the Festival of Economics sometimes refer to unresolved questions (market and democracy), dilemmas without a solution (wealth and poverty) or, as could appear in this case, trade-offs: a choice between two possibilities, with growth of one being incompatible with growth of the other, indeed leading to its decline.

I believe it is a "defect" of economists, which however I consider to be useful, to recall that there is no 'pleasure island' and that satisfying our desires often involves giving something up. Economics is the science of choices. This is what was stated in the textbooks studied in our youth for a subject that has been described as the "dismal science", perhaps precisely because choosing is not much fun.

The title of this edition of the Festival does not intend to refer to a (dismal) reality, but rather to reawaken economists' desire to contribute to the overall development of our society. Trying to answer today the question of whether growth (economic) and the environment (or rather, its protection) are truly compatible means trying to make the society in which we live go well beyond the simplistic idea that environmental safeguarding requires giving up a part of our wellbeing. It is indeed an appeal to think about many aspects of the economy whose neglect has led us to be convinced that our wellbeing must necessarily be pursued at the cost of the natural environment, considered as a resource of the current generations, who can consume and make use of it for their exclusive benefit.

I ask myself how, for the whole of the last century, when reckless growth of consumption characterised the developed world, we could have believed it was possible to construct wellbeing based on unlimited growth, with uncontrolled consumption of non-renewable natural resources. And how could we have believed that this could be circumscribed to a small part of the world (not by chance, our own)? It is not surprising that it is precisely the new generations, naturally more sensitive to living conditions in the next few decades and with a more global vision of the distribution of wellbeing around the world, that have raised the alarm.

Italy and the whole world have gone through a dramatic period that is still underway: suddenly we have remembered that epidemics exist, that these can not only undermine our economic systems, but also place our lifestyle in question. How many fundamental things seemed unimportant to us in the face of the need to defend a whole community, its present and its future? How much indispensable consumption was forgotten without this being experienced as a tragedy?

For the moment, the environmental catastrophe is not manifesting itself with the rapidity of an epidemic, and perhaps this does not force us to take immediate action such as that adopted recently during the health emergency. However, the risk is unfortunately of the same kind. Just as the threat of epidemics has already been seen in recent eras, as in the case of the "Spanish" flu in the 1920s, environmental threats have also sounded warning bells that have however been rapidly forgotten. One example was the oil crisis in the 1970s: a major and dramatic reminder that natural resources are not infinite.

Luckily, human ingenuity has also been capable of generating extraordinary development compatible with natural limitations, and therefore ensuring respect for the environment. However, we must take note of existing limits and work to make them compatible with our requirements. Indeed, the solution is not just the prospect of degrowth (happy or unhappy), that in truth very few want for themselves but tend to demand from others, but rather a future world in which we are all more aware of the great importance of a respected natural environment in terms of satisfying our needs. This includes the future of our children, which is certainly the asset that many,

if not all, care about most.

Once again this year, the Festival of Economics therefore gives us the opportunity to try and find our way in the labyrinth of the world's great problems; without claiming to provide the solution, which does not exist as such, but perhaps helping us to look for it where it can be found: within us, in our behaviour, our convictions and ultimately our choices.

I wish you all an enjoyable Festival of Economics.

Paolo Collini

Rector of the University of Trento

ENVIRONMENT AND GROWTH

During the lockdown period, from the windows of my home in Milan I could always see the foothills of the Alps clearly, even on gloomy days with little wind. In all the years I have lived there I had rarely stopped to admire this panorama. The quality of the air in our cities improved significantly when we were all shut up at home and on the streets there were only ambulances and delivery workers (mostly immigrants) on their bikes. I'm sure I was not the only one to ask myself: is it really necessary to go through this nightmare, confined to our homes with all non-essential activities strictly forbidden, in order to be able to breathe clean air in our cities?

It is often thought that environmental protection is in conflict with economic growth. Growth is believed to lead to pollution, depletion of natural resources and damage to the environment, whereas policy focusing on the prevention of climate change, improvement of air and water quality and the safeguarding of local areas is considered to be costly in terms of slowing down the growth rate of the world economy and the economies of individual countries. Environmentalist movements, above all in Italy, have a not entirely unjustified reputation for being against growth. They are perceived as wanting to block many economic initiatives and investment projects that could create jobs, offering income and opportunities to the less well-off, in the name of environmental protection. This reputation makes the environmentalist movement into an elitist group, while struggles to safeguard the environment are something that only the rich can afford, especially now we need to recover from the profound crisis affecting the whole planet. Populism is often set against environmentalism in the name of employment and growth.

So is it really true that safeguarding the environment leads to a reduction in the rate of growth for our economies?

In actual fact this is not the case, or in any event is not necessarily true. There is indeed policy that supports growth while respecting the environment. In many fields technological solutions have been identified and sustainable development strategies developed in relation to containing emissions and supplying energy. At the same time, there is increasing evidence that atmospheric pollution has negative effects on productivity, for example by increasing absenteeism due to ill health, thus affecting the rate of growth of our economies. There are also those who affirm that the Covid-19 pandemic is more lethal in regions with a higher level of pollution, because the virus encounters people with poorer immune systems (but here the empirical evidence is anything but solid).

In other words, failure to pay attention to the environment leads to a deterioration in our human capital, which is one of the driving forces of growth, as we have seen in previous editions of the Festival.

Furthermore, the most recent estimates of the costs, even strictly economic, of not doing anything in the face of phenomena such as climate change are pretty alarming. Sooner or later, we risk finding ourselves beyond the point of no return.

Having established that environmental protection policy is not necessarily detrimental to economic growth, the two main unresolved questions are what to do, and how to coordinate the action of different countries.

As regards the first aspect, it is often proposed to introduce taxes based on the principle that those who pollute must pay. The problem with this approach is that (Pigouvian) taxes of this kind can be highly regressive, as it is often the poorest families who use the most polluting energy sources. Another strategy is to subsidise innovations favourable to the environment.

The problem of how to bring common problems into decision-making processes still largely handled internally in each country is even more complex. It is a strong temptation for individual nations to allow others to bear the burden of adjusting for

more sustainable growth.

An increasing number of economists are dealing with these issues, studying measures that impose costs on those, whether multinational companies or governments, who make development choices that are not sustainable for the overall system. The best minds in the profession are preparing themselves, together with legal experts and scientists from very different backgrounds (in ecology, biology, physics, chemistry, plant science, zoology, mineralogy, oceanology, limnology, soil science, geology and atmospheric science) for the next "condominium meetings", called on to discuss how to manage common resources.

We hope that this year, at a Festival where there will always be a speaker present in person, but with a much larger number of speakers participating via video links than in the past, useful ideas will once again emerge from Trento on how to deal with a problem that concerns the future of us all, and especially of our children.

Tito Boeri

Scientific Director of the Festival of the Economics

Acknowledgements

Special thanks are due to all those collaborating in the organisation of the Festival.

Publishing houses:

Einaudi
Feltrinelli
Il Mulino

www.lavoce.info

Administration Office

Autonomous Province of Trento
Major Events and External Relations Office
Piazza Dante, 15
38122 Trento
tel. +39 0461 494946
info@festivaleconomia.it

Manager
Marilena Defrancesco

Press Office

Press Office Manager
Autonomous Province of Trento
Giampaolo Pedrotti
tel. +39 0461 494614
giampaolo.pedrotti@provincia.tn.it

Administration
tel. + 39 0461 497930
ufficiostampa@festivaleconomia.it

Press Office of the University of Trento
Manager Alessandra Saletti
tel. +39 328 1507260
alessandra.saletti@unitn.it

Editor Elisabetta Brunelli
tel. +39 0461 281131
ufficio.stampa@unitn.it

Press Office of Editori Laterza
Nicola Attadio
tel. +39 346 4936539
attadio@laterza.it

Editorial Committee

Tito Boeri
Innocenzo Cipolletta (coordinator)
Paolo Collini
Andrea Fracasso
Giuseppe Laterza

Editorial Coordinator for the Meetings with Authors

Tonia Mastrobuoni


Scientific Director

Tito Boeri

www.festivaleconomia.it

The organising committee of Trento Festival of Economics reserves the right to make changes to the programme after the printing of this publication. Information regarding the programme, last minute changes, and events suspended or cancelled is constantly updated at the site www.festivaleconomia.it, or can be requested at the information points open on the days of the Festival, telephonically from the administration office (Tel. +39 0461 494946), or by sending an e-mail to the address info@festivaleconomia.it.

All the events in the programme can be watched live on the date and at the time shown on the website www.festivaleconomia.it, with live Facebook videos also provided for in some cases. We also invite you to follow the Facebook page of the Festival of Economics, where the events to be broadcast live will be listed.

A simultaneous translation service is available for events accompanied by the  symbol. At the Festival website they can be watched in the original language or with simultaneous translation.

All the recordings of the events will be available on the website from the day after the live broadcast.

All the latest updates and useful information can be found at the website www.festivaleconomia.it.

Previous editions

2006 – WEALTH AND POVERTY
2007 – HUMAN CAPITAL, SOCIAL CAPITAL
2008 – THE MARKET AND DEMOCRACY
2009 – IDENTITY AND THE GLOBAL CRISIS
2010 – INFORMATION, CHOICES AND DEVELOPMENT
2011 – THE BORDERS OF ECONOMIC FREEDOM
2012 – LIFE CYCLES AND INTERGENERATIONAL RELATIONSHIPS
2013 – SOVEREIGNTY IN CONFLICT
2014 – RULING CLASSES, GROWTH AND THE COMMON GOOD
2015 – SOCIAL MOBILITY
2016 – WHERE GROWTH TAKES PLACE
2017 – UNEQUAL HEALTH
2018 – TECHNOLOGY AND JOBS
2019 – GLOBALIZATION, NATIONALISM AND REPRESENTATION

INAUGURATION

15.00

speakers:

TITO BOERI, INNOCENZO CIPOLLETTA, PAOLO COLLINI, GREGORIO DE FELICE, GIUSEPPE LATERZA, THE MAYOR OF TRENTO, THE PRESIDENT OF THE AUTONOMOUS PROVINCE OF TRENTO 

coordinated by **MARIA CONCETTA MATTEI**

VISIONS

17.00

ESTHER DUFLO 

GOOD ECONOMICS FOR HARD TIMES

introduced by **TITO BOERI**

How to deal with climate change when emissions originate mainly in rich countries and the costs of global warming are concentrated in poor countries? Should we change our habits? Should we consume less?

**MEET
THE AUTHORS**

18.30

ELISABETTA ROSASPINA

MARGARET THATCHER

discussed with **PAOLO GUERRIERI**
coordinated by **TONIA MASTROBUONI**

VISIONS

19.00

ROBERT SHILLER 

THE CONTAGION OF BAD IDEAS

introduced by **TITO BOERI**

In a world in which internet *troll farms* attempt to influence foreign elections, can we afford to ignore the power of viral stories to affect economies? The stories people tell—about economic confidence or panic, housing booms, the American dream, or Bitcoin—are contagious, and affect economic outcomes. How can we begin to take these stories seriously?

VISIONS

20.30

WILLIAM NORDHAUS 

WHY WE NEED A CARBON TAX

introduced by **VALENTINA BOSETTI**

Raising prices through a carbon tax, is a far more effective and efficient way to lower carbon emissions than direct government controls on the quantity of emissions through, say, regulatory limits on cars and power plants. Higher prices will encourage firms and consumers to find alternatives to carbon-based products as well as encourage new technologies that will make those substitutes competitive. Can the proceeds be used to compensate low income families hit particularly hard by the taxes?

CONTEMPORARY WITNESSES

21.00

PIERO ANGELA

THE FUTURE IN OUR HANDS: TECHNOLOGY, GENERATIONS AND THE ENVIRONMENT

introduced by **SILVIA BENCIVELLI**

Technology sparked off development of the economy, leading to a combination of wellbeing, demographic growth and the impact on the environment. Will we be capable of using technology to make our future sustainable?

KEYWORDS

10.00

VALENTINA BOSETTI

CARBON TAX

introduced by **ALBERTO NUCCIARELLI**

In order to encourage energy transition it is essential to associate a price with carbon emissions. How can this be done effectively? A comparison between the various experiments tried out in different countries.

INTERSECTIONS

10.30

STEFANO MANCUSO

THE NATION OF PLANTS AND THE ART OF COEXISTENCE

introduced by **GIUSEPPE LATERZA**

By looking at plants we can learn the art of coexistence: decentralised and cooperative organisation, with all living organisms finding a place, because each is aware of depending on the others.

IN HISTORY

11.00

PIERO BEVILACQUA

ITALY AND ITS ENVIRONMENT

introduced by **LUCA PETERMAIER**

The history of our country has been strongly affected by its specific environmental characteristics: from the way in which urban development has taken place and the development of industry at territorial level, to the construction of food production chains and overbuilding along the coast.

DISCUSSIONS

11.00

THE SUSTAINABLE MANAGER

organised by FONDAZIONE FONDIRIGENTI

coordinated by **EUGENIO OCCORSIO**

speakers: **ROBERTO GABRIELE, CARLO POLEDRINI, GIUSEPPE RICCI**

The concrete impact of managerial training on productivity and business growth. Management skills in the light of technological evolution and the new circular economy paradigm.

FORUM

12.00

CORPORATE SUSTAINABILITY

speakers: **INNOCENZO CIPOLLETTA, DOMENICO FAVUZZI, ELENA FLOR**

introduced by **STEFANO POGUTZ**

coordinated by **MASSIMO GAGGI**

While sustainability represented a field in its own right for businesses until a few years ago, today environmental and social issues have become an integral part of the purpose and strategy of many companies, increasingly often central to the development of innovative and successful business models. Can the pandemic become an opportunity to facilitate the acceleration towards a more sustainable paradigm?

AT THE FRONTIER

12.30

RICK VAN DER PLOEG 

OBSTACLES TO CLIMATE POLICY

introduced by **MAURO CASELLI**

One of the major obstacles to the implementation of policies for the reduction of polluting emissions is the fact that the taxes that should discourage the use of coal end up affecting mainly the weaker classes. What can be done to reconcile environmental objectives and the containment of inequalities?

DISCUSSIONS

14.00

THE SUN, THE TRUE ENERGY OF THE WORLD

organised by EF Solare Italia

coordinated by **PAOLA PICA**

speakers: **DIEGO PERCOPO, VALERIA TERMINI, EDOARDO ZANCHINI**

In energy transition, photovoltaics is destined to see very rapid development in the near future: PV systems are modular, competitive, usable with different configurations, exploited through digitisation and storage systems, and can be developed in total harmony with the local area and the environment.

AT THE FRONTIER

15.00

CHRISTIAN GOLLIER 

PRICING THE PLANET'S FUTURE

introduced by **EDOARDO GAFFEO**

How much sacrifice should we undertake to face our responsibilities toward future generations? How should we price CO₂ and other investment projects with very distant benefits? In this talk, I will explore these questions in the light

of the recent economists' debate on the value of time, i.e., about discounting.

MEET THE AUTHORS

16.00

TITO BOERI, SERGIO RIZZO

RIPRENDIAMOCI LO STATO

organised by Feltrinelli

discussed with **TONIA MASTROBUONI**

VISIONS

16.30

LARS PETER HANSEN 

**THE IMPACT OF GEOSCIENTIFIC AND ECONOMIC
UNCERTAINTY OF CLIMATE CHANGE ON MARKET AND
SOCIAL VALUATION**

introduced by **MASSIMO MARINACCI**

Geophysicists examine and document the repercussions for the earth's climate induced by alternative emission scenarios and model specifications. Using simplified approximations, they produce tractable characterizations of the associated uncertainty. Meanwhile, economists write simplified damage functions to assess uncertain feedbacks from climate change back to the economic opportunities for the macroeconomy. How can we assess both climate and emissions impacts, as well as uncertainty in the broadest sense, in social decision-making? Decision theory and tools from asset pricing are very valuable in answering such a question.

DIALOGUES

17.00

VALERIA TERMINI, LEIF WENAR 

THE WAR ON ENERGY

introduced by **MASSIMO GAGGI**

In the global conflict for energy, economic interests, even through violence, have often prevailed on political reason. What will happen in the near future when, presumably, the age of oil will end?

ALAN KRUEGER
LECTURE
18.00

JOSHUA ANGRIST 

MACHINE LABOUR
introduced by **TITO BOERI**

The “Alan Krueger lectures” suggest how to use empirical evidence to guide economic policy choices. The first lecture, given by Hilary Hoynes in 2019, was about how to use data to assess minimum income measures. The second will be about how to adopt machine learning techniques to assess education policy.

MEET
THE AUTHORS
18.30

STEFANO NESPOR

LA SCOPERTA DELL'AMBIENTE. UNA RIVOLUZIONE CULTURALE
organised by Laterza

discussed with **ELLY SCHLEIN**
coordinated by **TONIA MASTROBUONI**

AT THE
FRONTIER
20.30

GERNOT WAGNER 

CLIMATE SHOCK: THE ECONOMIC CONSEQUENCES OF A HOTTER PLANET
introduced by **EUGENIO OCCORSIO**

What we know – and what economists can quantify – is bad enough and should have prompted much more ambitious climate policy a long time ago. What we don't know – the known unknowns and unknown unknowns – by and large point in one and only one direction: to more ambitious climate action still.

DIALOGUES
21.00

ROBERT JOHNSON, MICHAEL SPENCE 

PANDEMICS AND INNOVATION
organised by INET

introduced by **TITO BOERI**

The Covid pandemic has drastically affected how the world economy operates. How many of the changes might be permanent? Might innovations adopted out of necessity lead to major changes in how economies function in the future?

**CONTEMPORARY
WITNESSES**

21.00

AMITAV GHOSH 

HOW CLIMATE IS CHANGING OUR IDEA OF FREEDOM

introduced by **MARINA FORTI**

Climate change has jeopardised the most important political concept of the modern era: the idea of freedom, central not only for contemporary politics, but also for the humanities, arts and literature.

KEYWORDS

10.00

LAURA PARISI

CLIMATE RISK

introduced by **ELEONORA BROCCARDO**

Climate change represents a significant source of systemic risk, with the potential to destabilise the normal operation of the markets, the financial sector and the real economy. The more we delay the transition to a sustainable economy, the greater the possible consequences will be.

VISIONS

10.30

PER KRUSELL 

CLIMATE CHANGE: HOW TO SLOW IT DOWN

introduced by **MASSIMILIANO VATIERO**

There is broad scientific consensus that the global climate is changing, and that this is a result of human activities. There is also a rather broad political consensus, by now deeply rooted in our populations, that we need to intervene: we need to decrease our emissions of greenhouse gases. But how to induce our economies to curb emissions is much less clear. Economics offers tools to help the world in this respect: economists have systematic methods for comparing different policy paths, because - by design - our science is about understanding how economies respond to policy interventions. This lecture discusses what economists have contributed so far to fulfill this important task, along with some promising avenues for further research.

DISCUSSIONS

11.00

SUSTAINABLE MOBILITY: THE LIMITATIONS AND POTENTIAL OF ELECTRIC CARS

organised by LeasePlan Italia

coordinated by **LUCA ORLANDO**

speakers: **INNOCENZO CIPOLLETTA, ANNA SCUTTARI, ALBERTO VIANO**

A meeting to analyse the development of electric cars in Italia and outline scenarios for the coming years, taking into account technological innovation, planning of infrastructures, accessibility for consumers and environmental protection.

FORUM

12.00

FINANCE FOR THE ENVIRONMENT



speakers: **GIANLUCA MANCA, NINO TRONCHETTI
PROVERA, NATALIE WESTERBARKEY**

introduced by **LORIANA PELIZZON**

coordinated by **MASSIMO GAGGI**

How can finance contribute towards promoting a more sustainable economy? Do the ESG (environmental, social & governance) indicators for investment represent an effective alternative for directing the economy towards more sustainable activities? What role could be played by the European Commission's "Action Plan on Sustainable Finance", which aims to mobilise the world of finance to promote sustainable growth?

DIALOGUES

14.30

LAURENCE BOONE, SALVATORE ROSSI



ENVIRONMENTAL POLICIES AFTER COVID-19

coordinated by **PAOLA PICA**

There is new awareness of environmental problems, but at the same time the need to recover the ground lost may induce governments to put environmental issues aside. A dialogue over the challenges facing environmental and economic policies in the years to come.

DIALOGUES

15.30

VINCENZO AMENDOLA, ROBERTO PEROTTI

THINKING ABOUT NEXT GENERATION EU

coordinated by **ELISA DOSSI**

With the Recovery Fund, Brussels has made 209 billion euro available to the government to finance a recovery plan for Italy, partly in the form of non-repayable grants and partly as a loan. What is the most beneficial strategy for getting the country going again? What obstacles could prevent it from being fully effective? The Minister for European Affairs, Vincenzo Amendola, and the economist Roberto Perotti discuss the issues.

MEET THE AUTHORS

16.00

CHIARA VALERIO

LA MATEMATICA È POLITICA

organised by Einaudi

discussed with **LINDA LAURA SABBADINI**

coordinated by **TONIA MASTROBUONI**

INTERSECTIONS

16.00

FEDERICO RAMPINI

XI JINPING VERSUS GRETA

introduced by **PAOLO MICHELETTO**

The bad news for 2019 is the U-turn by China, which after having been a leader in solar energy, has cut back heavily on its investment in renewable forms of energy. Faced with a slowdown in growth, Xi Jinping has not hesitated to resurrect "carbon capitalism". The information is official, and terrifying.

DIALOGUES

17.00

GIUSEPPE CONTE, TITO BOERI

ITALY AND EUROPE

coordinated by **TONIA MASTROBUONI**

IN HISTORY

17.30

NAOMI ORESKES 

CAN WE SAVE SCIENCE?

introduced by **MARCO MOTTA**

This talk explores the recent history of attacks on science, and proposes how we can restore public trust and use science to help us fight climate change, protect ourselves from pandemics, and other important things.

MEET THE AUTHORS

18.30

PAOLO GUERRIERI, PIER CARLO PADOAN

L'ECONOMIA EUROPEA. UN NUOVO RUOLO NELLA COMPETIZIONE GLOBALE

organised by Il Mulino

discussed with **ENZO AMENDOLA**

coordinated by **TONIA MASTROBUONI**

EconoMia

20.00

COMPETITION AWARD CEREMONY

The EconoMia competition rewards 20 high school students who offered the best written analysis of this year's themes. The winners will attend all events of the Festival, thus learning more about a major issue in contemporary economics.

DIALOGUES
20.30

**MATTEO GADDI, NADIA GARBELLINI, RYAN RAFATY,
ANNAMARIA SIMONAZZI** 

**AUTOMOBILES AND THE FATE OF NATIONS: A GREEN
RESTRUCTURING OF THE WORLD CAR INDUSTRY?**

Organised by INET

introduced by **THOMAS FERGUSON**
coordinated by **EUGENIO OCCORSIO**

The world automobile industry is in crisis. Not only are there too many producers, but deep changes in production methods associated with the shift to greener forms of transportation make many current industrial processes and forms of working obsolete. How the world and individual countries will cope with these changes is very much an open question and is the subject of this panel.

DIALOGUES
21.00

ALEXANDRA GEESE, ENRICO LETTA

A GREEN EUROPE
coordinated by **TONIA MASTROBUONI**

With the "European Green Deal" the European Commission has promoted an ambitious project, putting Europe at the cutting edge of environmental policy: the circular economy, energy transition, urban regeneration, sustainable tourism and agriculture etc. The Covid emergency has reinforced European solidarity, but the political, economic and cultural questions dividing EU countries remain: how can these be handled in the fairest and most effective way?

IN HISTORY

10.00

AMEDEO FENIELLO

WHEN THE CLIMATE CHANGES

introduced by **SIMONE CASALINI**

From Roman times to the Little Ice Age in the modern era, climate change has had more effect than might be believed, influencing migratory phenomena, the rise and fall of political systems, crises and the adaptation of social and economic systems.

KEYWORDS

10.30

TOMASZ KOŻLUK 

GREEN GROWTH

introduced by **MARIA LUIGIA SEGNANA**

Green Growth means sustainable development from the environmental point of view. While progress has been made, many would say that the outcome was not up to the expectations. Now, with the COVID-19 crisis, the green growth concept is again high on the agenda in the context of the recovery policies. What have we learned during the past decade? How can we use this knowledge in policy making? What else do we need to know?

DISCUSSIONS

11.00

THE CHALLENGE OF SUSTAINABILITY FACED BY BUSINESSES

organised by GEI – Gruppo Economisti di Impresa

coordinated by **MASSIMO DEANDREIS**

speakers: **GREGORIO DE FELICE, ANDREA GOLDSTEIN, ALESSANDRA LANZA**

GEI analyses the relationship between sustainable development and business development strategies, providing scientific evidence to promote new industrial policy proposals that can combine environmental and economic sustainability.

FORUM

12.00

TECHNOLOGY FOR THE ENVIRONMENT

speakers: **LAURA COZZI, MICHELE GAMBERINI**
introduced by **MARZIO GALEOTTI**
coordinated by **MASSIMO GAGGI**

Will the new energy and communications technologies be capable of solving the dilemma of balancing protection of the environment and natural resources, economic growth and job creation? Are there good and less good technologies? What is the role of policy promoting research and technological innovation in progress towards a net zero emissions economy, increasingly well-connected and with new ways of organising employment?

VISIONS

12.30

IGNAZIO VISCO

GROWTH, FINANCE AND SUSTAINABILITY: PROSPECTS AND CHALLENGES FOR THE ITALIAN ECONOMY

introduced by **TONIA MASTROBUONI**

The first signs of a recovery, expected to be slow, are emerging in Italy, presumably moving towards a new normality. The structural problems of the economy will need to be dealt with to support this recovery, with reforms designed to encourage innovation and the growth of human capital, along with a transition towards a more sustainable economy, not just in Italy, also with the contribution of the central banks.

CONTEMPORARY WITNESSES

15.00

GRACIELA CHICHILNISKY

REVERSING CLIMATE CHANGE. HOW DIRECT AIR CAPTURE OF CO₂ CAN RESOLVE CLIMATE CHANGE AND FIX THE ECONOMY

introduced by **DINO PESOLE**

The Kyoto Protocol, with the Carbon Market and its Clean Development Mechanism (CDM), became international law in 2005. This was revolutionary work and had it been fully adopted globally, the world's climate would not be in the precarious position that we find it in today. What is required to transform industry, provide profits and create new jobs, all while solving catastrophic climate change?

VISIONS

15.00

ANNE CASE 

DEATHS OF DESPAIR AND THE FUTURE OF CAPITALISM

introduced by **MASSIMO GAGGI**

Life expectancy in the United States has recently fallen for three years in a row—a reversal not seen since 1918 or in any other wealthy nation in modern times. In the past two decades, deaths of despair from suicide, drug overdose, and alcoholism have risen dramatically, and now claim hundreds of thousands of American lives each year—and they're still rising.

Why, for those who used to prosper in America, is capitalism no longer delivering anything?

VISIONS

16.30

ANGUS DEATON 

IS AMERICA COMING APART?

introduced by **TITO BOERI**

Even before the arrival of COVID, American lives (and deaths) were dividing, with an educated elite doing well and the majority doing badly. Covid is increasing these pre-existing inequalities and creating new ones everywhere, especially so in the US. The failure in the management of the pandemics is a byproduct not only of the lack of competence of the Trump administration, but also of the lack of a coherent national strategy in a federal system, where each local authority behaves autonomously causing inequalities and risks for citizens.

TITO BOERI

Tito Boeri is Professor of Economics at Bocconi University in Milan and Senior Visiting Professor at the London School of Economics (where he has been Centennial Professor). He has been Senior Economist at the Organisation for Economic Cooperation and Development (OECD) and consultant for the International Monetary Fund, the World Bank, the European Commission and the International Labour Organization, as well as the Italian government. From March 2015 to February 2019 he was President of the Istituto Nazionale di Previdenza Sociale (INPS). He is Scientific Advisor to the Fondazione Rodolfo De Benedetti (www.frdb.org), of which he has been Director since it was set up in 1998. He is a Fellow of the European Economic Association and the European Association of Labour Economists. He is also a Research Fellow of the Innocenzo Gasparini Institute for Economic Research (IGIER Bocconi), CEPR (Centre for Economic Policy Research), the Centre for Economic Performance in London, IZA (Institut zur Zukunft der Arbeit) in Bonn and Netspar (Network for the Study of Pension and Retirement) in Tilburg. He has been leader writer for "Il Sole 24 Ore", "La Stampa" and "la Repubblica" and has written for foreign newspapers such as the "Financial Times" and "Le Monde". He is one of the founders of the economic information website www.lavoce.info and the English language website www.voxeu.org. He is Scientific Director of the Festival of Economics in Trento.

His publications in Italian include: *Contro i giovani* (with V. Galasso), Mondadori (2007); *La crisi non è uguale per tutti*, Rizzoli (2009); *Classe dirigente* (editor together with A. Merlo and A. Prat), Università Bocconi (2010); *Le riforme a costo zero* (with P. Garibaldi), Chiarelettere (2011); *Parlerò solo di calcio*, Il Mulino (2012); *Populismo e stato sociale*, Laterza (2017); *Riprendiamoci lo Stato* (with S. Rizzo), Feltrinelli (2020).

Speakers

PIERO ANGELA

A journalist, writer and populariser of science, he has made many highly successful television programmes dedicated to science, history and the economy. Over the last thirty years he has invented hundreds of programmes, from the nature documentaries "Quark speciale" and "Il mondo di Quark", to the science programme "Quark", beginning in 1980. His more recent programmes include "Superquark" (1995) and "Ulisse" (2000).

He has written many books, translated into various languages, on different subjects: from physics and biology to psychology and technological development.

Over his career, he has received considerable recognition, including nine honorary degrees for his work as a populariser and the Telegatto lifetime achievement award in 2002, while in 2004 he was given the title of Grand Officer of the Order of Merit of the Italian Republic.

JOSHUA D. ANGRIST

Josh (Master Joshway) is the Ford Professor of Economics at MIT, a director of MIT's School Effectiveness and Inequality Initiative, and a Research Associate at the NBER. A dual U.S. and Israeli citizen, he taught at Harvard and the Hebrew University of Jerusalem before coming to MIT in 1996. His research interests include the economics of education and school reform; social programs and the labor market; the effects of immigration, labor market regulation and institutions; and econometric methods for program and policy evaluation.

He is a Fellow of the American Academy of Arts and Sciences and the Econometric Society, and has served on many editorial boards. He is the author with Jörn-Steffen Pischke of *Mostly Harmless Economics: An Empiricist's Companion* and *Mastering 'Metrics: The Path from Cause to Effect*, both published by Princeton University Press. He works with Pischke at Marginal Revolution University to bring econometrics education out of the Stones' Age.

PIERO BEVILACQUA

A historian, writer and essayist, he has lectured in Contemporary History at "La Sapienza" University in Rome. He previously lectured at the Universities of Salerno and Bari, and at the Faculty of Gastronomic Sciences in Pollenzo (Cuneo).

He has written extensively about the history of southern Italy, the history of agriculture and the countryside, and has concerned himself with the history of local areas and the environment. Among his books dealing with these issues we can recall: *La terra è finita. Breve storia dell'ambiente*, Laterza (2006); *Il cibo e la terra. Agricoltura, ambiente e salute negli scenari del nuovo millennio*, Donzelli (2019).

In 1985, together with Carmine Donzelli and Augusto Placanica, he founded the Istituto Meridionale di Storia e Scienze Sociali (IMES) and in 1987 he founded and edited the magazine "Meridiana". He was one of the academics called on to participate in the Manifesto on Food for Health promoted by Vandana Shiva.

VALENTINA BOSETTI

She is full professor at the Department of Economics, Bocconi University and a senior scientist at the RFF CMCC European Institute on Economics and the Environment.

She worked at Fondazione Eni Enrico Mattei from 2003 to 2018 and collaborated with CMCC from 2006. She served as a Council Member of the European Association of Environmental Economists and as the President of the Italian Association of

Environmental Economists.

She has published several papers in the field of economics of climate change and of clean technologies innovation.

She was the principal investigator of two European Research Council grants. She is a Lead Author of the IPCC (both 5th and 6th Report).

Since May 2020 she has been Chairperson of Terna.

ANNE CASE

She is the Alexander Stewart 1886 Professor of Economics and Public Affairs, Emeritus at Princeton University, where she is the Director of the Research Program in Development Studies. She has written extensively on health over the life course. For her work, she has been awarded the Kenneth J. Arrow Prize in Health Economics from the International Health Economics Association, and the Cozzarelli Prize from the Proceedings of the National Academy of Sciences.

She currently serves on the President's Committee on the National Medal of Science and the Committee on National Statistics. She is a Research Associate of the NBER, a Fellow of the Econometric Society, and is an affiliate of the Southern Africa Labour and Development Research Unit at the University of Cape Town.

GRACIELA CHICHILNISKY

She is the co-founder and CEO of Global Thermostat, and co-creator of a carbon removal technology that can reverse climate change. The technology was chosen by MIT Technology Review as one of the Ten Breakthrough Technologies of 2019, a list curated by Bill Gates. She is also a Professor of Economics and Mathematical Statistics at Columbia University, and Director of the Columbia Consortium for Risk Management. She acted as the lead author on the Intergovernmental Panel on Climate Change, which received the 2007 Nobel Prize for its work in deciding world policy with respect to climate change, and she worked extensively on the Kyoto Protocol, creating and designing the carbon market that became international law in 2005.

She is the author of more than 300 scientific articles and more than 15 books, including the recently published *Reversing Climate Change*.

ANGUS DEATON

He is Dwight D. Eisenhower Professor of Economics and International Affairs Emeritus at the Woodrow Wilson School of Public and International Affairs and the Economics Department at Princeton University and is Presidential Professor of Economics at the University of Southern California. His current research areas are poverty, inequality, health, well-being, economic development, and the development and use of evidence for policy. The recipient of the 2015 Nobel Prize in Economic Sciences, in 2016 he was made a Knight Bachelor for his services to economics and international affairs. President of the American Economic Association in 2009, he is a corresponding Fellow of the British Academy, an Honorary Fellow of the Royal Society of Edinburgh, a Fellow of the Econometric Society, an elected member of the American Philosophical Society and of the National Academy of Sciences.

ESTHER DUFLO

A French economist, she was awarded the Nobel Prize for Economics in 2019, together with Michael Kremer and her husband Abhijit Banerjee, for their experimental approach to combating global poverty. She is the second woman to have been awarded the Nobel Prize for Economics, as well as the youngest person to have received such an award.

She is Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics in the Department of Economics at the Massachusetts Institute of Technology and a co-founder and co-director of the Abdul Latif Jameel Poverty Action Lab (J-PAL). She

has received numerous academic honours and prizes including the 2019 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel (with co-laureates Abhijit Banerjee and Michael Kremer), the Princess of Asturias Award for Social Sciences (2015), the A.SK Social Science Award (2015), Infosys Prize (2014), the David N. Kershaw Award (2011), a John Bates Clark Medal (2010), and a MacArthur "Genius Grant" Fellowship (2009).

With Abhijit Banerjee, she wrote *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, which won the Financial Times and Goldman Sachs Business Book of the Year Award in 2011 and has been translated into more than 17 languages, and the recently released *Good Economics for Hard Times*, which will be published by Laterza in September 2020.

AMEDEO FENIELLO

A historian focusing on the medieval era, he was recently Directeur d'études invité at the École des Hautes Etudes en Sciences Sociales in Paris. He has lectured in Medieval Mediterranean History at Northwestern University in Evanston, Chicago, and has worked at the Istituto Storico Italiano per il Medioevo. He currently works for CNR's Istituto di Storia dell'Europa Mediterranea and teaches Medieval History at the University of Aquila.

He is the author of numerous essays on medieval society and economics in southern Italy, and his recent publications include; *Napoli 1343. Le origini medievali di un sistema criminale*, Mondadori (2015); and for Laterza, *Sotto il segno del leone. Storia dell'Italia musulmana* (2011); *Dalle lacrime di Sybille, Storia degli uomini che inventarono la banca*, (2013); *Storia del Mediterraneo in 20 oggetti* (with A. Vanoli, 2018); *Storia del mondo. Dall'anno 1000 ai giorni nostri* (with F. Canale Cama and L. Mascilli Migliorini, 2019); he has also contributed to the *Storia mondiale dell'Italia* (edited by A. Giardina).

AMITAV GHOSH

An Indian anthropologist, writer and journalist, he is one of the leading figures in contemporary Indian literature.

Considered one of the greatest living Indian writers, he was born in Calcutta and grew up in India, Bangladesh and Sri Lanka. He studied at Oxford and currently divides his time between his home town and New York. The subjects closest to his heart and that are often central in his speeches include anthropology, climate change and the environment, and the socio-political culture of modern India and South-East Asia. His books have been translated into more than thirty languages and he writes for newspapers such as "The New Yorker", "The New Republic" and "The New York Times". In Italy, with Neri Pozza, he has published: *Il paese delle maree* (2005), *Circostanze incendiarie* (2006), *Il Palazzo degli specchi* (2007), *Mare di papaveri* (2008), *Il cromosoma Calcutta* (2008), *Lo schiavo del manoscritto* (2009), *Il fiume dell'oppio* (2011), *Diluvio di fuoco* (2015), *La grande cecità* (2017) e *L'isola dei fucili* (2019).

CHRISTIAN GOLLIER

He is an internationally-renowned Professor of Decision theory under uncertainty, with applications in climate economics, finance and cost-benefit analysis and a special interest in long term (sustainable) effects. He is a fellow of the Econometric Society, and received an ERC Advanced Grant in 2011. He founded the Toulouse School of Economics alongside Jean Tirole, where he has served as director (2007-2015), vice-president (2017), and director again since December 2017. He is currently president-elect of the European Association of Environmental and Resource Economists (EAERE). In recent years, he has held visiting sabbatical positions at Harvard (2013) and Columbia (2015-2016). He has published more than 100 articles in top journals in economics, is one of the lead authors of the last two IPCC reports, and is the author of

several books published by MIT Press, Princeton University Press and Columbia University Press. His most recent outreach book in French (*Le climat après la fin du mois*, PUF, 2019) on the importance of acting to mitigate climate change, has met with wide success in France, and is currently under translation into English.

LARS PETER HANSEN

He is a leading expert in economic dynamics who works at the forefront of economic thinking and modeling, drawing approaches from macroeconomics, finance, and statistics. He has made fundamental advances in our understanding of how economic agents cope with changing and risky environments. He has contributed to the development of statistical methods designed to explore the interconnections between macroeconomic indicators and assets in financial markets. These methods are widely used in empirical research in financial economics today.

For his work he is a recipient of the 2013 Nobel Prize in Economic Sciences and received many other awards and honors.

He joined the faculty of the University of Chicago's Department of Economics in 1981 and has served as department chairman and director of graduate studies. He is now David Rockefeller Distinguished Service Professor of Economics, Statistics, Booth School of Business and the College.

His recent research explores how to quantify intertemporal risk-return tradeoffs and ways to model economic behavior when consumers and investors struggle with uncertainty about the future. Improving models that measure risk and uncertainty have important implications for financial markets, fiscal policy, and the macroeconomy. He currently directs the Macro Finance Research Program housed under the Becker Friedman Institute at the University of Chicago.

TOMASZ KOŻŁUK

He is a Senior Economist at the OECD in Paris. He heads the Going for Growth and Green Growth workstreams at the Economics Department. His research interests include empirical analysis of structural policies (competition, market regulation, infrastructure) and environmental policies. He holds a Ph.D. in Economics from EUI Florence, and MA degrees in Economics from Sussex University and Warsaw University.

PER KRUSELL

He is Professor of Economics at Stockholm University and holds a part-time position as Centennial Professor at London School of Economics. He held assistant-professor positions at Northwestern University and the University of Pennsylvania, as well as full-professor positions at the University of Rochester and Princeton University.

He is the elected President of the European Economic Association.

His research has focused on macroeconomics, broadly defined, with particular contributions in the areas of technological change, inequality, political economy, macroeconomic policy, and labor economics. He is currently pursuing a long-term project on the interactions between global sustainability, in particular climate change, and the economy.

For his work he has received numerous awards and grants.

STEFANO MANCUSO

An international renowned scientist, he heads the International Laboratory of Plant Neurobiology (LINV) at the University of Florence. He is a founder member of the International Society for Plant Signaling & Behavior and an ordinary academic member of the Accademia dei Georgofili. His publications with Laterza include: *L'incredibile viaggio delle piante* (2018), *La Nazione delle Piante* (2019) and *La pianta del mondo* (2020).

WILLIAM NORDHAUS

He is Sterling Professor of Economics at Yale University. He has been on the faculty since 1967 and has been Full Professor of Economics since 1973.

He has served on several committees of the National Academy of Sciences on topics including climate change, environmental accounting, risk, and the role of the tax system in climate change. He is on the research staff of the National Bureau of Economic Research, the Cowles Foundation for Research, and has been a member and senior advisor of the Brookings Panel on Economic Activity, Washington, D.C. since 1972. He was a Director and served as Chair of the Boston Federal Reserve Bank for 2013-2015. He received the Nobel Prize for Economics in 2018 for his studies on economics and climate change.

He is current or past associate editor of several scientific journals. In 2004, he was awarded the prize of "Distinguished Fellow" by the American Economic Association (AEA), of which he was President during the 2015-16 period.

NAOMI ORESKES

Naomi Oreskes is Professor of the History of Science and Affiliated Professor of Earth and Planetary Sciences at Harvard University. A world-renowned geologist, historian of science and public speaker, she is a leading public intellectual on the role of science in society the reality of anthropogenic climate change, and on anti-scientific disinformation campaigns. Her books include *Merchants of Doubt* (Bloomsbury, 2010), *The Collapse of Western Civilization* (Columbia University Press, 2014), *Discerning Experts* (University Chicago Press, 2019), *Why Trust Science?* (Princeton University Press, 2019), and *Science on a Mission: American Oceanography from the Cold War to Climate Change*, (University of Chicago Press, forthcoming). Her opinion pieces have been published in many leading venues, including *The New York Times*, the *Washington Post*, *The Times* (London), *Le Monde*, and *Frankfurter Allgemeine*. In 2018 she was named a Guggenheim Fellow for a new book project with Erik Conway, "The Magic of the Marketplace: The True History of a False Idea."

LAURA PARISI

She is a Financial Stability Expert at the Directorate General Macprudential Policy and Financial Stability, Stress Test Modelling division of the European Central Bank. Her current areas of research mainly focus on the impact assessment of climate-related risks for the banking sector and the overall economy: she's leading the ECB team working on climate-risk stress-testing, and she also collaborates with European and international institutions, and standard setting bodies. She previously worked in the Financial Regulation and Policy division in the same Directorate, where she focussed on the completion of the Banking Union. Laura holds a bachelor degree in Physics and a master degree in Theoretical Physics, and a PhD in Economics and Management from the University of Pavia.

FEDERICO RAMPINI

Editorial writer and correspondent for "la Repubblica" in New York. A White House accredited reporter, he often follows the President on his travels and deals with the international G7 and G20 summits. He has been a correspondent in Beijing, San Francisco, Paris and Brussels, and Deputy Editor of the "Sole 24 Ore" newspaper. He has lectured at the Universities of Berkeley, Shanghai and SDA-Bocconi. He has created and performed in several theatrical works, most recently *Trump Blues. L'età del caos*. He is the author of essays translated into various languages. His latest books are: *San Francisco-Milano. Un italiano nell'altra America*, Laterza (2013); *La trappola dell'austerità. Perché l'ideologia del rigore blocca la ripresa*, Laterza (2014); *Rete padrona. Amazon, Apple, Google & co. Il volto oscuro della rivoluzione digitale*, Feltrinelli (2014); *All You Need Is Love. L'economia spiegata con le canzoni dei*

Beatles, Mondadori (2015); *Il tradimento. Globalizzazione e immigrazione, le menzogne delle élite*, Mondadori (2016); *Le linee rosse. Uomini, confini, imperi: le carte geografiche che raccontano il mondo in cui viviamo*, Mondadori (2017); *L'oceano di mezzo. Un viaggio lungo 24.539 miglia*, Laterza (2019); *La seconda guerra fredda*, Mondadori (2019); *Oriente e Occidente. Massa e individuo*, Einaudi (2020).

ROBERT SHILLER

He is Sterling Professor of Economics, Department of Economics and Cowles Foundation for Research in Economics, Yale University, and Professor of Finance and Fellow at the International Center for Finance, Yale School of Management. He was awarded the Nobel Prize in Economic Sciences jointly with Eugene Fama and Lars Peter Hansen in 2013. He has written on financial markets, financial innovation, behavioral economics, macroeconomics, real estate, statistical methods, and on public attitudes, opinions, and moral judgments regarding markets.

His latest book is *Narrative Economics: How Stories Go Viral and Drive Major Economic Events*, Princeton University Press, 2019.

He writes a regular column *Finance in the 21st Century* for "Project Syndicate", and *Economic View* for "The New York Times".

RICK VAN DER PLOEG

He is Professor of Economics at the University of Oxford. He is Research Director of the Oxford Centre for the Analysis of Resource Rich Economies (OxCarre). He is also Research Fellow in International Macroeconomics at the CEPR, London, and Director of the Public Sector Economics programme at CESifo, Munich.

His research interests are (international) macroeconomics and public finance with special focus on the economics of natural resources and climate change, political economy and development economics.

Previous academic appointments include Cambridge (1979-83), LSE (1983-88), Tilburg (1985-91), Amsterdam (1991-1998) and EUI, Florence (2003-07). He is former Chief Financial Spokesperson in the Dutch Parliament (1994-1998), State Secretary of Education, Science and Culture of the Netherlands (1998-2002) and Elected Member and Vice-Chair of the UNESCO World Heritage Committee (2002-2007).

IGNAZIO VISCO

Since November 2011 he has been Governor of the Bank of Italy, an institution he joined in 1972. He is Chairman of the Joint Governing Board of the Insurance Supervisory Authority (IVASS). He is member of the Governing Council and General Council of the European Central Bank, the Board of Directors of the Bank for International Settlements, the Steering Committee of the Financial Stability Board and the General Board of the European Systemic Risk Board. He participates in the World Bank group as Governor for Italy. From 1997 to 2002 he was Chief Economist and Director of the Economic Department of the OECD in Paris. He graduated from "La Sapienza" University in Rome, subsequently obtaining an MA and PhD in Economics at the University of Pennsylvania. He is the author of numerous publications.

GERNOT WAGNER

He teaches at New York University, writes the Risky Climate column for "Bloomberg Green", and is the author of *Climate Shock* (with M. Weitzman), Princeton University Press 2015, among others a Top 15 McKinsey Financial Times Business Book of the Year 2015. For more: gwagner.com.

other participants

ENZO AMENDOLA

Minister for European Affairs

SILVIA BENCIVELLI

Doctor and scientific journalist

LAURENCE BOONE

Chief Economist at OECD

ELEONORA BROCCARDO

Associate Professor, Department of Economics and Management, University of Trento

SIMONE CASALINI

Journalist with "Il Corriere del Trentino"

MAURO CASELLI

Researcher, Department of Economics and Management and the School of International Studies, University of Trento

INNOCENZO CIPOLLETTA

President of ASSONIME and AIFI

PAOLO COLLINI

Rector of the University of Trento

GIUSEPPE CONTE

Prime Minister

LAURA COZZI

Chief Energy Modeller, IEA - International Energy Agency

MASSIMO DEANDREIS

President of GEI

GREGORIO DE FELICE

Head of Research and Chief Economist of Intesa Sanpaolo

ELISA DOSSI

Journalist with Rai

DOMENICO FAVUZZI

Chairman and Managing Director of Exprivia

THOMAS FERGUSON

INET - Institute for New Economic Thinking

ELENA FLOR

Head of Corporate Social Responsibility, Intesa Sanpaolo

MARINA FORTI

An actor and journalist, she writes for the "Internazionale"

ROBERTO GABRIELE

Professor of Applied Economics, Department of Economics and Management,
University of Trento

MATTEO GADDI

Fondazione Claudio Sabattini

EDOARDO GAFFEO

Full Professor, Department of Economics and Management, University of Trento

MASSIMO GAGGI

Journalist with the "Corriere della Sera"

MARZIO GALEOTTI

Full Professor of Energy and Environmental Economics, University of Milan

MICHELE GAMBERINI

Chief Technology & Information Officer, TIM

NADIA GARBELLINI

Fondazione Claudio Sabattini

ALEXANDRA GEESE

Member of the European Parliament – German Greens

ANDREA GOLDSTEIN

Senior Economist, OECD

PAOLO GUERRIERI

Italian economist and politician

ROBERT JOHNSON

President of INET - Institute for New Economic Thinking

ALESSANDRA LANZA

Senior Partner, Prometeia

GIUSEPPE LATERZA

Publisher

ENRICO LETTA

Head of the School of International Affairs at the Institute of Political Studies in Paris

GIANLUCA MANCA

Sustainability Manager for Eurizon Capital SGR - Gruppo Intesa Sanpaolo

MASSIMO MARINACCI

Full Professor at the Department of Decision Sciences, Bocconi University in Milan

TONIA MASTROBUONI

Journalist and Berlin correspondent for "la Repubblica"

MARIA CONCETTA MATTEI

Journalist with Tg2

PAOLO MICHELETTO

Journalist with the "L'Adige"

MARCO MOTTA

Editor and presenter of the radio programme *Radio 3 Scienza* - Rai Radio3

STEFANO NESPOR

Lawyer and journalist

ALBERTO NUCCIARELLI

Associate Professor, Department of Economics and Management, University of Trento

EUGENIO OCCORSIO

Journalist with "la Repubblica" and "L'Espresso"

LUCA ORLANDO

Journalist with "Il Sole 24 Ore"

PIER CARLO PADOAN

Economist, politician and academic

LORIANA PELIZZON

Associate Professor of Economics, Ca' Foscari University in Venice, and Chair of Law and Finance, SAFE Goethe University in Frankfurt

DIEGO PERCOPO

CEO, EF Solare Italia

ROBERTO PEROTTI

Economist

DINO PESOLE

Journalist with "Il Sole 24 Ore"

LUCA PETERMAIER

Journalist with "Il Trentino"

PAOLA PICA

Journalist with "Il Corriere della Sera"

STEFANO POGUTZ

Researcher, Department of Management and Technology, Bocconi University in Milan

CARLO POLEDRINI

President of Fondazione Fondirigenti G. Taliercio

RYAN RAFATY

Climate Econometrics, Nuffield College, University of Oxford

GIUSEPPE RICCI

Director Green and Traditional Refining & Marketing, ENI

SERGIO RIZZO

Journalist and writer

ELISABETTA ROSASPINA

Journalist with "Il Corriere della Sera"

SALVATORE ROSSI

Chairman of TIM

LINDA LAURA SABBADINI

General Director of ISTAT

ELLY SCHLEIN

Vice-President of the Emilia-Romagna Region

ANNA SCUTTARI

Senior Researcher at the Eurac Research Center for Advanced Studies (Bolzano)

MARIA LUGIA SEGNANA

Full Professor, Department of Economics and Management, University of Trento

ANNAMARIA SIMONAZZI

Professor of Political Economy and History of Economic Analysis, "La Sapienza" University, Rome

MICHAEL SPENCE

Economist, Nobel Prize for Economics in 2001

VALERIA TERMINI

Full Professor di Political Economy, Roma Tre University

NINO TRONCHETTI PROVERA

Managing Partner & Founder, Ambienta SGR

CHIARA VALERIO

Writer, editor and radio presenter

MASSIMILIANO VATIERO

Researcher at the Department of Economics and Management, University of Trento

ALBERTO VIANO

Managing Director of LeasePlan Italia

LEIF WENAR

Holder of the Chair of Philosophy and Law at King's College London

NATALIE WESTERBARKEY

Director and Head of EU Public Policy, Fidelity International

EDOARDO ZANCHINI

National Vice-President of Legambiente