



UNIVERSITY OF  
HOHENHEIM

**200**  
1818  
2018  
YEARS

# The Economics of Ageing and Inequality

Program and Abstract Book

May 4 – 5, 2018



# INEPA

# Host:

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UNIVERSITY OF  
HOHENHEIM

**200** YEARS  
1818-2018

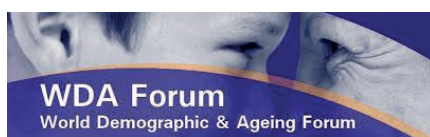
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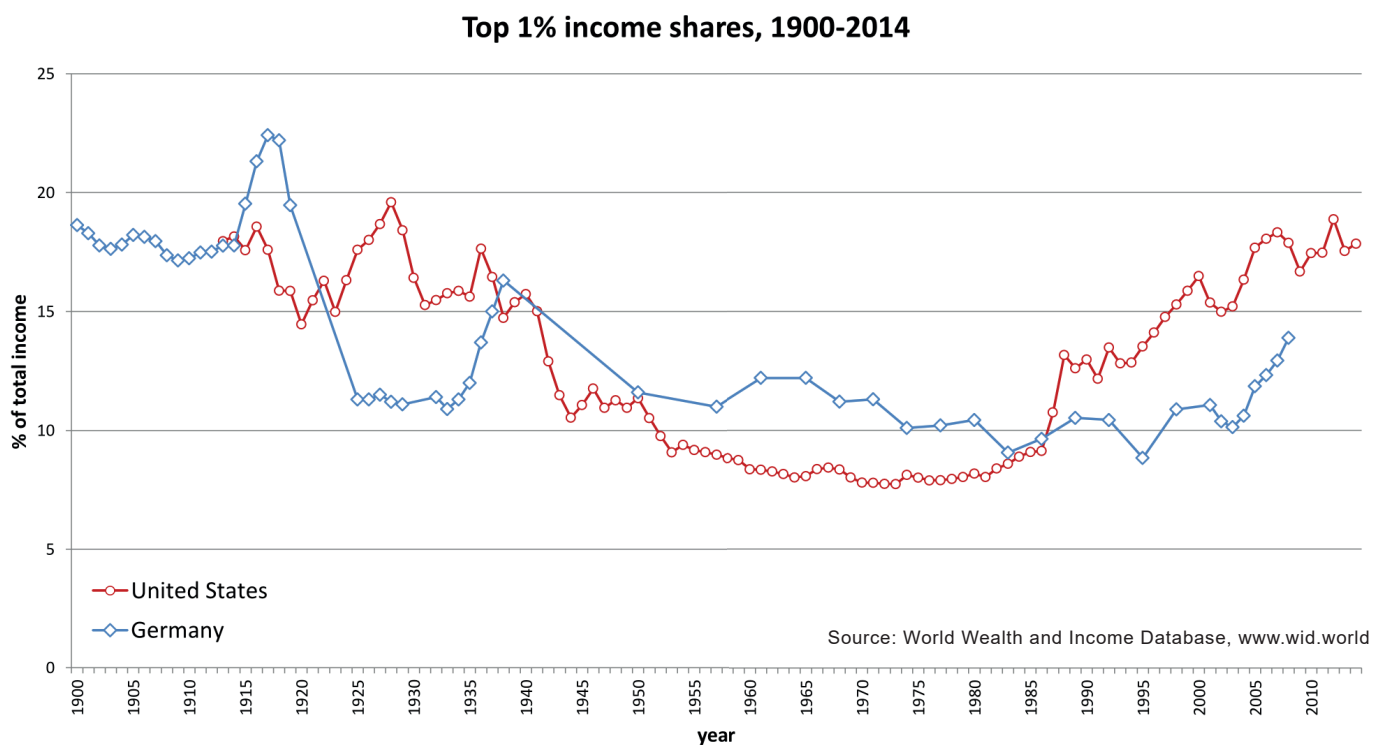
**HARVARD**  
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**SCHOOL OF PUBLIC HEALTH**  
Department of Global Health  
and Population

# Welcome to the Workshop on “The Economics of Ageing and Inequality”

as part of the “Next World Program” and “INEPA”

May 4 – 5, 2018, University of Hohenheim, Stuttgart



With support from:

Hohenheim Research Center for Health Sciences  
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# University of Hohenheim

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Founded in 1818 after devastating famines, the University of Hohenheim is not only engaged in intensive basic research but has traditionally also been committed to developing innovative solutions for some of society's pressing problems. To do so, the University of Hohenheim engages in a combination of scientific disciplines that is unique among German universities.

Today, the University of Hohenheim is the leading University in agricultural research and food sciences, as well as strong and unparalleled in natural, social, business, economic, and communication sciences. The combination makes it possible to find solutions for many global challenges.

For more information, visit  
[www.uni-hohenheim.de](http://www.uni-hohenheim.de)

## Hohenheim Research Center for Health Sciences

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The Hohenheim Research Center for Health Sciences provides a dynamic platform for researchers, lecturers, young scientists and students dedicated to life science and societal health topics and promotes high-level research across several disciplines in accordance with the modified „One Health“ concept by

- joining expertise, e.g. in biology, immunology, health care and medicine, agriculture and food sciences, economics and social sciences
- building bridges between bench scientists, clinical investigators, health researchers, business and public stakeholders

- strengthening national and international research networks for exchange and productive partnerships
- obtaining funds for integrated research projects focusing on major scientific and societal topics, including e.g. growth, development, demographic change, lifestyle, nutrition, aging as well as their social and economic impact.

For more information about the Research Center, visit  
[www.health.uni-hohenheim.de](http://www.health.uni-hohenheim.de)

# “Next World Program“

The Next World Program is a joint initiative of Harvard University’s Program on the Global Demography of Ageing, the WDA Forum, Stanford University’s AHPP, Fudan University’s Comparative Ageing Societies, and the University of Hohenheim. These institutions organize an annual workshop and a special issue in the Journal of the Economics of Ageing on an important economic theme related to ageing societies.

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## Research network “INEPA”

The research network “Inequality and Economic Policy Analysis (INEPA)” is an initiative of the Faculty of Business, Economics, and Social Sciences at the University of Hohenheim to connect researchers with various backgrounds and from different fields to conduct cutting edge research on the causes and consequences of inequality and on potential policy measures to mitigate the negative effects of inequality. Within this framework the University offers a Master’s Program with a focus on the Economics of Inequality, and publishes an inequality-related discussion paper series. The INEPA research network is growing and now includes scientists from the University of Hohenheim, University of Tübingen, Institute for Applied Economic Research (IAW) and Nuertingen-Geislingen University (HfWU).

### **The key scientific goals of the INEPA research network are to**

1. uncover mechanisms that drive economic inequality and quantify their empirical relevance in the past and in the present;
2. quantify the extent to which inequality hampers/fosters the well-being of the society;
3. identify economic policies that help to mitigate the negative consequences of inequality and evaluate their effects on other socio-economic outcomes;
4. develop new methods for a more precise analysis of inequality;
5. disseminate the knowledge and increase awareness.

The successful work on the research agenda benefits from the formal collaboration between the partner institutions because of the

- pooling of the strong existing expertise of the cooperation partners in various subfields to analyze the causes and consequences of inequality and the potential redistributive effects of economic policies from a large variety of different relevant angles;
- complementarity between the methodological competencies of the partners in (i) the formal mathematical modelling of long-run growth, globalization, and the evolution of inequality, (ii) the numerical implementation of these frameworks to quantify the relevant effects for the proper information of policy makers and public stakeholders, and (iii) the econometric analysis of the corresponding implications on micro- and macroeconomic data;
- pooling of resources [e.g., Data Laboratory Hohenheim (DALAHO)] for the acquisition and sharing of data;
- competence of the partners in the transfer of knowledge and in the dissemination of research results.

For more information about INEPA, visit  
[www.inepa.uni-hohenheim.de](http://www.inepa.uni-hohenheim.de)

**INEPA**

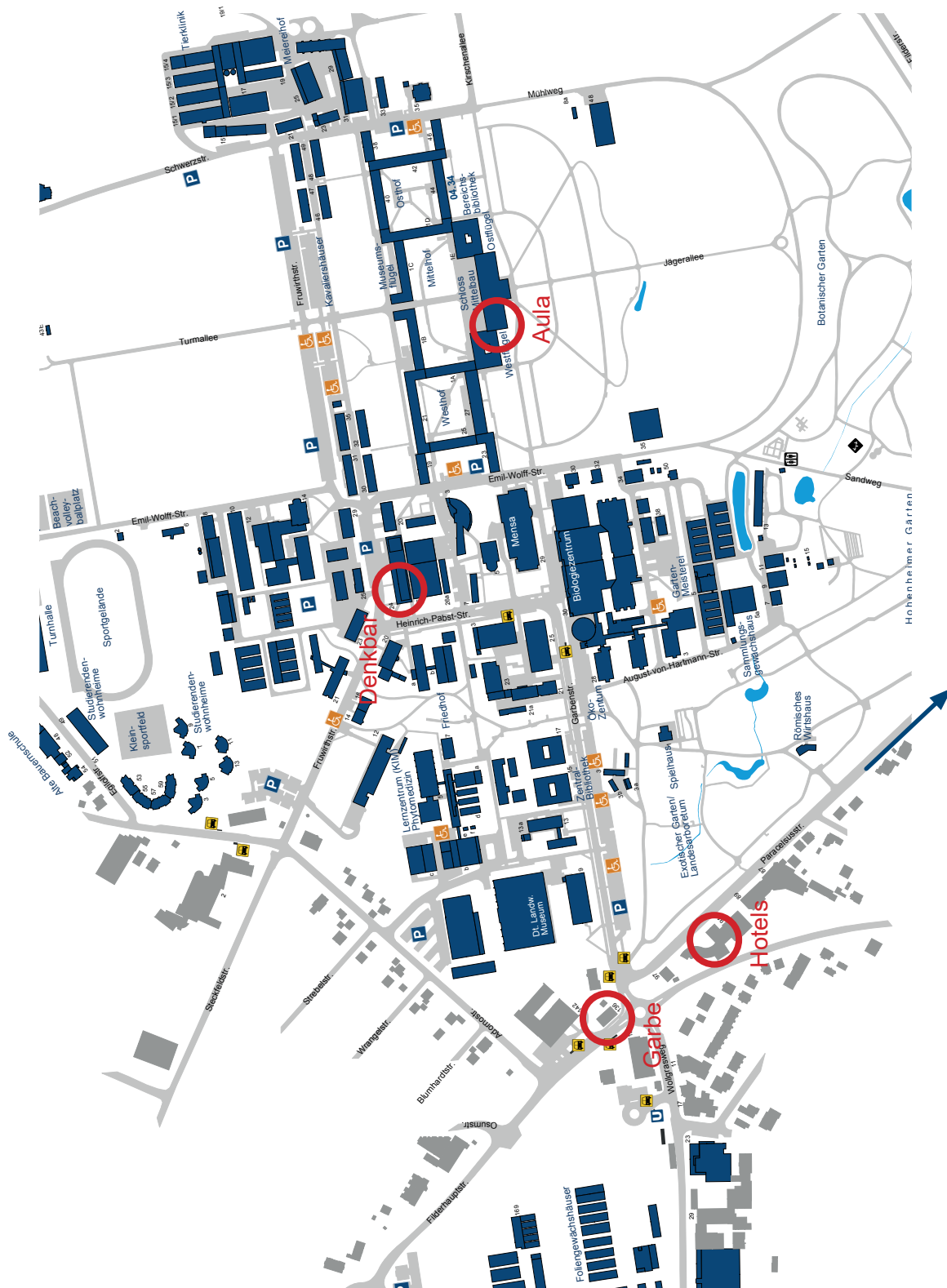


# Venue

Schloss Hohenheim 1

Lunch (Friday): Café Denkbar, Fruwirthstrasse 24

Dinner (Friday): Wirtshaus Garbe, Filderhauptstrasse 136



to Airport and Highway

# Program

## FRIDAY, MAY 4, 2018 (DAY 1)

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### — REGISTRATION AND WELCOME

- 08:00 Registration and coffee
- 08:45 Welcome address: Andreas Pyka, Vice-President, University of Hohenheim, Germany
- 09:00 Opening Keynote: David E. Bloom, Harvard T.H. Chan School of Public Health, USA  
Introduction by Alfonso Sousa-Poza, University of Hohenheim, Germany
- 10:15 Coffee break

### — SESSION 1:

#### Ageing & Health Inequality

- Chair: Alfonso Sousa-Poza, University of Hohenheim, Germany
- 10:30 Ivan Frankovic and Michael Kuhn, Vienna Institute of Demography, Austria  
**The impact of medical innovations on longevity inequality**  
*Discussant: Torben Klarl, University of Bremen, Germany*
- 11:30 Peter Hudomiet, Michael D. Hurd, and Susann Rohwedder, RAND, USA  
**Health inequalities: the relationship between socio-economic status and dementia**  
*Discussant: Aderonke Osikominu, University of Hohenheim, Germany*
- 12:30 Lunch break

### — SESSION 2:

#### Ageing & Inequality in Pension Schemes

- Chair: Klaus Prettnner, University of Hohenheim, Germany
- 14:00 Peter Haan, German Institute for Economic Research, DIW Berlin, Germany  
**The role of entry age and timing of pension benefits in partial retirement**  
*Discussant: Markus Knell, Oesterreichische Nationalbank, Austria*
- 15:00 Ronald Lee, University of California at Berkeley, Alexia Fürnkranz-Prskawetz, and Miguel Sanchez-Romero, Vienna Institute of Demography, Austria  
**Redistributive effects of pension schemes if individuals differ by life expectancy**  
*Discussant: Natalie Laub, University of Freiburg, Germany*
- 16:00 Coffee break



### — SESSION 3:

#### **Ageing & Health Inequality II**

**Chair:** Mirjam Reutter, University of Hohenheim, Germany

- 16:30** Volker Grossmann, University of Fribourg, Switzerland and Holger Strulik, University of Göttingen, Germany  
**The suffering middle class, rising health inequality, and the role of the welfare state**  
*Discussant: Michael Kuhn, Vienna Institute of Demography, Austria*
- 17:30** Ray Miller and Neha Bairoliya, Harvard Center for Population and Development Studies, USA and David Canning, Harvard T.H. Chan School of Public Health, USA  
**Health, longevity, and welfare inequality of the elderly**  
*Discussant: Rainer Kotschy, University of Munich, Germany*
- 19:30** **Elsevier Dinner and Award Ceremony of the Young Economist Prize for the Best Paper**

## SATURDAY, MAY 5, 2018 (DAY 2)

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### — SESSION 4:

#### **Ageing & Health Inequality III**

**Chair:** Gregor Pfeifer, University of Hohenheim, Germany

- 09:00** Ana Lucia Abeliowsky and Holger Strulik, University of Göttingen, Germany  
**Hungry children age faster**  
*Discussant: Hamid Oskorouchi, University of Hohenheim, Germany*
- 10:00** Holger Strulik, University of Göttingen, Germany  
**Limited self-control and longevity**  
*Discussant: Maik T. Schneider, University of Bath, United Kingdom*
- 11:00** Coffee break
- 11:30** **Keynote: Alexia Fürnkranz-Prskawetz, Vienna Institute of Demography, Austria**  
**National Transfer Accounts (NTA): structure, diversity and inequality in the economic life cycle**  
Introduction by Klaus Prettner, University of Hohenheim, Germany
- 12:30** Lunch break

### — SESSION 5:

#### **Ageing, Income Inequality and Public Transfers**

**Chair:** Kristina Strohmaier, University of Tübingen, Germany

- 14:00** Doris Prammer, Oesterreichische Nationalbank, Austria  
**Population ageing: How does it impact on personal income taxes and social security contributions?**  
*Discussant: Andreas Schaefer, University of Bath, United Kingdom*
- 15:00** Feng Wang, Ke Shen, Fudan University, China, and Yong Cai, University of North Carolina, Chapel Hill, USA  
**Expansion of public transfers in China: Who are the beneficiaries?**  
*Discussant: Peng Nie, Xi'an Jiaotong University, China*
- 16:00** Wrap-Up

# Keynote Speakers

## **DAVID E. BLOOM**

Harvard T.H.Chan School of Public Health, USA  
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Dr. David E. Bloom is Clarence James Gamble Professor of Economics and Demography in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health. Dr. Bloom is an economist whose work focuses on health, demography, education, and labor. In recent years, he has written extensively on primary, secondary, and tertiary education in developing countries and on the links among health status, population dynamics, and economic growth. Dr. Bloom has published over 300 articles, book chapters, and books.

Dr. Bloom has previously been a member of the public policy faculty at Carnegie-Mellon University and the economics faculty at Columbia University and Harvard University. He currently serves as a Faculty Research Associate at the National Bureau of Economic Research and is a member of the Board of Directors of PSI and of the Board of Trustees of am-



fAR, the Foundation for AIDS Research. Dr. Bloom also serves as Director of Harvard's Program on the Global Demography of Ageing. In April 2005, Dr. Bloom was elected Fellow of the American Academy of Arts and Sciences. Dr. Bloom received a BS in Industrial and Labor Relations from Cornell University in 1976 and a PhD in Economics and Demography from Princeton University in 1981.

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## **ALEXIA FÜRNKRANZ-PRSKAWETZ**

Institute of Statistics and Mathematical Methods in Economics, TU Wien, Austria  
Vienna Institute of Demography,  
Wittgenstein Centre (IIASA, VID, OAW, WU), Austria  
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Alexia Fürnkranz-Prskawetz is Professor of Mathematical Economics at the Vienna University of Technology and Executive Director at the Vienna Institute of Demography, Austrian Academy of Sciences. Since July 2013 she has been also research associate at the International Institute of Applied Systems Analysis, Laxenburg, Austria. After her study of Technical Mathematics and postgraduate study as Fulbright scholarship holder at the University of Chicago she joined the Austrian Academy of Sciences as research assistant in 1992. In 1998 she received the Venia for "Population Economics and Applied Econometrics" at the Vienna University of Technology. From October 1998 she was head of an independent research group on "Population, Economy and Environment" at the Max Planck Institute for Demography, Rostock. From 2003 she was deputy director of the Vienna Institute of Demography (VID), Austrian Academy of Sciences and head of the research group on Population Economics at VID. She is member of different demographic and economic



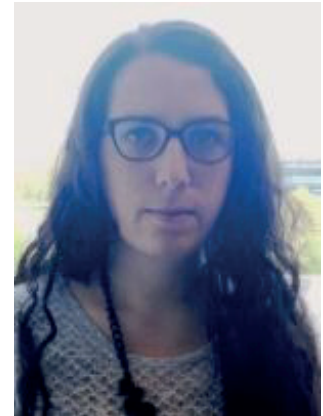
societies and referee of several international journals (Demographic Research, Journal of Economic Growth etc.). In 2007 she was elected corresponding and 2011 full member of the Austrian Academy of Sciences. In 2015 she was elected as member of Leopoldina (Nationale Akademie der Wissenschaften).

Her main areas of research are in the economic consequences of population and individual ageing, long run economic growth, fertility dynamics and female labor force participation and agent-based computational demography. During the last years she won several research proposals that aim to investigate the complex interrelationship between the ageing process and economic performance.

# Speakers and Abstracts

## **ANA LUCIA ABELIANSKY**

University of Göttingen, Department of Economics, Germany  
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Dr. Ana Lucia Abeliansky is a Post-doctoral researcher at the University of Göttingen. Before joining the University of Göttingen to conduct her PhD, she studied at the London School of Economics, University of Antwerp, Prague School of Economics, Staffordshire University and the University of Buenos Aires. She has also worked as research analyst at Crisil Irevna (a Standard and Poors' company) in Buenos Aires, and as an economist at the Centro de Estrategias de Estado y Mercado (Buenos Aires) collaborating in several consultancy projects. Her work focuses on different topics that include health and aging, new technologies (information and communication technologies, 3D printing, and automation), international economics, and economic development. Her work has been published in international journals, such as *Demography*. Dr. Abeliansky obtained her PhD in 2016.

## **Hungry children age faster**

### **ANA LUCIA ABELIANSKY, HOLGER STRULIK**

University of Göttingen, Department of Economics, Germany

We analyze how childhood hunger affects human aging for a panel of European individuals. For this purpose, we use six waves of the Survey of Health, Aging, and Retirement in Europe (SHARE) dataset and construct a health deficit index. Results from log-linear regressions suggest that, on average, elderly European men and women developed about 20 percent more health deficits when they experienced a hunger episode in their childhood. The effect becomes larger when the hunger episode is experienced earlier in childhood. In non-linear regressions (akin to the Gompertz-Makeham law), we obtain greater effects suggesting that health deficits in old age are up to 40 percent higher for children suffering from hunger. The difference of health deficits between hungry and non-hungry individuals increases absolutely and relatively with age. This implies that individuals who suffered from hunger as children age faster.

# Speakers and Abstracts

## **IVAN FRANKOVIC**

Vienna Institute of Demography,  
Wittgenstein Centre (IIASA, VID/OAW, WU), Austria  
ivan.frankovic@oeaw.ac.at



Ivan Frankovic is a Research Scholar at the Vienna Institute of Demography (since October 2014) and works as an Economic Advisor in the Norwegian Ministry of Finance (since December 2017). In his research he studies the impact of medical progress, insurance expansion and climate change on health care expenditures, their interactions with the overall economy as well as their implications for welfare and mortality inequality. His main focus lies on the mathematical modelling of these processes as well as their numerical simulation. Ivan Frankovic worked with Michael Kuhn on the Austrian Science Fund (ASF) stand-alone project “Medical Progress, Health Expenditure, and Population Ageing” (2014-2017).

Mr. Frankovic completed his doctorate at the Technical University of Vienna in 2017. He received his M.Sc. degree in Mathematics from the University of Regensburg in 2013. From 2013 to 2014 he worked in San Francisco for a health-care policy consultancy.

## **The impact of medical innovations on longevity inequality**

### **IVAN FRANKOVIC, MICHAEL KUHN**

Vienna Institute of Demography, Wittgenstein Centre (IIASA, VID/OAW, WU), Austria

We study medical progress and skill-biased productivity growth as drivers of longevity inequality from a theoretical life-cycle as well as from a macroeconomic perspective. To do so, we develop an overlapping generation model populated by heterogeneous agents subject to endogenous mortality. We model two groups of individuals for whom differences in skills translate into differences in income and in the ability to use medical technology effectively in curbing mortality. We derive the age-specific individual demand for health care based on the value of life, the level of medical technology and the market prices. Calibrating the model to the development of the US economy and the longevity gap between the skilled and unskilled, we study the impact of rising effectiveness of medical care in improving individual health and examine how disparities in health care demand and mortality emerge as a consequence. Furthermore, we explore the role of differential income growth. We pay particular attention to the macroeconomic feedback from price changes, especially to medical price inflation.

# Speakers and Abstracts

## **VOLKER GROSSMANN**

University of Fribourg, Chair of Macroeconomics,  
International Industrial and Growth Policy, Switzerland  
volker.grossmann@unifr.ch



Volker Grossmann studied economics from 1991 to 1996 at the University of Bonn and University of California, Berkeley. In July 2000 he obtained his doctoral degree from the University of Regensburg. From 2000 to 2005 he was Assistant Professor at the University of Zurich. Since October 2005 he has been Professor at the University of Fribourg, Switzerland, where he holds the Chair for Macroeconomics. Since 2015 he has been serving as co-editor of the Swiss Journal of Economics and Statistics. His research interests include dynamic macroeconomics, economic growth, the economics of ageing, and economic inequality.

## **The suffering middle class, rising health inequality, and the role of the welfare state**

### **VOLKER GROSSMANN<sup>1</sup>, HOLGER STRULIK<sup>2</sup>**

<sup>1</sup> University of Fribourg, Chair of Macroeconomics, International Industrial and Growth Policy, Switzerland

<sup>2</sup> University of Göttingen, Department of Economics, Germany

Empirical evidence for the US suggests a substantial deterioration of the health status of middle-aged workers with deteriorating labor market opportunities. We propose a task-based labor market model with endogenous health status that depends on stress levels associated with declining relative income (capturing social comparisons) and endogenous health expenditure. Consumption of intoxicants may mitigate negative feelings associated with poor health status and low income. We study the effects of offshoring and automation of jobs with medium-skill requirements on the distribution of income, health expenditure, health status, and the consumption of intoxicants (extensive and intensive margin) for different skill groups, conditional on the extent of the welfare state. We argue that the effects of outsourcing and automation on health status and consumption of intoxicants on the US middle-class are particularly pronounced relative to other advanced countries because of the less extensive US health insurance coverage for other than high-skilled workers.

# Speakers and Abstracts

## **PETER HAAN**

German Institute for Economic Research, DIW Berlin, Germany  
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Prof. Dr. Peter Haan is the head of department of Public Economics at DIW Berlin and Professor of Public Economics at Free University of Berlin. He studied Economics and Political Sciences at Albert-Ludwigs-University Freiburg, Humboldt University Berlin and University of Toronto. Peter Haan obtained his PhD degree in Economics with distinction (Supervisors: Prof. Viktor Steiner and Prof. Richard Blundell). He stayed as a Visiting Scholar at the Paris School of Economics, at the Institute for Fiscal Studies and at the UCL London. His research focuses on empirical analysis of the tax and social policies. He has published in refereed journals, such as in the Economic Journal, in the Journal of Health Economics and in the Econometrics Journal.

## **The role of entry age and timing of pension benefits in partial retirement**

### **PETER HAAN, SONGÜL TOLAN**

German Institute for Economic Research, DIW Berlin, Germany  
Free University of Berlin, Germany

In recent years policy-makers aim to incentivize later retirement entry by enabling more flexible transitions into retirement through partial retirement. However, empirical evidence shows that the employment and related fiscal effects of more flexibility in the pension system through partial retirement are ambiguous and strongly depend on the design of partial retirement regimes. Two margins are in particular important: (1) the entry age into partial retirement programs and (2) the timing of pension benefits in partial retirement prior to full retirement. Based on administrative data from Germany and using a dynamic structural retirement model this paper aims to analyze how variations in these two margins affect employment and fiscal balances. Our results show that partial retirement can lead to positive employment effects (a plus of up to 3.4% in employment volume) if the partial retirement entry age is equal to the ERA. Partial retirement also yields positive fiscal effects. This fiscal plus is higher under partial retirement regimes with earlier entry ages. Allowing for pension benefits in partial retirement can incentivize its take-up but limits to these early pension benefits in partial retirement are necessary to prevent substantial reductions in individual pensions.



# Speakers and Abstracts

## **PETER HUDOMIET**

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Peter Hudomiet (Ph.D., University of Michigan; M.A., Central European University) is an Associate Economist at the RAND Corporation in Santa Monica. He has expertise in the cognitive health and labor supply of older adults, and in applied econometric modelling. Currently he conducts research on estimating the lifetime risk and costs of dementia, trends in age-adjusted dementia prevalence in the U.S., retirement and mortality expectations of older adults, and non-traditional retirement trajectories. He has published in refereed journals, such as in the Journals of Gerontology, in the American Economic Journal: Economic Policy, and in the Journal of Labor Economics. He is a member of the American Economic Association and The Society of Labor Economists.

## **The lifetime risk of dementia and the distribution of lifetime out-of-pocket medical expenditures in the U.S.**

**PETER HUDOMIET<sup>1</sup>, MICHAEL HURD<sup>1, 2, 3</sup>, SUSANN ROHWEDDER<sup>1, 3</sup>**

<sup>1</sup> RAND Corporation, USA

<sup>2</sup> NBER, National Bureau of Economic Research, USA

<sup>3</sup> NETSPAR, Network for Studies on Pensions, Aging and Retirement, USA

Dementia is one of the most expensive diseases in the U.S. and it affects a significant share of the elderly population. The costs are borne by society via public programs such as Medicaid and by families and individuals. Many research papers estimate the prevalence of dementia defined as the fraction of the population affected by the disease; and the annual expenditures that can be attributed to dementia. From the perspective of society, the overall annual costs are important to know, but from the perspective of a family or individual, lifetime (as opposed to annual) costs are likely more relevant. In this paper, we take a lifetime perspective. First, we estimate the lifetime risk of dementia using a nationally representative longitudinal survey, the Health and Retirement Study (HRS). Second, we estimate cumulative lifetime expenditures that can be attributed to the onset of dementia. The lifetime expenditures are estimated by summing any out-of-pocket expenditures reported in the panel from age 65 to death. Right censored observations (mostly those who survive to the latest HRS wave) are imputed using a non-parametric matching method we call splicing: Survivors are matched to individuals with similar characteristics in older HRS cohorts, who were observed at the relevant ages (all the way through death). We find that 46.4% (s.e. 3.6%) of the 65+ year old sample died demented; 40.9% (s.e. 2.9%) was demented six months before death, and 29.8% was demented two years before death. The lifetime risk of dementia is significantly higher for females, the low educated, blacks, and the poor. Those who live with dementia for at least six months pay, on average, \$38,832 (s.e. \$5,655) more out of pocket from age 65 to death (in 2014 dollars, assuming a 0% discount rate) when length of life, demographics, socioeconomic status and comorbidities are controlled. The costs of dementia are almost exclusively due to spending on nursing homes. The effect of dementia on lifetime out-of-pocket expenditures is significantly larger for white and rich individuals, likely because they have more financial resources to spend before becoming eligible for support from Medicaid. Dementia also increases the probabilities of extremely high spending. The probability that individuals would spend more than \$100,000, which is around the 85th percentile of lifetime out-of-pocket spending distribution, increases by about 13.3 percentage points (s.e. 2.2 percentage point).

# Speakers and Abstracts

## **RAY MILLER**

Harvard Center for Population and Development Studies, USA  
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Ray Miller is a Postdoctoral Research Associate at the Harvard Center for Population and Development Studies and Research Fellow in the Program on the Global Demography of Aging. His research investigates the determinants and consequences of health disparities and social inequality. Research interests include the lasting impact of early health disparities, the welfare and economic implications of health insurance, and the inequality of health and economic well-being among the elderly. Dr. Miller received his doctorate in Economics from the University of Pittsburgh in 2015. He previously worked for the American Institutes for Research (2007-2010), a behavioral and social science research and evaluation organization in Washington DC.

## **Health disparities and the socioeconomic gradient in elderly life-cycle consumption**

**RAY MILLER<sup>1</sup>, NEHA BAIROLIYA<sup>1</sup>, DAVID CANNING<sup>2</sup>**

<sup>1</sup> Harvard Center for Population and Development Studies, USA

<sup>2</sup> Harvard T.H. Chan School of Public Health, USA

We quantify the importance of health disparities in explaining consumption differences at older ages by estimating a life-cycle dynamics model of elderly consumption, health, and mortality using data from the Health and Retirement Study. We use the estimated model and initial joint distribution of health and consumption to simulate elderly life-cycle paths and construct a measure of the net present value of expected remaining lifetime consumption at age sixty (NPVC). We first document a steep education gradient in elderly lifetime consumption. We then decompose the gradient in NPVC to quantify the effect of 1) differences in the health distribution at age sixty and 2) differential health and mortality transitions after age sixty. Our decomposition results suggest that roughly 12% of the education gradient in NPVC at age sixty can be explained by health differences.

# Speakers and Abstracts

## **DORIS PRAMMER**

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doris.prammer@oenb.at



Doris Prammer holds degrees in technical mathematics, business administration, and economics from the Technical University of Vienna, the Vienna University of Economics and Business, and the Institute for Advanced Studies, Vienna. Her dissertation at the Vienna University of Economics and Business deals with economic issues of taxation. Since 2000, she has been working as a public finance economist at the economic analysis division of the Oesterreichische Nationalbank. She was seconded as a national expert to the European Commission 2008-2013, where she contributed to the economic analysis of taxation in Directorate-General (DG) Taxation and Customs Union, especially dealing with the European Semester. Her research focuses on public finance issues, in particular fiscal forecasting, taxation and fiscal sustainability; she has published several articles on these topics in international journals.

## **Population ageing – How does it impact on personal income taxes and social security contributions?**

### **DORIS PRAMMER**

Oesterreichische Nationalbank, Austria

This paper analyses the impact of population ageing on the development of income taxes and social security contributions. The dynamic analysis shows that both, the average per capita tax liabilities, and the overall tax and social security revenues in percent of GDP will increase up to 2060 in Austria. The findings are driven by the combination of three components: i) the assumption of increasing per capital real wages and pension benefits, ii) demographic scenarios assuming an increasing population size, and iii) a newly estimated tax-to-base elasticity larger than one. However, the impact of population ageing on average per capita tax and social security liabilities is non-negligible: the counterfactual simulation estimates the loss to as much as 10%. The findings of the paper complement the information in the European Commission's Ageing Report, which lacked information on tax and social security revenues on pensions and hence on net pension expenditure for Austria.

# Speakers and Abstracts

## **MIGUEL SANCHEZ-ROMERO**

Institute of Statistics and Mathematical Methods in Economics,  
TU Wien, Austria

Vienna Institute of Demography,  
Wittgenstein Centre (IIASA, VID, OAW, WU), Austria  
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Miguel Sanchez-Romero obtained his PhD in Economics from Universidad Autónoma de Madrid (Spain) in December 2006. He was a Fulbright postdoctoral researcher under the supervision of Prof. Dr. Ronald D. Lee at the Center on Economics and Demography of Ageing (CEDA) at University of California, Berkeley (2008-2010). Before joining the Wittgenstein Centre (IIASA, VID/ÖAW and WU), Vienna Institute of Demography/Austrian Academy of Science in 2014, he worked as research scientist at the Max Planck Institute for Demographic Research (MPIDR) in Rostock, Germany. Miguel's main research interest deals with the effect of the interaction between demographic changes and intergenerational transfers on economic growth. To perform his analysis, he develops theoretical models as well as computable general equilibrium models that incorporate realistic demography and public and private transfers based on National Transfer Accounts (NTA) data.

## **Redistributive effects of pension schemes if individuals differ by life expectancy**

**MIGUEL SANCHEZ-ROMERO<sup>1, 3</sup>, RONALD D. LEE<sup>2</sup>, ALEXIA FÜRNKRANZ-PRSKAWETZ<sup>1, 3</sup>**

<sup>1</sup> Wittgenstein Centre of Demography and Global Human Capital (IIASA, VID, OAW, WU), Austria

<sup>2</sup> University of California, Berkeley (UCB), USA

<sup>3</sup> Institute of Statistics and Mathematical Methods in Economics, Research Unit Economics, TU Wien, Austria

Differences in life expectancy between high and low socioeconomic groups are often large and have widened in recent decades. In the US, this difference may now be as large as ten to 14 years. These longevity gaps strongly affect the actuarial fairness and progressivity of many public pension systems, raising the question of possible policy reforms to address this issue. In this paper we analyze the impact of three Notional Defined Contribution plans and three Defined Benefit plans (calibrated on the US case) on the redistribution of income when there exist longevity differences across socioeconomic groups.

# Speakers and Abstracts

## **HOLGER STRULIK**

University of Göttingen, Department of Economics, Germany  
holger.strulik@wiwi.uni-goettingen.de



Prof. Dr. Holger Strulik has been Head of the Chair for Macroeconomics and Development of the Georg-August University Göttingen since 2012. He studied Economics and obtained his PhD degree at the University of Göttingen. From 1994 to 2004, he was Assistant Professor at the University of Hamburg, where he in 2003 gained the Venia Legendi. After spending a few years as Associate Professor at the Department of Economics of the University of Copenhagen (2004-2006), he moved to the University of Hannover where he became a Full Professor of Macroeconomics in 2006.

He was also a Visiting Scholar at the Brown University, Providence (2009-2010) and at the University of Odense (2014), as well as Visiting Researcher at the University of Cambridge, UK (in 1999, Marie Curie Fellowship).

## **Limited self-control and longevity**

### **HOLGER STRULIK**

University of Göttingen, Department of Economics, Germany

This paper proposes a new framework to discuss self-control problems in the context of life-cycle health and longevity. Individual decisions are conceptualized as the partial control of impulsive desires of a short-run self (the limbic system) by a rationally forward-looking long-run self (the prefrontal cortex). The short-run self strives for immediate gratification through consumption of health-neutral and unhealthy goods. The long-run self reflects the long-term consequences of unhealthy behavior on health outcomes and longevity and invests time and money to improve current and future health. The model is calibrated with data from the U.S. and used to provide an assessment of the impact of imperfect self-control on unhealthy consumption, physical exercise, lifetime health, and the age at death. The model explains why poverty amplifies the incentive for impulsive unhealthy behavior. Limited self-control is thus identified as a potential pathway for the socioeconomic gradient of health and longevity.

# Speakers and Abstracts

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Feng Wang is professor of sociology at the University of California, Irvine and professor of sociology and demography at Fudan University in China. His main research interests include global, social and demographic changes, comparative population and social history, and social inequality, with a focus on China. He has studied many aspects of demographic and social changes, including fertility, marriage and family, famine and mortality, migration, population policy, income inequality, and population aging. He is the author of multiple books, and his research articles have been published in venues including *Population and Development Review*, *Demography*, *Science*, *The Journal of the Economics of Aging*, and *International Migration Review*. His work and views have also been covered by many media outlets, including *The New York Times*, *The Washington Post*, *Financial Times*, *The Guardian*, *Economist*, *NPR*, *CNN*, *BBC*, and others.

## **Expansion of public transfers in China: Who are the beneficiaries?**

**FENG WANG<sup>1,2</sup>, KE SHEN<sup>2</sup>, YONG CAI<sup>3</sup>**

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<sup>2</sup> Fudan University, Shanghai, China

<sup>3</sup> University of North Carolina, Chapel Hill, USA

Benefiting from unprecedented economic growth and revenue increase and faced with rapid population aging and public expectation of a social safety net, the Chinese government in the last decade and half vastly expanded its social welfare programs. Using the National Transfer Accounts (NTA) methodology and both micro-level survey data and macro-level government statistics, this paper examines distributional effects of China's expanded social welfare program across income groups and between generations. In absolute terms, the privileged members of the Chinese society and the elderly continued to receive more per capita public transfers in education, health care, and pension. The lower income groups, however, received more public transfers relative to their income. As a result, China's expanded social welfare programs helped to narrow the vast inequality gap, and between 2009 and 2014, the disparities in receiving public transfers between the top and the bottom income groups also narrowed considerably.



# Discussants

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After receiving his PhD in 2009, Torben Klarl worked as a postdoctoral researcher at Augsburg University, Germany. Since 2016, he has been working as a Professor for Macroeconomics at the University of Bremen, Germany. Torben Klarl is also a Research Fellow at the School of Public and Environmental Affairs (SPEA), Indiana University, Bloomington, USA. His research areas comprise sustainable macroeconomics with a focus on innovation, health (inequality) and the environmental sphere, housing as well as financial markets. For his research, he applies computational and modern empirical (Bayesian) approaches, such as wavelets or (Bayesian) dynamic factor models.

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Markus Knell is a research economist at the Economic Studies Division at the Oesterreichische Nationalbank in Vienna.

After his study of economics in Zurich, Vienna and San Diego, he worked as Assistant Professor at the Universities of Vienna and Zurich. His research focuses on macroeconomics, monetary policy, labor markets and wage-setting as well as on social security and pension systems and status and relative standing.

Next to economics he holds a Master in Social Sciences and a Doctor in Philosophy.

# Discussants

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Rainer Kotschy studied economics from 2008 to 2013 at the University of Munich, Germany and University of Oslo, Norway. He received his MSc degree with distinction and obtained his PhD in economics in 2018 at the University of Munich. He visited Harvard University's Program on the Global Demography of Aging (host: David Bloom) in 2017.

His research interests are in the fields of demographic and health economics, inequality and long-run development.

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## MICHAEL KUHN

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Michael Kuhn is (co-)leader of the research group on population economics at the Wittgenstein Centre (IIASA, VID/OEAW, WU) and Vienna Institute of Demography. Having received a doctorate in economics from the University of Rostock, in 2001 he has since held positions at the Centre of Health Economics, University of York, UK (1999-2004; lectureship) and at the Max-Planck-Institute for Demographic Research / University of Rostock, Germany (2005-2008; junior professorship). His research interests lie in the area of health and population economics. He has published, inter alia, in the Journal of Health Economics, Journal of Economic Theory, Economics Letters, Journal of Population Economics, Journal of Demographic Economics, Demographic Research and Theoretical Population Biology.

Having completed work on the Austrian Science Fund (ASF) stand-alone project "Medical Progress, Health Expenditure and Population Ageing" (2014-2017), he will from 2018 coinvestigate with Stefan Wrzacek the ASF project "Life-cycle behaviour in the face of large shocks to health". He is member of the special committees on "Health Economics" and "Population Economics" of the German Economic Association, associate editor of the Journal of the Economics of Ageing, and co-organiser of the 'European Workshop on Labour, Health and Education under Demographic Change' (since 2006).

# Discussants

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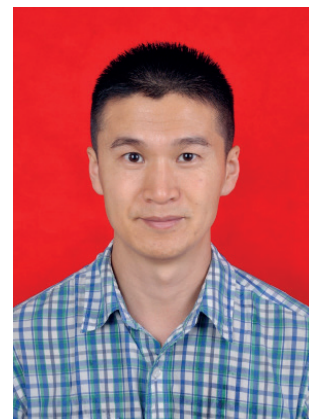


Natalie Laub received her Diploma (M.Sc. equivalent) in Economics from the University of Freiburg (Germany) in 2012. The title of her thesis was “Adequate and sustainable pension systems – A European comparative perspective”. Since 2012 she has been a PhD student/researcher at the Research Center for Generational Contracts (University of Freiburg, Germany). Her research interests are in the fields of social security, demography, pension systems and distributional effects of pension reforms.

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# Discussants

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Aderonke Osikominu is a Full Professor of Economics at University of Hohenheim where she also heads the Econometrics and Empirical Economics Group. Furthermore she works as a Senior Research Associate at the Institute for Employment Research (IAB), in Nuremberg. She studied Economics at the University of Paris and at the University of Mannheim. In 2008 she obtained her doctoral degree at Albert-Ludwigs-University Freiburg. She is a member of several committees of the German Economic Association, and a Research Affiliate at the Centre for Economic Policy Research (CEPR) in London and at the CESifo Research Network in Munich. She is Research Fellow at the Institute for the Study of Labor (IZA) in Bonn. Her research focuses on Applied Microeconometrics, Education, Labor Economics and Program Evaluation.

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Hamid Reza Oskorouchi is a Research Fellow in Economics at the University of Hohenheim, Germany, and a Consultant for the International Fund for Agricultural Development in Rome, Italy. He holds a Master Degree in Development Economics from the University of Florence (Italy) and will obtain his joint Ph.D. in Economics from the Universities of Hohenheim and Trento in 2018. His work is related to on Applied Development Microeconomics with particular focus on health, nutrition and fertility of population living in low- and middle-income countries. His most recent research projects and publications include studies on the effects of the Afghan conflict on child health and women's fertility, the relationship between floods, health and nutrition as well as how "Big Food" (large commercial entities that dominate the food and beverage environment) affects the obesity prevalence in South Africa. Hamid is specialized in constructing and analyzing satellite data for micro-econometric analysis as well as gathering information using data-mining techniques (e.g., Google, and Twitter APIs). He is member of the University of Hohenheim Inequality and Policy Analysis Research Area, and of several international economic associations, including American Economic Association, European Economic Association, Society of the Economics of the Household, European Society for Population Economics, Italian Economists Society, Italian Econometrics Society, and Italian Development Economists Association.

# Discussants

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Andreas Schaefer joined the Department of Economics in September 2017 as a Senior Lecturer. Previously, he was an Assistant Professor at ETH Zurich (Switzerland) and Leipzig University. Moreover, he joined the European University Institute in Florence for 6 months as a Jean Monnet Fellow and during several occasions the Vienna University of Technology (Institute for Mathematical Methods in Economics, Research Unit Economics) as a visiting scholar. Andreas Schaefer holds a Ph.D. in Economics from the University of Rostock (Germany) and a Master's Degree in Economics from the Leibniz University in Hannover (Germany). His main research interests lie in the fields of economic growth and development, environmental economics and economic inequality.

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Maik T. Schneider is an Associate Professor (Senior Lecturer) in Economics at the University of Bath. His research is driven by the question of how we can sustain and share prosperity in a globalized world and how we can design political institutions that deliver the highest welfare for all. Hence, his research interests are at the intersection of Economic Growth and Innovation, Political Economy, Public Finance and International Economics.

His work has been published in leading scientific journals such as the Journal of Monetary Economics, the Economic Journal, the Journal of Economic Growth, the European Economic Review and Games and Economic Behavior. He is a co-organizer of an annual scientific workshop in Political Economy and the Director of Research at the Economics Department at the University of Bath.

Maik T. Schneider studied Industrial Engineering at the Karlsruhe Institute of Technology (KIT), Germany. He earned a Ph.D. in Economics at the Ruprecht-Karls-University in Heidelberg, supported by a scholarship from the German National Science Foundation (DFG). Then he became a post-doctoral research fellow and later Assistant Professor at ETH Zurich, Switzerland, and was a visiting scholar at the Economics department at Stanford University, USA and at Nanyang Technical University (NTU) in Singapore.



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Alfonso Sousa-Poza studied computer science at the University of Cape Town and economics at the University of St. Gallen in Switzerland, from which he obtained his PhD in 1999.

His primary empirical research interests are in the fields of ageing, health, labour and population economics. He has published among others in the Journal of Health Economics, Journal of Population Ageing, Journal of Population Economics, Health Economics, and Labour Economics. He has worked regularly as an expert or consultant for institutions such as the World Bank, European Commission, OECD, Swiss Federal Statistical Office, Swiss National Science Foundation, Bertelsmann Foundation, Swiss Federal Department of Economic Affairs, UBS, Swisscom, Randstad, Avenir Suisse Foundation, Swiss Employers Association, as well as several law firms and courts.

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Klaus Prettnner joined the University of Hohenheim in 2015. Previously he held positions as an assistant professor at the Vienna University of Technology and at the University of Göttingen, as a postdoctoral research fellow at the Harvard Center for Population and Development Studies, and as a research scientist at the Austrian Academy of Sciences. His work is primarily concerned with the driving forces of long-run economic development, the interrelations between inequality and economic growth, and the economic consequences of automation. Klaus Prettnner obtained his habilitation in mathematical economics at the Vienna University of Technology in 2014 and his Ph.D. in economics at the University of Vienna in 2009.



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Jun.-Prof. Dr. Kristina Strohmaier is Assistant Professor of Public Economics at the University of Tübingen. Prior to taking this position in 2017, she has worked as a research assistant at the Ruhr-University Bochum and the University of Hohenheim. Her research interests comprise applied microeconomics in the areas of international tax competition, multinational firms, tax compliance, and the economics of education.

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