Role of Behavior for Inequality

Claus Thustrup Kreiner

Center for Economic Behavior and Inequality

Department of Economics
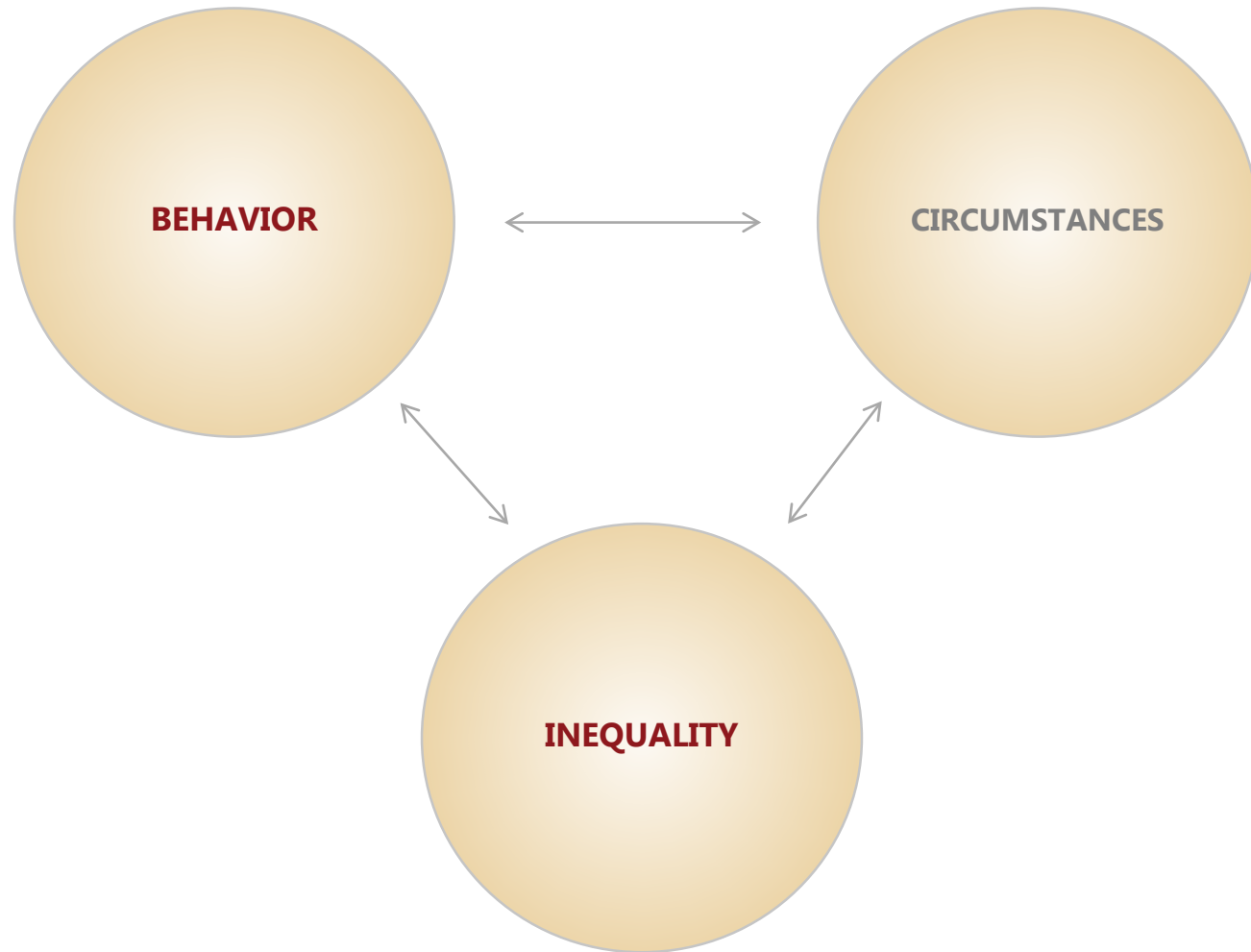
Professors' Symposium at UCPH
June 2022

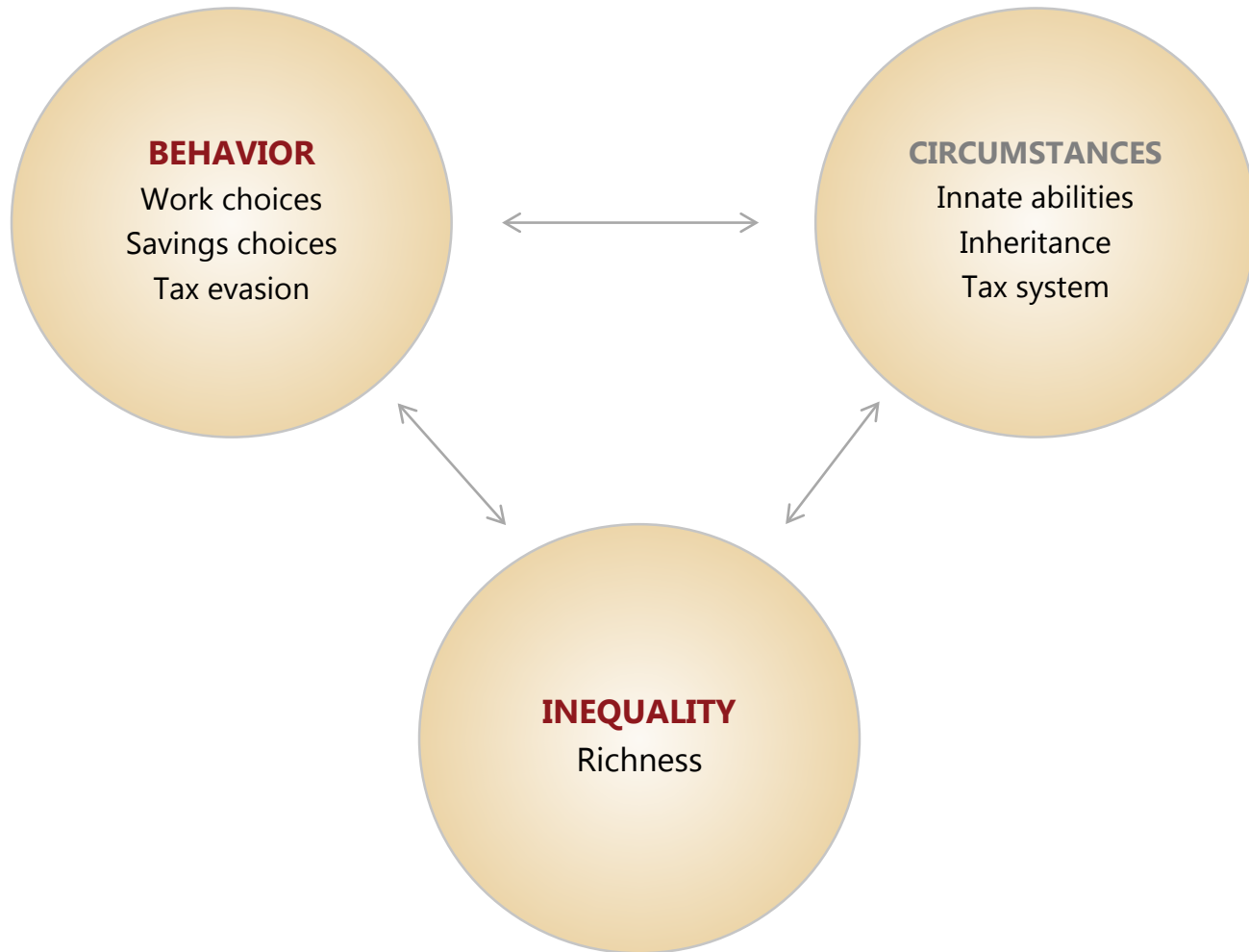# Inequality often at the center of public debates

- How much inequality?

- Sources of inequality?

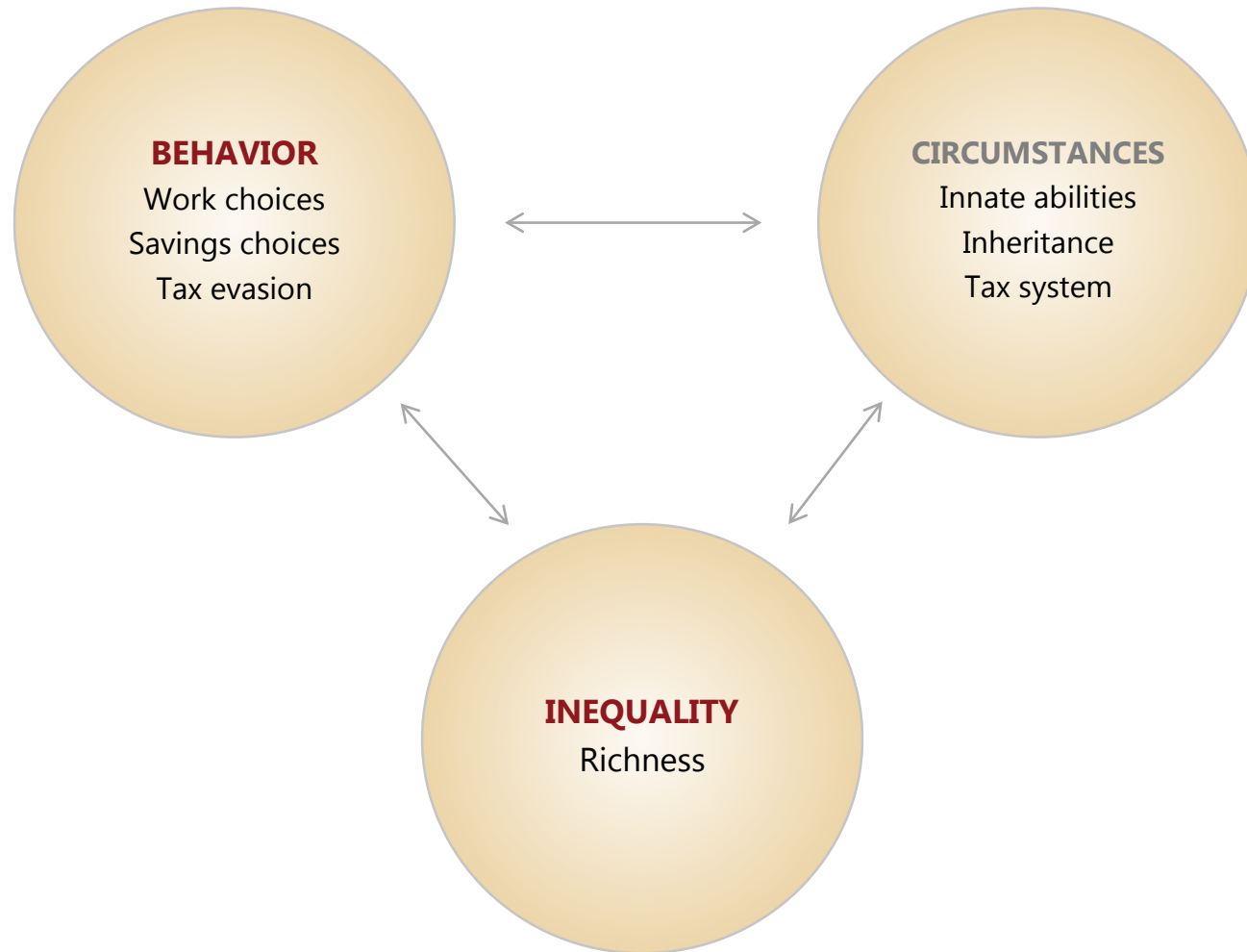- Fairness of inequality?

- Effects of public policy?

Center for **Economic Behavior** and **Inequality**

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BEHAVIOR
Work choices
Savings choices
Tax evasion

CIRCUMSTANCES
Innate abilities
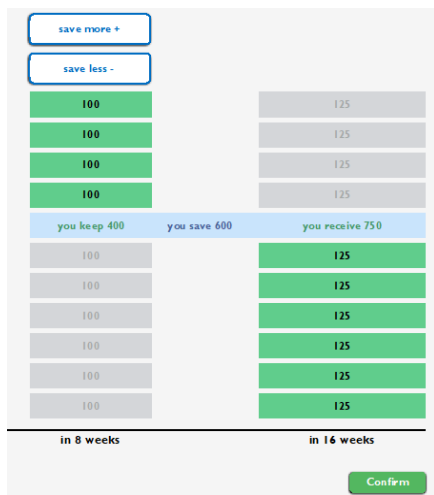Inheritance
Tax system

INEQUALITY
Richness

Many outcomes
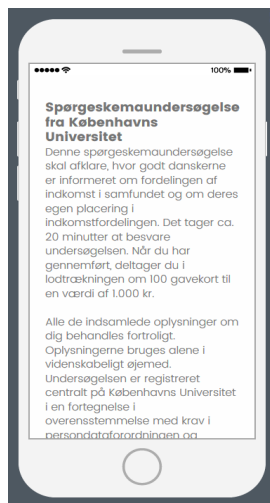Income, wealth, health, risk of getting into financial trouble, crime propensities…

Many types of inequality
Inequality within generations and across generations, top income shares, gender inequality…

Approach

Experiments
CEBI

Surveys
CEBI

Transaction data
Danske Bank
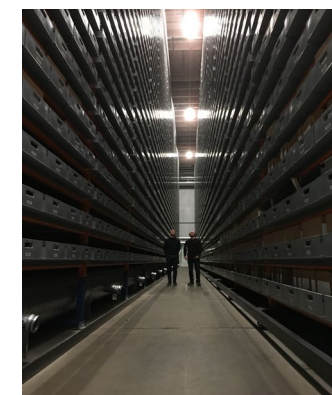
Archival data

Leaks from offshore
financial institutions

Administrative data
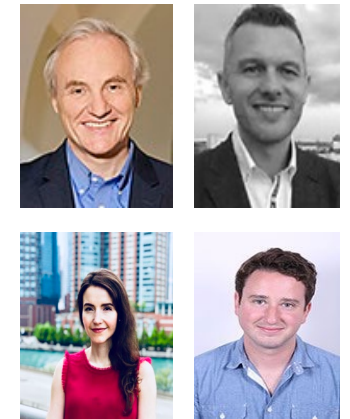Statistics Denmark

Delinquency on loan
Danish Tax agency (SKAT)

People

+ many collaborators

…

Many different fields: Public Economics, Labor Economics, Health Economics, Household Finance, Political Economy, Experimental Economics, Behavioral Economics, Microeconometrics, Structural Modelling…

Time Discounting and Wealth Inequality[†]

By Thomas Epper, Ernst Fehr, Helga Fehr-Duda,
Claus Thustrup Kreiner, David Dreyer Lassen, Søren Leth-Petersen,
and Gregers Nytoft Rasmussen*

This paper documents a large association between individuals' time discounting in incentivized experiments and their positions in the real-life wealth distribution derived from Danish high-quality administrative data for a large sample of middle-aged individuals. The association is stable over time, exists through the wealth distribution and remains large after controlling for education, income profit, school grades, initial wealth, parental wealth, credit con

Why some people are rich while others are poor is of fundamental interest in social science. Standard savings theory predicts that people who place a larger weight on future payoffs will be wealthier throughout the life cycle than more impatient people because of differences in savings behavior. Macroeconomic research suggests that this relationship between time discounting and wealth inequality can be quantitatively important and help explain why wealth inequality greatly exceeds

Wealth Inequality: Does Patience Play a Role?

Patient individuals are wealthier

Approach
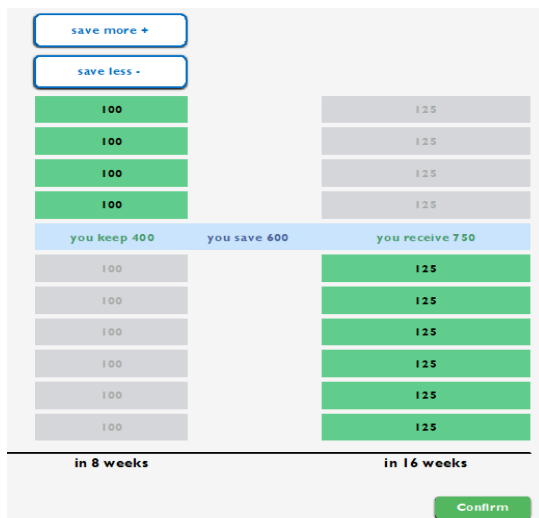
Experimentally elicited preference parameters linked to administrative records on wealth + …

Result

ASSOCIATION BETWEEN PATIENCE AND WEALTH
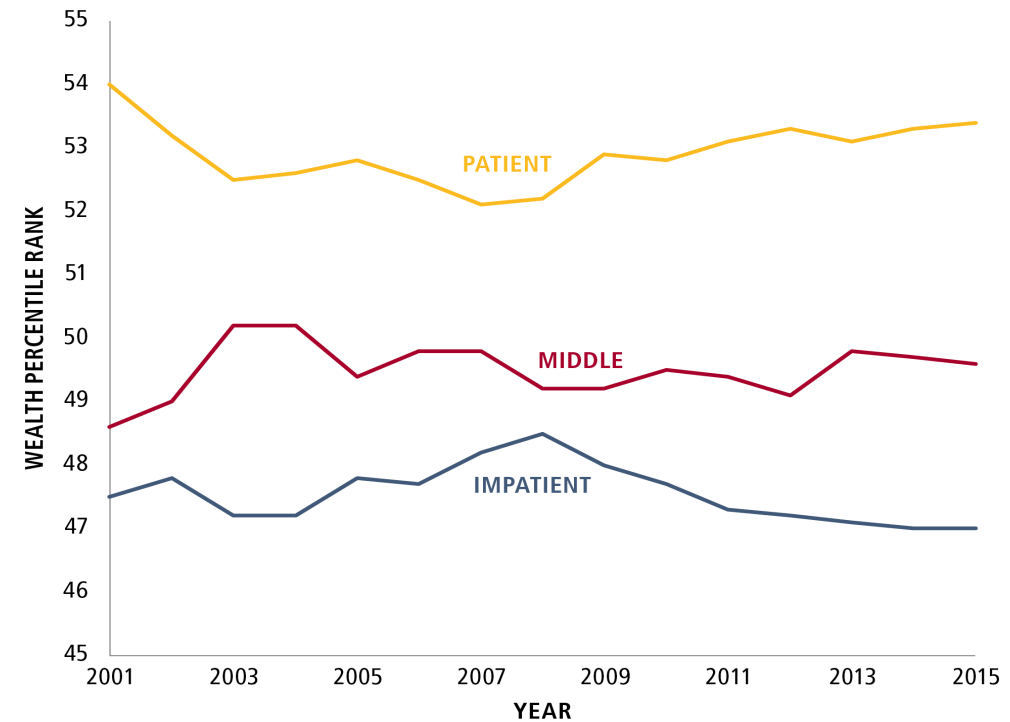
The graph shows the average position in the wealth distribution of three equally-sized patience groups of people over the years 2001-2015.

Tax Evasion and Inequality[†]

By ANNETTE ALSTADSÆTER, NIELS JOHANNESEN, AND GABRIEL ZUCMAN*

Drawing on a unique dataset of leaked customer lists from offshore financial institutions matched to administrative wealth records in Scandinavia, we show that offshore tax evasion is highly concentrated among the rich. The skewed distribution of offshore wealth implies high rates of tax evasion at the top: we find that the 0.01 percent richest households evade about 25 percent of their taxes. By contrast, tax evasion detected in stratified random tax audits is ~~less than 5 percent throughout the distribution~~. *Top wealth shares* ~~are~~ ...rted assets, highlight... ...to property measure*
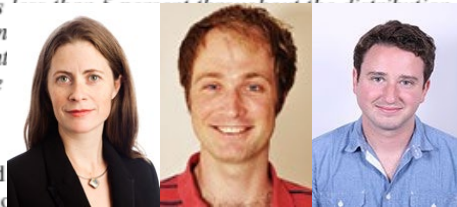
The size and ... ...tained interest and controversy am... ... ...ax evasion is done by the wealthy, a view fueled recently by high-profile leaks from offshore financial institutions such as the "Panama Papers." Others stress that poorer individuals may be more likely to evade taxes, highlighting fraud by the self-employed or abuse of refundable tax credits.

Who evades taxes, and how much, matters for both economists and policymakers. First, and most importantly, it matters for the study of inequality. Over the last 15 years, scholars have increasingly relied on tax data to study distributional issues, especially trends in top income and wealth shares (see Roine and Waldenström 2015, for a recent survey). Tax returns are the best available data source to study the top-end of the distribution, because they do not, contrary to surveys, suffer from sampling errors: everybody above a certain income level has to file a return. But they

Wealth Inequality: Role of Tax Evasion?

Large evasion rate by the very wealthy

Approach
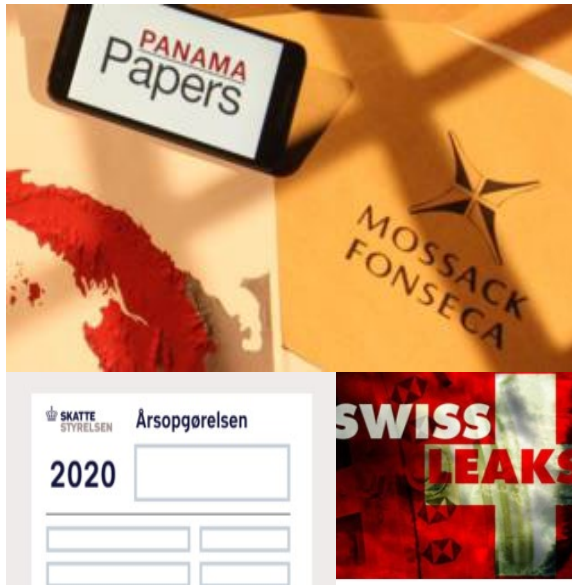
Leaks from offshore
financial institutions linked
to tax return records

Result

TAX EVASION BY WEALTH
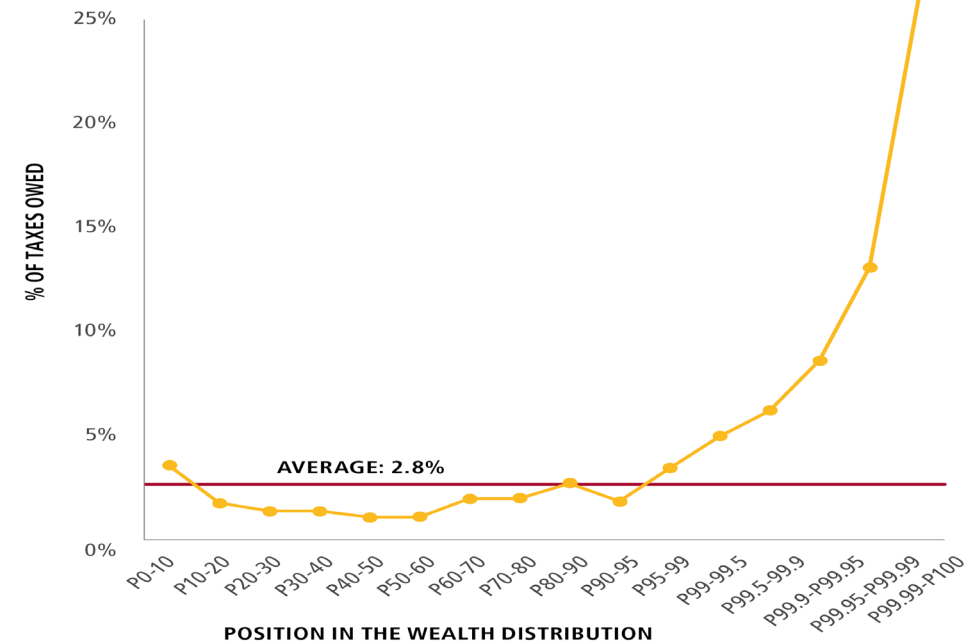
The graph shows the average tax evasion rate by percentile position of
people in the wealth distribution. The overall average is 2.8% as illus-
trated by the red line.

AIE improves tax compliance

Approach

CRS/FATCA reports +

Cross-border money transfers +

Tax return records +

Data from customized tax audits

Result

%-change in people who transfer>DKK 1 mill from foreign account to own account in DK (DiD estimate)
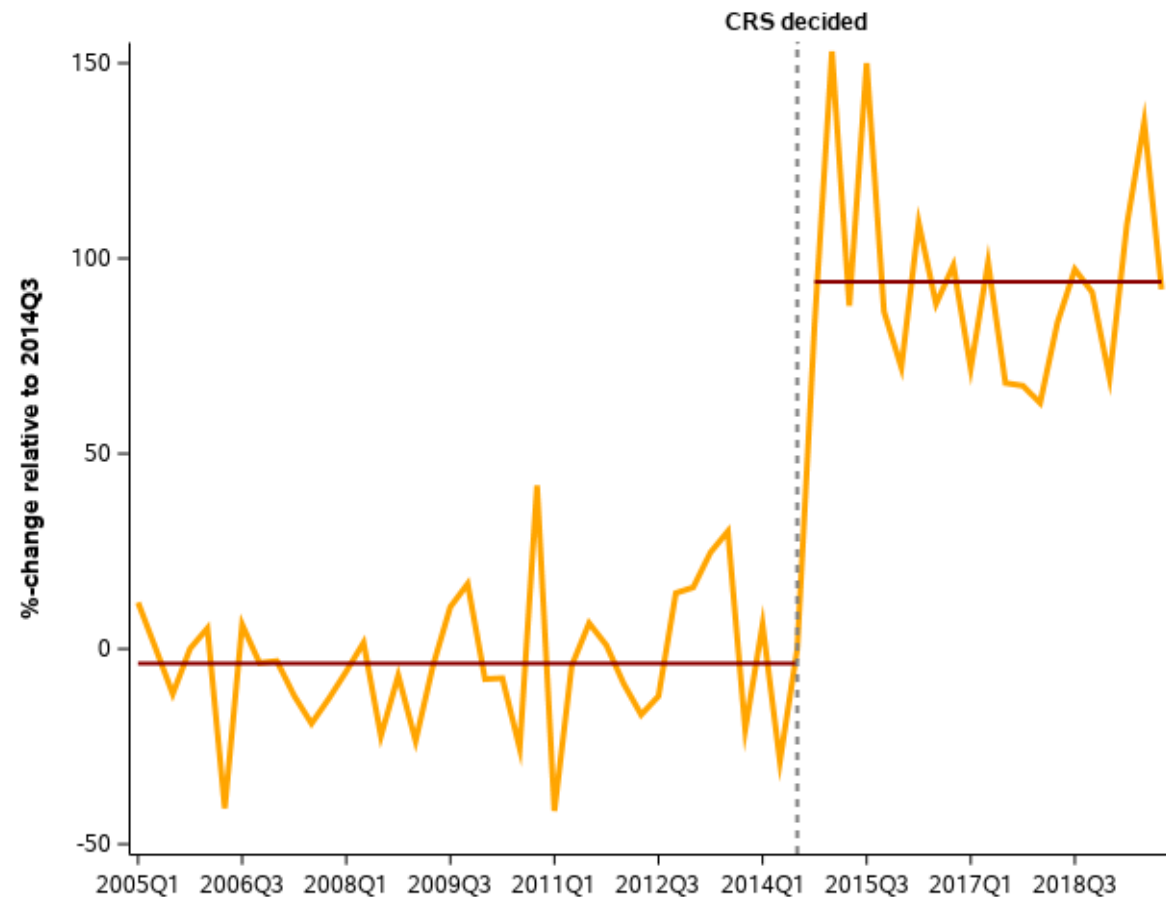
SOCIAL POSITIONS AND FAIRNESS VIEWS ON INEQUALITY

Kristoffer B. Hvidberg
Claus Kreiner
Stefanie Stantcheva

Perceptions about inequality and fairness of inequality?

People believe others are closer to themselves than they really are...

Approach
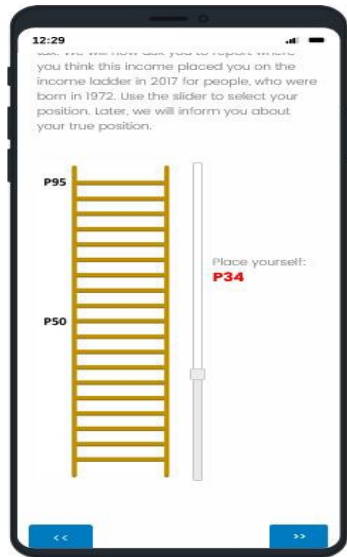
Survey data linked to administrative data on true income, income histories, reference groups, life shocks···

Result

What is the P50 income level of your cohort?

What is your income position within your co-workers?

Role of income mobility for the measurement of inequality in life expectancy

Claus Thustrup Kreiner[a,1], Torben Heien Nielsen[a], and Benjamin Ly Serena[a]

[a]Center for Economic Behavior and Inequality, Department of Economics, University of Copenhagen, 1353 Copenhagen, Denmark

This work proposes a method to compute the income gradient in period life expectancy that accounts for income mobility. Using income and mortality records of the Danish population over the period 1980–2013, we validate the method and provide estimates of the income gradient. The period life expectancy of individuals at a certain age, and belonging to a certain income class, is normally computed using the future mortality of older cohorts in the same income class. This neglects the fact that a substantial number of the individuals move away from their original income class in the following years. We improve the estimation by incorporating income mobility. Among 40-y-olds in the bottom 5% of the income distribution, the risk of dying before age 50 is 10 times larger than in the top 5% income class, but the two groups become much more alike in incorporating income mobility. Building on previous literature, we provide a method that predicts income mobility and future mortality simultaneously. With this method, the association between income and life expectancy is lower throughout the income distribution. Without accounting for income mobility, the estimated difference in life expectancy between persons in percentiles 20 and 80 in the income distribution is 4.6 y for males and 4.1 y for females, while it is only half as big when accounting for mobility. The estimated rise in life-expectancy inequality over time is also halved when accounting for income mobility.

life expectancy | mortality | inequality | income mobility

Life expectancy is strongly associated with income across societies and within societies (1–8). The relationship between income class and life expectancy within a society is important for evaluating equity and assessing the costs and benefits of public health and social security policies (9–14). It is well established that mortality is decreasing in income across individuals, and this relationship is used to estimate the association between income and life expectancy (6–8, 10, 15). An impressive recent study (7) provides nonparametric estimates of the association between income class and period life expectancy using tax return data for the US population and shows that those in the top of the income distribution at age 40 can expect to live nearly 15 y longer than those in the bottom of the distribution.

The calculation of period life expectancy for a given age group in a given year uses life tables with information about mortality of older cohorts to estimate future mortality. In an unchanging society, in which mortality rates are constant, period life expectancy will equal the observed average life length. Period life expectancy is, therefore, a useful summary measure of cross-sectional mortality rates in a given year and is often used to study trends in mortality (16).

When segregating period life expectancy by income class, the mortality of older cohorts in the same income class is used to estimate future mortality. This approach assumes that individuals stay in the same income classes over time, which is in contrast to evidence in economics and sociology documenting significant income mobility (17). As a consequence, estimates of period life expectancy of the different income classes will in general not be equal to the observed average life length, even when considering an unchanging society in which mortality and mobility rates
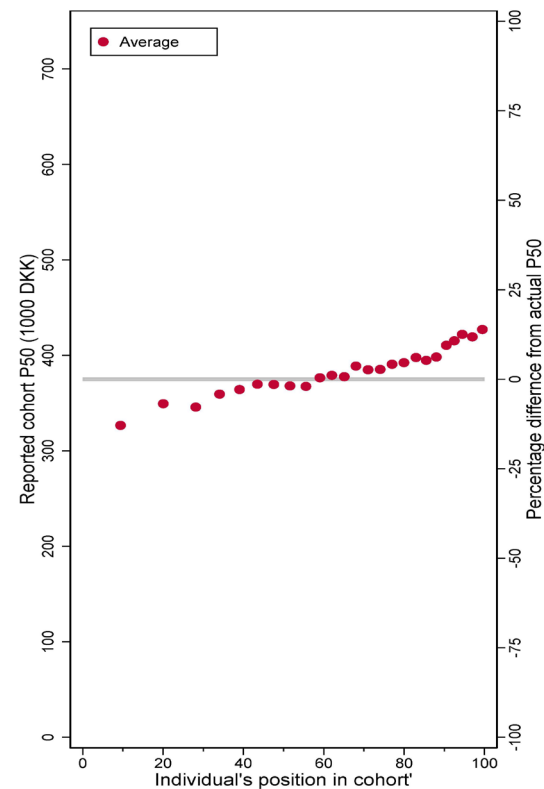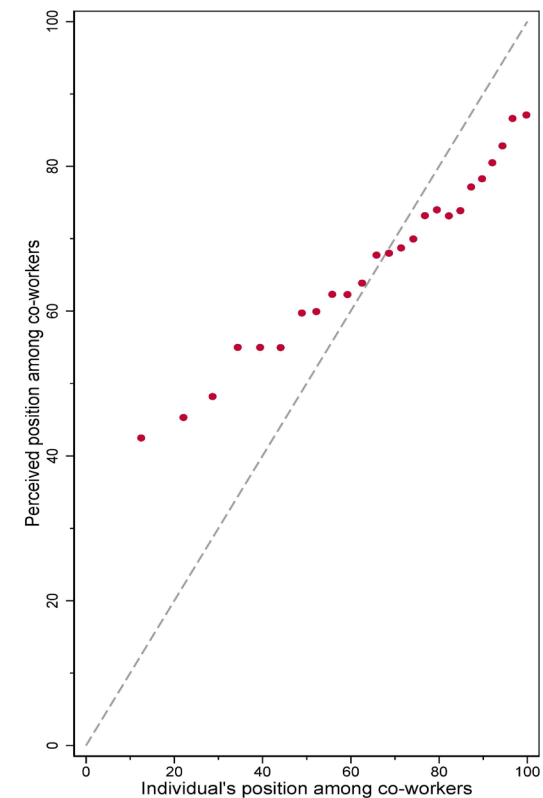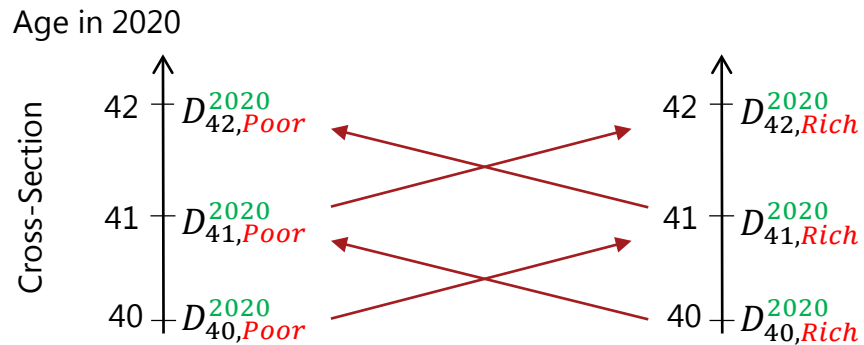
are constant. Some of the individuals originally in the top of the income distribution within their cohort will move down in the distribution, while individuals in the bottom of the distribution will tend to move up. Therefore, the method assigns too-high future mortality rates to low-income classes and too-low rates to high-income classes. This creates an upward bias in the estimation of the income gradient in period life expectancy (18).

To see the potential quantitative importance, consider the extreme case of perfect mobility, where income in 1 y is uncorrelated with income in preceding years. In this case, life expectancy of individuals alive 1 y from now is independent of their current income class, even when mortality rates vary strongly with income at each age. Estimates not accounting for income mobility would then point to a large income gradient in period life expectancy for these individuals, although the true gradient is zero.

Table 1 uses our data to illustrate the actual degree of income mobility in society and its importance for predicting future mortality of different income classes. Among 40-y-old males belonging to the bottom 5% of the income distribution, nearly half of those alive at age 50 (45% to be exact) have moved up in the income distribution (labeled movers), while the remaining half have stayed in the bottom part of the distribution (labeled stayers). Similarly, among individuals in the top 5% of the distribution, about half are movers, moving down in the income distribution, while the other half are stayers. This mobility across income classes is important for predictions of future mortality. During the subsequent 10 y, from age 50 to 60, we find that 29% of the stayers in the bottom part of the distribution die, but only 13.5% of the movers die. We observe the reverse pattern in the top of the distribution, where 3.5% of the stayers die, while 5% of the movers die. This example illustrates the potential for

Significance

People in the bottom of the income distribution live shorter lives than those in the top. This is an important dimension of inequality in society. We demonstrate how forces of income mobility are important for conclusions about inequality in life expectancy. Some people escape poverty, and many people at the top of the distribution only have high incomes temporarily. Those moving out of an income class have very different mortality patterns than those staying. We provide a method that incorporates income mobility in calculations of life-expectancy inequality. The good news is that the degree of inequality in life expectancy is only half as big once accounting for income mobility. The bad news is that inequality continues to rise.

Inequality in life expectancy: Not as big as we thought but still rising

Approach

Age in 2020

Cross-Section

$42 \vdash D_{42,Poor}^{2020}$ $42 \vdash D_{42,Rich}^{2020}$

$41 \vdash D_{41,Poor}^{2020}$ $41 \vdash D_{41,Rich}^{2020}$
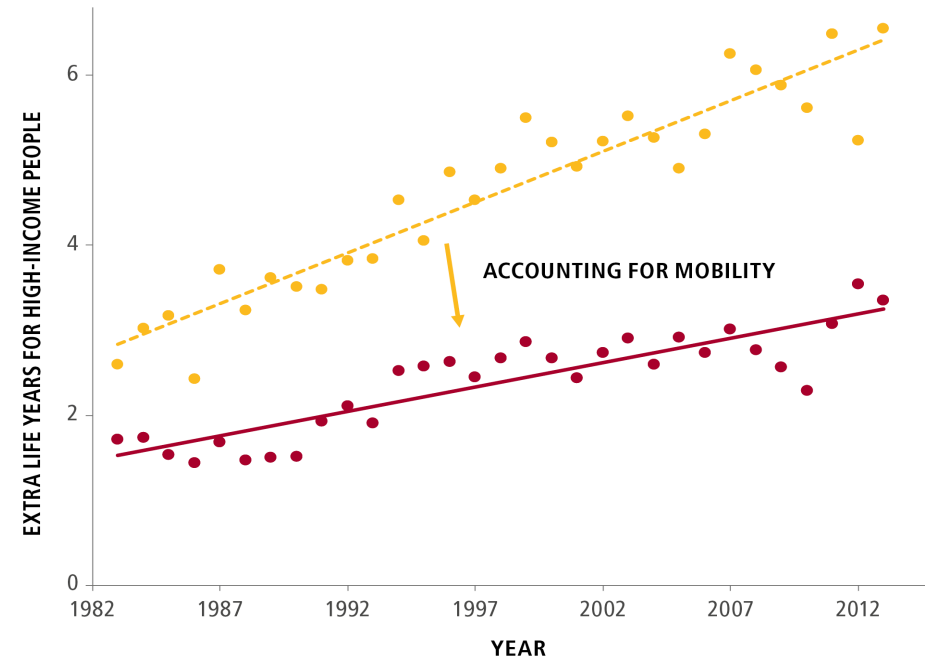
$40 \vdash D_{40,Poor}^{2020}$ $40 \vdash D_{40,Rich}^{2020}$

New method accounts for transitions across income classes. Empirical approach links income and mortality records for entire population over thirty years.

Result

LIFE EXPECTANCY INEQUALITY WHEN ACCOUNTING FOR INCOME MOBILITY

ACCOUNTING FOR MOBILITY

EXTRA LIFE YEARS FOR HIGH-INCOME PEOPLE

YEAR

The graph shows estimates of expected extra life years for high income 40-year old people compared to those with low income without accounting for income mobility (yellow dots) and when accounting for mobility (red dots).
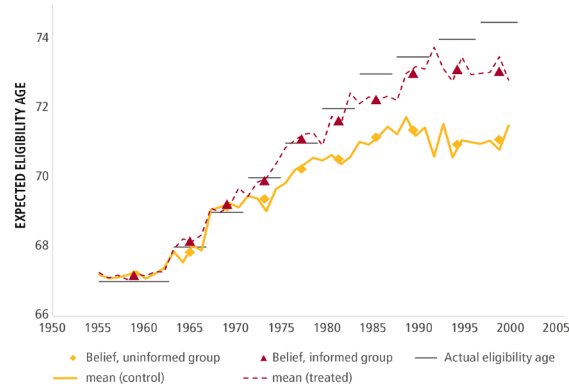
Child penalty on women
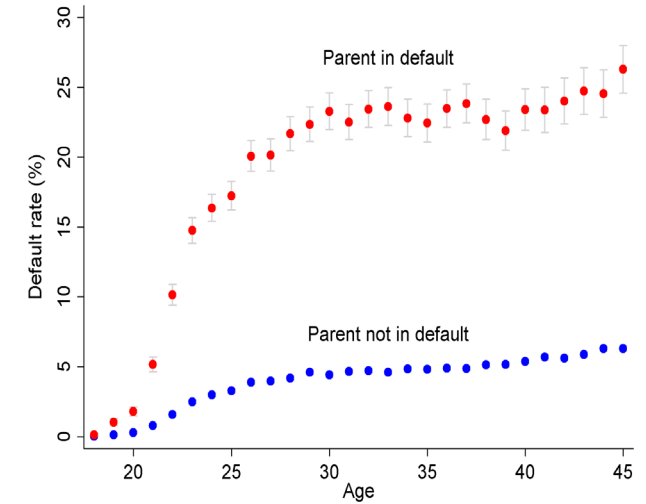
IMPACT OF CHILDREN ON EARNINGS OF WOMEN AND MEN
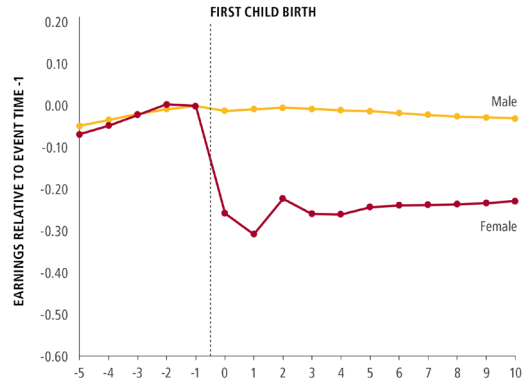
Badly informed about pension rules

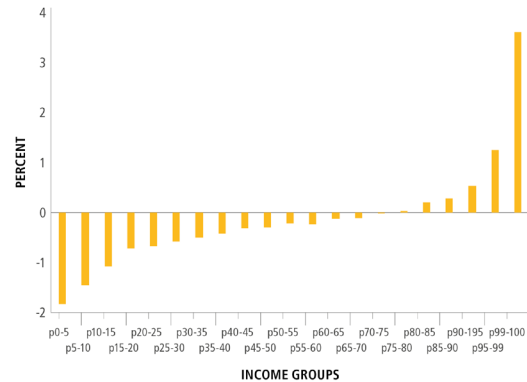IMPACT OF INFORMATION ON BELIEFS ABOUT ELIGIBILITY AGE

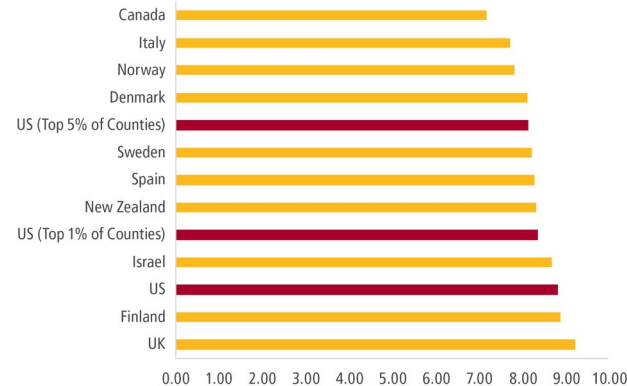

Financial trouble across generations

Lower interest rates favor the rich

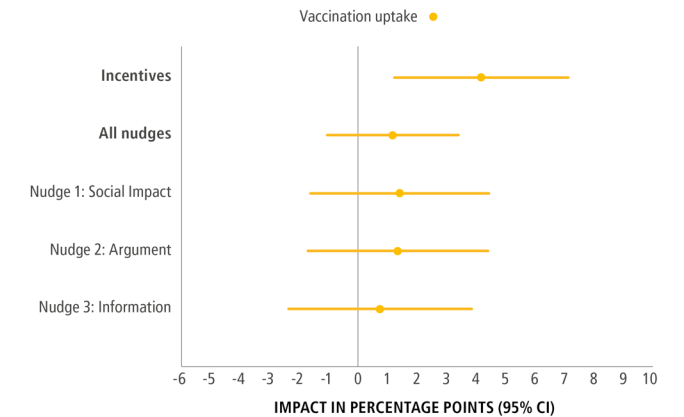DISTRIBUTIONAL EFFECTS OF LOWER INTEREST RATES

High health costs without better outcomes

COMPARING CASE FATALITY RATES FOR THE US TO OTHER HIGH-INCOME COUNTRIES

Monetary incentives increase vaccinations

EFFECTS OF INTERVENTIONS ON VACCINE UPDATE

Role of behavior for questions about inequality?

- How much inequality?

- Sources of inequality?

- Fairness of inequality?

- Effects of public policy?

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