Conference Agenda

Session Overview

Date: Tuesday, 20/Aug/2019

3:30pm - 6:30pm	**IIPF Board of Management Meeting I (for Board only)**
7:00pm - 9:30pm	**IIPF Board of Management Dinner (on invitation only)**

Date: Wednesday, 21/Aug/2019

8:00am - 5:30pm **Registration**
Hunter Halls

9:00am - 9:30am **Opening Ceremony**
Bute Hall

9:30am - 10:30am **Plenary I: Rachel Griffith (University of Manchester and IFS), "The Distributional and Corrective Implications of Sin Taxes"**
Bute Hall
Session Chair: **Katherine Cuff**, McMaster University
Presentation slides published at https://www.iipf.org/cng.htm

10:30am - 11:00am **Coffee Break**
Hunter Halls

11:00am - 1:00pm **A01: Optimal taxation I - Invited session**
McIntyre 201
Session Chair: **Dominik Sachs**, University of Munich

11:00am - 11:30am

Taxes and Turnout

Felix Bierbrauer, Aleh Tsyvinski, Nicolas Werquin
Toulouse School of Economics; nwerquin@gmail.com

We develop a model of political competition with endogenous turnout and endogenous platforms. Parties face a trade-off between maximizing their base and getting their supporters out to vote. We study the implications of this framework for non-linear income taxation. In equilibrium, both parties propose the same tax policy. This equilibrium policy is a weighted combination of two terms, one reflecting the parties' payoff from mobilizing their own supporters, one reflecting the payoff from demobilizing the supporters of the other party. The key determinant of the equilibrium policy is the distribution of the voters' party attachments rather than their propensity to swing vote. Our analysis also provides a novel explanation for why even left-leaning parties may not propose high taxes on the rich.

Bierbrauer-Taxes and Turnout-247.pdf

11:30am - 12:00pm

Optimal Income Taxation and Commitment on the Labor Market

Pawel Doligalski
University of Bristol, United Kingdom; pdoligalski@gmail.com

The optimal income taxation literature typically assumes that labor is traded on the spot markets. I relax this assumption by equipping workers and firms with a commitment power and, as a consequence, allowing for more sophisticated labor contracts. The main finding is that when both workers and firms have any positive commitment power, the tax schedule cannot be too regressive, as otherwise wages would be inefficiently randomized to reduce the expected tax paid by workers. I also show that the insurance of workers depends only on the total commitment power on the labor market, but not on its division between workers and firms. I calibrate the model to the US income distribution. The threat of wage randomization reduces the optimal marginal tax rates at low income levels by up to 40 percentage points and in certain cases makes the optimal tax schedule fully linear.

Doligalski-Optimal Income Taxation and Commitment on the Labor Market-336.pdf

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12:00pm - 12:30pm

Evolution of Tax Progressivity in the U.S.: New Estimates and Welfare Implications

Axelle Ferriere[1], Philipp Grübener[2], Gaston Navarro[3], Oliko Vardishvili[2]
[1]PSE, France; [2]European University Institute; [3]Federal Reserve Board; axelle.ferriere@psemail.eu

This paper focuses on the dynamics of the federal income tax system in the United States since the 1960s. Using tax-revenue data, we first document that the progressivity of the income tax has substantially increased since the mid-1980s. This increase was entirely due to the expansion of tax-credits while changes in the tax-rates schedule had minor effects. We then analyze the optimal tax-credits and tax-rates schedule in a quantitative model with heterogeneous agents. The model includes key features of U.S. tax system, namely: transfers, in-work tax-credits, and progressive tax rates. The model also incorporates unemployment risk and a labor supply decision at both the intensive and the extensive margin. Preliminary results suggest that tax-credits are a powerful tool to generate redistribution to- wards low-income households, while mitigating the efficiency costs on top-income earners.

Ferriere-Evolution of Tax Progressivity in the US-568.pdf

12:30pm - 1:00pm

Public Debt, Redistribution, and Growth

Dominik Sachs[3], Philipp Grübener[2], Axelle Ferriere[1]
[1]University of Munich; [2]European University Institute; [3]Paris School of Economics;
dominik.sachs@econ.lmu.de

We study the implications of economic growth for the design of the welfare state. We first derive some static benchmark for which the generosity of the welfare state is unaffected by the level of economic development. We then study external debt and find that governments of growing economies should (i) finance the welfare state initially with public debt, (ii) increase tax progressivity over time and (iii) decrease the generosity of the welfare state over time if the interest rate on government bonds is below a threshold. This threshold depends on the (i) curvature of the utility function, (ii) labor supply elasticity, (iii) growth rate and (iv) discount factor. For internal debt and without initial asset inequality, a constant welfare state is

optimal. Incorporating the concept of a subsistence level makes the use of public debt to finance an initially more generous welfare state more likely in all environments.

Sachs-Public Debt, Redistribution, and Growth-511.pdf

11:00am - 1:00pm
McIntyre 208

A02: Optimal taxation II - Indirect and corrective taxation

Session Chair: **Naomi Elisabeth Feldman**, Hebrew University of Jerusalem

11:00am - 11:30am

Spatial Productivity Differences and the Optimal Tax Treatment of Commuting Expenses

J. Malte Zoubek
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Spatial wage differences offer incentives to change the location of work either by commuting or by moving to the new work location. Combining an intensive labor supply margin with an extensive, productivity-enhancing margin of work place change due to commuting or moving, I study how spatial urban-fringe productivity differences and labor mobility shape optimal redistribution under tax deduction of commuting expenses. My study underlines the significance of the tax system for local labour market and settlement pattern.

Zoubek-Spatial Productivity Differences and the Optimal Tax Treatment-581.pdf

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11:30am - 12:00pm

The Digital Services Tax as a Tax on Location-Specific Rent

Wei Cui[1], **Nigar Hashimzade**[2]
[1]University of British Columbia, Canada; [2]Durham Business School, UK; cui@LAW.UBC.CA, nigar.hashimzade@durham.ac.uk

In 2018, the European Council and some national governments proposed to introduce a Digital Services Tax (DST) on the revenue of large digital platforms from advertising, online intermediation, and/or the transmission of data. We offer a rationalization of the DST as a tax on location-specific rent (LSR): just as countries already levy royalties on natural resource extraction, one can think of the DST as a tax on rents earned by platform companies from particular locations. We provide stylized examples of how platform rent can be traced to specific locations, even when users from multiple jurisdictions participate. We then elaborate the analogy between the DST and resource royalties, and analyze the DST's incidence and welfare effects using a simple model. Finally we argue that the DST's significance goes beyond current concerns about multinational tax avoidance, in that it indicates directions for redesigning international taxation in the age of labor-replacing AI technology.

Cui-The Digital Services Tax as a Tax on Location-Specific Rent-458.pdf

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12:00pm - 12:30pm

Optimal Pigouvian Taxation when Externalities Affect Demand

Enda Patrick Hargaden, **Matthew Harris**
University of Tennessee, United States of America; enda@utk.edu

Purchasing network goods (e.g. cell phones) generate the positive externality

of making phones more useful for others. Unlike traditional externalities, however, network externalities also directly affect the willingness-to-pay for the network good. Through these external knock-on effects to Ramsey-style elasticities, the optimal tax problem is complex. We generalize the standard commodity tax model to account for this. The optimal tax rate depends on three factors: demand elasticities, the marginal social cost, and the responsiveness of consumption to the externality. If a negative externality affects consumption enough, the optimal policy can be to subsidize it.

Solving the dynamic case computationally, we show that optimality requires initially setting tax rates below those implied by Pigou-Ramsey-Sandmo, followed by higher tax rates when a large stock (i.e. network) is established.

Hargaden-Optimal Pigouvian Taxation when Externalities Affect Demand-537.pdf

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12:30pm - 1:00pm

The Effect of Environmental Taxes on Car Prices, Purchases and Mileage

Naomi Elisabeth Feldman[1], **David Katz**[3], **Laura Kawano**[2]
[1]Hebrew University of Jerusalem, Israel; [2]University of Michigan; [3]University of Haifa; naomi.feldman@mail.huji.ac.il

In an effort to reduce overall emissions of carbon and other pollutants, Israel implemented a major tax reform in 2009 intended to encourage consumption of less polluting automobiles. Under the reform, import taxes on vehicles are now based on the particular vehicle's score on a pollution index, with less polluting cars taxes proportionately less and more polluting cars taxed proportionately higher. Using databases covering all car sales in Israel since 2000, along with their pollution ranking and yearly odometer readings, we find that the green tax did cause a significant shift in car purchases towards less polluting ones. However, some of the environmental gains appear to be offset by the facts that the reform brought about an increase in the overall amount of cars on the road and that newer, albeit more efficient cars were, on average, driven more than older cars.

Feldman-The Effect of Environmental Taxes on Car Prices, Purchases and Mileage-436.pdf

11:00am - 1:00pm
East Quad Lecture Theatre

A03: Health economics I

Session Chair: **Sara LaLumia**, Williams College

11:00am - 11:30am

Does Health Affect Reactions To Work Incentives? Evidence From Finnish Pension Reform

Joonas Ollonqvist[1], **Kaisa Kotakorpi**[2], **Jukka Pirttilä**[3], **Pekka Martikainen**[3], **Mikko Laaksonen**[4], **Lasse Tarkiainen**[5]

[1]University of Turku; [2]VATT Institute for Economic Research; [3]University of Helsinki; [4]Finnish Centre for Pensions; [5]Population Research Unit; jeaoll@utu.fi

We analyze the link between health and retirement decisions, and in particular individual reactions to changes in retirement incentives. We study these issues in the context of the Finnish pension reform of 2005, utilizing detailed individual-level register data on health together with register data on retirement decisions. Our results indicate that economic incentives matter for the retirement decisions. Our preliminary results do not indicate clear differences between population groups defined e.g. according to health status.

Ollonqvist-Does Health Affect Reactions To Work Incentives Evidence-539.pdf

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11:30am - 12:00pm

Can Child Benefits Reverse the Impact of Unbalanced Sex Ratios on Fertility?

Panayiota Lyssiotou

University of Cyprus, Cyprus; p.lyssiotou@ucy.ac.cy

We use the experience of an EU country to contribute to the scarce causal evidence on whether targeted child benefits can reverse unwanted long lasting effects of changing demographics on fertility. We exploit the introduction of non means-tested child benefits only to multi-member families that coincided with an exogenous fall in the sex ratio index of marriageable age men and women, which is linked to the historical events that took place about two decades before when this cohort of individuals were born. Our causal findings are robust to alternative econometric specifications and indicate that the reform increased significantly the probability to have a forth child and reversed the negative impact of declining sex ratios on the fertility of couples. In contrast, the probability of birth of parities smaller or greater than four were not affected by the reform but decreased significantly with the drop in the sex ratio index.

Lyssiotou-Can Child Benefits Reverse the Impact of Unbalanced Sex Ratios-570.pdf

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12:00pm - 12:30pm

Home Ownership As Self-Insurance For Long-Term Care - A Dynamic Simulation Analysis

Hans Fehr, **Maurice Hofmann**

University of Wuerzburg, Germany; maurice.hofmann@uni-wuerzburg.de

Housing wealth and long-term care (LTC) risk are important drivers of the savings behavior in retirement. In a world with incomplete insurance provision, home ownership may act as a self-insurance device since in need of care one may either prefer to stay at home or sell the property in order to afford a better nursing home. The present paper captures these links by introducing health-dependent utility from housing consumption in a general equilibrium overlapping generation model. Our model also accounts for the negative intra-cohort correlation between home ownership and LTC risk which strengthens inequities in LTC insurance demand. Simulation results with the model calibrated for Germany highlight the significant intra-cohort distributional effects as well as the growth consequences of public LTC insurance.

Fehr-Home Ownership As Self-Insurance For Long-Term Care-303.pdf

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12:30pm - 1:00pm

Intergenerational Effects of the EITC: The Health of Grandparents

Sara LaLumia

Williams College, United States of America; sl2@williams.edu

The Earned Income Tax Credit (EITC) delivers substantial payments to low- and middle-income households with children. Some recipient households contain three generations, including grandparents of the EITC-eligible children. This paper investigates whether larger EITC payments are associated with improved health of grandparents living with their grandchildren. The empirical strategy relies on legislated changes in the EITC that differentially expanded EITC payments for families with larger numbers of children relative to families with fewer children. Preliminary findings suggest positive effects on grandparent health.

LaLumia-Intergenerational Effects of the EITC-599.pdf

11:00am - 1:00pm

Gilbert Scott 253

A04: Labor I - Empirical labor economics

Session Chair: **Daniel Da Mata**, Sao Paulo School of Economics

11:00am - 11:30am

Effects Of Subsidizing The First Employee – Empirical Evidence From Finland

Annika Nivala[1,2]

[1]University of Turku, Finland; [2]VATT Institute for Economic Research; annika.nivala@utu.fi

This paper studies the effects of the first employee employment subsidy implemented in parts of Finland in 2007—2011. The subsidy admitted to firms amounted to 30% of the wage costs of the first employee in the first year and 15% in the second. Using a difference-in-differences approach and data on full population Finnish firms, I estimate the effect on the probability of becoming an employer. According to the results, the effect is close to zero with small standard errors, implying a negligibly small elasticity of becoming an employer. The evidence suggests that the subsidy did not affect entry or exit of firms either. The results are robust between different firm groups and estimation approaches. These findings suggest that targeting employment subsidies to non-employer firms may not be an effective way to promote

employment and growth in small businesses even though non-employer firms form a large majority of firms.

Nivala-Effects Of Subsidizing The First Employee – Empirical Evidence-300.pdf

11:30am - 12:00pm

First Comes Love, Then Comes Marriage? Marriage, Labor Supply, and Poverty

Max Groneck[1], **Johanna Wallenius**[2]

[1]University of Groningen, Netherlands, The; [2]Stockholm School of Economics, Sweden; m.groneck@rug.nl

Single Parents make up a substantial and rising share of all families in the US. A large fraction of single mothers live in poverty with their children. This suggests that the current welfare state does not provide sufficient insurance against the risk of becoming a single parent. Moreover, the US tax code provides incentives for marriage and the auxiliary social security benefit system favors married women over singles. We develop a life cycle model of couples and singles where individuals decide their marital state and females face the probability of getting children. Both of these events govern the likelihood of becoming a single mother and ending up in poverty. We seek to understand why such a large fraction of single mothers fall into poverty, and to evaluate policy reforms that reduce poverty, such as free child care, taking the behavioral effects on labor supply and marital transitions into account.

Groneck-First Comes Love, Then Comes Marriage Marriage, Labor Supply, and Poverty-389.pdf

12:00pm - 12:30pm

Labor Market Effects of Public Housing: Evidence from Large-Scale Lotteries

Daniel Da Mata[1], **Lucas Mation**[2]

[1]Sao Paulo School of Economics, Brazil; [2]University of Chicago; damatadaniel@hotmail.com

We exploit housing lotteries in Brazil to study the impacts of a large-size housing program on labor market outcomes. Combining data from several administrative registries, we track monthly outcomes for 700,000 lottery applicants, 35,000 of whom won a housing lottery. We assess the effects of winning a lottery on labor supply and entrepreneurship. We find a small, negative impact on formal employment. The effects are stronger for male lottery winners living in smaller cities. We do not find any impact on the likelihood of formalizing small-size firms. Wealth and income effects from the housing program allowed winners of remote projects to buy motorcycles to reduce transportation time costs to formal job opportunities. Therefore, the program brought about social costs in the form of negative externalities because of the private decision to buy motor vehicles.

Da Mata-Labor Market Effects of Public Housing-551.pdf

12:30pm - 1:00pm

Are Sufficient Statistics Necessary? Nonparametric Measurement of Deadweight Loss from Unemployment Insurance

David Lee[1], **Pauline Leung**[2], **Chris O'Leary**[3], **Zhuan Pei**[2], **Simon Quach**[1]

[1]Princeton University, United States of America; [2]Cornell University, United States of America; [3]W. E. Upjohn Institute for Employment Research, United States of America; pleung@cornell.edu

Central to the welfare analysis of income transfer programs is the deadweight loss associated with possible reforms. To aid analytical tractability, its measurement typically requires specifying a simplified model of behavior. We employ a complementary “decomposition” approach that compares the behavioral and mechanical components of a policy’s total impact on the government budget to study the deadweight loss of two unemployment insurance policies. Experimental and quasi-experimental estimates using state administrative data show that increasing the weekly benefit is more efficient (with a fiscal externality of 53 cents per dollar of mechanical transferred income) than reducing the program’s implicit earnings tax.

Lee-Are Sufficient Statistics Necessary Nonparametric Measurement-291.pdf

11:00am - 1:00pm
Gilbert Scott 132

A05: Macro I - Interest rates and debt

Session Chair: **Carsten Colombier**, Federal Finance Department

11:00am - 11:30am

A "Beggar-Thy-Neighbor" Effect in Public Debts? Evidence from Cross-Border Spillovers of Fiscal Consolidations

Kodjovi M. Eklou[2], **Marcelin Joanis**[1,4], **Patrick Richard**[3,4]

[1]Polytechnique Montréal, Canada; [2]International Monetary Fund; [3]Université de Sherbrooke, Canada; [4]CIRANO, Canada; marcelin.joanis@polymtl.ca

This paper investigates the cross-border e ffect of fiscal consolidations taking place in safe assets countries. Cross-border spillovers are de fined as the result of fi scal consolidation shocks in Germany or the US which are transmitted to peripheral countries. We consider two levels of analysis: the external e ffect of US fiscal consolidations on other OECD countries and the external e ffect of German fiscal consolidations on other Eurozone countries. The "beggar-thy-neighbor" e ffect in this context means that a reduction of the public debt in a safe asset country as a consequence of a fi scal consolidation plan may generate an increase in the public debt abroad. Our empirical analysis in a sample of 27 OECD countries over the period 1980-2007 shows evidence of a "beggar-thy-neighbor" e ffect in public debts, that can be rationalized by a financial market mechanism both at the OECD and the Eurozone levels.

Eklou-A Beggar-Thy-Neighbor Effect in Public Debts Evidence-517.pdf

11:30am - 12:00pm

Fiscal Sentiment and Long-Term Interest Rates

Keigo Kameda

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This study analyzes the relationship between long-term interest rates and a fiscal sentiment index originally developed by conducting textual analysis of newspaper articles from January 1, 1980, to March 24, 2017—a total of 134,742 articles. Daily frequency regression shows that the negative fiscal sentiment has significant positive effects on long-term interest rates. In contrast, a positive sentiment shows significant negative effects only in some cases. Considering the literature on the relationship between long-term interest rates and government budgets, building sentiment index are quite novel.

Kameda-Fiscal Sentiment and Long-Term Interest Rates-494.pdf

12:00pm - 12:30pm

Are Debt Sustainability Indicators Based on Time-Series-Data Useful for Predicting Crises?

Frank Westermann, Katharina Mersmann
Osnabrück University, Germany; fwesterm@uos.de

A large literature in empirical public finance applies time series techniques to historical data and draws inference about public debt sustainability of individual countries. These methods include unit root tests on primary deficits, co-integration between revenue and expenditure as well as fiscal reaction functions. In this note, we take a systematic approach to evaluating the in- and out-of-sample performance of various methods in predicting sovereign debt crises. In a panel-logit regression analysis for 31 countries, we find that the benefits for forecasting are surprisingly small.

Westermann-Are Debt Sustainability Indicators Based on Time-Series-Data Useful-189.pdf

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12:30pm - 1:00pm

Debt and Growth: Historical Evidence

Carsten Colombier[1,3], Christian Breuer[2]
[1]Federal Finance Department, Switzerland; [2]TU Chemnitz, Germany; [3]University of Cologne; carsten.colombier@efv.admin.ch

This present paper is one of a few papers that tackles the debt-growth nexus in a large historical data set. Our study differs from previous studies by the inclusion of co-variates, which reduces the risk of an omitted-variable bias, and by the application of a new dataset in this context. Several empirical studies support the “conventional view” on public debt that the public-debt-to-GDP ratio is adversely correlated with GDP growth. In contrast, we do not find robust evidence for a negative relationship between government debt and growth. While our baseline regressions seem to support the “conventional view”, however, only with a weak negative correlation, a series of robustness tests show that the baseline findings are highly sensitive to further co-variates such as country-specific trends and the sample size. Overall, our analysis indicates no systematic relationship between public debt and growth.

Colombier-Debt and Growth-394.pdf

11:00am - 1:00pm
James Watt South Stevenson 375

A06: Fiscal federalism I - Political economy I

Session Chair: **David Albouy**, University of Illinois

11:00am - 11:30am

Regional Public Goods Provision, Decentralization and Social Heterogeneity: A Global View

André Seidel
University of Bergen, Norway; Andre.Seidel@uib.no

This paper presents a new global dataset on the geocode location of public amenities, e.g., schools, hospitals or libraries, that is based on OpenStreetMap data. Volunteered geocoded information may be systematically incomplete; therefore, we develop a method that utilizes satellite settlement data to account for the likely degree of missing data within administrative regions of countries. Using this new method and data, we study the effect of decentralization and social heterogeneity on the subnational provision of public amenities associated with various public goods. We find strong evidence for the existence of collective action failure at a subnational level around the world. More autonomous regions with a high degree of social heterogeneity provide significantly fewer public amenities than others.

Seidel-Regional Public Goods Provision, Decentralization and Social Heterogeneity-149.pdf

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11:30am - 12:00pm

Rush Hours and Urbanization

Jan Wickerath, Tobias Seidel
University Duisburg-Essen, Germany; jan.wickerath@uni-due.de

We use a spatial general equilibrium model with potential commuting of workers between their place of work and their place of residence to analyze the effects of rush hours on the spatial allocation of employment and population, average labor productivity and the housing market. Abolishing traffic congestion during rush hours leads to a more urbanized economy as households move from the low-density countryside to the commuter belts of cities rather than from the city centers to the periphery. Employment, however, becomes more agglomerated in high-density large cities. This adjustment implies an increase of average labor productivity of 7.2 percent and higher inequality of housing costs.

Wickerath-Rush Hours and Urbanization-242.pdf

12:00pm - 12:30pm

Valuing Public Goods More Generally: The Case of Infrastructure

David Albouy[1], Arash Farahani[2]

[1]University of Illinois; [2]Independent Budget Office of the City of New York; albouy@illinois.edu

We examine the relationship between local public goods, prices, wages, and population in an equilibrium inter-city model. Non-traded production, federal taxes, and imperfect mobility all affect how public goods (or ``amenities'' more broadly) should be valued from data. Reinterpreting the estimated effects of public infrastructure on prices and wages in Haughwout (2002), we find infrastructure over twice as valuable with our more general model. New estimates based on more years, cities, and data-sets indicate stronger wage and positive population effects of infrastructure. These imply higher values of infrastructure to firms, and also to households if moving costs are substantial.

Albouy-Valuing Public Goods More Generally-579.pdf

11:00am - 1:00pm
Gilbert Scott 250

A07: Labor II - Methods and measurement

Session Chair: **Stephanie Briel**, University of Hohenheim

11:00am - 11:30am

Estimating the Conditional Gender Pay Gap: \\ The Role of Omitted Controls

Stephanie Briel[1], Marina Töpfer[2]

[1]University of Hohenheim, Germany; [2]University of Erlangen-Nuremberg; s.briel@uni-hohenheim.de

We estimate the gender pay gap using data for Germany in the years 2005, 2009 and 2013. Main interest of our analysis lies in accounting for potential omitted variable bias and its consequences for conventionally estimated gender pay gaps.

In order to minimize the threat of omitted variable bias, we use a machine learning technique for model selection. This ensures that we control for the most important gender differences and wage predictors. We compare the estimated gender pay gaps and decomposition results to those of a baseline model specified in line with recent literature. The complete analysis is conducted at the mean as well as at specific quantiles of the wage distribution.

Overall, we find evidence that more flexible model specifications as well as different model specifications along the wage distribution might be required if an (as) unbiased (as possible) estimation of the gender pay gap is of main interest.

Briel-Estimating the Conditional Gender Pay Gap-387.pdf

11:30am - 12:00pm

Simple Nonparametric Bounds on the Joint Distribution of Welfare and Endogenous Choice(s) in Discrete Random Utility Models

Sebastiaan Maes

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This paper studies the nonparametric identification of the joint distribution of money metrics and endogenous choice(s) in discrete choice models with unrestricted unobserved heterogeneity. Identifying this joint distribution enables studying the welfare consequences of price changes for groups that are endogenous to the model. This is an important consideration in many current policy debates and provides answers to questions like `How do congestion taxes affect the welfare of drivers?'. When panel data are available, I find the joint distribution of the compensating (CV) or equivalent (EV) variation and the pre-reform choice to be point identified from observed Marshallian transition probabilities. When only cross-sectional data are available, however, I show that this object can still be either point (CV) or set (EV) identified by exploiting Boole-Fréchet and stochastic revealed preference inequalities which impose restrictions on the now unobserved transition probabilities.

Maes-Simple Nonparametric Bounds on the Joint Distribution-392.pdf

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12:00pm - 12:30pm

Last Word Not Yet Spoken: Last Place And Rank Reversal Aversion

Lisa Windsteiger, Andrea Martinangeli

Max Planck Institute for Tax Law and Public Finance, Munich, Germany; lisa.windsteiger@tax.mpg.de, andrea.martinangeli@tax.mpg.de

Preferences over societal ranks have emerged as potential drivers of weaker than expected support for redistributive interventions among those closest to the bottom of the income distribution. We compare preferences for alterations of the income distribution affecting the decision maker's social rank, but not their income, and compare them with similar alterations leaving both rank and income unchanged. We find support for both a discontinuous increase in the disutility associated with occupying the last rank, affecting thus only those at the bottom of the distribution, and for a general aversion to rank reversals, affecting most ranks. We moreover contribute to the replication literature by uncovering a potential reason for the failed replication of previous results. We discuss implications for policy design in both public fi nance and management science.

Windsteiger-Last Word Not Yet Spoken-130.pdf

12:30pm - 1:00pm

Overconfidence And Gender Differences In Wage Expectations

Sascha Satlukal[1], Stephanie Briel[1], Gregor Pfeifer[1,2], Mirjam Reutter[1]

[1]University of Hohenheim, Germany; [2]University College London, UK; s.briel@uni-hohenheim.de

We analyze the impact of overconfidence on gender differences in wage expectations using elicited beliefs of German university applicants. Interestingly, female students have lower wage expectations and are less overconfident than their male counterparts. Oaxaca-Blinder decompositions show that a substantial part (7.6%) of the gender gap in wage expectations can be explained by stronger overconfidence of males. Applying recentered influence function decompositions, we find that the impact of overconfidence on the gender gap is particularly strong at the bottom and top of the wage expectation distribution, suggesting that females with the lowest expectations feature a very low level of confidence while males with the highest expectations feature a very high level of confidence.

Satlukal-Overconfidence And Gender Differences In Wage Expectations-489.pdf

11:00am - 1:00pm
Humanities Lecture Theatre

A08: Corporate taxation I - Theory

Session Chair: **James R Hines Jr.**, University of Michigan

Aligning Profit Taxation With Value Creation

Wolfram F. Richter
TU Dortmund University, Germany; wolfram.richter@tu-dortmund.de

The OECD seeks to align transfer pricing and profit taxation with value creation but fails to provide a clear definition. This paper argues that value creation requires international cooperation and that the profit tax base should therefore be allocated according to standards commonly considered as equitable when distributing the surplus of cooperation. The claim that current rules of international profit taxation are aligned with value creation is rejected. If anything, the OECD's objective suggests a tax system in which profits are split between the involved jurisdictions. This result triggers the question of possible implementation which is discussed in some depth.

Richter-Aligning Profit Taxation With Value Creation-129.pdf

Endogenous Product Differentiation and Profit Shifting

Hirofumi Okoshi
University of Munich, Germany; hirofumi.okoshi1@gmail.com

High product differentiation enhances consumers' utility and firms' profits but at the same time makes it difficult for tax authorities to audit MNEs' tax avoidance strategies, as the arm's length principle is difficult to apply. This paper combines these two aspects of product differentiation and studies the interrelation between profit shifting and product differentiation. The model shows that MNEs engage in more investment in product differentiation in the presence of profit shifting opportunities and financial economic integration accelerates the investment.

Okoshi-Endogenous Product Differentiation and Profit Shifting-377.pdf

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Income Shifting and Management Incentives

Regina Ortmann[1], Dirk Schindler[2]
[1]University of Paderborn, Germany; [2]Norwegian School of Economics, Norway; Dirk.Schindler@nhh.no

Existing literature shows that income shifting via transfer pricing within multinational enterprises collides with optimal incentivization of managers in subsidaries. Against this background, however, internal debt shifting has not been investigated so far. We investigate how both income-shifting channels impact management incentivization when the widely used profit metrics EBIT(DA) is applied. Different from most other studies, we focus on endogenous, unobservable managerial effort and the firm's optimal design of the compensation contract. We find that internal debt shifting does not have a direct effect on management incentives, but has some ambiguous repercussion via its positive effect on investment. In contrast, transfer pricing in royalty payments has a clearly negative incentive effect that is fully neutralized, however, by an higher participation rate. Hence, a higher participation rate one-to-one mirrors the transfer-pricing strategy of the firm. There is no indirect effect from this channel because abusive royalty payments do not affect investment.

Ortmann-Income Shifting and Management Incentives-238.pdf

Certain Effects of Uncertain Taxes

James R Hines Jr.[1], Michael Keen[2]
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This paper explores the implications of tax rate uncertainty, identifying circumstances in which revenue-neutral tax rate variability increases profitability, economic activity, and the efficiency of resource allocation. Furthermore, with heterogeneous taxpayers, tax rate variability is shown to perform an efficiency-enhancing screening function, imposing heavier expected tax burdens on less responsive taxpayers. And while efficient tax uncertainty enables governments to reduce average costs of taxation, it necessarily increases the marginal cost of taxation over some ranges of expected revenue, so may reduce efficient levels of government spending.

Hines Jr.-Certain Effects of Uncertain Taxes-469.pdf

11:00am - 1:00pm
Gilbert Scott Lecture Theatre 466

A09: Corporate taxation II - Income shifting

Session Chair: **Celine Azemar**, University of Glasgow

11:00am - 11:30am

Tax Arbitrage And Domestic Profit Shifting In Environments With Co-existing Income Tax Regimes

Luis Alejos
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In tax systems with two co-existing corporate income tax regimes, a simple theoretical model predicts an optimal strategy involving tax arbitrage across regimes. This prediction is tested for the case of Guatemala, where firms choose between a regime that taxes profits and another that taxes turnover. The Guatemalan setting is particularly useful for two reasons. First, firms can alter their choice before each fiscal year. And, second, a recent tax reform introduced variation in the marginal tax rates of each regime,

which according to the model should lead to differential responses between firms that engage in tax arbitrage and those that do not. Following a difference-in-difference approach, where treatment and control groups are defined by whether firms belong to a tax arbitrage network or not, the results identify differential behavior consistent with the model. The estimates suggest that tax savings could be as large as 66% of pre-arbitrage tax liability.

Alejos-Tax Arbitrage And Domestic Profit Shifting In Environments With Co-existing Income Tax Regimes-337.pdf

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11:30am - 12:00pm

Debt Shifting Restrictions and Reallocation of Debt

Katarzyna Anna Bilicka[1], **Yaxuan Qi**[2], **Jing Xing**[3]
[1]Utah State University, United States of America; [2]City University of Hong Kong, Hong Kong; [3]Antai College of Economics and Management, Shanghai Jiao Tong University, China; katarzyna.anna.bilicka@gmail.com

In this paper we analyze how multinational firms reallocate debt and real operations across their affiliates in response to the 2010 UK worldwide debt cap that limits interest deductibility. We find that multinationals affected by the reform reduced the amount of debt held in the UK and increased debt held abroad. The reform allowed the UK tax authority to collect more tax revenue from affected UK-headquartered multinationals, but it did not change their' worldwide effective tax rates. Affected non-UK headquartered multinationals shrank their operation in the UK and reallocated elsewhere. Our findings provide causal evidence for tax-motivated debt and real activity reallocation within multinationals and show how multinationals can circumvent tax avoidance regulations.

Bilicka-Debt Shifting Restrictions and Reallocation of Debt-335.pdf

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12:00pm - 12:30pm

Profit Shifting And The Marginal Tax Rate: What Determines The Shift-to-loss Effect?

Markus Gamm[1], **Jost H. Heckemeyer**[2], **Reinald Koch**[1]
[1]Catholic University Eichstätt-Ingolstadt, Germany; [2]Kiel University, Germany; reinald.koch@ku.de

This paper presents the first analysis of transfer pricing strategies, employing a simulated proxy for the company's marginal tax rate. Application of this sophisticated tax measure allows us to perform a direct comparison of profit shifting to subsidiaries with low statutory tax rates and to subsidiaries with tax losses. Using a panel of 23,668 EU subsidiaries of foreign companies, we observe that the shift-to-loss effect is significant and that its size (marginal effect: -.193) does not differ considerably from the size of shifting to low tax rates (marginal effect: -.182). Our findings further indicate that the shift-to-loss effect influences profit shifting only in the short term and that profits are shifted in particular to subsidiaries, whose loss carryforwards are expected to expire in the near future.

Gamm-Profit Shifting And The Marginal Tax Rate-508.pdf

12:30pm - 1:00pm

Why do Multinational Firms pay Less Taxes than Domestic Firms? An Integrated Approach

Celine Azemar
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The aim of this paper is to provide an integrated approach to explain why multinational enterprises (MNEs) have a lower effective tax rate (ETR) than their domestic counterparts. Using a dataset of 609,396 foreign and domestic firms of 16 European countries, this is achieved by considering that MNEs diverge in their ability to shift income or to benefit from tax concessions, by quantifying the ETR gap in all the sectors where there is a minimum of foreign firms' presence, and by considering that the channels for tax savings are not solely driven by tax planning but also by preferential tax treatment provided by governments.

Azemar-Why do Multinational Firms pay Less Taxes than Domestic Firms An Integrated Approach-397.pdf

11:00am - 1:00pm
Fore Hall

A10: Political economy I - Theoretical political economy

Session Chair: **Kai Andreas Konrad**, Max Planck Institute for Tax Law and Public Finance

11:00am - 11:30am

Optimal Opacity in International Negotiations

Marcel P. Thum[1,3], **Kai A. Konrad**[2]
[1]TU Dresden; [2]Max Planck Institute for Tax Law and Public Finance; [3]ifo Dresden; marcel.thum@tu-dresden.de

We study the role of transparency in international negotiations. In a simple ultimatum bargaining framework with incomplete information, the responder might optimally choose to delegate decision-making even if the responder cannot make the delegate tougher in expectation. It is sufficient to be able to generate opacity about the delegated valuation of an agreement. The optimal opacity choice implements efficiency and gives both negotiation parties a positive rent.

Thum-Optimal Opacity in International Negotiations-126.pdf

11:30am - 12:00pm

Solution Concept to Intergenerational Conflict]{Solution Concept to Intergenerational Conflict: the Role of Intergenerational Bargaining

Yusuke Kinai
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This paper specifically examines intergenerational conflict and analyzes an overlapping generations model of public goods provision from the viewpoint of time-consistency. Public goods are financed through labor-income and capital-income taxation, thereby distorting savings and the labor supply. Taxes redistribute

income across generations in the form of public goods. Under such a situation, there emerge dual intergenerational conflicts: the first is related to the amount of public goods and the second is the tax burden. We then contrast the politico-economic equilibrium with commitment allocation, and attempt to resolve such a conflict by introducing the concept of 'intergenerational bargaining'.

Kinai-Solution Concept to Intergenerational Conflict{Solution Concept to Intergenerational Conflict-398.pdf

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12:00pm - 12:30pm

Environmental Pollution & the Political Economy of Public Debt

Maximilian Kellner
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This paper analyzes the political economy of government debt when elected politicians decide about the distribution of public funds between a clean and a polluting public good. When provision of the polluting good creates a stock of climate externalities, strategic incentives for the incumbent government arise from both a budget and emission interaction. In this framework, reelection uncertainty leads to inefficiently low public savings (or even debt) which are attenuated by the emission interaction, while first period pollution decreases regardless of the future government's identity. If the incumbent government competes for office against an environmentalists' party, the total welfare loss from emissions also decreases as a direct result of reelection uncertainty.

Kellner-Environmental Pollution & the Political Economy of Public Debt-194.pdf

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12:30pm - 1:00pm

Citizenship for Sale: A Dilemma of Rights*

Kai Andreas Konrad[1], **Ray Rees**[2]
[1]Max Planck Institute for Tax Law and Public Finance, Germany; [2]LMU - University of Munich; Kai-Konrad-Office@tax.mpg.de

Motivated by the commercialization of citizenship rights in the European Union, we study the market for citizenship in a confederation or union of countries if the countries have full sovereignty over the right to grant national citizenship, and if this national citizenship endows members with benefits and citizenship rights of the confederation. We characterize the unique equilibrium and evaluate it from a welfare point of view. We identify country size and local and federal benefits as well as differences in local and union-wide cost externalities as the key determinants. We also consider how the union as a whole can respond to the efficiency problems such a market creates.

Keywords: citizenship-for-sale, commercialization of citizenship, European Union, Malta

JEL classification numbers: F15, F53, H77

Konrad-Citizenship for Sale-152.pdf

11:00am - 1:00pm
James Watt South Stevenson 354

A11: Political economy II - Mobility and competition

Session Chair: **Janne Tuomas Tukiainen**, VATT Institute for Economic Research

11:00am - 11:30am

Highway, Voting and Taxes

Paolo Campli, **Raphael Parchet**
Università della Svizzera Italiana, Switzerland; paolo.campli@usi.ch

In this paper we study the aggregation of heterogeneous preferences of Swiss residents regarding municipal tax rates. We build a simple spatial equilibrium theoretical model, in which residents optimally locate given their heterogeneous preferences for local amenities and public goods in a set of peripheral municipalities, taking the cost of transportation along the network into account. Local taxes are set as a linear combination of the agents preferences and used to finance a local public good. We show that the opening of a new highway connection is followed by a shift of the local income distribution upward and a decrease in local tax rates. We combine our theoretical model and the empirical results to recover, via structural estimation, the ``political weight" of individuals belonging to different income classes and their private cost of commuting.

Campli-Highway, Voting and Taxes-363.pdf

11:30am - 12:00pm

The Effect of Fiscal Performance on the Re-election Results of Finance Ministers - Evidence from Swiss Cantons

Aurélia Buchs
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Using data from 25 Swiss cantons over the 1980–2018 period, we estimate the effect of fiscal performance on the re-election results of finance ministers. Our estimations show that better performance, measured by the financing statement result in the year before re-election as well as cumulatively over the whole term, significantly increases the obtained vote percentage of finance ministers compared to their prior election result. Further we analyse how fiscal preferences and change in the attitude towards debt-financing channel the effect of fiscal performance on re-election results.

Buchs-The Effect of Fiscal Performance on the Re-election Results of Finance Ministers-470.pdf

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12:00pm - 12:30pm

Intergenerational Transmission of Political Party Affiliation

Linuz Aggeborn, **Pär Nyman**
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We investigate the intergenerational transmission of political party affiliation by using Swedish register data including all nominated politicians for the years 1982 to 2014. First, we demonstrate that there is a strong link between individuals and their parents concerning choice of political party affiliation. We also find that the intergenerational transmission is not only present between parents and children, but also existent over the generations and across siblings. Our second aim is to investigate the mechanisms behind this result, which we do by first discussing two hypotheses: A socialization pathway and a materialistic pathway. We then bring these hypotheses to the data and find that the socialization explanation seems to matter more for explaining the intergenerational transmission.

Aggeborn-Intergenerational Transmission of Political Party Affiliation-621.pdf

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12:30pm - 1:00pm

Class or Economic Voting? Evidence from Social Mobility in Victorian England

Torun Dewan[1], **Jaakko Meriläinen**[3], **Janne Tukiainen**[1,2]

[1]London School of Economics and Political Science; [2]VATT Institute for Economic Research; [3]Institute for International Economic Studies, Stockholm University; janne.tukiainen@vatt.fi

We explore the effects of social mobility on voting behavior in nineteenth-century England, using unique individual-level administrative records from the period preceding the introduction of the Secret Ballot in 1872. These records contain information on voters' behavior (which candidate(s) they voted for) and their occupation. While we do not find strong evidence of a cleavage along the working and middle class divide, we find evidence of a union of the landed gentry, farm workers, non-skilled workers and white-collar workers voting on average more for the Conservatives, and petty bourgeoisie and skilled workers for the Liberals in a cross-section. The changes in voting behavior within individuals due to social mobility are immediate and mainly consistent with the same cleavage. Our interpretation is that voting was influenced by Economic incentives related to the interests of the new and old industries, but to less extent by the socialized political behavior of the class background.

Dewan-Class or Economic Voting Evidence from Social Mobility-388.pdf

11:00am - 1:00pm

James Watt South Stevenson 355

A12: Networks and social interactions

Session Chair: **Olle Hammar**, Uppsala University

11:00am - 11:30am

Cities and the Structure of Social Interactions: Evidence from Mobile Phone Data

Konstantin Büchel, **Maximilian von Ehrlich**

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Social interactions are considered pivotal to agglomeration economies. We explore a unique dataset on mobile phone calls to examine how distance and population density shape the structure of social interactions. Exploiting an exogenous change in travel times, we and that distance is highly detrimental to interpersonal exchange. We show that, despite distance-related costs, urban residents do not benefi t from larger networks when spatial sorting is accounted for. Higher density rather generates a more efficient network in terms of matching quality, measured via link stability, and information diffusion capacity, measured via clustering.

Büchel-Cities and the Structure of Social Interactions-493.pdf

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11:30am - 12:00pm

There is no `I' in Team - Skill Distribution and Team Performance: Evidence from the German Bundesliga

Mario Jametti[1], **Eleonora Lanzio**[2], **Edoardo Slerca**[2]

[1]Università della Svizzera italiana, Switzerland, CESifo; [2]Università della Svizzera italiana, Switzerland; mario.jametti@usi.ch

We explore the effect of within team skill distribution on performance using data from the German Bundesliga.

Jametti-There is no `I in Team-480.pdf

12:00pm - 12:30pm

Efficient Incentives In Social Networks: Gamification And The Coase Theorem

Thomas Daske

Technical University of Munich, Germany; thomas.daske@tum.de

This study explores mechanism design for networks of interpersonal relationships. Agents' social preferences and private payoffs are all subject to asymmetric information; utility is quasi-linear. Surprisingly, the asymmetry of information about agents' social preferences can be utilized to satisfy agents' participation constraints. The central result is a constructive proof of the Coase theorem, in its typical mechanism-design interpretation, for networks of at least three agents: Any such network can resolve any allocation problem with a mechanism that is Bayesian incentive-compatible, interim individually rational, and ex-post Pareto-efficient. The endogenously derived solution concept is `gamification': Resolve the agents' allocation problem with an efficient social-preference robust mechanism; attract agents' participation by complementing this mechanism with an unrelated hawk-dove like game, a game that provides them with a platform to live out their propensities to cooperate or compete. A figurative example is a fundraiser complemented with awarding the best-dressed guest.

Daske-Efficient Incentives In Social Networks-552.pdf

12:30pm - 1:00pm

It's Where You're From, It's Where You're At: Culture, Individualism and Preferences for Redistribution

Olle Hammar
Uppsala University, Sweden; olle.hammar@nek.uu.se

In this study, I analyze the relationship between individualism and preferences for income redistribution and equality, using variation in immigrants' countries of origin to capture the impact of cultural beliefs on individual preferences. Using global survey data for a large number of individuals and countries around the world, I find strong support for the hypothesis that coming from a more individualistic culture is negatively and significantly associated with an individual's preferences for redistribution. The results are confirmed using a variety of robustness checks, including matching estimators and the grammatical rule of a pronoun drop as an instrumental variable. Cultural assimilation analysis, however, indicates that the impact of the cultural origin weakens off with time spent in the new country, and that the culture of origin has no statistically significant effect on an individual's current preferences for redistribution if migration took place before the age of 10.

Hammar-It's Where Youre From, Its Where Youre At-450.pdf

11:00am - 1:00pm
Gilbert Scott 134

A13: Property taxation

Session Chair: **Simon Camilo Buechler**, University of Bern

11:00am - 11:30am

The Electoral Consequences of a Tax Reform under Partial Decentralization

Catarina Alvarez
Nova School of Business and Economics, Portugal; catarina.alvarez.2016@novasbe.pt

Decentralization is usually not equivalent to a full separation of responsibilities across different levels of government. Hence, it is often argued that decentralization leads to a reduction of political accountability. This paper tests this hypothesis empirically by leveraging the the financial assistance program to Portugal in 2011 as a quasi-natural experiment, since it represented an exogenous shock in tax liabilities due to an urgent wave of property reassessments. In a first step, I use a difference-in-differences approach to quantify the impact of the property tax reform on fiscal outcomes at the local level. In a second step, I use the quasi-experimental variation in local budgets to analyze the subsequent effects on local election outcomes in 2013. Finally, I provide a heterogeneity analysis to compare the electoral effects across municipalities that are politically aligned and non-aligned with the central government.

Alvarez-The Electoral Consequences of a Tax Reform under Partial Decentralization-606.pdf

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11:30am - 12:00pm

Impact of the German Real Estate Transfer Tax on the Commercial Real Estate Market

Coletta Frenzel Baudisch[1], **Carolin Dresselhaus**[2]
[1]Justus Liebig University Giessen, Germany; [2]Landtag Rheinland-Pfalz, Germany;
coletta.frenzel@wirtschaft.uni-giessen.de

We examine the impact of the real estate transfer tax (RETT) on transactions and (net-of-tax) prices of commercial buildings and vacant commercial lots by means of a fixed-effects panel regression. The empirical analysis shows an association of a rise of the RETT by 1% with a decrease of office transactions by up to 0.48% and reduced prices by up to 0.21\%. On the market for other commercial properties, transactions and prices decline by 0.17% and 0.19% respectively. In the case of vacant commercial lots, a RETT increase seems to induce an increase of average prices by up to 0.43%, denoting tax incidence with the buyer. We find a negative response to RETT raises of 0.30% for transactions of vacant lots in the data.

In addition, we analyze possible neighborhood effects among the states.

Frenzel Baudisch-Impact of the German Real Estate Transfer Tax on the Commercial Real Estate Market-108.pdf

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12:00pm - 12:30pm

International Trade Integration of the East and Local Public Finance in Germany

Sebastian Kunert
University of Duisburg-Essen, Germany; sebastian.kunert@uni-due.de

This paper analyzes the causal effect of rising German trade with China and Eastern Europe on local government budgets during the period 1992–2006. Various income and spending categories of German municipalities at the district level are analyzed employing an instrumental variables approach. I find at least mild evidence of 'winner' and 'loser' municipalities in terms of per capita budget revenues and expenditures. While the effects are absent or less pronounced for aggregate per capita operational income and spending at the district level, I identify certain revenue sources and expenditure categories, which are significantly affected by being exposed to trade with the East. In particular, per capita business tax income is lower in districts with high import exposure as is spending for community streets and sports. I argue that these effects are more pronounced in spending categories where local governments have substantial leeway in budgeting and execution of their duties.

Kunert-International Trade Integration of the East and Local Public Finance-498.pdf

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12:30pm - 1:00pm

The Geography of Housing Subsidies

Simon Camilo Buechler[1], **Yashar Blouri**[1], **Olivier Schoeni**[2]
[1]University of Bern, Switzerland; [2]Laval University, Canada; simon.buechler@vwi.unibe.ch

We investigate the impact of the U.S. federal mortgage interest deduction (MID) on the location and tenure decisions of households. We build a spatial general equilibrium model at the county level featuring imperfect labor mobility, commuting flows, and endogenous tenure mode. Holding public expenditure

constant, our counterfactual analysis indicates that eliminating the MID subsidies would lower homeownership rates by 4.1% but increase

welfare by 0.1%. We attribute the welfare gain to the relocation of owners and renters closer to productive urban areas and to a decrease in commuting flows. Our findings imply that housing subsidies worsen urban sprawl.

Buechler-The Geography of Housing Subsidies-325.pdf

11:00am - 1:00pm

Gilbert Scott 356

A14: Simulation

Session Chair: **Magdalena Zachlod-Jelec**, European Commission, Joint Research Centre

11:00am - 11:30am

Why Is The Shape Of The Laffer Curve For Consumption Tax Different From That For Labor Income Tax?

Kazuki Hiraga[1], **Kengo Nutahara**[2]

[1]Tokai University, Japan; [2]Senshu University, Japan; nutti@isc.senshu-u.ac.jp

It is well known that the equivalence between consumption and labor income taxes holds. However, recent macroeconomic studies on the Laffer curves that use dynamic general equilibrium models find that the Laffer curve for consumption tax might not be hump-shaped, but monotonically increasing, whereas that for labor income tax is hump-shaped. This study finds that the main cause of this difference of two Laffer curves is the different effects of increasing tax rate on the relative price of leisure (RPL). The elasticity of the RPL from an increasing consumption tax rate is at most 1, whereas it can be infinity in the case of labor income tax.

Hiraga-Why Is The Shape Of The Laffer Curve For Consumption Tax Different-172.pdf

11:30am - 12:00pm

Income Redistribution Effect of Sequential Personal Income Tax Reforms: A Microsimulation Analysis in Japan

Takero Doi[1,2], **Hiroaki Kurita**[1]

[1]Keio University, Japan; [2]Tokyo Foundation for Policy Research, Japan; tdoi@econ.keio.ac.jp

We examine the income redistribution effect of the sequential personal income tax reforms planned in the 2010s in Japan, using microsimulation based on household micro data. Personal income tax system faces a problem of weakening redistribution effect in Japan, because income deductions are heavily used, but tax credits are rarely. We find the upper limit of deduction for salary income newly established in 2013 is the largest redistribution effect among these reforms. The redistribution effect of raising the capital gains tax rate (from 10% to 20%) in 2014 and raising the highest tax rate (from 40% to 45%) in 2015 is smaller than it. However, even if all income tax reforms were implemented, the Gini coefficient of the equivalent household disposable income decreases from 0.3134 to 0.3105. The redistribution effect is very limited, since reforms to convert income deductions into tax credits in personal income taxation have not been started.

Doi-Income Redistribution Effect of Sequential Personal Income Tax Reforms-386.pdf

12:00pm - 12:30pm

Transfer Programs Enforcement and the Use of Time

Rodrigo Ceni, **Gonzalo Salas**

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Conditional Cash Transfer (CCT) programs have been in the academic and political discussion in the last decades, but its level of enforcement no deserves so much attention. In this paper, we analyze the role of the level of enforcement in teenagers use of time. We develop a structural discrete choice model in which teenagers decide how to split their day time in attending high school, work in the market, home production and leisure. Teenagers and their parents decide jointly during two consecutive CCT programs with different characteristics and conditionalities. The model captures the main moments in the data. The policy experiments show if the level of enforcement rise to a medium level, the rate of school attendance increase by 10% and if it is maximum, in 18%. Finally, if the transfer become the half, the share of those who only study falls, and individuals work more.

Ceni-Transfer Programs Enforcement and the Use of Time-532.pdf

12:30pm - 1:00pm

Micro-Founded Tax Policy Effects in a Heterogenous-Agent Macro-Model

Magdalena Zachlod-Jelec[1], **Diego d'Andria**[1], **Jason DeBacker**[2], **Richard W. Evans**[3], **Jonathan Pycroft**[1]

[1]European Commission, Joint Research Centre, Spain; [2]Darla Moore School of Business, University of South Carolina; [3]Becker Friedman Institute, University of Chicago; Magdalena.Zachlod-Jelec@ec.europa.eu

Microsimulation models are increasingly used to calibrate macro models for tax policy analysis. Yet, they are rarely used to represent the non-linearity of the tax and social bene fit system and interactions between capital and labour incomes which play a key role to understand behavioural effects. Following DeBacker et al. (2018b) we use a microsimulation model to provide the output to estimate the parameters of bivariate non-linear tax functions in a macro model. In doing so we make marginal and average tax rates bivariate functions of capital income and labour income. To illustrate the methodology, we simulate a reduction in marginal personal income tax rates in Italy with a microsimulation model, translating the microsimulation results into the shock for a dynamic overlapping generations model. Our results show that this policy change affects differently households distinguished by age and ability type.

Zachlod-Jelec-Micro-Founded Tax Policy Effects in a Heterogenous-Agent Macro-Model-502.pdf

11:00am - 1:00pm
James Watt South Stevenson 361

A15: Pensions and ageing I

Session Chair: **Jonathan Pycroft**, European Commission

11:00am - 11:30am

The Adverse and Beneficial Effects of Front-Loaded Pension Contributions

Ed Westerhout
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Collective defined benefit pension schemes typically apply age-independent contribution and accrual rates. This implies that pension contributions are front-loaded. If pension contributions and accruals relate to earned labour income, this affects labour market efficiency. For it implies that the labour supply of younger workers is implicitly taxed and that of older workers implicitly subsidized. This paper confirms conventional wisdom that front-loading may be welfare-reducing, both through the implicit tax and the implicit subsidy. Then, it shows that the opposite result may hold true if there is government spending financed with a labour income tax. Front-loading may then be welfare-increasing. In particular, the more elastic is the labour supply of older workers relative to that of younger workers, the more likely it is that front-loading of pension contributions produces a welfare gain.

Westerhout-The Adverse and Beneficial Effects of Front-Loaded Pension Contributions-365.pdf

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11:30am - 12:00pm

The Fiscal Sustainability of State and Local Government Pension Plans

Byron Lutz[1], **Jamie Lenney**[2], **Louise Sheiner**[3]
[1]Federal Reserve Board, United States of America; [2]Bank of England; [3]Brookings Institution; byron.f.lutz@frb.gov

In this paper, we explore the fiscal sustainability of U.S. state and local government pensions plans. In particular, we examine if under current benefit and funding policies state and local pension plans will ever become insolvent, and, if so, when. We then examine the fiscal cost of stabilizing pension debt as a share of the economy and examine the cost associated with delaying such stabilization into the future. Our results suggest that, under low or moderate asset return assumptions and in aggregate for the U.S. as a whole, pension debt can be stabilized as a share of the economy with relatively moderate fiscal adjustments. Notably, there appear to be only modest returns to starting this stabilization process now versus a decade in the future. Of course, there is significant heterogeneity with some plans requiring large increases to stabilize their pension debt.

Lutz-The Fiscal Sustainability of State and Local Government Pension Plans-558.pdf

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12:00pm - 12:30pm

Growing Old Gracefully: Fiscal policy for an ageing society

Jason DeBacker[2], **Richard W. Evans**[3], **Jonathan Pycroft**[1], **Magdalena Zachlod-Jelec**[1]
[1]European Commission, Spain; [2]University of South Carolina; [3]University of Chicago; Jonathan.Pycroft@ec.europa.eu

The Italian population is shrinking and ageing. While some measures have been introduced, debt sustainability projections point to significant pressure on Italy's public finances in the medium-term.

In this paper, we evaluate the macroeconomic and intergenerational impact of realistic demographic trends in Italy with an overlapping generations model, OG-ITA. Key features include an overlapping generations structure of individuals of ages 21 to 100, split into seven income-earning ability types. By integrating microeconomic data and simulations from the EUROMOD microsimulation model into the overlapping generations macro model, we address the dynamic effects of fiscal policies that would counteract the fiscal challenges of ageing populations.

The simulations compare realistic demographic projections with those under an unchanged population profile. We furthermore simulate pension reforms by raising the age at which one receives a public pension. The results confirm the desirability of combining tax and pension reforms to address the challenges of ageing societies.

DeBacker-Growing Old Gracefully-483.pdf

12:30pm - 1:00pm

GDP-linked Bonds in Japan and Their Implications on Public Pension Policy

Shigeki Kunieda
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We consider the implication of GDP-linked bonds in Japan. After considering the detailed plan of GDP-linked bonds in Japan, we consider the effects of GDP-linked bonds to the debt limit. We find that introduction of GDP-linked bonds raises the debt limit significantly in Japan. However, since risk premium and novelty premium can be very large now, the gradual approach to GDP-linked bonds is recommended.

Also, we point out that NDC (notional defined contribution pension) is similar to non-tradable GDP-linked bonds, so NDC is effective to keep fiscal sustainability of public pension. At the same time, NDC may not provide fair return rate since it does not include risk premium demanded by tradable GDP-linked bonds holders. The ""macroeconomic indexation" adjustment of the current Japanese public pension has similar characteristic to temporal NDC. The fundamental pension reform proposal replacing Japanese existing public pension by funded defined contribution pension may damage fiscal sustainability.

Kunieda-GDP-linked Bonds in Japan and Their Implications on Public Pension Policy-191.pdf

11:00am - 1:00pm
Bute Hall

A16: Social insurance I

Session Chair: **Eva Mörk**, Uppsala University

Reducing Social Security Contributions: More Employment, Higher Wages or Increased Profits?

Sophie Cottet
Paris School of Economics, France; sophie.cottet@ipp.eu

Social Security Contributions (SSCs) induce a gap between the labor cost an employer faces and the wage effectively earned by an employee. In France, SSCs nominally paid by the employer represent an additional cost for labor of around one third of the gross wage. This high level of employer SSCs is combined to a large minimum wage. Altogether, these features have been suspected of fostering unemployment of less qualified workers. Since 1993, several reforms have reduced employer SSCs for low wages in order to favor employment. Building on previous works and implementing precise microsimulation of SSCs, I explore firm-level effects of the 1995-1997 reforms by implementing a dynamic difference-in-difference strategy with different levels of “treatment”. I find that reducing SSCs had a strong impact on employment, albeit temporary. The most affected firms also increased their profits. I found however no effect on average wage progression for different wage groups.

Cottet-Reducing Social Security Contributions-560.pdf

Earnings Risk and Tax Policy

Johannes Koenig
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estimate a life-cycle labor supply model to quantify individuals’ exposure to permanent earnings risk. I find that permanent earnings risk in the US has been on the rise since the early 2000s and has taken a marked hike during the financial crisis of 2008. In contrast, the insurance effect of the progressive tax and transfer system, which mitigates this risk, has remained flat. I estimate the progressivity of the tax and transfer system using a power function approximation. This progressivity parameter is sufficient to identify the insurance effect of the tax and transfer system.

Further, when progressivity is shut down, the model features only 5% less insurance. Earnings risk could have been reduced to pre-crisis levels by increasing progressivity substantially, lowering the progressivity parameter from the observed level of 0.93 to 0.78.

Koenig-Earnings Risk and Tax Policy-113.pdf

Adjusting the Welfare System to New Labour Market Risks: Integrating an In-Work Benefit into the German Basic Income System

Jannek Mühlhan, Kerstin Bruckmeier, Jürgen Wiemers
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Labour market risks in Germany have increasingly shifted from unemployment towards unstable low-paying jobs and in-work poverty. This paper proposes an adjustment of the German welfare system to these new labour market risks via the implementation of an in-work benefit (IWB) based on the rules of the existing basic income system. The aim of the reform is to reduce the complexity of the benefit system, to increase incentives to work full-time, to increase benefit take-up, and to

reduce poverty. We employ the microsimulation model of the Institute for Employment Research (IAB-MSM) to analyse the fiscal, distributional, and labour supply effects of the proposed IWB. Our reform proposal achieves stronger effects at lower financial expenditures compared to a benchmark of reforms recently implemented by the government. The IWB increases labour supply by 110 thousand full-time working individuals and reduces poverty by 9 per cent.

Mühlhan-Adjusting the Welfare System to New Labour Market Risks-472.pdf

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The Role Of Economic Incentives For Social Assistance Recipients: The Swedish Earnings Disregard

Eva Mörk[1], Ulrika Vikman[2]
[1]Uppsala University, Sweden; [2]IFAU, Sweden; eva.mork@nek.uu.se

In this paper, we evaluate the Swedish earnings disregard that was put in place in July 2013 and implies that, for households that have received social assistance for six months or more, 25 percent of earnings is exempted when the benefit level is calculated. Having access to longitudinal individual level data for all Swedish inhabitants aged 18-64 for the period 2005-2013, we are able to separate between potential entry, lock in and exit effects, thereby giving a more complete picture of the effects of an earnings disregard.

Mörk-The Role Of Economic Incentives For Social Assistance Recipients-234.pdf

1:00pm - 2:00pm **Lunch**
Hunter Halls

2:00pm - 4:00pm **B01: Optimal taxation III - Labor income taxation**
McIntyre 201
Session Chair: **Spencer Bastani**, Linnæus University

2:00pm - 2:30pm

Optimal Taxation with Multiple Incomes and Types

Etienne Lehmann[1], Sander Renes[2], Kevin Spiritus[2], Floris T Zoutman[3]
[1]CRED(TEPP), Université Paris 2, France; [2]Erasmus Universiteit Rotterdam, The Netherlands; [3]Norwegian School of Economics and Business Administration (NHH), Norway; etienne.lehmann@gmail.com

We derive an optimal nonlinear income tax formula in the case where taxpayers have several incomes and differ along several dimensions. We show that the tax perturbation approach and the mechanism design approach lead to the same formula. We decompose the design of the optimal tax system in two steps: which taxpayers are assigned to the same tax liability (the design of isotax curves) and which tax

liability is assigned to the each isotax curve. The solution to the second step is characterized by an ABC formula in which welfare weights and behavioral responses are averaged among all taxpayers located on the same isotax curves. Applying our model to the optimal household tax problem, our numerical results display isotax curves that are almost linear and parallel, except close to the boundaries of the income domain.

Lehmann-Optimal Taxation with Multiple Incomes and Types-496.pdf

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2:30pm - 3:00pm

Redistributive Income Taxation with Directed Technical Change

Jonas Loebbing
University of Cologne, Germany; loebbing@wiso.uni-koeln.de

This paper studies the implications of (endogenously) directed technical change for the design of non-linear labor income taxes in a Mirrleesian economy augmented to include endogenous technology choices by firms. I identify conditions under which any progressive tax reform induces technical change that compresses the pre-tax wage distribution. The key intuition is that progressive tax reforms tend to reduce labor supply of more skilled relative to less skilled workers, while the increased relative supply of less skilled workers induces firms to develop technologies that are more complementary to less skilled workers. Second, I provide conditions under which the endogenous response of technology raises the welfare gains from progressive tax reforms. Third, I show that the endogenous technical change effects tend to make the optimal tax scheme more progressive, raising marginal tax rates at the right tail of the income distribution and lowering them (potentially below zero) at the left tail.

Loebbing-Redistributive Income Taxation with Directed Technical Change-557.pdf

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3:00pm - 3:30pm

Ability, Wealth and Taxation

Spencer Bastani, Daniel Waldenström
Paris School of Economics, France; daniel.waldenstrom@psemail.eu

This paper exploits unique Swedish military enlistment data to analyze the

relationship between individuals' cognitive abilities and their labor incomes, wealth and capital income. We find a robust relationship between skills and labor incomes, but also substantial heterogeneity in skill among those with the same labor income. In particular, there is a strong positive correlation between skill and wealth/capital income conditional on labor income. This suggests that combining labor income taxation with wealth and capital income taxation can achieve egalitarian objectives at a lower efficiency cost as compared to only taxing labor income. Our paper also sheds light on the relative roles of innate skills and education in shaping economic outcomes. Skills appear to be more important than education in explaining individuals' wealth and capital income, whereas education is a better predictor for their labor earnings.

Bastani-Ability, Wealth and Taxation-323.pdf

3:30pm - 4:00pm

Social Exclusion and Optimal Redistribution

Thomas Aronsson[1], Spencer Bastani[2]
[1]Umeå University; [2]Linnæus University, Sweden; spencer.bastani@lnu.se

We analyze how government policies should be designed to combat social exlusion. Our vehicle of analysis is a three-period optimal income tax framework where individuals differ in their innate abilities and their costs of obtaining education. Workers who are not sufficiently productive to obtain regular employment in period 1 can enroll in education or become employed in the public sector in order to escape long-term unemployment.

Aronsson-Social Exclusion and Optimal Redistribution-443.pdf

2:00pm - 4:00pm
McIntyre 208

B02: Optimal Taxation IV - Compliance and tax evasion

Session Chair: **Sebastian Kessing**, University of Siegen

2:00pm - 2:30pm

Tax Compliance and Tax Morale: An ABM approach

Fernando Garcia Alvarado[1,2], Paolo Pellizzari[2]
[1]University of Paris 1 Pantheon-Sorbonne, France; [2]Ca' Foscari University of Venice; fernando.garcia@unive.it

This research aims to investigate how tax morale may explain a substantial part of tax compliance even in the extreme case scenario where the individuals' subjective probability of being audited is perceived to be zero. The proposed model parts from a expected utility model with a power utility function. Particularly, it presents a closed-form solution when the subjective probability is perceived to be either zero or one. Hence, conditions are derived on the tax rate and levels of individual tax morale and risk aversion under which agents will disclose some of their income or be fully compliant even though the audit rate is null. The results show how larger audit probabilities and fine rates have positive effects on the fraction of income declared, while larger tax rates may impose a negative impact. The effect of fine rates, however, become less efficient for lower audit probabilities and for higher tax rates.

Garcia Alvarado-Tax Compliance and Tax Morale-529.pdf

2:30pm - 3:00pm

Tax Evasion on a Social Network

Duccio Gamannossi[1], Matthew D Rablen[2]
[1]University of Exeter, United Kingdom; [2]University of Sheffield, United Kingdom; m.rablen@sheffield.ac.uk

We relate tax evasion behavior to a substantial literature on social comparison in judgements. Taxpayers engage in tax evasion as a means to boost their expected consumption relative to others in their social network. The unique Nash equilibrium of the model relates optimal evasion to a (Bonacich) measure of network centrality: more central taxpayers evade more. Given that tax authorities are now investing heavily in big-data tools that aim to construct social networks, we investigate the value of acquiring network information. We do this using networks that allow for celebrity taxpayers, whose consumption is widely seen, and who are systematically of higher wealth. We show that there are pronounced returns to the initial acquisition of network information, albeit targeting audits with highly incomplete knowledge of social networks may be counterproductive.

Gamannossi-Tax Evasion on a Social Network-150.pdf

3:00pm - 3:30pm

Do Countries Really Deviate from the Optimal Tax System?

Cristian Sepulveda-Oberleiter
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One of the main goals of the literature on optimal tax systems is to reduce the gap between the highly stylized normative theory of optimal taxation and the practice of fiscal policy reform. Unfortunately, however, we know little about the extent to which the international experience follows the policy prescriptions derived from economic theory, or how those policy prescriptions should adjust to account for differences in economic development. Based on the standard theory of optimal tax systems, this paper predicts the possible effects of economic development on the optimal level and composition of tax revenue; and then empirically tests these predictions with yearly data on 169 countries, for the period 2008-2013. In average, lower income countries collect less taxes and use more regressive tax instruments like the value added tax; while developed countries rely more on the personal income tax, which allows to implement a greater degree of progressivity.

Sepulveda-Oberleiter-Do Countries Really Deviate from the Optimal Tax System-520.pdf

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3:30pm - 4:00pm

Optimal Tax Administration with Self-Interested Governments

Sebastian Kessing
University of Siegen, Germany; kessing@vwl.wiwi.uni-siegen.de

This note investigates how a self-interested government selects its optimal administration in terms of tax enforcement. The rules guiding the optimal policy are shown to parallel those for benevolent governments, but are adjusted for the marginal benefit of tax revenues. The more the Government is self-interested, the more taxation and tax enforcement exceed the benevolent levels. However, the analysis shows that international support to improve tax administrations and enforcement can benefit the population.

Kessing-Optimal Tax Administration with Self-Interested Governments-533.pdf

2:00pm - 4:00pm

East Quad Lecture Theatre

B03: Empirical taxation I - Wealth and inheritance taxation I

Session Chair: **Adam Michael Lavecchia**, McMaster University

2:00pm - 2:30pm

Taxation and the External Wealth of Nations: Evidence from Bilateral Portfolio Holdings

Harry Huizinga[1,6], Maximilian Todtenhaupt[2,5], Johannes Voget[3,7], Wolf Wagner[4,6]
[1]Tilburg University; [2]Norwegian School of Economics (NHH); [3]University of Mannheim; [4]Erasmus University Rotterdam; [5]University of Munich (LMU); [6]CEPR; [7]ZEW; maximilian.todtenhaupt@nhh.no

This paper examines the impact of capital income taxation on the composition of foreign portfolio investment. Examining a sample of 39 developed and developing countries over the period 2001 to 2015, we find that capital gains and dividend taxation reduce the share of equities on foreign portfolios, while interest taxation increases this share. To the extent that equity commands a higher return than debt investments that accumulates over time, our findings indicate that domestic tax decisions have long-term implications for a country's external wealth.

Huizinga-Taxation and the External Wealth of Nations-236.pdf

2:30pm - 3:00pm

Successful Succession: Inheritance Tax on Family Firms

Philipp Krug[1], Dominika Langenmayr[1,2]
[1]KU Eichstaett-Ingolstadt, Germany; [2]CESifo; pkrug@ku.de

In a number of OECD countries, family firms face lower or no succession taxes if they fulfill continuation requirements. We study the effects of such a preferential treatment in a two-generation model with entrepreneurs and workers. Entrepreneurs have two bequest motives, obtaining utility from joy-of-giving and from the continued existence of their firm (a `spirit of capitalism' motive). They perfectly anticipate their heirs' continuation decisions and investment behavior. A more favorable inheritance tax treatment of continued firms increases investment, but induces low-ability heirs to continue the firm. Higher inheritance taxes discourage investment even if the firm is sold.

Krug-Successful Succession-351.pdf

3:00pm - 3:30pm

Tax-Free Savings Accounts: Who uses them and how?�

Adam Michael Lavecchia
McMaster University, Canada; laveccha@mcmaster.ca

Tax-Free Savings Accounts (TFSAs) are a tax-preferred account introduced in Canada in 2009. TFSA contributions are not deductible, but capital income on accumulated balances accumulates tax-free and withdrawals are not taxable. Using an instrumental variables strategy that exploits differences in annual family TFSA contribution limits, I estimate whether TFSA balances displace other saving. My baseline estimates suggest that a 1 percent increase in TFSA balances lowers taxable financial asset holdings by 0.3 percent. Moreover, using detailed data on household asset location (i.e. the amount of fixed income and equity holdings in taxable and tax-advantaged accounts), I show that TFSA balances only crowd-out taxable fixed income holdings and have no effect on taxable equity holdings. The latter result is consistent with savers following a "pecking-order" location rule, whereby lightly-taxed assets such as equities are located in taxable accounts while fixed income assets are allocated to tax-preferred accounts.

Lavecchia-Tax-Free Savings Accounts-299.pdf

2:00pm - 4:00pm
Gilbert Scott 253

B04: Labor III - Human capital and education finance

Session Chair: **Amy Schwartz**, Syracuse University

2:00pm - 2:30pm

Genetic Endowments, Educational Outcomes and the Mediating Influence of School Investments

Marc Christian Stöckli, Benjamin Arold, Paul Hufe
ifo Institute, LMU Munich; stoeckli@ifo.de

Human capital is the product of natural endowments and a variety of environmental factors that interact in a dynamic manner. In this paper we investigate to what extent investments into schooling environments are able to alter the productivity of genetic endowments. The characterization of this process is of considerable importance for policymakers willing to address equity and efficiency concerns in the production of educational outcomes. We find that school investments indeed mediate the productivity of natural endowments even if conducted at a later stage of individual’s schooling careers. Furthermore, the differential impact of such interventions across people with varying genetic endowments is particularly pronounced for outcomes at the later stages of educational careers.

Stöckli-Genetic Endowments, Educational Outcomes and the Mediating Influence-510.pdf

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2:30pm - 3:00pm

The Effect Of Central Government Grants On Local educational Policy

Rune Borgan Reiling[1], Kari Vea Salvanes[1], Astrid Marie Jorde Sandsør[1], Bjarne Strøm[2]
[1]Nordic Institute for Studies in Innovation, Research and education (NIFU); [2]Norwegian University of Science and Technology, Norway; bjarne.strom@svt.ntnu.no

In many countries, multipurpose local governments are responsible for the provision of compulsory education often in combination with limited possibilities to affect own revenues and substantial discretion on the spending side. General or earmarked central government grants to local governments are important policy tools for national policy-makers to affect school resources. An important question is to what extent receiving local governments allocate additional grants in the way intended by the central government. Utilizing a special grant policy initiated by the Norwegian government in 2015 to increase the teacher-student ratio in primary schools (grade 1-4), this paper uses quasi-experimental methods to investigate how earmarked grants affect educational resource allocation at the local government and school level. Our results show that Norwegian local governments did not increase the average teacher density in primary schools, despite receiving extra grants. The paper goes on to discuss potential reasons why.

Reiling-The Effect Of Central Government Grants On Local educational Policy-477.pdf

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3:00pm - 3:30pm

The Influence of Paternal Investments on Human Capital Formation

Paul Hufe
University of Munich, Germany; paul.hufe@econ.lmu.de

Parental time investments in early childhood are widely recognized for their positive impacts on human capital formation in various domains including health, cognitive skills and socio-emotional development. While much of the existing literature equates parental with maternal time investments, this paper pays particular attention to the role of fathers. In particular, I draw on the Millennium Cohort Study from the UK to estimate human capital production functions that explicitly take account of paternal time investments and their effects on child development. I find that paternal time investments in educational activities are quantitatively important drivers of the cognitive development of children. While these effects are sizable at young ages, they vanish once children reach the school age. In contrast, I find no evidence of paternal time investments influencing the socio-emotional skill development of children.

Hufe-The Influence of Paternal Investments on Human Capital Formation-348.pdf

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3:30pm - 4:00pm

Let Them Eat Lunch: The Impact of Universal Free Meals on Student Performance

Amy Schwartz, Michah Rothbart
Syracuse University, United States of America; amyschwartz@syr.edu

This paper investigates the impact of eliminating fees for school lunch for all students, regardless of income, on academic performance. Using a difference-in-differences design and unique longitudinal, student level data, we derive credibly causal estimates of impacts on test scores in English Language Arts (ELA) and mathematics, and participation in school lunch. We find UFM increases test scores by 0.083 (.032) sd in math and 0.059 (.027) in ELA for non-poor (poor) students and participation in school lunch by roughly 11.0 (5.4) pp for non-poor (poor) students, but no evidence of increases in obesity, overweight, or BMI. Instrumental variable analyses suggest increasing school lunch participation per se improves test

scores and some evidence that participation in school lunch improves weight outcomes for non-poor students. Results are robust to an array of alternative and specifications.

Schwartz-Let Them Eat Lunch-344.pdf

2:00pm - 4:00pm
Gilbert Scott 132

B05: Macro II - Inequality

Session Chair: **Ravi Kanbur**, Cornell University

2:00pm - 2:30pm

The Globalisation-Welfare State Nexus in OECD Countries: Evidence Based on the New KOF Globalisation Index

Florian Haelg[1], **Niklas Potrafke**[2], **Jan-Egbert Sturm**[1]
[1]KOF, ETH Zurich, Switzerland; [2]ifo Institute, Germany; haelg@kof.ethz.ch

This study portrays determinants of social expenditure in OECD countries. Many theories have been proposed to describe why social expenditure has increased in industrialized countries. Determinants include globalization, political-economic variables such as government ideology and electoral motives, demographic change and economic variables such as unemployment. Scholars have used social expenditure as dependent variable in a plethora of empirical studies. We employ extreme bounds analysis to examine robust predictors of social expenditure. Our sample includes 31 OECD countries over the period 1980-2016. The results suggest that trade globalization, fractionalisation of the party system and budget deficits decreased social expenditure. Social globalisation and coalition governments increased social expenditure.

Haelg-The Globalisation-Welfare State Nexus in OECD Countries-327.pdf

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2:30pm - 3:00pm

The "Forgotten" Middle - An Analysis of the Middle Class

Regina Pleninger[1], **Jan-Egbert Sturm**[1,2], **Jakob de Haan**[3,4]
[1]ETH Zürich, Switzerland; [2]CESifo Munich; [3]De Nederlandsche Bank; [4]University of Groningen; pleninger@kof.ethz.ch

This paper studies the effects of economic globalisation on middle income shares. Our findings suggest that economic globalisation, proxied by the KOF Globalisation Index, reduces the income shares of the middle class. Although less pronounced, the share the poorest 10% also drops due to globalisation, while the richest 10% experience a substantial increase in their share. As a consequence, economic globalisation increases overall income inequality. In addition, we distinguish between de facto and de jure measures of globalisation and find that only de facto measures have statistically significant effects on income shares and inequality measures. The results are robust to alternative definitions of middle class income and types of globalisation.

Pleninger-The Forgotten Middle-246.pdf

3:00pm - 3:30pm

Distributive Impacts of Social Protection Systems in OECD Countries: Public-Private Mix and the Hidden Welfare States

Hideki Konishi[1], **Naomi Miyazato**[2]
[1]Waseda University; [2]Nihon University; h.konishi@waseda.jp, miyazato.naomi@nihon-u.ac.jp

Modern welfare states provide social protection benefits not only directly through the public sector but also through the private sector in conjunction with governmental engagement, e.g., by mandating employment-based provisions and giving tax breaks for voluntary transactions. Countries with sufficient social support provided largely via the private sector are called hidden welfare states. Integrating such private social expenditures, this paper estimates the overall distributive impacts of social protection systems in OECD countries, using the SOCX database. Taking into account measurement biases in income inequality indices and reverse causality stemming from policy formation decisions, it found that the overall distributive impact decreases as the provision of social support relies more on the private sector and has no statistical difference from zero in some hidden welfare states.

Konishi-Distributive Impacts of Social Protection Systems-145.pdf

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3:30pm - 4:00pm

Employer Power, Labor Saving Technical Change, And Inequality

Ravi Kanbur[1], **Nancy Chau**[2]
[1]Cornell University; [2]Cornell University; sk145@cornell.edu

How does employer power mediate the impact of labor saving technical change on inequality? This question has largely been neglected in the recent literature on the wage and distributional consequences of automation, where the labor market is assumed to be competitive. In a simple task-based model, with search frictions which generate an equilibrium wage distribution even with identical fi rms and workers, we explore the implications of labor saving technical change for equilibrium outcomes. We show that employer power is a crucial determinant of the nuanced comparative statics of technical change and inequality.

Kanbur-Employer Power, Labor Saving Technical Change, And Inequality-139.pdf

2:00pm - 4:00pm
James Watt South Stevenson 375

B06: Fiscal federalism II - Local government I

Session Chair: **Ryusuke Shinohara**, Hosei University

2:00pm - 2:30pm

Influencing Corruption through Grants

Timothy Goodspeed
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This paper explores how corruption can be influenced by way of grants in a decentralized setting. If regional governments are benevolent and expenditures are decentralized, a benevolent social planner will give more grants to high cost regions. If regional politicians are corrupt, a benevolent social planner will do just the opposite, giving fewer resources to high cost regions to limit potential corruption. If regional politicians can be either honest or corrupt, giving fewer resources to high cost resources has an ambiguous effect on corruption. It may still limit corruption, but may also increase the probability of election of a corrupt politician.

Goodspeed-Influencing Corruption through Grants-255.pdf

2:30pm - 3:00pm

Strategic Intertemporal Budget Allocation of Local Governments in the Model with Spillovers and Mergers

Nobuo Akai, Tsuyoshi Goto
Osaka University, Japan; sge010gt@student.econ.osaka-u.ac.jp

Mergers of local governments, commonly referred to as municipal mergers, have been implemented widely to internalize spillover effects. Many empirical studies point out that municipalities strategically change the intertemporal budget allocation by increasing their debt issuance before mergers, which induces the `fiscal common pool problem', because of pooled budgets after mergers.

However, this phenomenon has not yet been analyzed theoretically. Therefore, this paper examines the mechanism of increased debt issuance before municipal mergers. Our results show that three different effects influence intertemporal budget allocations of municipalities at the time of a merger and the existence of externalities may reduce the severity of the fiscal common pool problem.

Akai-Strategic Intertemporal Budget Allocation of Local Governments-119.pdf

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3:00pm - 3:30pm

Voluntary Representative Negotiation and Public Good Provision: Strategic Delegation and Regional Welfare

Ryusuke Shinohara
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We consider the situation in which the public-good-provider region (region A) and the beneficiary region (region B) voluntarily negotiate the provision of public goods. The negotiation is conducted through representatives, who are appointed through regional election. Comparing the regional welfare with and without bargaining, we clarify the condition that each region benefits from negotiating. First, we show that region A always improves its welfare by negotiating. Second, whether region B improves its welfare by negotiating depends on the intensity of the spillover from the public good and region B's population. If the spillover effect and region B's population are ``sufficiently large,'' then region B is better off by negotiating. However, if they are ``intermediate,'' then region B is worse off by negotiating even though the negotiation improves the welfare of the overall economy. By this result, the representative negotiation may unevenly distribute the negotiation surplus to one of the regions.

Shinohara-Voluntary Representative Negotiation and Public Good Provision-168.pdf

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3:30pm - 4:00pm

Hardening Sub-national Budget Constraints Via Administrative Subordination: The Italian Experience Of Regional Recovery Plans

Massimo Bordignon[1], **Silvia Coretti**[1], **Gilberto Turati**[1], **Massimiliano Piacenza**[2]
[1]Catholic University of Milan, Italy; [2]Università del Piemonte Orientale; massimo.bordignon@unicatt.it

The problem of how to harden the budget of sub-national governments to avoid deficits in a decentralized setting is not new. Since 2007 Italian regions running large deficits were progressively enrolled in Recovery Plans centrally managed. These plans were part of a more general agreement contracted between the Central and the Regional Government in distress, with the aim of restoring a balanced budget while keeping constant the quality of health care services provided at the regional level. Besides a standard version of the Plan, a harder form of Recovery Plan also encompassed a Supervisor appointed by the Central government in charge of leading the implementation of the plan at regional level. We investigate if recovery plans have reached their objectives in terms of cost containment and safeguard of an acceptable provision of health care services and whether different recovery plans had different performances.

Bordignon-Hardening Sub-national Budget Constraints Via Administrative Subordination-414.pdf

2:00pm - 4:00pm
Gilbert Scott 250

B07: Fiscal federalism III - Public goods, inequality, urbanization

Session Chair: **Bodhisattva Sengupta**, Indian Institute of Technology Guwahati

2:00pm - 2:30pm

How Forward-Looking Are Local Governments? Evidence from Indonesia

Traviss Cassidy
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Conventional wisdom in the policy community holds that volatile fiscal transfers to local governments will cause volatile local spending, due to policy myopia. I test the degree to which local governments are forward-looking by exploiting unusual variation in intergovernmental grants in Indonesia. A national reform permanently increased the general grant, and the increase was larger for less densely populated districts. Hydrocarbon-rich districts experienced transitory shocks to shared resource revenue. Districts responded to the permanent revenue shock by increasing investment in lumpy public goods. By contrast, districts smoothed their expenditure responses to the transitory revenue shocks, opting not to adjust lumpy public goods. The results suggest that local governments respond to changes in permanent public income over a time horizon of three to five years. I discuss implications for countercyclical fiscal policy and research on taxation and accountability.

Cassidy-How Forward-Looking Are Local Governments Evidence-598.pdf

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2:30pm - 3:00pm

Local Fiscal Consolidation and Migration: Quasi-experimental Evidence from the Fiscal Rule Reform in Japan

Ryoh Ogawa[1], **Shin Kimura**[2]

[1]Osaka City University, Japan; [2]University of Hyogo, Japan; r.ogawa@econ.osaka-cu.ac.jp, skimura@sim.u-hyogo.ac.jp

This paper clarifies the causality between local fiscal consolidation and migration, exploiting the reformed system relating to fiscal consolidation of local governments in Japan. The new fiscal rule has an early warning system that the local governments are each designated as a fiscal consolidation municipality by the central government based on more fiscal indicators at an earlier stage of bad fiscal condition than ever before. The designation acts as a signal of the high debt level and the future deterioration of public services. We conduct a regression discontinuity design to compare the resident mobility between the designated and non-designated municipalities. We find that the designation decreases the net migration ratio and increases the outbound ratio. Furthermore, we confirmed that the population growth ratios for age groups 0-19, 20-39, and 80 and over, decrease by designation. This suggests households with children or elderly migrate to other municipalities by designation.

Ogawa-Local Fiscal Consolidation and Migration-357.pdf

3:00pm - 3:30pm

How Does Inequality Affect Local Fiscal Policy in Germany?

Samina Sultan[1], **Florian Neumeier**[2], **Lea Immel**[2]

[1]Ludwig-Maximilians University, Germany; [2]ifo Institute, Germany; samina.sultan@econ.lmu.de

This paper studies the effect of income inequality on local fiscal policy outcomes in Germany over the time period 1992 to 2016. Fiscal variables include local tax rates as well as local public spending. We combine administrative panel data on the universe of German municipalities with income inequality data from the German Microcensus. Using an instrumental variables approach, which predicts changes in regional inequality with changes in national inequality only, allows us to overcome confounding effects like mobility and spacial segregation. We find that a rise in inequality translates into higher taxation of businesses and farmers and lowers a regressive tax on property. On the other hand, counties react to a rise in inequality by lowering their overall expenditures, and in particular spending on health care and culture. Thus, our results are ambiguous regarding the distributional consequences of increasing inequality

Sultan-How Does Inequality Affect Local Fiscal Policy in Germany-374.pdf

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3:30pm - 4:00pm

Expenditure Or Revenue? Spillover, Political Economy and Subnational Government Choice

Bodhisattva Sengupta

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Do subnational governments in a federal economy commit to expenditure or to taxes? In this study, we explore the tax-expenditure choice of sub national governments in an economy with interregional grants. Here, local public goods are produced through federally funds and (costly) local revenues. The marginal responsiveness of federal funds to local taxation is influenced by the nature of inter-jurisdiction spillover of such public goods. This, in turn, affects the choice of tax or expenditure by altering the tax price of public good at the provincial level. Second, we show how political economy considerations (for example, re-election probability at the local level elections) interact with provincial spillovers and correlate to a set of possible actions (commitment to revenue or expenditure). Our study complements previous literature (e.g. Koethenbuerger, 2011, JPubEcon) by predicting a richer set of responses at the local level.

Sengupta-Expenditure Or Revenue Spillover, Political Economy and Subnational Government Choice-361.pdf

2:00pm - 4:00pm

Humanities Lecture Theatre

B08: Corporate taxation III - Tax design

Session Chair: **Seppo Kari**, VATT

2:00pm - 2:30pm

Optimal Benefits-Based Corporate Income Tax

Simon Naitram

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I derive an optimal benefit-based corporate tax rate formula as a function of the public input elasticity of profits and the (net of) tax elasticity of profits. I argue that the existence of the corporate income tax should be justified by the benefit-based view of taxation: firms should pay tax according to the benefits they receive from the use of the public input. I argue that benefit-based corporate taxation is normatively fair. Since the public input is a location-specific factor, a positive benefit-based corporate tax rate is also feasible even in a small open economy. The benefit-based view gives three clear principles of corporate tax design. First, we should tax corporate profits at source. Second, the optimal tax base is location-specific rents. Third, profit shifting is normatively wrong. An empirical application suggests the optimal tax rate on U.S. public corporations lies in the range 35 to 52 percent.

Naitram-Optimal Benefits-Based Corporate Income Tax-528.pdf

2:30pm - 3:00pm

On the Optimal Design of Interest Limitations Rules

Olli Tapani Ropponen, **Seppo Kari**
VATT Institute for Economic Research, Finland; olli.ropponen@vatt.fi

This paper studies the properties of interest limitation rules designed to limit the profit-shifting activity of multinational enterprises (MNEs). The focus is on how the two leading alternative earnings stripping rules (ESRs) affect profit-shifting and investment incentives, and which of the two is preferable from society's point of view. By using a dynamic investment model, the paper reveals quite different investment incentives and neutrality properties between the EBIT and EBITDA rules. While the cost of capital remains independent of the useful lives of assets under the EBIT rule, this neutrality is lost under the EBITDA rule. The EBITDA rule is also more sensitive to the key interest limitation parameter, the fixed ratio, than the EBIT rule. However, the EBITDA rule still provides higher social welfare in most cases. The cases where the EBIT rule implies higher welfare are usually those with large differences between the useful lives of assets.

Ropponen-On the Optimal Design of Interest Limitations Rules-367.pdf

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3:00pm - 3:30pm

New Challenges in the Taxation of a Digital Economy, SA vs FA

Nhung Luong, Marcel Gerard
UCLouvain, Universié catholique de Louvain, Belgium; marcel.gerard@uclouvain.be

This paper is about one of the most mobile items in International Public Finance, digital products and factors. Then, although digitalization is a key driver of the economy, it means new challenges for the international tax system, like distortions between digital and traditional businesses, and erosion of tax revenues. Since digital economy may not be ring-fenced, it calls for reforms.

Our contribution aims at strengthening knowledge of digital economy and tax-related issues.

More specifically, from a careful study of literature on two-sided markets, arm's length principle, separate accounting, formulary apportionment, and data factor, we derive conclusions that we further discuss.

The economy has evolved at a fast pace with digital business models expected to arise quickly. However, the international tax system seems outdated for that new reality. Hence, it is pressing reforming it and ensuring a fair and efficient game on the playing field where digital business meets traditional economy.

Luong-New Challenges in the Taxation of a Digital Economy, SA vs FA-228.pdf

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3:30pm - 4:00pm

Tax Deferral and Investment Incentives: The Optimal Design of a Tax-deductible Reserve

Seppo Kari[1], Jussi Laitila[2], Olli Ropponen[1]
[1]VATT, Finland; [2]Ministry of Finance, Finland; seppo.kari@vatt.fi

Several countries have implemented tax deductible reserves, partly to incentivize business investment. Investment reserves are designed directly for this purpose, whereas tax allocation reserves defer taxes generally and may serve other goals as well. This paper employs a delayed-response optimal control model to study how various forms of tax-deductible reserves affect investment incentives. The effects are observed to vary depending on the type and design of the reserve. Tax allocation reserve lowers the effective tax rate and produces a small reduction in the firm's cost of capital. The impacts of investment reserves are more complex. With a low non-investment penalty and a low ceiling for allocations the investment reserve works similarly to a tax allocation reserve. Instead, with a high penalty and a high ceiling it comes close to a neutral cash flow tax. We further analyze the socially optimal design of investment reserves.

Kari-Tax Deferral and Investment Incentives-446.pdf

2:00pm - 4:00pm
Gilbert Scott Lecture Theatre 466

B09: Corporate taxation IV - Empirical corporate taxation I

Session Chair: **Max Pflitsch**, University of Cologne

2:00pm - 2:30pm

Fdi Diversion, Tax Proximity And Regionalism: A Spatial Autoregressive Analysis

Andrzej Leszek Stasio
Vienna University of Economics and Business, Austria; andrzej.stasio@wu.ac.at

An apparent weakness of the mainstream empirical literature on the effects of host country tax regimes and tax treaties on foreign direct investment (FDI) is its reliance on an exclusively bilateral framework. This paper fills this void. I analyse the spatial dependence in bilateral FDI accounting for the tax-proximity between countries and find strong spatial autoregressive relationships that are consistent with pure vertical and export-platform motivations for FDI. The substitution between FDI going into a host economy and other destination markets is suggestive of tax-motivated FDI diversion. I study the relative relevance of taxes on repatriation of dividends, interest and royalties between eight distinct industries and observe differential results. Finally, I find little support for role of regionalism and cultural and historical ties for FDI diversion. Rather, tax-motivated FDI diversion is a global phenomenon.

Stasio-Fdi Diversion, Tax Proximity And Regionalism-564.pdf

2:30pm - 3:00pm

Calculating the Corporate Laffer Tax Rate Using Micro-Data

Carmel Veber[1], Michel Strawczynski[2]
[1]Hebrew University of Jerusalem, School of Public Policy, Israel; [2]Hebrew University of Jerusalem, Dept. of Economics, Israel; michel.strawczynski@mail.huji.ac.il

This paper uses administrative panel micro-data of Israeli firms between 2006 and 2015 to calculate Corporate Laffer Tax rate. We first propose a theoretical model where three effects interact: a mechanical effect, a dynamic effect - related to opening and closing firms - and an efficiency effect on profits. We run regressions for opening and closing firms, and for profits, as a function of the corporate tax rate, together with a bunch of additional explanatory variables. Using the coefficients obtained from these regressions we estimate the Laffer tax rate, which is in a range between 31 and 37 percent – figures that fall into the range shown in the literature by using macro data. Concerning branches, we found that real estate is characterized by a low Laffer tax rate (21 percent) while construction and industry by a high one (close to 50 percent).

Veber-Calculating the Corporate Laffer Tax Rate Using Micro-Data-341.pdf

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3:00pm - 3:30pm

Location Choice and Tax Responsiveness of Foreign Multinationals: Evidence from ASEAN Countries

Athiphat Muthitacharoen
Chulalongkorn University, Thailand; athiphat@gmail.com

This study uses a firm-level dataset to examine the impacts of taxation on multinationals' decisions to set up new foreign subsidiaries in developing ASEAN countries. It finds that taxes play a critical role in MNEs' location choice decision, with tax incentives being instrumental for maintaining location choice probabilities associated with each host country. The findings also indicate important heterogeneity in the tax responsiveness. First, the tax sensitivity for high-tech firms is significantly lower than that for low-tech firms. Second, having a prior presence in the respective host country is associated with substantially lower tax responsiveness. Finally, in accordance with international-tax-avoidance considerations, the tax responsiveness is significantly diminished for affiliates with a connection to tax-haven countries. These provide important policy implications for developing-country governments that consider employing tax incentives to attract MNEs.

Muthitacharoen-Location Choice and Tax Responsiveness of Foreign Multinationals-124.pdf

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3:30pm - 4:00pm

Cross-border Effects of a Major Tax Reform - Evidence from the European Stock Market

Max Pflitsch, **Michael Overesch**
University of Cologne, Germany; pflitsch@wiso.uni-koeln.de

We analyze the effect of a major tax reform on foreign firms. While foreign firms that are active in the respective country should be directly affected, other foreign firms could also be indirectly affected through competition. On the evening of December 15th, 2017, the final version of the U.S. "Tax Cuts and Job Act" was published. With an event study design, we show that following the announcement, the European market overall exhibits positive abnormal returns. We find particularly positive market returns for the European firms that generate revenues in the United States. Our results also suggest that the European firms that face strong competition from U.S. firms exhibit significantly lower returns.

Pflitsch-Cross-border Effects of a Major Tax Reform-317.pdf

2:00pm - 4:00pm

James Watt South Stevenson 354

B11: Tax compliance I

Session Chair: **Anh Pham**, George Mason University

Policy Uncertainty and Tax Non-compliance: Evidence from China

Yukun Sun[1], **Enhui Kou**[2]
[1]Zhongnan University of Economics and Law; [2]Central University of Finance and Economics; syk1208@gmail.com

This paper explores the impact of prefecture leader turnovers on firm tax avoidance. Using firm-level tax administrative data and turnovers of prefecture level politicians from the period 2005 to 2012, we show that firms evade more tax on the year of leadership change, while no such influence on small firms. When we separate the sample by ownership of firms, we find that private firms tend to evade more tax compare with state owned firms and foreign firms. We also find that firms paying taxes to local tax bureau are more sensitive to political turnovers compared with firms paying to national tax bureau. Firms' tax avoidance are more evidence in the prefecture with relatively younger politicians.

Sun-Policy Uncertainty and Tax Non-compliance-611.pdf

Nudging for Tax Compliance: A Meta-Analysis

Zareh Asatryan[1], **Armenak Antinyan**[2]
[1]ZEW Mannheim, Germany; [2]Zhongnan University, China; asatryan@zew.de

Standard economic models of crime fail to explain the levels of tax compliance observed in data. More recent work from behavioral interventions provides evidence that individuals dislike cheating and introduces tax morale to standard theory. This has created a lot of buzz among policy makers around the world to use simple and cheap letters to nudge taxpayers to better comply with taxes. We use methods of meta-analysis to study whether nudges are really effective in curbing tax evasion. We find that behavioral interventions – those aiming to change individual tax morale – do not work well. This is in contrast to more traditional deterrence interventions – those that matter for individual financial decisions – the effectiveness of which, however, depends on the ability of the tax enforcer to implement audits credibly.

Impact of Local Public-Sector Governance on the Business and Tax Registration Compliance: Evidence from Vietnam

Anh Pham
George Mason University, United States of America; apham16@gmu.edu

This paper examines how provincial public-sector governance affects the compliance of household businesses' registration and whether or not the businesses pay taxes, using the Vietnam Household Business Census. Using contiguous border commune-pair fixed effects, we compare household businesses located in neighboring communes but belonging to two different provinces and hence facing different provincial governance. We find that a one-standard-deviation decrease in entry cost of business registration and a one- standard-deviation decrease in bribery and corruption increased the probability of household businesses registering by 5% and 6%, respectively. Additionally, a one-standard-deviation decrease in bribery and corruption decreased the probability of registered household businesses having a tax-ID (businesses need tax-IDs to pay taxes) by 9%. A one-standard-deviation increase in land access (i.e., better property rights) increased the probability of registered household businesses having a tax-ID by 5%.

Pham-Impact of Local Public-Sector Governance on the Business and Tax Registration Compliance-466.pdf

2:00pm - 4:00pm

James Watt South Stevenson 355

B12: Behavioral economics I

Session Chair: **Rose Anne Devlin**, University of Ottawa

2:00pm - 2:30pm

Do Mild Sentences Deter Crime? Evidence using a Regression-Discontinuity Design

Mikael Priks

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We study if harsher sentences deter or increase reoffending by exploiting two discontinuities in the Swedish legal system against driving under the influence. Above certain thresholds, individuals tend to be sentenced to prison, which in practice means one month in minimum-security institutions or electronic monitoring, as opposed to probation. The results show that individuals just above the thresholds commit fewer crimes (traffic-related crime, drug-related crimes and assaults) upon release than those receiving probation. Individuals who are sentenced to prison commit approximately one less crime in the future. Considering the relatively low costs of this short and mild prison sentence, this may well be a cost-efficient law enforcement policy.

Priks-Do Mild Sentences Deter Crime Evidence using a Regression-Discontinuity Design-423.pdf

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2:30pm - 3:00pm

No, But … - Are Three Answering Options Better Than Two In Referendum-based Contingent Valuation Studies?

Michael Ahlheim[1], Tobias Boerger[2], Oliver Froer[3], Sonna Pelz[4], Yalei Zhang[5]

[1]University of Hohenheim, Germany; [2]University of St. Andrews, UK; [3]University of Kablenz-Landau, Grermany; [4]University of Hohenheim, Germany; [5]Tongji University Shanghai, China; ahlheim@uni-hohenheim.de

The so-called trichotomous choice (TC) elicitation format has been suggested as an alternative to the classic dichotomous choice (DC) question format in contingent valuation interviews. The DC format is alleged of leading to an overestimation of the social benefits from a public project since it might induce respondents to state a higher willingness to pay for the project in contingent valuation interviews than they consider adequate, just to signal their approval of the project. We test the performance of TC versus DC in a contingent valuation survey in China. We find that TC leads to more comprehensive information than DC regarding the preferences of respondents towards a public project and to a more realistic assessment of its benefits. We find a tendency of the DC elicitation format to overvalue public projects as compared to the TC format also in the cultural context of China.

Ahlheim-No, But … - Are Three Answering Options Better Than Two-346.pdf

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3:00pm - 3:30pm

Inattention and the Taxation Bias

Antoine Ferey[1], Jeremy Boccanfuso[2]

[1]Ecole Polytechnique - CREST, France; [2]Paris School of Economics - EHESS, France; antoine.ferey@polytechnique.edu

This paper studies how information frictions in tax perceptions interact with the design of actual tax policy. It develops a positive theory of tax policy in which taxpayers endogenously choose their attention to taxes and the government sets tax policy taking taxpayers' attention choices into account. In equilibrium, we show that the government implements inefficiently high tax rates because it faces a commitment problem. This taxation bias directly depends on agents' attention and sheds a new light on the implications of tax misperceptions. Most notably, we find that the underestimation of tax rates is not welfare-improving if taxpayers are not sufficiently attentive to tax policy. Further, we highlight that the positive correlation between income and attention reduces the progressivity of actual tax schedules. Overall, our findings suggest that by inducing information frictions, tax complexity may lead to undesirable and regressive tax increases.

Ferey-Inattention and the Taxation Bias-576.pdf

3:30pm - 4:00pm

Doing Good, Feeling Good: Causal Evidence from Volunteers

Catherine Deri-Armstrong, Rose Anne Devlin, Forough Seifi

University of Ottawa, Canada; radevlin@uottawa.ca

Volunteers are reputedly healthier and happier than their non-volunteering counterparts. But is this a causal link or are healthier, happy individuals simply more likely to volunteer? Some papers have attempted to identify the causal relationship using an instrumental variable methodology, mostly relying on measures of religiosity as instruments for volunteering –however, religiosity may also affect health thus calling into question the validity of this approach. We rely on a novel instrument, a measure physical proximity to volunteer opportunities, to help identify the causal link from volunteering to health and happiness using econometric regression techniques. We find that volunteering is a robustly significant predictor of health, and positively affects life satisfaction for females and for middle-aged individuals.

Deri-Armstrong-Doing Good, Feeling Good-161.pdf

2:00pm - 4:00pm
Gilbert Scott 134

B13: Finance

Session Chair: **Philipp Doerrenberg**, Unibersity of Mannheim

2:00pm - 2:30pm

Investment Losses and Inequality

Maximilian Wenzel[1], **Johannes Koenig**[2]
[1]Freie Universität Berlin, Germany; [2]DIW Berlin; jkoenig@diw.de

Household investment behavior should follow some basic principles implied by the Global Capital Asset Pricing Model (GCAPM). Rational investors will take some, but no uncompensated, risk. Empirical tests of these predictions are difficult to implement, as they require asset information at the household level. This type of data is found in a few, select countries. However, several national surveys provide information on household portfolios aggregated at the level of asset classes. In this paper we build a bridge between analyses relying on asset-level data and those with aggregated data. Hence, we replicate the analysis of Von Gaudecker (2015), who applies a GCAPM with disaggregated data. We artificially aggregate the asset information and show that a class-based GCAPM will produce investment losses that come very close to unclassed estimates. Relying on this result, we analyze investment losses and inequality in in Austria, Belgium, Germany, Ireland, and Spain.

Wenzel-Investment Losses and Inequality-136.pdf

2:30pm - 3:00pm

Profit Taxation and Bank Risk Taking

Michael Kogler
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How can taxation improve financial stability? Recent studies point to large potential stability gains from a reform that eliminates the debt bias in corporate taxation. It is well known that such a reform reduces bank leverage. This paper emphasizes a novel, complementary channel, namely, bank risk taking. We model the portfolio choice of banks under moral hazard and thereby highlight the `incentive function' of equity. We find that (i) introducing an allowance for corporate equity and lowering the corporate tax rate discourages risk taking and offers stability and welfare gains, (ii) a revenue-neutral tax reform unambiguously improves financial stability, and (iii) capital regulation influences how banks respond to taxes and higher tax rates may even reduce risk taking if capital standards are tight.

Kogler-Profit Taxation and Bank Risk Taking-212.pdf

3:00pm - 3:30pm

Speculative Bubbles and Tax Policy

Shigeki Kunieda
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In this paper, I will consider effects of capital gains tax and other tax policy in the model explicitly incorporating bubbles. Rational bubbles may occur when the return from bubbles is taxed more lightly than other assets even in a dynamically inefficient economy. With higher capital gains tax, bubbles should grow faster in order to keep the arbitrage condition with other assets. However investors realize that such higher growth of bubbles is unsustainable. Then, rational bubbles will collapse totally or partially. After the collapse of bubbles, there can be multiple paths; a bubbly equilibrium path converging to the new bubbly steady state with a smaller bubble than before, a bubbly equilibrium path converging to the bubbleless steady state and a bubbleless equilibrium path where there is no bubble at all. I consider two episodes of bubble and tax policy in Japan; land price bubble in late 1980s and rabbit bubble in 1872-73.

Kunieda-Speculative Bubbles and Tax Policy-192.pdf

3:30pm - 4:00pm

Tax Effects on the Trading Behavior of Private Investors: Evidence from Individual Portfolio Data

Florian Buhlmann[1], **Philipp Doerrenberg**[2], **Bejamin Loos**[3], **Johannes Voget**[4]
[1]University of Mannheim; [2]ZEW; [3]University of Technology Sydney; [4]University of Mannheim; doerrenberg@uni-mannheim.de

We study the effects of capital-gains taxation on the trading behavior of individual investors, using confidential portfolio-level panel data provided by a large commercial bank. For identification, we exploit a large capital-gains tax reform in Germany. Prior to 2009, any gains from sold shares with a holding period of less than one year were subject to PIT whereas gains from shares that were held for more than a year remained tax free. This so-called 'speculation tax' was abolished in 2009 and replaced by a system where the holding period was not tax relevant anymore. Using bunching techniques and hazard-rate regressions, we show that the realized holding periods and sale probabilities were considerably affected by the tax prior to 2009. We further study the link between taxes and the disposition effect.

Buhlmann-Tax Effects on the Trading Behavior of Private Investors-538.pdf

2:00pm - 4:00pm
Gilbert Scott 356

B14: Household taxation I

Session Chair: **Barra Roantree**, Economic and Social Research Institute

2:00pm - 2:30pm

The Fiscal Return To Childcare Policies

Dominik Sachs[2], David Koll[1], Helene Turon[4], Fabian Stürmer-Heiber[3]
[1]University of Munich, Germany; [2]European University Institute; [3]Bristol University; [4]University of Munich, Germany; david.koll@eui.eu

We study the long-term fiscal implications of childcare subsidies through their impact on maternal labour supply. Taking human capital accumulation into account, we explicitly capture life-cycle career aspects in a dynamic structural household model of female labour supply and childcare decisions: higher labour supply of mothers today can result in higher future earnings. In our dynamic structural model, we allow households to be heterogeneous in their taste for home produced childcare, their taste for leisure and in their access to informal childcare (e.g. by grandparents). Using German survey data, we provide a structural estimate of the degree to which childcare subsidies are dynamically self-financing through higher labour income tax revenue. Further, we explore how the marginal fiscal returns of childcare subsidies depend on the group of families targeted (e.g. low income, single parents, number of children).

Sachs-The Fiscal Return To Childcare Policies-562.pdf

2:30pm - 3:00pm

A Labor Supply Model with Overtime Work: The Case of Single-Earner Families

Moon Jung Kim, Jonghyeon Oh
Korea Institute of Public Finance, Korea, Republic of (South Korea); moonkim@kipf.re.kr

We propose a labor supply model where, at the moment of being offered a job, the worker observes nominal work hours and he has limited discretion only over their overtime hours. The model is estimated by the simulated method of moments, and the estimated model is utilized to conduct two counterfactual experiments. The first policy is to increase the amount of EITC that is independent of labor income and other variables, while letting the subsidy also to economically inactive households. The second policy is to raise the labor-income tax by ten percent. For the first policy, households associated with low wage rates tend to work longer, while those with middle wage rates tend to decrease work hours and even exit the labor market. Responding to the second policy, those with low wage rates tend to work for longer hours, while those with relatively high hourly wage rates tend to work for fewer hours.

Kim-A Labor Supply Model with Overtime Work-505.pdf

3:00pm - 3:30pm

Same-Sex Marriage Recognition and Taxes: New Evidence about the Impact of Household Taxation

Leora Friedberg[1], Elliott Isaac[2]
[1]University of Virginia, United States of America; [2]Tulane University, United States of America; eisaac@tulane.edu

The U.S. tax code encourages marriage for some and discourages marriage for others, but same-sex couples were only recently exposed to marriage incentives from the tax code. The staggered recognition of same-sex marriage implies, further, that tax incentives varied by state and year, depending on both state and federal recognition. We provide new estimates of the effect of taxes on marriage using variation created by state same-sex marriage recognition, followed by the *United States v. Windsor* Supreme Court ruling, followed by the *Obergefell v. Hodges* ruling. We estimate a significant marriage elasticity that is large relative to the literature, and we explore several dimensions of heterogeneity. Our estimates suggest that the Tax Cuts and Jobs Act, by virtue of diminishing average marriage penalties, would increase the propensity of most cohabiting couples to marry.

Friedberg-Same-Sex Marriage Recognition and Taxes-553.pdf

3:30pm - 4:00pm

Income Tax And The Careers Of Women

Barra Roantree
Economic and Social Research Institute, Ireland; barra.roantree@esri.ie

Under a jointly assessed system of income tax, the marginal rate faced by individuals in a couple depends on their combined income. As a result, the lower earner in a couple - typically a woman - can face the higher marginal rates imposed by a progressive tax schedule from even low levels of earnings. This paper considers how such a system of taxation affects the careers of women.

I first adopt a differences-in-differences approach, exploiting the UK's abolition of joint taxation in 1990. Estimates suggest that absent the reform, employment rates for married women would have been 4-6% lower. However, income taxes also affect the incentives to invest in education, accumulate human capital and take time out from the labour market. To investigate these longer-run responses, and to unpack the mechanisms underlying them, I develop (and estimate the parameters of) a dynamic lifecycle model capturing women's education, employment, fertility and savings decisions.

Roantree-Income Tax And The Careers Of Women-326.pdf

2:00pm - 4:00pm

James Watt South Stevenson 361

B15: Pensions and ageing II

Session Chair: **Bernd Genser**, University of Konstanz

2:00pm - 2:30pm

Financing Pensions with an Aging Population: Estimate Biases with Single-Country Models

Thomas Davoine
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The small open or closed economy assumptions may lead to biased macroeconomic evaluations in an ever more integrated world economy. Using a multi-country model covering 14 European countries with perfect capital markets integration as benchmark, I investigate such biases over the long run. For large

worldwide shocks such as population aging, small open economy estimates are particularly pessimistic, predicting an average 11.8% decline of GDP per capita in Europe, 7.0 %-points worse than closed economy and multi-country estimates, which encapsulate the true expected outcome. While multi-country estimates are bracketed by small open and closed economy estimates at the European level, it is not the case at the country level. For slow aging countries, both small open and closed economy estimates with population aging are too pessimistic because they miss cross-country redistribution effects, sometimes by 2.0 %-points of GDP per capita.

Davoine-Financing Pensions with an Aging Population-186.pdf

2:30pm - 3:00pm

Life-cycle Horizon Learning, Social Security Reform, and Policy Uncertainty

Erin Cottle Hunt

Lafayette College, United States of America; cottlee@lafayette.edu

I develop a theory of bounded rationality that I call lifecycle horizon learning to explore the welfare cost of Social Security policy uncertainty. Agents use adaptive expectations to forecast future aggregates, which introduces cyclical transition dynamics. This magnifies the welfare cost of policy uncertainty, compared to a rational expectations model. The ex-ante welfare cost of policy uncertainty (where policy is either a tax or benefit change in 2030 or 2040) is equivalent to 1.99 percent of period consumption for the cohort of agents most harmed in the life-cycle horizon learning model compared to 1.49 percent in a rational expectations framework.

JEL Codes: D83, D84, D91, E71, H55, H62

Key words: Learning; Bounded Rationality; Policy Uncertainty; Social Security; Fiscal Sustainability

Cottle Hunt-Life-cycle Horizon Learning, Social Security Reform, and Policy Uncertainty-588.pdf

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3:00pm - 3:30pm

How costly are pension reform reversals? - An analysis based on the Ageing Report

Carolin Nerlich[1], Zsuzsa Munkacsi[2], Daniel Baksa[3]

[1]European Central Bank, Germany; [2]International Monetary Fund; [3]Central European University; ZMunkacsi@imf.org

We assess the adverse macroeconomic implications of population ageing, how they can be reduced through pension reforms, and what would be the impact in case reforms were reversed. The latter aspect is highly relevant as several countries currently consider whether to withdraw earlier reform measures. Compared to other studies we exploit the country-specific information contained in the 2018 Ageing Report projections and integrate this information into a general equilibrium model with overlapping generations. We find that population ageing - if left unaddressed - has major adverse macroeconomic effects. By contrast, implementing comprehensive reform packages helps to alleviate the adverse impact and to spread the adjustment burden more equally across generations. If, however, earlier reforms were to be reversed, we show for the case of Germany and Slovakia that this would generate substantial macroeconomic costs going well above the baseline.

(The paper is available from the authors upon request.)

3:30pm - 4:00pm

Pensions in a Globalizing World: How Do (N)DC and (N)DB Schemes Fare and Compare on Portability and Taxation?

Bernd Genser[1], Robert Holzmann[2]

[1]University of Konstanz, Germany; [2]Austrian Academy of Sciences, Vienna; bernd.genser@uni-konstanz.de

As part of globalization, individuals increasingly spend part of their working or retirement life abroad. This raises the issue of the portability and taxation of cross-border pensions in accumulation and disbursement. The paper summarizes the limited literature on portability and taxation of cross-border pensions and concludes that the current taxation approach is unsustainable in a global setting. We present a proposal to move from deferred toward frontloaded taxation of pensions and point at the gains in fairness for individuals and states and some other attractive features of this regime change. Moreover, we discuss three tax payment options for frontloaded pension taxation which can be combined with financial and nonfinancial pension schemes.

Genser-Pensions in a Globalizing World-350.pdf

2:00pm - 4:00pm
Bute Hall

B16: Social insurance II

Session Chair: **Pierre Pestieau**, University of Liege

Health Risk and the Optimality of Social Security

Shantanu Bagchi[1], Juergen Jung[2]

[1]Towson University, United States of America; [2]Towson University, United States of America; sbagchi@towson.edu

We examine the welfare implications of Social Security in a calibrated overlapping-generations model with realistic labor income, mortality, and health risks. While Social Security may have positive insurance effect as an imperfect technology to save for old-age health risk, it may also interfere with households' ability to achieve better short-term consumption smoothing during the work life. We find that the latter effect dominates: Social Security has a larger negative effect on welfare in the presence of health risk. We also find that making Social Security's benefit-earnings rule less progressive has a larger negative effect on households with low education and worse health risks, and making the benefit-earnings rule more progressive has a large positive effect on these households. Overall, we find evidence of small welfare gains from a benefit-earnings rule that is more progressive than the current U.S. rule when health risk affects both household income and expenditures.

Bagchi-Health Risk and the Optimality of Social Security-332.pdf

Informal work, social insurance, and enforcement: Theory and Evidence from Latin America

Rodrigo Ceni
UdelaR, Uruguay; rceni@iecon.ccee.edu.uy

This paper analyzes how informality responds to the quality of labor enforcement and the bundle of benefits that the formal workers receive. In the model, in a general equilibrium framework, the government maximizes the workers' utility subject to a budget constraint, choosing the level of labor contributions' enforcement and the bundle of benefits that the formal worker enjoys. Then, there are a representative firm chooses the share of formal and informal workers that they want to hire; and workers offering a percentage of their work time formally and informally. I estimate the main parameters of the model, the production function, the quality of government enforcement and the quality of benefits for five countries: Argentina, Brazil, Colombia, Peru, and Uruguay. Differences in the quality functions of the government enforcement and benefits are found, as well as in the fines established to enforce labor regulations.

Ceni-Informal work, social insurance, and enforcement-243.pdf

Fair Long-Term Care Insurance

Pierre Pestieau[1], **Marie Louise Leroux**[2], **Gregory Ponthiere**[3]
[1]University of Liege, Belgium; [2]UQUAM, Montreal; [3]Paris School of Economics; p.pestieau@ulg.ac.be

This paper revisits the design of optimal LTC insurance while adopting an ex post egalitarian social criterion, which gives priority to the worst-off in realized terms. Using a lifecycle model with risk about the duration of life and risk about old-age dependence, it is shown that, unlike at the utilitarian optimum, elderly individuals in dependence receive, at the ex post egalitarian optimum, more resources than healthy elderly individuals. Moreover, unlike under the utilitarian criterion, the consumption age-profile under the ex post egalitarian optimum is decreasing in the absence of old-age dependence, and may be decreasing or increasing in case of old-age dependence. We also study the robustness of optimal second-best LTC social insurance to the underlying social welfare criterion.

Pestieau-Fair Long-Term Care Insurance-115.pdf

4:00pm - 4:30pm **Hunter Halls**	**Coffee Break**
4:30pm - 5:30pm **Bute Hall**	**Plenary II: Stefanie Stantcheva (Harvard University), "Taxation and Innovation"** Session Chair: **Bas Jacobs**, Erasmus University Rotterdam Presentation slides published at https://www.iipf.org/cng.htm
5:30pm - 6:30pm **Bute Hall**	**General Assembly of Members**
7:00pm - 8:00pm **Glasgow City Chambers**	**Welcome Reception** Included in registration fee, has to be indicated on the registration form. Delegates will be welcomed by The Lord Provost and canapes and alcoholic beverages will be served. No dinner is provided.

Date: Thursday, 22/Aug/2019

8:00am - 4:00pm **Registration**

Hunter Halls

9:00am - 10:00am **Plenary III: Nathaniel Hendren (Harvard University), "Social Mobility and Investments in Children"**

Bute Hall

Session Chair: **Daniel Waldenström**, Paris School of Economics

Presentation slides published at https://www.iipf.org/cng.htm

10:00am - 10:30am **Coffee Break**

Hunter Halls

10:30am - 12:30pm **C01: Optimal taxation V - Participation and secondary earners**

McIntyre 201

Session Chair: **Helmuth Cremer**, Toulouse School of Economics

10:30am - 11:00am

Optimal Earned Income Tax Credit in the presence of cultural barriers for labor market participation

Michel Strawczynski

Hebrew University of Jerusalem, Israel; michel.strawczynski@mail.huji.ac.il

In this paper I simulate labor market entrance in the presence of cultural barriers that constraint participation of low-income workers. In this case, an optimal EITC depends on social planner's preferences for persistently unemployed and working poor. I check EITC optimality under different types of social planners - from mild inequality averse to Rawlsian; and different kinds of policy makers – conservative and liberal. Using simulations, I find that the imposition of an EITC is optimal in all cases, except for a Rawlsian and liberal policy-maker under full compliance to minimum wage. By calibrating the model for Israel, a country with well-documented cultural barriers for labor market participation, I find that the proposed framework will remain relevant in the foreseeable future. In light of these results, the scare use of an EITC in developed economies remains an open question that merits further research.

Strawczynski-Optimal Earned Income Tax Credit in the presence of cultural barriers-339.pdf

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11:00am - 11:30am

Optimal Income Taxation and Unemployment Benefit with Involuntary Unemployment

Takao Kataoka[2], **Yoshihiro Takamatsu**[1]

[1]Shizuoka University, Japan; [2]Waseda University, Japan; takamatsu.yoshihiro@shizuoka.ac.jp

We consider optimal income taxation and search-contingent unemployment benefits in a model where there are both voluntary and involuntary unemployed households, where households' labor productivity and labor disutilities are heterogeneous, and households choose whether to participate and seek jobs in the labor market. We derive an optimal employment tax rule. We show that employment tax rates depend on the size of the search-contingent unemployment benefit. Our numerical simulations suggest that negative employment tax rates for some income groups with low consumption are less likely to be negative.

Kataoka-Optimal Income Taxation and Unemployment Benefit with Involuntary Unemployment-290.pdf

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11:30am - 12:00pm

Having It All, For All: Child-Care Subsidies and Income Distribution Reconciled

Francesca Barigozzi[2], **Helmuth Cremer**[1], **Kerstin Roeder**[3]

[1]Toulouse School of Economics, France; [2]University of Bologna, Italy; [3]University of Augsburg, Germany; helmuth.cremer@tse-fr.eu

We study child-care policies when redistribution matters. Traditional mothers provide some informal child care, whereas career mothers purchase full time formal care in the market. The sorting of women across career paths is endogenous and shaped by a social norm. Via this norm traditional mothers' informal child care imposes an externality on career mothers, so that the market outcome is inefficient. Informal care is too large and the group of career mothers is too small.

In a second-best settings, a tradeoff between the reduction of gender inequality and redistribution emerges. The optimal uniform subsidy is lower than the "Pigouvian" level. Under a nonlinear policy the first-best "Pigouvian" rule for the (marginal) subsidy on informal care is reestablished. While the share of high career mothers continues to be distorted downward for incentive reasons, this policy reconciles the reduction of gender inequalities with income distribution across couples.

Barigozzi-Having It All, For All-174.pdf

10:30am - 12:30pm **C02: Optimal taxation VI - Taxation, public goods and stabilization**

McIntyre 208

Session Chair: **Bas Jacobs**, Erasmus University Rotterdam

10:30am - 11:00am

Is the Marginal Cost of Public Funds equal to one?

Bjart Holtsmark

Statistics Norway, Norway; bholtsmark@gmail.com

Jacobs (2018) found the marginal cost of public funds (MCF) is one in second best. This conclusion is based on a claim that there are certain shortcomings with the standard definition of MCF, for example that the size and sign of the standard MCF measure is sensitive to the choice of the untaxed good. A less frequently used definition of MCF is therefore applied instead. The contribution of the present paper is two-fold. First, it finds that the standard MCF-measure is not sensitive to the choice of the untaxed good.

Second, it finds that the proposed alternative definition has undesirable properties, for example that it is sensitive to the choice of the untaxed good also in cases where this does not make sense. The present paper therefore concludes that there is a weak basis for the conclusion that MCF is one with optimal taxation.

Holtsmark-Is the Marginal Cost of Public Funds equal to one0-372.pdf

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11:00am - 11:30am

Pareto Efficient Income Taxation and Self-financing Tax Cuts

Thomas Gaube
University of Osnabrueck, Germany; thomas.gaube@uni-osnabrueck.de

The paper compares two criteria for evaluating income tax schedules, namely absence of a self-financing tax cut and Pareto efficiency. It is first pointed out that both criteria are equivalent under nonlinear taxation but not under linear taxation. Then the equivalence is used for showing that (i) the effect of a tax reform on total revenue is a sufficient statistic for Pareto efficiency in the presence of tax evasion, that (ii) the criterion of a self-financing tax cut also applies to the analysis of work related expenses and that (iii) objectives that either maximize statutory disposable income or minimize statutory tax rates lead to a Pareto efficient outcome.

Gaube-Pareto Efficient Income Taxation and Self-financing Tax Cuts-585.pdf

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11:30am - 12:00pm

Optimal Tax Policy Under Uncertainty Over Tax Revenues

Nathan Seegert
University of Utah, United States of America; nathan.seegert@gmail.com

This paper investigates optimal tax policy with uncertainty in private and public consumption. Tax policy affects volatility through two channels; spreading risk between public and private consumption and hedging idiosyncratic tax source risk. This paper develops an excessive risk index to quantify the amount of unnecessary risk governments accept. For US state governments, I find the cost of inefficient risk is roughly 40\% of their expected tax revenues. This cost is mostly due to states being overdependent on a given tax source, e.g., income or sales taxes. In 2014, 36 states are found to be overdependent in either the income or sales tax.

Seegert-Optimal Tax Policy Under Uncertainty Over Tax Revenues-318.pdf

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12:00pm - 12:30pm

The Public Finance Approach to Optimal Stabilization Policy

Bas Jacobs
Erasmus University Rotterdam, Netherlands, The; bjacobs@ese.eur.nl

This paper studies optimal macro-economic stabilization policy in a New Keynesian model of a closed economy with price rigidities, labor-market rigidities and the effective lower bound (ELB) on nominal interest rates. Optimal fiscal policy implementations should be geared towards solving the underlying market failures, not bang-for-the-buck calculations based on fiscal multipliers. A tax on wealth -- coupled to an investment tax credit -- is the optimal way to eliminate the ELB. Furthermore, the first-best solution to involuntary unemployment is to remove the implicit tax ('wedge') on labor as a result of unemployment by means of an explicit subsidy on employment. Public goods are always provided according to the classical Samuelson rule and not to stabilize output. Central banks are superfluous if the government has a sufficiently rich instrument set. Optimal policy is fundamentally Pigouvian and not Keynesian in the New Keynesian model.

Jacobs-The Public Finance Approach to Optimal Stabilization Policy-465.pdf

10:30am - 12:30pm
East Quad Lecture Theatre

C03: Empirical taxation II - Income taxation

Session Chair: **Jukka O Pirttilä**, University of Helsinki

10:30am - 11:00am

Evaluation of the Finnish Basic Income experiment: First year results

Ohto Kanninen[1], **Jouko Verho**[2], **Kari Hämäläinen**[2]
[1]Labour Institute for Economic Research, Finland; [2]Vatt Institute for Economic Research;
ohto.kanninen@gmail.com

The Finnish Basic Income experiment is a large scale randomized field experiment organized by the Social Insurance Institution of Finland. The experiment began in January 2017 and it includes 2,000 unemployed workers receiving basic income. The basic income is 560 euros per month and it is paid unconditionally for two years. The experiment increased work incentives,removed most bureaucracy and allowed for an opt-out from active labour market policies. We will evaluate the effect of this basic income model using register-based data. Our results for the first year show that the experiment did not have a significant effect on employment. Also the preliminary analysis of the secondary outcomes indicate that the experimented model failed to active people. The earnings in the treatment group did not increase and the use of unemployment benefits remained high.

Kanninen-Evaluation of the Finnish Basic Income experiment-462.pdf

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11:00am - 11:30am

Taxation and the Future of Work: How Tax Systems Influence Choice of Employment Form

Anna Milanez[1], **Barbara Bratta**[2]
[1]OECD, France; [2]Ministry of Finance, Italy; anna.milanez@oecd.org

Recent policy discussion has highlighted the variety of ways in which the world of work is changing. One development prevalent in some countries has been an increase certain forms of non-standard work. Is this beneficial, representing increased flexibility in the workforce, or detrimental, representing a deterioration in job quality driven by automation, globalisation and the market power of large employers? These changes also raise crucial issues for tax systems. Differences in tax treatment across employment forms may create tax arbitrage opportunities. This paper investigates the potential for such opportunities for eight countries. It models the labour income taxation, inclusive of social contributions, of standard employees and then of self-employed workers (with applicable tax rules detailed in the paper's annex). The aim is to understand whether countries' tax systems treat different employment forms differently, before approaching the broader question of whether differential treatment has merit when evaluated against tax design principles.

Milanez-Taxation and the Future of Work-495.pdf

11:30am - 12:00pm

On the Time Frame of Tax Responsiveness in Earnings

Trine Engh Vattoe
Statistics Norway, Norway; tev@ssb.no

In estimating the elasticity of taxable income (ETI), analysts have adopted a three-year time span to allow all tax induced changes to materialize. However, there is little evidence as to whether this arbitrary chosen time interval captures the full response of a tax reform. The present paper discusses the extent to which the conventional static approach underestimates the long-term effect when allowing for individuals gradually adjusting earnings to the desired level. By employing Norwegian tax return data for wage earners over a 14-year period (1995-2008) with multiple changes in the tax schedule, I find that allowing for dynamic effects in earnings increases the ETI estimate from 0.11 to 0.15. Most importantly, the conventional static approach fails to approximate the long-term elasticity estimate by simply extending the time span.

Vattoe-On the Time Frame of Tax Responsiveness in Earnings-248.pdf

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12:00pm - 12:30pm

The Effects Of Personal Income Tax Reform on Taxable Income In Uganda

Pia Rattenhuber[1], Maria Jouste[1,3], Tina Kaidu[2], Joseph Okello[2], Jukka Pirttilä[1,4]
[1]UNU-WIDER, Finland; [2]Uganda Revenue Authority; [3]University of Turku; [4]University of Helsinki; jukka@wider.unu.edu

We evaluate a major personal income tax reform in Uganda that came into effect in 2012/13. The reform increased the tax-free lower threshold, increased tax rates for higher incomes and introduced an additional highest tax band. Using the full universe of administrative Pay-as-you-earn (PAYE) data submitted by employers in the formal sector we specifically analyze the impact of the introduction of an additional top tax band on chargeable income. Preliminary results show a positive elasticity of taxable income similar in magnitude to earlier results from developed countries. As intended by policy makers the share of tax payers in the lower tax-free tax bracket decreased after the reform. We contribute to the very scarce literature on effects of personal income tax reform on employee income in a low-income country in Africa.

Rattenhuber-The Effects Of Personal Income Tax Reform on Taxable Income-215.pdf

10:30am - 12:30pm
Gilbert Scott 253

C04: Labor IV - Labor supply and wages

Session Chair: **Beate Jochimsen**, Berlin School of Economics and Law

10:30am - 11:00am

Do All-Day Primary Schools Increase Maternal Labor Supply?

Lukas Riedel
ZEW Mannheim, Germany; lukas.riedel@zew.de

As in many cases: it depends. While the availability of all-day schools does significantly increase the probability that children are in full-day childcare, overall no effect on labormarket participation can be found. If, however, all-day school supply is sufficiently high mothers who have their children in full-day care due to the presence of all-day schools increase their labor supply by 13.7 hours per week.

These results are obtained exploiting the expansion of all-day schools in Germany rolled out since 2003 in a staggered fashion across states and counties, thus creating quasi-experimental variation in the childcare choices faced by mothers. Using the county-level share of all-day primary schools as an instrument for children being in full-day care this paper estimates a local average treatment effect (LATE) on maternal labor supply. Further, utilizing data on county-level take-up rates allows to rule out potential biases through otherwise unobserved parental preferences.

Riedel-Do All-Day Primary Schools Increase Maternal Labor Supply-283.pdf

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11:00am - 11:30am

Resource-Rent Spillovers to Remuneration of Fishermen

Thorolfur Matthiasson[1], Eyjolfur Sigurdsson[2]
[1]University of Iceland; [2]Statistics Iceland; totimatt@hi.is

Icelandic commercial fishermen earn higher wages than they might have attained in another profession. We utilize a database consisting of information gathered from official data (tax returns, labour market surveys, education statistics and population and residency statistics from the Icelandic National Registry) that have earlier been used to calculate returns on education to estimate gains in remuneration when a person switches from any occupation to fishing, correcting for individual factors and for factors like working hours. Preliminary results indicate that a person enjoys an hourly wage that (considering explanatory variables such as age, education and sex) is 39 to 50% higher than the wage that they could have earned if otherwise employed.

Matthiasson-Resource-Rent Spillovers to Remuneration of Fishermen-442.pdf

11:30am - 12:00pm

Can a Wage Subsidy System Help Reduce 50 Per Cent Youth Unemployment? Evidence from South Africa

Amina Ebrahim[2], **Jukka O Pirttilä**[1]

[1]University of Helsinki, VATT, UNU-WIDER; [2]UNU-WIDER; ebrahim@wider.unu.edu

The paper examines the incidence and employment impacts of the Employment Tax Incentive, a South African wage subsidy system that is targeted at the employers of low-wage youth. The paper uses a triple differences strategy and both survey and administrative data, covering the universe of South African workers. The results reveal that the system has not had a positive influence on the employment rate of eligible workers. Monthly earnings have increased in the region where the subsidy is the greatest. This is partly explained by an increase in the hiring rate for young workers, but it may also suggest that the incidence of the subsidy is partly on workers.

Ebrahim-Can a Wage Subsidy System Help Reduce 50 Per Cent Youth Unemployment Evidence-486.pdf

12:00pm - 12:30pm

Impacts of Child Care Reforms on Labor Market Participation of Migrant and Native-born Mothers

Tanja Fendel[1], **Beate Jochimsen**[2]

[1]Institute for Employment Research; [2]Berlin School of Economics and Law; Beate.Jochimsen@hwr-berlin.de

In 2013, Germany introduced two significant child care reforms, a home care allowance for parents who do not use public child care for their children younger than four and an extended right to claim for public child care. Using data obtained from the German Socio-Economic Panel and a two-step difference-in-difference approach, we investigate impacts of these reforms on the labor market participation of migrant and native-born mothers. For native-born mothers, effects are significantly positive. For migrant mothers, results indicate that the reform has no negative effects on the labor market participation.

Fendel-Impacts of Child Care Reforms on Labor Market Participation of Migrant and Native-born Mothers-132.pdf

10:30am - 12:30pm
Gilbert Scott 132

C05: Environmental economics I

Session Chair: **Hayato Kato**, Osaka University

10:30am - 11:00am

Consumption Emission Tax vs. Production Emission Tax in an International Duopoly

Jan S. Voßwinkel[1], **Laura Birg**[2]

[1]Nuertingen-Geislingen University, Germany; [2]University of Göttingen; jan.vosswinkel@hfwu.de

This paper studies the effect of an emission tax on consumption emissions compared to an emission tax on production emissions in an international duopoly with vertical product differentiation in the presence of green consumers. The tax on emission consumption taxes sales of both companies. The tax on production consumption only taxes the domestic firm. If the government applies a tax on consumption emissions, both firms are directly affected by the tax and adjust their product quality levels accordingly. If the government taxes production emissions, only the domestic firm that produces the high-quality product is affected directly by the tax. But both firms adjust their product quality levels as a reaction to the unilateral taxation of production emissions of the high-quality firm.

Voßwinkel-Consumption Emission Tax vs Production Emission Tax-604.pdf

11:00am - 11:30am

Border Tax Adjustments and Tariff-Tax Reforms with Consumption Pollution

Michael S. Michael[1], **Panos Hatzipanayotou**[2], **Nikos Tsakiris**[3]

[1]University of Cyprus, Cyprus; [2]Athens University of Economics and Business, Greece; [3]University of Ioannina, Greece; m.s.michael@ucy.ac.cy

We develop a model of a small open economy, where pollution per unit of consumption between domestically produced and imported quantities of the same good differs. We show that the first-best policy combination calls for consumption taxes on all polluting goods, and Border Tax Adjustment (BTA) measures, i.e., tariffs or import subsidies. We identify conditions under which well known tariff-tax reform policies for developing economies, such as a consumer-price-neutral piecemeal reform of a trade and a consumption tax, and a consumer-price-neutral reform of all trade and consumption taxes improve welfare. We also evaluate whether a consumer-price-neutral reform of a tariff and a consumption tax is superior to a reform of a tariff alone.

Michael-Border Tax Adjustments and Tariff-Tax Reforms with Consumption Pollution-197.pdf

11:30am - 12:00pm

Environmental Taxation in Global Value Chains

Haitao Cheng[1], **Hayato Kato**[2], **Ayako Obashi**[3]

[1]Hitotsubashi University, Japan; [2]Osaka University, Japan; [3]Aoyama Gakuin University, Japan; hayato.kato1@gmail.com

The current globalization is characterized by the spatial unbundling of production processes. As unbundling costs for parts remote from assembly decline, parts production and the associated pollution are spatially diversified. This paper studies environmental policies in a two-country model of global value chains in which the location of parts and assembly can differ. Parts production generates local pollution and is taxed by each country.

When unbundling costs are so high that parts and assembly must co-locate in the pre-globalized world, pollution is spatially concentrated. In this case, harmonizing the environmental tax rates leads to the highest global welfare. By contrast, under low unbundling costs triggering the spatial dispersion of parts production and thus of pollution in the world today, environmental tax harmonization does not maximize the global welfare.

Cheng-Environmental Taxation in Global Value Chains-375.pdf

10:30am - 12:30pm

James Watt South Stevenson 375

C06: Fiscal federalism IV - Revenue

Session Chair: **Daniel Stöhlker**, ifo Institute

10:30am - 11:00am

Estimating Two Phases of Soft Budget Constraints Problem: Evidence from Japanese Prefectures

Kota Sugahara

Kyoto Sangyo University, Japan; sugahara@cc.kyoto-su.ac.jp

This paper ascertains whether a soft budget constraint (SBC) problem is caused by the Local Allocation Tax (LAT) transfer in Japan. We develop a two-period Stackelberg game model that describes the dynamic commitment (DC) problem of the central government and the common pool behavior (CPB) of prefectural governments. Using the data of Japanese prefectural government, we estimate the reaction function of the central government, which represents a DC problem, and the borrowing equation for capturing the CPB of the prefectural government. We find no definitive evidence for CPB whereas the bailout by the LAT transfer is clear. Therefore, we cannot ascertain the so-called SBC problem of the LAT transfer. On the other hand, it seems that the decision-making of the prefectural government is merely incremental not strategic.

Sugahara-Estimating Two Phases of Soft Budget Constraints Problem-364.pdf

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11:00am - 11:30am

Municipal Merger and Debt Issuance in South African Municipality

Tsuyoshi Goto[1], **Sandra Sekgetle**[2], **Takashi Kuramoto**[3]

[1]Osaka University, Japan; [2]National Treasury of South Africa; [3]Konan University, Japan; sge010gt@student.econ.osaka-u.ac.jp

Employing South African data and Difference-In-Difference (DID) method, this paper investigates whether the free-ride behaviour was taken by municipalities which faced their mergers before the municipal demarcation changes are executed. We focus on the South African municipal mergers, where the upper government of municipalities implemented the policy for pre-merged municipalities to suspend new contracts involving the borrowing contract before the mergers. As a result of DID analysis, we show that South African municipalities did decrease the amount of borrowings before their mergers. This result is an opposite result considering the previous empirical researches and means that the proper policy for municipal mergers can prevent the fiscal common pool problem caused by free-ride behavior. In addition, this paper shed the light to utilize the data of developing countries and is the first paper to show there were reductions of borrowings before municipal mergers.

Goto-Municipal Merger and Debt Issuance in South African Municipality-207.pdf

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11:30am - 12:00pm

Local governments' efficiency and its heterogeneity – empirical evidence from a Stochastic Frontier Analysis of Italian municipalities 2010-2015

Francesco Porcelli[1], **Tommaso Agasisti**[2]

[1]SOSE SpA (Italian Ministry of Finance), Italy; [2]Politecnico di Milano; fporcelli@sose.it

This paper investigates the efficiency of Italian local governments using a novel dataset collected by SOSE (Italian Ministry of Treasury) and by means of Stochastic Frontier Analysis, for the period 2010-2015 during an intense period of fiscal consolidation. As dependent variable of the cost function, we consider the total current expenditure for producing local public services. As outputs, we employ a composite indicator for the output volume. Thus, we estimate a global efficiency score for each local government in each year providing a comprehensive evaluation of efficiency for local governments, an exercise still quite rare in the literature. Our findings reveal that after the fiscal consolidation the total expenditure declined over time, less than proportionally when compared with reduction of outputs produced. As a consequence, the global efficiency of Italian municipalities is estimated to be lower in 2015 than it was in 2010.

Porcelli-Local governments' efficiency and its heterogeneity – empirical evidence-338.pdf

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12:00pm - 12:30pm

Quality of Local Public Good Provision and Electoral Support

Daniel Stöhlker

ifo Institute, Germany; Stoehlker@ifo.de

Do voters value the quality of local public goods, such as whether pavements are clean, or whether local roads are in good shape? Using almost 150,000 geo-located complaints posted on the complaint-platform FixMyStreet.com between May 2007 and May 2011, we compute quality indicators for all 8,500 local wards that comprise the whole of England. The results provide compelling evidence for both a strong rewarding and a punishment effect: In wards with positive quality indicators, such as a large fraction of complaints that are solved within 30 days, the incumbent party has statistically and economically significantly higher chances of being re-elected. On the contrary, a large share of complaints that is solved only after twelve months or never increases the probability that the incumbent party is voted out of office by up to seven percentage points. The results provide new insights into the link between local governmental spending and voting behavior.

Stöhlker-Quality of Local Public Good Provision and Electoral Support-509.pdf

10:30am - 12:30pm
Gilbert Scott 250

C07: Local public finance I - Tax incidence and mobility

Session Chair: **Nahid Islam**, Curtin University

10:30am - 11:00am

Multilevel Taxation, Competition, And Sorting: Evidence From Regional Borders

Federico Revelli[1], **Roberto Zotti**[2]
[1]University of Torino, Italy; [2]University of Torino, Italy; roberto.zotti@unito.it

This paper exploits the multi-level structure of progressive personal income taxation in Italy, and particularly the discontinuity of upper-tier top marginal rates at regional borders, to estimate the response of the share of high income taxpayers to local tax differentials and to analyze the tax rate setting decisions of lower-tier municipal authorities relative to their neighbors. We discuss the properties and data requirements of recently proposed border-discontinuity instrumental variable estimators of spatial reaction functions (Parchet, 2019). Using a large panel dataset of municipal and regional income tax rates, we find a positive and significant impact of the net-of-tax rate on the share of top income taxpayers that reside in a locality. The evidence of negative spatial correlation in local income tax rates turns out to be highly sensitive to the specification of the empirical model, leaving open the issue of whether they are strategic complements or substitutes.

Revelli-Multilevel Taxation, Competition, And Sorting-526.pdf

11:00am - 11:30am

The Incidence Of Local Public Goods On Wages: Evidence From Germany

Patrick Gauß[1,2], **Nadine Riedel**[1,3], **Martin Simmler**[4,5]
[1]Ruhr-University-Bochum, Germany; [2]Ruhr Graduate School in Economics; [3]CESifo Munich; [4]Centre for Buisness Taxantion; [5]German Institute for Economic Research (DIW Berlin); patrick.gauss@rub.de

We use rich data on local public good and service (PIGS) provision in Germany to empirically test whether PIGS impact on workers' wages. The effect is theoretically ambiguous: If PIGS raise firm profits, these benefits may partly be passed on to workers through higher wages. If additional PIGS, in turn, attract new resident-workers to a locality, wages may decline. Our empirical results suggest that more PIGS spending on people public goods lowers workers' wages while more spending on infrastructure public goods rises workers' wages. Quantitatively, the effect turns out to be small, however. Assessing the role of specific PIGS dimensions (targeted at particular household or firm groups) yields results in line with our theoretical considerations. Higher spending on elementary school, for example, lowers the wages of workers with school aged children.

Gauß-The Incidence Of Local Public Goods On Wages-455.pdf

11:30am - 12:00pm

Who Bears the Burden of Local Taxes?

Marius Brülhart[1], **Jayson Danton**[2], **Raphael Parchet**[3], **Jörg Schläpfer**[4]
[1]University of Lausanne; [2]Swiss National Bank; [3]Università della Svizzera italiana, Switzerland; [4]Wüest Partner; raphael.parchet@usi.ch

We study the incidence of local taxes on the welfare of heterogeneous house- holds. Our model features imperfectly mobile renters who differ in their income and their valuation for a local public good financed by a proportional income tax. Our empirical estimates are based on municipality-level micro data in Switzer-land, whose institutional setting allows us to instrument tax rates. We embed reduced-form tax base and housing price elasticities in a structural estimation of income-specific preference parameters for a local public good. We find a positive relationship between income and public-good preferences for households with children, and a negative relationship for households without children. The im- plied tax incidence is null for households with children, positive for bottom-50% income households without children, and – tax capitalization notwithstanding – strongly negative for top-25% income households without children.

Brülhart-Who Bears the Burden of Local Taxes-441.pdf

12:00pm - 12:30pm

Population Mobility and Revenue-sharing Equalisation Net Transfer in a Representative Tax System

Nahid Islam, **Felix Chan**, **Jeff Petchey**
Curtin University, Bentley, Western Australia; m.islam25@postgrad.curtin.edu.au

We have developed a theoretical model of a regional economy in the context of population mobility and representative tax system (RTS) based revenue-sharing equalisation net transfer by extending the prior model in the extant literature. We employ population mobility and revenue-sharing equalisation net transfer endogenous into the framework to observe their responses to a change in benefit arising from the provision public good and saving rates in a particular region. Finally, with simultaneous Nash conjectures policy game, we solve social welfare maximisation problem to obtain the best response (first order necessary condition) of a particular region. The results from our model identify the associated marginal costs and benefits from the response of population mobility and equalisation transfer; namely, congestion cost on the public good, expenditure-output interaction through per capita and the marginal product of labour, the strength of tax base and output in a region and expenditure on public good in a region.

Islam-Population Mobility and Revenue-sharing Equalisation Net Transfer-382.pdf

10:30am - 12:30pm
Humanities Lecture Theatre

C08: Corporate taxation V - Invited session IMF

Session Chair: **Victoria J. Perry**, International Monetary Fund
Discussant Paper 1: **Michael P. Devereux**, University of Oxford
Discussant Paper 2: **Victoria J. Perry**, International Monetary Fund

Discussant Paper 3: **Kimberly A. Clausing**, Reed College
Discussant Paper 4: **Carla Birgit Krolage**, ifo Institute and LMU Munich

10:30am - 11:00am

Profit Shifting Before and After the Tax Cuts and Jobs Act

Kimberly A. Clausing
Reed College, United States of America; kimberly.clausing@gmail.com

In recent years, estimates of profit shifting by multinational companies have indicated substantial revenue costs to the U.S. government, in excess of $100 billion per year. The recent Tax Cuts and Jobs Act (TCJA) changed the climate for profit shifting in several ways: the lower U.S. corporate rate lowered the incentive to shift profits offshore, whereas “territorial” tax treatment increased that incentive. In addition, novel base protection measures such as the GILTI were aimed directly at profit shifting. This paper evaluates how TCJA may change the magnitude of profit shifting. Estimates suggest that, once adjustment to the legislation is complete, it should reduce the U.S. affiliate corporate tax base in haven countries by about 20 percent, increasing the tax base in both the United States and in higher-tax foreign countries. Still, positive U.S. tax revenue effects are likely to be modest due to the design of the provisions.

Clausing-Profit Shifting Before and After the Tax Cuts and Jobs Act-622.pdf

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11:00am - 11:30am

Expected Effects of the US Tax Reform on other Countries: Global and Local Survey Evidence

Carla Birgit Krolage, Dorine Boumans, Clemens Fuest, Klaus Wohlrabe
ifo Institute and LMU Munich, Germany; krolage@ifo.de

The Tax Cuts and Jobs Act constitutes the largest change to the US tax system since the 1980 and thoroughly alters the way in which multinational companies are taxed. Current assessments on the reform’s international impact vary widely. This article sheds light on the tax reform’s expected effects on other countries. We first use representative German business survey data to analyse the impact of the reform on German firms. Many firms with substantial US revenues or production capacities in the US intend to expand US investment in response to the reform, in particular large firms and manufacturing companies. The effects on investment in Germany are ambiguous: While some firms substitute between investment locations, others expand in both countries. We subsequently extend our analysis to the global level using worldwide survey data. The results suggest a negative impact on tax revenues and investment in countries with close economic ties to the US.

Krolage-Expected Effects of the US Tax Reform on other Countries-624.pdf

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11:30am - 12:00pm

Corporate Taxation in The Global Economy

Victoria J. Perry
International Monetary Fund, United States of America; vperry@imf.org

The international corporate tax system is under unprecedented stress. The G-20/OECD project on Base Erosion and Profit Shifting (BEPS) has made significant progress in international tax cooperation, addressing some major weak points in the century-old architecture. But vulnerabilities remain. Limitations of the arm’s-length principle—under which transactions between related parties are to be priced as if they were between independent entities—and reliance on notions of physical presence of the taxpayer to establish a legal basis to impose income tax have allowed apparently profitable firms to pay little tax. Tax competition remains largely unaddressed. And concerns with the allocation of taxing rights across countries continue. Recent unilateral measures, moreover, jeopardize such cooperation as has been achieved.

Perry-Corporate Taxation in The Global Economy-623.pdf

12:00pm - 12:30pm

Residual Profit Allocation by Income

Michael P. Devereux[1], Alan Auerbach[2], Michael Keen[3], Paul Oosterhuis[4], Wolfgang Schön[5], John Vella[1]
[1]University of Oxford, United Kingdom; [2]University of California at Berkeley, USA; [3]International Monetary Fund IMF; [4]Skadden, Arps, Slate, Meagher & Flom LLP and Affiliates, USA; [5]Max Planck Institute for Tax Law and Public Finance, Germany; michael.devereux@sbs.ox.ac.uk

This paper presents and analyses a possible reform of the international system for taxing business profit, a Residual Profit Allocation system (RPA). The RPA offers important improvements over the current system, in particular it significantly restricts the opportunities available to multinational companies to shift profits to low tax jurisdictions. It also enjoys some advantages over the other reform proposals such as the destination-based cash flow tax (DBCFT). While the DBCFT has – in principle, at least – more attractive efficiency properties and goes further in eliminating profit-shifting opportunities, it requires a more substantial departure from the existing system. In contrast, whilst the RPA includes some important differences, it remains close to the existing system. It employs familiar concepts and techniques and can be rationalised within the logic of the existing system.

10:30am - 12:30pm
Gilbert Scott Lecture Theatre 466

C09: Corporate taxation VI - Tax havens I

Session Chair: **Kunka Petkova Petkova**, WU University of Economics and Business

10:30am - 11:00am

Tax Havens and Welfare in Non-Haven Countries in a Dynamic World

Zarko Y. Kalamov

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This papers analyzes the short and long term effects that tax havens have on the welfare in non-haven countries when multinational enterprises (MNEs) use internal debt to minimize their tax liability. This profit shifting channel lowers the tax rate sensitivity of investment in the non-haven countries and may impact positively the equilibrium tax rates and welfare. In a static setting, the short and long term effects of profit shifting on welfare are identical and unambiguously positive. However, in a dynamic model, profit shifting lowers welfare in the short term and increases it in the long term, if the redistribution motive of the government is not too strong. While the long term gain overcompensates the initial welfare decline, the nonmonotonic welfare effects have important implications both for empirical research and policy.

Kalamov-Tax Havens and Welfare in Non-Haven Countries in a Dynamic World-571.pdf

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11:00am - 11:30am

Tax Havens and Cross-border Licensing

Jay Pil Choi[1], **Jota Ishikawa**[2,3], **Hirofumi Okoshi**[4]

[1]Michigan State University; [2]Hitotsubashi University, Japan; [3]RIETI; [4]University of Munich; jota@econ.hit-u.ac.jp

Multinational enterprises (MNEs) have incentive for tax planning through transfer pricing when corporate tax rates are different among countries. The incentive is stronger when MNEs own intangible assets which can easily be shifted across countries. To mitigate such strategic tax saving, the OECD proposed the arm's length principle (ALP). This paper investigates how the ALP affects MNE's licensing strategy and welfare in the presence of a tax haven. We deal with two methods of the ALP: the comparable uncontrolled price method and the transactional net margin method. The ALP may distort MNE's licensing decisions, because providing a license to unrelated firms restricts MNE's profit-shifting opportunities due to the emergence of comparable transaction. As a result, welfare may deteriorate. When the MNE's subsidiary and the local firm compete in the market, the ALP harms consumers even with licensing to the local firm and vice versa without licensing to the local firm.

Choi-Tax Havens and Cross-border Licensing-352.pdf

11:30am - 12:00pm

Illicit Financial Flows and Trade Mispricing: Systematic Pricing Patterns in International Trade

Alex Cobham[1], **Petr Janský**[2], **Jan Mareš**[2]

[1]Tax Justice Network; [2]Charles University, Prague, Czech Republic; janxmares@gmail.com

Trade mispricing is a real phenomenon, as documented by numerous case studies. What is less clear is the scale of these illicit financial outflows for developing countries. In this paper we critically review the existing methodologies to estimate trade mispricing. Some studies provide estimates for many developing countries that are not reliable. A few other, more recent studies use confidential customs data to confirm the existence of trade mispricing, but they are unlikely to spread to many developing countries any time soon. Both of these streams of literature are unsatisfactory since they do not provide us with an answer to the question of the scale of trade mispricing for developing countries. This poses an opportunity to develop a new methodological approach, which would combine the strengths of both – developing country coverage and reliability. With this objective in mind, we carry out an explorative analysis using the UN Comtrade data.

Cobham-Illicit Financial Flows and Trade Mispricing-603.pdf

12:00pm - 12:30pm

Anchors, Not Havens: Spillovers In Tax Treaty Bargaining

Kunka Petkova Petkova[1], **Andrzej Stasio**[2], **Martin Zagler**[3]

[1]WU University of Economics and Business, Austria; [2]WU University of Economics and Business, Austria; [3]WU University of Economics and Business, Austria & UPO University of Eastern Piedmont; kunka.petkova@gmail.com

This paper investigates spillovers in tax treaty bargaining. Tax treaties are often seen as a means to mitigate fierce tax competition. We challenge this by demonstrating that past treaties with peers reduce negotiated withholding tax rates (WTR) and thereby the overall tax burden. We focus on the four WTR on passive income - portfolio dividends, participation dividends, interest and royalties, and collect these rates for nearly 3,000 treaties and amending protocols signed 1930-2012. Further, we test the hypothesis that WTR are a product of a bargaining game between the two signatory countries, and are bound by WTR negotiated by any of them with the peers of the other one. We find a positive relationship between the spatial interaction terms and the negotiated WTR. This relationship is most significant for interest and royalties. Also, the effect is strongest if OECD countries are involved, whereas existing treaties with tax havens matter little.

Petkova-Anchors, Not Havens-287.pdf

10:30am - 12:30pm
Fore Hall

C10: Mobility I

Session Chair: **Eckhard Janeba**, University of Mannheim

10:30am - 11:00am

Progressivity of Personal Income Tax and Intergenerational Persistence: Evidence from Italy and Poland

Michele Raitano[1], **Francesco Bloise**[2], **Maurizio Franzini**[3]

[1]Sapienza University of Rome, Italy; [2]University of Roma Tre, Italy; [3]Sapienza University of Rome, Italy; francesco.blow@gmail.com

We analyse the impact of personal income tax (PIT) on the link between parental characteristics and children earnings in Italy and Poland, two countries with comparable levels of intergenerational

association but very different degree of tax progressivity. To this end, using EU-SILC 2011 we estimate two measures of background-related advantages at the mean and at different percentiles of the children's earnings distribution, comparing results related to gross and net earnings. As expected, we find that PIT reduces the size of such association but the bulk of the decrease is related to a decrease in earnings inequality due to taxation rather than to a re-rank of children. Therefore, the higher the tax progressivity, the higher the inequality reduction and the lower the intergenerational association, as confirmed comparing the Italian and Polish cases and observing the influence of PIT on the intergenerational association at top percentiles, where earnings inequality is higher.

Raitano-Progressivity of Personal Income Tax and Intergenerational Persistence-183.pdf

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11:00am - 11:30am

Taxation and Job Mobility in Europe

Davud Rostam-Afschar[1], **Kurt Schmidheiny**[2]

[1]University of Hohenheim, Germany; [2]Universität Basel, Switzerland; kurt.schmidheiny@unibas.ch

This paper analyzes the effects of i) top personal income tax rates, ii) top corporate income tax rates, and iii) movement costs on international migration. We provide evidence based on income tax events for the 28 EU Member States, Norway and Iceland from 1995–2017. We compare effects of taxation to those of migration costs identified through events in interstate occupational licensing. While descriptive evidence suggests that higher taxes in the origin state increase migration, we estimate the long-run tax elasticity of mobility to be precisely zero for personal income taxes and precisely zero for corporate income taxes. In contrast, adoption of freedom of movement for workers increases the migration probability by more than 50% the long run. We show that tax incentives matter in interaction with lower migration costs but not on their own.

Rostam-Afschar-Taxation and Job Mobility in Europe-312.pdf

11:30am - 12:00pm

Earnings Responses of Top Labor Incomes to Tax Changes: Evidence from a Tax Reform in Uruguay

Marcelo Bergolo[1,4], **Gabriel Burdin**[2,4], **Matias Giaccobasso**[3], **Martin Leites**[1], **Horacio Rueda**[1], **Mauricio De Rosa**[5]

[1]UDELAR; [2]LUBS; [3]UCLA; [4]IZA; [5]PSE; mbergolo@iecon.ccee.edu.uy

In this paper we analyze how top income earners respond to personal income tax using administrative tax records from Uruguay during the period 2009-2014. Our identification strategy exploits a reform to Uruguay's progressive labor income tax schedule that generates differential changes in tax rates across very similar taxpayers at the top of the income distribution. Based on a diff-in-diff empirical strategy we estimate elasticities on three margins of behavioral responses –intensive, extensive, income shifting to the top labor income tax rate change. Our results in the intensive margin suggest low elasticities for the whole sample of top earners of around 0.03, although higher elasticities for the sample of self employed (0.43). The extensive margin elasticities of labor income for all top incomes are slightly above 0.2 and statistically significant. Finally, we present suggestive evidence of income shifting from labor income tax base to corporate income tax base.

Bergolo-Earnings Responses of Top Labor Incomes to Tax Changes-265.pdf

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12:00pm - 12:30pm

Preferences over Taxation of High Income Individuals: Evidence from Survey and Laboratory Experiments

Eckhard Janeba[1], **Dirk Engelmann**[2], **Lydia Mechtenberg**[3], **Nils Wehrhöfer**[1]

[1]University of Mannheim, Germany; [2]Humboldt University, Germany; [3]University of Hamburg, Germany; janeba@uni-mannheim.de

Mobility of high income individuals across borders puts pressure on governments to lower taxes. A central tenet of underlying models is that mobile individuals react to tax differentials and immobile households vote for lower taxes. In light of behavioural economics research, we use an experimental survey design and elicit answers from more than 3000 households in the German Internet Panel (GIP) to understand the role of mobility and ideology in tax choice. We observe substantial deviations from the predicted theoretical equilibrium. In many cases comparative static results prevail, however. Furthermore, political ideology matters: left-leaning households choose higher taxes than right-leaning persons, and center-right leaning individuals tend to emigrate more when the tax at home is high. We compare the results with those from a closely related lab experiment, in which subjects appear to behave

more in line with standard predictions.

Janeba-Preferences over Taxation of High Income Individuals-368.pdf

10:30am - 12:30pm

James Watt South Stevenson 354

C11: Tax compliance II

Session Chair: **Mazhar Waseem**, University of Manchester

10:30am - 11:00am

Are Survey-Based Self-Employment Income Under-Reporting Estimates Biased? New Evidence from Register and Survey Data

Norman Gemmell, **Ana Cabral**

Victoria University of Wellington, New Zealand; norman.gemmell@vuw.ac.nz

This paper estimates the income-gap (the proportion of undeclared to true income) of the self-employed using traces of expenditure to infer true income holdings following the approach of Pissarides and Weber (1989) and Feldman and Slemrod (2007). This uses the relationship between expenditure and income for the employed (with lower opportunities to evade) to infer the true income of the self-employed. We use a

unique dataset from New Zealand that matches individuals across survey and register (tax return) data sources. We find that using register income data leads to robust estimates of income underreporting by the self-employed of around 20% on average. By contrast, estimates are only around half as large when based on survey data. Measurement error in survey-reported incomes would appear to account for much of the difference.

Gemmell-Are Survey-Based Self-Employment Income Under-Reporting Estimates Biased New Evidence-147.pdf

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11:00am - 11:30am

The Impact Of Corrupt Tax Collectors And Tax Advisors

Umashanker Trivedi, Amin Mawani
York University, Canada; amawani@schulich.yorku.ca

We examine the impact of auditors seeking bribes on taxpayers' reported incomes with and without the presence of a corrupt auditor, and with different types and levels of bribes (as a percentage of unpaid taxes and penalty on the unreported income, or of reported income). Our first experimental results show that the presence of a corrupt auditor demanding bribes at levels up to the legally sanctioned penalty reduces overall taxpayer compliance. Our second experimental results show that in the absence of corrupt auditors, tax advisors are better at improving taxpayer compliance in cases where advisory fees end up mitigating unpaid taxes and penalties.

Trivedi-The Impact Of Corrupt Tax Collectors And Tax Advisors-307.pdf

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11:30am - 12:00pm

Do Tax Administrative Interventions Targeted To Small Businesses Improve Tax Compliance And Revenue Collection? Evidence From Ugandan Tax Administrative Data

Maria Emilia Jouste[1,2], Ronald Waiswa[3], Milly Nalukwago[3]
[1]University of Turku; [2]UNU-WIDER; [3]Uganda Revenue Authority; maria.jouste@utu.fi

Many developing countries have challenges to improve tax revenue collection and tax paying culture. The adoption of new technologies and innovative methods can be a key in developing tax culture and tax administration. This study analyzes tax administrative reforms which have been targeted to small businesses in Uganda using population-wide tax administrative data. We exploit two administrative interventions, a taxpayer's registration campaign and a new electronic filing system for presumptive tax returns, to estimate their effects on number of taxpayers and number of new taxpayers using the difference-in-differences approach. Our results show that the new electronic filing system increased number of taxpayers filing returns. In contrast, the taxpayer registration campaign has no positive impact.

Jouste-Do Tax Administrative Interventions Targeted To Small Businesses Improve Tax Compliance And Revenue.pdf

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12:00pm - 12:30pm

Pecuniary and Non-Pecuniary Motivations for Tax Compliance: Evidence from Pakistan

Joel Slemrod[1], Obeid Ur Rehman[1], Mazhar Waseem[2]
[1]University of Michigan; [2]Manchester University; mazhar.waseem@manchester.ac.uk

We examine two Pakistani programs to explore the extent to which deterrence, as well as social and psychological factors, play a meaningful role in the compliance behavior of agents. In the first of these programs, the government began publishing online the income tax liability reported by every taxpayer in the country. The second program publicly recognizes and rewards the top 100 tax paying corporations, partnerships, self-employed individuals, and wage-earners in the country. We find that both programs induced a significant compliance response. The public disclosure caused a 9 log point increase in tax liability and 2 log point increase in tax filing by agents exposed to the program. The social recognition of top taxpayers caused a further 17 log point increase in the tax liability reported by the treated agents.

Slemrod-Pecuniary and Non-Pecuniary Motivations for Tax Compliance-587.pdf

10:30am - 12:30pm
James Watt South Stevenson 355

C12: Behavioral economics II

Session Chair: **T. Scott Findley**, Utah State University

Behavioral Responses to a Policy Treatment of Information about Future Pension Benefits

Najat El Mekkaoui de Freitas[1], Berangere Legendre[2], T. Scott Findley[3]
[1]PSL, Universite Paris-Dauphine; [2]Universite Savoie Mont Blanc; [3]Utah State University, CESifo, and Netspar; najat.el-mekkaoui@dauphine.fr, tscott.findley@usu.edu

We evaluate a public policy that provides information to households about future pension benefits, wherein the policy is designed to encourage households to save and/or earn more for retirement. Using regression discontinuity designs and quantile regressions, we find that the treatment might create inequities in behavioral responses between households who process information and households who do not. Specifically, we find that the arrival of pension information encourages wealthy households to increase their retirement savings, while it does not affect the behavior of households with less wealth. To interpret these findings that behavioral responses are asymmetric across the wealth distribution, we construct a life-cycle model with time-inconsistent dynamic optimization in which households have short planning horizons. This model generates predictions that are consistent with our empirical findings, namely that wealthy households (longer planning horizons) are more salient in their behavioral responses to the arrival of information about future pension benefits.

El Mekkaoui de Freitas-Behavioral Responses to a Policy Treatment of Information-259.pdf

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Reference Dependence in Retirement Behavior: Evidence from German Pension Discontinuities

Arthur Seibold
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This paper analyzes a puzzling fact about retirement behavior: the large concentration of job exits at specific ages. In Germany, 30% of workers retire in the month when they reach a “statutory” retirement ages, although there is often no incentive to retire. I use novel administrative data covering the universe of German retirees, and unique variation in retirement incentives in the German pension system. Measuring retirement bunching responses to 644 pension discontinuities, I document that financial incentives alone cannot explain retirement patterns in the data. There is a direct effect of “presenting” a threshold as a statutory age, which is substantially larger than that of financial incentives. Further evidence suggests the framing of statutory ages as reference points for retirement is a potential mechanism. Counterfactual simulations of a model with reference points highlight that increasing statutory ages is an effective policy to increase retirement ages with a positive fiscal impact.

Seibold-Reference Dependence in Retirement Behavior-444.pdf

Pension Knowledge, Financial Literacy, and Retirement Planning

Mikael Elinder[1], Johannes Hagen[2], Mattias Nordin[1], Jenny Säve-Söderbergh[3]
[1]Uppsala University; [2]Jönköping University; [3]Swedish Institute for Social Research, Stockholm University; mikael.elinder@nek.uu.se

A large literature has documented that financial literacy is strongly correlated with preparedness for retirement. However, for complex decisions like planning for retirement, specific knowledge may be necessary in addition to general financial literacy. In this paper, we use new survey data on both pension knowledge and financial literacy, combined with register data from Statistics Sweden and the Swedish Pensions Agency, to show that the general level of pension knowledge in Sweden is low for a large fraction of the population and that pension knowledge is strongly correlated with socioeconomic status. We also show that those who are knowledgeable about the pension system are much better prepared for retirement even when controlling for financial literacy. Our results highlight the importance of context-specific knowledge for rational financial decisions.

Elinder-Pension Knowledge, Financial Literacy, and Retirement Planning-298.pdf

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Dynamic Consistency and Regret

Frank Caliendo[1], T. Scott Findley[2]
[1]Utah State University; [2]Utah State University, CESifo, and Netspar; tscott.findley@usu.edu

Individuals report that they regret not having saved more for retirement. While many interpret such evidence as a rationale for modifying the discount function that applies to future utility (e.g., hyperbolic discounting), we propose that another way to interpret such evidence is to modify the discount function over past utility. To make this point, we solve and simulate a "full control rights" life-cycle consumption and saving problem wherein an individual at a given age has full control over all lifetime resources, including past, present, and future income. The forward discount function is exponential, which preserves the dynamic consistency of choices; but, by allowing for past utility to be discounted relative to present utility, the model generates regret about not having saved more for retirement, even though actual saving decisions are dynamically consistent. Adding an incomplete labor market with choice over retirement timing compounds the regret that individuals experience about past saving decisions.

Caliendo-Dynamic Consistency and Regret-260.pdf

10:30am - 12:30pm
Gilbert Scott 134

C13: Indirect taxation I - VAT I

Session Chair: **Egbert Jongen**, CPB and Leiden University

10:30am - 11:00am

Once or Twice a Month? The Impact of Payment Frequency on Consumption Patterns

Jani-Petri Laamanen[1], Tuomas Matikka[2], Tuuli Paukkeri[2]
[1]Tampere University, Finland; [2]VATT Institute for Economic Research, Finland; jani-petri.laamanen@tuni.fi

We study how the number of benefit payments within a month affect spending patterns of benefit recipients. In Finland, the payment dates of national pension benefits were based on the initial of the recipients’ last name. This generates as-good-as-random variation in payment dates over the month, providing a clear and robust setup to analyze consumption patterns. Using detailed consumption survey data, we find more within-month variation in expenditures for those who received most of their incomes in the beginning of the month, compared to a smoother consumption pattern for those who received their income in a more dispersed manner. There are similar patterns in expenditures both on nondurable goods and on a broader group of goods. Our results imply that two benefit payments, instead of just one, over the month can lead to smoother consumption patterns among benefit recipients.

Laamanen-Once or Twice a Month The Impact of Payment Frequency-563.pdf

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11:00am - 11:30am

Distributive Effects of Value Added Tax in Ghana

Francis Kwaw Andoh
University of Cape Coast, Ghana; fandoh@ucc.edu.gh

The introduction of VAT in Ghana and the subsequent upward adjustments in VAT rates have always been met with varied, sometimes extreme public protests on the basis that increase in VAT rates increases the cost of living through increases in consumer prices. This paper examines the distributional aspects of Ghana’s VAT using data the last three rounds of the Ghana Living standard surveys as well as monthly consumer prices data. The preliminary finds show that the increases in the VAT rates were associated with high CPI for the various household expenditure categories. However, the expenditure groups that take a greater proportion of the total expenditure of households in the lower quintile and rural

localities (relative to those of the higher quintile and urban households) recorded greater increase in the CPI during the period surrounding the implementation of the new VAT rate increase.

Andoh-Distributive Effects of Value Added Tax in Ghana-258.pdf

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11:30am - 12:00pm

Using Temporary VAT Cuts as Fiscal Stimuli - Evidence from the Netherlands

Joke Goes[1], Egbert Jongen[2], Eric van Loon[3]

[1]Ministry of Finance; [2]CPB, Leiden University; [3]The Dutch Authority for the Financial Markets; e.l.w.jongen@cpb.nl

Can a temporary VAT cut boost economic activity during a recession? We study the effects of two temporary VAT cuts on home improvement in the Netherlands during the Great Recession, using differences-in-differences. We find full pass-through of the temporary VAT cuts into lower prices, and a substantial boost in sales of home improvement services of 10-11%. In contrast to previous studies abroad, we find limited intertemporal substitution of home improvement. Hence, rather than just bringing home improvement forward in time, the reform caused an overall increase in home improvement.

Goes-Using Temporary VAT Cuts as Fiscal Stimuli-566.pdf

10:30am - 12:30pm
Gilbert Scott 356

C14: Household taxation II

Session Chair: **Elena Del Rey Canteli**, Universidad de Girona

10:30am - 11:00am

Effects of Child Allowance on Family Expenditure

Kazuko Nakata

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Child poverty has become widely debated issues in Japan, prompting the Japanese government to increase the child allowance and child rearing allowance. Using the “Comprehensive Survey of Living Conditions,” this study examines the effects of child allowance and child rearing allowance receipts on family expenditure and child care expenditure. The analysis takes means testing, family structure, and differences in the number of children and income into account and, moreover, examines the effects of the reforms of child allowance conducted between 2010 and 2012.

The results can be summarized as follows. First, the family expenditure negligibly increased when the government raised child and child rearing allowances. Second, families’ child care expenditure increased when the government raised child and child rearing allowances, depending on the number of children, the children’s age, and household income. Lastly, the child allowance reforms did not have a large effect on family expenditure and child care expenditure.

Nakata-Effects of Child Allowance on Family Expenditure-349.pdf

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11:00am - 11:30am

Fiscal Policy Effectiveness and Gender Equality: Efficacy of Gender Budgeting in Asia Pacific

Lekha Chakraborty[1], Marian Ingrams[2], Yadawendra Singh[3], Komal Jain[4]

[1]National Institute of Public Finance and Policy, India; [2]OECD and SOMO; [3]National Institute of Public Finance and Policy, India (former); [4]National Institute of Public Finance and Policy, India (former); mingrams@jd16.law.harvard.edu, yadawendra@gmail.com, jain.komal712@gmail.com

Our study investigates the impact of gender budgeting on promoting gender equality across Asia Pacific countries. We measure the link between gender budgeting and the Gender Development Index (GDI) and the Gender Inequality Index (GII) scores in each country. The data for our gender inequality variables are mainly drawn from the IMF database on gender indicators and the World Development Indicators database over the 1990–2013 period. Our results show that gender budgeting has a significant effect on increasing the GDI and a small but significant potential to reduce the GII, strengthening the rationale for employing gender budgeting to promote inclusive development. However, our empirical results show no prioritization for gender budgeting in the fiscal space of health and education sectors in the region.

Chakraborty-Fiscal Policy Effectiveness and Gender Equality-618.pdf

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11:30am - 12:00pm

Do Couples Pool Their Income?: Evidence from Demand System Estimation for Germany

Martin Beznoska

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Whether couples pool their resources and behave like a unit or spend their income individually is crucial for social and tax policy. In this paper, I provide a test of the income pooling hypothesis using administrative cross-sectional survey data on expenditures and individual incomes of couple households in Germany. The test is performed within the Quadratic Almost Ideal Demand System (QUAIDS) framework, which allows for an endogenous expenditure budget and endogenous individual income contribution shares in an instrumental variables approach. Although the hypothesis is broadly rejected, there are significant differences regarding the marital status, the presence of at least one child in the household and whether the household is located in a former West or East German federal state. Married couples and couples with children are closer to the acceptance of the hypothesis than unmarried couples without children.

Beznoska-Do Couples Pool Their Income-185.pdf

12:00pm - 12:30pm

Labor Market Effects of Reducing the Gender Gap in Parental Leave Entitlements

Elena Del Rey[1], **Maria Racionero**[2], **Jose I. Silva**[1]
[1]University of Girona, Spain; [2]Australian National University, Australia; elena.delrey@udg.edu

We explore the effect of parental leave entitlements for mothers and fathers on wages and unemployment rates. We show that an increase in leave duration has an ambiguous effect both on job creation and wages. We identify the mechanisms underlying this ambiguity. Given the variety of possible final effects, we calibrate the model for several countries (Denmark, France, Italy, and Portugal) and simulate policy changes. In all countries considered an increase in the duration of either leave negatively affects job creation and the wage of the directly affected worker. As a result, both wages fall while unemployment rates increase in equilibrium. Finally, we explore the effect of closing the gender gap in leave duration and show that, since fathers tend to take the leave less often, increasing the duration of the male-specific leave is less effective in closing the wage and unemployment gaps than decreasing the female-specific one.

Del Rey-Labor Market Effects of Reducing the Gender Gap in Parental Leave Entitlements-292.pdf

10:30am - 12:30pm
James Watt South Stevenson 361

C15: Inequality I - Redistribution

Session Chair: **Sophia Chen**, International Monetary Fund

10:30am - 11:00am

Blessed Top And Misfortunate Bottom? The Long-term Patterns Of Earnings Inequality And Volatility In Germany Since 1960

Timm Bönke[1], **Matthias Giesecke**[3], **Holger Lüthen**[1,2]
[1]FU Berlin, Germany; [2]DIW, Germany; [3]RWI Essen, Germany; timm.boenke@fu-berlin.de

Using administrative biography data on earnings from 1960 through 2015, we provide novel evidence on earnings dynamics throughout various transitions in the German labor market – inter alia strong deregulation, de-unionization and a shift in employment from the industrial to the service sector. We analyze the long-term evolution of permanent inequality and transitory earnings insecurity across generations. We find that young workers face an increasing and substantial amount of insecurity, implying that it becomes more difficult to obtain a stable career track. Splitting earners into top and bottom 50 percent according to their lifetime earnings reveals distinct patters for the two groups: the bottom faces insecurity throughout their complete working lifecycle, whereas the top is able to secure a stable earnings career after age 30 and face mainly permanent differences. Using panel regressions, we show that unemployment, deregulation, female labor market participation, economic growth and openness affect top and bottom differently.

Bönke-Blessed Top And Misfortunate Bottom The Long-term Patterns-430.pdf

11:00am - 11:30am

Distributional National Accounts in the Welfare State: Sweden, 1930–2016

Sebastian Escobar[1], **Olle Hammar**[2], **Daniel Waldenström**[3], **Gabriel Zucman**[4]
[1]Ludwig Maximilians Universität, Germany; [2]Uppsala University, Sweden; [3]Paris School of Economics, France; [4]Berkeley, United States of America; sebastian.escobar@econ.lmu.de

This paper presents new evidence on the evolution of income and wealth inequality in Sweden since 1930. The basis for the analysis is the distributional national accounts (DINA) methodology and to match individual register data with macroeconomic totals from the national accounts and thereby compute new estimates of pre- and post-tax/transfer distributions of income and wealth in Sweden. The paper makes several contributions to the literature on income and wealth distribution. It is first paper to apply the recent DINA methodology using full-population administrative registers that cover multi-decadal panels. This allows for an extensive scrutiny of a range of the assumptions and method approaches used in past DINA-studies of, e.g., inequality in the US and France. Furthermore, the paper will be the first one that studies the DINA series for a Scandinavian welfare state, Sweden, over its entire evolution since 1930.

Escobar-Distributional National Accounts in the Welfare State-213.pdf

11:30am - 12:00pm

Distributional Changes In Turbulent Times: Greece 2007-2016

Panos Tsaklogou[1,3,4], **Eirini Andriopoulou**[1,2], **Alexandros Karakitsios**[1,2]
[1]Athens University of Economics & Business; [2]Ministry of Finance; [3]IZA; [4]Hellenic Observatory, LSE; e.andriopoulou@minfin.gr

The paper explores the effects of the Greek crisis on inequality and poverty. Most indices record an increase in inequality and the effect is larger when the indices are more sensitive to changes close to the bottom of the distribution. The elderly improved their relative position while there was substantial deterioration in the position of the enlarged group of the unemployed. The contribution of disparities between educational groups to aggregate inequality declined while that of disparities between socio-economic groups rose. The progressivity of social transfers rose during the crisis, but this effect was counter-balanced by the adverse effects observed in other income components. All poverty indicators suggest that poverty increased considerably, especially when "anchored" poverty lines are used. Despite an increase in the population share of households headed by pensioners, their contribution to aggregate poverty declined considerably, with a corresponding increase in the contribution of households headed by unemployed persons.

Tsaklogou-Distributional Changes In Turbulent Times-408.pdf

12:00pm - 12:30pm

Sharing the Burden: Household-Level Evidence on Fiscal Consolidation in the European Union

Sophia Chen[1], **Deniz Igan**[1], **Victoria Wenxin Xie**[2]

[1]International Monetary Fund, United States of America; [2]University of California, San Diego; ychen2@imf.org

We explore the distributional impact of fiscal consolidation during the European debt crisis using the narrative approach and household survey data. Adopting a fixed-effect framework, we show that both tax and spending consolidations negatively affect households' food and housing consumption. We find tax hikes to be more contractionary than spending cuts. The impact tends to be larger for poorer and older households, albeit a great degree of nuance depending on the fiscal consolidation measures and the consumption category. Our results suggest that looking at the average effects alone masks the large heterogeneity across households. In some cases, not taking into account household wealth and age can lead to misleading results (e.g. a negative average multiplier).

Chen-Sharing the Burden-204.pdf

10:30am - 12:30pm
Bute Hall

C16: Eurozone

Session Chair: **Iva Valentinova Tasseva**, University of Essex

An Unemployment Re-Insurance Scheme for the Eurozone? Stabilizing and Redistributive Effects

Mathias Dolls
ifo Institute, Germany; dolls@ifo.de

This paper develops a decomposition framework to study the importance of different stabilization channels of an unemployment re-insurance scheme for the euro area. The paper provides insights on the potential added value of

a re-insurance scheme which crucially hinges on its ability to provide interregional smoothing. Running counterfactual simulations based on household micro data for the period 2000-16, the paper finds that on average 15-25 per cent of the income losses originating from rising unemployment in deep recessions would have been absorbed through interregional smoothing effects. The results suggest that the interregional smoothing channel of the re-insurance scheme is economically as important as the intertemporal smoothing effect of an average domestic unemployment insurance scheme in the euro area. The latter would have led to a cushioning effect of 16-27 per cent of large unemployment shocks. No member state would have turned out as a permanent net contributor/recipient.

Dolls-An Unemployment Re-Insurance Scheme for the Eurozone Stabilizing and Redistributive Effects-160.pdf

Getting Closer or Falling Apart? Euro Countries After the Crisis

Massimo Bordignon, Massimiliano Onorato, Nicolò Gatti
Catholic University of Milan, Italy; massimo.bordignon@unicatt.it

We study convergence / divergence in a sample of EMU countries by assembling an extensive dataset about OECD countries in the last 20 years that contains information on public spending, policy outcome, regulation of product and labour market, and trust in formal or informal institutions. The occurrence of a crisis is identified by a significant downgrade in the rating of sovereign debt. Results show that in spite of divergent economic growth and falling public expenditure in the Euro periphery countries after the crisis, quality of services and level of regulation in general did not deteriorate or indeed improved, increasing convergence with the core Euro countries. However, the crisis and the policies adopted to address it dramatically worsened the trust in institutions, both national and European, in periphery Euro countries. This increases the risk of a political backlash

Bordignon-Getting Closer or Falling Apart Euro Countries After the Crisis-420.pdf

An Evaluation Of Different Proposals For A European Fiscal Capacity

Sebastian Weiske, Mustafa Yeter
German Council of Economic Experts; mustafa.yeter@svr-wirtschaft.de

Recently, several policy makers and academics advocated a fiscal capacity for the euro area. It is supposed to help countries stabilise their economies during recessions. At the same time, such a capacity should not generate permanent transfers, which may lead to moral hazard. This paper evaluates different transfer mechanisms, where payments are linked to the development of the unemployment rate. There is a trade-off between stabilisation on the one hand and avoiding permanent transfers on the other. Our results suggest that a cap on transfers may be a good compromise between these two objectives.

Weiske-An Evaluation Of Different Proposals For A European Fiscal Capacity-524.pdf

Europe Through the Crisis: Discretionary Policy Changes and Automatic Stabilisers

Alari Paulus, Iva Tasseva
University of Essex, United Kingdom; itasseva@essex.ac.uk

Tax-benefit policies affect changes in household incomes through two main channels: discretionary policy changes and automatic stabilisers. Although a large body of literature has studied the impact of policy changes on incomes, little is known about the link between automatic stabilisers and the income distribution. We contribute to the literature by studying the contribution of automatic stabilisers and discretionary policy changes to income changes in the EU countries between 2007 and 2014. Our results show that, discretionary policy changes and the automatic stabilisation response of policies more often worked to reduce rather than increase inequality of net incomes, and helped offset the inequality-increasing impact of a growing disparity in gross (pre-tax) market incomes. Inequality reduction was achieved mainly through benefits using both routes. On the other hand, policy changes to and the stabilisation response of taxes and social insurance contributions raised inequality in some countries and lowered it in others.

Paulus-Europe Through the Crisis-406.pdf

12:30pm - 1:30pm **Lunch**

Hunter Halls

1:30pm - 3:00pm
McIntyre 201

D01: Money and Banking

Session Chair: **Friedrich Schneider**, University of Linz

Overconfidence and Bailouts

Daniel Gietl
University of Munich, Germany; Daniel.Gietl@econ.lmu.de

Empirical evidence suggests that managerial overconfidence and government guarantees contribute substantially to excessive risk-taking in the banking industry. This paper incorporates managerial overconfidence and limited bank liability into a principal-agent model, where the bank manager unobservably chooses effort and risk. An overconfident manager overestimates the returns to effort and risk. We find that managerial overconfidence necessitates an intervention into banker pay. This is due to the bank's exploitation of the manager's overvaluation of bonuses, which causes excessive risk-taking in equilibrium. Moreover, we show that the optimal bonus tax rises in overconfidence, if risk-shifting incentives are sufficiently large. Finally, the model indicates that overconfident managers are more likely to be found in banks with large government guarantees, low bonus taxes, and lax capital requirements.

Gietl-Overconfidence and Bailouts-102.pdf

The Daily-frequency Money Premium: Evidence from Recent Debt Limit Impasses

David Byron Cashin, Beth Klee, Erin Ferris
Federal Reserve Board, United States of America; david.b.cashin@frb.gov

We use the 2011 and 2013 U.S. debt limit impasses to evaluate the dynamics of Treasury securities' ``money premium'' -- the liquidity and safety premiums on near-money assets -- at a daily frequency. Our estimates suggest that, at the peak of the debt limit episodes, 50 basis points of the money premium on Treasury bills was eroded, with roughly 2/3 attributable to the liquidity premium and 1/3 to the safety premium. Of note, some of the loss of the money premium is also likely attributable to an increase in the information sensitivity of Treasury debt. Evidence reflecting economic policy uncertainty is consistent with this interpretation. Our estimates suggest that the money premium decreased the cost of debt to U.S. taxpayers by approximately $70 billion -- 1/4 of the interest cost on Treasury debt -- in 2016.

Cashin-The Daily-frequency Money Premium-460.pdf

Cash in Circulation and the Shadow Economy

Friedrich Schneider[1], Franz Seitz[2], Hans-Eggert Reimers[3]
[1]University of Linz, Austria; [2]Weiden Technical University; [3]University of Technology Wismar; friedrich.schneider@jku.at

We analyze the net issues of the national euro area central banks in relation to the dynamics of the shadow economy within a panel cointergration framework. Besides the total net issues, we distinguish between large, medium and small euro banknotes and take account of other determinants of cash demand. We find a significant and positive relationship between the net issues and the size of the shadow economy only for medium notes. Moreover this result seems to be driven by the smaller euro erea countries.The use of small and large denominations obviously is not driven by the shadow economy.

Schneider-Cash in Circulation and the Shadow Economy-143.pdf

1:30pm - 3:00pm
McIntyre 208

D02: Empirical taxation III - Top taxation and mobility I

Session Chair: **Daniel Wilson**, Federal Reserve Bank of San Francisco

1:30pm - 2:00pm

The Composition and Mobility of Top Earners - Evidence from Switzerland

Isabel Z. Martinez
University of St.Gallen, Switzerland; isabel.martinez@unisg.ch

This paper studies income mobility at the top in Switzerland, where previous research by Föllmi and Martínez (2017) has found that top income shares have been rising and have become more volatile since the mid-1990s. I use full-population social security data over the period 1981-2012 and find that persistence within the top 1% has been slightly decreasing, yet not enough to counteract rising inequality. In addition, I shed light on gender inequality at the top, and the share of foreign-born and self-employed among top earners in Switzerland. With a share of only 5%, women are still strongly under-represented among the top 0.1% of earners. The share of foreign-born among the top 0.1%, on the other hand, rose from 20% to 40% in the 2000–2010 period. Finally, I study industry composition and the declining role of self-employment among top earners in Switzerland over the past 30 years.

Martinez-The Composition and Mobility of Top Earners-555.pdf

2:00pm - 2:30pm

Do European Top Earners React To Labour Taxation Through Migration?

Mathilde Muñoz
Paris School of Economics, France; mathilde.munoz@psemail.eu

This paper studies the effects of top earnings tax rates on the mobility of top ten percent employees within Europe, using a novel detailed micro-level dataset on mobility built from the largest European survey (EU-LFS), representative of the entire population of 28 European countries. Exploiting the differential effects of changes in top income tax rates on individuals of different propensities to be treated by these changes, I find that top ten percent workers' location choices are significantly affected by top income taxation. I estimate an elasticity of the number of foreign top earners with respect to net-of-tax rate that is around one, while the elasticity of domestic top earners is close to zero. I uncover large heterogeneities in tax competition outcomes across member states. I formalise these country-level differences and the overall

tax policy implications of the results using a revenue-maximizing approach that I calibrate with my estimated parameters.

Muñoz-Do European Top Earners React To Labour Taxation Through Migration-253.pdf

2:30pm - 3:00pm

Taxing Billionaires: The Geographical Sensitivity of the Forbes 400 to Estate Taxes

Enrico Moretti[1], **Daniel Wilson**[2]

[1]University of California, Berkeley; [2]Federal Reserve Bank of San Francisco; daniel.wilson@sf.frb.org

We study the effect of state-level estate and inheritance (EI) taxes on the geographical location of the Forbes 400 richest Americans. For most of the 20th century, there was virtually no cross-state variation in effective EI tax rates on billionaire's estates due to a federal credit. This credit was eliminated after 2004, resulting in substantial variation between states with and without EI taxes. This ``natural experiment'' allows for sharp identification of the tax sensitivity of the ultra-wealthy's locational choices. First, we use a difference-in-difference estimator and find the share of Forbes 400 individuals in EI states fell significantly after 2004. Second, we use a triple-difference estimator based on the notion that a billionaire's sensitivity to the EI tax should increase with age. We find that the share of Forbes 400 individuals in EI states is uncorrelated with age up to 2004, but falls sharply with age after 2004.

Moretti-Taxing Billionaires-600.pdf

1:30pm - 3:00pm
East Quad Lecture Theatre

D03: Empirical taxation IV - Elasticity estimation

Session Chair: **James R Hines Jr.**, University of Michigan

1:30pm - 2:00pm

Ethnicity And Tax Filing Behavior

Spencer Bastani[1,2,3,4,5], **Thomas Giebe**[1,2], **Chizheng Miao**[1,2]

[1]Department of Economics and Statistics, Linnaeus University; [2]Linnaeus University Centre for Discrimination and Integration Studies; [3]Uppsala Center for Fiscal Studies, Sweden; [4]Uppsala Center for Labor Studies, Sweden; [5]CESifo, Germany; chizheng.miao@lnu.se

We analyze differences in tax filing behavior between natives and immigrants using population-wide Swedish administrative data, focusing on two empirical examples. First, controlling for a rich set of variables, we compare deduction behavior of immigrants and natives with the same commuting patterns within Sweden’s largest commuting zone. We find that newly arrived immigrants file fewer deductions than natives, that immigrants with a longer duration of stay in the host country behave more like natives, and that immigrants with the longest stay file the most, even more than natives. Second, we analyze bunching behavior among the self-employed at the first central government kink point of the Swedish income tax schedule and find that self-employed immigrants exhibit significantly less bunching behavior than natives, even after a long time in the host country. We highlight residential segregation as the main driver of the observed behavioral differences.

Bastani-Ethnicity And Tax Filing Behavior-463.pdf

2:00pm - 2:30pm

A Structural Approach to Income Elasticity Measurement

Thomas Aronsson[1], **Katharina Jenderny**[1,2], **Gauthier Lanot**[1]

[1]Umeå Universitet, Sweden; [2]Freie Universität Berlin, Germany; katharina.jenderny@umu.se

Measuring the elasticity of taxable income (ETI) is central for tax policy design. Yet, there are few arguments which support or infirm that current methods yield measurements of the ETI that can be trusted. We have shown in a related simulation study that estimators based on indirect inference principles can be expected tp produce more precise estimates of the ETI than any of the most commonly used methods. Our purpose in this paper is to apply indirect inference estimation to Swedish tax data. This is the first application of this method to empirical data in the field of the ETI measurement.

Aronsson-A Structural Approach to Income Elasticity Measurement-488.pdf

2:30pm - 3:00pm

Best of the Corporate Bunch

James Hines. Jr.[1], **Elena Patel**[2], **Nathan Seegert**[2], **Matt Smith**[3]

[1]University of Michigan; [2]University of Utah; [3]United States Department of the Treasury, United States of America; jrhines@umich.edu

The elasticity of corporate taxable income is a key policy parameter with limited evidence due to a lack of comprehensive data and viable variation. We provide crisp new evidence using the universe of c-corporations in the US and newly developed methods that exploit different types of variation. We find the elasticity of corporate taxable income is 0.64, substantially larger than previous estimates. In addition, we show that using newly developed methods is important in practice because, in their absence, we would underestimate the elasticity by 25%.

Hines. Jr.-Best of the Corporate Bunch-321.pdf

1:30pm - 3:00pm
Gilbert Scott 253

D04: Procurement and regulation I

Session Chair: **Manabu Nose**, The University of Tokyo

1:30pm - 2:00pm

Anatomy of Public Procurement

Jan Jääskeläinen[1], **Janne Tukiainen**[2,3]

[1]Aalto University; [2]London School of Economics and Political Science; [3]VATT Institute for Economic Research; janne.tukiainen@vatt.fi

We provide novel stylized facts about competition, bidding, entry and bidders

across a wide spectrum of public procurement auctions using comprehensive and rich Finnish data. Competition for publicly procured contracts is relatively low with a median bidder count of two. Bidders typically are very heterogeneous in size, which likely limits competition further. Competition seems to work roughly as expected as on average (standardized) bids mainly decrease with the number of actual and potential bidders. Using information on registrations as a good proxy for potential bidders, we show that the ratio of actual to potential bidders increases with the number of actual bidders. We also show that being present in the contracting authority's municipality or province correlates positively with registering, entry (bidding) and winning, but other firm characteristics matter less. We also show suggestive evidence that the use of scoring rule can be an entry barrier.

Jääskeläinen-Anatomy of Public Procurement-395.pdf

2:00pm - 2:30pm

Enforcing Public-Private Partnership Contract: How do Fiscal Institutions Matter?

Manabu Nose

The University of Tokyo, Japan; mnose@pp.u-tokyo.ac.jp

Public-private partnerships (PPPs) have increased rapidly in emerging and developing countries, creating both opportunities and fiscal challenges. One of the main challenges is that while governments have increased commitments in guarantees and direct subsidies to promote PPPs, contractual disputes remain high with significant costs. This paper examines how fiscal institutions affect the selection of PPP contracts and the probability of contract disputes using about 6,000 PPP contract-level data. The analysis shows that larger government financing needs, lower budget transparency and bureaucratic efficiency are associated with higher probability for governments to offer guarantees. Propensity score estimation shows that disputes are more common for guaranteed contracts due to adverse selection and contingent liability effects. PPP investment management quality and budget transparency are found to be key determinants for a longer survival of PPPs.

Nose-Enforcing Public-Private Partnership Contract-385.pdf

1:30pm - 3:00pm
Gilbert Scott 132

D05: International economics

Session Chair: **Saila Stausholm**, Copenhagen Business School

1:30pm - 2:00pm

Financial Openness and Inequality

Tsvetana Spasova[1], **Stefan Avdjiev**[2]

[1]University of Basel, Switzerland; [2]Bank for International Settlements; tsvetana.spasova@gmail.com

Although there is a large body of literature on the link between trade openness and inequality, there is little empirical research on the relationship between external financial openness and inequality. In this paper, we attempt to ll this gap in the literature by conducting an empirical examination of the link between Gini-based inequality measures and key measures of financial openness for a sample of 47 countries between 1991 and 2010. We find that in emerging market economies the impact of external financial openness on inequality varies considerably over time. An increase in a country's external liabilities is associated with an initial rise and a subsequent fall in inequality. The main driver of this pattern appears to be foreign direct investment, whose estimated impact exhibits a very similar dynamics. Meanwhile, the estimated impact of external financial openness on inequality in advanced economies tends to be considerably smaller than in emerging market economies.

Spasova-Financial Openness and Inequality-340.pdf

2:00pm - 2:30pm

Demographic Change and the German Current Account Surplus

Matthias Schön

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This paper analyses whether the severe German demographic change causes its high current account surpluses. An ageing population both increases supply and lowers demand of capital. Due to a longer life individuals save more. Fewer workers reduce the optimal capital stock. Additionally, there are effects on foreign assets depending on how existing public pay as you go pension systems adjust in an ageing society. According to a 2-region model with endogenous savings, labour supply and a bequest motive that is augmented with actual demographic data projections for OECD countries, the demographic change is a key determinant of the current account. However, it cannot fully account for the magnitude of the recent German surplus. The simulation results indicate that both a higher retirement age and a fixed pension level with a rising contribution rate reduce foreign assets. If the contribution rate is fixed and the pension level lowered, foreign assets increase.

Schön-Demographic Change and the German Current Account Surplus-404.pdf

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2:30pm - 3:00pm

Rise Of Ineffective Incentives: New Empirical Evidence On Tax Holidays In Developing Countries

Saila Stausholm

Copenhagen Business School, Denmark; sast.ioa@cbs.dk

Developing countries employ tax incentives in the hope of attracting investors, but questions remain on the effects of these policies. Asking whether tax incentives undermine or facilitate development, this paper investigates tax rates and tax holidays in developing countries 1985-2014 in the largest panel data set ever deployed for this purpose. The collection of new data results in three major contributions. First, the analysis shows that the use of tax holidays has increased over the last decade throughout all four regions

surveyed. Second, the analysis finds that the effect of tax holidays on FDI is negligible and decreasing, and importantly, that it does not translate into neither real capital accumulation nor economic growth. Third, the paper then investigates how the revenue losses from tax incentives can mean real differences for human development. The analysis concludes that tax holidays overall have more negative than positive impacts on sustainable development.

Stausholm-Rise Of Ineffective Incentives-381.pdf

1:30pm - 3:00pm
James Watt South Stevenson 375

D06: Fiscal federalism V - Political economy II

Session Chair: **Traviss Michael Cassidy**, University of Alabama

1:30pm - 2:00pm

Grants-in-aid and the Prospect of Re-election: The Impact of EU Funds on Mayoral Elections in Poland

Monika Banaszewska[1], **Ivo Bischoff**[2]
[1]Poznań University of Economics and Business, Poland; [2]University of Kassel, Germany;
monika.banaszewska@ue.poznan.pl, bischoff@wirtschaft.uni-kassel.de

We investigate whether grants-in-aid help the recipient government to get re-elected. We take Poland as our testing ground and analyze the impact of EU funds spent within a municipality on mayoral elections in 2010 and 2014. We employ an instrumental variables approach to account for the endogeneity of EU funds. Our results show that EU funds do not generally increase the mayors' chance of reelection. We test whether the impact of EU funds is moderated by municipal characteristics. We find no moderating effect for the fiscal situation of municipalities but positive effects for human capital endowment and for the share of pro-European citizens. These results suggest that the political incentives inherent do not help to concentrate EU funds in regions where there is a particular need to foster economic development, nor do they help to direct funds to municipalities where the potential to reconcile EU sceptics is high.

Banaszewska-Grants-in-aid and the Prospect of Re-election-302.pdf

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2:00pm - 2:30pm

Who Sent You? Extreme Voting, Transfers and Bailouts in a Federation

Willem Sas[1], **Gianmarco Daniele**[2], **Amedeo Piolatto**[3]
[1]University of Stirling; [2]University of Bocconi; [3]Autonomous University of Barcelona; willem.sas@stir.ac.uk

Lower-level governments often receive federal support through transfers or bailouts. We study how the regional ties of federal politicians can steer this process, and bring about extreme voting. We build a two-tier model of government, where federal legislators bargain over support aimed at their own constituency. As a result, they are strategically elected to watch over the interests of their own region, cushioning shocks to local welfare. As long as federal co-funding schemes imply some degree of interregional redistribution, voters select federal representatives with more extreme positions than the median voter to stack federal bargaining in their favour. Lower-level legislators anticipate this, which sets the stage for regional over-borrowing. Our empirical analysis confirms these predictions, by comparing the political extremism of representatives elected to the EU Parliament with that of representatives elected to national Parliaments.

Sas-Who Sent You Extreme Voting, Transfers and Bailouts-322.pdf

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2:30pm - 3:00pm

Broadening the State: Consequences of the Introduction of the Income Tax

Traviss Cassidy[1], **Mark Dincecco**[2], **Ugo Troiano**[2,3]
[1]University of Alabama, United States of America; [2]University of Michigan, United States of America;
[3]NBER; tmcassidy@cba.ua.edu

We provide new evidence about the consequences of a major investment in state capacity: the introduction of the income tax. Our empirical strategy exploits the staggered introduction of the income tax across U.S. states. Drawing in part on archival data, we introduce a new panel database that spans 1900 to 2008. To account for the selective timing of adoption, we employ a semiparametric difference-in-differences design. Total revenue and expenditure initially increased after the introduction of the income tax, but returned to their original levels within a decade. By contrast, revenue and expenditure per capita permanently increased. To explain the fiscal results, we show that the introduction of the income tax led to significant outmigration to non-tax states. While the introduction of the income tax allowed U.S. states to significantly increase their revenue-raising capacity on a per capita basis, population mobility provided a partial check on the absolute size of government.

Cassidy-Broadening the State-250.pdf

1:30pm - 3:00pm
Gilbert Scott 250

D07: Mobility II

Session Chair: **Desiree I. Christofzik**, German Council of Economic Experts

1:30pm - 2:00pm

Do Sanctions Constrain Military Spending of Iran?

Sajjad Faraji Dizaji[1], **Farzanegan Mohammad Reza**[2]
[1]Tarbiat Modares University, Iran, Islamic Republic of; [2]Center for Near and Middle Eastern Studies;
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Using the annual data from 1960 to 2017 and the (ARDL) model, we show that an increase in the intensity of sanctions is associated with a larger decrease in military spending both in short and long run. One level increases in the intensity of sanctions with respect to our coding approach decreases military spending in the long-run by approximately 33 percent. We also find that only the multilateral sanctions have a statistically significant and negative impact on military spending of Iran in both the short and long run.

Multilateral sanctions in place reduce Iran's military spending by approximately 77 percent in long run, ceteris paribus. The results remain robust when controlling for other determinants of military spending such as gross domestic product (GDP), oil rents, trade openness, population, quality of political institutions, military expenditure of the Middle East region, non-military spending of government and the war period with Iraq.

Faraji Dizaji-Do Sanctions Constrain Military Spending of Iran-597.pdf

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2:00pm - 2:30pm

Defense Spending and Contest Success Functions

Klaas Staal

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The relation between the amounts of resources devoted to conflict and the probability of winning can be modelled by contest success functions. I first show that the two commonly used types of contest functions, the ratio and difference forms, have profoundly different implications for the relation between defense spending and country size. I therefore empirically estimate this relation, and argue that the difference form fits predicts the observed pattern more accurately. This has far-reaching implications for the theoretical literature that often uses the ratio form.

Staal-Defense Spending and Contest Success Functions-249.pdf

2:30pm - 3:00pm

Does Accrual Accounting Alter Fiscal Policy Decisions? - Evidence from Germany

Desiree I. Christofzik

German Council of Economic Experts, Germany; desiree.christofzik@svr-wirtschaft.de

Many governments have replaced traditional cash-based accounting with some form of accrual-based accounting system. However, empirical evidence on the effects of the public accounting system on fiscal policy is scarce. Following rules by the federal states, municipalities in Germany have adopted accrual-based accounting systems gradually. By exploiting variations over time and across states I find no evidence for an impact on the overall financial balance. However, my findings suggest that accrual accounting has altered the structure of the budget. Revenues from the sales of non-financial assets have decreased significantly. This supports the hypothesis that municipalities had used these one-off measures before to meet fiscal constraints. Using data on entities controlled by the municipalities, the analysis provides no evidence for repercussions on these public funds, institutions or enterprises.

Christofzik-Does Accrual Accounting Alter Fiscal Policy Decisions-431.pdf

1:30pm - 3:00pm

Humanities Lecture Theatre

D08: Corporate taxation VII - Empirical corporate taxation II

Session Chair: **Nathan Seegert**, University of Utah

1:30pm - 2:00pm

An Ex-Ante Assessment Of The Impact Of AGI: Firm-Level Evidence From Belgian Tax Return Data.

Pieter Buyl, Annelies Roggeman

University of Ghent, Belgium; annelies.roggeman@ugent.be

Using confidential tax return data, we provide a unique research setting in which the Belgian ACE is replaced by the incremental Allowance for Growth and Investment (AGI) as proposed by the European Commission (EC). The results show that the AGI would be a more viable option from a budgetary view. At the firm level, introducing the AGI system would especially harm large companies as they would face a 4.2 percentage point higher probability for an effective tax rate (ETR) increase. Furthermore, we found that the equity ratio enhances the probability for an ETR increase more for large firms compared to SMEs. Further, it is found that a 1 percentage point higher equity growth could lower the probability of a higher ETR by 0.73 percentage points. This suggest that retaining earnings could be an effective tool to anticipate the AGI for Belgian firms.

Buyl-An Ex-Ante Assessment Of The Impact Of AGI-308.pdf

2:00pm - 2:30pm

General Business Credits: the Biggest Tax Policy You've Never Heard Of

Elena Spatoulas Patel[1], Nathan Thomas Seegert[1], Laura Konda[2]

[1]University of Utah, United States of America; [2]Department of the Treasury, United States of America; nathan.seegert@eccles.utah.edu

We identify an underlying tax aggressiveness for US Corporations using a recent change in tax disclosure (2011 Redesign of IRS Form 3800). Our empirical strategy exploits novel variation in exposure created by exogenous differences in tax years across firms. We find that firms report a stock of carry-forward General Business Credits that is 23% larger, and this response reflects an underlying tax-aggressiveness of firms. Further, we find that private firms increase their tax aggressiveness by 14% more than public firms. In this way, the increased disclosure in 2011 cost between $1.4 and $1.8 billion in corporate receipts.

Patel-General Business Credits-342.pdf

1:30pm - 3:00pm

Gilbert Scott Lecture Theatre 466

D09: Corporate taxation XIII - Empirical corporate taxation III

Session Chair: **Jarkko Harju**, VATT Institute for Economic Research

1:30pm - 2:00pm

A Decade of Changes in Effective Tax Rate: Evidence from Reinvestment Allowance Utilized by Corporate Taxpayers in Malaysia

Fairus Halizam A. Hamzah[1,2], **Nadiah Abd Hamid**[2]
[1]Inland Revenue Board of Malaysia; [2]Universiti Teknologi Mara, Shah Alam, Selangor, Malaysia; fairuzhalizam@gmail.com

Using tax return data, we investigated the time trend in the effective tax rate (ETR) over a decade on firms that consistently utilised Reinvestment Allowance (RA) and constructed a measure for RA utilisation in our estimation on ETR. The key result is that we discovered a slender increase in ETR by 0.2% over that period. Remarkably, evidence from the Ordinary Least Squares time trend estimation suggests that average firms consistently hold their ETR at a shallow threshold of 6.47% and utilise only 20% of RA tax deduction benefit. We found an appropriate explanation for the finding, and are agreeable that revenue foregone in emerging countries such as Malaysia is unnecessary because profit is shifted out of the country. It turns out to be that the revenue was tax exempted via tax incentives, taxable at a lower rate and taxpayer exploiting the loopholes in the taxation system.

A. Hamzah-A Decade of Changes in Effective Tax Rate-134.pdf

2:00pm - 2:30pm

Two-Tier Tax Systems and Firms: Evidence from Brazil

Francois Gerard[1], **Joana Naritomi**[2], **Arthur Seibold**[3]
[1]Columbia University; [2]London School of Economics; [3]University of Mannheim; seibold@uni-mannheim.de

Modern systems of firm taxation feature payroll, valued-added, and corporate income taxes. However, they often exist alongside simplified tax regimes targeted at small and medium enterprises, such as a single turnover tax. We use novel administrative data from Brazil, including data on inter-firm trade, to shed light on the effects of such two-tier tax systems on firm growth, competition, and production decisions. First, we show that the firm size distribution is distorted by the eligibility threshold for the simplified tax system. Second, ineligible firms are adversely affected by reductions in the tax and compliance burden for SME. Third, we find that firms in the simplified tax regime use relatively more labor input and source more of their intermediate input from other firms in the same regime. We show that heterogeneity across firms drives part of these correlations, but there is also a causal effect of tax regimes on input choices.

Gerard-Two-Tier Tax Systems and Firms-440.pdf

2:30pm - 3:00pm

Using Payroll Tax Variation to Unpack the Black Box of Firm-Level Production

Jarkko Harju[1], **Youssef Benzarti**[2]
[1]VATT Institute for Economic Research, Finland; [2]University of California, Santa Barbara; jarkko.harju@vatt.fi

This paper uses quasi-experimental variation in payroll tax rates to investigate how firms use their input factors. We find that higher payroll tax rate implies relatively large employment responses and no effect on employee-level earnings. As the cost of labor increases firms substitute away from low skilled, routine and manual workers, towards more productive workers. We also find that firms decrease their investments as a response to the increased payroll tax rates. Higher firm-level payroll tax rates also slightly decrease the total output of firms. Our results imply that firm level production and input factor choices are clearly affected by payroll taxes, and that the elasticity of substitution between capital and labor is rather close to zero.

Harju-Using Payroll Tax Variation to Unpack the Black Box-169.pdf

1:30pm - 3:00pm
Fore Hall

D10: Corporate taxation IX - Empirics small businesses

Session Chair: **Audrey Guo**, Stanford University

1:30pm - 2:00pm

Small Firms and Corporate Taxes: Effects on (Real) Economic Outcomes

Aliisa Koivisto[1,2], **Jarkko Harju**[1], **Li Liu**[3,4], **Tuomas Matikka**[1]
[1]VATT Institute of Economic Research, Finland; [2]University of Helsinki; [3]International Monetary Fund; [4]Oxford University Centre for Business Taxation; aliisa.koivisto@vatt.fi

What is the impact of corporate taxes on investments, aggregate production and input usage among small firms? We study the efects of a sizable 4.5 percentage-point corporate tax cut in Finland in 2014 on these outcomes. We use very detailed administrative data and a difference-in-difference method utilizing privately held corporations as our treatment group (tax rate cut) and partnerships as a control group (no changes in taxes). We find no response in new investment after the corporate tax rate cut. However, we observe an increase in sales and input usage. These results suggest that corporate tax rates have a direct effect on the extent of firm activity of small firms but they do not affect the overall stock of firm-level productive capital.

Koivisto-Small Firms and Corporate Taxes-451.pdf

2:00pm - 2:30pm

Unemployment Duration and Startup Success: Evidence from Germany.

Sebastian Camarero Garcia[1,2], **Martin Murmann**[1,3,4]
[1]Centre for European Economic Research (ZEW Mannheim); [2]University of Mannheim; [3]University of Zurich; [4]Institute for Employment Research (IAB); Sebastian.CamareroGarcia@zew.de

We assess the relationship between the potential benefit duration of the unemployment insurance, the actual unemployment duration of previously unemployed founders, and the quality of the firms they start. While existing research has not yet probed into significant heterogeneity within the group of previously

unemployed founders, we stress the importance of the previous unemployment duration for subsequent firm outcomes. We isolate causal effects by exploiting reform and age-based exogenous variation in the potential benefit duration within the German unemployment insurance system. Based on a newly created representative dataset for German founders, an instrumental variables approach, difference-in-difference estimates, and a regression discontinuity design suggest that longer potential benefit duration leads to longer actual unemployment duration of those becoming self-employed. With increasing unemployment duration, the founders' outcomes in terms of self-assessed motivation, sales, and employment growth become inferior. These findings have important implications for nascent entrepreneurs, and the (optimal) design of the unemployment insurance.

Camarero Garcia-Unemployment Duration and Startup Success-187.pdf

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2:30pm - 3:00pm

The Effects of Unemployment Insurance Taxation on Multi-Establishment Firms

Audrey Guo
Stanford University, United States of America; amguo@stanford.edu

This paper investigates whether and to what extent state-level differences in business taxes influence the location decisions and labor demand of multi-establishment firms. In the United States each state administers its own unemployment insurance (UI) program, and cross-state variation leads to significant differences in the potential UI tax costs faced by employers in different states. Leveraging the existing locations of multi-state manufacturing firms for identification, I find that high tax plants were more likely to exit during economic downturns, and less likely to hire during the recovery. Moving a plant's outside option from a high tax state to a low tax state would increase its likelihood of exit by 20% during the Great Recession. These findings suggest that decentralized administration of UI taxes may contribute to jobless recoveries and additional misallocation in the economy.

Guo-The Effects of Unemployment Insurance Taxation on Multi-Establishment Firms-179.pdf

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1:30pm - 3:00pm
James Watt South Stevenson 354

D11: Tax Compliance III - Enforcement

Session Chair: **Nadine Riedel**, Ruhr-Universitt Bochum

1:30pm - 2:00pm

Local Enforcement Externalities and The Long-run Evolution of Tax Compliance in Italy

Antonio Acconcia[2], Marcello D Amato[3], Riccardo Martina[2], Maria Luisa Ratto[1]
[1]University Paris-Dauphine, France; [2]Universita Federico II Naples; [3]Universita di Salerno; maria_luisa.ratto@dauphine.fr

We study a model of tax evasion dynamics in the presence of an enforcement externality and social learning by taxpayers. Conditions under which the distribution of the perceived probability of apprehension and compliance behavior converge to one or multiple steady states are studied.

The insights obtained from the model are used to interpret the high level of geographical dispersion of tax evasion and its persistence in Italy as consequences of an unanticipated and substantial tax raise and of the local dimension of tax jurisdiction since unification. We finally use a novel data set from the Italian Revenue Agency and historical data from the Ministry of Finance in 1870 to show that persistent geographical dispersion in tax evasion is consistent with an institutional trap by the unification process

Acconcia-Local Enforcement Externalities and The Long-run Evolution-536.pdf

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2:00pm - 2:30pm

Do Taxpayers Really Want A Simple Tax System? Evidence On Preferences Towards Income Tax Simplification

Sebastian Blesse[1], Florian Buhlmann[1], Philipp Dörrenberg[2]
[1]ZEW - Leibniz Centre for European Economic Research, Germany; [2]University of Mannheim; florian.buhlmann@zew.de

There seemingly is a consensus that modern tax systems are too complex and should be simplified. However, one can also derive economic arguments in favor of a certain degree of tax complexity and it is puzzling why tax systems seem to get even more complex over time despite the seemingly consensus for more simplification. In this paper, we present the results from a detailed survey with a representative sample of the German population which sheds light on preferences for tax simplification.

Blesse-Do Taxpayers Really Want A Simple Tax System Evidence-574.pdf

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2:30pm - 3:00pm

Spatial Tax Enforcement Spillovers: Evidence from South Africa

Nadine Riedel, Kristina Strohmaier, Collen Lediga
Ruhr-Universitt Bochum, Germany; nadine.riedel@rub.de

The purpose of this paper is to test for spatial enforcement spillovers. Empirical test- ing ground is the enforcement of business taxes in South Africa. The analysis relies on the population of business tax returns for the years 2009 to 2014 and data on all business taxpayer audits by the South African Revenue Services during that time period. The results suggest that audits significantly raise the tax reporting of non-audited neighboring firms. While the observed spillovers decline in geographic distance to the audited entity and are short-run in nature, the implied aggregate revenue gains are non- negligible. Additional analysis shows that the effect is driven by audit cases, where audited firms do not experience an upward revision in their tax owed in the course of the audit. This suggests that the observed effect roots in communication among taxpayers and is not driven by audit-related cost shocks to business partners.

Riedel-Spatial Tax Enforcement Spillovers-264.pdf

1:30pm - 3:00pm

James Watt South Stevenson 355

D12: Intergenerational mobility I

Session Chair: **Andreas Peichl**, ifo Institute and University of Munich LMU

1:30pm - 2:00pm

So Close yet so Unequal: Neighborhood Inequality in American Cities

Francesco Andreoli[1,2], **Eugenio Peluso**[2,1]

[1]University of Verona, Italy; [2]Luxembourg Institute of Socio-Economic Research (LISER); francesco.andreoli@liser.lu

This paper contributes to the literature on neighborhood inequality along both theoretical and empirical lines. We introduce a new neighborhood inequality index to measure income inequality within individual neighborhoods of varying sizes, and study its normative and statistical properties. The neighborhood inequality index is used in combination with a large database of income distributions de fined on a fine grained geographic scale to study neighborhood inequality in American cities over the last 35 years. Inequality within small individual neighborhoods is found to grow steadily over the period, albeit heterogeneously across cities. We investigate the intergenerational consequences of a rising neighborhood inequality index, exploiting labor market responses to minimum wage regulation as a source of identification. We find that lower neighborhood inequality during childhood makes income mobility for children with a disadvantaged parental background more likely.

Andreoli-So Close yet so Unequal-593.pdf

2:00pm - 2:30pm

The Generation Gap; Empirical Evidence From Age-earning Profiles in Korea

Hyejeong Sim

National Assembly budget Office in Korea, Korea, Republic of (South Korea); hyejeuong@hanmail.net

This paper describes the evolution over time of earnings of male workers using data from Korea Employment Statistics, which allows the tracking of information on workers entering the labor market. The analysis shows that the age-earnings curves of the generations who entered the labor market before the late 1990s describe a distinct improvement in wage conditions in comparison to each previous generation. On the other hand, those of the generations who entered the labor market after the 2000s show a stable or slight downward trend. In addition, the wage growth rate as a result of age (the age effect) has slowed since 1999, when the cohorts born after the mid-1970s entered the labor market. The results of this paper show that the wage gap between the young and the old generation has expanded since the 2000s, and that this tendency is even more apparent in the low education group.

Sim-The Generation Gap Empirical Evidence From Age-earning Profiles-274.pdf

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2:30pm - 3:00pm

Measuring Unfair Inequality: Reconciling Equality of Opportunity and Freedom from Poverty

Paul Hufe[1], **Ravi Kanbur**[2], **Andreas Peichl**[1]

[1]ifo Institute and University of Munich LMU, Germany; [2]Cornell; peichl@ifo.de

Rising income inequalities are widely debated in public and academic discourse. We contribute to this debate by proposing a new family of measures of unfair inequality. To do so, we acknowledge that inequality is not bad per se, but that its underlying sources need to be accounted for. Thereby, this paper is the first to reconcile two prominent fairness principles, namely equality of opportunity and freedom from poverty, into a joint measure of unfair inequality. Two empirical applications provide important new and interesting insights on the development of inequality both over time (in the US) and across countries (in Europe).

Hufe-Measuring Unfair Inequality-262.pdf

1:30pm - 3:00pm

Gilbert Scott 134

D13: Gender and the glass ceiling - Invited session

Session Chair: **Paola Profeta**, Bocconi University

Does The Entry Of a Woman Into Political Office Affect Policy Choices?

Thushyanthan Baskaran[1], **Zohal Hessami**[2]

[1]University of Siegen, Germany; [2]University of Konstanz, Germany; thushyanthan.baskaran@gmail.com

While still far from parity, worldwide female representation in politics has substantially

increased over the last two decades. We analyze whether this rise in female representation has substantive consequences for policy choices using the example of child care – a public good arguably valued by women. We hand-collect micro-data for roughly 220,000 candidates running in local council elections in 2002, 2008 and 2014 in more than 1600 municipalities in the German state of Bavaria. In this setting of open-list elections, we run RDD regressions centered around mixed-gender races for the last council seat that accrues to a party. We find that a female victory in a mixed-gender race accelerates the expansion of public child care provision. We also explore mechanisms.

Baskaran-Does The Entry Of a Woman Into Political Office Affect Policy Choices-117.pdf

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Parachuting Women Above the Glass Ceiling: Evidence from a Norwegian Executive Gender Quota Reform

Benny Geys, **Rune Sørensen**

BI Norwegian Business School, Norway; Benny.Geys@bi.no

Most gender quota reforms address female under-representation in politics by mandating a more equal gender representation on election lists. In contrast, a 1992 legislative reform in Norway required parties' candidate lists for the local executive board to comprise at least 40% politicians of each gender. This legal change was not only exogenously imposed by a higher-level government, but also generated distinct quota-induced constraints across Norwegian municipalities. We exploit the resulting variation in 'quota

shocks' using a difference-in-differences design to identify the quota's effect on female political representation as well as local public policies. We find that more women enter the executive board after the reform, though spill-overs on female representation in the local council and on the probability of a female mayor or top administrator are weak. We also find no consistent evidence for shifts in public policies due to increased female representation in positions with executive powers.

Geys-Parachuting Women Above the Glass Ceiling-127.pdf

Women, Local Public Finance and Fiscal Adjustment

Alessandra Casarico[1], **Salvatore Lattanzio**[2], **Paola Profeta**[1]
[1]Bocconi University; [2]University of Cambridge; paola.profeta@unibocconi.it

Does the gender of the mayor affect the size and composition of public expen-

ditures and revenues? Do male and female mayors react differently to fiscal adjustments? Analyzing close mixed gender elections of mayors in Italian municipalities in the period 2000-2015 we find that female mayors collect more revenues and spend more than male ones, while the composition of both is not affected by gender. When constrained to fiscal adjustments, female mayors reduce both expenditures and revenues more than men.

Casarico-Women, Local Public Finance and Fiscal Adjustment-369.pdf

1:30pm - 3:00pm
Gilbert Scott 356

D14: Education I - Schooling

Session Chair: **Amanda Ross**, University of Alabama

1:30pm - 2:00pm

Long-run Effects from Comprehensive Student Support: Evidence from Pathways to Education

Adam Michael Lavecchia[1], **Philip Oreopoulos**[2], **Robert S Brown**[3]
[1]McMaster University; [2]University of Toronto; [3]Toronto District School Board; lavecchia@mcmaster.ca

We estimate long-run impacts to the Pathways to Education program, an intensive set of coaching, tutoring, group activities and financial incentives, offered to disadvantaged high school students beginning in Grade 9. High school administrative records are matched to income tax records to follow individuals up to the age of 28, even when they leave the household or province. We find significant positive effects on persistence in postsecondary education institutions, earnings and employment. Eligibility for Pathways increased annual earnings by 19 percent, employment by 14 percent and reduces social assistance (welfare) receipt by more than a third.

Lavecchia-Long-run Effects from Comprehensive Student Support-501.pdf

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2:00pm - 2:30pm

Do Teacher Assistants Improve Student Outcomes? Evidence from School Funding Cutbacks in North Carolina

Helen Francis. Ladd[1], **Steven Hemelt**[2]
[1]Duke University, United States of America; [2]University of North Carolina, Chapel Hill; hladd@duke.edu

This paper examines the influence of teacher assistants and other personnel on student outcomes in elementary schools during a period of recession-induced cutbacks in teachers and teacher assistants. Using panel data from North Carolina, we exploit the state's unique system of financing its local public schools to identify the causal effects of teacher assistants, controlling for other staff, on student test scores in math and reading and other outcomes. We find strong and consistent evidence of positive contributions of teacher assistants, an understudied staffing category, for student outcomes in reading and larger positive effects in both reading and math for minority students and students in high-poverty schools than for white students and students in more affluent schools. In addition, we find positive effects of school health providers on student outcomes in math.

Ladd-Do Teacher Assistants Improve Student Outcomes Evidence-154.pdf

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2:30pm - 3:00pm

A Second Stand in the Schoolhouse Door: Are Public Schools Resegregating?

Amanda Ross[1], **Michael Finnegan**[2], **Erik Johnson**[1], **Laura Razzolini**[1]
[1]University of Alabama, United States of America; [2]Richmond Federal Reserve Bank, United States of America; aross@cba.ua.edu

We revisit the issue of whether or not pubic schools are resegregating. The previous research that has examined the possibility of resegregation has focused on the release of schools from desegregation orders. Court ordered desegregation was commonly achieved by merging schools and/or busing students to achieve the "unitary status" of a single, rather than a segregated school system. In the early 1990s, three Supreme Court rulings allowed for these desegregation plans to be terminated. After being released from a court order, schools were free to remove busing plans and it is possible that districts could resegregate. We expand on this literature in three waysby considering how changes in school district boundaries affect resegregation.

Ross-A Second Stand in the Schoolhouse Door-257.pdf

1:30pm - 3:00pm
James Watt South Stevenson 361

D15: Inequality II - Poverty

Session Chair: **Aziz Berdiev**, Bryant University

1:30pm - 2:00pm

Poverty and Inequality in Nordic Comparson - a Policy Analysis

Heikki Palviainen
Tampere University, Finland; heikki.palviainen@tuni.fi

Based on simulated counterfactual analyses, this paper studies the long-term evolution of key policy outcomes associated with the Nordic model. The results show that Finland had the most redistributive policy changes in the studied time periods. The Danish flexicurity model involves high benefit levels, and the participation tax rates were the highest. The Swedish work-line policy increased the risk of poverty by 1.0 percentage point and the Gini coefficient by 0.4. In Sweden, the behavioural effects did not fully offset the negative static effects on the risk-of-poverty rate and inequality. From a policy perspective, the results indicate that the Nordic model is resilient. In Sweden, a significant increase in the risk of poverty implies that there are other factors, such as immigration, that challenge the Nordic model.

Palviainen-Poverty and Inequality in Nordic Comparson-575.pdf

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2:00pm - 2:30pm

Projecting child poverty in Scotland

Paola De Agostini[1], **Nicola Hudson**[2]
[1]University of Essex, United Kingdom; [2]Scottish Parliament Information Centre, Edinburgh, United Kingdom; pdeago@essex.ac.uk

This paper estimates the distributional effects of tax-benefit policies in 2016-2018, a period for which survey data are not yet publicly available. It also analyses the policy effects on children poverty risk of reforms announced to take place between 2018 and 2023. Estimates suggest that child poverty has continued to rise between 2016 and 2018. If no further action is taken, the current projections would suggest that child poverty will continue to rise through to 2023. It becomes therefore important to understand which policy reforms would be more efficient in reversing such trend. To do this, the paper examines the likely impact of three hypothetical tax-benefit reforms on the incomes and poverty risk of families with children in Scotland in 2023/24. The policy scenarios were selected to illustrate the range of impacts that might be achieved through alternative policy actions and are purely illustrative in nature.

De Agostini-Projecting child poverty in Scotland-542.pdf

2:30pm - 3:00pm

Lurking in the Shadows: Effects of Poverty on the Shadow Economy

Aziz N. Berdiev[1], **James W. Saunoris**[2], **Friedrich Schneider**[3]
[1]Bryant University, United States of America; [2]Eastern Michigan University, United States of America; [3]Johannes Kepler University, Austria; aberdiev@bryant.edu

While the literature has identified institutional factors such as high taxes and burdensome regulations among the determinants of the shadow economy, whether and to what extent economic factors such as the prevalence of poverty drive the shadow economy are less forthcoming. We contribute to this literature by examining the impact of poverty on the size of the shadow economy using cross-country panel data for over 100 countries for the period 1991-2015. The results show that poverty has a positive and significant effect on the size of the shadow economy and these results withstand a battery of robustness checks. Furthermore, we find that poverty has the largest effect on the size of the shadow economy when government quality is the lowest and the size of the government is the largest.

Berdiev-Lurking in the Shadows-208.pdf

3:00pm - 6:30pm **Excursion**

Each delegate will be given a specific pick up time/group allocation/meeting point for the excursion day (in the welcome envelope at registration). No dinner has been arranged for any of the excursions, however at the end of each excursion, delegates will be in close proximity to various restaurants.

Date: Friday, 23/Aug/2019

8:00am - 5:30pm **Registration**

Hunter Halls

9:00am - 10:30am McIntyre 201

E01: Optimal taxation VII - Sin taxes and evasion

Session Chair: **Aart Gerritsen**, Erasmus University Rotterdam
(order of presentations changed on request)

Sin Taxes, Insurance and the Correction of Internalities

Zarko Kalamov[1,2], **Marco Runkel**[1,2,3]
[1]University of Technology Berlin, Germany; [2]CESifo Munich; [3]NoCeT, NHH Bergen; zarko.y.kalamov@tu-berlin.de, marco.runkel@tu-berlin.de

We analyze individuals with heterogeneous time-inconsistent preferences that consume sin goods and make a savings decision. A government may tax the sin good and provide mandatory health insurance. Due to time-inconsistency, the individual sin good and savings choices inflict internalities. Due to the ex-ante moral hazard of health insurance, sin good consumption also causes an externality. If the individuals' utility is such that savings and sin good demand decisions are decoupled, the government can achieve the first-best outcome using a uniform tax rate and uniform health insurance. Moreover, in the optimum, the tax rate internalizes only the externality and the government provides full insurance. When the savings and sin good consumption choices are interrelated, the government can still achieve the first-best outcome by additionally using social security to stipulate minimum savings requirements.

Kalamov-Sin Taxes, Insurance and the Correction of Internalities-516.pdf

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Income Tax Evasion And Third-Party Reported Consumption Expenditures: Implications For The Optimal Tax Structure

Aart Gerritsen
Erasmus University Rotterdam, Netherlands, The; agerritsen@ese.eur.nl

Tax authorities increasingly use third-party reported information on taxpayers' wealth and consumption expenditures to inform audit decisions. I determine the consequences of such audit policies for the optimal tax structure. In particular, I identify under what conditions third-party reported consumption should be subject to higher (or lower) tax rates than non-reported consumption. On the one hand, as tax evaders shy away from third-party reported consumption, raising taxes on unreported consumption discourages tax evasion. On the other hand, imposing a higher tax on reported consumption further distorts a tax evader's consumption bundle, and may therefore also discourage tax evasion. The net balance of these countervailing social-welfare effects is crucially driven by the elasticity of substitution between reported and non-reported goods. Government should impose higher (lower) taxes on third-party reported consumption when the elasticity of substitution is sufficiently high (low). Implications for wealth taxation are discussed.

Gerritsen-Income Tax Evasion And Third-Party Reported Consumption Expenditures-427.pdf

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Taxation and Regulation in a Market of Sin Goods with Persuasive Advertising

Luca Colombo[2], **Stefano Colombo**[2], **Umberto Galmarini**[1,3]
[1]Insubria University, Como, Italy; [2]Catholic University, Milan, Italy; [3]IEB, Barcelona; umberto.galmarini@uninsubria.it

We introduce persuasive advertising in a duopoly market of differentiated harmful goods, where firms compete on prices and advertising. Since advertising artificially inflates consumers' demand, there is over-consumption of sin goods. We then show how taxation increases aggregate surplus by improving consumers' welfare and reducing firms' profits. Adding regulation of advertising increases aggregate surplus further, but by increasing firms' profits and creating a conflict between consumers not very sensitive to advertising --- who experience welfare reductions --- and consumers highly sensitive to it --- who experience welfare gains.

Colombo-Taxation and Regulation in a Market of Sin Goods with Persuasive Advertising-282.pdf

9:00am - 10:30am McIntyre 208

E02: Political economy III - Empirical political economy

Session Chair: **Davide Cipullo**, Uppsala University

9:00am - 9:30am

Political Budget Forecast Cycles

Francisco José Veiga[1], **Frank Bohn**[2]
[1]University of Minho, Portugal; [2]Radboud University, The Netherlands; fjveiga@eeg.uminho.pt

By forecasting overly optimistic revenues opportunistic governments can increase spending in order to appear more competent prior to elections. Ex post deficits emerge in election years, thereby producing political forecast cycles - as also found for US states in the empirical literature. In our theoretical moral hazard model we obtain three additional results which are tested with panel data for Portuguese municipalities. The extent of manipulations is reduced when (i) the winning margin is expected to widen; (ii) the incumbent is not re-running; and/or (iii) the share of informed voters (proxied by education) goes up.

Veiga-Political Budget Forecast Cycles-311.pdf

9:30am - 10:00am

Political Institutions and Health Expenditure: Do Democracies Care for their People?

Johannes Blum[1], **Florian Dorn**[1], **Axel Heuer**[2]

[1]ifo institute Munich; University of Munich (LMU), Germany; [2]KfW Kreditanstalt für Wiederaufbau, Germany; Blum@ifo.de

This paper examines the effect of political institutions and democratic transitions on health expenditures. We use a balanced panel for 117 developing and developed coun-tries for the years 2000 to 2015 and employ panel fixed effect OLS and event study estimation designs. We present evidence for the positive effect of democracy on gov-ernment health expenditure. The estimation results indicate that democracies have higher government health expenditures relative to GDP than their non-democratic counterparts. Private health expenditures, however, do not turn out to be significantly affected by political institutions. Event study results show that government health expenditures in-crease after democratic transitions. We conclude that democracies care more for their people and may decrease inequalities in the access for health services.

Blum-Political Institutions and Health Expenditure-619.pdf

10:00am - 10:30am

Biased Forecasts to Affect Voting Decisions: The "Brexit" Case

Davide Cipullo[1], André Reslow[1,2]

[1]Uppsala University, Sweden; [2]Sveriges Riksbank; davide.cipullo@nek.uu.se

This paper introduces macroeconomic forecasters as political agents and suggests that they use their forecasts in order to influence voting outcomes. We develop a probabilistic voting model in which voters do not have complete information about the future states of the economy and have to rely on macroeconomic forecasters. The model predicts that it is optimal for forecasters with economic interest (stakes) and influence to publish biased forecasts prior to a referendum. We test our theory using high-frequency data at the forecaster level surrounding the "Brexit" referendum. The results show that forecasters with stakes and influence released much more pessimistic estimates for the following year GDP growth as compared to other forecasters. The realization of the GDP growth rate in 2017 show that forecasters with stakes and influence were also more incorrect than other institutions and that the "propaganda bias" explains up to 50% of their forecast error.

Cipullo-Biased Forecasts to Affect Voting Decisions-181.pdf

9:00am - 10:30am

East Quad Lecture Theatre

E03: Empirical taxation V - Wealth and inheritance taxation II

Session Chair: **Clara Martínez-Toledano Toledano**, Paris School of Economics

9:00am - 9:30am

The Elasticity of Taxable Wealth: Evidence from Switzerland

Marius Brülhart[1], Jonathan Gruber[2], Matthias Krapf[3], Kurt Schmidheiny[3]

[1]University of Lausanne; [2]MIT; [3]University of Basel, Switzerland; kurt.schmidheiny@unibas.ch

We study the effects of wealth taxation on reported wealth in Switzerland, which has the highest rate of annual wealth taxation in the developed world, and where tax rates vary considerably across locations and over time. We use aggregate data on wealth holdings by canton and individual-level data for the canton of Bern. We find implied behavioral elasticities that substantially exceed those of the taxable income literature. We also find that taxpayers bunch below the tax threshold, that our responses are driven by changes in wealth holdings rather than mobility, and that financial wealth is more responsive than non-financial wealth.

Brülhart-The Elasticity of Taxable Wealth-434.pdf

9:30am - 10:00am

What Happens When Dying Gets Cheaper? Behavioural Responses to Inheritance Taxation

Mariona Mas-Montserrat

University of Barcelona & IEB, Spain; m.mas@ub.edu

This paper intends to identify behavioural responses to significant cuts in the inheritance tax, paying special attention to evasion and avoidance. Using the universe of inheritance tax returns of Catalan tax residents from 2008 to 2015, it exploits a natural experiment resulting from an important tax reform: the quasi-repeal of the inheritance tax for bequests given to close relatives (i.e. descendants, parents and spouses). Main findings suggest that taxpayers facing very low (or null) tax rates increase reported inheritances by 40%. Such increase can be explained by real estate over-assessment. Although this behaviour is not related to inheritance tax evasion, it helps to reduce potential capital gains in the future, and thus it helps to evade future personal income taxes.

Mas-Montserrat-What Happens When Dying Gets Cheaper Behavioural Responses-319.pdf

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10:00am - 10:30am

Housing Bubbles, Wealth Inequality and Capital Income Taxation

Clara Martínez-Toledano Toledano

Paris School of Economics, France; cmtneztt@gmail.com

This paper combines different sources (tax records, national accounts, wealth surveys) to construct wealth distribution series for Spain over the period 1984-2015. The wealth inequality series and a new asset-specific accumulation decomposition are then used to analyze how housing bubbles shape the wealth distribution. Wealth concentration dropped in Spain since the eighties until the end of the housing boom of the 2000s and it increased afterwards during the years of the housing bust. My findings suggest that differences in rates of return and capital gains drive wealth inequality dynamics during housing booms and busts, but saving rates only play a role during busts. Rich individuals diversify their portfolio during the housing bust substituting housing for financial assets, contributing to revert the decreasing trend in wealth concentration of the housing boom.

Martínez-Toledano Toledano-Housing Bubbles, Wealth Inequality and Capital Income Taxation-592.pdf

9:00am - 10:30am
Gilbert Scott 253

E04: Procurement and regulation II

Session Chair: **Agnieszka Krystyna Kopańska**, University of Warsaw

9:00am - 9:30am

You Sponsor Mine, I Procure Yours: Pharmaceutical Sponsorships and Procurement in Public Hospitals

Alexandra Victoria Rusu
Erasmus University Rotterdam, Netherlands, The; alexandra.v.rusu@gmail.com

Using unique data linking hospital procurement contracts with sponsorships from pharmaceutical firms, I investigate possible instances of influence peddling and conflict of interest in Romanian hospitals. Procurement contracts related to sponsorships are 11% higher than procurement contracts not related to sponsorships. Sponsorships increase the probability of receiving a procurement contract by 5 percentage points. Sponsoring a doctor in hospital management has a slightly larger effect than sponsoring a regular doctor: the difference is economically significant only for direct contracts, which are the least transparent.

Rusu-You Sponsor Mine, I Procure Yours-120.pdf

9:30am - 10:00am

Mafia's Infiltration And Spillover Effects In The Construction Sector

Leonzio Rizzo[1], **Massimiliano Ferraresi**[2], **Riccardo Secomandi**[3]
[1]Università di Ferrara and IEB; [2]European Commission Joint Research Centre (JRC); [3]Università di Ferrara and Università di Parma; rzzlzg@unife.it, riccardo.secomandi@unife.it

Literature has mainly focused on understanding whether organized crime impacts on economic growth, broadly intended. Yet, at the local level, much little is known as to how crime may affect economic activities. Using a unique geo-localized dataset on Italian firms, we show that in municipalities where the city council is dismissed because of mafia infiltration, there is a reduction in the added value of firms located in neighboring municipalities, being this effect more marked for firms operating in the construction sector. We also find that the effect is larger the longer the presence of the organized crime in the municipal council.

Rizzo-Mafia's Infiltration And Spillover Effects In The Construction Sector-390.pdf

10:00am - 10:30am

Fiscal And Political Determinants Of Local Government Involvement In Public-Private Partnership (PPP)

Agnieszka Krystyna Kopańska, **Roman Asiński**
University of Warsaw, Poland; kopanska@wne.uw.edu.pl

In this article, we estimate the main determinants of local government's engagement in public-private partnership (PPP) projects using logistic panel regression. We use data from 2478 municipalities and cities in Poland from 2009 to 2016. The results show that municipalities with higher levels of indebtedness have a higher probability of opening PPP tenders while local units that are more dependent on central grants or receive more European grants are less engaged in PPP. We found also that the mayors of municipalities and cities with stronger electoral competition also engage in PPP with a higher probability, but fragmentation of municipal councils impedes decisions on PPP. These results are important for discussions on the efficient use of PPP. They show that local government decisions made in conditions of fiscal constraint and political struggle can blur the PPP's value-for-money aim.

Kopańska-Fiscal And Political Determinants Of Local Government Involvement-110.pdf

9:00am - 10:30am
Gilbert Scott 132

E05: Environmental economics II

Session Chair: **Gunther Markwardt**, Technische Universität Dresden

9:00am - 9:30am

Sudden Re-Introduction of Environmental Investment Tax-Incentive - How Do Firms Respond?

Kinga Barbara Tchorzewska
University of Barcelona, IEB, Chair of Energy Sustainability, Spain; kinga.tchorzewska@ub.edu

This paper investigates the effect of a sudden re-introduction of environmental investment tax incentives on investment in green technologies, using a sample of 2,562 Spanish manufacturing companies between 2008 and 2014. Exploiting the sharp unexpected re-introduction of the tax deduction at 8% in 2011, we perform difference-in-difference analysis. We combine difference-in-difference with propensity score matching technique to find firms, which could be used as an appropriate control group. We find that due to the nature of the tax credit in place, its re-introduction resulted in a decrease in investment in pollution abating end-of-pipe technologies and has, instead, increased financing cleaner production technologies aimed at air pollution reduction. Studying the dynamic effects, we find that as time passes, air pollution end-of-pipe technologies are decreasingly financed through those tax credits.

Tchorzewska-Sudden Re-Introduction of Environmental Investment Tax-Incentive-347.pdf

9:30am - 10:00am

Spotlight on Spatial Environmental Policy Spillovers: An Econometric Analysis of Wastewater Treatment in Mexican Municipalities

Gunther Markwardt[1], **Lutz Hecker**[2], **Frank Wätzold**[2]
[1]Technische Universität Dresden, Germany; [2]Brandenburg University of Technology Cottbus-Senftenberg; gunther.markwardt@tu-dresden.de

The objective of this paper is to analyze whether successful environmental policies spread across geographical space. We examine the existence of such environmental spatial policy spillovers using the example of wastewater treatment in Mexican municipalities. Untreated wastewater is a key pollution source in many developing and emerging countries, also in Mexico. However, wastewater treatment levels also differ greatly among the 2,456 Mexican municipalities. We apply spatial econometrics to explain differences in wastewater treatment. Our main finding is that a municipal administration is more likely to treat wastewater if neighboring municipalities do so. This insight seems of broader relevance to environmental policy-making. In developing and emerging countries, governments frequently lack capacities to solve environmental problems. Consequently, they may often rely on learning spillovers from nearby success cases. We recommend to implement environmental pilot projects which may then trigger domino effects.

Markwardt-Spotlight on Spatial Environmental Policy Spillovers-407.pdf

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10:00am - 10:30am

Waste-To-Energy And Recycling: How Do Plant Ownership And Waste Mobility Affect Equilibrium Outcomes?

Laura Ievaggi[2], Rosella Levaggi[1], Carmen Marchiori[1], Carmine Trecroci[1]

[1]University of Brescia, Italy; [2]Faculty of Science and Technology, Free University of Bolzano-Bozen; rosella.levaggi@unibs.it

This paper investigates incentives, trade-offs and equilibria in a two-Region model for the treatment of municipal solid waste. Regions are identical but for waste disposal. Waste to Energy (WtE) is used in Region 1; landfill in Region 2. We investigate how waste mobility and the institutional setting (public/private ownership of the WtE plant) affect waste management choices and welfare in the two Regions. When waste mobility is not allowed, institutional settings are uninfluential, but the environmental damage may not be optimal. Allowing for mobility when the incinerator is publicly owned, leads to an equilibrium outcome which is globally efficient and Pareto improving for the two Regions. Compared to no-mobility, the optimal level of recycling is higher in Region 1 and lower in Region 2; moreover, the total amount of waste incinerated is larger. Finally, the mobility scenario with private ownership may not be welfare improving for all parties involved

Ievaggi-Waste-To-Energy And Recycling-239.pdf

9:00am - 10:30am

James Watt South Stevenson 375

E06: Fiscal federalism VI - Political economy III

Session Chair: **Monika Banaszewska**, Poznań University of Economics and Business

9:00am - 9:30am

The Allocation of Discretionary Intergovernmental Transfers in Portugal

Linda Gonçalves Veiga

University of Minho, Portugal; linda@eeg.uminho.pt

This paper analyses the political economy of the allocation of discretionary intergovernmental transfers, using a sample comprising the 308 Portuguese municipalities over the period 1998-2017. The baseline empirical results suggest that there are political cycles in transfers around elections and that municipalities where the national government and the mayor obtained greater electoral support receive more transfers. There is also evidence that, in election years, mayors belonging to the Prime-Minister's party are favoured in the allocation process. Additionally, in legislative elections term-limited mayors do not benefit from increases in current non-formula transfers and, in local election years, municipalities where the incumbent does not run for re-election are negatively discriminated.

Veiga-The Allocation of Discretionary Intergovernmental Transfers-330.pdf

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9:30am - 10:00am

Political Alignment and the Remuneration of Top-level Bureaucrats

Jon Fiva, Benny Geys, Tom Reiel Heggedal, Rune Sørensen

BI Norwegian Business School, Norway; Benny.Geys@bi.no

We study the private gains to top bureaucrats from their political alignment with

elected politicians. Whereas existing studies rely on proxies for politician-bureaucrat political alignment, a rare feature of our data allows measuring it directly since 27% of bureaucrats ran for political office. Using close elections for inference, wef ind that politician-bureaucrat alignment significantly increases top bureaucrats' wage in the Norwegian civil service system. Our results go against predictions from models with policy-motivated bureaucrats, but are consistent with politically aligned principal-agent matches being more productive.

Fiva-Political Alignment and the Remuneration of Top-level Bureaucrats-153.pdf

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10:00am - 10:30am

The Political Economy of Preferential Tax Treatment. An Empirical Analysis of Polish Municipalities

Monika Banaszewska

Poznań University of Economics and Business, Poland; monika.banaszewska@ue.poznan.pl

We investigate whether the scope of preferential tax treatment depends on the political strength of local authorities. For this purpose, we use a unique panel dataset on real estate taxes in Polish municipalities in the years 2005-2017. The empirical study consistently shows that more tax revenues are foregone in municipalities governed by politically weak mayors, albeit the uncovered relationship has a limited economic significance. We also investigate the components of tax reductions. There is robust evidence that less popular local authorities offer higher preferential tax measures towards natural persons and in the form of tax rate reductions.

Banaszewska-The Political Economy of Preferential Tax Treatment An Empirical Analysis of Polish Municipalities.pdf

9:00am - 10:30am
Gilbert Scott 250

E07: Entrepreneurship

Session Chair: **Tuomas Matikka**, VATT Institute for Economic Research

9:00am - 9:30am

Collateral Value and Entrepreneurship: Evidence from a Property Tax

João Pereira dos Santos[2], **Miguel Ferreira**[1], **Ana Venâncio**[3]
[1]Nova School of Business and Economics; [2]Nova School of Business and Economics; [3]ISEG and ADVANCE/CSG; joao.santos@novasbe.pt

We study the role of property taxes on entrepreneurial activity using a quasi-natural experiment, which unexpectedly reduced the upper bound of the Portuguese property tax rate for urban properties in 2008. Using a difference-in-differences approach, we find that treated municipalities (i.e., municipalities that had a property tax rate above the new upper bound) experienced higher entry rates in the manufacturing sector vis-à-vis control municipalities (i.e., municipalities that had a property tax rate at or below the new upper bound). In addition, we find that treated municipalities with less residential mortgages experienced higher entry rates in the service sector. These findings suggest that the value of housing collateral is important to entrepreneurship in sectors that need little start-up capital such as services. Taking advantage of firm-level data we show that start-ups created as a response to the decrease in property taxes use more debt, invest more, and are more likely to survive.

Pereira dos Santos-Collateral Value and Entrepreneurship-356.pdf

9:30am - 10:00am

Does Mandating Social Insurance Affect Entrepreneurial Activity?

Youssef Benzarti, Jarkko Harju, Tuomas Matikka
VATT Institute for Economic Research, Finland; tuomas.matikka@vatt.fi

This paper estimates the effect of relaxing the social insurance mandate on entrepreneurial activity using rich administrative data from Finland. We find that relaxing the social insurance mandate leads entrepreneurs to reduce their contributions by 16%, which they channel instead into their firms. While young firms use the saved cash to increase their sales by 11% and labor costs by 6%, older firms use it to improve their net lending position by purchasing stocks. Our results imply that the impact of the social insurance mandate on business activity is heterogeneous and depends on the age of the firm.

Benzarti-Does Mandating Social Insurance Affect Entrepreneurial Activity-133.pdf

9:00am - 10:30am
Humanities Lecture Theatre

E08: Corporate taxation X - Empirical corporate taxation IV

Session Chair: **Giacomo Brusco**, University of Michigan

9:00am - 9:30am

Cash on the Table? Imperfect Take-up of Tax Incentives and Firm Investment Behavior

Jeffrey Hicks[1], **Wei Cui**[2], **Jing Xing**[3]
[1]Vancouver School of Economics, University of British Columbia, Canada; [2]Allard Law School, University of British Columbia, Canada; [3]Shanghai Jiao Tong University, China; jeffrey.hicks@ubc.ca

We investigate whether new forms of tax incentives are effective in stimulating private investment in less developed countries, by exploiting the introduction of accelerated depreciation for fixed assets investment in China as a natural experiment. Using confidential corporate tax returns from a large province, we find that 80 percent of firms with eligible investment fail to claim the tax benefits and appear to leave cash on the table. Firms' take-up decisions of tax incentives are significantly influenced by their taxable positions and tax sophistication. Information delivery and resources of local tax authorities also play an important role. In contrast to the large positive impact of similar tax incentives on investment found in more developed countries, we obtain limited evidence for the efficacy of accelerated depreciation on Chinese firms' investment. Our study contributes to the understanding of conditions under which tax-based investment incentives can be effective.

Hicks-Cash on the Table Imperfect Take-up of Tax Incentives and Firm Investment Behavior-595.pdf

9:30am - 10:00am

How Effective is an Incremental ACE in Addressing the Debt Bias? Evidence from Corporate Tax Returns

Antonella Caiumi[1], **Nicola Branzoli**[2]
[1]ISTAT, Italy; [2]Banca d'Italia; acaiumi@istat.it

The Allowance for Corporate Equity (ACE) introduced in Italy in 2011 has decreased the fiscal distortion between the costs of equity and debt by introducing the deductibility from taxable income of a notional return on capital increases. In this paper we estimate the impact of the ACE on the leverage ratio of Italian manufacturing firms. Using a novel instrumental variable approach to identify the causal effect, we find that the introduction of the incremental ACE has substantially reduced the leverage ratio of its beneficiaries. The effect of the reform increases with age and decreases with the size of the enterprise. These results suggest that an incremental ACE may be an effective policy tool to reduce the leverage ratio of European firms.

Caiumi-How Effective is an Incremental ACE in Addressing the Debt Bias Evidence-410.pdf

10:00am - 10:30am

Tax Reform and the Valuation of Superstar Firms

Giacomo Brusco

University of Michigan, United States of America; gbrusco@umich.edu

In a frictionless model of perfect competition, the increase in value a company receives after a tax cut is offset exactly by an equal decrease due to the entry of new firms. If instead frictions prevent immediate entry, the size of the increase in value upon a tax cut will be higher, the higher the economic profits of a firm. Using data on the U.S. stock market, I show that, among the biggest firms, those with a bigger market capitalization before the tax cut saw a higher return on their stock upon news shocks regarding the passing of the Tax Cuts and Jobs Act. My work complements a growing literature documenting a concentration of market shares in the U.S. economy.

Brusco-Tax Reform and the Valuation of Superstar Firms-507.pdf

9:00am - 10:30am
Gilbert Scott Lecture Theatre 466

E09: Corporate taxation XI - Management and financing policy

Session Chair: **Daniela Scur**, MIT

9:00am - 9:30am

Taxation of Dividends and Governance Issues of Corporate Minority Shareholders

Lisa Hillmann
University of Goettingen, Germany; lisa.hillmann@wiwi.uni-goettingen.de

This study investigates the responsiveness of shareholders to dividend taxation. Using a German dividend tax increase, which is only applicable to corporate minority shareholders, and ownership data of German private corporations, I can further examine how the shareholders' dividend tax responsiveness is affected by conflicts between large and minority shareholders. My results suggest that corporate minority shareholders on average decrease their minority shareholdings in German corporations after the dividend tax increase. As shareholder conflicts between large and minority shareholders increase, corporate minority shareholders decrease more strongly their shareholdings. My findings extend the literature on the effects of dividend taxation in general and the interaction between dividend taxation and governance issues.

Hillmann-Taxation of Dividends and Governance Issues of Corporate Minority Shareholders-190.pdf

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9:30am - 10:00am

How Do Firm Owners Respond to Dividend Taxes?

Aliisa Koivisto[1,2]
[1]VATT Institute of Economic Research, Finland; [2]University of Helsinki; aliisa.koivisto@vatt.fi

In this paper, I use panel data of all Finnish privately held corporations and

their main owners to study how business owners respond to dividend taxes. By studying the effects of dividend tax schedule discontinuities on place in 2006-2016, I find exceptionally clear dividend responses to tax rates, implying taxable income elasticities between 0.5-3.6. The results indicate that majority of the payment response is due to inter-temporal income-smoothing or income-shifting across income bases, while changes in the tax schedule did not cause significant real responses in output or investment.

Koivisto-How Do Firm Owners Respond to Dividend Taxes-456.pdf

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10:00am - 10:30am

Structured Management and Tax Planning Practices in the Firm

Katarzyna Bilicka[1], **Daniela Scur**[2]
[1]Utath State University and Oxford University Centre for Business Taxation; [2]MIT Sloan; dscur@mit.edu

This paper considers the effect of firm's organizational capacity – proxied by structured management practices - on tax planning behavior of multinational firms (MNEs). Management practices improve productivity and hence should increase taxable corporate income of firms. However, better managed firms may also be better at tax avoidance. We show that MNEs from high-tax home countries operating in a low-tax host countries exhibit a positive relationship between reported profits and structured management practices, while the opposite relationship exists for MNEs from high-tax home countries located in high-tax host countries. These patterns are consistent with structured management firms shifting profits out of high-tax country affiliates into low-tax country affiliates. This adds a novel explanation for why some firms are more likely to engage in aggressive tax planning, with implications to the cost-benefit analysis of government-funded management upgrading projects.

Bilicka-Structured Management and Tax Planning Practices in the Firm-519.pdf

9:00am - 10:30am
Fore Hall

E10: Corporate taxation XII - Corporate tax incidence

Session Chair: **Adrian Lerche**, Universitat Pompeu Fabra

9:00am - 9:30am

Does Capital Bear the Burden of Local Corporate Taxes? Evidence from the 2008 Tax Reform in Germany

Aria Ardalan[1], **Sebastian G. Kessing**[1], **Salmai Qari**[2], **Malte Zoubek**[1]
[1]Universität Siegen, Germany; [2]DIW Berlin; aria.ardalan@uni-siegen.de

We use an asset price approach to analyze the incidence of local corporate taxes. Exploiting the German 2008 tax reform we employ an event study design to assess the effects of local corporate taxes on stock prices. The reform reduced federal as well as local corporate tax rates, the latter as a function of the existing local corporate tax rates, as well as the determination of the tax base. We match firms to the local tax rates prevailing at their respective headquarters and analyze the differential stock market responses to the political decision to legislate the reform as a function of local business tax rates. We find that firms which are located in high tax jurisdictions significantly outperform firms in low tax jurisdictions during the period in which the reform was decided. Our results indicate that firm owners partially bear the burden of local corporate taxes.

Ardalan-Does Capital Bear the Burden of Local Corporate Taxes Evidence-534.pdf

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9:30am - 10:00am

The Real Effects of Tax Avoidance

Narly Dwarkasing[1], **Mintra Dwarkasing**[1], **Jasmin Gider**[2], **Yiqing Lu**[3]
[1]Erasmus University Rotterdam, Netherlands, The; [2]Tilburg University; [3]NYU Shanghai; n.r.d.dwarkasing@ese.eur.nl

This paper investigates the impact of tax avoidance on financing and investment decisions by firms. Tax avoidance, by decreasing expenses, may positively affect investment, but at the same time may also increase opacity, which can aggravate financing constraints. We build a theory to analyze the firm's choice of tax avoidance and investment in the presence of financing constraints. It predicts that if the opacity cost of tax avoidance outweighs the benefit of a reduced tax burden, then investment and investment-cash flow sensitivity goes down due to tightened financial constraints. Empirically we exploit the differential exposure to a change in tax avoidance opportunities (Check the Box regulations). Constrained firms do not increase investment, don't change leverage, but experience lower credit ratings, rating downgrades, and become more financially constrained. Their investment-cash flow sensitivity declines. These findings are inconsistent with the general notion that tax avoidance may alleviate financing constraints and promote investment.

Dwarkasing-The Real Effects of Tax Avoidance-383.pdf

10:00am - 10:30am

Investment Tax Credits and the Response of Firms

Adrian Lerche
Universitat Pompeu Fabra, Spain; adrian.lerche@upf.edu

This paper studies the effects of investment tax credits on firms' input choices by ex- ploiting a sudden shift in the tax credit rate by firm size for manufacturing firms in Germany in 1999. I find that more generous tax credits lead to a significant increase in both investment and employment, with implied elasticities with respect to capital costs of 2.8 and 1.1, respectively. Local spillovers between firms generate an additional positive effect. A heterogeneity analysis reveals that firms with larger capital cost shares are more responsive to tax credits and that spillovers tend to be stronger for firms operating in the same industry. While there is little evidence that the average firm adjusts its skill mix or occupational structure, firms in industries with higher investment shares into information and communications technology (ICT) are more likely to shift towards highly educated labor and high-skilled occupations.

Lerche-Investment Tax Credits and the Response of Firms-284.pdf

9:00am - 10:30am

James Watt South Stevenson 354

E11: Tax Compliance IV - Auditing

Session Chair: **Thor O. Thoresen**, Statistics Norway

9:00am - 9:30am

The Effects of Random Audits on Firms

Jarkko Harju[1,3], **Kaisa Kotakorpi**[1,2,3], **Tuomas Matikka**[1,3], **Lauri Ojala**[4]
[1]VATT Institute for Economic Research, Finland; [2]Helsinki Graduate School of Economics; [3]CESifo; [4]London School of Economics; kaisa.kotakorpi@vatt.fi

We analyse the impact of tax enforcement on firms using data from random audits implemented in Finland in 2014-2016. We combine information on timing, content and results of audits to detailed register data on firm performance, and analyse the development of firm performance following an audit. Mechanical (direct) effects of audits are a signal of non-compliance, while dynamic effects of audits in subsequent years are a signal of strategic responses of firms to tax enforcement. We find that firms respond to audits by adjusting their tax-deductible expenditures. There is an increase in taxable income and corporate taxes paid also in the year following an audit.

Harju-The Effects of Random Audits on Firms-447.pdf

9:30am - 10:00am

Descriptive Evidence from Risk Based Tax Audits in Finland

Annika Nivala[1,2], **Jarkko Harju**[2], **Kaisa Kotakorpi**[2,3,4], **Tuomas Matikka**[2]
[1]University of Turku, Finland; [2]VATT Institute for Economic Research; [3]Helsinki Graduate School of Economics; [4]CESifo; annika.nivala@utu.fi

We provide descriptive evidence on firm tax enforcement policy in Finland. We use data on all risk based tax audits of firms in Finland in 2003–2015 from the Finnish tax administration. This is combined with tax return data on the full population of firms in 2000-2016. In this study we describe how firm characteristics are associated with getting audited and the results of the audits. We find that large firms are much more likely audited than small but relatively larger tax deficits are detected in small companies. Also, limited companies have a higher audit rate and larger deficiencies, but are less likely to have positive tax deficiencies at audit. We also describe the behavior of the audited firms compared to those not audited. The audited firms grow faster before the audit but slower after, and have higher exit rate after the audit.

Nivala-Descriptive Evidence from Risk Based Tax Audits in Finland-492.pdf

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10:00am - 10:30am

Behavioral Responses to Tax Audits: Between Deterrence and Approval

Shafik Hebous[2], **Zhiyang Jia**[1], **Knut Løyland**[3], **Thor O. Thoresen**[1], **Arnstein Øvrum**[3]
[1]Statistics Norway, Norway; [2]International Monetary Fund; [3]Nowegian Tax Administration; tot@ssb.no

Auditing the income tax return not only ensures that the correct amount is paid in the year of the intervention, it is expected to affect the tax compliance in the subsequent years too. From a tax administration efficiency point of view, it is important to know the duration of a potential deterrence effect. Moreover, as some studies refer to less subsequent compliance after an audit among the compliant taxpayers, we explore to what extent there is a counteracting "approval effect" too. A random audit selection scheme operated by the Norwegian tax administration is used in the empirical identification. We find estimates in accordance with an overall modest deterrence effect, however statistically significant only in the first year after the audit. Behind this we see substantially larger effects in the non-compliant group, lasting for five years after the audit, whereas the compliant taxpayers show no signs of behavioral adjustments.

Hebous-Behavioral Responses to Tax Audits-487.pdf

9:00am - 10:30am
James Watt South Stevenson 355

E12: Behavioral economics III

Session Chair: **Monika Bütler**, University of St. Gallen

9:00am - 9:30am

When Margaret met Sally: Same-Sex Preferences in Academia when Female Instructors are Scarce

Patricia Funk[1], Nagore Iriberri[2], Giulia Savio[3]

[1]Università della Svizzera Italiana, Switzerland; [2]University of the Basque Country; [3]Università della Svizzera Italiana, Switzerland; giulia.savio@usi.ch

This paper combines observational and experimental data to investigate whether scarcity of female instructors affects students' demand thereof. We find that female students evaluate female professors relatively more favorably but only in faculties with a relatively low share of female professors. To shed light on scarcity of female professors as a potential channel, we design an incentivized instructor-choice experiment on MTurk. We experimentally vary the existing pool of instructor gender and let subjects choose one additional (male or female) instructor. Female (and only female) subjects are more likely to choose the female instructor when the pool of instructors is male-dominated.

Funk-When Margaret met Sally-500.pdf

9:30am - 10:00am

Poverty and Economic Behavior: Gambling at Social Security Paydays

Momi Dahan

Hebrew University, Israel; momidahan@mscc.huji.ac.il

The goal of this research is to explore whether actual lottery revenues is sensitive to scarcity, as measured by intra-monthly variation in financial resources. Exogenous paydays of social security benefits are employed to generate the intra-monthly variation in financial resources. Employing two million observations on daily lottery revenues that cover more than 2,500 lottery outlets in Israel for two years (2015-2016), we find that gambling revenue spikes at social security paydays. The estimation results imply that on Income Support payday aggregate lottery revenues are higher by 5 percent. However, the calculated aggregate response of lottery revenues on Income Support payday is quite small and equal 0.5 percent of the total monthly payments deposited to the bank account of Income Support recipients. In addition, the other social security and salary paydays induce a trivial impact relative to total monthly payments deposited to the bank account of the respective recipients.

Dahan-Poverty and Economic Behavior-135.pdf

10:00am - 10:30am

The Impact Of Crisis Exposure On Risk Behaviour At Retirement: Evidence From Cash-Out Choices In The Great Recession In Switzerland

Monika Bütler, Alma Ramsden

University of St. Gallen, Switzerland; monika.buetler@unisg.ch

We explore the impact of the Great recession on risk behaviour by analysing cash-out choices at retirement in a large Swiss pension provider. While the crisis had differential effects on economic sectors, it left pension wealth of workers close to retirement unchanged due to stringent regulation. Nonetheless, individuals working in crisis-prone export-oriented sectors prior to retirement displayed a significantly larger increase in the propensity to annuitize pension wealth than their peers in non-export sectors. In the absence of direct financial consequences, these choices are consistent with changes in risk preferences or risk perception.

Bütler-The Impact Of Crisis Exposure On Risk Behaviour At Retirement-103.pdf

9:00am - 10:30am
Gilbert Scott 134

E13: Indirect taxation II - Cars

Session Chair: **Katrine Marie Jakobsen**, University of Copenhagen

9:00am - 9:30am

Efficient Taxation of Fuel and Road Use

Geir H M Bjertnæs

Statistics Norway, Norway; ghb@ssb.no

This study calculates efficient taxes on fuel and road use based on recent advances within the literature. The study shows that the efficient CO2 tax on fuel equals the marginal damage of CO2-emissions. The efficient road user charge on fuel is however below the marginal mileage-related damage to prevent tax avoidance due to an excessive economic driving-style. The current US tax rate on gasoline is below the efficient rate while the current UK rate is slightly above the efficient rate in this case. The efficient tax on fuel exceeds the marginal damage of CO2-emissions to promote an economic driving-style when the tax

is combined with a GPS-based tax on road use. The efficient GPS-based tax rate on road use is reduced below the marginal damage of mileage-related externalities in this case.

Bjertnæs-Efficient Taxation of Fuel and Road Use-296.pdf

9:30am - 10:00am

Car Taxation and Households' Car Choice: Evidence from Denmark

Katrine Marie Jakobsen
University of Copenhagen, Denmark; kmtj@econ.ku.dk

This paper studies how households' car choices and car prices respond to car taxes. Governments impose taxes to regulate and influence car usage and to raise tax revenue, but evidence of the effects of such policies is scarce. In Denmark, like Holland, Norway, and France, new cars are taxed the first time they are registered. In November 2015 this tax was reduced strongly for medium and large cars. The tax change was announced and unexpected. I find that the average retail price of new cars bought by Danish households increases by 4 percent in the year after the tax reduction. Furthermore, my results suggest that the reduction in the registration tax is fully reflected in final car prices and that car dealers do not increase retail prices in response to the reduction.

Jakobsen-Car Taxation and Households Car Choice-499.pdf

9:00am - 10:30am **IIPF Board of Management Meeting II (for Board only)**

10:30am - 11:00am **Coffee Break**
Hunter Halls

11:00am - 1:00pm **F01: Optimal taxation VIII - Political economy and self-employed**
McIntyre 201
Session Chair: **John A Weymark**, Vanderbilt University

Optimal Taxation of Employment and Self-Employment: Evidence from Poland and Implications

Tomasz Andrzej Zawisza[1,2]
[1]Institute for Fiscal Studies, United Kingdom; [2]European University Institute; tazawisza@gmail.com

I examine two central questions bearing on the optimal relative taxation of employment and self-employment income using the 2009 Polish reform. Firstly, I estimate the degree of substitution on the extensive margin between the employment and selfemployment tax bases, as well as the intensive-margin elasticities for these tax bases separately. The baseline estimates of the intensive-margin elasticities are around 0.2 for the employed and around 0.7 for the self-employed. Secondly, I characterize optimal non-linear employment and self-employment tax schedules in a theoretical model, finding rationale for taxation of self-employment income at lower marginal and total tax rates.

Zawisza-Optimal Taxation of Employment and Self-Employment-417.pdf

Higher Taxation for Fairer Redistribution A Political Economy Model with Occupational Choice

Anne Villamil[2], **Xiaobing Wang**[3], **Ning Xue**[1]
[1]University of York, United Kingdom; [2]University of Iowa, United States; [3]University of Manchester, United Kindom; xueninguibe@gmail.com

This paper explores the relationship between inequality and taxation in a political economy model where agents with different wealth choose to be workers or entrepreneurs. It has been predicted in the theoretical literature on the political economy of taxation that inequality and taxation is positively related while the results of empirical studies are mixed. By introducing occupational choice, we show that more inequality may cause it to be positive or negative. In this framework, agents vote for their preferred tax rate based on their own income and the occupational choice of others. Tax policy affects the economy through two effects. A higher tax rate discourages entrepreneurial investment and thus affects the tax revenue collected which reflects the traditional “equity and efficiency trade-off”. In addition to this direct effect, it indirectly affects the income of agents by reducing the equilibrium wage as fewer entrepreneurs reduces labor demand.

Villamil-Higher Taxation for Fairer Redistribution A Political Economy Model with Occupational Choice-413.pdf

Probabilistic Voting over Linear Income Taxes with International Migration

Craig Brett
Mount Allison University, Canada; cbrett@mta.ca

The choice of income tax policy by office-seeking politicians when workers are internationally mobile is examined. Optimal tax rules are derived, showing the separate effects of voting at the ballot box and with the feet. The resulting formulas are used to highlight when and how political considerations can attenuate (or exacerbate) the downward pressure on income tax rates typically associated with international mobility.

Brett-Probabilistic Voting over Linear Income Taxes with International Migration-428.pdf

Majority Rule and Selfishly Optimal Nonlinear Income Tax Schedules with Discrete Skill Levels

Craig Brett[2], **John A Weymark**[1]
[1]Vanderbilt University, United States of America; [2]Mount Allison University, Canada; john.weymark@vanderbilt.edu

Röell (unpublished 2012) shows that Black's Median Voter Theorem for majority voting with single-peaked preferences applies to voting over nonlinear income tax schedules that satisfy the constraints of a finite type version of the Mirrlees optimal income tax problem when voting takes place over the tax schedules that are selfishly optimal for some individual and preferences are quasilinear. An alternative way of establishing Röoell's median voter result is provided that offers a different perspective on her findings, drawing on insights obtained by Brett and Weymark (GEB 2017) in their analysis of a version of this problem with a continuum of types. In order to characterize a selfishly´optimal schedule, it is determined how to optimally bunch different types of individuals.

Brett-Majority Rule and Selfishly Optimal Nonlinear Income Tax Schedules with Discrete Skill Levels-229.pdf

11:00am - 1:00pm
McIntyre 208

F02: Optimal taxation IX - Behavioral economics

Session Chair: **Thomas Aronsson**, Umeå University

11:00am - 11:30am

Optimal Income Taxation In The Presence Of Networks Of Altruism

Anasuya Raj
CREST, École Polytechnique, France; anasuya.raj@polytechnique.edu

This paper characterizes the optimal income tax in the presence of networks of altruism. Networks of altruism arise when individuals take into account the private utility of other individuals as well as their own, into their utility. In our paper, individuals form groups of altruism, that materialize through monetary transfers that they make to each other. Individuals thus have two dimensions of choices: their labour income and the transfers they make to other individuals. First, we establish the structure of incomes and transfers under the laissez-faire situation. Second, we characterize the optimal linear income tax and show that depending on the distribution of the homogeneity of groups, because of partial crowding out transfers, the optimal tax rate should adjust to the elasticity of transfers to the tax rate. Finally, the optimal non-linear income tax has a more ambiguous effect.

Raj-Optimal Income Taxation In The Presence Of Networks Of Altruism-473.pdf

11:30am - 12:00pm

Redistribution through Charity, Optimal Taxation, and Social Status

Thomas Aronsson[1], **Olof Johansson-Stenman**[2], **Ronald Wendner**[3]
[1]Umeå University, Sweden; [2]University of Gothenburg, Sweden; [3]University of Graz; olof.johansson@economics.gu.se

This paper analyzes tax policy responses to redistributive charitable giving through simultaneous treatment of (i) public and private redistribution, (ii) the warm glow of giving and stigma of receiving charitable donations, and (iii) social comparisons with respect to both charitable donations and private consumption. Whether charity should be taxed or supported turns out to largely depend on the relative strengths of the warm glow of giving and the stigma of receiving charity, respectively, and on the positional externalities caused by charitable donations. In addition, imposing stigma on the mimicker (which relaxes the self-selection constraint) strengthens the case for subsidizing charity. We also consider a case where the government is unable to target the charitable giving through a direct tax instrument, and examine how the optimal marginal income tax structure should be adjusted in response to charitable giving. Numerical simulations demonstrate that quantitative effects can be substantial.

Aronsson-Redistribution through Charity, Optimal Taxation, and Social Status-201.pdf

12:00pm - 12:30pm

Optimal Tax Systems with Behavioral Agents

Dylan Moore, **Joel Slemrod**
University of Michigan, United States of America; dtmoore@umich.edu

We develop an optimal tax framework that combines two recent extensions of tax analysis: a tax-systems emphasis on non-rate policy instruments, and taxation with behavioral biases. Although the implications of taxpayers' biases for optimal tax rates has received considerable attention, a complete analysis of this aspect of optimal tax theory must account for the fact that such biases may be endogenous to the non-rate aspects of a tax system. We extend optimal tax systems analysis to incorporate behavioral biases, illustrating the implications of this perspective using two simple models. We characterize the optimal tax system in this setting under a fairly general formulation of taxpayer bias and (potentially costly) non-rate policies. We also discuss the implications of our framework for applied welfare analysis with behavioral agents, documenting new possibilities and challenges for such work that a tax-systems view reveals.

Moore-Optimal Tax Systems with Behavioral Agents-583.pdf

12:30pm - 1:00pm

Charity, Status, and Optimal Taxation: Welfarist and Paternalist Approaches

Thomas Aronsson[1], **Olof Johansson-Stenman**[2], **Ronald Wendner**[3]
[1]Umeå University, Sweden; [2]University of Gothenburg, Sweden; [3]University of Graz, Austria; Thomas.Aronsson@umu.se

This paper deals with tax policy responses to charitable giving. Charitable donations are described in terms of voluntary contributions to a public good, to which the government also contributes through public revenue, and the set of tax instruments contains general, nonlinear taxes on income and charitable giving. Individuals are concerned with the warm-glow of giving as well as with status, determined by their relative contributions to charity and relative consumption, respectively. We analyze the conditions under which it is optimal to tax or subsidize charitable giving and derive corresponding optimal policy rules. Another purpose is to compare the optimal tax policy and public good provision by a conventional welfarist government with those by two kinds of paternalist governments, which do not share (i) the consumer preferences for status in terms of relative giving and relative consumption, and (ii) in addition does not share the consumer preference for warm-glow.

Aronsson-Charity, Status, and Optimal Taxation-199.pdf

11:00am - 1:00pm
East Quad Lecture Theatre

F03: Health economics II

Session Chair: **Cortnie Shupe**, DIW Berlin

11:00am - 11:30am

Drug Price Regulation: Value Based Alternatives For Personalised Drugs In The Presence Of Asymmetry Of Information

Rosella Levaggi[1], **Paolo Pertile**[2]
[1]University of Brescia, Italy; [2]University of Verona; rosella.levaggi@unibs.it

The market for new drugs is changing: personalised drugs are deemed to increase heterogeneity in patients' responses and, possibly, uncertainty on the outcomes. In this context, price regulation is going to play an increasingly important role. Value based prices are replacing cost based schemes, but their implementation is still controversial. In this article we argue that personalised medicine opens new scenarios as concerns the relationship between pricing, industry listing strategies and research. We suggest that more research should be devoted to study the effects of alternative pricing schemes on competition and innovation in a dynamic perspective.

Levaggi-Drug Price Regulation-419.pdf

11:30am - 12:00pm

Are Doctors Better Health Ministers?

Adam Pilny[1], **Felix Roesel**[2]
[1]RWI - Leibniz Institute for Economic Research, Germany; [2]ifo Institute, Dresden Branch, Germany; adam.pilny@rwi-essen.de

Appointing or electing professionals to be public officials is a double-edged sword. Experts can use their rich knowledge to implement reforms, but they can also favor their own profession at the expense of taxpayers. In this study, we compare physician-trained state health ministers to ministers of other professions in Germany during 1955-2015 and show that in-group favoritism within professions strongly dominates expertise. State health ministers have great power to determine bed capacities and capital resources. Briefly, we find that when medical doctors become health ministers, hospital bed capacities increase and hospitals hire more physicians, but with little impact on hospital outputs or on patient and general staff satisfaction. Thus, total factor productivity (TFP) growth in hospital care is adversely affected by physician-ministers. We conclude that experts in office have strong incentives to gratify their rent-seeking profession, which can distort the efficient allocation of resources.

Pilny-Are Doctors Better Health Ministers-218.pdf

12:00pm - 12:30pm

Does Corruption Kill? Evidence from Half a Century Infant Mortality Data

Oguzhan Cevat Dincer[1], **Ozgur Teoman**[2]
[1]Illinois State University, United States of America; [2]Hacettepe University, Turkey; odincer@ilstu.edu, ozgurt@hacettepe.edu.tr

We investigate the relationship between corruption and infant mortality in Turkey. Our study contributes to the literature in a couple of ways in terms of data and estimation method. First, we construct a novel index of corruption in Turkey based on the stories covered in a major newspaper between the years 1960 and 2010. Second, because we now annual data on corruption covering a period long enough, we investigate the integration properties of the data and (1) estimate the cointegrating relationship between corruption and infant mortality using Fully Modified OLS (FMOLS) and Canonical Cointegrating Regression (CCR) and (2) test for the Granger causality between the two. We find that corruption increases infant mortality in the long-run and the causality runs from corruption to infant mortality, not the other way around. Our results are robust to different estimation methods.

Dincer-Does Corruption Kill Evidence from Half a Century Infant Mortality Data-353.pdf

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12:30pm - 1:00pm

Affordability of the Affordable Care Act: Implications for Household and Public Finances

Cortnie Shupe
Free University Berlin and DIW Berlin, Germany; cshupe@diw.de

This paper investigates the short-run impact of public health insurance expansion under the Patient Protection and Affordable Care Act ("Obamacare") on medical consumption and spending among low-income households. Using data from the Medical Expenditures Panel Survey (MEPS), I measure exposure to the reform according to eligibility rules. I apply a DD(D) identification strategy combined with a simulated instrument to exploit the exogenous variation in eligibility rules across regions, income groups and time. I find that the Medicaid expansion significantly reduced household out-of-pocket medical expenditures (OOP) for low-income Medicaid-eligible households by 6.5% for medical services and products and by 10.4% for insurance premia. On net, Medicaid expansion increased the share of total medical costs paid by public sources by 8.6%. Based on the short-run cost-benefit-analysis, in order to consider the reform cost-neutral, medium-run health improvements would have to induce cost-savings of roughly $2,400/Medicaid-eligible individual.

Shupe-Affordability of the Affordable Care Act-289.pdf

11:00am - 1:00pm
Gilbert Scott 253

F04: Labor V - Migration

Session Chair: **Panu Poutvaara**, University of Munich and ifo Institute

11:00am - 11:30am

Coming to stay or to go? Migration Intentions and Involved Uncertainty

Fabian Koenings, Silke Uebelmesser, Tina Haussen, Stefan Toepfer
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Regions compete for young talents, either for productivity reasons or to alleviate challenges due to skilled-labor shortage and demographic change. One way to achieve those goals is to attract international students who remain in the region after graduation. This study investigates the drivers of international students' intentions to stay after their studies in the host country. The analysis is based on a survey about the intention to stay at the beginning of the students' studies. While this assures that the analysis does not suffer from attrition over the study period, the expressed intention involves a high degree of uncertainty. Therefore, we employ several novel approaches to account for the uncertainty involved in the context of migration intention. The results show that next to study characteristics, the importance of career opportunities and having social ties in the host country are significantly associated with the intention to stay.

Koenings-Coming to stay or to go Migration Intentions and Involved Uncertainty-416.pdf

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11:30am - 12:00pm

Self-Selection of Emigrants: Role of Returns to Skills and Taxation

Ilpo Tapio Kauppinen, Kaisa Kotakorpi, Jukka Pirttilä, Salla Kalin
Vatt Institute for Economic Research, Finland; ilpo.kauppinen@vatt.fi

In this research project we use full population administrative data to study self-selection of emigrants from Finland. We also aim to study how cross-country differences in returns to skills and taxation explain the observed migration patterns. According to our preliminary analysis, Finnish emigrants are positively self-selected. Those with higher educational qualifications, as well as those working in managerial and professional positions are more prone to emigrate. Migrants from Finland also earn more than non-migrants, even though annual gross income is only weakly associated with emigration in the regressions controlling for socio economic background characteristics and education or occupational position.

Kauppinen-Self-Selection of Emigrants-569.pdf

12:00pm - 12:30pm

Collective Bargaining and Preferences over Migration Policies: Evidence from Switzerland

Teodora Tsankova[1], Mirjam Bächli[2]
[1]University of Warwick, United Kingdom; [2]University of St. Gallen, Switzerland; t.n.tsankova@warwick.ac.uk

This study examines how exposure to foreigners and di erent labor market institutions interact in determining native employment outcomes and preferences over migration policies in the context of Switzerland. The speci c institutions we consider are collective bargaining agreements (CBAs) with minimum wage clauses while our measure of preferences comes from votes on referenda related to regulating European Union (EU) migration. Results show that CBAs protect native wages in particular from competition of EU migrants. At the same time, higher foreigner presence raises share of votes in favor of reducing migration restrictions but less so in highly covered areas. Patterns across origin groups are consistent with a labor market channel.

Tsankova-Collective Bargaining and Preferences over Migration Policies-626.pdf

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12:30pm - 1:00pm

Refugees' Self-selection into Europe: Who Migrates Where?

Cevat Giray Aksoy[1], Panu Poutvaara[2]
[1]European Bank for Reconstruction and Development, London School of Economics; [2]University of Munich, ifo Institute; poutvaara@ifo.de

About 1.4 million refugees and irregular migrants arrived in Europe in 2015 and 2016. We model how refugees and irregular migrants are self-selected. Using unique datasets from the International Organization for Migration and Gallup World Polls, we provide the first large-scale evidence on reasons to emigrate, and the self-selection and sorting of refugees and irregular migrants for multiple origin and destination countries. Refugees and female irregular migrants are positively self-selected with respect to education, while male irregular migrants are not. We also find that both male and female migrants from major conflict countries are positively self-selected in terms of their predicted income. For countries with minor or no conflict, migrant and non-migrant men do not differ in terms of their income distribution. We also analyze how border controls affect destination country choice.

Aksoy-Refugees' Self-selection into Europe-295.pdf

11:00am - 1:00pm
Gilbert Scott 132

F05: Environmental economics III

Session Chair: **Mark Schopf**, University of Hagen

11:00am - 11:30am

Multilateral Reforms of Trade and Environmental Policy of an Environmental Union

Catia Montagna[1], Avanti Pinto[2], Nikolaos Vlassis[1]
[1]University of Aberdeen, United Kingdom; [2]University of St Andrews, United Kingdom; nvlassis@abdn.ac.uk

This paper analyses environmental and trade policy reforms undertaken by a subset of countries that are bound by an environmental agreement (referred to as an environmental union). Within, a perfectly competitive general equilibrium model of world trade we characterise the optimal trade and environmental policies for the union countries in the presence and absence of transfers. Interestingly, we find that the transfers internalise the negative externalities (trade and environmental) from the non-union countries.

Thereafter, starting from an initial arbitrary tariff and pollution distorted equilibrium, the necessary and sufficient conditions for the existence of strict Pareto-improving reforms to be undertaken by the union are developed. Characterising union Pareto-improving reforms, we find that, despite the presence of multiple policy tools to target multiple distortions, there exists a negative relationship between the change in welfare of the union and that of the non-union countries and it stems from the terms of trade effect.

Montagna-Multilateral Reforms of Trade and Environmental Policy of an Environmental Union-224.pdf

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11:30am - 12:00pm

On the Principles of Commodity Taxation under Interregional Externalities

Nikos Tsakiris[1], **Panos Hatzipanayotou**[2], **Michael S. Michael**[3]

[1]University of Ioannina, Greece; [2]Athens University of Economics and Business; [3]University of Cyprus; ntsak@uoi.gr

We examine the efficiency of decentralized commodity taxation where consumption tax revenue finances public sector activities related to interregional externalities. We consider two cases; tax revenue finances (i) public pollution abatement in the presence of consumption generated transboundary pollution, and (ii) the provision of an interregional public consumption good, in the absence of pollution. The key result of our study is that in either case, non-cooperative equilibrium origin-based consumption taxes are efficient, while destination-based taxes are not. When consumption tax revenue is lump-sum distributed, neither type of consumption taxes is efficient.

Tsakiris-On the Principles of Commodity Taxation under Interregional Externalities-343.pdf

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12:00pm - 12:30pm

Kinks Know More: A Solar Energy Policy Evaluation Beyond Bunching

Stefan Pollinger

Toulouse School of Economics, France; stefan.pollinger@tse-fr.eu

The quasi-experimental method developed in this paper estimates the intensive and the participation margin response of solar panel adoptions in Germany to changes in the subsidy. The method exploits the effect of kinks in the existing subsidy on the observable capacity-distribution of adoptions. The capacity-distribution distinctly depends on the two unknown margins, enabling their simultaneous estimation. To circumvent the endogeneity problems of methods relying on exogenous variation, identification relies on a testable smoothness condition on the counter-factual capacity-distribution. The counter-factual distribution is non-parametrically identified. I find that both margins are quantitatively important and time-variant. Using the estimates, the paper proposes a counter-factual subsidy which reduces costs considerably, without reducing installed capacity or increasing the complexity of the subsidy scheme. This method is applicable in policy evaluation, optimal taxation and optimal pricing problems, where existing kink and notch methods are not applicable as both margins are present and relevant.

Pollinger-Kinks Know More-573.pdf

12:30pm - 1:00pm

Unilateral Deposit Policy and the Green Paradox

Mark Schopf

University of Hagen, Germany; mark.schopf@fernuni-hagen.de

This paper deals with possible foreign reactions to unilateral deposit policies against global warming. It differentiates between demand side and supply side reactions as well as between intra- and intertemporal shifts of greenhouse gas emissions. Using Ritter & Schopf's (2014) two-period general-equilibrium model, we change the policy instrument from an emissions trading scheme to a deposit preserving system. In this system, the deposits that are most costly but still worthwhile to extract are preserved in each period. We find that purchasing additional deposits in the second period reduces early and total emissions. By contrast, leasing additional deposits in the first period can lead to higher total emissions, which can induce the strong green paradox. However, the weak green paradox does not occur. Finally, we analyze under which conditions the one or the other policy is more effective and discuss which policy could be more cost effective in reducing climate damages.

Schopf-Unilateral Deposit Policy and the Green Paradox-167.pdf

11:00am - 1:00pm
James Watt South Stevenson 375

F06: Fiscal federalism VII - Macro

Session Chair: **Lisa Grazzini**, University of Florence

11:00am - 11:30am

Vertical Fiscal Externalities and Federal Tax-Transfers under Variable Factor Supplies

Nikos Tsakiris[1], **Panos Hatzipanayotou**[2], **Michael Michael**[3]

[1]University of Ioannina, Greece; [2]Athens University of Economics and Business, Greece; [3]University of Cyprus, Cyprus; hatzip@aueb.gr

Within a model of variable supply of capital due to international mobility and variable labor supply due to endogenous labor-leisure choice, we revisit the issues of vertical fiscal externalities, and of federal tax-transfers. Capital and labor taxes by federal and state governments finance the provision of federal and of state public consumption goods. When capital and labor are substitutes in production, we show that (i) the state's optimal policy calls for capital and labor taxes, (ii) the vertical fiscal externality can be reversed from negative, implying inefficiently high non-cooperative capital taxes, to positive, implying inefficiently low non-cooperative capital taxes, and (iii) under centralized leadership the federal government replicates the second best optimum with a capital tax, and possibly, top-down transfers.

Tsakiris-Vertical Fiscal Externalities and Federal Tax-Transfers under Variable Factor Supplies-196.pdf

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11:30am - 12:00pm

Efficiency Of Regional Taxation In The Presence Of Mandatory Spending

Michael Jähn[1], **Jan Wickerath**[2]

[1]Ruhr-University Bochum, Germany; [2]University Duisburg-Essen; Michael.Jaehn@rub.de

Initial differences in obligatory spending of local governments financed by regional taxes might lead to diverging economic activity. As a consequence, regional governments with high levels of obligatory spending cannot compete for workers and firms by lowering tax rates. They are trapped in a vicious cycle.

We show empirically that shocks to mandatory spending of German cities do have a negative impact on their fiscal strength.

Furthermore we build a spatial general equilibrium model in which a households location decision is affected by regional taxes. We can use the model to rationalize the effects of mandatory spending on the local tax base.

Jähn-Efficiency Of Regional Taxation In The Presence Of Mandatory Spending-476.pdf

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12:00pm - 12:30pm

When Theory Meets Practice: Can We Implement the Optimal Fiscal Federal Structure?

Therese Jane McGuire[1], **Teresa Garcia-Mila**[2,3]

[1]Northwestern University, United States of America; [2]Universitat Pompeu Fabra, Spain; [3]Barcelona Graduate School of Economics, Spain; teresa.garcia-mila@upf.edu

We provide new insights into whether existing fiscal federal systems are achieving the best possible outcomes. Our new insights are based on the results of Calsamiglia, Garcia-Milà, and McGuire (2013). The authors introduce solidarity preferences into the standard model of fiscal federalism and find that a system with a common (countrywide) minimal level of spending combined with subnational revenue-raising authority dominates other typically considered systems. We use these results to develop a new lens through which to assess fiscal federal systems and we apply this new approach to the systems in Canada, Germany, Spain and the United States. We show that with fairly straightforward reforms, existing fiscal federal systems could be improved, resulting in higher social welfare.

McGuire-When Theory Meets Practice-178.pdf

12:30pm - 1:00pm

Heterogeneous Capital Tax Competition in a Federation with Tax Evasion

Lisa Grazzini[1], **Alessandro Petretto**[2]

[1]University of Florence, Italy; [2]University of Florence, Italy; lisa.grazzini@unifi.it

In a federal country with two regions, consumers can decide not only the region where to invest, but also the type of capital investment. We analyse how such decision is affected by two sources of asymmetry: one type of capital is taxed at a regional level while the other one is taxed at a federal level, and for the latter a different degree of tax evasion may arise across regions. We show how tax evasion arising at a federal level affects not only the federal tax policy but also the regional tax policies both directly and indirectly because of vertical tax competition. In particular, we show under which conditions a decrease in the level of tax compliance on the second type of capital can lead to a reduction in its federal tax rate, and simultaneously to an increase in the regional tax rate on the other type of capital investment.

Grazzini-Heterogeneous Capital Tax Competition in a Federation with Tax Evasion-380.pdf

11:00am - 1:00pm
Gilbert Scott 250

F07: Local public finance II - Disasters and refugees

Session Chair: **Riikka Savolainen**, Newcastle University

11:00am - 11:30am

Allocation of Disaster-Recovery Payments in Japan: Role of Governor, Local Legislature, and National Politics

Takeshi Miyazaki[1], **Haruo Kondoh**[2]

[1]Kyushu University, Japan; [2]Seinan Gakuin University, Japan; tmiyazak@econ.kyushu-u.ac.jp

This study explores how congressional and local legislative politics influence the allocation of disaster recovery payments using Japanese prefectural-level panel data from 1989 to 2015. First, gubernatorial years in office positively affect allocation. This holds true even after substituting terms in office for years in office. Second, the share of prefectural legislators belonging to the governing parties is negatively correlated with payments. This connection was strongest when the Liberal Democratic Party (LDP) was the sole governing party or part of coalitions with other governing parties. Third, governors' role in increasing funds for disaster recovery has deepened since the 2000s, but in the 1990s, the distribution system of specific-purpose grants (which the LDP had developed over a long period of time) helped to dispense payments. Fourth, gubernatorial election year, a governor's partisan affiliation, and other legislative and congressional political factors do not explain disaster payment allocation.

Miyazaki-Allocation of Disaster-Recovery Payments in Japan-484.pdf

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11:30am - 12:00pm

Earthquakes, Grants And Public Expenditure: How Municipalities Respond To Natural Disasters

Giuliano Masiero[1,2], **Michael Santarossa**[3]

[1]University of Bergamo, Italy; [2]USI - Università della Svizzera Italiana, Switzerland; [3]University of Pavia, Italy; giuliano.masiero@unibg.it

We analyze the response of municipalities to the occurrence of earthquakes in Italy, in terms of expenditure, use of upper-tier transfers and recovery. We find evidence of increasing expenditure for about 12 years after the shock, with asymmetric responses between earthquake-specific and unconditional grants, and heterogeneous flypaper effects across the country. While in Northern municipalities expenditure tends to regress to pre-disaster levels, Southern municipalities react to

decreasing grants showing inertia in expenditure levels. This evidence is coupled with a faster recovery of private income and housing prices in Northern municipalities. We use balance sheet data of about 8000 municipalities for the period 2000-2015 and the universe of earthquake events. We apply a matching approach to disentangle earthquake-related grants from other grants, and to define a control group of non-treated municipalities. The spatial and temporal variation in expenditure and transfers between treated and not-treated governments are examined using panel data models.

Masiero-Earthquakes, Grants And Public Expenditure-481.pdf

12:00pm - 12:30pm

Natural Disasters and Electoral Support

Michael Santarossa[1], **Giuliano Masiero**[2,3]

[1]University of Pavia, Italy; [2]University of Bergamo, Italy; [3]Università della Svizzera Italiana, Switzerland; michael.santarossa01@universitadipavia.it

In this study, we analyze how changes in risk perception and uncertainty following the occurrence of earthquakes affects incumbent mayor reelection probability and party votes. To identify the causal impact of uncertainty on reelection probability and vote shares, we exploit data from 5 municipal electoral cycles (1993-2015) in Italy and apply an empirical strategy with OLS and linear probability models that control for the electoral cycle, municipality time-invariant heterogeneity and several time-variant characteristics. We find that more uncertainty (destructive earthquakes) significantly increases the incumbent chance of being reelected and vote share, with some persistence in the following electoral cycles. These results point at preferences for less uncertain outcomes by the struck population. We discuss evidence on possible channels and show that higher visibility on the media and disaster relief spending by incumbent politicians have higher marginal reward. Finally, we provide evidence of voter rationality since choices enhance post-electoral income.

Santarossa-Natural Disasters and Electoral Support-474.pdf

12:30pm - 1:00pm

How Does Refugee Immigration Influence Redistribution Politics? Evidence from Finland

Riikka Savolainen[1], **Konstantinos Matakos**[1], **Janne Tukiainen**[2]

[1]King's College London, United Kingdom; [2]VATT Institute for Economic Research, Finland; riikka.m.savolainen@gmail.com

We study whether immigration influences redistribution positions of candidates in local elections in Finland --a country where municipalities have significant control over fiscal policies. The sudden and unprecedentedly large inflow of asylum seekers in autumn 2015 and the resulting establishment of asylum centres facilitates a diff-in-diff research design. We find that on average candidates do not change their redistribution positions in a voting aid application survey. Our estimates are precise enough to rule out even fairly small effects both for all the candidates and the elected ones. In contrast, there is evidence of various voter responses, suggesting that electoral politics may limit to some extent the impact of voter preferences on policies. However, in the very smallest municipalities where there are many refugees per capita also the candidates become less favourable towards redistribution. Moreover, a similar result obtains for the ethnically most homogenous municipalities.

Savolainen-How Does Refugee Immigration Influence Redistribution Politics Evidence-544.pdf

11:00am - 1:00pm

Humanities Lecture Theatre

F08: Corporate taxation XIII - Tax havens II

Session Chair: **Barbara Maria Beatriz Stage**, University of Mannheim

11:00am - 11:30am

Tax Havens, Financial Secrecy And Intermediaries

Miroslav Palanský, **Petr Janský**

Charles University, Czech Republic; miroslav.palansky@gmail.com

To show how financial secrecy developed over time, by type, and across countries, we construct and explore a panel dataset from the five editions of the Financial Secrecy Index between 2009 and 2018. We find, first, that the intensity of financial secrecy has on average decreased by at least ten percent between 2011 and 2018. Second, most of this decline comes from international standards and cooperation, one of four types of financial secrecy. Third, the United Arab Emirates, Netherlands, and Malta have become more important providers of financial secrecy, although they are still less important than the currently leading Switzerland, United States or Cayman Islands. Having documented changes in financial secrecy over the past decade, we conclude with how the dataset and our related findings can be used as a tool for further studying and, perhaps, curbing financial secrecy – an objective pursued by global policy makers.

Palanský-Tax Havens, Financial Secrecy And Intermediaries-607.pdf

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11:30am - 12:00pm

The Worldwide Network of Tax Evasion

Fernando Garcia Alvarado[1,2], **Antoine Mandel**[1,3]

[1]University of Paris 1 Pantheon-Sorbonne, France; [2]Ca' Foscari University of Venice; [3]Paris School of Economics; fernando.garcia@unive.it

This paper attempts to study the worldwide network of tax evasion by employing the evidence from the Panama Papers, concerning over 200,000 financial entities. Through econometric methods we study the determinants of entity creations between source-countries and host-countries employing a comprehensive covariate database. Two different systems of evasion are tested: a core-periphery network with a connected core of tax havens, and a two-level network where the mid-positions are offshore financial centers that intermediate the evasion flow. Moreover, the results find negative and statistically significant effects of tax information exchange treaties in the probability of forming new evasion channels from non-

haven jurisdictions to offshore centers, yet these results are not significant whenever the money flow moves between two tax havens. Additionally, it was found through network centrality measures that `prestigious' offshore centers tend to be the most sought evasion channels, enhanced by a large governance index and debilitated by tax treaties.

Garcia Alvarado-The Worldwide Network of Tax Evasion-522.pdf

12:00pm - 12:30pm

Escaping The Exchange Of Information: Tax Evasion Via Citizenship-by-Investment

Lennard Zyska, **Dominika Langenmayr**
KU Eichstaett-Ingolstadt, Germany; lennard.zyska@ku.de

Since the fight against international tax evasion became a priority of the OECD and G20, many countries have signed up to (automatic) exchange of tax information. At the same time, more and more countries have (re-)introduced Citizenship-by-Investment programs (CBIPs), which offer a path to citizenship in return for financial transfers; and which can be misused to escape tax information reporting. Our study is the first attempt to assess the relevance of CBI in a tax evasion context: We model the tax evasion and CBI decisions of individuals facing the risk of insecure detection probabilities due to information exchange. In line with predictions from our model, we provide empirical evidence suggesting that CBI schemes are misused for tax evasion.

Zyska-Escaping The Exchange Of Information-554.pdf

12:30pm - 1:00pm

Cross-Border Tax Evasion After the Common Reporting Standard: Game Over?

Barbara Maria Beatriz Stage[1], **Elisa Casi**[2], **Christoph Spengel**[1]
[1]University of Mannheim and ZEW, Germany; [2]University of Mannheim, Germany; stage@zew.de

In 2013, the Automatic Exchange of Information (AEOI) was endorsed as the prevailing universal solution to fight cross-border tax evasion and the OECD launched a global standard for the AEOI, the Common Reporting Standard (CRS). In this study, we analyze the impact of the CRS on cross-border tax evasion. Our results suggest that the CRS induced a reduction of 14% in cross-border deposits parked in traditional offshore countries. Moreover, regardless of the 2,600 bilateral Exchange relations created under the CRS, relocation still emerged as the preferred option. More specifically, upon the CRS implementation at domestic level, the United States, which so far did not commit to the CRS, seems to emerge as a potentially attractive location for cross-border tax evasion.

Stage-Cross-Border Tax Evasion After the Common Reporting Standard-104.pdf

11:00am - 1:00pm
Gilbert Scott Lecture Theatre 466

F09: Corporate taxation XIV - Empirical corporate taxation V

Session Chair: **Petr Janský**, Charles University

11:00am - 11:30am

Measuring R&D tax incentives: The new OECD R&D Tax Incentive Database

Ana Cinta Gonzalez Cabral[1], **Fernando Galindo-Rueda**[2], **Silvia Appelt**[3]
[1]OECD, France; [2]OECD, France; [3]OECD, France; anacintagonzalez@gmail.com

Over the past two decades, tax incentives have become a major tool for promoting business R&D. This raises a number of policy questions: How has the role of R&D tax incentives in the government policy mix evolved over time? How generous are these provisions for different firm types? How effective are they in stimulating additional business R&D investment? This paper introduces the newly released OECD R&D tax incentive database featuring two novel time-series estimates of the cost and generosity of R&D tax support. It outlines recent trends in the availability, uptake and cost of R&D tax incentives; as well as the evolution of governments' policy-mix to support business R&D. This paper further examines the impact of R&D tax incentives and direct support using an econometric model of R&D investment on a new panel of OECD countries for the period 2000-16; and reviews different approaches to measure input additionality.

Gonzalez Cabral-Measuring R&D tax incentives-315.pdf

11:30am - 12:00pm

Corporate Effective Tax Rates 2017: An International Comparison

Tibor Paul Hanappi
OECD, France; Tibor.Hanappi@oecd.org

The paper presents a new data series on forward-looking effective tax rates collected as a part of the OECD Corporate Tax Statistics database; it discusses forward-looking effective average and marginal tax rates for 74 jurisdictions (including all OECD and G20 countries) for 2017, calculated on the basis of the methodology developed by Devereux and Griffith (2003). The main findings from this new data series include the observation that, among the 55 jurisdictions that provide accelerated depreciation, the average reduction of the statutory tax rate was 1.8 percentage points (including the effects of allowances for corporate equity); the largest reductions due to fiscal acceleration were observed in the United States (4.8 percentage points), India (3.8 percentage points), Papua New Guinea (3.8 percentage points) and Belgium (3.6 percentage points). In addition to a description of the descriptive results, the annex provides information on tax provisions, asset definitions and the calibration of macroeconomic parameters.

Hanappi-Corporate Effective Tax Rates 2017-376.pdf

12:00pm - 12:30pm

Where Does Multinational Profit Go with Territorial Taxation? Evidence from the UK

Dominika Langenmayr[1,2], **Li Liu**[3,4]
[1]KU Eichstätt-Ingolstadt; [2]CESifo; [3]IMF; [4]Oxford University; dominika.langenmayr@ku.de

In 2009, the United Kingdom abolished the taxation of profits earned abroad and introduced a territorial tax system. Under such a tax system, firms have strong incentives to shift profits abroad. Using a difference-in-differences research design, we show that profits of UK subsidiaries in low-tax countries increased after the reform compared to the subsidiaries of other multinational firms in the same countries. The effect is large, corresponding to a 50% increase in the profitability of the median firm in the sample. Firms with high levels of intangible assets react the strongest. Our results have important implications for other countries switching from worldwide to territorial taxation.

Langenmayr-Where Does Multinational Profit Go with Territorial Taxation Evidence-240.pdf

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12:30pm - 1:00pm

Decomposing the Declining Effective Tax Rates of Multinational Corporations

Javier Garcia-Bernando[1], Petr Janský[2], Thomas Tørsløv[3]

[1]University of Amsterdam; [2]Charles University, Prague; [3]University of Copenhagen;
jansky.peta@gmail.com

By systematically decomposing the effective tax rates of U.S.- and EU-based MNCs, we show that profit shifting can explain at most a quarter of the fall in effective tax rates paid since 2004. The remainder of the decrease is explained by falling statutory and effective tax rates across the globe. If these are a reaction to tax competition, indirect revenue costs of profit shifting and tax competition are potentially 4-6 times greater than the usually estimated direct costs. We use the Orbis dataset to compare EU-based firms with the U.S.-based firms described in BEA-data. We find that both groups of firms pay about the same effective rates between 2004-2016. EU-based MNCs have benefited from falling statutory rates at home, where U.S.-based MNCs have mainly benefited from paying lower effective rates at home, while the statutory rate remained constant.

Garcia-Bernando-Decomposing the Declining Effective Tax Rates of Multinational Corporations-279.pdf

11:00am - 1:00pm
Fore Hall

F10: Political economy IV - Lobbying and voting I

Session Chair: **Stanley L. Winer**, Carleton University

11:00am - 11:30am

Whom to Lobby? Special Interests and Hired Guns

Christopher J Ellis[1], Thomas Groll[2]

[1]University of Oregon, United States of America; [2]Columbia University, United States of America;
tgroll@columbia.edu

We model which special interest groups lobby which policymakers directly, and which employ for-profit intermediaries. We show that special interests affected by policy issues that frequently receive high political salience lobby policymakers directly, while those that rarely receive high political salience must employ "hired guns." This follows from the availability of repeated agency contracts between policymakers and special interests. Special interests that lobby on issues that frequently experience high political salience may be incentivized to truthfully reveal private, policy relevant, information to policymakers via the promise of a high probability future political access. For-profit intermediaries are always in the "informational lobbying market" and can be easily incentivized by policymakers to truthfully reveal private information. We also show that "insecure" policymakers, those in vulnerable seats, tend to be lobbied by professional intermediaries. Also, policymakers that are more time constrained tend to rely more on professional intermediaries for policy relevant information.

Ellis-Whom to Lobby Special Interests and Hired Guns-151.pdf

11:30am - 12:00pm

Bureaucratic and Political Connections in Parliamentary Lobbying

Ross David Hickey

University of Melbourne, Australia; ross.hickey@unimelb.edu.au

We study the bureaucratic and political connections of lobbyists in a parliamentary democracy. Using administrative data on lobby registrations from the Canadian province of Quebec we study the impacts of lobbyist characteristics on the value of commercial lobbying contracts. We measure political connections as revealed by lobbyists following ministers. Similarly we study bureaucratic connections, measured using lobbyist previous experience with particular ministries and previous public sector employment experience. To mitigate the endogeneity of connections our research design focuses on the reassignments of politicians to ministerial portfolios through exogenous cabinet shuffles. We find that lobbyists with political connections work on less valuable contracts than those with no connections at all. We discuss these findings with reference to the literature on the value of lobbyist connections in a presidential system.

Hickey-Bureaucratic and Political Connections in Parliamentary Lobbying-355.pdf

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12:00pm - 12:30pm

Identity and Policy in Preferential Voting

Mattias Nordin

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In this paper, I use unique data on policy preferences and demographic and socio-economic characteristics of both voters and candidates to the national parliament in Sweden. I make use of these data to analyze i) whether voters and candidates who are similar to each other in terms of demographic and socio-economic characteristics also are more likely to share policy preferences and ii) whether voters are more likely to cast a preferential vote for candidates who are similar to themselves. Preliminary results suggest that voters and candidates who share background characteristics also have more similar policy preferences, and that both similarity in background characteristics and policy views predict preferential voting behavior, although the latter more so than the former.

Nordin-Identity and Policy in Preferential Voting-449.pdf

12:30pm - 1:00pm

Franchise extension and redistribution: evidence from the United Kingdom 1820-1913

Toke Aidt[1], **Stanley L. Winer**[2], **Peng Zhang**[3]

[1]Cambridge University; [2]Carleton University; [3]Simon Fraser University; stanley.winer@carleton.ca

We study the effect of franchise extension on fiscal structure in the United Kingdom between 1820 and 1913 in order to revisit the Redistribution Hypothesis - the prediction that franchise extension causes an increase in state-sponsored redistribution. To do so, we adopt a novel method of uncovering causality from non-experimental data proposed by Hoover (2001). This method is based on use of a combination of detailed historical narrative analysis and tests for structural breaks in marginal and conditional distributions of the franchise and fiscal structure time series. We find no compelling evidence in support of the Redistribution Hypothesis.

Aidt-Franchise extension and redistribution-301.pdf

11:00am - 1:00pm

James Watt South Stevenson 354

F11: Tax Compliance V - Evasion and avoidance

Session Chair: **Satu Maria Kristiina Metsälampi**, University of Turku

11:00am - 11:30am

On Income Tax Avoidance - The Case Of Germany Revisited

Hannes Fauser

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Assessing its extent for Germany, I study tax avoidance along the income distribution based on micro data from the Income and Consumption Survey (EVS). The richness of the EVS concerning taxes and expenditures is exploited by modelling the German tax code in terms of the items available in the EVS. I.e, components of taxable income and deductions are estimated as precisely as possible. Adding to that, the results of Lang et al. (1997), which are based on the 1983 wave of the survey, are reappraised using the most recent data generated in 2013. Results confirm findings in the literature claiming that tax avoidance increases with rising income. The estimated amount of avoided tax is largest for the richest decile, at around 5.4% of taxable income before deductions or 29.8% of taxes paid. Aggregate losses at the national amount to at least EUR 27.9 bn, or 11.3% of income tax revenues.

Fauser-On Income Tax Avoidance-432.pdf

11:30am - 12:00pm

Tax Returns and Multiple Modes of Evasion

Tobias Hauck

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This paper examines the effect of publicly announced line item priorities for tax return reviews in a German state. By using a difference-in-differences strategy, I compare taxpayers' tax returns in this state with unaffected taxpayers' returns in other German states. Overall, this policy evaluation addresses three questions. First, does the announcement of line item priorities indeed reduce tax evasion for this item? Second, is there substitution evasion to non-mentioned line items and lastly, how persistent are these effects?

Hauck-Tax Returns and Multiple Modes of Evasion-118.pdf

12:00pm - 12:30pm

Tax Evasion In The Lab - A Comparison Of Reporting Institutions In A Competitive Market

Kaisa Kotakorpi[1], **Satu Metsälampi**[2], **Topi Miettinen**[3], **Tuomas Nurminen**[3]

[1]VATT Institute for Economic Research; [2]University of Turku; [3]Hanken School of Economics; satu.metsalampi@utu.fi

We study the impact of different tax reporting mechanisms in experimental double auction markets in which sellers and buyers trade a fictitious good. The sales tax is paid by the seller, and we compare market outcomes in a no-tax condition to cases where (i) tax evasion is impossible, (ii) taxes can be evaded but there is an exogenous (low) audit probability, or (iii) there is double-reporting by both the buyer and the seller, and the seller's audit probability is endogenously increased if her tax report is inconsistent with the buyer's report. The latter case mimics a situation where so called third-party reporting is used in tax enforcement. As predicted by theory, third-party reporting effectively deters evasion, and market clearing prices and quantities return to the levels observed when tax evasion was impossible. We further examine the mechanisms behind the effectiveness of double reporting in deterring non-compliance.

Kotakorpi-Tax Evasion In The Lab-491.pdf

11:00am - 1:00pm

James Watt South Stevenson 355

F12: Behavioral economics IV

Session Chair: **Mathias Sinning**, Australian National University

11:00am - 11:30am

Smart and generous

Oscar Erixson

Uppsala University, Sweden; oscar.erixson@nek.uu.se

In this paper, I investigate the relationship between cognitive ability and charitable giving using register data from Sweden covering more than 1.2 million individuals. I find that cognitive ability is positively associated with the probability and amount of charitable gifts and that this relationship holds when

controlling for non-cognitive ability, observable and unobservable family background characteristics, and large set of potential mediating variables, including education and income. These findings indicate that smart people are more generous towards beneficiaries of charities. I also find that cognition is positively associated with a survey measure of altruistic preferences, suggesting that smart individuals are also more intrinsically generous.

Erixson-Smart and generous-281.pdf

11:30am - 12:00pm

Who to Target in Fundraising? A Field Experiment on Gift Exchange

Ulrich Glogowsky[1], **Johannes Rincke**[2], **Tobias Cagala**[3]

[1]University of Munich, Germany; [2]University of Nuremberg, Germany; [3]Deutsche Bundesbank; ulrich.glogowsky@econ.lmu.de

This paper studies how to optimally target fundraising instruments in the form of gifts. To that end, we implement a randomized field experiment with three groups: a control group, a gift treatment, and a gift-plus-recognition treatment. We find that the extensive and intensive margin effects are hump-shaped in the donors' baseline willingness to donate, translating into a hump-shaped average treatment effect. Due to this heterogeneity, gifts are only cost-effective when being sent to individuals with a moderate baseline probability to donate. Targeting the gift to those individuals leads to net revenue gains of 37.3% relative to a uniform provision of the gift. We also demonstrate that gifts are not profitable if we label them as a "thank you" for past donations. The latter finding suggests that reciprocity concerns drive behavior in gift exchange.

Glogowsky-Who to Target in Fundraising A Field Experiment on Gift Exchange-478.pdf

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12:00pm - 12:30pm

The Bonus-Income Donation Norm

Michalis Drouvelis[1], **Adam Isen**[2], **Benjamin M. Marx**[3]

[1]Department of Economics, University of Birmingham; [2]Office of Tax Analysis at the U.S. Department of the Treasury; [3]University of Illinois at Urbana-Champaign, United States of America; benmarx@illinois.edu

To what extent does income increase giving? Research findings are mixed. We offer the explanation that a social norm imposes an expectation of greater giving when income is unearned. In one experiment, subjects are paid for performance in real-effort tasks and then asked if they would like to donate some of their earnings to a local charity. We induce random variation in both earned income and bonuses, and we find that only bonus income increases charitable giving. Our second experiment uses a coordination game to conduct an incentivized elicitation of social norms for donations made in the setting of the first experiment. Subjects convey how morally appropriate they think most people would consider an act, and perceived appropriateness increases with donation amount. The relationship between appropriateness and donation amount varies with the amount of bonus income and with subject demographics in ways that mirror giving behavior.

Drouvelis-The Bonus-Income Donation Norm-182.pdf

12:30pm - 1:00pm

Nudging Businesses to Pay Their Taxes: Does Timing Matter?

Christian Gillitzer, **Mathias Sinning**

Australian National University, Australia; mathias.sinning@anu.edu.au

This paper provides theoretical and empirical evidence on the implications of the timing of reminders by studying the effect of varying the timing of reminder letters to taxpayers on their payment behavior. We show that varying the timing of a reminder letter has a theoretically ambiguous effect on tax payments. We study the payment behavior of business taxpayers in a field experiment in Australia and find that a simple reminder letter increases the probability of payment by about 25 percentage points relative to a control group that does not receive a letter from the tax authority. However, variation over a three-week period in the timing of the reminder letter has no effect on the probability of payment within seven weeks of the due date. Our findings indicate that sending reminders early results in faster payment of debts with no effect on the ultimate probability of payment.

Gillitzer-Nudging Businesses to Pay Their Taxes-163.pdf

11:00am - 1:00pm
Gilbert Scott 134

F13: Indirect taxation III - Sin taxes

Session Chair: **Tuomas Kosonen**, Labour Institute for Economic Research, Helsinki

11:00am - 11:30am

Can Sin Taxes Help Consumers with Low Self-Control? Evidence from Danish Soft Drink Tax Reforms

Renke Schmacker[1], **Sinne Smed**[2]

[1]DIW Berlin, Germany; [2]IFRO, University of Copenhagen; rschmacker@diw.de

A recent stream of research in behavioral taxation has shown that sin taxes can be welfare improving if consumers with low levels of self-control react at least as strong to a tax change than people with high levels of self-control. In this paper we empirically investigate this relationship in the context of the soft drink tax reforms in Denmark in 2012 (tax increase by 50 percent) and 2014 (complete tax repeal) using the GfK Consumerscan household panel. First, we establish that the tax changes were indeed passed through to consumer prices and overshifted. Second, we calculate an average price elasticity of around 1.1 for both tax hike and tax repeal. Third, we find that consumers with low self-control react less strongly to the tax changes, suggesting that price incentives are not well suited to target time inconsistent consumers.

Schmacker-Can Sin Taxes Help Consumers with Low Self-Control Evidence-497.pdf

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11:30am - 12:00pm

Soda Taxes: Price and Quantity Effects on Soda and Other Drinks

João Pereira dos Santos[1], **Judite Gonçalves**[2]

[1]Nova School of Business and Economics, Portugal; [2]Nova School of Business and Economics, Portugal; joao.santos@novasbe.pt

Increasing obesity-related problems have led governments to consider the introduction of soda taxes. We study a recent attempt using scanned data from one of the largest retailers in Portugal. We take advantage of the tax breakdown within sugar levels to examine how prices and quantities consumed reacted in different segments. Our identification strategies relies on a difference-in-differences estimator with high dimensional fixed effects.

For drinks with more than 80-grams of sugar per liter, results indicate almost full price pass-through to the consumer. For drinks with less than 80-grams of sugar per liter, price pass-through surpassed 100%. Our findings reveal no significant changes in most beverages vis-à-vis water, with the exception of soda with low levels of sugar. This suggests that any benefits of the soda tax in terms of reducing sugar intake are mainly due to the reformulation of recipes.

Pereira dos Santos-Soda Taxes-354.pdf

12:00pm - 12:30pm

A Comprehensive Examination of the Demand and Supply of Heated Tobacco Products

Estelle P. Dauchy[1], **Naomi Feldman**[2], **Ce Shang**[3]

[1]Campaign for Tobacco-Free Kids, International Research; [2]Department of Economics, the Hebrew University of Jerusalem; [3]University of Oklahoma Health Sciences Center, United States of America; edauchy@TobaccoFreeKids.org

Heated Tobacco Products (HTPs), or "Heat-Not-Burn" have been first launched in the tobacco market in 2014, by Phillip Morris International Inc (PMI), in Japan and Italy. Since then HTP have been marketed and sold in an increasing number of countries. In this paper, we estimate the direct and cross-price elasticity of supply and demand of cigarettes and HTPs. We use detailed information on country and products taxation to identify price changes. We use the results to simulate the consumption and revenue impact of aligning the taxation of cigarettes and HTPs.

Dauchy-A Comprehensive Examination of the Demand and Supply of Heated Tobacco Products-523.pdf

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12:30pm - 1:00pm

A Case for Zero Effect of Sin Taxes on Consumption? Evidence from a Sweets Tax Reform

Tuomas Kosonen[1], **Riikka Savolainen**[2]

[1]Labour Institute for Economic Research, Helsinki, Finland; [2]King's College London; tuomas.kosonen@labour.fi

Excise taxes on soda or other unhealthy products have become increasingly popular measures attempting to tackle the increasing obesity problem. We study one such attempt in Finland: a sweets tax introduced in 2011 and consequent reforms increasing the tax. We study the pass-through to prices and the quantity elasticity of this excise tax. We provide credibly causal estimates because we can find credible control groups not affected by the tax reforms but resembling the sweets. We have access to a unique product- and week-level data on sales from a large retailer chain containing hundreds of millions of observations. Our findings show that the tax was fully passed through to prices. The general sweets tax reform did not reduce the demand for sweets or soda, but that higher tax rates for sugared soda than for sugar-free soda did decrease the consumption of sugary soda.

Kosonen-A Case for Zero Effect of Sin Taxes on Consumption Evidence-409.pdf

11:00am - 1:00pm
Gilbert Scott 356

F14: Education II - School design

Session Chair: **Sandra McNally**, University of Surrey

11:00am - 11:30am

The Effects of Financial Aid Offers on Postsecondary Educational Outcomes: New Experimental Evidence from the Fund for Wisconsin Scholars

Deven Carlson[2], **Felix Elwert**[1], **Nicholas Hillman**[1], **Alex Schmidt**[1], **Barbara Lea Wolfe**[1]

[1]University of Wisconsin-Madison, United States of America; [2]University of Oklahoma, USA; bwolfe@wisc.edu

Due to self-selection bias, it is generally difficult to assess the impact of financial aid on college students' enrollment decisions. In this pre-registered study, we analyze the effects of need-based financial aid offers on the educational outcomes of low-income college students based on a large-scale randomized experiment. We find evidence that the aid offers increase two-year persistence by 1.7 percentage points among four-year college students. The estimated effect on six-year bachelor's degree completion is of similar size but is not statistically significant. Among two-year students, we find positive—but not statistically significant—effects on persistence and bachelor's degree completion. Additional analyses present little evidence that effects vary by cohort, race, gender, or the prior receipt of food stamps. We also show that the estimated treatment-on-the-treated (TOT) effects of actually receiving grant money—as opposed to simply receiving an offer—are very similar, though slightly greater, to the intent-to-treat (ITT) estimates.

Carlson-The Effects of Financial Aid Offers on Postsecondary Educational Outcomes-345.pdf

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11:30am - 12:00pm

The Effects of Mandating Training in Firms: Theory and Evidence from the Colombian Apprenticeship Program

Santiago Caicedo[1], **Miguel Espinosa**[2], **Arthur Seibold**[3]
[1]Universidad de los Andes, Colombia; [2]Universitat Pompeu Fabra; [3]University of Mannheim; seibold@uni-mannheim.de

We study the effect of apprenticeship programs on firms and welfare, using novel administrative data on the universe Colombian manufacturing firms, and a unique reform to apprenticeship regulation. The reform simultaneously establishes apprentice quotas that vary discontinuously in firm size and lowers apprentices' wages. This policy increased the number of trained apprentices more than threefold. However, it induced significant firm size distortions driven by heterogeneous firm responses. In sectors with high skill requirements, firms avoided hiring apprentices decreasing their size and bunching just below the regulatory thresholds. In contrast, firms in low-skilled sectors, increase their size and bunch just above the regulatory thresholds in order to be able to hire more apprentices. We develop a simple theoretical model featuring heterogeneous training costs across sectors in order to rationalize and quantify these empirical findings. We use the model to analyze the welfare consequences of the regulation and study counterfactual policies.

Caicedo-The Effects of Mandating Training in Firms-475.pdf

12:00pm - 12:30pm

Specialist Schools for Technical Education: An Evaluation

Stephen Machin[1], **Sandra McNally**[2], **Camille Terrier**[3], **Guglielmo Ventura**[4]
[1]London School of Economics; [2]University of Surrey, United Kingdom; [3]HEC Lausanne; [4]CEP London School of Economics; S.Mcnally1@lse.ac.uk

Countries such as the UK and the US, with a weak recent history of vocational education, have begun to set up specialist schools in technical education. We evaluate the effect of attending these new institutions in England. These are ‘University Technical Colleges’ (UTCs), which aim to integrate technical, practical and academic learning for students aged between 14 and 18. They are a type of free school that have been set up in range of locations across England. We evaluate their effect on student outcomes using an Instrumental Variable strategy which makes use of a student’s proximity to the institution. Our findings show a very mixed picture. While UTCs are good at delivering technical education and placing their students on to apprenticeships, they are very poor at teaching either basic or higher level academic education.

Machin-Specialist Schools for Technical Education-225.pdf

11:00am - 1:00pm
James Watt South Stevenson 361

F15: Inequality III - Deprivation and aversion

Session Chair: **Nicolas-Guillaume Martineau**, York University, Glendon College

11:00am - 11:30am

Individual and Social Deprivation when Choices Matter

Paolo Giovanni Piacquadio
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Choices are fundamental in explaining differences in the attainments of individuals. This paper addresses the challenge of measuring individual and social deprivation, when keeping individuals responsible for their choices. I show that intuitive principles of distributive justice force social deprivation to be measured by the sum of specific indices of individual deprivation which: (i) respect the preferences of individuals; (ii) compare individuals based on the set of attainments they are deprived of; and (iii) are continuous and convex. Furthermore, I extend the characterization results to differences in needs and categorical dimensions of deprivation and illustrate the criteria using the Norwegian register data.

Piacquadio-Individual and Social Deprivation when Choices Matter-297.pdf

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11:30am - 12:00pm

Why Are We Inequality Averse?

Matias Giaccobasso[1], **Marcelo Bergolo**[2], **Gabriel Burdin**[3], **Santiago Burone**[5], **Mauricio de Rosa**[4], **Martin Leites**[6]
[1]UCLA & Universidad de la Republica (Uruguay); [2]IECON UdelaR, IZA; [3]Leeds University Business School; [4]Paris School of Economics & Universidad de la Republica (Uruguay); [5]IECON UdelaR; [6]IECON UdelaR; mgiaccobasso@ad.ucla.edu

There are different approaches and methods to measure inequality aversion in individuals preferences. However, there is no consensus about the roots of these preferences. Understanding this is necessary to improve our knowledge about the nature of individuals behavior and also because of its policy implications; in particular for optimal tax design. We use an experimental survey carried out on a sample of 3,000 undergraduate students to estimate income inequality aversion. First, we find that individuals are more likely to accept income inequality when it is the result of effort. Second, we fi nd that higher income mobility is associated with larger inequality aversion. Finally, we also find that individual position in income distribution is relevant to explain the degree of inequality aversion. Overall these results are consistent with recent literature that rejects the hypothesis of self- interest and supports the inclusion of social preferences in models for individual preferences.

Giaccobasso-Why Are We Inequality Averse-275.pdf

12:00pm - 12:30pm

Immigration beats Poverty: Causal Impact on Demand for Redistribution in a Survey Experiment

Andrea Fabio Michael Martinangeli, **Lisa Windsteiger**
Max Planck Institute for Tax Law and Public Finance, Germany; andrea.martinangeli@tax.mpg.de, lisa.windsteiger@tax.mpg.de

In a survey experiment conducted in Germany, we investigate how preferences over both the financing and the supply of redistributive policies are affected by poverty and immigration. We find that while information about poverty has no detectable impact on the progressivity of the respondents' demanded income tax schedule, information about immigration has a sizeable and significant negative impact for middle income respondents. Opposite effects can be observed for low income earners, such that effects cancel out at the aggregate level. On the supply side, middle income respondents seem to envisage public education as a viable response to the challenges of both poverty and immigration, while the opposite holds for low income respondents. These strong heterogeneous effects with respect to the respondent's income levels suggest that understanding the relationship between immigration and demand for redistribution and addressing its pitfalls requires in-depth investigations by population segment.

Martinangeli-Immigration beats Poverty-636.pdf

12:30pm - 1:00pm

Societal Consensus and Redistributive Taxation

Nicolas-Guillaume Martineau
York University, Glendon College, Canada; ngmartineau@glendon.yorku.ca

This paper aims to update the normative analysis of income redistribution by conditioning it on a societal consensus. An inequality-averse social planner chooses a linear income tax schedule while accounting for the possibility that certain policy choices are consonant with the individual social preferences of a plurality of groups in the population, i.e. that they lead to a societal consensus. It is assumed that consensual choices induce ethical labour supply choices, and thus a greater potential for redistribution. The planner's trade-offs lie between pursuing consensual policies that differ from those otherwise chosen optimally, and retaining its free rein. In a two skill-type economy, it proves worthwhile for the planner to choose a consensual tax schedule, even if it does not correspond to the unconstrained optimal choice, as long as it remains moderate. This occurs the greater is the proportion of high-skilled agents, and the lower is the pre-tax wage inequality.

Martineau-Societal Consensus and Redistributive Taxation-366.pdf

11:00am - 1:00pm
Bute Hall

F16: Adam Smith Lecture - Christopher Berry

Session Chair: **Celine Azemar**, University of Glasgow

Special lecture on Adam Smith

Christopher Berry
University of Glasgow, United Kingdom; Christopher.Berry@glasgow.ac.uk

1:00pm - 2:00pm
Hunter Halls

Lunch

2:00pm - 4:00pm
McIntyre 201

G01: Optimal taxation X - Capital and wealth taxation

Session Chair: **James A Feigenbaum**, Utah State University

Optimal Taxation of Capital Income with Heterogeneous Rates of Return

Kevin Spiritus, Bas Jacobs, Aart Gerritsen, Alexandra Rusu
Erasmus University Rotterdam, The Netherlands; spiritus@ese.eur.nl

We derive optimal taxes on labor and capital income if individuals have heterogeneous returns on capital, since there is increasing evidence that people differ in the rates of return on their savings, even after controlling for risk. We allow for two distinct reasons why returns are heterogeneous: because individuals higher ability obtain higher returns on their savings and because wealthier individuals achieve higher returns due to scale effects in wealth management. In either case, a strictly positive tax on capital income is part of a Pareto-efficient redistributive tax system.

Spiritus-Optimal Taxation of Capital Income with Heterogeneous Rates of Return-608.pdf

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On Optimal Income Taxation When Inherited Wealth Differs

Terhi Helena Ravaska[1], Matti Tuomala[2]
[1]Labour Institute for Economic Research, Finland; [2]Tampere University; terhi.ravaska@labour.fi

In this paper we study a multidimensional optimal taxation problem when individuals differ in skills and in initial wealth. In a two-period model with one cohort we derive the optimal distortions for the savings decision in two- to four-types economies. Numerical methods are used for solving the binding incentive constraints and optimal consumption-saving-and-work bundles. We also extend the model to include income shifting.

Our findings support the view that there should be non-linear savings tax. In the simplest case of two-types, the saving decisions of the low-ability and low-wealth type is taxed at the margin. In the 3- to 4-type settings high initial wealth types are subsidized at the margin. For the type of low-wealth and high-productivity the marginal distortion on the saving decision depends upon the degree of correlation between ability and initial wealth and the chosen social welfare function.

Ravaska-On Optimal Income Taxation When Inherited Wealth Differs-459.pdf

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Parental Altruism and Estate Taxation

Robin Jessen[1], Maria Metzing[2], Marten von Werder[3]
[1]RWI; [2]DIW; [3]Freie Universität Berlin; robin.jessen@rwi-essen.de

We derive optimal nonlinear inheritance and linear income tax rates in a two generations model of inheritance where parents differ by their preferences for bequeathing. We provide simulations that show that results depend crucially on the degree of the so called ``double counting" of the heirs' utility in the social welfare function. We allow for income effects and characterize the entire tax schedule. Detailed simulations illustrate the implications of parental preferences interacting with social discounting. Optimal inheritance tax rates are negative and progressive unless double counting is minimal. The reasons are an intergenerational redistributive motive due to double counting and an intragenerational redistributive motive for the generation of heirs. For some parameterizations with limited double counting, an intragenerational redistributive motive for the generation of parents can lead to an optimal regressive inheritance tax.

Jessen-Parental Altruism and Estate Taxation-373.pdf

Capital in a Segregated Economy

James A Feigenbaum
Utah State University, United States of America; j.feigen@aggiemail.usu.edu

As an alternative to massive heterogeneous-agent models, we introduce a new kind of model in which inequality is introduced exogenously, so the policy implications of severe wealth inequality can be analyzed more readily. This is a hybrid model in which households are segregated into two groups: laborers and capitalists. The laborers comprise the bulk of the population. Unable to pass on significant amounts to their children, they are described by a standard overlapping-generations model of perfectly competitive agents. In contrast, the handful of capitalists can fully indulge the pure altruism they feel to their children and are modeled as infinitely-lived dynasties. Both capitalists and laborers would prefer to eliminate capital taxes in the long run. However, a Pareto-improving transition to this steady state requires capital taxes for capitalists to be raised initially.

Feigenbaum-Capital in a Segregated Economy-231.pdf

2:00pm - 4:00pm
McIntyre 208

G02: Tax competition

Session Chair: **John Douglas Wilson**, Michigan State University

2:00pm - 2:30pm

Tax Competition with Mobile Labor, Residents, and Capital

David R. Agrawal[1], **William H. Hoyt**[2], **John D. Wilson**[3]
[1]University of Kentucky, United States of America; [2]University of Kentucky, United States of America; [3]Michigan State University, United States of America; wilsonjd@msu.edu

We construct a unifying theoretical model of tax competition that includes mobile workers, mobile residents, and mobile capital—and is therefore appropriate for the study of local government policy. Jurisdictions are linked by commuting, the cost of which is endogenously determined by congestion. Although local governments are atomistic with respect to the world capital market, tax competition involving business capital taxation alters commuting patterns, which creates fiscal externalities that affect decisions about where to live. In this way, competition for workers affects competition for households. Commuting also gives rise to "tax exporting." In particular, a higher capital tax in the central city will be partially borne by non-resident commuters in the form of a lower wage, and this form of tax exporting allows the capital tax to remain optimal, even when a head tax is also available. We also investigate tax competition involving the residential property tax.

Agrawal-Tax Competition with Mobile Labor, Residents, and Capital-584.pdf

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2:30pm - 3:00pm

Tax Competition With Asymmetric Endowments In Fossil Resources

Max Franks, **Kai Lessmann**
Potsdam Institute for Climate Impact Research, Germany; franks@pik-potsdam.de

We analyze strategic interactions of governments on global factor markets. We consider carbon taxes and their impact on national welfare in a setting with international markets for capital and fossil resources and asymmetric resource endowments. We show that resource poor countries have an incentive to tax carbon to appropriate resource rents. Resource rich countries subsidize fossil fuel use to attract production factors. Capital mobility tames the incentives to tax because with it, taxation is more distortionary and, thus more costly to governments. While other studies of asymmetric tax competition find that small countries in terms of population are winners of tax competition, we show that with asymmetric resource endowments but a symmetric population size, there are no winners. The Nash equilibrium is the least desirable outcome in terms of social welfare. A game structure similar to a Prisoner’s Dilemma emerges and Pareto improvements are possible.

Franks-Tax Competition With Asymmetric Endowments In Fossil Resources-123.pdf

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3:00pm - 3:30pm

Tax Competition and Fiscal Sustainability

Kazutoshi Miyazawa[1], **Hikaru Ogawa**[2], **Toshiki Tamai**[3]
[1]Doshisha University, Japan; [2]University of Tokyo, Japan; [3]Nagoya University, Japan; kazu@mail.doshisha.ac.jp

By constructing a two-country endogenous growth model with a debt-financing government, this study examines the relationship between the sustainability of public finance and increases in inter-regional factor mobility. To this end, it identifies the minimum tax rate that ensures fiscal sustainability against the backdrop of capital tax competition and studies whether competition for mobile capital lowers or improves fiscal sustainability. The main findings are as follows: (i) when countries are symmetric, increasing capital flows encourages accumulation of capital through tax reduction derived from tax competition and promotes economic growth through the expansion of Romer-type knowledge spillovers, resulting in increased fiscal sustainability in all countries; and (ii) when a marked difference exists between countries, tax competition might lower fiscal sustainability in a country with abundant capital and large outstanding debt.

Miyazawa-Tax Competition and Fiscal Sustainability-418.pdf

3:30pm - 4:00pm

Tax Competition with Two Tax Instruments--and Tax Evasion

Johannes Becker[1], **John Douglas Wilson**[2]

[1]University of Münster, Germany; [2]Michigan State University, United States of America; wilsonjd@msu.edu

We consider a world in which countries apply optimal taxes on mobile capital and savings (like in Bucovetsky & Wilson, 1991). Firms and savers may evade taxation by underreporting their tax base. We show that, even in the presence of tax evasion, the equilibrium under tax competition may still be efficient. This is the case if the marginal social losses due to evasion of savings taxes and investment taxes are equal. Generally, the efficiency properties of the tax competition equilibrium crucially depend on how elastically evasion activity reacts to tax rates. Perhaps surprisingly, investment tax rates are inefficiently high if investment tax evasion is more important than evasion of savings taxes. Tax coordination is shown to reduce the overall tax burden on capital if the social loss due to savings tax evasion is larger than the one due to investment tax evasion.

Becker-Tax Competition with Two Tax Instruments--and Tax Evasion-547.pdf

2:00pm - 4:00pm

East Quad Lecture Theatre

G03: Empirical taxation VI - Tax progressivity and elasticities

Session Chair: **Victor Mylonas**, International Monetary Fund

2:00pm - 2:30pm

Personal Income Tax Progressivity: Trends and Implications

Claudia Gerber[1], **Alexander Klemm**[2], **Li Liu**[2], **Victor Mylonas**[2]

[1]Boston Consulting Group; [2]International Monetary Fund, United States of America; vmylonas@imf.org

This paper discusses how the structure of the tax system affects its progressivity. It suggests a measure of progressive capacity of tax systems, based on the Kakwani index, but independent of pre-tax income distributions. Using this and other progressivity measures, the paper (i) documents a decline in progressivity over the last decades and (ii) examines the relationship between progressivity and economic growth. Regressions do not reveal a significant impact of progressivity on growth, suggesting that efficiency costs of progressivity may be small—at least for degrees of progressivity observed in the sample.

Gerber-Personal Income Tax Progressivity-286.pdf

2:30pm - 3:00pm

Top Tax Progression and Capital Taxation in Germany

Katharina Jenderny[1,2]

[1]Umeå Universitet, Sweden; [2]Freie Universität Berlin, Germany; katharina.jenderny@umu.se

This paper analyzes the effect of the introduction of a flat tax schedule on capital income on the progressivity of the German personal income tax, with a particular focus on top income groups. The reform-induced change in net incomes is proposed as a measure for progressivity changes at the top. The analysis is based on a micro-level panel dataset of income tax returns between 2001 and 2006 that is particularly representative for the top of the income distribution. The panel structure is used to construct a permanent reform effect that is less prone to annual volatility in income composition. The reform is found to be regressive. It is shown that the reform included substantial loopholes. Within the top of the distribution, the gain in net incomes is spread widely, but is not negative under plausible assumptions on reporting adjustments.

Jenderny-Top Tax Progression and Capital Taxation in Germany-490.pdf

3:00pm - 3:30pm

"The Elasticity of Taxable Income: Bunching Evidence From Spain"

Ana Gamarra

Complutense University of Madrid, Spain; anagamar@ucm.es

This paper provides empirical evidence on taxpayers' responsiveness to personal income taxation through the estimation of the elasticity of taxable income for Spain. Applying the bunching approach and an annual cross-section data that covers all income tax returns for 2010-2014, we find clear evidence of bunching behavior at the first four tax kinks of the Spanish Personal Income Tax created by the progressivity of the tax and intensified by the tax reform of 2011. Interestingly, we obtain different forms of bunching despite the conventional excess mass around kink points. Further exploration confirms the existence of considerable heterogeneity in the value of the elasticity depending on taxpayers' characteristics. By analyzing the anatomy of responses, we find that much of the behavioral response to kinks in the Spanish tax system is the result of married taxpayers using itemized deductions to minimize their tax liabilities.

Gamarra-The Elasticity of Taxable Income-122.pdf

3:30pm - 4:00pm

Are Elasticities of Taxable Income Rising?

Alexander Klemm, Li Liu, Victor Mylonas, Philippe Wingender

International Monetary Fund, United States of America; vmylonas@imf.org

This paper assesses a possible explanation for the global downward trend in top personal income tax rates over the last decades: globalization and the related tax evasion and avoidance opportunities could have raised elasticities of taxable income, which would imply lower optimal tax rates. The paper estimates elasticities of taxable income for top income earners using a large sample of economies and years with a common method, allowing an analysis of trends in such elasticities. The paper finds that elasticities do not

appear to exhibit any clear pattern over the years. The downward trend in tax rates must have other possible explanations, which are briefly discussed.

Klemm-Are Elasticities of Taxable Income Rising-329.pdf

2:00pm - 4:00pm
Gilbert Scott 253

G04: Labor VI - Retirement

Session Chair: **David John Sturrock**, Institute for Fiscal Studies

2:00pm - 2:30pm

Demographic Change, Collective Wage Bargaining and Pay-as-you-go Social Security

Max Friese
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This paper investigates how demographic change affects the financial sustainability of a defined benefit pay-as-you-go social security system in an environment with collective bargaining on the labor market. Temporary equilibrium analysis shows that the contribution rate decreases, if the old-age dependency ratio rises. The government balances the social security budget by aiming indirectly at a higher level of employment. In the intertemporal equilibrium the opposite applies. The government increases the contribution rate due to additional effects of demographic change on capital accumulation and labor demand. In contrast to a perfect labor market scenario, the imposed financing burden from an aging society is overcompensated by favorable labor market effects on the social security budget.

Friese-Demographic Change, Collective Wage Bargaining and Pay-as-you-go Social Security-316.pdf

2:30pm - 3:00pm

Pension Incentives and Labor Force Participation: Evidence from the Introduction of Universal Old-Age Assistance in the UK

Philipp Jäger, Matthias Giesecke
RWI – Leibniz Institute for Economic Research, Germany; philipp.jaeger@rwi-essen.de

We estimate the labor force participation (LFP) response to the introduction of means-tested minimum pensions in the UK through the Old-Age Pension Act (OAP) of 1908. The OAP was a major social policy Intervention and the first one to universally target older workers in a time of very limited social protection. The empirical framework is based on three decennial census waves (1891, 1901, 1911), covering the full UK population. We identify the LFP effects of the program based on variation at the age-based eligibility threshold between 69 and 70. Our results show a considerable and abrupt decline of 6.3 to 7.6 percentage points in the LFP rate when older men turn 70. This sudden drop only occurs at the age cutoff and only after the OAP was implemented.

Jäger-Pension Incentives and Labor Force Participation-121.pdf

3:00pm - 3:30pm

The Effects of Early Retirement Incentives on Retirement Decisions

Carla Krolage[1,2], Mathias Dolls[2,3]
[1]ifo Institute; [2]LMU Munich; [3]CESifo; krolage@ifo.de

This paper analyzes behavioral responses to a reform in the German public pension system that allowed individuals with long contribution histories to retire without deductions before reaching the regular retirement age. Following the 2014 reform, individuals with 45 contribution years could retire without deductions as early as age 63 instead of age 65. Using high-quality administrative data from public pension insurance accounts, we first conduct an event study. Our results indicate that the probability of retiring immediately increases by more than 10 percentage points upon becoming eligible, relative to the counterfactual probability of retiring at the same age with deductions. Second, we employ a coarsened exact matching procedure to compare retirement entry decisions of eligible and non-eligible individuals. In line with the event study, results show that individuals who are eligible for early retirement retire on average 5.4 months earlier than non-eligible individuals with identical characteristics.

Krolage-The Effects of Early Retirement Incentives on Retirement Decisions-159.pdf

3:30pm - 4:00pm

Survival Pessimism And The Demand for Annuities

David Sturrock[1,2], Cormac O'Dea[1,3]
[1]Institute for Fiscal Studies; [2]University College London; [3]Yale University; david_s@ifs.org.uk

The "annuity puzzle" refers to the fact that annuities are rarely purchased despite the longevity insurance they provide. Most explanations for this puzzle assume that individuals have accurate expectations about their future survival. We provide evidence that individuals mis-perceive their mortality risk, and study the demand for annuities in a setting where annuities are priced by insurers on the basis of objectively-measured survival probabilities but in which individuals make purchasing decisions based on their own subjective survival probabilities. Subjective expectations have the capacity to explain significant rates of non-annuitization, yielding a quantitatively important explanation for the annuities puzzle.

Sturrock-Survival Pessimism And The Demand for Annuities-222.pdf

2:00pm - 4:00pm
Gilbert Scott 132

G05: Macro III - Growth

Session Chair: **Sophia Chen**, International Monetary Fund

2:00pm - 2:30pm

Decomposing Poverty Change into Growth and Distribution Effects Revisited

Takahiro Yamada
Ministry of Finance, Japan; takahiro.yamada2@mof.go.jp

This paper proposes a new method decomposing poverty change into growth and distribution effects (GE and DE) by employing the mode of expenditure to observe the sensitive movement of poor that is not captured by the mean-based decomposition, conventionally-used function. After deriving rigorous probability function of expenditure supposing lognormal distribution using maximum likelihood estimation, the new method decomposes the poverty change based on the mode of expenditure distribution. The empirical analysis employs the bottom 40 percent of the population in Vietnam by decile and area from 1993 to 2014, where significant poverty reduction has been taken place. The results show the expenditure increase has been largely induced by GE across areas and the deciles of the bottom 40 percent. DE for poverty change is small and even negative in the bottom 10 and 20 percent. The results support prioritizing growth-enhancing policies for speedy poverty reduction while reinforcing time-consuming redistribution system.

Yamada-Decomposing Poverty Change into Growth and Distribution Effects Revisited-162.pdf

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2:30pm - 3:00pm

The Effects of Public Sector Employment on Inequality and the Fiscal Multipliers

Luis Gustavo Bettoni, **Marcelo Santos**
Insper, Brazil; luisgb@al.insper.edu.br

The heterogeneous response to fiscal consolidation observed across countries following the 2008 Financial Crisis recalled the debate about the determinants of fiscal multipliers. The upsurging literature suggests that the effects of fiscal consolidation depend on country characteristics. In this research project, we propose a new dimension that can help understand These heterogeneous responses: public sector employment. We aim to contribute to the literature, both empirically and theoretically, by presenting empirical evidence and a general equilibrium model that captures the main mechanisms through which public sector employment may affect the size of fiscal multipliers.

Bettoni-The Effects of Public Sector Employment on Inequality and the Fiscal Multipliers-589.pdf

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3:00pm - 3:30pm

State-level Federal Stimulus Funds and Economic Growth: The American Recovery and Reinvestment Act

Klaas Staal
Karlstad University, Sweden; klaas.staal@kau.se

The American Recovery and Reinvestment Act encompassed a substantial federally-funded state-level fiscal stimulus. The objectives of the Act were to increase employment and stimulate economic growth. While the level of the fiscal stimulus is potentially endogenous, a direct analysis of its effects leads to biased results. To circumvent this, I study the effect of the stimulus on economic growth by using the approach based on instrumental variable estimation, using the fact that the distribution of a large part of the funds was based on conditions exogenous to the economic downturn. I use a cross-state two-stage least squares estimation procedure to quantify the effect of the stimulus on economic growth and show that the robust significant positive effect of the stimulus amounts to a fiscal multiplier of almost 1.6.

Staal-State-level Federal Stimulus Funds and Economic Growth-251.pdf

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3:30pm - 4:00pm

The Effect of Public Investment on Private Investment: Theory and Evidence on the Local Market Competition Channel

Sophia Chen, **Yu Shi**
International Monetary Fund, United States of America; ychen2@imf.org

We propose and test market power as a transmission mechanism for fiscal policy. We show that following a targeted fiscal stimulus, the more competitive the market is, the more sectoral output responds, and the less sectoral prices and markups respond. We present a model where this is due to imperfect market competition with endogenous markups. Targeted fiscal stimulus reduces the aggregate demand elasticity in the targeted sector. In response, markups increase less the more competitive the market is. We offer new empirical evidence consistent with this mechanism in the context of a large-scale fiscal stimulus in China in 2009-2010.

Chen-The Effect of Public Investment on Private Investment-205.pdf

2:00pm - 4:00pm
James Watt South Stevenson 375

G06: Fiscal federalism VIII - Local government II

Session Chair: **Seth Giertz**, University of Texas at Dallas

2:00pm - 2:30pm

How Do Municipalities React To A Revenue Shock?

Andreas Mense, **Daniela Wech**, **Matthias Wrede**
Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; daniela.wech@fau.de

We study the fiscal reaction of German municipalities to a revenue shock that stems from the adjustment of population counts in the 1987 and 2011 censuses. We focus on the choice of instruments municipalities use in order to offset the shock, namely municipal taxes, debt, and spending. Simple models of public finance suggest that municipalities should adjust all instruments marginally. In more complicated models that take into account the political economy, this does not need to hold. In regular instrumental variable (IV) regressions, we find that municipalities significantly adjust one or two instruments. Non-parametric IV regressions that rely on generalized random forests (Athey et al., 2019) provide evidence on strategic behaviour of municipalities.

Mense-How Do Municipalities React To A Revenue Shock-429.pdf

2:30pm - 3:00pm

Fiscal Equalization and Shifts in Sectoral Employment – Evidence from German Federal States 1970-2016

Yannick Bury[1], **Lars P. Feld**[1,2]
[1]Walter Eucken Institute, Germany; [2]University of Freiburg, Germany; bury@eucken.de

We investigate whether transfers of the German revenue equalization scheme are related to the reaction of state politicians to the decline of the mining industry the German federal states. We hypothesize that fiscal equalization may reduce the fiscal costs of inefficient policies, strengthening incentives to implement change retarding policies. Applying a Panel-VAR framework we provide evidence that the decline of relative employment shares in the mining industry was associated with an increase in state-subsidies with vertical equalization transfers having an increasing effect on these subsidies. We find only weak evidence that an increase in transfers was associated with an increase in subsidies when marginal rates of contribution to the equalization system increased. After all, we find no evidence that employment was affected neither by subsidies nor by transfers.

Bury-Fiscal Equalization and Shifts in Sectoral Employment – Evidence-527.pdf

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3:00pm - 3:30pm

The Short-Run Production of School Outcomes and Fiscal Decentralization: Empirical Evidence from Germany

Julia Hauschildt
Universität Kassel, Germany; julia.hauschildt@wirtschaft.uni-kassel.de

The effects of local public school spending and decentralization on school outcomes as an important measure of human capital are a subject of many international studies. We analyze the short-run effects of school expenditures from different federal levels on the rate of young people who successfully get a college entrance qualification using a regional database on Germany from 2000 to 2011. Using the local share of elderly, an election year dummy as well as a lagged expenditure variable as instrumental variables, we find positively significant impacts of the teacher density as a state input as well as of school expenditures by counties as the local input on the outcome variable. Furthermore, no significant effects of the decentralization measure are found.

Hauschildt-The Short-Run Production of School Outcomes and Fiscal Decentralization-513.pdf

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3:30pm - 4:00pm

Stimulative Effects of Federal Medicaid Dollars for States: Evidence from Regression Kink

Seth Giertz[1], **Anil Kumar**[2]
[1]University of Texas at Dallas, United States of America; [2]Dallas Federal Reserve Bank, United States of America; seth.giertz@gmail.com

Medicaid is a means-tested public health-insurance program for low-income individuals—mainly children, new mothers, pregnant women, elderly and the disabled. It is jointly funded by federal and state governments, with the federal government reimbursing 50-74 percent of states' Medicaid costs. There is a general perception that federal Medicaid dollars foster economic activity and positive employment multiplier for states. While anecdotal evidence abounds, there is little formal research on the local multiplier effects of federal Medicaid spending. Identifying such effects remains a challenge because state Medicaid spending and, therefore federal matching funds, are likely endogenous, being correlated with unobserved factors driving states' economic outcomes. We circumvent this inherent endogeneity by adopting a novel RKD approach and find that while federal Medicaid dollars increase health-care employment, the impact on overall state employment and economic activity is significantly smaller than previously thought.

Giertz-Stimulative Effects of Federal Medicaid Dollars for States-561.pdf

2:00pm - 4:00pm
Gilbert Scott 250

G07: Mobility II - Income mobility

Session Chair: **Austin Nichols**, Abt Associates

2:00pm - 2:30pm

Motivated Prospects Of Upward Mobility

Juho Alasalmi
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The prospect of upward mobility (POUM) hypothesis conjectures that the reason why the poor do not expropriate the rich and sometimes seem to vote against their self-interest is that they expect upward mobility and fear that high redistribution may negatively affect them in the future. This work formalizes the POUM hypothesis by explicitly modeling the voters' beliefs about their prospective incomes. When belief formation and voting are strategic, the poor will form overly optimistic beliefs and vote for low taxes if the value of anticipation is high enough and if their optimism does not cause too drastic a change in tax policy. If belief formation and voting are non-strategic, the poor will always indulge in optimism and may even vote against their best interest. Furthermore, a striking result is that if the incomes of the rich increase as the transfers to the poor stagnate, the poor may demand less redistribution.

Alasalmi-Motivated Prospects Of Upward Mobility-293.pdf

2:30pm - 3:00pm

Illustrating Income Mobility: Two New Measures

Norman Gemmell, **John Creedy**
Victoria University of Wellington, New Zealand; norman.gemmell@vuw.ac.nz

Jenkins and Lambert (1997) demonstrated that a number of measures of poverty could be combined and compared using the "Three Is of Poverty" (TIP) curve; the `three Is' being the incidence, intensity and inequality of poverty. This paper takes the insights from the TIP curve and applies them to income growth based measures of mobility, proposing a "Three Is of Mobility", or TIM, curve. Similar analysis is then applied to re-ranking measures of mobility to yield re-ranking curves. Illustrations are provided using income data from random samples of New Zealand income taxpayers over the period 1998 to 2010. Both income growth and re-ranking based curves represent simple graphical devices that nevertheless conveniently illustrate the "Three Is" properties of income mobility.

Gemmell-Illustrating Income Mobility-146.pdf

3:00pm - 3:30pm

The Impact of Taxes on Income Mobility

Mario Alloza[1,2]

[1]Bank of Spain, Spain; [2]Centre for Macroeconomics, UK; marioalloza@gmail.com

This paper investigates how taxes affect relative mobility in the income distribution in the US. Household panel data drawn from the PSID between 1967 and 1996 is employed to analyse the relationship between marginal tax rates and the probability of staying in the same income decile. Exogenous variation in marginal tax rates is identified by using counterfactual rates based on legislated changes in the tax schedule. I find that higher marginal tax rates reduce income mobility. An increase in one percentage point in marginal tax rates causes a decline of around 0.8 percentage points in the probability of changing to a different income decile. Additional results suggest that the effect of taxes on income mobility differs according to the level of human capital and that it is particularly significant when considering mobility at the bottom of the distribution.

Alloza-The Impact of Taxes on Income Mobility-514.pdf

3:30pm - 4:00pm

Income Mobility in Survey and Administrative Data

Austin Nichols[1], **Shanthi Ramnath**[2]

[1]Abt Associates, United States of America; [2]Treasury, United States of America; austinnichols@gmail.com

We compare measures of income risk, decomposed into long-run inequality, variability around trends, and variability in trends (mobility risk) and several alternative measures of mobility, in panel data from 31 countries and tax return data from the United States. The United States is an outlier in several respects, but less so in pre-tax-and-transfer incomes (gross or market incomes) than take-home incomes (net or disposable incomes). We find that survey and administrative data provide similar pictures, indicating that reporting errors do not drive the broad conclusions. A variety of mobility measures, while measuring different underlying mobility processes, also support generally consonant conclusions.

Nichols-Income Mobility in Survey and Administrative Data-467.pdf

2:00pm - 4:00pm
Humanities Lecture Theatre

G08: Corporate taxation XV - Tax havens III

Session Chair: **Miroslav Palanský**, Charles University

2:00pm - 2:30pm

Tax Haven Investors and Corporate Profitability - Evidence of Profit Shifting by German-Based Affiliates of Multinational Firms

Sarah Godar

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This paper uses confidential firm-level panel data to provide new estimates on the extent of corporate profit shifting by German-based affiliates of multinational corporations. The estimated semi-elasticity of reported profits with regard to statutory foreign tax rates is 3.6, or 4.8 when allowing for a non-linear relationship. This is higher than most of the previous estimates of around 1. In addition, the paper develops an alternative identification strategy suggesting that the first-time appearance of a tax-haven investor in the ownership chain reduces the reported profits of German-based affiliates by 61 percent if a majority of the affiliate is held by a single investor. The estimated effects are used to extrapolate the amount of shifted profits and associated revenue losses for all German-based foreign affiliates. The results suggest moderate but non-negligible revenue losses between 2.9 and 10.7 percent of corporate income tax revenues.

Godar-Tax Haven Investors and Corporate Profitability-263.pdf

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2:30pm - 3:00pm

Dutch Shell Companies and International Tax Planning

Maarten Van T Riet[1], **Arjan Lejour**[1,2], **Jan Möhlmann**[1], **Thijs Benschop**[1]

[1]CPB Netherlands Bureau for Economic Policy Analysys, Netherlands, The; [2]Tilburg University; mvtr@cpb.nl

This work uses the financial statements of special purpose entities (SPEs) for explaining the geography of dividend, interest, and royalty flows passing the Netherlands. These statements contain the country of origin and destination of these flows and the corresponding stocks. We find that Bermuda is the most important destination for royalty flows. The origins of these flows are Ireland, Singapore and the United States. For dividends and interest payments the geographical pattern is more widespread. We find a substantial tax reduction for royalties by using Dutch SPEs. However, we cannot find such tax savings for dividends and interest with an approximation based on statutory tax rates. Yet, when controlling for country characteristics in our regression analysis we do find that tax differentials partially explain the patterns of income flows diverted through the Netherlands. This work is among few exceptions in examining bilateral income flows in stead of FDI.

Van T Riet-Dutch Shell Companies and International Tax Planning-188.pdf

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3:00pm - 3:30pm

Where Does Your Money Go? The European Union's Public Tenders and Tax Havens

Miroslav Palanský, **Petr Janský, Jiří Skuhrovec**
Charles University, Czech Republic; miroslav.palansky@gmail.com

In this paper we use the recently compiled dataset on public procurement in European countries to systematically map foreign owners of companies that supply procurement to governments. We focus particularly on companies owned from tax havens and jurisdictions with high bank and financial secrecy. We find that in most EU countries, only 10-25% of tenders are supplied by companies from abroad. However, the results show that in the pool of foreign suppliers, companies from tax havens are disproportionately often present, highlighting an advantage of these companies over domestic ones and those from non-havens. In addition to a number of jurisdictions black- and grey-listed by the European Commission, we identify four intra-EU outliers in terms of the value of supplied tenders: the Netherlands, Cyprus, Austria and Luxembourg. We highlight two specific policy tools that could improve the situation: a more centralized and efficient tender marketplace and public registers of beneficial ownership.

Palanský-Where Does Your Money Go The European Union's Public Tenders and Tax Havens-605.pdf

2:00pm - 4:00pm
Gilbert Scott Lecture Theatre 466

G09: Development economics

Session Chair: **Anne Brockmeyer**, World Bank

Corruption and Economic Growth Revisited

Maksym Ivanyna[1], **Alex Mourmouras**[1], **Peter Rangazas**[2]
[1]International Monetary Fund, United States of America; [2]IUPUI; maksym.ivanyna@gmail.com

While literature finds many channels through which corruption can hurt economic growth, the link proved hard to establish in empirical cross-country studies. In this paper we show that part of the explanation of this puzzle is that there is a reverse causality: everything else equal, exogenously-driven economic growth can increase corruption. The reason is that the boost to output increases tax revenue, and hence pool of resources that corrupt public officials can embezzle. We show the workings of this channel in a simple stylized model, which is then accompanied by numerical simulations in a dynamic general equilibrium overlapping-generations model, which allows for corruption and tax evasion. We also present empirical evidence, which supports our fi ndings.

Ivanyna-Corruption and Economic Growth Revisited-426.pdf

Barriers to Public Pension Program Participation in a Developing Country

Tomoaki Tanaka[1], **Junichi Yamasaki**[2], **Yasuyuki Sawada**[3], **Khaliun Dovchinsuren**[3]
[1]Japan International Cooperation Agency; [2]Kobe University; [3]The University of Tokyo;
tanaka.tomoaki@jica.go.jp

Increasing public pension participation rates in developing countries is an important policy objective. We study three possible constraints for the participation using a large-scale randomized control trial and administrative records of pension contribution, covering 40 percent of the Mongolian subdistricts. We find that information about monetary benefits does not increase the participation significantly. However, information about mobile phone payment of pension and experts dispatched to the pension administrative agency from a foreign aid agency increase the payment. This result implies that perceived transaction costs and trust affect the demand for annuity products, novel findings in the literature. It also suggests that foreign aid can affect citizen's participation in public service by changing their perception of the service, which is an under-investigated channel of foreign aid in the literature. We also find weak evidence that our treatments cause adverse selection by looking at the correlation between contribution and proxies of longevity.

Tanaka-Barriers to Public Pension Program Participation in a Developing Country-370.pdf

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Optimal Property Taxation in Developing Countries: Evidence from Mexico

Anne Brockmeyer, **Alejandro Estefan**
World Bank, United States of America; abrockmeyer@worldbank.org

This paper studies the optimal design of property tax schedules in a context of low compliance and high inequality. Two features distinguish property taxes from other taxes. First, the tax payment elasticity rather than the tax base elasticity with respect to the net-of-tax rate is a key parameter for optimal design of property tax schedules, as taxpayers cannot adjust the tax base in the short term. Second, for the majority of taxpayers, payment is either full or nil, thus generating sharp inequality across taxpayers and making the incidence of payment responses another key parameter for a welfare-optimizing government. Exploiting quasi-experimental variation and administrative data from Mexico City, we estimate small compliance elasticities. The elasticity increases with the size of the tax rate change, but is too small to reverse the mechanical effect of a higher tax rate. The current property tax rates are thus below the revenue-maximizing Laffer rate.

Brockmeyer-Optimal Property Taxation in Developing Countries-512.pdf

2:00pm - 4:00pm
Fore Hall

G10: Political economy V - Lobbying and voting II

Session Chair: **Emanuel Hansen**, University of Cologne

2:00pm - 2:30pm

Rent-seeking Worsens Economic Outcomes And Increases Wealth Inequality

Angelos Angelopoulos[2,4], **Konstantinos Angelopoulos**[1,3], **Spyridon Lazarakis**[1], **Apostolis Philippopoulos**[2,3]
[1]University of Glasgow, United Kingdom; [2]Athens University of Economics and Business; [3]CESifo; [4]Greek Open University; s.lazarakis.1@research.gla.ac.uk

Rent seeking is known to lead to a misallocation of resources that worsens economic outcomes at the aggregate level. Here we find that this deterioration also increases wealth inequality. We examine rent seeking via the financial sector in an environment with idiosyncratic earnings and equal opportunity for rent seeking, under the assumption that effectiveness at extracting resources increases with wealth. On one hand, for given aggregate outcomes, rent seeking provides a means of insurance that works to correct financial market incompleteness: when rent extraction increases with wealth, this creates additional incentives for individuals to accumulate wealth, which works to decrease exposure to idiosyncratic earnings shocks and thus reduce wealth inequality. On the other hand, the negative aggregate effects of resource misallocation decrease household income and lower market returns to savings, hampering individual wealth accumulation and leading to an increase in wealth inequality.

2:30pm - 3:00pm

The Effect of Disclosure Laws on Politician’s Outside Income: Evidence from Tax Return Data

Carina Neisser[1,2], **Nils Wehrhöfer**[1,2]

[1]ZEW Mannheim, Germany; [2]University of Mannheim, Germany; nils.wehrhoefer@gess.uni-mannheim.de

In Germany, members of parliaments (MPs) outside activities and corresponding earnings were not observable to voters up to 2007. Starting in July 2007, German federal MPs were forced by law to publish these information in a bracket system top-coded at 7,000e. We exploit this policy change in order to identify the causal effects of public disclosure rules on politician’s outside earnings using administrative tax return data. It allows us to observe pre-reform income as well as using state MP’s as a control group. The top-censored nature of the reporting scheme seems to have the unintended consequence of raising outside income.

We also provide suggestive evidence for a second reform, that moved the highest bracket to 250,000e, thereby greatly increasing the information available to voters. This reform strongly reduces outside income, overcompensating the increase of the first reform.

Neisser-The Effect of Disclosure Laws on Politician’s Outside Income-378.pdf

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3:00pm - 3:30pm

Government Stability in Parliamentary Democracies

Felipe Carozzi[2], **Davide Cipullo**[1], **Luca Repetto**[1]

[1]Uppsala University, Sweden; [2]London School of Economics and Political Science, United Kingdom; davide.cipullo@nek.uu.se

This paper studies how political fragmentation affects government stability. We exploit a 5% vote-share entry threshold in Spanish local parliaments to generate variation in the number of parties with representation. Each additional party with representation in Parliament increases the probability that the incumbent government is replaced by a no-confidence vote by 4 percentage points. Governments with more resources at their disposal for legislative bargaining are less likely to be replaced. When they are, new government leaders are younger, better educated, and more likely to win the following elections than the incumbents they replace, suggesting instability may induce positive selection on politicians. We interpret our results in light of a two-period bargaining model of coalition formation featuring government instability. Overall, our findings indicate the rising fragmentation observed in parliaments worldwide may have a substantial impact on stability and accountability.

Carozzi-Government Stability in Parliamentary Democracies-180.pdf

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3:30pm - 4:00pm

Political Competition With Endogenous Party Formation And Citizen Activists

Emanuel Hansen

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The paper studies political competition between endogenously formed parties. For this purpose, it develops a theoretical model in which party formation allows like-minded citizens to coordinate their political behavior in two ways. First, they can share the cost of running in a public election. Second, they can select a candidate for this election from their ranks, thereby committing to a policy platform. The paper characterizes the set of political equilibria with two competing parties and with one uncontested party. In particular, it studies the policy platforms that can be offered by stable political parties. In equilibria with two competing parties, the distance between both platforms is always positive but limited, in contrast to both the median voter model and the citizen candidate model. In equilibria with one uncontested party, the median voter can be worse off than in equilibria with two competing parties.

Hansen-Political Competition With Endogenous Party Formation And Citizen Activists-285.pdf

2:00pm - 4:00pm

James Watt South Stevenson 354

G11: Transparency and fiscal policy

Session Chair: **Kaetana Leontjeva**, King's College London

2:00pm - 2:30pm

Fiscal Behaviour of Subnational Governments: Analyzing the Forecast Errors

Pinaki Chakraborty, **Lekha Chakraborty**, **Ruzel Shrestha**

National Institute of Public Finance and Policy, India; pinaki.chakraborty@nipfp.org.in, lekha.chakraborty@nipfp.org.in, ruzelshreshta@gmail.com

We analyse the fiscal forecast errors at the subnational governments in India for the period 2011-12 to 2015-16. The fiscal rules determine fiscal marksmanship as the fiscal behaviour of the states in conducting budgetary forecasts has been with the objective of effective fiscal consolidation. Fiscal marksmanship captures the extent of rational expectations in the budgetary forecasting. Applying Theil’s technique, we have analyzed the extent of forecast errors of major macro-fiscal variables across the States in India. There is a heterogeneity in the magnitude of errors across subnational governments in

India, and the errors are pronounced more significantly in capital budgets than revenue budgets. We have also partitioned the errors to identify whether the errors were systemic or random. The results showed that errors are more random than biased.

Chakraborty-Fiscal Behaviour of Subnational Governments-615.pdf

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2:30pm - 3:00pm

Fiscal Transparency And Government Expenditure Efficiency: Not Just About Disclosure?

Nada Azmy Mahmoud El-Berry
Ghent University, Belgium; Nada.Elberry@Ugent.be

This paper examines whether and how fiscal transparency, disaggregated into four aspects which are: fiscal information disclosure; good quality of disclosed information; an accountability aspect; and the legal framework, can improve public expenditure allocative and technical efficiencies. The study uses regression analysis for public health spending in middle-income countries in 2014 within a principal-agent setting where the politicians and bureaucrats act as agents and voters act as principals. The results show that fiscal disclosure has a positive effect on the allocative and technical efficiencies; however, this effect is not always statistically significant. In contrast, an aggregate accountability measure has a statistically significant effect which goes in two opposite directions since it positively affects the allocative efficiency, while it negatively affects the technical efficiency. The legal framework is also found to have a positive statistically significant effect on efficiency due to its influence on politicians' and bureaucrats' incentives.

El-Berry-Fiscal Transparency And Government Expenditure Efficiency-421.pdf

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3:00pm - 3:30pm

Threat Misestimations and the Role of NGOs in International Risk Management

Toshihiro Ihori[1], Martin C. McGuire[2], Shintaro Nakagawa[3]
[1]National Graduate Institute for Policy Studies, Japan; [2]University of California-Irvine, USA; [3]Konan University, Japan; shintaro@konan-u.ac.jp

In this paper, we investigate the impacts of misestimation concerning the severity of a threat on the provision of risk-management public goods in an alliance. We examine how misestimation of a threat affects burden-sharing among allies. The ally may "over"-estimate the threat in the sense that the estimated level of threat is higher than the true level. We will show that if an ally overestimates the severity of threat, it may contribute more to the public goods than it does when it estimates the precise severity.

Then, we investigate the influence of a hypothetical international NGO on threat estimation in an alliance wherein two countries voluntarily provide a self-protection public good. If the unit cost of lobbying satisfies a condition, the NGO will effectively choose the socially optimal level of lobbying, which leads countries to the socially optimal provision of the public good at a (non-cooperative) Nash equilibrium.

Ihori-Threat Misestimations and the Role of NGOs in International Risk Management-272.pdf

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3:30pm - 4:00pm

The Fiscal Truth: Personal Fiscal Information Curbs Enthusiasm for Tax and Spend

Kaetana Leontjeva
King's College London, United Kingdom; kaetana1013@gmail.com

Fiscal illusion is concerned with taxpayers being unaware of the full extent of taxes and public spending, yet the effects of providing personal fiscal information have not been explored. The present paper reports on a 2018 online survey experiment of 4,480 UK employees, investigating how the provision of personalized fiscal data affects respondents' fiscal preferences. The findings reveal that knowledge of personal taxes and tax-costs of public services increases support for lower taxes and lower spending on public services. The study results support the main tenets of fiscal illusion theory, whereby illusion was found to arise through both direct and indirect taxation, fragmentation of the total tax liabilities into numerous taxes, unclear tax incidence, taxation of socially popular issues, concealed tax–costs of public spending and policymakers' appeals for higher spending.

Leontjeva-The Fiscal Truth-586.pdf

2:00pm - 4:00pm
James Watt South Stevenson 355

G12: Intergenerational mobility II

Session Chair: **Holger Lüthen**, DIW Berlin, Freie Universität Berlin

2:00pm - 2:30pm

Like Father, Like Son? A Comparison of Absolute and Relative Intergenerational Labour Income Mobility in Germany and the US

Maximilian Stockhausen
German Economic Institute, Germany; stockhausen@iwkoeln.de

Are children better off than their parents? This highly debated question is investigated by analysing the trends in absolute and relative intergenerational labour income mobility for Germany and the US. High quality panel data is used for this purpose; the SOEP for Germany and the PSID for the US. In Germany, 67 per cent of sons born between 1955 and 1975 earned a significantly higher wage than their fathers. The same share was 60 per cent in the US. Overall, absolute but also relative labour income mobility are larger in Germany than in the US. While the majority of German males has been able to share in the country's rising prosperity and are better off than their fathers, US males continue to lose ground. Hence, Chetty et al. (2017) seem to be right when they say that the American Dream is slowly fading away.

Stockhausen-Like Father, Like Son A Comparison of Absolute and Relative Intergenerational Labour Income.pdf

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2:30pm - 3:00pm

Opportunity and Inequality across Generations

Winfried Koeniger[1], **Carlo Zanella**[2]
[1]University of St.Gallen, Switzerland; [2]University of Zurich, Switzerland; winfried.koeniger@unisg.ch

We analyze inequality and mobility across generations in a dynastic economy. Nurture, in terms of bequests and the schooling investment into the next generation, is observable but the draw of nature in terms of ability is hidden, stochastic and persistent across generations. We calibrate the model to U.S. data and illustrate the mechanisms through which nurture and nature affect mobility and the transmission of income inequality across generations. We then analyze the transition from the calibrated steady state to a social optimum in which the planner weighs dynasties equally and chooses optimal tax schedules subject to incentive compatibility. We find that insurance against intergenerational ability risk increases on the transition path, by making welfare of family dynasties more dependent on nurture relative to nature. The insurance comes at the cost of less mobility.

Koeniger-Opportunity and Inequality across Generations-170.pdf

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3:00pm - 3:30pm

Intergenerational Earnings Elasticity in Italy Along Sons' Lifecycle

Michele Raitano[2], **Francesco Bloise**[1]
[1]University of Roma Tre, Italy; [2]Sapienza University of Rome, Italy; francesco.blow@gmail.com

We provide first comparable estimates of the intergenerational earnings elasticity (IGE) in Italy being able to observe actual fathers-sons pairs. Using administrative data merged with Italian waves of the EU-SILC, we observe a representative sample of sons from 1 to 6 years after they stopped studying (i.e. potential work experience) and each father over a 15 years period starting in the birth year of his son. Results show a 0.401 IGE computed 6 years after sons left education.According to subsequent empirical tests, the choice of observing sons by potential work experience rather than by age prevents our estimated elasticity being strongly affected by lifecycle bias. Hence, re-estimating the elasticity by observing two subsamples of sons 8 or 11 years after they stopped to study and correcting for the residual estimated lifecycle bias, we report very high background-related earnings advantages in Italy finding an IGE around 0.45.

Raitano-Intergenerational Earnings Elasticity in Italy Along Sons' Lifecycle-184.pdf

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3:30pm - 4:00pm

Are children better off? Intergenerational Mobility of Living Standards

Holger Lüthen[1,2], **Timm Bönke**[2], **Astrid Harnack**[2]
[1]DIW Berlin; [2]Freie Universität Berlin; hluethen@diw.de

This paper examines if children are economically better off than their parents: what is the share of children possessing more economic resources than the previous generation? We use to a copula approach to compare various income and consumption data across generations and uncover a decline in intergenerational mobility for children born 1962 through 1983. Depending on the concept, mobility drops by about 20 percentage points, from about 0.9 to 0.7 - a decline about twice as high as observed in the US for the same cohorts. The decline especially shows for children born after the 1970s.

Lüthen-Are children better off Intergenerational Mobility-485.pdf

2:00pm - 4:00pm
Gilbert Scott 134

G13: Indirect taxation IV - VAT II

Session Chair: **Michael Smart**, U of Toronto

Information, Asymmetric Incentives, or Withholding? Understanding the Self-Enforcement of Value-Added Tax

Mazhar Waseem
University of Manchester, United Kingdom; mazhar.waseem@manchester.ac.uk

During the period 1996-2000, the coverage of VAT in Pakistan rose by twenty times in

terms of the number of firms and by ten times in terms of the volume of transactions subject to it. This paper leverages this staggered roll out of VAT in the country to estimate enforcement spillovers created by the tax. Focusing on firms already subject to VAT, I explore if the tax compliance of these firms improves as VAT gets extended to their trading partners. Using differential response to upward and downward extension of the tax, I characterize the mechanisms underlying the self-enforcement response.

Waseem-Information, Asymmetric Incentives, or Withholding Understanding the Self-Enforcement-164.pdf

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Red Tape? The Revenue Impact of the VAT Filing Thresholds

Jan Luksic[1], **Shekhar Mittal**[2]
[1]Goethe University Frankfurt; [2]University of California, Berkeley; luksic@econ.uni-frankfurt.de

Value-added tax systems across the world are afflicted with size-dependent regulations. In this paper, we use an administrative dataset from the state of Delhi in India to first show that a policy which mandated different frequencies of filing based on self-reported turnover resulted in bunching of firms below the thresholds at all levels. Using the subsequent change in these reporting policies, we provide evidence that such sharp bunching indeed occurs due to the VAT reporting frequency thresholds. Second, we calculate the VAT revenue losses due to such bunching. Third, the subsequent withdrawal of the policy allows us to show that in a regime with size-dependent reporting requirements, more frequent reporting is not associated with greater VAT collection. Finally, according to our back of the envelope welfare analysis, the sized-based filing policy is welfare improving if a welfare-maximizing government's objective function assigns important weights to small- and medium-sized enterprises.

Luksic-Red Tape The Revenue Impact of the VAT Filing Thresholds-294.pdf

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A New Method for Estimating Value Added Tax Compliance

Michael Smart[1], **Peter Morrow**[1], **Artur Swistak**[2]

[1]U of Toronto, Canada; [2]IMF; msmart@chass.utoronto.ca

We develop a simple structural model of the effects of international trade on value added tax (VAT) compliance. We show how the model may be estimated with widely available national accounts data to learn about the extent of VAT evasion. The key to our approach is that international border controls improve VAT compliance, generating a correlation between imports and VAT revenues that is informative about the extent of domestic tax evasion. Using data on a large panel of countries, we estimate VAT evasion. We compare our estimates to others in the literature, and we use our methods to analyze the institutional and economic determinants of tax evasion.

Smart-A New Method for Estimating Value Added Tax Compliance-334.pdf

2:00pm - 4:00pm
Gilbert Scott 356

G14: Education III - Labor outcomes

Session Chair: **Kristoffer Balle Hvidberg**, University of Copenhagen

2:00pm - 2:30pm

All Together Now? The Effects of Comprehensive Schooling on Student Achievement in Germany

Kristina Strohmaier
University of Tübingen, Germany; k.strohmaier@uni-tuebingen.de

Germany has experienced a huge increase in the number of comprehensive schools over the last decade. While the proponents of this type of non-selective school system often argue via decreasing educational inequality, there is still a lack on evidence about its effectiveness. In this paper, I analyse the effects of comprehensive schooling on student achievement in Germany, a country where multiple school systems exist simultaneously. Using a propensity score matching approach, I find that pupils attending a comprehensive school do worse in math, while I do not find an effect for reading classes. However, this negative effect on math competence is largely driven by low-ability students. In a second step, I then try to examine whether student peer effects are responsible for the lower achievements level.

Strohmaier-All Together Now The Effects of Comprehensive Schooling-305.pdf

2:30pm - 3:00pm

Do Centralized Post-compulsory Student Admissions Lead to Better Education and Career Outcomes?

Tuomo Suhonen[1], **Hannu Karhunen**[2]
[1]VATT Institute for Economic Research, Finland; [2]Labour Institute for Economic Research, Finland; tuomo.suhonen@vatt.fi

Centralized systems matching students with post-compulsory schools and programs have recently gained popularity, whereas it is unknown whether individuals benefit from these systems in the long term. Our paper provides unique evidence on both school- and individual-level effects of access to centralized admissions by utilizing a differences-in-differences design arising from the regional rollout of the Finnish joint admission reform in the 1970s. We find that, in the short term, the adoption of the centralized system increased the number of applications and intake at vocational secondary schools. In the longer term, individuals appear to have benefited from the new system in terms of a higher average probability to obtain a post-compulsory degree, whereas the estimated income effects up to age 50 are small and vary from positive to negative. However, significant variation in the effects of the reform by family background suggests that the reform successfully reduced socioeconomic differences in outcomes.

Suhonen-Do Centralized Post-compulsory Student Admissions Lead-405.pdf

3:00pm - 3:30pm

Effects of Universal Early Childhood Education on Adolescent Behavioral Outcomes

Michihito Ando[1], **Hiroaki Mori**[2], **Shintaro Yamaguchi**[3]
[1]Rikkyo University, Japan; [2]Hitotsubashi University, Japan; [3]University of Tokyo, Japan; michihito.ando@rikkyo.ac.jp

We estimate the effects of universal early childhood education on adolescent behavioral outcomes. Exploiting staggered expansions of kindergarten across provinces in Japan, we identify the causal effects by the difference-in-differences approach. We find that the kindergarten reform reduced juvenile crime and teenage pregnancy. We also find that the kindergarten reform did not lead to a higher high school graduation or college enrollment rate, which implies that the reductions in crime are unlikely to be brought about by the incapacitation effect of education. Our results suggest that universal early childhood education generates positive externalities.

Ando-Effects of Universal Early Childhood Education on Adolescent Behavioral Outcomes-233.pdf

3:30pm - 4:00pm

Higher Education and Financial Behavior - The Effect of Studying Mathematics and Economics on Debt Behavior

Kristoffer Balle Hvidberg
University of Copenhagen, Denmark; kristoffer.balle.hvidberg@econ.ku.dk

This paper presents new evidence on the effect of education on financial behaviour. In particular, I investigate whether obtaining a degree from a study program with a mathematical or economic curriculum affects individuals' future probability of having a loan default or delinquency, their debt-to-income ratio and their holding of liquid assets relative to their income. By combining data on admissions to post-secondary education with data on the universe of personal loans and demographic variables, I create a unique dataset, which makes it possible to identify the causal effects of different types of education on financial behaviour using a fuzzy regression discontinuity design. I find that graduating from a mathematical or economic field of study decreases the probability of having a loan default or delinquency post graduation for the applicants who did not have one of these fields as their preferred field of study.

	Hvidberg-Higher Education and Financial Behavior-277.pdf
2:00pm - 4:00pm **Bute Hall**	**G16: Panel session on tax policy Scottish Government** Session Chair: **Bas Jacobs**, Erasmus University Rotterdam Gary Gillespie (chief economist Scottish Government) provides an introduction to Scotland's economic policy. Lucy O'Carroll (director of tax Scottish government) gives an overview of the tax systems in Scotland and UK. A panel discussion follows between Clemens Fuest, Michael Devereux, Bas Jacobs, Gary Gillespie and Lucy O'Carroll on tax policy. **Tax Policy Session Scottish Government** **Gary Gillespie** Scottish Government, United Kingdom; Gary.Gillespie@gov.scot Introduction to tax policy issues Scotland **Tax Policy Session Scottish Government** **Lucy O'Carroll** Scottish Government, United Kingdom; lucy.ocarroll@gov.scot Introduction to tax policy issues Scotland **Tax Policy Session Scottish Government** **Michael P. Devereux** University of Oxford, United Kingdom; michael.devereux@sbs.ox.ac.uk Introduction to tax policy issues UK **Tax Policy Session Scottish Government** **Clemens Fuest** ifo Institute, CESifo and University of Munich LMU, Germany; fuest@ifo.de **Tax Policy Session Scottish Government** **Bas Jacobs** Erasmus University Rotterdam, Netherlands, The; bjacobs@ese.eur.nl
4:00pm - 4:30pm **Hunter Halls**	**Coffee Break**
4:30pm - 5:30pm **Bute Hall**	**Plenary IV: Jonathan Portes (King's College London), "Brexit and the UK Economy"** Session Chair: **Clemens Fuest**, ifo Institute, CESifo and University of Munich LMU Presentation slides published at https://www.iipf.org/cng.htm
5:30pm - 6:00pm **Bute Hall**	**Closing Ceremony**
6:30pm - 11:59pm **Hilton hotel (William St)**	**Conference Dinner** Included in the congress registration fee, advance registration required. Starts with a drink reception at 6.30 pm.