72nd Annual Congress of the International Institute of Public Finance

Date: Monday, 08/Aug/2016

8:30am - 9:00am **Breakfast (GIZ Master Class participants only)**

Graduate Student Lounge - Joe Crowley Student Union, University of Nevada, Reno

9:00am - 11:00am

MC1: GIZ Master Class Presentation Session One

Session Chair: **Jean-Francois Wen**, University of Calgary
- Note that papers cannot be downloaded for this session. Please contact the author(s).

Agricultural Taxation and Economic Growth in Ethiopia

Azime Adem Hassen
Ethiopian Civil Service University, Ethiopia
Discussant(s): **Anne Wanyagathi Maina** (Kenya Revenue Authority)

In developing country, the pattern of tax revenues and economic growth across countries has become a significant concern recently due to the source of finance for economic growth. Thus, this study investigated tax responsiveness to changes in gross domestic product in Ethiopia for the period 1981 - 2014. It mainly focused on the agricultural tax revenue components, but personal and business income tax has also analyzed. An understanding and analysis of the level of sensitivity of the tax revenue to discretionary policy measures are essential to the formulation of fiscal policy. The trend of the agricultural income tax and land use fee collection are highly inconsistent. The study revealed that the Ethiopian agricultural income tax and land use fee are not buoyant, implying that the growth of the agricultural sector has no statistically significant impact on agricultural income tax buoyancy. However, personal, business and total direct taxes are relatively responsive.

Financial Innovation and Pro Poor & Inclusive Growth in Developing Countries: The role of Mobile Banking Development in Africa

Christian Lambert Nguena
University of Dschang, Cameroon
Discussant(s): **Azime Adem Hassen** (Ethiopian Civil Service University)

Using a new database on mobile banking across countries we partially constructed, we document the questionable pro poor and inclusive growth in developing countries and show the importance of mobile banking development. In fact, this paper use several econometric technics to investigate mobile banking benchmarking, determinants and real impacts on inclusive growth in developing countries of Africa. The statistical benchmarking analysis revealed that there is a positive link between mobile banking development and economic development. The estimation of our model using different specification and estimation technics present the same result: a positive impact of the mobile banking development on both pro poor and inclusive economic growth. These main findings suggest that policies to boost mobile banking development in Africa should be viewed as measures that would yield fruit in the medium to long terms. Moreover, as determinants of mobile banking, we find: banking sector domestic credit, human capital, remittances, credible monetary policy, infrastructure and trade.

The Effect of Consumption Taxes on Poverty and Income Inequality in Kenya

Anne Wanyagathi Maina
Kenya Revenue Authority, Kenya
Discussant(s): **Christian Lambert Nguena** (University of Dschang)

Kenya faces high inequality and poverty level (KNBS and SID, 2013). Consumption tax contributes significantly to total collections, about 40 per cent of total collections(KNBS, 2015). There has been continuous reforms in the administration of taxes. With the global agenda giving priority to poverty eradication and enhancing equity, a study focusing on how consumption taxes and income distribution is crucial.

The paper estimated two OLS models are estimated; one to show the effect of consumption on income inequality and the other on GDP per capita. The findings confirm regressivity of consumption. Consumption tax is positively related to GDP per capita. The research recommends restricted use of differentiated rates that are well targeted to the poor; lower rates are to be applied on basic goods which the poor spend more of their income on compared to the rich. Taxes collected can be utilized to provide essential facilities targeting the poor.

9:00am - 11:00am

MC2: GIZ Master Class Presentation Session Two

Session Chair: **Mehmet Serkan Tosun**, University of Nevada, Reno
- Note that papers cannot be downloaded for this session. Please contact the author(s).

A Study on the Effect of Government Expenditure on Fiscal Deficit to GDP Ratio

Israa A. El Husseiny[1], **Surajit Das**[2]
[1]Faculty of Economics and Political Science, Cairo University, Giza, Egypt; [2]Centre for Economic Studies & Planning, Jawaharlal Nehru University, New Delhi, India.
Discussant(s): **Adeniyi Jimmy Adedokun** (Mcpherson University)

This paper seeks to explore whether a reduction in government expenditure would necessarily reduce the fiscal deficit to GDP ratio in a particular economy or not. Various austerity measures are being implemented in many countries with the objective of reducing the fiscal deficit to GDP ratio. However, whether contractionary fiscal policy would have a negative impact or positive effect on the fiscal deficit to

GDP ratio, would depend upon the values of government expenditure multiplier and that of the revenue buoyancy in a particular economy. On the basis of available empirical evidence from 175 countries around the globe during 2000 to 2014, we argue that the increase in aggregate government expenditure might give rise to an increase in the fiscal deficit to GDP ratio in the context of only about half of the countries. The opposite is true for about the other half of the countries across the world.

An Evaluation Of The Progressivity Of The taxes On Salaries And Wages In Cameroon

Bertrand Njuma Ebune
Berlin School of Economics and Law, Germany (GIZ mqster Class)
Discussant(s): **Israa Adel El Husseiny** (Faculty of Economics and Political Science, Cairo University)

The application of higher taxes to the wealthy is nowadays a central aspect of public finance debate. To ensure more equitable societies, Governments design tax structures based on the principle of progressivity.

However, the configuration of these systems makes room for certain reductions which modify the tax base for some individuals thereby influencing progressivity.

This paper examines the extent to which certain policy choices undertaken Cameroon influence the levels of progressivity of the taxes on wages and salaries. Based on structural progressivity indicators it shows that the increase in the standard deduction rate from 20 % to 30 % and the capping of the taxation of certain fringe benefits, adversely affect progressivity.

As such, it is proposed that these benefits be entirely liable to taxes and the increased standard reduction rate be applied solely to lower earners.

Inclusive Growth and Distribution of Growth Opportunities in Nigeria

Adeniyi Jimmy Adedokun
Mcpherson University, Nigeria
Discussant(s): **Bertrand Njuma Ebune** (Berlin School of Economics and Law)

This study examines growth inclusiveness in Nigeria, and investigates optimum distribution of growth opportunities in a typical developing economy like Nigeria, using the framework of equity in the distribution of opportunities. Analyses of benefits from growth, and participation in growth show that consistent growth recorded in Nigeria for more than a decade have not been inclusive. Further employment investigations (aggregate and sectoral) using employment elasticity technique, reveal that aggregate employment's responsiveness to output is not large enough to reduce unemployment in Nigeria. Sectoral analyses show that manufacturing contributes negatively to employment growth. However, agriculture, extractive, building and construction, and services contribute positively to employment growth, with services taking the lead. Building on the utilitarian social welfare function, the study concludes that in order to achieve an optimum distribution of growth opportunities, government must redistribute growth opportunities to the waning sector(s) of the economy.

9:00am - 11:00am

MC3: GIZ Master Class Presentation Session Three

Session Chair: **Pavel Aleksandrovich Yakovlev**, Duquesne University
- Note that papers cannot be downloaded for this session. Please contact the author(s).

Cyclicality of Public Investment in Africa

Abdoulaye Ouedraogo[1], Mehmet Serkan Tosun[1], Serdar Yilmaz[2]
[1]University of Nevada, Reno, USA; [2]Africa Region, The World Bank, USA
Discussant(s): **Michael Masembe** (Uganda Revenue Authority)

In this paper we examine the cyclicality of public investment in African countries using panel data for the 1996-2012 period. In addition to an overall analysis of the African continent, we also examine public investment in country sub-groups such as Sub-Saharan Africa (SSA), the West African Economic and Monetary Union (WAEMU), the Central African Economic and Monetary Community (CEMAC), and the South African Development Community (SADEC). Our analysis focuses on spatial spillovers from economic shocks using contiguity and distance based spatial weighting. While our results confirm procyclicality in public investment in Africa, the degree of procyclicality varies significantly across the country groups. Procyclicality becomes less significant when spatial spillovers are considered for WAEMU and CEMAC countries but it becomes stronger for SADEC countries.

Missing Imports And Tari

Mwayiwawo Sara Donda, Michael Mike Masiya
Malawi Revenue Authority, Malawi
Discussant(s): **Abdoulaye Ouedraogo** (University of Nevada, Reno)

The study analyzed 2013 bilateral trade data between Malawi and each of the following three trading partners; Mozambique, South Africa and China. Using data from the World Integrated Trade Solution (WITS), the study employed a simple Ordinary Least Squares (OLS) model to estimate the impacts of tax rates on tariff evasion and conducted some robustness checks. We found that tax rates applicable to Mozambique and South African Imports reduce the trade gap. This is interpreted to mean that other countries' exports to Malawi are declared as originating from Mozambique and South Africa in order to enjoy the preferential rates of duty due to the bilateral trade agreements that exist between each of the two countries and Malawi. We also found out that tax rates have a positive significant effect on tax evasion of Chinese imports. Further, the paper established that higher tax rates induced tax evasion.

9:00am - 11:00am

MC4: GIZ Master Class Presentation Session Four

Session Chair: **Rob Wassmer**, Sacramento State
- Note that papers cannot be downloaded for this session. Please contact the author(s).

Fiscal Measures to Stimulate Affordable Housing: Case of South Africa

Londiwe Penelope Khoza
National Treasury

Discussant(s): **Djedje Hermann Yohou** (Center for Sutdies and Research on International Development (CERDI) and University Felix Houphouet Boigny of Abidjan (Cote d\'Ivoire))

In a country like South Africa, characterised by high levels of poverty and inequality, not all households can afford the housing that they require. Several existing government programmes are targeted at achieving: changing consumer income; increase the incentive for households to purchase or rent adequate accommodation; and increase the incentive to suppliers to provide more affordable housing.

These existing fiscal measures have failed to address the problem of affordable housing for a specific vulnerable group (gap market) in South Africa. Resulting in a market failure where there is insufficient stock of housing at an appropriate price to cater for this group. This market failure is fuelled by both demand and supply factors. We evaluate the demand and supply side factors and to what extent can these be influenced by the tax system.

VAT Revenue Productivity and Reforms in Malawi: A Performance Diagnosis and Options for Further Reform

Frank Kalizinje
Malawi Revenue Authority, Malawi

Discussant(s): **Londiwe Penelope Khoza** (University of Johannesburg)

The study measures productivity of value added tax (VAT) and further investigates its determinants using time series data from Malawi Revenue Authority (MRA) and World Bank's World Development Indicators (WDI). To achieve this objective, OLS regression techniques are employed to measure buoyancy of VAT and ascertain the factors explaining VAT productivity. We find a short run buoyancy of 0.43% implying that the Malawian VAT is not responsive to GDP and reforms. Decomposition of the buoyancy into tax to base and base to income reveal that the latter is higher (1.15) than the former (0.28). This diagnosis highlights the degree of revenue loss due to VAT exemptions, evasion, avoidance and inconsistencies and loopholes in VAT policy and administration. On the other front, VAT productivity is found to increase with private consumption, openness as well as share of agriculture in GDP, and is found to decrease with standard rate.

In Search Of Fiscal Space In Africa: The Role Of The Quality Of Government Spending

Djedje Hermann Yohou
Center for Sutdies and Research on International Development (CERDI) , France and University Felix Houphouet Boigny of Abidjan, Cote d'Ivoire

Discussant(s): **Frank Kalizinje** (Malawi Revenue Authority)

Taking advantage of African experience, this paper proposes to enrich empirically the issue of fiscal space. Africa has markedly achieved significant economic progress since the 80's decade crisis. However, this progress has been proven insufficient to curb dramatically the infrastructures gap and poverty because of the shortage of funding. While several ways are being looked for creating a sustained fiscal space, this paper argues that improving the quality of public spending remains the key avenue. It then derives fiscal space by computing Data Envelopment Analysis (DEA) efficiency scores of public spending using a group of 62 African and non-African countries over the period 1980-2013. The results indicate that on average African countries are less efficient than their peers. The average efficiency score of public spending for African countries relatively to their peers is 0.585 suggesting that they could reduce their spending by 41.5% to achieve the same results.

9:00am - 11:00am

MC5: GIZ Master Class Presentation Session Five

Session Chair: **Panu Poutvaara**, Ifo Institute and University of Munich
- Note that papers cannot be downloaded for this session. Please contact the author(s).

Effectiveness Of Transfer Pricing Laws In Counteracting Transfer Pricing Malpractices. A Case Of Zimbabwe

Priscar Hoko
ZIMRA, Zimbabwe

Discussant(s): **Nancy Chepkorir Kiget** (Kenya Revenue Authority)

Taxation of related party transactions is a complex issue that has aggravated challenges faced by revenue authorities in protecting erosion of the tax base. This study analyzed the effectiveness of transfer pricing laws of Zimbabwe in counteracting transfer pricing malpractices causing tax revenues. The country's economic reforms include luring foreign direct investment which require laws to curb transfer pricing manipulation. Literature analysis was used in this study to establish the best practices in an effort to develop practical solutions to transfer pricing challenges that have seen most countries losing revenue. Legal and administrative transfer pricing issues were raised from the current Zimbabwean practices and compared with the best practices obtained from literature analysis. The current tax laws and administrative practices were found to be causing challenges in taxation of international transactions. The study concluded that legislation for Zimbabwe needed amendments for government to effectively tax Multi National Enterprises.

Taxation Policies on Capital Flight in Kenya

Nancy Chepkorir Kiget
Kenya Revenue Authority, Kenya

Discussant(s): **Priscar Hoko** (ZIMRA)

This paper examined and provided empirical evidence on the influences of tax policy on capital flight. Over the years, capital flight to tax havens abroad had greatly increased in Kenya. These capital outflows is not taxed which has led to reduction in the tax base and loss of revenue. Though tax policies have been put in place, capital flight is still increasing. There is therefore need for a more focused policy approach and intervention that needs to be given to put in place to curb capital flight.

Time-series data estimates on Capital Flight from Ndikumana and Boyle 2012 were used to establish the effect of rising total tax rate on capital flight. The study was guided by two theories, the Investment diversion theory and the tax depressing theory.Empirical evidence also showed that tax incentives can increase capital flight. The researcher tested the hypothesis that Capital flight increases with rising total tax rate.

9:00am - 1:00pm	**GIZ Master Class (for selected participants only)**
12:00pm - 1:00pm **Graduate Student Lounge - Joe Crowley Student Union, University of Nevada, Reno**	**Lunch (GIZ Master Class participants only)**
3:30pm - 7:00pm **Edgewood Golf Course**	**IIPF Board of Management Meeting I**
3:30pm - 7:00pm	**Registration**
7:00pm - 9:30pm **Edgewood Golf Course**	**IIPF Board of Management Dinner**

Date: Tuesday, 09/Aug/2016

7:30am - 9:00am — **Continental Breakfast and Registration (all day)**

9:00am - 9:30am
Sand Harbor 1-3, Harrahs

Opening Ceremony
Session Chair: **Joel Slemrod**

9:30am - 10:30am
Sand Harbor 1-3, Harrahs

Plenary I: Roger Gordon (Professor of Economics, University of California, San Diego): How Should Taxes be Designed to Encourage Enterprepreneurship?
Session Chair: **Kimberley Scharf**, University of Warwick

10:30am - 11:00am — **Coffee Break**

11:00am - 1:00pm
Garden I, Harveys

A01: Labor Supply
Session Chair: **Henk-Wim De Boer**, CPB Netherlands bureau for economic policy analysis

11:00am - 11:30am

Labor Supply of Mother: The Role of Time Discounting

Peter Haan[1,2], **Luke Haywood**[1,2], **Ulrich Cornelius Schneider**[1,2]
[1]DIW Berlin, Germany; [2]Freie Universität Berlin, Germany
Discussant(s): **Henk-Wim De Boer** (CPB Netherlands bureau for economic policy analysis)

We estimate a dynamic life-cycle model of labor supply with a focus on time preferences for women. We extend the dynamic discrete choice model to accommodate potentially non-exponential discounting. Variation in job protection regulations provides identifying variation to test time discounting, affecting future and not current payoffs. Reforms to job protection legislation in Germany constitute a natural experiment to identify the key time preference parameters of our model. We shed light on the importance of time-inconsistent preferences on maternal labor market return. The structure of time preferences will importantly affect cost and effectiveness of labor market policies.

Haan-Labor Supply of Mother-287.pdf

11:30am - 12:00pm

The 1975 Earned Income Tax Credit and the Rise of Working Mothers

Jacob Eldon Bastian
University of Michigan, United States of America
Discussant(s): **Ulrich Cornelius Schneider** (DIW Berlin)

Working mothers played an important role in the twentieth-century rise in female employment. The employment gap between mothers and women without children rose steadily between 1900 and the early 1970s, when it suddenly began to fall. I show that the introduction of the Earned Income Tax Credit (EITC) in 1975 was partly responsible for this rise of working mothers. The EITC led to a 6-percent rise in the employment of mothers. Heterogeneous treatment effects show that married women with low-earning spouses responded to the EITC much like single women. This finding provides a more complete understanding of how the EITC affects married women. This is the first systematic study of the 1975 EITC.

Bastian-The 1975 Earned Income Tax Credit and the Rise of Working Mothers-271.pdf

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12:00pm - 12:30pm

Adjust Me if I Can't: The Effect of Firm Incentives on Labor Supply Responses to Taxes

Alisa Tazhitdinova
UC Berkeley, United States of America
Discussant(s): **Jacob Eldon Bastian** (University of Michigan)

Using administrative data, I study behavioral responses to incentives generated by the "Mini- Job" program aimed at increasing labor supply of low-income individuals in Germany. I show evidence of strong behavioral responses – in the form of sharp bunching – to the mini-job threshold, which translates into elasticity estimates that are an order of magnitude larger than has been previously estimated using the bunching approach. I show that in the presence of search costs, the magnitude of labor supply responses to taxes depends on the statutory incidence of taxes: labor supply responses are stronger when the statutory incidence falls on firms.

By comparing wages and benefits of workers with earnings around the mini-job threshold, I show that mini-job workers receive smaller bonuses and fewer vacation days than regular workers. These results indicate that lower fringe benefits make mini-jobs attractive to employers, thus facilitating labor supply responses.

Tazhitdinova-Adjust Me if I Can't-128.pdf

12:30pm - 1:00pm

Intensive Margin Responses by the Self-Employed: Evidence from Dutch Tax Reforms

Henk-Wim De Boer, **Nicole Bosch**
CPB Netherlands bureau for economic policy analysis, Netherlands, The
Discussant(s): **Alisa Tazhitdinova** (UC Berkeley)

This paper studies the causal relation between effective marginal tax rates for the self-employed and their taxable income using panel data for the period 1999-2012. This period contains several tax reforms that we use to identify the elasticity of taxable income (ETI). We estimate an ETI of 0.2 for the self-employed.

This result is robust to different income controls. However, our results indicate that sample selections are not
innocuous. Selecting more experienced self-employed downsizes the estimated ETI. We also uncover much heterogeneity in responses: women have a higher ETI than men, and the ETI is higher at the lower end of the income distribution.

De Boer-Intensive Margin Responses by the Self-Employed-278.pdf

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11:00am - 1:00pm
Garden II, Harveys

A02: Incidence of Value-added Taxes

Session Chair: **Thiess Buettner**, Univ. or Erlangen-Nuremberg

11:00am - 11:30am

The Impact of a Permanent Income Shock on Consumption: Evidence from Japan's 2014 VAT Rate Increase

David Cashin[1], **Takashi Unayama**[2]
[1]Federal Reserve Board, United States of America; [2]Hitotsubashi University, Japan
Discussant(s): **Thiess Buettner** (Univ. or Erlangen-Nuremberg)

In April 2014, Japan increased its VAT rate. Because the VAT rate increase was largely uncompensated and passed on in full to households in the form of higher prices, it represents a proportionate decrease in households' lifetime resources. Furthermore, the fate of the VAT rate increase was highly uncertain until Prime Minister Abe's October 2013 announcement. Consequently, his announcement can be treated as a shock to permanent income. We estimate the impact of the VAT rate increase on household consumption, and find consumption dropped proportionally upon announcement of the VAT rate increase. Our results are consistent with the Life Cycle/Permanent Income Hypothesis, whereas excess smoothness (sensitivity) would imply a small (proportional) drop in consumption upon announcement (implementation).

Cashin-The Impact of a Permanent Income Shock on Consumption-215.pdf

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11:30am - 12:00pm

Who Really Benefits from Consumption Tax Cuts? Evidence from a Large VAT Reform in France

Dorian Carloni, **Youssef Benzarti**
UC Berkeley, United States of America
Discussant(s): **David Byron Cashin** (Federal Reserve Board)

This paper estimates the share of consumption tax changes falling on workers, firm owners and consumers by analyzing the value-added tax (VAT) cut applied to French sit-down restaurants -- a drop from 19.6 percent to 5.5 percent -- in July 2009. We use a difference-in-differences strategy and compare sit-down restaurants to (a) non-restaurant market services and (b) non-restaurant small firms. We find that prices decreased by around 2 percent, the cost per employee increased by 3.9 percent and the return to capital increased by around 10 percent. Finally, we conduct a welfare analysis and find that (1) the effect on consumers was limited, (2) employees shared around 30 percent of the benefit, and (3) the reform mostly benefited capital owners, who received around 50 percent of the tax cut, both in the short-run and in the long-run.

Carloni-Who Really Benefits from Consumption Tax Cuts Evidence from a Large VAT Reform-134.pdf

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12:00pm - 12:30pm

The Extent and Moment of the Value Added Tax Shifting to Consumers: the Case of Poland

Arkadiusz Bernal
Poznan University of Economics, Poland
Discussant(s): **Dorian Carloni** (UC Berkeley)

The main objective of the article is to answer the question to what extent and when consumers bear the value added tax burden and what determines the extent of tax shifting. The research is based on the data on prices of detailed goods and services on which the value added tax rates changed in Poland between 2000 and 2012. A few factors which determine the price changes in response to tax rate changes are identified. Taxpayers' reactions for tax rate decreases are different than for tax rate increases. The extent of tax shifting varies between different goods and depends i.a. on a price level per unit and on rigidity of demand. Tax shifting in general takes place immediately after a tax rate changed unless prices of goods and services adjust seasonally. Then tax shifting could be delayed.

Bernal-The Extent and Moment of the Value Added Tax Shifting-235.pdf

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12:30pm - 1:00pm

Pre-announced VAT Increases and the Sales of Consumer Durables

Thiess Buettner[1,2], **Boryana Madzharova**[1]
[1]Univ. or Erlangen-Nuremberg, Germany; [2]CESifo
Discussant(s): **Arkadiusz Bernal** (Poznan University of Economics)

The paper analyzes the effects of VAT on the time pattern of sales of consumer durables. A theoretical analysis shows that a VAT increase gives rise to an increase in the purchases of durables directly before the VAT increase, and a substantial drop afterwards.The predictions of the model are tested utilizing a unique dataset of monthly sales of durable goods in various European countries, many of which have increased the VAT rate in recent years. The results show that the VAT reforms have triggered sales patterns over time in line with the theoretical predictions, except that the drop in sales after the reform tends to be larger.

Buettner-Pre-announced VAT Increases and the Sales of Consumer Durables-253.pdf

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11:00am - 1:00pm

Emerald Bay 4, Harveys

A03: Firm Evasion and Avoidance Behaviour

Session Chair: **Anne Brockmeyer**, World Bank

11:00am - 11:30am

Bunching and non-bunching of firms at VAT and admin thresholds

Zareh Asatryan, Andreas Peichl
ZEW, University of Mannheim, Germany

Discussant(s): **Anne Brockmeyer** (World Bank)

Using panel data on the population of corporate tax-returns of Armenian firms, we study the behavioral response of firms to: i) an introduction of an unusually large VAT-threshold that is higher than in any OECD country, and ii) a sharp change of a size-dependent threshold that creates favorable rules of tax administration for SMEs (simplified accounting and less frequent tax-returns). We find strong bunching evidence at the latter treatment, but generally not much at the notch created by the VAT-threshold. Based on the results of audits performed at about every fiftieth firm each year, we provide evidence suggesting that the bunching-response of firms is largely due to tax evasion.

Asatryan-Bunching and non-bunching of firms at VAT and admin thresholds-466.pdf

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11:30am - 12:00pm

How much tax do companies pay in the UK? Evidence from the UK confidential corporate tax returns.

Katarzyna Anna Habu[1,2]
[1]Oxford University Centre for Business Taxation, United Kingdom; [2]University of Oxford, United Kingdom

Discussant(s): **Andreas Peichl** (ZEW, University of Mannheim)

This paper uses the confidential UK corporate tax returns data provided by the HMRC to look at the corporation tax payment behavior of the UK companies. I show that multinational companies consistently contribute to over 60% of UK corporation tax revenue; however, the corporate tax payments of multinational subsidiaries relative to their size are significantly smaller than those of comparable domestic companies. I use propensity score matching to estimate this difference between domestic standalones and multinational subsidiaries and find it to be statistically and economically significant. I further disentangle the sources of income for various ownership types and show that income from trading activities in the UK constitutes less than half of the multinationals income, but is driving the difference between multinationals and domestic companies tax payments. What is more, multinationals claim over 50% of their income in various deductions, while domestic companies only claim 1%.

Habu-How much tax do companies pay in the UK Evidence-437.pdf

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12:00pm - 12:30pm

Hotel Tax Incidence with Heterogeneous Firm Evasion: Evidence from Airbnb Remittance Agreements

Eleanor Reed Wilking
University of Michigan, United States of America

Discussant(s): **Katarzyna Anna Habu** (Oxford University Centre for Business Taxation)

How does assignment of the remittance obligation affect consumption tax incidence? In classical tax theory, the responsibility of transferring tax revenue has no effect on which party bears the economic burden of a consumption tax. I explore this prediction in the context of agreements between city governments and a large digital platform firm that shifted the obligation to remit hotel taxes from independent rentors to the platform firm itself. Using variation in the location and timing of such agreements, I estimate their effect on rental prices. My results indicate that shifting the remittance obligation to the platform increases after-tax prices, suggesting that consumers bear a greater share of the tax burden when the remittance obligation is shifted to a party with fewer evasion opportunities.

Wilking-Hotel Tax Incidence with Heterogeneous Firm Evasion-487.pdf

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12:30pm - 1:00pm

Taxation, Information and Withholding: Evidence from Costa Rica

Anne Brockmeyer, Marco Hernandez
World Bank, United States of America

Discussant(s): **Eleanor Reed Wilking** (University of Michigan)

• Note that this paper cannot be downloaded and an Abstract is not available. Please contact the author (s).

11:00am - 1:00pm

Emerald Bay 5, Harveys

A04: Entrepreneurship

Session Chair: **Sebastian Felix Heitzmann**, University of Freiburg

11:00am - 11:30am

Unobserved Ability and Entrepreneurship

Deepak Hegde[1], **Justin Tumlinson**[2]
[1]Stern School of Business, New York University; [2]Ifo Institute at the University of Munich

Discussant(s): **Sebastian Felix Heitzmann** (University of Freiburg)

Why do individuals become entrepreneurs? When do they succeed? We develop a model in which individuals use pedigree (e.g., educational qualifications) as a signal to convince employers of their unobserved ability. However, this signal is imperfect, and individuals who correctly believe their ability is greater than their pedigree conveys to employers, choose entrepreneurship. Since ability, not pedigree, matters for productivity, entrepreneurs earn more than employees of the same pedigree. Our empirical analysis of two separate nationally representative longitudinal samples of individuals residing in the US

and the UK supports the model's predictions that (A) Entrepreneurs have higher ability than employees of the same pedigree, (B) Employees have better pedigree than entrepreneurs of the same ability, and (C) Entrepreneurs earn more, on average, than employees of the same pedigree, and their earnings display higher variance. We discuss the implications of our findings for entrepreneurship, education, and public policy.

Hegde-Unobserved Ability and Entrepreneurship-171.pdf

11:30am - 12:00pm

Corporate Deductibility Provisions and Financial Constraints of Innovative Entrepreneurs

Sebastian Felix Heitzmann[1], **Wolfgang Eggert**[1,2]

[1]University of Freiburg, Germany; [2]ifo Institute for Economic Research at the University of Munich, Germany

Discussant(s): **Justin Tumlinson** (Ifo Institute at the University of Munich)

A common feature of the majority of corporate income tax systems around the world is the fact that they treat returns to equity and to debt in a different manner. This characteristic leads to distortions on the financing decisions. Furthermore, startups face the problem of accumulating venture capital due to the accompanying high risk and the uncertain success. We defend the proposition that ACE, a product of public policy thought to mitigate the unequal treatment of returns to owned and borrowed capital, can also enhance the process of financing startups.

Heitzmann-Corporate Deductibility Provisions and Financial Constraints-244.pdf

11:00am - 1:00pm
Emerald Bay 6, Harveys

A05: Local Government Finance

Session Chair: **Mohamed Mohsin**

11:00am - 11:30am

Housing Boom-Busts, Temporary Windfalls, and Local Government Budgets

Albert Sole-Olle[1,2], **Elisabet Viladecans-Marsal**[1,2]

[1]University of Barcelona, Spain; [2]Barcelona Institute of Economics (IEB)

Discussant(s): **Mohamed Mohsin**

We study the effects of the construction-related temporary windfall revenues obtained by Spanish municipalities during the years of the housing boom (1995-2007) on local government budgets during the boom and during the subsequent bust (2008-11). We assess whether local governments spent too much of these revenues or not and, in case they spent too much, if they were able or not to deal with the effects of the accompanying shortfalls that emerged during the crisis. Our results show, first, that just a very small proportion of the boom windfalls were saved for the bad times. Second, we show that most of these shortfalls went to cuts in capital spending and tax hikes, but also to deficit increases. Finally, we show that both over-spending during the boom and the difficulties in adjusting the budget during the bust are higher in places with low government quality.

Sole-Olle-Housing Boom-Busts, Temporary Windfalls, and Local Government Budgets-110.pdf

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11:30am - 12:00pm

Premium Municipal Bonds and Issuer Fiscal Distress

Stephan David Whitaker, **Ozgur Emre Ergungor**

Federal Reserve Bank of Cleveland, United States of America

Discussant(s): **Albert Sole-Olle** (University of Barcelona)

Economic theory suggests that bond issuers of lower credit quality or higher opacity should be more likely to issue bonds with premium coupons (higher coupon rates relative to yields at issuance). Using a comprehensive data set of municipal bonds issued between 1992 and 2012 by more than 21,000 issuers, we show that this has not been the case until early 2000s. We examine what changed in this market to bring it into greater alignment with economic principles. We argue that Government Accounting Standards Board's Statement 34 that required the use of accrual accounting rules in government financial reports deserves the credit.

Whitaker-Premium Municipal Bonds and Issuer Fiscal Distress-149.pdf

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12:00pm - 12:30pm

The Political Economy of Underfunded Municipal Pension Plans

Jeffrey C Brinkman[1], **Daniele Coen-Pirani**[2], **Holger Sieg**[3]

[1]Federal Reserve Bank of Philadelphia, United States of America; [2]University of Pittsburgh; [3]University of Pennsylvania

Discussant(s): **Stephan David Whitaker** (Federal Reserve Bank of Cleveland)

This paper analyzes the determinants of underfunding of local government's pension funds using a politico-economic overlapping generations model. We show that a binding downpayment constraint in the housing market dampens capitalization of future taxes into current land prices. Thus, a local government's pension funding policy matters for land prices and the utility of young households. Underfunding arises in equilibrium if the pension

funding policy is set by the old generation. Young households instead favor a policy of full funding. Empirical results based on cross-city comparisons in the magnitude of unfunded liabilities are consistent with the predictions of the model.

Brinkman-The Political Economy of Underfunded Municipal Pension Plans-165.pdf

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12:30pm - 1:00pm

Output Multipliers and State Rainy Day Funds

Matthew N. Murray, Mohammed Mohsin, Shreekar Pradhan
University of Tennessee, United States of America

Discussant(s): **Jeffrey C Brinkman** (Federal Reserve Bank of Philadelphia)

Using a panel of data for 43 American states for 1987-2010, we investigate the effects of state rainy day funds (RDFs) on state gross domestic product(GDP). Rainy day funds are intended to smooth taxes and spending to alleviate scal stress during recessions. While RDFs are not intended to a ect the business cycle, they may do so through fund accumulation during periods of economic expansion and fund disbursement during periods of economic contraction. Using an Arellano-Bond estimator and exploiting variation in the RDF rules for de-positing and withdrawing funds across states, we investigate output multipliers of state RDFs. We nd that the average output multiplier of the RDF is about

1.16. The multiplier of total savings funds during high unemployment periods is about 1.18 and the multiplier during low unemployment periods is about -1.6.

Murray-Output Multipliers and State Rainy Day Funds-424.pdf

11:00am - 1:00pm
Tallac, Harveys

A06: Redistributive Politics and Preferences for Redistribution

Session Chair: **Elina Tuominen**, University of Tampere

11:00am - 11:30am

The Politics of Road Investment and Regional Economic Growth: A Case of Japanese Prefectures

Haruo Kondoh
Seinan Gakuin University, Japan

Discussant(s): **Elina Tuominen** (University of Tampere)

This paper clarifies whether or not the distribution of funds for road investment from the central government to local governments is affected by political incentives and whether or not the funds contribute to regional economic growth. We employ a simultaneous-equation approach in order to attain this aim, and estimate the regional distribution functions and the regional growth regression using a panel of Japanese prefectural level data for a period of 1980 to 2010. Empirical results show that, (1) conditional convergence is observed between Japanese prefectures during our sample period, (2) regional distribution of funds for road investment is affected by political factors such as governing party (LDP)'s incentive to buy votes and pressure by a local interest group, (3) the funds for road investment conducted by local governments contribute regional economic growth, but road investment funded or conducted by the central government does not.

Kondoh-The Politics of Road Investment and Regional Economic Growth-374.pdf

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11:30am - 12:00pm

The Left and Taxation - the Impact of Electoral Systems

Per Fredrik Andersson
Lund University, Sweden

Discussant(s): **Haruo Kondoh** (Seinan Gakuin University)

This paper is concerned with the effect of political ideology on taxation. While counterintuitive, left-wing governments tax consumption relatively heavier than right-wing governments. However, there is no consensus as of why this is. This paper argues that the left employs different modes of redistribution depending on the strategic context, which is shaped by the electoral system. In majoritarian systems, left governments tax progressively with a heavier emphasis on income tax and less on excise and consumption. In proportional representation systems, the left taxes consumption heavier and income lighter. Using a new dataset on the composition of government revenues covering thirty-one countries in Western Europe, North and South America, and Australasia between 1800 and today, I show that in the time period leading up to the Second World War, the impact of having a left-wing head of government is different depending on the electoral system.

Andersson-The Left and Taxation-436.pdf

12:00pm - 12:30pm

Inequality, Redistributional Preferences, and the Extent of Redistribution

Hannu Tanninen[1], Matti Tuomala[2], Elina Tuominen[2]
[1]University of Eastern Finland, Finland; [2]University of Tampere, Finland

Discussant(s): **Per Fredrik Andersson** (Lund University)

This paper examines the relationship between the extent of redistribution and the components of the Mirrlees framework by utilising the Luxembourg Income Study (LIS) database. The database provides information on both factor and disposable incomes. In our empirical models, we use penalized spline methods to study nonlinearities in a flexible manner to avoid problems related to pre-specified functional forms. We study 14 advanced countries over the last three to four decades and find a positive link between factor-income inequality and the extent of redistribution, which is in line with the Mirrlees model. We also investigate the relationship between the extent of redistribution and redistributional preferences - using top tax rates as a proxy - and find that top tax rates are positively associated with redistributive outcomes.

Tanninen-Inequality, Redistributional Preferences, and the Extent-338.pdf

11:00am - 1:00pm
Zephyr, Harveys

A07: Corruption and Enforcement

Session Chair: **Massimo Bordignon**, catholic university of milan

11:00am - 11:30am

Law Enforcement, Municipal Budgets and Spillover Effects: Evidence From a Quasi-experiment in Italy

Sergio Galletta
University of Lugano, Switzerland
Discussant(s): **Massimo Bordignon** (catholic university of milan)

In this paper, I empirically investigate the presence of spillover effects resulting from the strengthening of law enforcement against corruption and organized crime in local governments. Specifically, I take advantage of an Italian law that gives power to the central government to replace democratically elected municipal officials who are potentially connected with mafia with a commission of non-elected administrators. Fixed effects model estimates that focus on a sample of municipalities from three Italian regions (Campania, Calabria and Sicilia) for the period 1998 to 2013 show that the city council dismissal of a municipality fosters a reduction in public investments in neigh-boring municipalities. Additional empirical evidence suggests that this result could be explained by the presence of law enforcement spillovers potentially reducing misconducts in neighboring municipalities.

Galletta-Law Enforcement, Municipal Budgets and Spillover Effects-105.pdf

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11:30am - 12:00pm

Social Capital, Electoral Behaviour and Government's Performance.

Emanuele Bracco[1], Ben Lockwood[2], Francesco Porcelli[3], Michela Redoano[2]
[1]University of Lancaster; [2]University of Warwick; [3]SOSE
Discussant(s): **Sergio Galletta** (University of Lugano)

We use a new dataset on Italian municipalities to investigate the link between local governments' performance and electoral behaviour. We employ a new measure for municipal performance and we find that its variation is mainly due to municipalities' level of social capital (or civic values). Other political (i.e. ruling party, level of electoral contestability), economic, or geographical factors do not affect municipalities' performances.We investigate the channels through which this may operate. We find that in municipalities with:

"high civic values" voters punish those incumbents who do not perform well,

(i.e. associated with bad municipal performance) "low civic values" voters punish those incumbents who increase property tax rates.

Bracco-Social Capital, Electoral Behaviour and Government's Performance-387.pdf

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12:00pm - 12:30pm

Corporate Taxes and Firm Behavior in a Low Enforcement Environment - Evidence from South Africa

Kristina Strohmaier, Nadine Riedel, Collen Lediga
Ruhr University Bochum, Germany
Discussant(s): **Francesco Porcelli** (SOSE SpA and GAGE (University of Warwick))

The aim of this paper is to empirically investigate firm behavior in response to corporate taxation and administrative deterrence instruments (tax payer auditing) in a low enforcement environment. Using the population of corporate tax returns in South Africa for 2008-2015, we in a first step analyze bunching in the distribution of taxable income at kinks and notches in the tax schedule and estimate the elasticity of corporate taxable income with respect to statutory corporation tax rates. The analysis yields large elasticity estimates suggesting that corporate taxpayers react sensitively to tax incentives. Detailed information on tax payer audit results, tax deductions and asset investment moreover allows us to distinguish real and evasion responses to taxation. In a second step, we use audit data to study the response of tax payers to deterrence instruments and analyse a large-scale administrative intervention that aimed at bringing non-registered tax payers into the tax net.

Strohmaier-Corporate Taxes and Firm Behavior in a Low Enforcement Environment-494.pdf

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12:30pm - 1:00pm

Are Mafia-type Organizations Fiscally Responsible?

Massimo Bordignon[1], gilberto turati[2], massimiliano piacenza[3]
[1]catholic university of milan, Italy; [2]university of turin; [3]University of Turin
Discussant(s): **Kristina Strohmaier** (Ruhr University Bochum)

The quality of the institutional environment is a crucial issue in understanding the effective outcome of fiscal decentralization initiatives. The analysis exploits an unforeseen change in fiscal policy by Central government increasing Vertical Fiscal Imbalances and tests whether the spending behaviour of municipalities is influenced by the incentives stemming from the lower tax decentralization depending on the quality of the institutional environment. We find a 7-9% increase in average spending per capita as a consequence of the reduced tax autonomy in the municipalities not captured by Mafia clans. On the contrary, the behaviour of local governments is unaffected by the policy change where the istitutional environment is weak.

Bordignon-Are Mafia-type Organizations Fiscally Responsible-352.pdf

11:00am - 1:00pm
Tahoe A, Harrahs

A08: International Trade and Tax Avoidance

Session Chair: **Thomas A. Gresik**, University of Notre Dame

11:00am - 11:30am

Trading Offshore: Evidence on Banks' Tax Avoidance

Dominika Langenmayr[1,2], Franz Reiter[3]
[1]KU Eichstaett-Ingolstadt, Germany; [2]CESifo; [3]University of Munich, Germany
Discussant(s): **Thomas A. Gresik** (University of Notre Dame)

This paper proposes a novel way in which banks lower their tax burden: the strategic relocation of their proprietary trading activities to low-tax jurisdictions. Using regulatory data from the German central bank, we show that a 10 percentage point lower corporate tax rate increases a banks' share of proprietary

trading assets in total assets by 5 to 6 percentage points. Furthermore using Bureau van Dijk's Bankscope data set, we show that this increase mostly stems from the relocation of book profi ts, not of real activities.

Langenmayr-Trading Offshore-207.pdf

11:30am - 12:00pm

The Effect of Transfer Pricing Regulations on Intra-Industry Trade

Vincent Dekker[1], **Kristina Strohmaier**[2]
[1]University of Hohenheim, Germany; [2]Ruhr University Bochum, Germany

Discussant(s): **Franz Reiter** (University of Munich)

In this paper we analyse the economic consequences of transfer pricing regulations. We base our estimation on a panel gravity model, where the transfer pricing regulations are modeled as trade costs. To abstract from any aggregate demand shocks, we focus on intermediate goods in the car industry. Our results suggest a significant volume effect on the exported quantity as a result of the introduction of transfer pricing laws in the exporting country. Exports to lower tax rate countries are reduced, whilst exports to higher tax rate countries are increased. In line with theory, transfer pricing regulations only play a role if a tax rate difference exists between the trading partners.

Dekker-The Effect of Transfer Pricing Regulations on Intra-Industry Trade-398.pdf

12:00pm - 12:30pm

Immobilizing Corporate Income Shifting: Should It Be Safe to Strip in the Harbor?

Thomas A. Gresik[1], **Dirk Schindler**[2], **Guttorm Schjelderup**[2]
[1]University of Notre Dame, United States of America; [2]Norwegian School of Economics, Norway

Discussant(s): **Vincent Daniel Dekker** (University of Hohenheim)

Many subsidiaries can deduct interest payments on internal debt from their taxable income. By issuing internal debt from a tax haven, multinationals can shift income out of host countries through the interest rates they charge and the amount of internal debt they issue. We show that, from a welfare perspective, thin-capitalization rules that restrict the amount of debt for which interest is tax deductible (safe harbor rules) are inferior to rules that limit the ratio of debt interest to pre-tax earnings (earnings stripping rules), even if a safe harbor rule is used in conjunction with an earnings stripping rule.

Gresik-Immobilizing Corporate Income Shifting-111.pdf

11:00am - 1:00pm
Tahoe B, Harrahs

A09: Macroeconomic and Monetary Policies

Session Chair: **Jason Scott Seligman**, Department of Treasury

11:00am - 11:30am

(Un-)certainty about Bailouts: The Impact of (Un-)conventional Fiscal and Monetary Policy Measures on the Re-Convergence of GIIPS Interest Rate Spreads

Ekkehard A. Koehler, **Julia Wolfinger**
Walter Eucken Institut, Germany

Discussant(s): **Jason Scott Seligman** (Department of Treasury)

What influenced the re-convergence of interest rates of GIIPS countries? A popular explanation (e.g. De Grauwe and Ji, 2012) points at Mario Draghi's pledge to “do whatever it takes” to defend the “integrity of the union” (e.g. or Eichengreen, 2015, p. 415). In this paper we closely examine this hypothesis in an unprecedented way:

We empirically analyze the impact of fiscal (e.g. EFSF, ESM) and monetary (e.g. LTRO CBPP) policy measures on 2y, 5y and 10y sovereign bond yields and 2- and 5-year CDS yield spreads on a daily basis in a dynamic macro panel analysis. We find that re-convergence can be explained by instruments unknown to investors before the Eurocrisis. We find that country specific risks no longer explain interest rate spreads after Q3 2012 – at least in the GIIPS countries. These findings support the Rational Expectation Hypotheses in sovereign debt bond pricing, after all.

Koehler-(Un-)certainty about Bailouts-295.pdf

11:30am - 12:00pm

Nationalizations, Bailouts and Efficiency

Ernesto Crivelli, **Klaas Staal**
Karlstad Business School, Karlstad University, Sweden

Discussant(s): **Ekkehard A. Koehler** (Walter Eucken Institut)

We develop a theoretical model in which there are public and private firms and a government. When firms become insolvent, the government can intervene with bailouts or by nationalizing firms. The government only intervenes when the bankruptcy of a firm entails social costs. In a stylized model, we analyze how government interventions affect allocative and productive efficiency. Potential nationalizations of private firms in case unprofitable investments were made, lead to increased allocative efficiency despite private ownership. The effort level chosen by the manager working for a firm is also affected by government intervention, which has an impact on productive efficiency.

Crivelli-Nationalizations, Bailouts and Efficiency-389.pdf

12:00pm - 12:30pm

Restructuring Sovereign Debt by Auction Mechanisms

Gideon Goerdt, **Maximilian Stephan**, **Nora Paulus**
Albert-Ludwigs-Universität Freiburg, Germany

Discussant(s): **Klaas Staal** (Karlstad University)

In case of a debt restructuring, holdout investors have the incentive to press for a higher payout. This can lead to a failure of the restructuring. Because of the possible failure, this article focuses on a mechanism

to solve the coordination problem. The idea is to implement an auction mechanism instead of negotiations. The aim of the paper follows the assumption that creditors are willing to offer haircuts to get a preferred repayment. Therefore, we will discuss a first price auction and a uniform price auction. The first price auction has the higher haircut, but cannot implement a situation where investors show their real preferences. In contrast, the uniform price auction acts vice versa. Creditors reveal their preferences but conversely have to accept a lower haircut.

Goerdt-Restructuring Sovereign Debt by Auction Mechanisms-138.pdf

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12:30pm - 1:00pm

Yield Curve Impacts of Forward Guidance and Maturity Extension Programs

Jeffrey W. Huther[1], **Jason Scott Seligman**[2]

[1]Federal Reserve Board, United States of America; [2]Department of Treasury, United States of America

Discussant(s): **Gideon Goerdt** (Albert-Ludwigs-Universität Freiburg)

Central bank actions in the wake of the financial crisis and Great Recession have demonstrated public sector innovation and leadership in support of both public finance and private entrepreneurship. A new class of reserve neutral activities are of particular note. In 2011-2012, the Federal Reserve provided date-specific assurances that overnight interest rates would not rise at the same time that it sold Treasury securities with short maturities. We analyze resulting conflicting pressures on the yield curve using data on: yields, interest rates on closely related interest rate products, and inventories of Treasury securities held by primary dealers. Results indicate: date-based guidance on the path of overnight interest rates was effective in setting expectations; however, it was insufficient to completely negate the effects of Treasury sales. Accumulations of Treasury securities by Federal Reserve counter-parties were consistent with the idea that primary dealers responded opportunistically to the forward guidance on rates.

Huther-Yield Curve Impacts of Forward Guidance and Maturity Extension Programs-333.pdf

11:00am - 1:00pm
Tahoe C, Harrahs

A10: Migration

Session Chair: **Henrik Andersson**, Uppsala University

11:00am - 11:30am

A panel Data Analysis Of The Effect On Capital Expenditure on Regional Migration In Korea

Hyuna Kim

Korea Institute of Public Finance, Korea, Republic of (South Korea)

Discussant(s): **Henrik Andersson** (Uppsala University)

Have regional development policies mitigated capital area population concentration in Korea? This paper empirically examines the effects of central and local government investments in regional development policies in Korea, confirming that such investments by using ‘capital expenditure’ have played a critical role in reducing provincial migration over the last two decades. This outcome is based on assessments of the performance of intergovernmental fiscal transfers and central government investment in regional policies. The present study therefore argues for the importance of considering and assessing not only the market effects but also the government effects when devising a redistributive policy agenda. This study contributes to the field by taking a unique approach to the migration issue, determining the net migration effect by isolating market forces such as employment, marriage education, etc., and showing the linkage between central and local governments’ capital investment in underdeveloped areas and the reduction of migration rates.

Kim-A panel Data Analysis Of The Effect On Capital Expenditure on Regional Migration-170.pdf

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11:30am - 12:00pm

Remittances and Taxes

James Allen Feigenbaum

Utah State University, United States of America

Discussant(s): **Hyuna Kim** (Korea Institute of Public Finance)

What are the macroeconomic effects of taxing remittances? By taxing transfers of cash from immigrant households to their families back home, the government may be able to reduce the fiscal burden on native households. But to what extent will the resulting increase in the labor hours of immigrant households reduce the wages of low-skilled native workers? Here we compute the mix of taxes on labor income and remittances that maximizes the social welfare of native households that are able to vote.

Feigenbaum-Remittances and Taxes-330.pdf

12:00pm - 12:30pm

What Drives the Legalization of Immigrants? Evidence from IRCA

Alessandra Casarico[1], **Giovanni Facchini**[2], **Tommaso Frattini**[3]

[1]Università Bocconi, Italy; [2]University of Nottingham, UK; [3]University of Milan, Italy

Discussant(s): **James Allen Feigenbaum** (Utah State University)

We develop a model to understand the trade–offs faced by an elected representative in supporting an amnesty when a restrictive immigration policy is in place. We show that an amnesty is more desirable the more restricted are the occupational opportunities of undocumented immigrants and the less redistributive is the welfare state. Empirical evidence based on the voting behavior of U.S. Congressmen on the Immigration Reform and Control Act of 1986 provides strong support for the predictions of our theoretical model.

Casarico-What Drives the Legalization of Immigrants Evidence-210.pdf

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12:30pm - 1:00pm

Neighbors and Networks

Henrik Andersson
Uppsala University, Sweden
Discussant(s): **Alessandra Casarico** (Università Bocconi)

In this paper I use full population Swedish register data to study the labor market effects of neighbor networks. More specifically, I define the size of your network as number of employed coethnics living in your property, and look specifically at a group of unemployed foreign born who at a given year move a very short distance. With the assumption that moving a short distance effects labor market possibilities only through the change of neighbors, I argue that I estimate the causal effect of neighbor networks on the probability of employment. While not being the first paper studying immigrant networks, the paper contributes to the literature with its very detailed residential data, and also aims to perform a more thorough investigation of the mechanisms driving the results. So far the results indicate a positive employment effect of a larger number of employed coethnics as neighbors. Also, the results can not be explained by family connections.

Andersson-Neighbors and Networks-495.pdf

11:00am - 1:00pm
Tahoe D, Harrahs

A11: Optimal Taxation

Session Chair: **Arnaldur Solvi Kristjansson**, University of Oslo

11:00am - 11:30am

A Just and Optimal Tax System

Robin Jessen[1], Maria Metzing[2], Davud Rostam-Afschar[1]
[1]Freie Universität Berlin, Germany; [2]DIW Berlin, Germany
Discussant(s): **Arnaldur Solvi Kristjansson** (University of Oslo)

We use a question from the German Socioeconomic Panel (SOEP) to obtain information about what amount of taxes individuals consider as just. We formulate the problem of a social planer who wants to minimize the deviations from "just taxes". Adapting the optimal taxation framework by Saez (2002), we estimate justness weights for singles implied by the actual tax schedule s.t. the budget constraint and utility optimizing labor supply by tax payers. We find that middle income earners have the highest justness weights.

Jessen-A Just and Optimal Tax System-279.pdf

11:30am - 12:00pm

Optimal taxation of motherhood

Sebastian G. Kessing[1], Vilen Lipatov[2], J. Malte Zoubek[1]
[1]University of Siegen, Germany; [2]Compass Lexecon
Discussant(s): **Davud Rostam-Afschar** (Universitaet Hohenheim)

Mothers earn substantially lower wages and incomes, and have a larger labor supply elasticity, than women without children. In the presence of a progressive tax-transfer scheme, the discrete change in family status of becoming a mother can thus generate substantial scal externalities. We build an optimal taxation model that combines an intensive labor supply margin with the extensive child-bearing decision. The latter endogenously a¤ects endogenously female productivity in terms of market remuneration as well as the labor supply elasticity. The resulting reduction in gross income reduces tax revenue under progressive income taxation, such that the decision for a child entails a scal externality. Our analysis reveals the nature of this externality and shows that they can be important.

Kessing-Optimal taxation of motherhood-510.pdf

12:00pm - 12:30pm

Optimal Taxation with Performance based Pay

Arnaldur Solvi Kristjansson
University of Oslo, Norway
Discussant(s): **Malte Zoubek** (University of Siegen)

I ask the question how are optimal taxes affected by the presence of performance based pay in the labour market. To answer this question I analyses an optimal tax model in a dual labour market, where there is a less skill demanding sector and a skill demanding sector where productivity is stochastic and remuneration is performance based. When the government designs an optimal income tax schedule, it has to take into account the disincentives effects on labour supply. When wages depend on performance (which is stochastic), the employer partly insures their employees for taking risk. The optimal tax should also take this into account and further reduces the progressivity of the income tax. If an increase in income inequality can be attributed to an increase in performance pay, the tax rate should be increased less than what optimal tax theory with exogenous wage rates would recommend.

Kristjansson-Optimal Taxation with Performance based Pay-407.pdf

11:00am - 1:00pm
Glenbrook/Fallen Leaf, Harrahs

A12: Housing Markets

Session Chair: **David Albouy**, U of Illinois - UC

11:00am - 11:30am

Implications of Fiscal Policy for Housing Tenure Decisions

Anastasia Girshina
University of Luxembourg (Luxembourg School of Finance), Luxembourg; and Ca' Foscari University of Venice (Department of Economics), Italy
Discussant(s): **David Albouy** (U of Illinois - UC)

Many of the world's wealthy countries provide fiscal incentives to homeowners. Yet, the impact of such tax breaks on housing tenure decision is unclear. Using difference-in-differences approach, this study estimates the effect of mortgage interest deduction on homeownership in the United States. The identification relies on the large changes in income tax rates and standard deduction. The largest of these changes increased income tax rate by as much as 23,9% and decreased standard deduction by 7,2% between 2002 and 2004. The baseline estimates suggest that increase in income tax rate in a state that allows mortgage interest deduction is associated to 3 percentage points increase in homeownership relative to states that didn't change their fiscal policy and to 5 percentage points -relative to states that do not allow mortgage interest deduction but had a comparable increase in tax rates. The results are robust to a range of alternative specifications.

Girshina-Implications of Fiscal Policy for Housing Tenure Decisions-147.pdf

11:30am - 12:00pm

Tax arbitrage incentives for mortgage prepayment behavior: Evidence from Dutch micro data

Stefan Groot, **Arjan Lejour**
CPB Netherlands Bureau for Economic Policy Analysis

Discussant(s): **Anastasia Girshina** (University of Luxembourg and Ca\' Foscari University of Venice)

This paper exploits a unique set of Dutch micro data to analyze the response in prepayment behavior to changes in incentives for prepaying. The paper shows that the effect of mortgage interest rates on the value of prepaying a mortgage (also taking taxes and returns on savings into account) is equivalent to a change in the rate at which financial wealth is taxed. This feature is used to estimate tax elasticities (i.e. the elasticity of changes in wealth tax revenues resulting from changes in prepayment with respect to the wealth tax rate). Using a Heckman selection model the paper finds that patterns in prepayment behavior are only to a limited extent explained by decisions directed to optimizing financial wealth.

Groot-Tax arbitrage incentives for mortgage prepayment behavior-204.pdf

12:00pm - 12:30pm

Speculative Bubbles and Tax Policy

Shigeki Kunieda
Hitotsubashi University, Japan

Discussant(s): **Stefan Groot** (CPB Netherlands Bureau for Economic Policy Analysis)

In this paper, I 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-410.pdf

12:30pm - 1:00pm

Housing Inequality

David Albouy[1], **Mike Zabek**[2]
[1]University of Illinois; [2]University of Michigan

Discussant(s): **Shigeki Kunieda** (Hitotsubashi University)

Inequality in U.S. housing prices and rents both declined in the mid-20th century, even as home-ownership rates rose. Subsequently, housing-price inequality has risen to pre-War levels, while rent inequality has risen less. Combining both measures, we see inequality in housing consumption equivalents mirroring patterns in income across both space and time, according to an income elasticity of housing demand just below one. These patterns occur mainly within cities, and are not explained by observed changes in dwelling characteristics or locations. Instead, recent increases in housing inequality are driven most by changes in the relative value of locations, seen especially through land.

Albouy-Housing Inequality-353.pdf

1:00pm - 2:30pm **Lunch**

2:30pm - 4:30pm
Garden I, Harveys

B01: Shadow Economies

Session Chair: **Gebhard Kirchgässner**, University of St. Gallen

2:30pm - 3:00pm

Minimising Selection Failure and Measuring Tax Gap: An Empirical Model

Sudhanshu Kumar[1], **Kavita Rao**[2]
[1]National Institute of Public Finance and Policy, New Delhi, India; [2]National Institute of Public Finance and Policy, New Delhi, India

Discussant(s): **Gebhard Kirchgässner** (University of St. Gallen)

This paper presents an empirical model for minimising selection failure by tax departments in selecting cases for scrutiny assessment. This model also provides a new methodology for estimating tax gap from limited information that the department collects on a regular basis through scrutiny assessments. Using a maximum-likelihood procedure that corrects for sample selection bias, and the data on the scrutiny assessment exercise carried out by the income tax department, we estimate the model which relates the probability and extent of under-reporting to various inputs provided by the tax filer. The estimated model provides a mechanism to analyse the trade-off between two types of cases of failure - wrong selection of a case and failure to take up the potential under-reporter.

Kumar-Minimising Selection Failure and Measuring Tax Gap-357.pdf

3:00pm - 3:30pm

Modelling the Egyptian Shadow Economy: A Currency Demand And A MIMIC Model Approach

Friedrich Schneider[1], **Mai Hassan**[2]

[1]Johannes Kepler University Linz, Austria; [2]Philipps-University Marburg, Germany

Discussant(s): **Sudhanshu Kumar** (National Institute of Public Finance and Policy, New Delhi)

We estimate the size and trend of the Egyptian shadow economy using two of the most common methods: the currency demand approach and the structural equation MIMIC model. To the best of our knowledge, this is the first comprehensive study to estimate the size of the shadow economy in Egypt during the last four decades (1976 to 2013). In addition to the standard explanatory variables used in the currency demand approach and MIMIC model, we consider variables that are specifically related to the Egyptian economy such as self-employment, agricultural importance and a proxy for institutional quality of democratic institutions. Our results indicate a decreasing trend of the size of the shadow economy from more than 50% in 1976 to 32% in 2013, yet it still comprises a large portion of the official GDP.

Schneider-Modelling the Egyptian Shadow Economy-364.pdf

3:30pm - 4:00pm

Shadow Economies and Developing Nations: Addressing the Recursive Fiscal Dilemma

Matthew N. Murray, Michael Craig, Mohammed Mohsin

University of Tennessee, United States of America

Discussant(s): **Friedrich Schneider** (Johannes Kepler University Linz)

We examine how tax and enforcement policy changes can address two issues common to developing economies: weak central government revenue collections and large informal sectors. The existing literature finds that higher taxes discourage formality. We incorporate different uses of government revenue into a dynamic general equilibrium model and run policy experiments. We find that when the government provides productive public goods to the household's production sector, higher taxes can increase revenue and formal sector activity. Our results are consistent with the literature on the roles of ``fiscal exchange'' and the ``fiscal social contract'' that exists between the government and its constituents, that providing a tangible public good in exchange for paying taxes is essential in generating compliance for the goal of using tax as a means of state building. We identify a tipping point in the proportion of government revenue dedicated to public capital provision for which this result holds.

Murray-Shadow Economies and Developing Nations-425.pdf

4:00pm - 4:30pm

On Estimating the Size of the Shadow Economy

Gebhard Kirchgässner

University of St. Gallen, Switzerland

Discussant(s): **Michael Craig** (Lynchburg College)

As long as it is employed cautiously enough, the model approach is a useful tool to estimate simultaneously the size and the development of the shadow economy in several countries. However, a second method is necessary to calibrate the model. The currency demand ap-proach can lead to highly implausible results; the size of the shadow economy might be largely overestimated. An alternative is the survey method. For real tests of whether a variable has an impact, procedures are necessary that do not use the same variables as those used to construct the indicator. Thus, to make progress in analysing the shadow economy, the model approach has a role to play, but it has to be complemented by other methods employing different data. The currency demand approach cannot be used as long as it employs the same variables for its constructions.

Kirchgässner-On Estimating the Size of the Shadow Economy-363.pdf

2:30pm - 4:30pm
Garden II, Harveys

B02: Profit-Shifting

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

2:30pm - 3:00pm

Measuring Misalignment: the Location of US Multinationals' Economic Activity versus the Location of their Profits

Petr Janský[1], **Alex Cobham**[2]

[1]Charles University in Prague, Czech Republic; [2]Tax Justice Network, United Kingdom

Discussant(s): **Jonathan Pycroft** (European Commission)

A major international effort – the OECD Base Erosion and Profit Shifting initiative – aims to reduce the extent of misalignment between the profits of multinational groups, and the location of their real economic activity. Recent research using balance sheet data has shown major misalignments, with a number of small jurisdictions capturing a tax base disproportionate to their economic activity, but has also revealed the limitations of available balance sheet data for lower-income countries. This paper uses survey data on the international operations of US-headquartered multinational groups to expand the research to a broader group of host countries (albeit for only one home economy), and confirms major misalignments of profit. A small number of 'profit-haven' jurisdictions are seen to have captured a disproportionate share of total profits, resulting in serious disadvantages for most G20 countries, regardless of income level.

Janský-Measuring Misalignment-169.pdf

3:00pm - 3:30pm

Corporate Tax Reforms and Tax-motivated Profit Shifting: Evidence from the EU

Anna Alexander, Antonio De Vito, Martin Jacob

WHU - Otto Beisheim School of Management, Germany
Discussant(s): **Petr Janský** (Charles University in Prague)

This paper reassesses the role of taxation in multinationals' profit shifting. Using a European sample of multinationals and their subsidiaries, we exploit multiple tax rate reforms in a difference-in-differences setting to examine when and why tax rate changes affect profit shifting. Our results suggest that lowering the statutory corporate tax rate in the country of the parent company incentivizes subsidiaries to shift back profits to the parent country. A one standard deviation decrease in the change in the tax difference (2.7 percentage points) reduces profits by 7% in the host country. This effect is stronger when the change in the tax difference is large enough to reverse the sign of the tax rate difference. Furthermore, profit shifting responses to tax reforms in the parent country are muted by economic growth in the host country of the subsidiary but are strengthened by strong institutions in the host country.

Alexander-Corporate Tax Reforms and Tax-motivated Profit Shifting-257.pdf

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3:30pm - 4:00pm

Profit Shifting and Tax Morale

Danilo Zehner
University of Frankfurt am Main, Germany
Discussant(s): **Antonio De Vito** (WHU - Otto Beisheim School of Management)

This research project investigates the effects of tax morale on profit shifting. In a first step, methods from the recent profit shifting literature (Dischinger et al., 2014a,b) are applied and extended by measures of national tax morale. First results indicate that tax morale actually affects profits. It is found that the domestic tax morale measure increases reported profits in parents and subsidiaries. Furthermore, the difference between the tax morale measures in the subsidiary and the parent company has a positive effect on the profits of the subsidiary. In other words, the higher tax morale in the subsidiary country gets relative to the tax morale in the parent country, the more profits the subsidiary will report. Finally, different extensions and research ideas are presented to identify possible channels through which tax morale can affect profit shifting.

Zehner-Profit Shifting and Tax Morale-264.pdf

4:00pm - 4:30pm

Intangibles and Profit Shifting: An Assessment of Policy Reforms Using a CGE model

Maria Teresa Alvarez-Martinez, Salvador Barrios, Diego d´Andria, Maria Gesualdo, Dimtrios Pontikakis, Jonathan Pycroft
European Commission, DG-JRC, IPTS, Spain
Discussant(s): **Danilo Zehner** (University of Frankfurt am Main)

In the EU, some multinational company groups engage in aggressive tax planning thus avoiding paying taxes in the place where profits are generated. Corporate income tax rates can generate substantial responses within the implementing country as well as beyond its own borders; related to the latter, the elasticity of profit shifting with respect to tax differentials has been found to be larger for multinationals that own large shares of intangibles over total assets. We use a CGE model, named CORTAX, and extend it to make profit shifting sensitive to intangible assets. We simulate the impact of a hypothetical reform that reduces depreciation allowances for intangibles for the EU countries, and of a policy reform that curbs profit shifting (through transfer pricing) directly. We find that policies reducing the depreciation allowances for intangibles have a negative average effect on welfare. Policies that directly curb profit shifting have a positive average effect.

Alvarez-Martinez-Intangibles and Profit Shifting-446.pdf

2:30pm - 4:30pm
Emerald Bay 4, Harveys

B03: Institutions: Private, Public and PPP

Session Chair: **Enlinson Mattos**, Fundacao Getulio Vargas

2:30pm - 3:00pm

Sequential Moral Hazard Under Financial Limits:

Marco Buso, Luciano Greco
University of Padova, Italy
Discussant(s): **Enlinson Mattos** (Fundacao Getulio Vargas)

We study a moral hazard problem in which a risk-neutral principal, potentially facing a financial constraint, delegates the implementation of two sequential tasks to risk-neutral, financially-constrained agents. Each task brings to a contractible output that is randomly related to agent's effort. No technological externality is considered between the two tasks. Under sequential contracts, two different agents are hired to implement the tasks, and the second task optimal contract does not have memory. Under partnership contract, a single agent implements the two tasks; the optimal contract involves a correlation between first-andsecond-phase output. When the principal's financial constraint does not bind, the partnership contract always dominate sequential contracts. To some extent, this result is robust to the introduction of financial constraints of the principal. Our model provides a novel theoretical explanation of the empirical evidence that governments facing financial stress are more likely to implement infrastructure investment and operation through public-private partnerships.

Buso-Sequential Moral Hazard Under Financial Limits-429.pdf

3:00pm - 3:30pm

Does Tax Competition Tame the Leviathan?

Marius Brülhart[1], Mario Jametti[2]
[1]University of Lausanne, Switzerland; [2]Università della Svizzera italiana, Switzerland
Discussant(s): **Luciano Greco** (University of Padua)

We study the impact of tax competition on equilibrium taxes and welfare, focusing on the jurisdictional fragmentation of federations. In a representative-agent model of fiscal federalism, fragmentation among jurisdictions with benevolent tax-setting authorities unambiguously reduces welfare. If, however, tax-setting authorities pursue revenue maximization, fragmentation, by pushing down equilibrium tax rates, may under certain conditions increase citizen welfare. We exploit the highly decentralized and heterogeneous Swiss fiscal system as a laboratory for the estimation of these effects. While for purely direct-democratic jurisdictions (which we associate with relatively benevolent tax setting) we find that tax rates increase in fragmentation, fragmentation has a moderating effect on the tax rates of jurisdictions with some degree of delegated government. Our results thereby support the view that tax competition can be second-best welfare improving by constraining the scope for public-sector revenue maximization.

Brülhart-Does Tax Competition Tame the Leviathan-435.pdf

3:30pm - 4:00pm

Sorting in Higher Education in Brazil

Enlinson Mattos[2], **Priscilla Bacalhau**[1]

[1]Fundacao Getulio Vargas, Sao Paulo School of economics Brazil; [2]Fundacao Getulio Vargas, Brazil

Discussant(s): **Mario Jametti** (Università della Svizzera italiana)

This paper investigates students' sorting in higher education in Brazil. Based on three merged datasets: (i) National Survey by Household Sampling (PNAD / IBGE), (ii) National Exam of Student Performance (Enade) and (iii) National Survey of Secondary Education (Enem) our results are threefold. We fi nd evidence that education of the family is important for students to access Higher Education Institutions (HEI).Second, we follow students in their fi rst and senior year to calculate the di fference in the score (value added) of the fi eld-speci c grade in Enade to construct a measure of quality of HEI. Our results leads to public institutions students have 6.17 (15%) points larger valued added scores. Last, only 50% diff erential can be explained by the observable variables. After we include students' score in the Enem-proxy for talent, our model explains almost 90% of that grades' di erential between public and private institutions.

Mattos-Sorting in Higher Education in Brazil-334.pdf

2:30pm - 4:30pm

Emerald Bay 5, Harveys

B04: Quality of Governance

Session Chair: **Alice Sanna**, Université Catholique de Louvain

2:30pm - 3:00pm

Towards Greater Objectivity in Governance Measurement: Second Generation Citizen-Centric Governance Indicators

Maksym Ivanyna[1], **Anwar Shah**[2]

[1]Joint Vienna Institute, Michigan State University, Austria; [2]Brookings Institution, World Bank and SWUFE, China

Discussant(s): **Alice Sanna** (Université Catholique de Louvain)

Most widely used governance indicators lack information on how citizens evaluate their governments. The first generation citizen-centric governance indicators by Ivanyna and Shah (2011) attempted to overcome this by using data from World Value Surveys to capture citizens' perceptions of governance environment and outcomes in their own countries. The citizen based evaluations while addressing the voids of experts' purely subjective perspectives, however, are not immune from systemic bias such as indoctrination, intimidation, and critical citizenship. This paper presents methods for testing and correcting these biases of public opinion surveys and develops a second generation citizen-centric governance indicators that incorporate these adjustments. In doing so, it develops more reliable indicators of governance quality across the globe. The correction procedures presented here would be helpful in correcting for systemic biases in other measures that use public opinion survey data.

Ivanyna-Towards Greater Objectivity in Governance Measurement-317.pdf

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3:00pm - 3:30pm

In Search Of Fiscal Space In Africa: The Role Of The Quality Of Government Spending

Djedje Hermann Yohou

Center for Sutdies and Research on International Development (CERDI), France

Discussant(s): **Maksym Ivanyna** (Joint Vienna Institute, Michigan State University)

Taking advantage of African experience, this paper proposes to enrich empirically the issue of fiscal space. Africa has markedly achieved significant economic progress since the 80's decade crisis. However, this progress has been proven insufficient to curb dramatically the infrastructures gap and poverty because of the shortage of funding. While several ways are being looked for creating a sustained fiscal space, this paper argues that improving the quality of public spending remains the key avenue. It then derives fiscal space by computing Data Envelopment Analysis (DEA) efficiency scores of public spending using a group of 62 African and non-African countries over the period 1980-2013. The results indicate that on average African countries are less efficient than their peers. The average efficiency score of public spending for African countries relatively to their peers is 0.585 suggesting that they could reduce their spending by 41.5% to achieve the same results.

Yohou-In Search Of Fiscal Space In Africa-183.pdf

3:30pm - 4:00pm

How Much Tax Do Companies Pay In A Corrupt World?

Katarzyna Anna Habu[1,3], **Andre Seidel**[2]

[1]Oxford University Centre for Business Taxation, United Kingdom; [2]TU Dresden, Germany; [3]Oxford University, United Kingdom

Discussant(s): **Djedje Hermann Yohou** (Center for Sutdies and Research on International Development (CERDI) and University Felix Houphouet Boigny of Abidjan (Cote d\'Ivoire))

This paper introduces heterogeneous profit shifting costs induced by corrupt tax officials to analyse the effects of corruption on profit shifting of multinationals. Using firm level data on European firms, we show that corruption increases profit shifting. Hence, country with high corruption faces higher tax losses when increasing their tax rate, than a country with similar tax rates but lower corruption. Specifically, Italy and Greece face very high elasticities of aggregate profits with respect to their tax rates relative to Norway or Sweden. These countries will not be able to raise substantial amounts of tax revenues by increasing their tax rates.

Habu-How Much Tax Do Companies Pay In A Corrupt World-421.pdf

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4:00pm - 4:30pm

The Efficiency of VAT and the Quality of Governance

Alice Sanna, Marcel Gerard
University of Louvain, Belgium

Discussant(s): **Katarzyna Anna Habu** (Oxford University Centre for Business Taxation)

Taxation is the subject of much theoretical, empirical and policy oriented research. It is a powerful tool for domestic resource mobilization in order to reinforce ownership of public policy and to achieve financial autonomy. Against that framework we want to test whether the level of development and the quality of governance, next to other indicators and control variables, increase the efficiency of the Value Added Tax (VAT) device. Therefore, we use a database of 154 countries observed over a six-year period. Both our cross sectional study and our panel data analysis show that an increased quality of governance and a higher level of development are key drivers of VAT efficiency, at least up to a threshold of development. Although the paper focuses on VAT, results are likely to hold for a larger range of taxes.

Sanna-The Efficiency of VAT and the Quality of Governance-179.pdf

2:30pm - 4:30pm

Emerald Bay 6, Harveys

B05: Fiscal Policy and Competition

Session Chair: **Wiliam Harvey Hoyt**, University of Kentucky

2:30pm - 3:00pm

Fiscal Competition and Public Debt

Eckhard Janeba[1,2,3], Maximilian Todtenhaupt[1,2]
[1]University of Mannheim; [2]Centre for European Economic Research; [3]CESifo

Discussant(s): **Wiliam Harvey Hoyt** (University of Kentucky)

The existing theoretical literature on fiscal competition has to a large extent ignored the role of government debt as determinant of taxes and productive public spending. We develop a simple model of fiscal competition with government borrowing. When default on government debt is ruled out, initial debt levels play no role in fiscal competition. This neutrality result is overturned when we allow for government default. A government that is constrained in its borrowing due to possible default responds optimally by lowering spending on durable public infrastructure. This in turn induces the jurisdiction to be more aggressive in setting taxes in the fiscal competition game. Our model may help explain why highly indebted countries in Europe have decreased corporate tax rates over-proportionally. Our model may also be useful for evaluating reforms in which the power to tax firms is devolved to lower levels of governments which differ in initial debt levels.

Janeba-Fiscal Competition and Public Debt-186.pdf

3:00pm - 3:30pm

Intergovernmental Fiscal Transfers and Tax Effort: Evidence from Japan

Takeshi Miyazaki
Kyushu University, Japan

Discussant(s): **Maximilian Todtenhaupt** (Centre for European Economic Research)

The current paper aims to examine the incentive effects of fiscal equalization transfers on local corporate tax rates and capital from the theoretical and empirical perspectives. We focus on additional corporate tax on capital, which is exempted from calculation of equalization grants. A theoretical investigation reveals that an increase in equalization rate increases the additional capital tax rates, but lowers the level of capital. The theoretical predictions are empirically examined using panel data of Japanese municipalities from 1990 – 2000, and the following two results are obtained. First, it is found that higher equalization rates in fiscal equalizing transfers give municipalities an incentive to raise the tax rates of the corporate tax exempted from the transfer scheme. Second, the results suggest that capitals remain unchanged irrespective of applied equalization rates of the fiscal transfer.

Miyazaki-Intergovernmental Fiscal Transfers and Tax Effort-488.pdf

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3:30pm - 4:00pm

Optimal Fiscal Policy in a Transfer Union

Till Gross
Carleton University, Canada

Discussant(s): **Takeshi Miyazaki** (Kyushu University)

I consider optimal fiscal policy in a transfer union, where every constituency has to pay a share of its tax revenues into a pool which then disburses the funds back to its members. Fiscal policy is composed of source-based capital taxes, labor taxes, government consumption, productive infrastructure, and bonds. I analyze both a static and a dynamic model and use a closed economy as a benchmark. In a static open economy without transfers, capital taxes are inefficiently low, whereas infrastructure spending is inefficiently high. Labor taxes, government consumption, and infrastructure are all declining functions of the share of government revenues which are transferred. Capital taxes are increasing in transfers. This also applies to the short run of a dynamic open economy. In the long run, capital taxes and infrastructure spending are efficient without transfers; with transfers, capital taxes remain efficient, whereas infrastructure spending is too low and decreasing in transfers.

Gross-Optimal Fiscal Policy in a Transfer Union-492.pdf

4:00pm - 4:30pm

The Assignment and Division of the Tax Base in a System of Hierarchical Governments

Wiliam Harvey Hoyt
University of Kentucky, United States of America

Discussant(s): **Till Gross** (Carleton University)

Abstract Vertical externalities, changes in one level of government's policies that affect the budget of another level of government, may lead to non-optimal government policies. These externalities are associated with tax bases that are shared or "co-occupied" by two levels of government. Here I consider whether the co-occupancy of tax bases is desirable. I examine the optimal extent of the tax bases of a lower level of government (local) and a higher level (state). I find that it is optimal to have co-occupancy in the absence of other corrective policies if commodities in tax base are substitutes.. Finally, if there are horizontal externalities generated by cross-border shopping, there is still reason to co-occupy the tax base if commodities are substitutes. As well, local governments should have those commodities with the lowest cross-border shopping costs in their tax base.

Hoyt-The Assignment and Division of the Tax Base in a System of Hierarchical Governments-396.pdf

2:30pm - 4:30pm
Tallac, Harveys

B06: International Competition

Session Chair: **John Douglas Wilson**, Michigan State University

2:30pm - 3:00pm

The Political Economy Of Interregional Competition For Firms

Daniel Hopp, Michael Kriebel
University of Muenster, Germany

Discussant(s): **John Douglas Wilson** (Michigan State University)

This paper studies the impact of majority voting on interregional competition for firms. We model the competition as a first-price sealed bid auction under full information between two regions inhabited by low- and high-skilled individuals. The firm's location causes an increase in wages for the high-skilled. A region's bid is determined by the median voter's preference. We derive two results. First, the location decision may be inefficient because the firm may not locate in the region that benefits most. Second, if regional differences are sufficiently small and the median voter of the successful region is high-skilled, the winning region suffers a loss of aggregated income as subsidies exceed the surplus created by a firm's location. This implies that restricting inter-regional competition for firms, e.g. banning subsidies, may prevent inefficient location decisions.

Hopp-The Political Economy Of Interregional Competition-300.pdf

3:00pm - 3:30pm

Bonus Taxes and International Competition for Bank Managers

Daniel Gietl, Andreas Haufler
Ludwig-Maximilians-Universität, Germany

Discussant(s): **Michael Kriebel** (University of Muenster)

This paper analyzes the competition in bonus taxation when banks compensate their managers by means of incentive pay and bankers are internationally mobile. Bonus taxes make incentive pay more costly for national banks and lead to an outflow of managers, lower effort and less risk-taking in equilibrium. The international competition in bonus taxes may feature a 'race to the bottom', or a 'race to the top', depending on whether bankers exert a positive or a negative fiscal value on their home government. The latter can arise when governments bail out banks in the case of default, and bankers take excessive risks as a result of incentive pay.

Gietl-Bonus Taxes and International Competition for Bank Managers-233.pdf

3:30pm - 4:00pm

Tax Competition And Corporate Losses

Mohammed Mardan, Michael Stimmelmayr
ETH Zurich, Switzerland

Discussant(s): **Daniel Gietl** (Ludwig-Maximilians-Universität)

This paper analyzes the implications of uncertainty under SA and FA. We first show that under SA as well as under FA, an increase in uncertainty leads to mitigated tax competition however with different magnitudes. Hence, in order to evaluate when a switch from SA to FA is beneficial not only the tax base mobilities under the two systems is relevant but also the level of uncertainty in the economy. Second, we show that a higher weight on capital shares has two effects on tax competition under FA. First, tax competition is aggravated because the MNE's effort to manipulate the formula increases. Second, a high weight on capital shares also acts as an insurance for tax revenue collection if sales shares drop to zero. For intermediate levels of uncertainty the insurance effect can dominate so that a higher weight on capital shares mitigates tax competition under FA.

Mardan-Tax Competition And Corporate Losses-282.pdf

4:00pm - 4:30pm

Competitive Nonlinear Income Taxation Revisited

John Douglas Wilson[1], **Lixin Ye**[2], **Chenglin Zhang**[3]
[1]Michigan State University; [2]Ohio State University; [3]Ohio State University

Discussant(s): **Mohammed Mardan** (ETH Zurich)

In the current literature on competitive nonlinear income taxation, competition is usually modeled as a game in which different tax authorities compete in tax schedules. An undesirable feature of this traditional approach is that the resource constraint is required only in equilibrium: following a deviation by one state, the resource constraints in other competing states are typically unbalanced. We propose a new approach in which the tax authorities compete in marginal tax rates, with the poll subsidies adjusting to satisfy budget balance. We show that our new approach in general leads to an equilibrium outcome different from the traditional approach. Under certain regular conditions we demonstrate that the new approach leads to increased competition, reducing the amount of income redistribution from high-income to low-income workers.

Wilson-Competitive Nonlinear Income Taxation Revisited-502.pdf

2:30pm - 4:30pm
Zephyr, Harveys

B07: Local Property Taxes and Infrastructure

Session Chair: **Yilin Hou**, Syracuse University

2:30pm - 3:00pm

The Coupling Relation between Urban Transportation Superiority and Industrial Connection in Perspective of Regional Collaboration ——A Case Study of Tianjin in China

Zhen-po Wang, **Jing-tong Zhai, Ping Yang, Li-yan Wang**
Tianjin Chengjian University, China, People's Republic of
Discussant(s): **Yang He** (Central University of Finance and Economics)

Relieving the non-capital function is the top priority for the Beijing-Tianjin-Hebei collaborative development strategy. Tianjin plays an important role in undertaking Beijing industrial transfer and industrial structure optimization of the Beijing-Tianjin-Hebei region. This paper analyzes the influence of the non-capital function relief for Tianjin industrial development and spatial distribution optimization. We establish the adaptation framework of urban spatial distribution optimization under the "transportation integration and industrial transformation and upgrading". The coupling relations between Tianjin traffic advantages and the industrial spatial distribution are identified. Finally, we conduct experiment studies to provide managerial insights for Tianjin industrial upgrading and urban functions promotion.

Wang-The Coupling Relation between Urban Transportation Superiority and Industrial Connection-200.pdf

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3:00pm - 3:30pm

Measuring the Ability to Pay Local Property Taxes

Ping Zhang[1], **Yilin Hou**[2]
[1]Fudan University, China; [2]Syracuse University
Discussant(s): **Zhen-po Wang** (Tianjin Chengjian University)

This paper attempts to construct a theoretical framework of the ability-to-pay of local property taxes and to measure the ability-to-pay based on the upcoming property tax adoption in China. Using survey data from the China Family Panel Studies, we compare the ATP of different household groups by their housing type, with/without housing loans, social-economic status and etc. We conduct regression analysis to investigate the potential determinants of households' ability to pay potential local property taxes. Preliminary results show huge variation among different families in their ability-to-pay the property tax. Even with some equalization policies, the disparity of ability-to-pay measured by the Gini coefficient is still high, indicating that some relief policies may be necessary to help the disadvantaged groups. The empirics of the paper highlights the complexity of China's undergoing property tax adoption and sheds light for transitional economies that consider to design or adopt a property tax.

Zhang-Measuring the Ability to Pay Local Property Taxes-547.pdf

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3:30pm - 4:00pm

Cost analysis on private participation in Chinese infrastructure projects

Zhongqi Deng[1], **Shunfeng Song**[2], **Yongjun Chen**[1]
[1]School of Business, Renmin University of China; [2]Department of Economics, University of Nevada
Discussant(s): **Ping Zhang** (Fudan University)

While public-private partnerships (PPPs) have become an increasingly popular approach in both developed and developing countries, very little is known about whether or not PPPs are more efficient than pure-public or pure-private modes. Building on some recent work studying PPP issues this paper improves the understanding of public-private capital structures, provides some theoretical considerations as well as empirical evidence that private participation affects PPPs cost through the knowledge-transfer effect and the cost-increase effect, and demonstrates a U-shaped relationship between the project costs and private shares. Empirical analysis also finds that the private shares in China's infrastructure PPPs are excessive, and BOT (build, operate, and transfer) projects, compared to other PPP types, are not efficient in China.

Deng-Cost analysis on private participation in Chinese infrastructure projects-548.pdf

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4:00pm - 4:30pm

The Ability to Pay for the Property Tax in China:Evidence from Micro Data of Urban China Household

Yang He[1], **Yilin Hou**[2]
[1]Central University of Finance and Economics, China, People's Republic of; [2]Maxwell School of Syracuse University, Syracuse
Discussant(s): **Zhongqi Deng** (Renmin University of China)

The willingness of homeowners to pay property taxes is a key in designing or reforming the tax. While willingness-to-pay incentivizes local governments to provide better public goods and services, it is affected by many factors. The literature offers no consensus on this topic. To fill in the gap, this paper uses micro data from 2014 China Family Survey to estimate the marginal willingness of urban residents to pay the property management fees. The results shed light on acceptable rates for countries like China that may soon adopt the property tax.

He-The Ability to Pay for the Property Tax in China-549.pdf

2:30pm - 4:30pm
Tahoe A, Harrahs

B08: Social Security Systems

Session Chair: **Doina Maria Radulescu**, University of Bern

2:30pm - 3:00pm

Optimal Government Policy For Life Risk And National Risk

Tohru Naito[2], **Tatsuya Omori**[1]
[1]Chukyo University, Japan; [2]Tokushima University, Japan
Discussant(s): **Doina Maria Radulescu** (University of Bern)

Introducing life risk and national risk into the overlapping-generations model, we show the optimal wage income tax rate to finance national security and social security and the optimal allocation rate of public funds between them. Only in dynamic efficient economy does there exist the positive optimal wage income tax rate. The probability of surviving at the retirement period and child care cost does not affect optimal rates. We explain the positive effects of probability for national risk on optimal tax rate. However, the effects of probability of national risk on public fund allocation to social security are negative.

Naito-Optimal Government Policy For Life Risk And National Risk-248.pdf

3:00pm - 3:30pm

Impulsivity and Social Security

T. Scott Findley
Utah State University, United States of America
Discussant(s): **n/a n/a** (n/a)

A leading rationale for having a social security program is that it remedies insufficient saving for retirement due to impulsive spending. Yet despite the fact that hyperbolic discounting has become the conventional way to represent impulsivity in economics research, a major challenge has emerged for the mandatory saving role of social security given that recent research has documented that it is impossible for social security to counteract the insufficient saving that results from hyperbolic discounting. In contrast, I demonstrate both analytically and numerically that social security can remedy impulsive spending, if the idea of an impulsive consumer is conceptualized differently. This alternative specification of impulsivity is represented as an intra-temporal tension between saving optimally and saving too little, which fits within the general context of a naive "dual self" from psychology. These findings can provide theoretical support for the mandatory saving role of social security under the criterion of "new paternalism".

Findley-Impulsivity and Social Security-506.pdf

3:30pm - 4:00pm

On the Spread of Social Protection Systems

Doina Maria Radulescu[1], **Peter Egger**[2], **Nora Strecker**[2]
[1]University of Bern, Switzerland; [2]ETH Zurich
Discussant(s): **T. Scott Findley** (Utah State University)

This paper undertakes an empirical analysis of the adoption of various components of social security systems as well as contribution rates. Apart from economic determinants of the adoption, the empirical analysis features determinants relating to countries' political systems and contagion. We analyse to which extent a country's integration into the international network of economic and political cooperation, the similarity of political systems, and economic interdependence facilitate the adoption of social security-system components between economies. We study the heterogeneous responses of high and middle to low income economies to country-specific as well as foreign countries' fundamentals.

Radulescu-On the Spread of Social Protection Systems-227.pdf

2:30pm - 4:30pm
Tahoe B, Harrahs

B09: Fiscal Policies and Economic Growth

Session Chair: **Michael Stimmelmayr**, ETH Zurich

2:30pm - 3:00pm

Public Expenditures, Innovation and Economic Growth: Empirical Evidence from G20 Countries

Hanusch Horst[1], **Lekha Chakraborty**[2], **Swati Khurana**[3]
[1]University of Augsburg; [2]National Institute of Public Finance and Policy, India and Levy Economics Institute; [3]Vivekananda Institute of Professional Studies, IP University, New Delhi
Discussant(s): **Michael Stimmelmayr** (ETH Zurich)

Against the backdrop of Comprehensive Neo-Schumpeterian Economics framework, the paper examines the effects of productive public expenditures on economic growth. Using a panel data in G-20 countries during 2000-2012, the paper contributes to the specific literature showing which kind of state matters for economic growth, in an extended set of infrastructure, defense and human capital formation variables. The data used was organised from the electronic data base of Government Finance Statistics (IMF), the Infrastructure Reports for the G20 countries and the World Development Indicators (World Bank). The panel results revealed that the impact of innovation on economic growth is relatively higher than other spending variables.

Horst-Public Expenditures, Innovation and Economic Growth-249.pdf

3:00pm - 3:30pm

Identifying And Disentangling The Impact Of Fiscal Decentralization On Economic Growth

Bauyrzhan Yedgenov[1], **Jorge Martinez-Vazquez**[1], **Gustavo Canavire-Bacarreza**[2]
[1]Georgia State University, United States of America; [2]Universidad EAFIT, Medellin, Colombia
Discussant(s): **Miguel Angel Asensio** (Universidad Nacional del Litoral)

This paper investigates the relationship between fiscal decentralization and economic growth while addressing the essential endogeneity issue by using new instrumental variables based on geography using 2SLS method. The instrumental variables are Geographic Fragmentation Index (GFI) and country land area, which we argue are strong and consistent instruments both by economic logic and empirically. We find no significant causal impact of fiscal decentralization on economic growth in second stage for all countries sample and non-high income sample, while for high income sample the impact is negative and significant.

Yedgenov-Identifying And Disentangling The Impact Of Fiscal Decentralization-472.pdf

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3:30pm - 4:00pm

The Effects of (In)Direct Taxation on Growth and Competitiveness

Michael Stimmelmayr
ETH Zurich, Switzerland
Discussant(s): **Bauyrzhan Yedgenov** (Georgia State University)

This paper studies the role of direct and indirect taxes for the competitiveness of firms in a dynamic, open economy, general equilibrium framework. Thereby, it answers the question to which extent a decrease in pay-roll taxes combined with a budget neutral increase in the value added tax is effective to stimulate economic growth through increased competitiveness of domestic vis-a-vis foreign firms. The theoretical analysis is augmented by a quantitative assessment based on a sequence of related reform steps initiated in Germany between 2005 and 2007. The simulation results show that the analysed reform is effective in increasing factor productivity and thus long-run output growth. In addition, the results suggest a reform-induced gain in competitiveness of domestic vis-a-vis foreign firms, as reflected by a non-negligible improvement of the trade balance, thereby confirming the insights associated with the concept of fiscal devaluation.

Stimmelmayr-The Effects of (In)Direct Taxation on Growth and Competitiveness-469.pdf

2:30pm - 4:30pm
Tahoe C, Harrahs

B10: Provision of Public Goods

Session Chair: **Gareth Donald Myles**, University of Exeter

2:30pm - 3:00pm

Self-Enforcing Climate Coalitions And Preferential Free Trade Arrangements

Thomas Kuhn, Radomir Pestow, Anja Zenker
University of Technology Chemnitz, Germany
Discussant(s): **Gareth Donald Myles** (University of Exeter)

In this paper, we discuss the endogenous formation of self-enforcing climate coalitions linked to the issue of a free trade agreement. As a framework, a strategic trade model is used in which countries may discourage greenhouse gas emissions by means of an import tariff on dirty goods. In addition, countries can set an emissions cap being effective on a permit market. Our main focus, however, is on the utilization of terms of trade privileges provided to members of a preferential free trade area. We propose evidence for that the welfare gains of trade liberalization are strongly promoting the formation of climate coalitions. In the parametrical simulation of the model, global emissions as well as climate change damages are found significantly reduced compared to the BAU scenario while global welfare is found significantly higher.

Kuhn-Self-Enforcing Climate Coalitions And Preferential Free Trade Arrangements-470.pdf

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3:00pm - 3:30pm

Voluntary disaster prevention in a metropolitan city: A theoretical analysis

Shintaro Nakagawa
Shimonoseki City University, Japan
Discussant(s): **Anja Zenker** (Chemnitz University of Technology)

If a catastrophic earthquake strikes a metropolitan city, fires could outbreak in densely inhabited areas and burn down an extensive area in the city. I investigate voluntary prevention of disasters by households living in a metropolitan city, where, if a fire may outbreak in a natural disaster, it may burn down the neighboring houses. The main results of the present paper are as follows. First, the probability that all houses resist the disaster is decreasing with the population of the block. Second, under a certain condition, the probability that all houses resist is decreasing with income inequality of the households. Third, in a symmetric economy, a rise in matching grant on disaster prevention financed by a lump-sum tax raises the probability that all houses resist the disaster. Finally, if the population of the block is quite small, an introduction of matching grant may result in overprovision of disaster prevention.

Nakagawa-Voluntary disaster prevention in a metropolitan city-246.pdf

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3:30pm - 4:00pm

Self-Enforcing Agreements under Unequal Nationally Determined Contributions

Emilson Silva
University of Alberta, Canada
Discussant(s): **Shintaro Nakagawa** (Shimonoseki City University)

For a large global economy with normal goods, and an unequal world income distribution, we consider the endogenous formation and stability of an international environmental agreement (IEA) under nationally determined contributions (NDCs). Nations share green R&D efforts and enjoy R&D spillovers if they join an IEA. Nonmembers do not enjoy R&D spillovers. We show that the Grand Coalition is stable under

NDCs if all nations are active carbon abatement and R&D contributors. If some nations are inactive, because they lack sufficient income to provide carbon abatement and R&D, the stable coalition under NDCs is the coalition of all active (wealthier) nations.

Silva-Self-Enforcing Agreements under Unequal Nationally Determined Contributions-113.pdf

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4:00pm - 4:30pm

Corporate environmental contributions: Can they sustain the public interest defence?

Nigar Hashimzade[2], **Gareth Donald Myles**[1]

[1]University of Exeter, United Kingdom; [2]Durham University, United Kingdom

Discussant(s): **Emilson Silva** (University of Alberta)

Corporations make significant direct contributions to environmental improvement and contribute indirectly through process and product innovation. We explore alternative motivations for these expenditures, beyond the assertion that they are an act of business ethics, to identify the material benefits. Three potential motives are explored: environmental improvement causing a direct reduction in production costs; publicized environmental expenditures boosting brand image; and expenditures permitting a "public interest" defence for the operation of a cartel. For the first two motives we analyze the equilibrium and social welfare consequences of the environmental expenditures. The two motives are combined to determine whether the public interest defence can be justified. We show a _decrease_in the number of firms can_increase_the level of environmental expenditures. However, this does not sustain the public interest defence: allowing firms to operate a cartel always reduces environmental expenditures. Welfare falls, and the public interest defence fails.

Hashimzade-Corporate environmental contributions-109.pdf

2:30pm - 4:30pm
Tahoe D, Harrahs

B11: Topics in Optimal Taxation

Session Chair: **Kevin Spiritus**, KU Leuven

2:30pm - 3:00pm

Optimal Taxation in Unionized Labor Markets

Albert Jan Hummel[1,2], **Bas Jacobs**[1,2,3]

[1]Erasmus University Rotterdam, Netherlands, The; [2]Tinbergen Institute; [3]CESifo

Discussant(s): **Kevin Spiritus** (KU Leuven)

We analyze optimal redistributive income taxation in the extensive labor supply model, extended with union-negotiated wages. Unions raise the welfare cost of income redistribution from employed workers to unemployed workers, because higher taxes and unemployment benefits raise wage demands and thereby cause involuntary unemployment. Optimal income/participation taxes should be reduced and participation subsidies (EITC programs) are more likely to be desirable in unionized labor markets. Net participation subsidies are always desirable for workers whose social welfare weight exceeds one, and may even be optimal for workers whose welfare weight is below one. From a social welfare perspective, unions can be useful only in sectors where the workers' welfare weight exceeds one, since in those sectors participation decisions are distorted upwards. Our simulations demonstrate that unions can strongly reduce optimal taxes and transfers and could possibly be useful, but only at the very bottom of the labor market.

Hummel-Optimal Taxation in Unionized Labor Markets-473.pdf

3:00pm - 3:30pm

On Optimal Taxation When Initial Endowments Differ

Terhi Helena Ravaska, **Matti Tuomala**

University of Tampere, Finland

Discussant(s): **Albert Jan Hummel** (Erasmus University Rotterdam)

In this paper we study a multidimensional optimal taxation problem where agents' heterogeneity comes from differences in skill *and* in initial endowment or inherited wealth. In a two-period model with one cohort we derive the optimal distortions for the saving's decision in two- to four-types economies. The government aims to redistribute income from

the high-income and high-initial-wealth type towards the low-income and low-initial-wealth type and to set up a tax system that creates incentives for agents to reveal their true types. Numerical methods are used for solving the binding incentive constraints and optimal consumption-saving-and-work bundles. The preliminary numerical solutions show that a four-type model returns back to two-type model by pooling the types with respect to their skill and that correlation between skill and initial wealth affects significantly whether or not tax savings. .

Ravaska-On Optimal Taxation When Initial Endowments Differ-448.pdf

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3:30pm - 4:00pm

Mirrlees meets Diamond-Mirrlees

Florian Scheuer[1], **Iván Werning**[2]

[1]Stanford University, United States of America; [2]Massachusetts Institute of Technology, United States of America

Discussant(s): **Terhi Helena Ravaska** (University of Tampere)

We show that the Diamond and Mirrlees (1971) linear tax model contains the Mirrlees (1971) nonlinear tax model as a special case. In this sense, the Mirrlees model is an application of Diamond-Mirrlees. We also derive the optimal tax formula in Mirrlees from the Diamond-Mirrlees formula. In the Mirrlees model, the relevant compensated crossprice elasticities are zero, providing a situation where an inverse elasticity rule holds. We provide four extensions that illustrate the power and ease of our approach, based on Diamond-Mirrlees, to study nonlinear taxation. First, we consider annual taxation in a lifecycle context. Second, we include human capital investments. Third, we incorporate more general forms of heterogeneity into the basic Mirrlees model. Fourth, we consider an extensive margin labor force participation decision,

alongside the intensive margin choice. In all these cases, the relevant optimality condition is easily obtained as an application of the general Diamond-Mirrlees tax formula.

Scheuer-Mirrlees meets Diamond-Mirrlees-516.pdf

4:00pm - 4:30pm

The Rate of Return Allowance

Robin Boadway[1], **Kevin Spiritus**[2]
[1]Queen's University, Canada; [2]KU Leuven, Belgium
Discussant(s): **Florian Scheuer** (Stanford University)

Abstract We study the optimality of taxing capital income according to a Rate of Return Allowance (RRA) system as proposed by the Mirrlees Review (2011). In this system, risk-free returns on all assets are tax-exempt, while excess returns of risky assets face a positive tax rate. We adopt a setting in which capital income would be tax-exempt if all assets were risk-free and earned competitive returns. We show that when risky assets with excess returns common to all investors are made available, the RRA system is generally optimal: risk-free returns are tax-exempt while excess returns face a positive tax rate. If excess returns include inframarginal rents, risk-free returns should be taxed. If excess returns increase with the amount of investment so there are advantages of scale, risk-free returns should be subsidized.

Boadway-The Rate of Return Allowance-326.pdf

2:30pm - 4:30pm

Glenbrook/Fallen Leaf, Harrahs

B12: Government Expenditure and Welfare Programs

Session Chair: **Matz Dahlberg**, Uppsala University

2:30pm - 3:00pm

Preventing NEETs - A Panel Data Analysis of a Dutch Reform

Emile Cammeraat, **Egbert Jongen**, **Pierre Koning**
Leiden University, Netherlands, The
Discussant(s): **Matz Dahlberg** (Uppsala University)

We study the impact of stricter welfare conditionality for individuals up to 27 years of age in the Netherlands. This reform, that was introduced in 2009, implied the introduction of a 'work-learn'-offer for young unemployed individuals, so as to avoid them to become NEETs (not in employment, education or training). Using rich administrative data, we performance a difference-in-differences of the reform on the use of welfare benefits and employment. Our main finding is a large negative significant effect of the reform on income from welfare of 63\% for individuals 20--22 years of age and 26\% for individuals of 23--25 years of age. Nevertheless, we find no effect of the reform on employment. This finding is robust across a large number of dependent variables, specifications and demographic groups.

Cammeraat-Preventing NEETs-365.pdf

3:00pm - 3:30pm

Is there an Nth of the Month Effect? The Timing of SNAP Issuance, Food Expenditures, and Grocery Prices

Jacob Goldin[2], **Tatiana Homonoff**[1], **Katherine Meckel**[3]
[1]Cornell University, United States of America; [2]Stanford Law School, United States of America; [3]University of Chicago, United States of America
Discussant(s): **Emile Cammeraat** (Leiden University)

Previous research on the Supplemental Nutrition Assistance Program (SNAP) suggests that participants consume more food on days immediately following benefit issuance, prompting retailers to raise food prices to capture a portion of the transfer. Partly in response to such findings, some have called for states to stagger benefit issuance over multiple days of the month. To study the effect of staggering benefits, we link variation among states in the timing of benefit issuance to a large panel of transaction-level data from households and retailers. We document large intra-month cycles in food expenditures among SNAP-eligible households that closely track state issuance policies. However, we rule out economically significant effects on retailer pricing, which suggests that staggering benefits would not meaningfully shape the incidence of SNAP benefits.

Goldin-Is there an Nth of the Month Effect The Timing of SNAP Issuance, Food Expenditures, and Grocery.pdf

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3:30pm - 4:00pm

Identifying Tax Mimicking in Municipal Health Insurance: Evidence from A Boundary Reform

Michihito Ando[1], **Reo Takaku**[2]
[1]National Institute of Population and Social Security Research; [2]Institute of Health Economics and Policy
Discussant(s): **Tatiana Homonoff** (Cornell University)

This paper examines whether tax mimicking occurs among municipalities in the setting of health insurance tax levels in Japan. To uncover the effects of strategic mimicking behavior among neighboring municipalities, we exploit the fact that insurance tax levels sharply dropped when municipalities experienced municipal amalgamation during the Great Heisei Amalgamation, which took place during the mid-2000s. Utilizing the incidence of neighbor amalgamation as an instrumental variable, we investigate how insurance tax levels in neighbor municipalities affect tax levels in non-amalgamated municipalities. Results suggest that there has been significant mimicking behavior in non-amalgamated municipalities whose insurance tax levels were higher than those of their neighbors before the Great Heisei Amalgamation. The other non-amalgamated municipalities have not responded to changes in neighbor insurance tax levels. We also discuss the issues of internal and external validity in the identification of tax mimicking.

Ando-Identifying Tax Mimicking in Municipal Health Insurance-269.pdf

4:00pm - 4:30pm

Activation Programs for Welfare Recipients: Evidence from Jobbtorg Stockholm

Matz Dahlberg[1], **Eva Mörk**[2], **Ulrika Vikman**[3]
[1]Uppsala University, Sweden, IFAU; [2]Uppsala University, Sweden; [3]IFAU

Discussant(s): **Michihito Ando** (National Institute of Population and Social Security Research)

In labor market evaluation studies, causal analyses build on the assumption of no unmeasured confounding (selection on observables). In this paper we combine population-based administrative registers with survey data containing normally unobserved information on self-reported health and perceived labor market prospects to investigate to what extent the survey data contributes in the estimate of the labor market program effect. The econometric approach builds on the search for sufficient subsets of the union set of variables formed by register data and survey data. We use a covariate selection algorithm to select subsets by sequentially performing variable selection for outcome regression and propensity score models. Using data from Jobcenters in the city of Stockholm targeted at recipients of social assistance we estimate the effect of internship on future social assistance receipt and labor earnings. Our results show that the information revealed via the survey contributes importantly, especially for the labor market outcome.

Dahlberg-Activation Programs for Welfare Recipients-465.pdf

2:30pm - 4:30pm Marla Bay/Emerald Bay, Harrahs	**B13: Energy Markets** Session Chair: **Jan Brueckner**, University of California at Irvine

2:30pm - 3:00pm

Free Riding and Energy Use

Mikael Elinder, **Sebastian Escobar**, **Ingel Petre**
Uppsala universitet, Sweden

Discussant(s): **Jan Brueckner** (University of California at Irvine)

This paper quantifies the reduction in energy consumption when individuals have to pay for electric energy consumption (EEC). Our results capture the causal effect on EEC of letting tenants pay for their own consumption, rather than have unlimited EEC included in the rent. Our estimates are based on comparisons between tenants in two residential areas between 2006 and 2016 (about 1,800 apartments). Treated tenants paid for EEC starting March 1, 2012, while tenants in the control area paid for EEC during the entire period. We see a decrease in EEC among treated tenants when they were informed that they would soon have to pay for their own EEC. The decrease continues until May 2012 when their EEC stabilizes at an approximately 20 percent lower level. Our results have strong policy recommendations. By shifting from collective to individual charging, EEC can be cut without incurring costs on others than the free-riders.

Elinder-Free Riding and Energy Use-418.pdf

3:00pm - 3:30pm

Welfare and Redistribution Effects of Alternative Tariffs In Energy Markets With Solar Power

Doina Maria Radulescu[1], **Nicola Pavanini**[2], **Fabian Feger**[1]
[1]University of Bern, Switzerland; [2]University of Zurich, Switzerland

Discussant(s): **Sebastian Escobar** (Uppsala universitet)

Renewable energy production via PV installations has taken off during the last years. This trend challenges the financing of utilities' infrastructure networks because buildings with PV installations require energy from the network, leaving the fixed costs of grid maintenance unchanged, but contribute less to the grid costs, as they pay volumetric charges and produce their own energy. We propose an alternative tariff scheme to both incentivize PV adoptions and guarantee the sustainability of network costs. We use data on energy consumption, income, and building characteristics for around 180,000 households in the Canton of Bern (Switzerland) in the years 2008-2013 to estimate models of energy demand and PV installation. We identify energy elasticities using a matching design, and we model PV adoption as a dynamic single agent investment framework. Using a counterfactual exercise we find that under a uniform tariff scheme low income households would experience a very small welfare loss.

Radulescu-Welfare and Redistribution Effects of Alternative Tariffs-226.pdf

3:30pm - 4:00pm

Optimal Energy Taxation in Cities

Rainald Borck[1], **Jan Brueckner**[2]
[1]University of Potsdam, Germany; [2]University of California, Irvine, United States of America

Discussant(s): **Nicola Pavanini** (University of Zurich)

This paper presents the first investigation of the effects of optimal energy taxation in an urban spatial setting. Rather than exploring the effects of a carbon tax, our approach is to derive the supplements to existing taxes that are needed to support the social optimum. We then analyze the effects of these taxes on urban spatial structure. Emissions are generated by housing consumption and commute trips, and the optimal tax structure has a tax on commuting, housing floor space, and land. These taxes reduce the extent of commuting and the level of housing consumption while increasing building heights, generating a more-compact city with a lower level of emissions per capita.

Borck-Optimal Energy Taxation in Cities-106.pdf

4:30pm - 5:00pm	**Coffee Break**

5:00pm - 6:00pm **Sand Harbor 1-3, Harrahs**	**Plenary II: Robert W Fairlie (Professor of Economics, University of California, Santa Cruz): Government Training, Affirmative Action, and Entrepreneurship** Session Chair: **Mehmet Serkan Tosun**, University of Nevada, Reno
6:00pm - 8:30pm **Edgewood Golf Course**	**Welcome Reception**

Date: Wednesday, 10/Aug/2016

7:30am - 9:00am **Continental Breakfast and Registration (all day)**

9:00am - 11:00am
Garden I, Harveys

C01: Corporate Tax Elasticities and Incidence

Session Chair: **Simon Loretz**, Institute for Advanced Studies

9:00am - 9:30am

Shifting the Burden of Corporate Taxes - Heterogeneity in Direct Wage Incidence

Nils aus dem Moore
RWI - Rheinisch-Westfälisches Institut für Wirtschaftsforschung, Germany
Discussant(s): **Peter H. Egger** (ETH Zurich)

We contribute to the empirical literature on the effective incidence of corporate income taxation. We focus on the so-called direct incidence via the wage bargaining process and analyze the importance of various dimensions of heterogeneity at the firm-level.

In particular, we investigate the distinct effects of (i) firm size, (ii) level of profitability, and (iii) competition intensity across (iv) different economic sectors. Furthermore, we investigate the relative importance of the surrounding institutional setting. To this end, a firm-level within-country approach is pursued separately for two different economies, namely France and the United Kingdom, which can be regarded as polar cases with respect to the relevant features of the wage-setting process. However, in many respects,

we find surprisingly similar results for both countries. Thereby, this paper also adds to the literature by providing new insights on the degree to which results from previous single-country studies can possibly be generalized.

aus dem Moore-Shifting the Burden of Corporate Taxes-335.pdf

9:30am - 10:00am

Tax Elasticity Estimates for Capital Stocks in Canada

Fatih Yilmaz[1], **Jean-Francois Wen**[2]
[1]Central Bank of Republic of Turkey, Turkey; [2]University of Calgary, Canada
Discussant(s): **Nils Aus Dem Moore** (RWI - Rheinisch-Westfälisches Institut für Wirtschaftsforschung)

We use aggregate Canadian data to estimate short- and long-run elasticities of capital with respect to the user cost of capital, as well as semi-elasticities with respect to the marginal effective tax rate (METR). While semi-elasticities with respect to the METR are rarely reported in the literature, we argue that it is an intuitive and useful guide for tax policy analysis. Unlike previous studies using Canadian aggregate data, we exploit variations in tax policy across, not only time and business sectors, but also inter-provincial variation. The user cost elasticities that we obtain are higher than found in most studies, although they are plausible and comparable to some previous estimates.

Yilmaz-Tax Elasticity Estimates for Capital Stocks in Canada-245.pdf

10:00am - 10:30am

On the Measurement of Investment Types: Heterogeneity in Corporate Tax Elasticities

Simon Loretz[1], **Hendrik Jungmann**[2]
[1]Institute for Advanced Studies, Vienna, Austria; [2]Salzburg Centre of European Union Studies, University of Salzburg
Discussant(s): **Jean-Francois Wen** (University of Calgary)

This paper highlights the importance of different investment motives and how they affect the tax elasticity. In particular, we discuss how to classify investments into non-related, horizontal, vertical and complex types, and how the resulting classification depends on choices made by the researcher. We then examine the effects of host-country corporate taxation on the volume of different investment modes within related firms (i.e., intensive margin). Distinguishing between different investment types we find that non-related investments react stronger to corporate taxation, while horizontal investment are less responsive; we only find significantly negative tax elasticities for the subset of manufacturing industries where horizontal investments are much more prevalent. While the strict classification into the categories vertical or complex investment produces no clear answers, we use an extension of the classification methodology to make the point that by and large stronger business motives for the investment reduce the tax responsiveness.

Loretz-On the Measurement of Investment Types-263.pdf

9:00am - 11:00am
Garden II, Harveys

C02: Tax Compliance and Tax Evasion

Session Chair: **Yulia Paramonova**, Higher School of Economics in Saint Petersburg

9:00am - 9:30am

Distributional Implications of Joint Tax Evasion

Odd Erik Nygård[1], **Joel Slemrod**[2], **Thor Olav Thoresen**[3]
[1]Statistics Norway; [2]University of Michigan; [3]Statistics Norway
Discussant(s): **Yulia Paramonova** (Higher School of Economics in Saint Petersburg)

Both buyers and sellers of goods and services benefit from letting their economic transactions go unrecorded for tax purposes. The supplier reduces his tax burden by underreporting income, whereas the consumer gains from buying a non-taxed, and therefore a lower priced product. The implications of such joint tax evasion for income distribution depend on the amounts evaded, on where the evaders on both sides of the market are found in the income distribution and how the financial gain is split between the suppliers and demanders. We use various data sources to identify magnitudes and the distribution of evaded income among sellers and buyers of goods and services. Results clearly suggest that the tax-evasion-controlled estimate of income inequality in Norway exhibits more income dispersion than official estimates.

Nygård-Distributional Implications of Joint Tax Evasion-173.pdf

9:30am - 10:00am

The Effects of Compliance Reminders on Tax Payments; Quasi-experimental Evidence from Greece

Antonios M. Koumpias
Georgia State University, United States of America
Discussant(s): **Odd Erik Nygård** (Statistics Norway)

This paper examines the effect of phone call and e-mail compliance reminders on payments of overdue tax liabilities in Greece. I use micro-level income tax and value-added tax liabilities for 2013 from administrative individual- and firm-level tax records. I take advantage of the treatment assignment rule, which leads to a discontinuous relationship between tax delinquents with liabilities exceeding 500 euro and the probability they received a reminder phone call. Using a fuzzy-regression discontinuity design, I identify the local average treatment effect of the compliance reminders on payments at the cutoff. To recover the global effect over the entire distribution of liabilities, I use coarsened exact matching. Compliance reminders may lead to increases in tax payments but also backfire in the present of informational asymmetries. The heterogeneous responses confirm the importance of information about the costs of non-compliance and reveal a complementarity with tax agency payment deadline reminder nudges.

Koumpias-The Effects of Compliance Reminders on Tax Payments Quasi-experimental Evidence-459.pdf

10:00am - 10:30am

Revisiting the Tax Compliance Problem Using Prospect Theory

Suranjali Tandon, **Dr. R Kavita Rao**
National Institute of Public Finance and Policy, India
Discussant(s): **Antonios M. Koumpias** (Georgia State University)

Tax compliance is a twofold problem it entails the decision to enter the system by filing of return and declaration of income based on the prevailing policy rates. While the latter has found sufficient discussion in literature the former has been largely of the form country specific studies . These studies have intended to profile the non-filers from the information provided by the tax department. In this paper we model the compliance behaviour by introducing the decision to file along with the decision to declare a certain income. We provide conditions under which an individual would choose to file. These decisions are evaluated within the framework of prospect theory.

Tandon-Revisiting the Tax Compliance Problem Using Prospect Theory-408.pdf

10:30am - 11:00am

Collateral Tax Sanctions: A Way to Correlate Punishment with Ability

Yulia Paramonova
Higher School of Economics in Saint Petersburg, Russian Federation
Discussant(s): **Suranjali Tandon** (National Institute of Public Finance and Policy)

Abstract Suspension of a driver's license, revocation of a passport or a professional license are used by the tax authority as a sanction for failure to comply with tax obligations and referred to as collateral tax sanctions. In his paper, I propose a new rationale for why it may be beneficial to use collateral tax sanctions for the purpose of tax enforcement. By affecting consumption and providing enforcement targeted to a group, collateral tax sanctions may allow the government to impose punishment correlated with individual's earning potential. Such punishment makes the effective tax rates also correlated with individuals' earning potential and, as a result, leads to a more effective redistribution of income. I show that using a collateral tax sanction increases social welfare when the earning potential of the poorest individual in the targeted group is sufficiently higher than the earning potential of the poorest individual in the rest of the population.

Paramonova-Collateral Tax Sanctions-143.pdf

9:00am - 11:00am

Emerald Bay 4, Harveys

C03: Topics in Consumption Taxation

Session Chair: **Antonio Russo**, ETH Zurich

9:00am - 9:30am

Political and Economic Determinants of Consumption Taxes in OECD Countries

Pavel Aleksandrovich Yakovlev, **Francesca Yazbek**
Duquesne University, United States of America
Discussant(s): **Antonio Russo** (ETH Zurich)

Conventional economic wisdom holds that consumption taxes make for a more stable and efficient but also more regressive revenue source than income taxes. Policymakers often consider these tradeoffs in choosing the optimal combination of income and consumption taxes. With no national consumption tax and a heavy reliance on a progressive income tax, the United States stands in stark contrast in its tax policy to the OECD country average. This study estimates the economic and political determinants of OECD countries' reliance on consumption taxes to shed some light on the factors that might affect a country's reliance on consumption taxes.

Yakovlev-Political and Economic Determinants of Consumption Taxes-484.pdf

9:30am - 10:00am

When is the Laffer curve for consumption tax hump-shaped?

Kazuki Hiraga[1], **Kengo Nutahara**[2,3]
[1]Tokai University, Japan; [2]Senshu University, Japan; [3]Canon Institute for Global Studies, Japan
Discussant(s): **Pavel Aleksandrovich Yakovlev** (Duquesne University)

This paper characterizes the shape of the Laffer curve for consumption tax. It is shown that the Laffer curve for consumption tax can be hump-shaped if the utility function is additively separable in consumption and labor supply. Conversely, it cannot be hump-shaped if the utility function is non-separable as reported by previous researchers. It is also shown that the difference in the utility functions has quantitatively significant effects on the peak tax rates of the Laffer curves for labor and capital income taxes.

Hiraga-When is the Laffer curve for consumption tax hump-shaped-314.pdf

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10:00am - 10:30am

Do Prices Respond Differently to Increases and Decreases In Consumption Taxes?

Youssef Benzarti, **Dorian Carloni**
UC Berkeley, United States of America
Discussant(s): **Kengo Nutahara** (Senshu University)

This paper shows that prices respond asymmetrically to increases and decreases in consumption taxes. We combine monthly commodity price data with information on value added tax (VAT) rates across several European countries for the period 1996-2015 and show that prices respond more to VAT increases than to decreases. We explain this asymmetric pass-through to prices with a simple model of fairness based on the findings of kahneman1986fairness. Our finding cautions against using incidence estimates derived in previous studies without accounting for the direction of the tax change and questions the effectiveness of reductions in VAT to achieve redistribution or stimulate economic growth.

Benzarti-Do Prices Respond Differently to Increases and Decreases-240.pdf

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10:30am - 11:00am

Efficiency-enhancing Taxation and Nonlinear Pricing

Antonio Russo[1], **Mohammed Mardan**[2], **Anna D'Annunzio**[3]
[1]ETH Zurich, Switzerland; [2]ETH Zurich, Switzerland; [3]Telenor Research, Norway
Discussant(s): **Youssef Benzarti** (UC Berkeley)

This paper considers commodity taxation in presence of a monopolist that prices access to and usage of a good/service (e.g., with a two-part tariff). We examine how underprovision can be corrected by (ad-valorem) taxation, allowing for differentiated tax rates on usage and access. In a simple model with identical consumers, we show that if the marginal cost is small, the usage fee decreases with the respective tax rate, and consumption increases. Hence, despite underprovision, the optimal ad-valorem tax rate on usage is positive. With heterogeneous consumers, and the monopolist engaging in second-degree price discrimination, we show that a tax targeting usage is optimal when the marginal cost or the information rent left to the high types are small. By contrast, when the marginal cost or the information rent are large, a tax targeting access is optimal. Applications of our model include mobile and fixed telephony, Internet access, energy distribution and transportation.

Russo-Efficiency-enhancing Taxation and Nonlinear Pricing-268.pdf

9:00am - 11:00am

Emerald Bay 5, Harveys

C04: Health Care and Health Outcomes

Session Chair: **Melanie Luhrmann**, Royal Holloway, University of London and IFS

9:00am - 9:30am

The E ffects of Fluoride In The Drinking Water

Linuz Aggeborn[1], **Mattias Öhman**[2]
[1]Uppsala University, Sweden; [2]Uppsala University, Sweden
Discussant(s): **Melanie Luhrmann** (Royal Holloway, University of London and IFS)

Fluoridation is a public policy whose aim is to improve dental health. Although the evidence is clear that fluoride is good for dental health, concerns have been raised regarding potential negative effects on cognitive development. We study the effects of fluoride exposure through the drinking water on cognitive and non-cognitive ability, education and labor market outcomes in a large-scale setting. To estimate the effect we exploit intra-municipality variation of fluoride, stemming from an exogenous variation in the bedrock. First, we investigate and confirm the long-established positive relationship between fluoride and dental health. Second, we find precisely estimated zero effects on cognitive ability, non-cognitive ability and education. We do not find any evidence that fluoride levels below 1.5 mg/l have negative effects. Third, we find evidence that fluoride improves labor market outcome later in life, which confirms that good dental health is a positive factor on the labor market.

Aggeborn-The E ffects of Fluoride In The Drinking Water-144.pdf

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9:30am - 10:00am

Preferences for Sugar and the Eff ects of a Soft Drinks Tax

Martin O'Connell[1], **Pierre Dubois**[2], **Rachel Griffith**[3]
[1]Institute for Fiscal Studies, United Kingdom; [2]Toulouse School of Economics, France; [3]University of Manchester, United Kingdom
Discussant(s): **Linuz Aggeborn** (Uppsala University)

We specify a discrete choice demand model for soft drinks and estimate consumer level preference parameters. Using micro data, we exploit information on many repeated purchases by a sample of consumers to estimate the nonparametric joint distribution of preferences over the mean utility from soft drinks, price and sugar. We use the estimates to consider the impact of introducing a tax on sugary soft drinks. We show despite having the highest willingness to pay for sugar, consumers aged below 21 respond most strongly to the tax. However, response are highly heterogenous across consumers.

O&#39Connell-Preferences for Sugar and the Eff ects of a Soft Drinks Tax-209.pdf

10:00am - 10:30am

Impact Of The Structure Of Household On Demand For Health Care Service And Health Expenditure: In The Case Of Advancement Of Aging In Japan

Yoshihiro Kaneko
National Institute of Population and Social Security Research, Japan
Discussant(s): **Martin O\'Connell** (Institute for Fiscal Studies)

This paper examines the impact of household structures on demand for health into account the diversity of the elderly. First, using the model of Zweifel & Breyer (1997), the author showed that supposing that there are differences in the degree of risk aversion between single households and households having two or more members, the elderly of single households had greater demand for medical care than other household structures. After this analysis, the author conducted the empirical analysis of the effects of household structures of the elderly on demand for health service using the data of Survey on Health and Retirement. It was found that even if income, employment situations, pension benefits and other factors were controlled, the fewer the number of household members was, the probability of the elderly receiving medical care a month and the frequency of the elderly receiving medical care a month increased. This result agrees with the result of model analysis.

Kaneko-Impact Of The Structure Of Household On Demand For Health Care Service And Health Expenditure-342.pdf

10:30am - 11:00am

Increasing incomes, increasing waistlines? The impact of Chinese income growth on nutrition and diet

Melanie Luhrmann, **Lei Lu**
Royal Holloway, University of London and IFS, United Kingdom
Discussant(s): **Yoshihiro Kaneko** (National Institute of Population and Social Security Research)

Understanding the socio-economic gradient in health behaviours is crucial for the design of policies to reduce health inequalities. Recent years have witnessed a sharp increase in obesity worldwide, now one of the largest public health risks. Chinese obesity rates are still comparatively low, but increase fast.

We focus on nutrition as a major determinant of bodyweight, and estimate income effects on nutrition between 1998 and 2006.

We propose an innovative identification strategy based on changes in marginal tax rates, (tax) bracket creep and supply shocks affecting agricultural household production.

Engel curves in calories are hump-shaped with income elasticities around 0.08 at median income. We find significant gender differences: Females are more income elastic towards calories and other macronutrients, poor urban males more towards fat.

Overall, strong income growth in China resulted in a shift in females' diet away from the traditional rice-based one —and little change in diets of males.

Luhrmann-Increasing incomes, increasing waistlines The impact-489.pdf

9:00am - 11:00am
Emerald Bay 6, Harveys

C05: Taxation, Efficiency and Labor Markets

Session Chair: **Katherine Cuff**, McMaster University

9:00am - 9:30am

Labor Market Discrimination And The Efficiency-enhancing Role Of Mandatory Parental Leave

Spencer Bastani[1], **Tomer Blumkin**[2], **Luca Micheletto**[3]
[1]Linnaeus University, Sweden; [2]Ben Gurion University, Israel; [3]University of Milan, Italy
Discussant(s): **Katherine Cuff** (McMaster University)

We study a setting where anti-discrimination legislation prevents firms from differentiating between employees who differ in terms of their family/career orientation. This results in distortions in the labor market where workers are offered contracts with inefficient duration of parental leave. We demonstrate the usefulness of mandatory parental leave rules in mitigating these distortions and derive conditions under which a Pareto improvement is possible. We also characterize the optimal parental leave policy.

Bastani-Labor Market Discrimination And The Efficiency-enhancing Role-445.pdf

9:30am - 10:00am

Optimal Nonlinear Taxation: The Dual Approach

Aart Gerritsen
Max Planck Institute For Tax Law And Public Finance, Munich
Discussant(s): **Luca Micheletto** (University of Milan)

The usual method of solving for an optimal nonlinear tax schedule is that of the primal approach -- first solving for the optimal allocation, and subsequently determining which tax system decentralizes this allocation. While this method is mathematically rigorous, it lacks intuitive appeal. I propose a different method based on the dual approach -- directly solving for the optimal tax system -- which is equally rigorous, while being much closer in spirit to actual tax policy. I show that this approach can easily incorporate preference heterogeneity, as well as individual behavior that is not fully consistent with utility maximization. Over and above solving for the optimum, the dual approach allows one to obtain new insights into the welfare effects of small nonlinear tax reforms outside the optimum.

Gerritsen-Optimal Nonlinear Taxation-160.pdf

10:00am - 10:30am

Environmental Tax Reform In A Federation With Rent-Induced Migration

Jean-Denis Garon
ESG-UQAM, Canada

Discussant(s): **Aart Gerritsen** (Max Planck Institute Munich)

We study the welfare effects of a revenue-neutral environmental tax reform in a federation. The reform consists of increasing a tax on a polluting input and reducing that on labor income. Households are fully mobile within the federation. Regions are unequally endowed with a nonrenewable natural resource. Resource rents are owned by regions and are redistributed to citizens on a residence basis, which generates a motive for inefficiently relocating to the resource-rich jurisdiction. Since the resource-poor region has a higher marginal product of labor than does the resource-rich region in equilibrium, the tax reform mitigates the scope of inefficient migration. This positive welfare effect may significantly reduce abatement costs of pollution and calls for higher environmental tax, as compared with a model where migration is assumed away.

Garon-Environmental Tax Reform In A Federation With Rent-Induced Migration-440.pdf

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10:30am - 11:00am

Optimal Unemployment Insurance and Redistribution

Katherine Cuff[1], Robin Boadway[2]
[1]McMaster University, Canada; [2]Queen's University, Canada

Discussant(s): **Jean-Denis Garon** (ESG-UQAM)

In this paper, we characterize the optimal linear income tax and unemployment insurance in a search-matching framework where both voluntary and involuntary unemployment are endogenous and Nash bargaining determines wages. We first consider the case of individuals of a single productivity type and show that is optimal to have a positive linear income tax even if search is efficient, that is, the Hosios condition is satisfied. We then extend the model to allow for different productivity types so there is a redistributive role for the income tax between individuals of differing productive abilities. Finally, we incorporate a role for self-insurance through a savings decision by extending the static framework to two periods. Unemployment insurance can then smooth consumption between employment and unemployment when individuals are precluded from self-insuring by liquidity constraints.

Cuff-Optimal Unemployment Insurance and Redistribution-401.pdf

9:00am - 11:00am
Tallac, Harveys

C06: Transfer Pricing

Session Chair: **Andreas Oestreicher**, Georg-August-Universität Göttingen

9:00am - 9:30am

How much is too much? Evaluating Factors of Transfer Pricing

Andrea Lassmann, Benedikt Rydzek
ETH Zurich, Switzerland

Discussant(s): **Andreas Oestreicher** (Georg-August-Universität Göttingen)

In this paper we analyze different margins of profit shifting. We argue that concealment costs are increasing in the price difference between the transfer priced charged for within firm transactions and the arms-length price as well as the quantity of goods traded. We use Swiss firm level transaction data to identify determinants of the extensive and intensive margins in terms of prices and quantities traded. Moreover, we structurally estimate the concealment cost function which allows us to perform counter-factual analysis.

Lassmann-How much is too much Evaluating Factors of Transfer Pricing-177.pdf

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9:30am - 10:00am

Transfer Pricing as Tax Avoidance under Different Legislative Schemes

Carolin Holzmann
Friedrich-Alexander-University Erlangen-Nuremberg, Germany

Discussant(s): **Andrea Lassmann** (ETH Zurich)

This paper investigates tax-motivated transfer pricing of multinational enterprises (MNEs) before and after reforms of transfer pricing legislation. The reforms introduced and tightened obligatory documentation requirements for transfer prices to enforce that MNEs set internal transfer prices at an arm's-length. The results provide empirical evidence for tax-motivated transfer pricing during the entire first decade of the 2000s. Interestingly, MNEs target different types of service transactions for profit shifting via transfer pricing depending on the at the time applicable anti-shifting legislation. The findings show transfer pricing legislation to be effective in case of service transactions with observable market values. In contrast, the results clearly reveal the short-comings of transfer pricing legislation in case of intellectual property (IP) where an effective enforcement of the arm's-length principle is very limited as market values are unobservable. Here, the findings suggest the need for a change in tax policy in order to effectively prevent base erosion.

Holzmann-Transfer Pricing as Tax Avoidance under Different Legislative Schemes-280.pdf

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10:00am - 10:30am

Do The Existence And Form Of Arbitration Impact Transfer Pricing Decisions?

Gerrit Kimpel, Andreas Oestreicher, Luisa Prolingheuer
Georg-August-Universität Göttingen, Germany

Discussant(s): **Carolin Holzmann** (Friedrich-Alexander-University Erlangen-Nuremberg)

This paper examines possible effects of a binding arbitration procedure on transfer pricing decisions. To this end, we look at the behavior of participants in an economic experiment. In order to mitigate double taxation they can apply either for a mutual agreement procedure, or for binding arbitration following an "independent opinion approach" or a "last best offer approach". In a series of treatments, varying transaction volumes and tax rate differentials are applied.

Our results show that both the existence and the form of an arbitration proceeding are re-flected in transfer pricing decisions. Where arbitration is available, there is an increased probability that the taxpayer will apply for a mutual agreement procedure in order to avoid possible double taxation resulting from transfer pricing inconsistencies. Furthermore, this existence of arbitration proceedings makes it more likely that mutual agreement procedures will lead to settlements.

Kimpel-Do The Existence And Form Of Arbitration Impact Transfer Pricing Decisions-331.pdf

9:00am - 11:00am
Zephyr, Harveys

C07: Investment and Uncertainty

Session Chair: **Naomi Feldman**, Federal Reserve Board

9:00am - 9:30am

The Real Effects of the Removal of Government Guarantees in the Banking Sector: The Case of the German Guarantor Liability

Susanne Simone Wildgruber[1], **Christa Hainz**[2]
[1]LMU Munich, Center for Economic Studies (CES), Germany; [2]ifo Institute
Discussant(s): **Naomi Feldman** (Federal Reserve Board)

This paper studies the effects of government guarantees on firms' Investment behavior by analysing the removal of the Guarantor Liability in the German banking sector in 2001. As the policy change only affected public banks, we employ a difference-in-differences analysis in order to identify effects on firms being customers of public banks as opposed to firms being affiliated with private banks. The paper uses survey data for the period 1998 to 2007, obtained from the ifo Investment Test. Our results indicate that corporate customers of public banks feared a deterioration in their financing possibilities for planned investments in the immediate aftermath of the policy change. This negative effect, however, was not persistent over time, possibly due to further policy measures which will be discussed in the paper.

Wildgruber-The Real Effects of the Removal of Government Guarantees-347.pdf

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9:30am - 10:00am

Investment and Employment Responses to State Adoption of Federal Accelerated Depreciation Policies

Eric Ohrn
Grinnell College, United States of America
Discussant(s): **Susanne Simone Wildgruber** (LMU Munich, Center for Economic Studies (CES))

In the 2000s, the U.S. federal government implemented bonus depreciation and significantly increased Section 179 depreciation allowances in an effort to stimulate business investment and employment. When the policies were enacted and enhanced, many states adopted bonus depreciation and increased their state Section 179 allowances. Other states chose to leave their depreciation polices unaltered. This paper uses this variation to estimate investment and employment responses to state adoption of the federal policies. The analysis suggests that both state bonus and state 179 allowances significantly enhance state-level investment. However, an increase in either policy significantly decreases the impact of the other. Neither policy affects employment. These results are consistent across sub-samples chosen to mitigate selection concerns.

Ohrn-Investment and Employment Responses to State Adoption-390.pdf

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10:00am - 10:30am

Do publicly-traded firms invest myopically? Evidence from U.S. tax returns

Naomi Feldman[1], **Jesse Edgerton**[2], **Laura Kawano**[3]
[1]Federal Reserve Board, United States of America; [2]JP Morgan; [3]US Department of Treasury
Discussant(s): **Eric Ohrn** (Grinnell College)

It is often claimed that pressure from outside investors causes firms with publicly-traded stock to sacrifice long-term investments to improve short-term financial results. We investigate this claim using data from the US tax returns of public and private firms for the first time. While firms with publicly-traded stock account for 73.3% of aggregate assets and 60.6% of sales, we find that they account for 66.3% of long-term physical investment and 74.8% of R&D spending. These figures suggest that, on average, public stock markets facilitate long-term investments, perhaps due to the correlation of longer investment horizons with larger project scales that benefit from public markets' abilities to pool funds and diversify risks. However, on the margin, it

is still possible that policies or other shocks that induce firms to be public will induce myopic behavior. We illustrate this mechanism in a simple model.

Feldman-Do publicly-traded firms invest myopically Evidence-392.pdf

9:00am - 11:00am
Tahoe A, Harrahs

C08: Collective Decision-Making

Session Chair: **Mattias Nordin**, Uppsala University

9:00am - 9:30am

Puzzling Evidence on Voter Turnout

Mats Johan Ekman
Hanken School of Economics, Finland
Discussant(s): **Mattias Nordin** (Uppsala University)

In this empirical analysis of voting patterns in five countries on days when one or more national referenda were held, voter turnout appears to decline in the number of concurrent referenda, in contrast to standard theories' predictions and regardless of method used to hold constant the quality of the referenda. Multiple concurrent referenda imply "quantity discounts" as one may vote on more ballots in one visit to the polling station. They should also draw more voters due to the wider range of interests attracted when more issues are up for vote. Yet, none of this seems to happen in the data. More recent developments, such as rule-

utilitarian and information-based theories of voting, fare similarly poorly in light of the evidence presented in this article; an extension on social theories of voting does better.

Ekman-Puzzling Evidence on Voter Turnout-344.pdf

9:30am - 10:00am

Voter Fatigue and Turnout

Sebastian Garmann

TU Dortmund University, Germany

Discussant(s): **Mats Johan Ekman** (Hanken School of Economics)

Influential scholars have argued that frequent elections lead to voter fatigue and can therefore be directly responsible for low turnout in countries characterized by frequent contests. However, other theories predict that frequent elections can even increase turnout. The existing empirical evidence is problematic as it simply correlates election frequency

with turnout. By contrast, I exploit a natural experiment in the German state of Hesse, where voters from different municipalities faced the same electoral contest but experienced different election frequency, due to the staggered timing of some local elections. I find that in cases where another election has happened soon before the studied contest, voter turnout was significantly reduced. This effect is stronger when the election

is deemed less important in the eyes of the voters. Election frequency thus might also partly explain the wide turnout gap between first- and second-order elections, as suggested by Lijphart (1997).

Garmann-Voter Fatigue and Turnout-315.pdf

10:00am - 10:30am

Magical Economic Policy: An Explanation of Fiscal Fatigue

Shigeki Kunieda

Hitotsubashi University, Japan

Discussant(s): **Sebastian Garmann** (TU Dortmund University)

The delay of painful, but necessary fiscal reforms ("fiscal fatigue") is often caused by the political parties proposing magical economic policies, namely implausible, but very happy economic policies. In this paper, I consider why magical economic policies are chosen by voters and picked up by political parties. Voters may choose implausible policies if the policies seem to provide very happy results when they succeed. Political parties may pick up magical economic policies as their proposals when they attach more weight to winning the immediate election even though the failures of their proposed policies may cause serious damage to image of the political parties in future. Even when economic crisis is deteriorating after failures of magical economic policies, voters may choose another magical economic policy, since more painful reform is required to stop deeper economic crisis by realistic economic policies. Independent fiscal institutions are effective to prevent these problems.

Kunieda-Magical Economic Policy-393.pdf

10:30am - 11:00am

Political Selection under Proportional Representation

Mattias Nordin

Uppsala University, Sweden

Discussant(s): **Shigeki Kunieda** (Hitotsubashi University)

In this paper, I analyze how parties decide which politicians will represent them, a question that has been difficult to investigate empirically. By analyzing the 2014 Swedish parliamentary election, I test whether politicians are ranked higher on the election ballot if they have policy positions that are popular within the party or among voters. To do so, I use unique and detailed data on the policy positions of parties, political candidates and voters, all measured on the same scale. I find that candidates ranked high on the election ballot are more likely to hold policy positions that conform to the official party position, whereas I do not find any relationship between ballot rank and policy closeness to voters. The findings therefore indicate that candidates that are popular within the party, rather than among voters, are more likely to be ranked high on the election ballot.

Nordin-Political Selection under Proportional Representation-438.pdf

9:00am - 11:00am
Tahoe B, Harrahs

C09: Minimum Wage Policy

Session Chair: **Eliav Danziger**, Simon Fraser University

9:00am - 9:30am

The effect of minimum wages on health in China

Dan Liu[1,2], **Gilberto Turati**[3]

[1]University of York, United Kingdom; [2]Catholic University of the Sacred Heart, Italy; [3]University of Torino, Italy

Discussant(s): **Eliav Danziger** (Simon Fraser University)

As required by the Provisions on Minimum Wages, minimum wages must be adjusted at least once every two years in all provinces in China. We exploit geographical and time variation in minimum wages to study how real minimum wages affect population health in China. Using data from the Study on Global Aging and Adult Health (SAGE), we estimate the OLS and the ordered probit models, controlling for different sets of covariates as robustness checks. Additionally, we estimate the health effects of one-year and two-year lagged real minimum wages separately. We find that real minimum wages are negatively and significantly related to population health in the short and the long run, a result that might be explained by the role of more stressful working conditions as a consequence of a higher minimum wage.

Liu-The effect of minimum wages on health in China-201.pdf

9:30am - 10:00am

Lobbying for Minimum Wages

Josip Lesica
McMaster University, Canada

Discussant(s): **Dan Liu** (University of York)

This paper illustrates how the level of a minimum wage reflects the interaction between economic and political factors and when the policymaker will be successfully lobbied to increase the minimum wage. When labor demand elasticity is large, so the minimum wage 'bite' is strong, lobbying is successful in inducing the policymaker to set the minimum wage in accordance with her political preference; a more business (labor) friendly policymaker reduces (increases) the minimum wage. However, lobbying can also reverse the policymaker's ideological preference and induce a business (labor) friendly government to increase (reduce) the minimum wage. Panel data regressions for Canadian provinces provides support for theoretical predictions. Controlling for unobserved province and year effects, and various province specific, time varying factors, results indicate that real minimum wage decreases in skill-adjusted union density and a measure of political ideology. Larger labor demand elasticity reinforces the influence of political ideology in the presence of lobbying.

Lesica-Lobbying for Minimum Wages-132.pdf

10:00am - 10:30am

Estimating a Structural Equilibrium Job Search Model to Evaluate the Introduction of a Uniform Minimum Wage in Germany

Maximilian J. Blömer[1], **Nicole Guertzgen**[2], **Laura J. Pohlan**[1,3], **Holger Stichnoth**[1], **Gerard J. van den Berg**[3]
[1]Centre for European Economic Research, Germany; [2]IAB Nuremberg, University of Regensburg; [3]University of Mannheim

Discussant(s): **Josip Lesica** (McMaster University)

In this study, we estimate an econometric structural equilibrium search model to ex-ante simulate the introduction of a uniform minimum wage in the German labour market. We use the model to gain a better understanding about the magnitude of search frictions and, thus, the extent of employers market power in the German low-wage sector. To accommodate a wide range of employment responses, we estimate the model by Bontemps et al. (1999), which allows for negative, zero or positive employment effects. We take the model to large-scale administrative German data, and validate our estimations by comparing our predictions to the results from quasi-experimental studies on the introduction and changes in sectoral minimum wages. We then use the model to conduct a variety of policy simulations, including the systematic variation of general minimum wages over a large range of values.

- Note that this paper cannot be downloaded. Please contact the author(s).

10:30am - 11:00am

The Optimal Graduated Minimum Wage and Social Welfare

Eliav Danziger[1], **Leif Danziger**[2]
[1]Simon Fraser University, Canada; [2]Ben-Gurion University, Israel

Discussant(s): **Maximilian Joseph Blömer** (Centre for European Economic Research)

This paper analyzes the effects of introducing a graduated minimum wage in a model with optimal income taxation in which a government seeks to maximize social welfare. It shows that the optimal graduated minimum wage always increases the low-productivity workers' consumption and brings it closer to the first-best. The paper also describes how the graduated minimum wage in a social welfare optimum depends on important economy characteristics such as the government's revenue needs and the numbers and productivities of the different types of workers.

Danziger-The Optimal Graduated Minimum Wage and Social Welfare-496.pdf

9:00am - 11:00am
Tahoe C, Harrahs

C10: Fiscal Policy in a Federation

Session Chair: **Clemens Fuest**, Ifo Institute and University of Munich

9:00am - 9:30am

Accountability And Subnational Tax Autonomy: When Do Politicians Lose Fiscal Interest?

Willem Sas
Center for Economic Studies, KU Leuven, Belgium

Discussant(s): **Clemens Fuest** (Ifo Institute and University of Munich)

Devolving tax authority to lower-level jurisdictions in a federation is often argued to better align the actions of politicians with the wishes of voters. In this paper, we derive the conditions for tax autonomy to bring about local growth-enhancing policies -as the fiscal incentives approach of Weingast (2009) would predict- and investigate whether this is indeed beneficial to voter welfare. We add to the literature by modelling a multi-tiered, political agency setting where growth-enhancing policies produce additional public revenues. Rent-seeking incumbents can then improve their chances of re-election, by setting such policies and using the additional incomes for pork-barrel targeting. Surprisingly, the resulting ``discipline effect'' proves stronger in a unitary setting, where all of public provision is kept at the center. However, given a certain degree of decentralisation and a sufficient amount of rent-seeking politicians, expanding local tax autonomy unambiguously boosts voter welfare.

Sas-Accountability And Subnational Tax Autonomy-493.pdf

9:30am - 10:00am

On Regional Integration, Fiscal Income, And GDP Per Capita

Yutao HAN[1], **Zhen SONG**[2]

[1]University of International Business and Economics, Beijing, China; [2]Central University of Finance and Economics, Beijing, China

Discussant(s): **Willem Sas** (KU Leuven)

This paper investigates the economic impacts of regional integration on a small jurisdiction in a dynamic fiscal competition environment. The trade-offs between the economic benefits and the loss of policy flexibility resulting from Integration are analyzed from the perspectives of scal revenue and GDP per capita. If fiscal revenue is concerned, the loss of flexibility can dominate the other integration effects. However, if GDP per capita is concerned, it has no impact.

HAN-On Regional Integration, Fiscal Income, And GDP Per Capita-417.pdf

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10:00am - 10:30am

State-Dependent Effects of Fiscal Policy in OECD and EU countries

Jernej Mencinger[1], **Aleksander Aristovnik**[1], **Miroslav Verbič**[2]

[1]Univesity of Ljubljana, Faculty of Administration, Slovenia; [2]Univesity of Ljubljana, Faculty of Economics, Slovenia

Discussant(s): **Yutao HAN** (University of International Business and Economics)

In this paper, we take account of an evaluation of the short- and medium-term effects of the transmission mechanism of fiscal policy in EU and OECD countries and their dependence on the state of the economy. The results show that the responses of output differ remarkably across models. In the linear model, the average response is positive and statistically significantly differs from zero. In contrast, the response of output in a recessionary regime is robustly positive for up to four semesters, whereas fiscal multipliers in an expansionary regime are much weaker, in fact negative at some horizons. The conclusions apply to both groups of countries and are in line with the Keynesian assumptions. The evaluation of multipliers regarding their dependence on the state of the economy can provide a more unbiased and hence misleading measure about their size and magnitude, which can be used by policymakers when seeking to conduct an appropriate fiscal policy.

Mencinger-State-Dependent Effects of Fiscal Policy in OECD and EU countries-386.pdf

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10:30am - 11:00am

How Can a Country ‘Graduate’ From Procyclical Fiscal Policy? Evidence From China

Clemens Fuest[1], **Jing Xing**[2]

[1]Ifo Institute and University of Munich, Germany; [2]Shanghai Jiao Tong University

Discussant(s): **Jernej Mencinger** (Univesity of Ljubljana, Faculty of Administration)

This study analyzes the cyclicality of fiscal policies in China during the period 1978-2013. We find that the cyclicality of local government spending in China significantly affects the cyclicality of total government spending. By employing both time-series and province-level panel data, we show that local budgetary government spending was strongly procyclical during the 1980s, but it became counter-cyclical with respect to nationwide output fluctuations and acyclical with respect to region-specific output shocks since the mid-1990s. We argue that these are likely to be consequences of the 1994 fiscal reform, which revamped the fiscal relations between the central and local governments, reduced the procyclicality of local government budgetary revenue and brought in counter-cyclical intergovernmental transfers. Findings of this study contribute to the debate on how developing countries, in particular those in fiscal federations, could reduce the procyclicality of their fiscal policies.

Fuest-How Can a Country ‘Graduate’ From Procyclical Fiscal Policy Evidence From China-103.pdf

9:00am - 11:00am
Tahoe D, Harrahs

C11: Wealth Distribution and Taxation

Session Chair: **Thor Olav Thoresen**, Statistics Norway

9:00am - 9:30am

The Implications of Richer Earnings Dynamics for Consumption, Wealth and Welfare

Mariacristina De Nardi[1,2], **Giulio Fella**[3], **Gonzalo Paz Pardo**[1]

[1]University College London, United Kingdom; [2]Federal Reserve Bank of Chicago, United States; [3]Queen Mary University of London, United Kingdom

Discussant(s): **Thor Olav Thoresen** (Statistics Norway)

Earnings dynamics are much richer than those typically used in macro models with heterogenous agents. This paper provides multiple contributions. First, it proposes a simple non-parametric method to model rich earnings dynamics that is easy to estimate and introduce in structural models. Second, it applies our method to estimate a nonparametric earnings process using two data sets: the Panel Study of Income Dynamics and a large, synthetic, data set that matches the dynamics of the U.S. tax earnings. Third, it uses a life cycle model of consumption to compare the consumption and saving implications of our two estimated processes to those of a standard AR(1). We find that, unlike the standard AR(1) process, our estimated, richer earnings process generates an increase in consumption inequality over the life cycle that is consistent with the data and better fits the savings of the households at the bottom 60%of the wealth distribution.

De Nardi-The Implications of Richer Earnings Dynamics for Consumption, Wealth and Welfare-321.pdf

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9:30am - 10:00am

Behavioral Responses to Wealth Transfer Taxation: Bunching Evidence from Germany

Ulrich Glogowsky

University of Munich, Germany

Discussant(s): **Gonzalo Paz Pardo** (University College London)

Increasing inequality in recent decades has triggered a heated debate on whether wealth transfer taxation is an appropriate countermeasure to the perpetuation of inequality. A major factor in taking progress in this discussion is understanding how taxpayers respond to incentives generated by wealth transfer taxes. Using administrative tax records from Germany, this paper investigates behavioral responses to a very large transfer tax kink in the inheritance and inter vivos gift tax schedule. We find sharp bunching of taxable inheritances and even larger bunching of taxable inter vivos gifts. However, because the kink is large, the underlying taxable inheritance and gift elasticities are moderate and amount up to 0.11. In line with the notion of accidental bequest models, further evidence suggests that the amount of wealth bequeathed is uncertain. This may explain the small size of the inheritance elasticities. Overall, the present paper supports the hypothesis that wealth transfers are inelastic.

Glogowsky-Behavioral Responses to Wealth Transfer Taxation-323.pdf

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10:00am - 10:30am

Gifts and Inheritances: How Do They Shape the Wealth Distribution?

Marten von Werder
Freie Universität Berlin, Germany

Discussant(s): **Ulrich Glogowsky** (University of Munich (LMU))

Using Data from the Socio-Economic Panel, I estimate the impact of inter-

generational transfers on the level and the inequality of wealth. I particularly focus on the propensity of households to save from gifts and inheritances: While many studies on wealth inequality assume that these transfers are fully saved, households typically add only a certain share of them to their previously accumulated wealth. I find that households on average save only around 60 Cents of an inherited Euro. Quantile regression estimates then reveal that the propensity to save increases almost monotonically over the wealth distribution. I then resort to the quantile regression-based decomposition approach suggested by Machado and Mata (2005) in order to illustrate wealth distributions with and without transfers. I however do not find evidence that the heterogeneity in the propensity to save translates in a disequalizing effect of intergenerational transfers on the wealth distribution.

von Werder-Gifts and Inheritances-327.pdf

10:30am - 11:00am

Distribution of the Annual Wealth Tax on Lifetime-Dynastic Income

Elin Halvorsen[1,3], **Thor Olav Thoresen**[1,2]
[1]Research Department, Statistics Norway, Norway; [2]Department of Economics, University of Oslo, Norway; [3]Norges Bank

Discussant(s): **Marten von Werder** (Freie Universität Berlin)

Recent books by Thomas Piketty (Piketty, 2014) and Anthony Atkinson (Atkinson, 2015) have brought the annual wealth tax back on the policy agenda. Both authors argue for using the annual wealth tax to supplement the redistributional effects of the income tax. However, when measured against annual income, the wealth tax is often not seen as a pronounced distributional backstop mechanism. Life cycle developments and other characteristics of the income and wealth processes imply that agents may be in a wealth tax position when income is relatively small. In this paper we discuss to what extent the depiction of the distribution of the wealth tax is altered by using an alternative concept of well-being, namely lifetime income in the dynasty. The role of the wealth tax as a distributional supplement to the income tax is seen as more advantageous under the alternative framework.

Halvorsen-Distribution of the Annual Wealth Tax on Lifetime-Dynastic Income-427.pdf

9:00am - 11:00am

Glenbrook/Fallen Leaf, Harrahs

C12: Property Taxes

Session Chair: **Rob Wassmer**, Sacramento State

9:00am - 9:30am

Shifting the tax burden from labor to property: The case of Germany

Markus Tiefenbacher, **Jörg Paetzold**
Salzburg Centre of European Union Studies, University of Salzburg, Austria

Discussant(s): **Rob Wassmer** (Sacramento State)

Contrary to recommendations of the public finance literature and international institutions, a persistently high tax wedge on labor is observed in Europe. Simultaneously, the scope for shifting taxes to more growth-friendly revenue sources appears underused. This motivates our simulation of a revenue-neutral property tax reform for Germany, a country in which property tax receipts are particularly low. More precisely, we assess by how much social insurance contributions (SIC) can be reduced when Germany switches from its current property tax scheme based on outdated cadastral values to one based on market values. In order to make such a simulation possible, we match property related information with the input dataset of the tax-benefit microsimulation model EUROMOD. Our results suggest that the implicit tax rate on labor could be reduced from 37,2% to 36,5%. Redistributive effects of three different scenarios tend to be modest and depend crucially on the design of SIC reduction.

Tiefenbacher-Shifting the tax burden from labor to property-343.pdf

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9:30am - 10:00am

State and Local Property, Income, and Sales Tax Resilience: Estimates from Dynamic Heterogeneous Data Panels

John Edwin Anderson
University of Nebraska-Lincoln, United States of America

Discussant(s): **Markus Tiefenbacher** (Salzburg Centre of European Union Studies)

Stability properties of state and local property, income and sales taxes are estimated using U.S. Census data over the period 1967-2012. Estimates of long-run and short-run resilience are produced using Ordinary Least Squares (OLS) and Dynamic OLS (DOLS) methods as well as panel time series methods including Dynamic Fixed Effects (DFE). Newer Mean Group (MG) and Pooled Mean Group (PMG) estimators designed for use with dynamic heterogeneous panels are also used. Property and sales tax systems are found to respond to changes in state GDP less than proportionally, with property taxes being the more stable. States with income taxes have long-run resilience greater than unity. Error correction estimates indicate that sales tax systems are the quickest to respond to GDP shocks, returning to their long-run equilibrium levels. Property tax systems are also relatively quick to respond, but income tax systems have much slower error correction processes.

Anderson-State and Local Property, Income, and Sales Tax Resilience-305.pdf

10:00am - 10:30am

What Determines the Level of Local Business Property Taxes?

David Franklin Merriman
University of Illinois Chicago, United States of America

Discussant(s): **John Edwin Anderson** (University of Nebraska-Lincoln)

Conventional economic wisdom holds that the optimal level of business taxes recovers the cost of public services to businesses. I present an alternative model and derive conditions under which a self-interested decisionmaker picks tax rates to maximize an objective function that depends on business tax revenues, workers' earnings, and business profits. I show that, in this model, optimal business tax revenues may either be more or less than the cost of public services to businesses.

Data from approximately 70 large U.S. cities over a 16-year period reveals that the mean ratio of commercial-to-home effective property tax rates is about 1.6. I report results from a large variety of regressions to test the conventional wisdom and alternative theory. These regressions provide no support for the conventional wisdom—commercial ETRs are inversely, not directly, related to the share of spending on business public services. There is mixed evidence about the alternative hypothesis.

Merriman-What Determines the Level of Local Business Property Taxes-130.pdf

10:30am - 11:00am

Further Empirical Evidence on Property Taxation and the Occurrence of Urban Sprawl

Robert William Wassmer
Sacramento State, United States of America

Discussant(s): **David Franklin Merriman** (University of Illinois Chicago)

Economic theory indicates that as the effective rate of taxation on residential property rises, a negative influence on capital intensity could occur through less multi-story structures built (an Improvement Effect). Alternatively, a positive influence on capital intensity could occur through housing consumers switching to smaller houses built on smaller lots (a Dwelling Size Effect). An empirical assessment of this issue is therefore necessary; however, methodological concerns in earlier empirical analyses cast doubt on the reliability of findings. Regression results indicate that a higher rate of effective residential property taxation increases the amount of land used for a given population (greater sprawl).

Wassmer-Further Empirical Evidence on Property Taxation and the Occurrence-107.pdf

9:00am - 11:00am

Marla Bay/Emerald Bay, Harrahs

C13: Sin Goods

Session Chair: **Kate Smith**, Institute for Fiscal Studies

9:00am - 9:30am

Regulating Tobacco Consumption

Luca V.A. Colombo[1], **Umberto Galmarini**[2,3]
[1]Università Cattolica del Sacro Cuore, Italy; [2]Università degli Studi dell'Insubria, Italy; [3]IEB -- Barcelona, Spain

Discussant(s): **Kate Smith** (Institute for Fiscal Studies)

We examine policies directed at regulating tobacco consumption through three types of instruments: (i) an excise tax hindering consumption by increasing the price of cigarettes, (ii) prevention programs helping consumers to make choices that are more time consistent when trading-off the current pleasure from smoking and its future health harms, and (iii) smoking bans directly restricting consumption. First, on normative grounds, we focus on the optimal design of public policies maximizing the economy's surplus. Second, in a positive perspective, we investigate how the lobbying activities of the tobacco industry, of smokers, and of anti-tobacco organizations may distort government intervention.

Colombo-Regulating Tobacco Consumption-196.pdf

9:30am - 10:00am

Does cigarette tax affect consumption of alcohol?: Evidence from the Korean National Health Insurance Cohort DB

Seng Eun Choi
Korea Institute of Public Finance, Korea, Republic of (South Korea)

Discussant(s): **Luca V.A. Colombo** (Università Cattolica del Sacro Cuore)

The paper examines whether Korean cigarette tax increase in 2005 affects alcohol consumption. Using Korean National Health Insurance Cohort DB, the paper shows that cigarette tax in 2005 increases alcohol consumption and obesity. The effect of cigarette tax increase is estimated to be larger in the longer run. The estimated result implies that alcohol consumption and cigarette consumption may be substitute. Smokers tend to drink more than non-smokers on average, and when they reduce smoking, they seem to replace reductions in smoking to drinking. It suggests that raising cigarette tax may be not beneficial on health. Effective tobacco control policy may call for liquor tax as well, along with cigarette tax increase. The relative size of increase in liquor tax and cigarette tax may depend on the cross price elasticity of cigarette and alcohol.

Choi-Does cigarette tax affect consumption of alcohol-243.pdf

10:00am - 10:30am

Corrective Taxes and Consumer Heterogeneity in the Alcohol Market

Rachel Griffith, Martin O'Connell, Kate Smith
Institute for Fiscal Studies, United Kingdom

Discussant(s): **Seng Eun Choi** (Korea Institute of Public Finance)

Correcting externalities motivates many government interventions. The marginal external costs of consumption often vary across consumers; policy e ffectiveness therefore depends on consumers' diff erential responses. We exploit information on consumers' purchase histories, which also proxy for their externality, to capture di fferential substitution patterns in a discrete choice demand model applied to the UK alcohol market. We fi nd that although heavy drinkers are more price sensitive, they have a strong taste for alcohol, which mitigates attempts to reduce their consumption by increasing alcohol tax rates. Our approach relaxes common assumptions on the distribution of consumer preferences, with important implications for market elasticities.

Griffith-Corrective Taxes and Consumer Heterogeneity in the Alcohol Market-129.pdf

11:00am - 11:30am **Coffee Break**

11:30am - 12:30pm
Sand Harbor 1-3, Harrahs

Plenary III: Dietmar Harhoff (Director, Max Planck Institute for Innovation and Competition): Innovation and Taxation
Session Chair: **Clemens Fuest**, Ifo Institute and University of Munich

12:30pm - 2:00pm **Lunch**

2:00pm - 4:00pm
Garden I, Harveys

D01: Multinational Firms

Session Chair: **Olli Ropponen**, VATT Institute for Economic Research

2:00pm - 2:30pm

Are MNEs paying their fair share?

Peter Egger[1], Benedikt Rydzek[2], Nora Strecker[2]
[1]ETH Zurich, Switzerland, CEPR, CESifo, Oxford University Centre of Business Taxation; [2]ETH Zurich, Switzerland

Discussant(s): **Olli Ropponen** (VATT Institute for Economic Research)

In this paper we analyze the effective tax rates (ETR) of multinational firms (MNE). We argue that MNEs are in a better bargaining position than domestic firms when negotiating with tax authorities over possible tax deductions. First, MNEs are able to threat more credibly to re-locate to a different (low tax) country. Second, as MNEs are more profitable their tax revenues are more important for the government which as well increase bargaining power. The latter effect can be seen as economies of scale in tax deductions. We use French firm level data and entropy balancing to empirically decompose the MNE's tax advantage into these two effects. We find that the economies of scale in tax deductions decrease the ETR by 1.12 percentage points while the outsourcing threat decreases the ETR by 2.05 percentage points.

Egger-Are MNEs paying their fair share-375.pdf

2:30pm - 3:00pm

The Effects of Repatriation Taxes on FDI: Evidence from OECD Multinationals

Masaaki Suzuki[1], Hirokazu Mizobata[2]
[1]Mizuho Research Institute, Japan; [2]Tezukayama University, Japan

Discussant(s): **Nora Margot Strecker** (ETH Zurich)

This study empirically investigates whether the tax differentials between home and host countries differently affect multinationals' foreign investment and profit shifting decisions under contrasting international tax systems. In particular, we compare these differential tax effects between credit and exemption systems, using firm-level data on selected OECD countries. Based on the presented analysis, we find that tax differentials affect multinationals' foreign investment decisions to a larger degree under the exemption system than under the credit system when a home country's tax rate is larger than that in the host country. By contrast, our results show that the tax effects on profit shifting are similar under both these systems.

Suzuki-The Effects of Repatriation Taxes on FDI-136.pdf

3:00pm - 3:30pm

Withholding Tax Effects On The Investment Decision Of Multinational Firms

Michael Riedle
University Tuebingen, Germany

Discussant(s): **Masaaki Suzuki** (Senshu University)

Using a large international firm-level panel data set, we investigate the impact of corporate taxation on foreign direct investment. In this paper, we also theoretically and empirically analyse foreign corporate taxation. In particular, we examine non-resident withholding taxes. The impact of foreign country taxation is estimated to be sizable, as is consistent with the findings from the existing literature. Moreover, our results provide evidence which shows that withholding taxes have a remarkable additional effect on the investment decision. We find that a ten percentage point increase in the foreign corporate tax rate is associated with a 15.8% decrease in the affiliate's fixed assets. Furthermore, we show that a ten percentage point increase in the withholding tax rate reduces the affiliate's fixed assets by 4.4%.

Riedle-Withholding Tax Effects On The Investment Decision-293.pdf

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3:30pm - 4:00pm

Empirical Evaluation on the Effects of Interest Barriers: Case Finland

Olli Ropponen[1], **Jarkko Harju**[1,2], **Ilpo Kauppinen**[1]
[1]VATT Institute for Economic Research, Finland; [2]CESifo
Discussant(s): **Michael Riedle** (University Tuebingen)

This paper employs Orbis database on Finnish and Swedish MNEs to study the effects of introducing an interest barrier in Finland. Swedish MNEs serve as a control group in the analysis. Base Erosion and Profit Shifting (BEPS) project by OECD is designed to reduce the gaps and mismatches in the global tax rules faced by the multinational enterprises (MNEs). Action 4 in their BEPS Action Plan is dedicated to limiting base erosion involving interest and other financial payments. In line with this Action Finland introduced an interest barrier in the beginning of 2014. We first study whether Swedish MNEs constitute a suitable control group for Finnish MNEs and then study the effects of the introduction of the interest barrier using a difference in differences method.

Ropponen-Empirical Evaluation on the Effects of Interest Barriers-114.pdf

2:00pm - 4:00pm
Garden II, Harveys

D02: Welfare Improving Policies

Session Chair: **Barbara L Wolfe**, University of Wisconsin-Madison

2:00pm - 2:30pm

Buildings and Welfare

Mats Johan Ekman
Hanken School of Economics, Finland
Discussant(s): **Barbara L Wolfe** (University of Wisconsin-Madison)

This article finds that the approval rate of applications for social assistance is higher in welfare offices with building characteristics that enhance the visibility of entry (such as elevated entrances or space to traverse between street and building). A fitting explanation for this finding is that persons looking for social assistance apply more conservatively when others can see them, particularly if their chances of approval are low, which raises the approval rate by reducing the denominator. Applicants do this because of widespread social norms of self-reliance; they dislike being thought of as “welfare cases”. The data on approval rates come from individual welfare offices – sometimes over time to capture anonymity-affecting changes in welfare regimes – and the data on building characteristics are gathered from GoogleMaps’ ‘StreetView’ feature. The visibility effects are small but pervasive, and weakly decline in the rate of poverty, suggesting that the self-reliance norm weakens as poverty increases.

Ekman-Buildings and Welfare-349.pdf

2:30pm - 3:00pm

Should Football Fans Pay Cost Of Policing Match Days?

Christian Johannes Sander, **Stefan Thiem**
University of Muenster, Germany
Discussant(s): **Mats Johan Ekman** (Hanken School of Economics)

There is a large discussion whether football fans should pay an additional security fee added to ticket prices to finance police activities on match days. This paper investigates the short and long term price effect on the demand for tickets by considering different subgroups of spectators: (regular) fans and hooligans. We argue that a small increase in ticket prices may lead to more violence in and around stadiums due to the mob good character of sporting events and a relative small price elasticity of hooligans towards tickets. Therefore, we recommend against introducing a security fee.

Sander-Should Football Fans Pay Cost Of Policing Match Days-431.pdf

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3:00pm - 3:30pm

The Impact of Private and Public Childcare Provision on the Distribution of Children's Incomes in Germany

Maximilian Stockhausen
Freie Universität Berlin, Germany
Discussant(s): **Stefan Thiem**

This paper investigates the impact of extending disposable cash income of children by the monetary value of private and public childcare provision on economic inequality in Germany between 2009 and 2012. It takes account of the multidimensionality of children's well-being and access to economic resources. Combining survey data from the Socio-Economic Panel (SOEP) and Familien in Deutschland (FiD) with administrative data from the German Federal Statistical Office, extended income inequality is found to be significantly lower than cash income inequality across all years. This difference is strongly influenced by the expansion of public childcare provision, which profits children living with single parents most, and gives additional evidence

for its equalizing potential as a policy instrument.

Stockhausen-The Impact of Private and Public Childcare Provision-262.pdf

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3:30pm - 4:00pm

The Effect of Housing Assistance on Student Achievement and Attainment: Evidence from Wisconsin

Robert Haveman[1], **Kyong Wan Kang**[2], **Hannah Miller**[3], **Barbara Wolfe**[4], **Deven Carlson**[5]
[1]University of Wisconsin-Madison, United States of America; [2]University of Wisconsin-Madison, United States of America; [3]University of Wisconsin-Madison, United States of America; [4]University of Wisconsin-Madison, United States of America; [5]University of Oklahoma, United States of America
Discussant(s): **Maximilian Stockhausen** (Freie Universität Berlin)

Drawing on a unique data set that links information on all Wisconsin households receiving means-tested benefits with the educational performance of all Wisconsin public school students in these households, we estimate the effect of a family first receiving housing assistance in 2006, 2007, or 2008 on students’ subsequent attendance and achievement outcomes. Using two different comparison groups, we estimate these effects in a difference-in-differences framework.

Haveman-The Effect of Housing Assistance on Student Achievement and Attainment-512.pdf

2:00pm - 4:00pm

Emerald Bay 4, Harveys

D03: Political Economy

Session Chair: **Toshihiro Ihori**, GRIPS

2:00pm - 2:30pm

Let The Voters Choose Women

Audinga Baltrunaite[2], Alessandra Casarico[1], Paola Profeta[1], Giulia Savio[3]

[1]Università Bocconi, Italy; [2]Stochkolm University; [3]Unviersity of Lugano

Discussant(s): **Keigo Kameda** (Kwasnei gakuin University)

Female under-representation in politics can be the result of parties' selection of candidates and/or of voters' electoral preferences. To assess the impact of these two channels, we exploit the introduction of Italian Law 215/2013, which prescribes both gender quotas on candidate lists and double preference voting conditioned on gender. Using a Regression Discontinuity Design, we estimate that the law increases the share of elected female politicians by 22 percentage points. The result is driven by the increase in preference votes cast for female candidates, suggesting a salient role of double preference voting in promoting female empowerment in politics.

Baltrunaite-Let The Voters Choose Women-187.pdf

2:30pm - 3:00pm

The Paradox of Democracy

Anna Maria Koukal, Reiner Eichenberger

University of Fribourg, Switzerland

Discussant(s): **Alessandra Casarico** (Università Bocconi)

Switzerland is known for its highly developed direct democracy. Swiss women however were enfranchised at the federal level only in 1971, and in some cantons they even had to wait till 1990 to finally get their suffrage. We analyze the role of direct democracy in the delayed Swiss enfranchising process by looking at two novel historical sets of cantonal and municipal data covering the full period from 1919 to 1990 of popular votes, i.e. male votes, about enfranchising women on different levels. While direct democracy in general and in the form of local town meetings proves to delay the enfranchisement of women, the possibility to launch budget referenda as an emergency brake against unwanted outcomes, fosters women's suffrage. Thus, this paper reveals a paradox of democracy. The larger the say of the present voters in determining politics the less they are actually willing to share their rights with new voters.

Koukal-The Paradox of Democracy-477.pdf

3:00pm - 3:30pm

Do Political Parties Matter? - Evidence From German Communities

Nadine Riedel[1], Martin Simmler[2], Christian Wittrock[1]

[1]Ruhr-University Bochum, Germany; [2]Said Business School, UK

Discussant(s): **Anna Maria Koukal** (University of Fribourg)

The paper aims to test whether partisanship affects policy outcomes at the local level. While the literature has presented comprehensive evidence for partisanship on policy outcomes at the state and federal level, recent findings suggest that partisan effects may be absent at the local level. Using detailed data on public goods and service spending, we assess the link between the partisanship of local councils and the composition of public good spending of German localities. Firstly, we estimate panel data models assessing whether changes in partisanship impact per-capita-spending in different spending-categories. Secondly, we investigate whether left-wing or right-wing communities differ in their spending response to exogenous revenue shocks during their legislative term (among others induced by changes of the assigned personal income tax base). The approach compares responses in communities with dominated councils using propensity score matching and weighting. Based on both approaches, we find moderate partisan effects at best.

Riedel-Do Political Parties Matter-490.pdf

3:30pm - 4:00pm

Flexibility of Deficit Ceiling and Income Fluctuation in a Political Economy

Toshihiro Ihori[2], Keigo Kameda[1]

[1]Kwansei gakuin University, Japan; [2]National graduate institute for policy studies, Japan

Discussant(s): **Christian Wittrock** (Ruhr-University Bochum)

To avoid fiscal crisis, a government can impose a long-term deficit ceiling. A key issue relevant to this is how long-term objectives should be modified to accommodate economic fluctuations and to maintain some flexibility for fiscal stabilization policy. By incorporating the political effort behavior of private agents into a weak government model, we explore how income fluctuations affect the deficit ceiling in a political economy. If the government can control the political behavior, normally, the deficit ceiling should rise in a recession as a first-best case; however, interestingly, a recession does not necessarily prompt an increase in the deficit ceiling in a second-best political economy. The response of the deficit ceiling to income fluctuations mainly depends on the efficiency of political effort, which may correspond to the degree of democracy and bureaucratic efficiency of the governments. We test the prediction and find it applicable for democratic countries with semi-efficient governments.

Ihori-Flexibility of Deficit Ceiling and Income Fluctuation-119.pdf

2:00pm - 4:00pm

Emerald Bay 5, Harveys

D04: Innovation and Biodiversity

Session Chair: **Ruediger Pethig**, University of Siegen

2:00pm - 2:30pm

Yield versus Disease - Can Monopolies in Seed Markets Improve Welfare?

Sylwia Bialek

Goethe University Frankfurt, Germany

Discussant(s): **Ruediger Pethig** (University of Siegen)

The paper investigates markets ridden by problems of common pool resources and asks how monopoly rights for inputs into those markets affect the welfare. The analysis rests upon the example of anti-pest innovations. The quintessential feature of such innovations is the possibility of them losing their effectiveness. Their application exerts evolutionary pressure on pests that eventually leads to them developing resistance to the innovation. The ensuing perishability of the innovation makes its common pool resource character visible. The paper develops a model of agricultural markets and discusses how monopolies, despite their underprovision of output may lead to increased welfare compared to generic industries. In this context, the optimal patent length is investigated.

Bialek-Yield versus Disease-267.pdf

2:30pm - 3:00pm

Public Procurement As Policy Instrument For Innovation

Dirk Czarnitzki[1], **Nima Moshgbar**[1], **Paul Huenermund**[2]

[1]KU Leuven, Belgium; [2]ZEW Mannheim, Germany

Discussant(s): **Sylwia Bialek** (Goethe University Frankfurt)

We estimate the average treatment effect on the treated (ATET) of innovation-directed public procurement on German firms' share of sales of innovation and imitation using the 2013 wave of Germany's contribution to the Community Innovation Survey (CIS). Due to a policy change on the European level in 2008/2009 and its ratification in Germany in 2009, public authorities can explicitly demand innovation by contract. We apply a multiple of different evaluation techniques to analyze the ATET and find that this innovation policy tool induces higher sales of imitation by about 8 percentage points, whereas no effect on innovation sales can be found. Thus, the policy does not foster original innovation, but induces higher performance of products new to the firm. These results are robust to a multiple of techniques such as OLS, propensity score matching, nearest neighbor matching and Lewbel's (2012) IV regression using generated instruments.

Czarnitzki-Public Procurement As Policy Instrument For Innovation-320.pdf

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3:00pm - 3:30pm

Coaseian Biodiversity Conservation. Who Benefits?

Ruediger Pethig[1], **Thomas Eichner**[2]

[1]University of Siegen, Germany; [2]Fernuniversität Hagen, Germany

Discussant(s): **Dirk Czarnitzki** (KU Leuven)

We analyze strategies to conserve worldwide biodiversity assuming that the willingness-to-pay for biodiversity is positive in developed countries (North), but zero in developing coun-tries (South). The strategies of biodiversity conservation are cooperation among the North (Regime 2) or financial support of biodiversity conservation from North to South (Regime 3). We investigate the impact on biodiversity conservation and welfare when the world economy moves from business as usual (BAU, Regime 1) to the Regimes 2 or 3 or to the combined Regimes 2 and 3, called Regime 4. Regime 4 turns out to be the Coaseian socially optimal solution. The move from BAU to Regime 2 may reduce biodiversity conservation and welfare in North and South. Regime 3 fares better, but it hardly enhances welfare and biodiversity in our simulations. The North or the South may be worse off in Regime 4 than in BAU for some subset of parameters.

Pethig-Coaseian Biodiversity Conservation Who Benefits-140.pdf

2:00pm - 4:00pm

Emerald Bay 6, Harveys

D05: Topics in Growth

Session Chair: **Maksym Ivanyna**, Joint Vienna Institute, Michigan State University

2:00pm - 2:30pm

Accelerated Economic Growth and Tax Effort: The case of an Economically Advanced State of India

Sthanu Nair[1], **Pushpangadan K**[2]

[1]Indian Institute of Management Kozhikode, India; [2]Rajiv Gandhi Institute for Development Studies, India

Discussant(s): **Maksym Ivanyna** (Joint Vienna Institute, Michigan State University)

To meet her developmental requirements Kerala requires sufficient tax revenue mobilisation. This paper attempts to empirically estimate the effort taken by Kerala in mobilising tax revenues in relation to its taxable capacity during two different phases of the state's economic growth trajectory: 1970-71 to 1999-00 and 2000-01 to 2012-13. Whereas the first period has experienced stagnant to moderate economic growth, the second period saw rapid economic progress. The findings of the paper reveal that though Kerala was able to improve the tax effort with respect to land revenue, motor vehicle tax and passengers and goods tax, state excise duty and own tax revenue during the period of accelerated economic growth in the case sales tax, which contributes the lion's share of the tax revenue, the state's tax effort lowered significantly. The state has earned lowest ranking based on the tax effort for many taxes when compared to other comparable states.

Nair-Accelerated Economic Growth and Tax Effort-242.pdf

2:30pm - 3:00pm

Inclusive Growth and Distribution of Growth Opportunities in Nigeria

Adeniyi Jimmy Adedokun
Mcpherson University, Nigeria
Discussant(s): **Sthanu Nair** (Indian Institute of Management Kozhikode)

This study examines growth inclusiveness in Nigeria, and investigates optimum distribution of growth opportunities in a typical developing economy like Nigeria, using the framework of equity in the distribution of opportunities. Analyses of benefits from growth, and participation in growth show that consistent growth recorded in Nigeria for more than a decade have not been inclusive. Further employment investigations (aggregate and sectoral) using employment elasticity technique, reveal that aggregate employment's responsiveness to output is not large enough to reduce unemployment in Nigeria. Sectoral analyses show that manufacturing contributes negatively to employment growth. However, agriculture, extractive, building and construction, and services contribute positively to employment growth, with services taking the lead. Building on the utilitarian social welfare function, the study concludes that in order to achieve an optimum distribution of growth opportunities, government must redistribute growth opportunities to the waning sector(s) of the economy.

Adedokun-Inclusive Growth and Distribution of Growth Opportunities-441.pdf

3:00pm - 3:30pm

Financial Innovation and Pro Poor & Inclusive Growth in Developing Countries: The role of Mobile Banking Development in Africa

Christian Lambert Nguena
University of Dschang, Cameroon
Discussant(s): **Adeniyi Jimmy Adedokun** (Mcpherson University)

By using a new database on mobile banking across countries we partially constructed, we document the questionable pro poor and inclusive growth in developing countries and show the importance of mobile banking development. The estimation of our model using different specification and estimation technics present the same result: a positive impact of the mobile banking development on both pro poor and inclusive economic growth. These main findings suggest that policies to boost mobile banking development in Africa should be viewed as measures that would yield fruit in the medium to long terms. Moreover, as determinants of mobile banking, we find: banking sector domestic credit, human capital, remittances, credible monetary policy, infrastructure and trade. Therefore, since mobile banking development matter for pro poor and inclusive growth, African governments should pursuit good performance in terms of determinants highlighted above by implementing specific and robust economic policies.

Nguena-Financial Innovation and Pro Poor & Inclusive Growth-225.pdf

3:30pm - 4:00pm

Corruption, Public Debt, and Economic Growth

Maksym Ivanyna[1], **Alexandros Mourmouras**[2], **Peter Rangazas**[3]
[1]Joint Vienna Institute, Michigan State University, Austria; [2]International Monetary Fund; [3]IUPUI
Discussant(s): **Christian Lambert Nguena** (University of Dschang)

This paper develops a quantitative theory of fiscal policy and economic growth that includes both corruption and tax evasion. Even when the other fundamentals of the economy suggest that the optimal public debt level should be zero, the presence of corruption can cause significant government borrowing. The government debt resulting from corruption crowds out both private and public capital and significantly reduces output. The corruption-public debt interaction also generates endogenous periodic equilibria, where debt cycles between high and low values. These debt cycles offer a possible explanation for why it is common for countries to accumulate debt for extended periods of time, only to abruptly carry out fiscal reforms designed to reduce government borrowing.

Ivanyna-Corruption, Public Debt, and Economic Growth-316.pdf

2:00pm - 4:00pm
Tallac, Harveys

D06: Intergovernmental Interactions

Session Chair: **Lars-Erik Borge**, Norwegian University of Science and Technology

2:00pm - 2:30pm

The Flypaper Effect in Municipal Finance: A Regression Kink Design

Marko Koethenbuerger, **Gabriel Loumeau**
ETH Zurich, Switzerland
Discussant(s): **Lars-Erik Borge** (Norwegian University of Science and Technology)

We analyze the existence of a flypaper effect in local public finance. Kinks in the transfer schedule in the Canton of Vaud in Switzerland allow us to apply a Regression Kink Design and to estimate the causal impact of transfers on municipal expenditures and tax rates. Consistent with the literature, we find robust evidence that ``money sticks where it lands'' i.e. transfers have a positive local average treatment effect (LATE) on municipal expenditures, while leaving the revenue side unchanged. Moreover, by studying the heterogeneity of policy responses to transfers, we observe a ``double'' flypaper effect. It appears that money sticks even more where it used to land in the past. The second layer of the effect can be used to explain the flypaper effect described in the literature.

Koethenbuerger-The Flypaper Effect in Municipal Finance-453.pdf

2:30pm - 3:00pm

Change in Strategic Interaction after Introducing Policy

Katsuyoshi Nakazawa[1], **Hirokazu Matsuoka**[2]
[1]Toyo University, Japan; [2]The University of Tokyo, Japan
Discussant(s): **Marko Koethenbuerger** (ETH Zurich)

This study investigates the change in the strength of strategic interaction from a policy introduction stage to a mature stage. Our hypothesis is that the strength of strategic interaction decreases from a policy introduction stage to a mature stage because the uncertainty at the policy-making level might become weaker as time elapses. We focus on the Japanese long-term care insurance (LTCI) system that was introduced in fiscal year (FY) 2000. Our findings suggest that since municipalities should forecast the demand for long-term care and set the premium over a three-year "program management period," they have a strong incentive to refer to the premium setting of surrounding municipalities. Moreover, the incentive would decrease as periods elapse. The empirical evidence is consistent with our hypothesis that the strength of strategic interaction on LTCI premium setting is gradually reduced from the early stage to the mature stage.

Nakazawa-Change in Strategic Interaction after Introducing Policy-191.pdf

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3:00pm - 3:30pm

Wagner's Law and Fiscal Discipline: Empirical Evidence of U.S. and German State-Level

Yoshito Funashima[1], **Kazuki Hiraga**[2]

[1]Tohoku Gakuin University, Japan; [2]Tokai University, Japan

Discussant(s): **Katsuyoshi Nakazawa** (Toyo University)

Does fiscal discipline restrain government from increasing the budget size? To answer this question, this paper investigates whether Wagner's law is satisfied for two states: the U.S. states in which fiscal sovereignty is established, and the German states in which fiscal transfer dependence is high and budget constraints are softened. In the U.S. states, we demonstrate that Wagner's law is validated, while a portion of the balanced budget requirements weakens the validity of the law. In German states, we find the "inverse" law, especially after the bailouts of Bremen and Saarland. The "inverse" law is a new channel of the growth in government size, and means that soft budget constraints cause the significant negative correlation between government sizes and output. These results are robust regardless of whether intergovernmental fiscal transfers are taken into account.

Funashima-Wagner's Law and Fiscal Discipline-259.pdf

3:30pm - 4:00pm

Unintended Consequences of a Grant Reform: How the Action Plan for the Elderly Affected the Budget Deficit and Services for the Young

Lars-Erik Borge, **Marianne Haraldsvik**

Norwegian University of Science and Technology, Norway

Discussant(s): **Yoshito Funashima** (Tohoku Gakuin University)

The Action Plan for the Elderly (APE) was implemented by the Norwegian parliament in 1997 to increase capacity and improve service standards within the care for the elderly sector. Care for the elderly is a local government responsibility, and the main financial element in APE was a temporary investment grant of a matching type to the local authorities. This type of grant is likely to have adverse effects for other services and the budgetary balance. We investigate empirically whether APE had such adverse effects. There is evidence that APE reduced the growth in child care coverage and increased the budget deficit.

Borge-Unintended Consequences of a Grant Reform-478.pdf

2:00pm - 4:00pm
Zephyr, Harveys

D07: Corporate Taxation

Session Chair: **Tanja Kirn**, University of Liechtenstein

2:00pm - 2:30pm

Taxes and capital structure: Evidence from a quasi-natural experiment

Giampaolo Arachi[1], **Valeria Bucci**[2], **Camilla Mastromarco**[2], **Alberto Zanardi**[3]

[1]University of Salento and Dondena, Bocconi University; [2]University of Salento, Italy; [3]Ufficio Parlamentare di Bilancio

Discussant(s): **Tanja Kirn** (University of Liechtenstein)

This paper analyses the effects of corporate taxes on companies' capital structure, taking advantage of the quasi-natural experiment provided by a surprise announcement of a corporate tax surcharge on Italian firms operating in oil and energy sectors. We do not find any significant evidence that corporations reacted by increasing the leverage ratio in the three years following the sharp increase in the tax rate.

Arachi-Taxes and capital structure-161.pdf

2:30pm - 3:00pm

Taxing Away M&A: The Effect of Corporate Capital Gains Taxes on Acquisition Activity

Lars P. Feld[2,5], **Martin Ruf**[3,4], **Ulrich Schreiber**[1,2], **Maximilian Todtenhaupt**[1,2], **Johannes Voget**[1,2]

[1]University of Mannheim; [2]Centre for European Economic Research; [3]University of Tübingen; [4]NoTeC; [5]University of Freiburg

Discussant(s): **Alberto Zanardi** (Italian Parliamentary Budget Office)

Taxing capital gains is an important obstacle to the efficient allocation of resources because it imposes a transaction cost on the vendor which locks in appreciated assets by raising the vendor's reservation price in prospective transactions. For M&As, this effect has been intensively studied with regard to shareholder taxation, whereas empirical evidence on the effect of capital gains taxes paid by corporations is scarce. This paper analyzes how corporate level taxation of capital gains affects inter-corporate M&As. We identify a significant lock-in effect. Results from estimating a Poisson pseudo-maximumlikelihood (PPML) model suggest that a one percentage point decrease in the corporate capital gains tax rate would raise both the number and the total deal value of acquisitions by about 1.1% per year. We use this result to estimate an efficiency loss resulting from corporate capital gains taxation of 3.06 bn USD per year in the United States.

Feld-Taxing Away M&A-185.pdf

3:00pm - 3:30pm

Corporate Income Tax Reform in the EU

Maria Teresa Alvarez-Martinez, Salvador Barrios, Diego d´Andria, Maria Gesualdo, Dimitrios Pontikakis, Jonathan Pycroft
European Commission, DG-JRC, IPTS, Spain

Discussant(s): **Maximilian Todtenhaupt** (Centre for European Economic Research)

Using CORTAX, a computable general equilibrium (CGE) model designed to assess the economic impact of corporate taxation, we examine the possible economic impacts of uncoordinated and coordinated changes in national corporate tax rates among a group of economies (the EU) that are tightly associated through international trade and investment. The aim is to contribute to the on-going debate about the desirability, modality and likely impact of alternative policy solutions to the challenges posed by tax competition and aggressive tax planning. Corporate income tax rates can generate substantial responses within the implementing country as well as beyond its own borders. Harmonisation of CIT rates would likely involve winners and losers, and as such, may be best pursued gradually and as part of a broader package of corporate tax reform.

Alvarez-Martinez-Corporate Income Tax Reform in the EU-319.pdf

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3:30pm - 4:00pm

How Did Behavioral Responses After The Introduction Of An ACE Affect The Cost Of Capital?

Tanja Kirn
University of Liechtenstein

Discussant(s): **Jonathan Pycroft** (European Commission)

This paper examines the impact of an ACE on the cost of capital. As the Belgian SMEs have gradually reduced their leverage ratio after the ACE came into force, the analysis disentangles the policy induced direct effect from the impact of the behavioural response on the cost of capital. The main identification strategy is based on variation in the behavioural response of the firm due to the gradual adjustment of their leverage ratio. To disentangle the policy induced direct effect from the impact of the behavioural response, a counterfactual decomposition is carried out by the inference procedure (Chernozhukov et. al. 2013). This quasi-natural experiment demonstrates that the ACE significantly reduced the cost of capital. Secondly, the results illustrate that the behavioural impact gained importance by time. Thirdly, a reciprocal influence between the direct and the indirect effect is found, as the direct effect becomes stronger, if firms decrease their leverage.

Kirn-How Did Behavioral Responses After The Introduction-372.pdf

2:00pm - 4:00pm
Tahoe A, Harrahs

D08: Tax Avoidance, Compliance and Collection

Session Chair: **Dhammika Dharmapala**, University of Chicago

2:00pm - 2:30pm

How Taxing Is Tax Filing? Leaving Money on the Table Because of Hassle Costs

Youssef Benzarti
UC Berkeley, United States of America

Discussant(s): **Dhammika Dharmapala** (University of Chicago)

I use a quasi-experimental design and a novel identification strategy to estimate the burden of filing taxes. Employing a sample of US income tax returns, I observe the preferences of taxpayers when choosing between itemizing deductions and claiming the standard deduction. Taxpayers forgo tax savings to avoid the hassle cost of itemizing, resulting in an average burden of itemizing of $644, with substantial heterogeneity. A revealed preference argument implies that itemizing deductions is as painful as working 19 hours. The burden of tax filing is larger for richer households, consistent with the fact that the value of time increases with income.

Benzarti-How Taxing Is Tax Filing Leaving Money on the Table Because-310.pdf

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2:30pm - 3:00pm

Tax Debt Collection Enforcement: When Does Suspension of a Driver's License Help?

Yulia Paramonova
Higher School of Economics in Saint Petersburg, Russian Federation

Discussant(s): **Youssef Benzarti** (UC Berkeley)

This paper examines the enforcement of tax debt collection and explains when it is optimal to impose on delinquent taxpayers such a collateral tax sanction as the suspension of a driver's license. I develop a dynamic model, where individuals are heterogeneous in income and in ability to escape tax debt payment. To discourage tax debt, the tax authority can impose a monetary fine or a collateral tax sanction. I show that, when debtors differ in their ability to escape tax debt, the timing when a penalty affects the tax debtor is critical, therefore it may be optimal to use the collateral tax sanction in addition to the monetary fine. In contrast to the monetary fine that can be delayed and paid only when the tax debt is collected, the collateral tax sanction applies and influences immediately.

Paramonova-Tax Debt Collection Enforcement-142.pdf

3:00pm - 3:30pm

Tax Avoidance through Advance Tax Rulings - Evidence from the LuxLeaks Firms

Birgit Huesecken, Michael Overesch
University of Cologne, Germany

Discussant(s): **Yulia Paramonova** (Higher School of Economics in Saint Petersburg)

Our empirical study tests the effect of advance tax rulings on tax avoidance of multinational corporations. In 2014, the International Consortium of Investigative Journalists published confidential documents that identify hundreds of firms worldwide that had benefited from advance tax rulings. We apply an approach similar to a difference-in-differences design and find that after engaging in an advance tax ruling in the tax haven Luxembourg, firms have lower worldwide effective tax rates compared to non-ruling firms. The results are robust even if we mitigate a potential bias via propensity score matching. Consequently, this study gives evidence for corporate tax avoidance through special tax deals in the form of advance tax rulings.

Huesecken-Tax Avoidance through Advance Tax Rulings-303.pdf

3:30pm - 4:00pm

Estimating the Compliance Costs of Securities Regulation: A Bunching Analysis of Sarbanes-Oxley Section 404(b)

Dhammika Dharmapala
University of Chicago, United States of America
Discussant(s): **Birgit Huesecken** (University of Cologne)

An extensive literature has analyzed the compliance costs of securities regulation. A particular focus has been the Sarbanes-Oxley (SOX) legislation enacted in 2002. The most significant provisions of SOX have been applied only to firms that have a public float of at least $75 million. Public float is not reported in standard databases, so this paper collects public float information for the universe of US reporting entities over 2000-2013, yielding about 140,000 firm-year observations. The paper analyzes the "bunching" behavior of firms close to the $75 million threshold. In the period following the enactment of SOX, there is a substantial "excess" number of observations below the threshold, exhibiting a bimodal pattern. The results imply that firms around the threshold reduce their public float by about $1 million on average. Those firms that appear responsive to the threshold reduce public float by up to $10 million.

Dharmapala-Estimating the Compliance Costs of Securities Regulation-112.pdf

2:00pm - 4:00pm
Tahoe B, Harrahs

D09: Taxable Income Elasticities

Session Chair: **Joerg Paetzold**, University of Salzburg

2:00pm - 2:30pm

The Taxable Income Elasticity: A Structural Differencing Approach

Anil Kumar[1], **Che-Yuan Liang**[2]
[1]Federal Reserve Bank of Dallas, United States of America; [2]Uppsala University, Sweden
Discussant(s): **Caroline Weber** (University of Oregon)

We extend a standard taxable income model with its typical functional-form assumptions to account for nonlinear budget sets. We propose a new method to estimate a taxable income elasticity that is more policy relevant than the typically estimated elasticity based on linearized budget sets. Using U.S. data from the NBER tax panel for 1979-1990 and differencing methods, we estimate an elasticity of 0.75 for taxable income and 0.20 for broad income. These estimates are higher than those obtained by specifications based on linearization. Our approach offers a new way to address the problem of endogenous observed marginal tax rates.

Kumar-The Taxable Income Elasticity-178.pdf

2:30pm - 3:00pm

The (Endogenous) Elasticity of Taxable Income: A Meta-Regression Analysis

Carina Woodage
ZEW Mannheim, Germany
Discussant(s): **Joerg Paetzold** (University of Salzburg)

The elasticity of taxable income (ETI) is a key parameter in optimal tax and

welfare analysis. However, estimates reveal substantial heterogeneity. Potential reasons for the variation are: different estimators and specifications (e.g. Kopczuk, 2005 and Weber, 2014), different tax systems and the underlying reform itself (ETI as a policy choice), different data sets and differences in behavior across countries. To explore different dimensions of this heterogeneity, I conduct a comprehensive meta-regression analysis. Information from 80 different studies containing 1800 estimates is used. Special emphasis is placed on the influences a

government (e.g. tax base, degree of enforcement, and remittance rules) might have to control the size of the ETI and how characteristics of the underlying reform used for identification (e.g. large vs. small reform, tax increase vs. tax decrease and tax base broadening) influence the behavior of taxpayers.

Woodage-The (Endogenous) Elasticity of Taxable Income-195.pdf

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3:00pm - 3:30pm

Estimating the Elasticity of Broad Income in the Presence of Income Growth and Volatility

Laura Kawano[1], **Caroline Weber**[2]
[1]U.S. Department of Treasury, United States of America; [2]University of Oregon, United States of America
Discussant(s): **Anil Kumar** (Federal Reserve bank of Dallas)

This paper obtains a precisely estimated elasticity of broad income (EBI) with respect to the marginal net-of-tax rate for top-earners. The optimal top personal income marginal tax rate is a hotly debated topic and an estimate of the EBI is a sufficient statistic to answer this question under certain assumptions. However, pinning down the EBI precisely has, to this point, generally eluded researchers because this is a small portion of income-earners and these earners have substantial income volatility. This paper addresses this by introducing a new estimation method to this literature--inverse probability weighting--and estimating this relation on a much larger sample of these high-income taxpayers--we use a large sample of high-income individuals from the universe of tax returns and exploit the American Taxpayer Relief Act of 2012. We estimate an EBI of 0.013.

Kawano-Estimating the Elasticity of Broad Income in the Presence of Income Growth and Volatility-189.pdf

3:30pm - 4:00pm

Bunching in the presence of deduction possibilities: Earnings and deduction responses to a large kink

Joerg Paetzold
University of Salzburg, Austria
Discussant(s): **Carina Woodage** (ZEW Mannheim)

This paper contributes to recent literature emphasizing the importance to identify the different channels along which taxable income responses occur. Using bunching techniques and exploiting a large first kink point where marginal tax rates increase by as much as 38.3 percentage points, we first recover modest gross wage earnings responses of Austrian employees. Next, we show that when accounting for deduction behavior, the additional mass of wage earners at the kink increases by around 50\%. We find direct evidence for wage earners targeting the kink with their deduction claiming. Finally, we use a novel estimation strategy to show evidence that the probability of claiming a deduction item depends on the (net-of-tax) cash value of the respective deduction, and provide a new estimate for the deduction elasticity. Our results indicate that distinguishing between earnings and deduction responses matters even for wage earners with only limited possibilities to shelter taxable income.

Paetzold-Bunching in the presence of deduction possibilities-116.pdf

2:00pm - 4:00pm
Tahoe C, Harrahs

D10: Optimal Taxation and Redistribution

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

2:00pm - 2:30pm

Optimal Income Taxation with Wage and Unemployment Responses: A Sufficient Statistics Approach

Kory Kroft, Kavan Kucko, Etienne Lehmann, Johannes Schmieder
University of Toronto, Canada
Discussant(s): **Bas Jacobs** (Erasmus University Rotterdam)

This paper reassesses whether the optimal income tax program features an Earned Income Tax Credit (EITC) or a Negative Income Tax (NIT) at the bottom of the income distribution, in the presence of unemployment and wage responses to taxation. The paper makes two key contributions. First, it derives a sufficient statistics optimal tax formula in a general model that incorporates unemployment and endogenous wages. The second contribution is to estimate the sufficient statistics that are inputs to the optimal tax formula using a standard quasi-experimental research design. We estimate these reduced-form parameters using policy variation in tax liabilities stemming from the U.S. tax and transfer system for over 20 years. Using our empirical estimates, we implement our sufficient statistics formula and show that the optimal tax at the bottom more closely resembles an NIT relative to the case where unemployment and wage responses are not taken into account.

Kroft-Optimal Income Taxation with Wage and Unemployment Responses-400.pdf

2:30pm - 3:00pm

Taxation of Couples: a Mirrleesian Approach for Non-Unitary Households

Carlos Eugenio Da Costa[1], Lucas Alves De Lima[2]
[1]Fundacao Getulio Vargas, Brazil; [2]Harvard University
Discussant(s): **Kory Kroft** (University of Toronto)

Can we still rely on the taxation and revelation principles to study optimal taxation if households do not behave as single agents as precribed by the unitary model?

To address this question we take a collective view of households, for which choices are outcomes of Nash bargains. The mechanism plays the dual role of inducing the allocations given that spouses make joint decisions and determining through threat points the objective functions optimized by spouses.

We show that the revelation principle applies, provided that one uses the appropriate defintion of a type. The same is not true for the taxation principle, which typically fails in this environment.

Our findings should prove useful to other group decison problems such as group borrowing and cartel behavior for firms with economies of scope.

Da Costa-Taxation of Couples-402.pdf

3:00pm - 3:30pm

Is A Minimum Wage an Appropriate Instrument for Redistribution?

Bas Jacobs
Erasmus University Rotterdam, Netherlands, The
Discussant(s): **Carlos Eugenio Da Costa** (Fundacao Getulio Vargas)

We analyze the redistributive (dis)advantages of a minimum wage over income taxation in competitive labor markets. In comparison to a distributionally equivalent tax change, a higher minimum wage reduces low-skilled labor demand. This yields involuntary unemployment and more skill formation as some workers move into high-skilled employment. We show that the desirability of a minimum wage critically depends on how unemployment is distributed among low-skilled workers. A minimum wage is an appropriate instrument for redistribution if the welfare gains of more skill formation outweigh the welfare losses of larger unemployment. We derive a necessary condition based on sufficient statistics, which is calibrated using empirical estimates for the semi-elasticity of skill formation with respect to employment and OECD-data. A minimum wage is not an appropriate instrument for redistribution for nearly all countries in our sample. Decreasing the minimum wage, while neutralizing the distributional effects with tax adjustments, can yield Pareto improvements.

Jacobs-Is A Minimum Wage an Appropriate Instrument for Redistribution-491.pdf

2:00pm - 4:00pm
Tahoe D, Harrahs

D11: Behavioral Economics and Fiscal Policies

Session Chair: **Marcelo Arbex**, University of Windsor

2:00pm - 2:30pm

Support and opposition To a Pigovian Tax: Road Pricing With Reference-Dependent Preferences

Bruno Lode De Borger[1], **Amihai Glazer**[2]
[1]University of Antwerp, Belgium; [2]University of California-Irvine
Discussant(s): **Marcelo Arbex** (University of Windsor)

This paper studies the effect of loss aversion on support and opposition to a Pigovian tax to reduce externalities, with the particular application to road pricing. It shows several results. First, with reference-dependent preferences the socially optimal road toll is smaller than the optimal toll in the absence of reference dependence, and it declines in the degree of loss aversion. Second, loss aversion can explain the empirical observation that support for road pricing is lower before than after its introduction. Third, loss aversion may increase or reduce lobbying efforts by driver organizations against the introduction of tolling. Loss aversion will increase lobbying if a high toll is proposed but drivers initially believe that the probability that it will be introduced is small. Lastly, loss aversion unambiguously reduces lobbying by organizations of non-drivers (representing, for example, environmentalists or public transport users) in favor of the introduction of a toll.

De Borger-Support and opposition To a Pigovian Tax-197.pdf

2:30pm - 3:00pm

Mental Accounting Of Public Funds - The Flypaper Effect In The Lab

Johannes Becker, Daniel Hopp, Michael Kriebel
University of Münster, Germany
Discussant(s): **Bruno Lode De Borger** (University of Antwerp)

This paper reports evidence from a laboratory experiment that focusses on

mental accounting of 'public funds'. Groups of three players decide upon how much to redistribute within the group. We find that the inclination to redistribute is signifficantly higher if it is financed out of a common budget. Since the common budget is otherwise used for the players' private consumption, its relative size should not affect the decision to redistribute. We interpret this finding as evidence for mental accounting and discuss implications for tax policy and government spending.

Becker-Mental Accounting Of Public Funds-302.pdf

3:00pm - 3:30pm

Reference Dependence and Social Security System

Hyeon Park
Manhattan College, United States of America
Discussant(s): **Daniel Hopp** (University of Münster)

I study an inter-temporal model to understand the role of social security in determining intergenerational distribution and welfare when consumers have reference-dependent preferences. Using a unified social security system, by which different social security plans are represented via different degrees of fundedness, I examine the effects of a transition from a less funded system to more funded one on savings, consumption, and capital accumulation for an OLG production economy. By deriving closed form solutions, I find that an increase in fundedness intensity unambiguously increases capital accumulation and savings, but decreases consumption in steady states. I also find that increases in tax rates decrease savings unambiguously for all plans considered, whereas the effect on consumption is not conclusive.

Park-Reference Dependence and Social Security System-150.pdf

3:30pm - 4:00pm

Heterogeneous Present-bias and Optimal Taxation of Health and Education

Marcelo Arbex[1], **Enlinson Mattos**[2]
[1]University of Windsor, Canada; [2]Sao Paulo School of Economics, Fundacao Getulio Vargas.
Discussant(s): **Hyeon Park** (Manhattan College)

This paper studies the feasibility of implementing paternalistic taxation in the presence of health and human capital accumulation. Agents can incorrectly discount differently future educational choices versus health investments. We characterize the optimal linear tax on health and education allocations of individuals with heterogeneous misperception of future benefits such investments. Second-best results suggest that the optimal level of distortion of health and human capital investments must capture two terms, namely, a Pigouvian term to correct for the degree of misperception of future benefits of more education and better health and an optimal tax term to capture the redistributive impact taxation. The larger the correlation between present-bias and earnings, the lower the distortion on investment decisions, but larger has to be the distortion of agent's time and resources allocation, the larger consumption inequality among individuals. A subsidy to human (health) capital accumulation can achieve similar welfare improvement without subsidizing health (education).

Arbex-Heterogeneous Present-bias and Optimal Taxation of Health and Education-232.pdf

2:00pm - 4:00pm
Glenbrook/Fallen Leaf, Harrahs

D12: Charitable Giving

Session Chair: **Silvio Städter**, University of Regensburg

2:00pm - 2:30pm

Optimal Reporting Thresholds: Theory and Evidence from Charitable Contributions

Alisa Tazhitdinova
UC Berkeley, United States of America
Discussant(s): **Silvio Städter** (University of Regensburg)

This paper considers the trade-off between evasion and compliance costs and asks how to optimally set compliance thresholds. First, I consider a reform that simplified reporting rules for charitable contributions in the form of assets. I show that reporting rules are costly to taxpayers but successful at reducing evasion: I find that relaxing reporting requirements led to an increase in donations but that nearly 50% of new donations were untruthful. This tax revenue loss, however, was offset by substantial savings on behalf of taxpayers: I find an average compliance cost of $82-102 dollars per person. Second, I show that optimal reporting threshold determination should take into account the utility loss from compliance cost experienced by individuals and loss in externality benefits against tax revenue changes and utility gain of evaders. The type and magnitude of evasion behavior has the strongest influence on determining the optimal threshold.

Tazhitdinova-Optimal Reporting Thresholds-275.pdf

2:30pm - 3:00pm

Who to Target in Fundraising? A Field Experiment on Gift Exchange

Tobias Cagala[1], Ulrich Glogowsky[2], Johannes Rincke[1]
[1]University of Erlangen-Nuremberg, Germany; [2]University of Munich, Germany
Discussant(s): **Alisa Tazhitdinova** (UC Berkeley)

This paper studies the optimal targeting of gifts in fundraising. We implement a randomized field experiment in a setting where a fundraiser sends out annual solicitation letters to a large population of individuals. Three treatment groups are compared: a control group, a gift treatment group, and a gift-plus-recognition treatment group. We identify a distinct heterogeneity in responses to the gift treatment: both the extensive margin and the intensive margin effects are hump-shaped with respect to donors' baseline willingness to donate, translating into a hump-shaped average treatment effect. Due to the heterogeneity, up-front gifts are cost effective only for individuals with a moderate baseline probability to donate. Gifts are not profitable if they are framed in terms of recognition for past donations. The latter finding suggests that behavior in gift exchange is indeed driven by reciprocity concerns.

Cagala-Who to Target in Fundraising A Field Experiment on Gift Exchange-212.pdf

3:00pm - 3:30pm

Team Behavior In Public Goods Games With Ostracism

Stephan Huber, Jochen Model, Silvio Städter
University of Regensburg, Germany
Discussant(s): **Ulrich Glogowsky** (University of Munich (LMU))

We study the behavior and the motivations of individuals and teams in a public goods game with ostracism, i.e. the possibility to exclude non cooperators from future benefits of the public good. We find, that the ostracism mechanism works in increasing the contribution to the public good of both, individuals and teams. In line with most of the literature on team behavior we find teams to act more selfish in terms of contributions without and with ostracism, i.e. teams come closer to the standard game theoretic prediction. However, since teams vote and exclude less in the ostracism stage, they overall earn more than individuals.

Huber-Team Behavior In Public Goods Games With Ostracism-318.pdf

2:00pm - 4:00pm

Marla Bay/Emerald Bay, Harrahs

D13: Labour Supply and Savings over the Life-Cycle

Session Chair: **André M.J. Decoster**, KU Leuven

2:00pm - 2:30pm

Using Tax Credits to Postpone Retirement - A Panel Data Analysis of a Large Dutch Reform

Egbert Jongen
CPB, Netherlands, The
Discussant(s): **André M.J. Decoster** (KU Leuven)

We study the impact of an earned income tax credit targeted at workers close to retirement. Introduced in the Netherlands in 2009, the Deferred Pension Bonus (DPB) is a substantial tax credit for workers older than 60 years of age, with a maximum of almost 5 thousand euro. The goal of the DPB was to increase the employment rate of older workers and to improve the sustainability of public finances. With a large and rich administrative panel data set for the period 2003--2012 we study the impact of the DPB using differences-in-differences and regression discontinuity. We find that the DPB had only a small effect on the employment rate, insignificantly different from zero. This result is robust across methods and specifications. Results for other outcomes are more mixed, but typically small as well. The treatment effects are far too small for the DPB to have improved the sustainability of public finances.

Jongen-Using Tax Credits to Postpone Retirement-299.pdf

2:30pm - 3:00pm

Passive Saving over the Life Cycle

Nick Fabrin Nielsen[1], Daniel Reck[2]
[1]University of Copenhagen, Denmark; [2]University of Michigan, United States of America
Discussant(s): **Egbert Jongen** (CPB)

A growing body of evidence suggests that many individuals are inattentive to saving, so that policies that increase saving under individual inaction can substantially increase total saving. This paper considers the

life cycle consequences of passive saving. Because all saving must eventually be converted into expenditure, more passive saving must eventually result in higher spending or lower earnings. One attractive possibility is that individuals become attentive later in life, and act as if they receive wealth shocks when they do so, adjusting their retirement plans or later-in-life spending. Evidence from Danish population register data suggests that retirement at age 60 responds little to passively increased saving, while retirement at age 62 responds slightly more.

Nielsen-Passive Saving over the Life Cycle-218.pdf

3:00pm - 3:30pm

Long-run Effects of Career Interruptions

Jonas Klos, **Carsten Hänisch**
Fraunhofer-Institut für Angewandte Informationstechnik FIT, Germany

Discussant(s): **Daniel Reck** (University of Michigan)

This paper provides a micro-simulation study on the long-run effects of career interruptions in Germany, extending earlier work which generally only focuses on the first few years after an interruption. Using data of the German Socio-Economic Panel, it finds that career interruptions will, for the average individual, have lifelong effects on incomes and labor-force participation. It quantifies these effects for the average affected individual as well as on the entire society and therefore provides additional information on the total cost of career interruptions.

Klos-Long-run Effects of Career Interruptions-250.pdf

3:30pm - 4:00pm

Getting tired of work, or re-tiring in absence of decent job opportunities? Some insights from an estimated Random Utility Random Opportunity model on Belgian data

André M.J. Decoster, **Bart Capéau**
Department of Economics KU Leuven, Belgium

Discussant(s): **Jonas Klos** (Fraunhofer-Institut für Angewandte Informationstechnik FIT)

This paper exploits the distinction between preference and opportunity factors in a Random Utility and Random Opportunity (RURO) model of job choice (Aaberge, Dagsvik and Strøm, 1995, and Aaberge, Colombino and Strøm,1999), estimated on Belgian data (SILC 2007). To investigate to what extent lower labour market participation of elderly is due to changing preferences or differences in opportunities, we simulate two counterfactuals. First, we remove partly the age heterogeneity in opportunities. Then we remove age heterogeneity in preferences. A comparison of labour market behaviour in these two counterfactuals shows that opportunities which decline with age are at least as an important factor in explaining low participation rates for the elderly, as is increasing preference for leisure. The effect of opportunities seems to work primarily through the extensive margin, whereas the effect of preferences is more outspoken in the intensive than in the extensive margin.

Decoster-Getting tired of work, or re-tiring in absence of decent job opportunities Some insights-228.pdf

4:00pm - 10:00pm MS Dixie	**Excursion**

Date: Thursday, 11/Aug/2016

7:30am - 9:00am **Continental Breakfast and Registration (all day)**

9:00am - 11:00am
Garden I, Harveys

E01: Educational Outcomes

Session Chair: **Jennifer A Delaney**, University of Illinois at Urbana-Champaign

9:00am - 9:30am

Teacher's Strikes and Student Outcomes

Martin Farnham, **Elisabeth Gugl**
University of Victoria, Canada
Discussant(s): **Jennifer A Delaney** (University of Illinois at Urbana-Champaign)

Using data on standardized test scores for 4th and 7th graders, we employ a difference-in-difference approach to measure the impact on student outcomes of a 17-day, Province-wide teachers' strike in 2005 and a 25-day, province-wide teachers' strike in 2014 in British Columbia, Canada. Our preliminary findings are mixed. We find little to no effect of the 2005 strike on test scores, but we find large effects of the 2014 strike. We find that test participation rates decline by a statistically significant 2-6 percentage points in both strike years. The declines in participation rates, if non-random and concentrated among lower achievers, may mean that our estimates of strike effects on scores are biased toward zero. Future work will investigate this and other potential gaming of standardized test scores related to strikes.

Farnham-Teachers Strikes and Student Outcomes-166.pdf

9:30am - 10:00am

New Evidence on the Effects of the Shortened School Duration in the German States: An Evaluation of Post-Secondary Education Decisions

Meyer Tobias[2], **Stephan L. Thomsen**[1], **Schneider Heidrun**[3]
[1]Leibniz Universität Hannover, Germany; [2]NIW Hannover, Germany; [3]DZHW Hannover, Germany
Discussant(s): **Martin Farnham** (University of Victoria)

Most German states have reformed university preparatory schooling during the last decade by reducing its duration from 13 to 12 years without changing the graduation requirements. In this paper, we use nationwide data on high school graduates and apply a difference-in-differences approach to evaluate the reform effects on post-secondary education decisions. The results show that enrollment in university education in the first year after graduation is reduced in all analyzed states, while participation in voluntary service or staying abroad is increased. In some subgroups, depending on state, gender and family background, university enrollment is decreased additionally beyond the first year.

Tobias-New Evidence on the Effects of the Shortened School Duration-292.pdf

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10:00am - 10:30am

Short-Term Effects of Secondary School Tracking in Germany: A Dis-Aggregated Synthetic Control Approach

Aderonke Osikominu, **Gregor Pfeifer**, **Kristina Strohmaier**
U Hohenheim, Germany
Discussant(s): **Stephan L. Thomsen** (Leibniz Universität Hannover)

We analyze the influence of the institutional design of transition from primary to secondary school on educational behavior of German children. Precisely, differences between binding teacher recommendations and free parental choice are evaluated w.r.t. transition rates to the respective school tracks and the repetition rate after transition. We exploit a recent policy reform in the state of Baden-Wuerttemberg that led to the abolition of mandatory teacher recommendations using the neighboring state of Bavaria as the control group. Developing a dis-aggregated version of the Synthetic Control Method, we use the districts in Baden-Wuerttemberg and Bavaria respectively to derive a distribution of treatment effects, which is then compared against an analogous placebo distribution. The abolishment of mandatory teacher recommendations led to a substantial increase (decrease) in the transition rate to the highest (lowest) school track. For the overall repetition rate, we find a positive effect amounting to an increase of about 86%.

Osikominu-Short-Term Effects of Secondary School Tracking in Germany-456.pdf

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10:30am - 11:00am

A Difference-in-Difference Analysis of "Promise" Financial Aid Programs on Postsecondary Institutions

Jennifer A Delaney, **Bradley Hemenway**
University of Illinois at Urbana-Champaign, United States of America
Discussant(s): **Kristina Strohmaier** (Ruhr University Bochum)

This study examines the impact of universal-eligibility financial aid, or "Promise" programs, on postsecondary institutions in the U.S. The growth and popularity of Promise programs has garnered widespread attention, especially after the announcement of the Kalamazoo (MI) Promise program in 2005, but relatively little scholarly research. Promise programs provide grant aid to all students from a particular geographic location and make an early commitment to fund postsecondary studies that is based on neither academic merit nor income. Using a panel dataset with data from 2000-2012, this paper employs a quasi-experimental difference-in-difference methodological design to consider the impact of Promise programs on postsecondary institutions. We find that Promise programs influence postsecondary institutional behavior in all of the areas we tested – tuition and fees, and grant aid. We also find that the direction of the effects are different for 2- and 4-year institutions.

Delaney-A Difference-in-Difference Analysis of “Promise” Financial Aid Programs-362.pdf

9:00am - 11:00am
Garden II, Harveys

E02: Trade and Trade Policies

Session Chair: **Ron Davies**, University College Dublin

9:00am - 9:30am

At Your Service! The Role of Tax Havens in International Trade with Services

Shafik Hebous
IMF, United States of America

Discussant(s): **Ron Davies** (University College Dublin)

This paper documents that tax havens play a prominent role in international service trade and investigates the nature of this role. We employ a firm-level dataset with detailed information about service trade and foreign affiliates for virtually all multinational firms in Germany, which allows us to approximately distinguish trade between related and unrelated parties. We find that the service trade of tax havens partly reflects genuine specialization in service industries, which suggests that institutional features such as low tax rates, secrecy and low regulatory standards create a comparative advantage in service production. We also find that trade in service categories such as intellectual property (patents and trademarks) and headquarter services (administration, management and advertising) partly reflects mispriced affiliate trade serving to shift profits to tax havens.

Hebous-At Your Service! The Role of Tax Havens in International Trade with Services-146.pdf

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9:30am - 10:00am

Trade Policies and Product Innovation: Does MFN Status Encourage Quality Convergence?

Nigar Hashimzade[1], **Hassan Khodavaisi**[2], **Gareth Myles**[3]
[1]Durham University, United Kingdom; [2]Urmia University, Iran; [3]Exeter University, United Kingdom

Discussant(s): **Shafik Hebous** (IMF)

We investigate the welfare implications of the choice of tariff regime by an importing country on the investment in product innovation and quality competition between a firm located in a developed exporting country and a firm in a less-developed exporting country. We show that the less-developed country prefers the uniform tariff regime (or MFN status) promoted by trade agreements only when this causes convergence in quality relative to the outcome with discriminatory tariffs. Whether quality convergence occurs depends on the structure of the strategic trade policy game played between the exporters and the importer. In every case the interests of the developed exporter and the importer are always aligned, and counter to the interest of the less-developed exporter. The less-developed exporting country prefers the uniform tariff only if the importer commits to this regime, but the importer will not commit to this regime because it benefits from applying discriminatory tariffs.

Hashimzade-Trade Policies and Product Innovation-102.pdf

10:00am - 10:30am

The Impact of Special Economic Zones on Exporting Behavior

Ronald Davies[1], **Arman Mazhikeyev**[2]
[1]University College Dublin, Ireland; [2]University College Dublin, Ireland

Discussant(s): **Nigar Hashimzade** (Durham University)

Using firm level data from Africa and Asia, we estimate the impact of being in a special economic zone (SEZ) on a firm's probability of exporting, export intensity, and value of exports. On average, SEZs have no impact. Nevertheless, contingent on local factors including corporate taxes and trade policy, they can have substantial effects. At the extensive margin, we find that SEZ firms in open economies are 25\% more likely to export than their non-SEZ counterparts, with a large negative effect in closed economies. At the intensive margin, we find that SEZs increase the value of exports, but only in countries with barriers to imports where the estimate increase is 3.6\%. Thus, the estimated effect of introducing an SEZ can be meaningful, but is heavily contingent on the local economic environment.

Davies-The Impact of Special Economic Zones on Exporting Behavior-281.pdf

9:00am - 11:00am
Emerald Bay 4, Harveys

E03: Foreign Direct Investment

Session Chair: **Federica Liberini**, ETH Zurich

9:00am - 9:30am

Tax Treaties and Foreign Direct Investment: A Network Approach

Sunghoon Hong
Korea Institute of Public Finance, Korea, Republic of (South Korea)

Discussant(s): **Federica Liberini** (ETH Zurich)

Multinational investors often reduce tax on dividends by using indirect investment routes. This paper constructs a tax rate matrix to represent a real-world network of tax treaties between 70 countries and develops network algorithms to study the structure of tax-minimizing (direct or indirect) investment routes in the tax treaty network. The treaty shopping arbitrage rate, defined as the difference between the foreign tax rates of the direct route and a tax-minimizing route, is estimated to be about 3.57 percentage points on average. In bilateral FDI data, it appears that the average inward FDI stock via a tax-minimizing direct route is about 3.75 times larger than the average via a direct route that is not tax-minimizing. Empirical results confirm that the availability of a tax-minimizing direct route is positively and significantly related to FDI. By making a direct route tax-minimizing, countries can promote FDI via the direct route.

Hong-Tax Treaties and Foreign Direct Investment-406.pdf

9:30am - 10:00am

The Welfare Effects of Attracting Foreign Direct Investment in the Presence of Unemployment

Yoshitomo Ogawa[1], **Yoshiyasu Ono**[2]
[1]Kinki University, Japan; [2]Osaka University, Japan
Discussant(s): **Sunghoon Hong** (Korea Institute of Public Finance)

We develop a 2×2×2 model with the following features: (1) one sector is perfectly competitive while the other is oligopolistic; (2) one country has unemployment while the other attains full employment; (3) oligopolists move internationally; and (4) the ownership of each oligopolist is internationally shared. The welfare effects of various tax-cum-subsidies are examined. If the oligopolistic sector is capital intensive, subsidizing the oligopolists' profits, inflows, production or employment is more likely to harm the country. The number of domestically based oligopolists, the volume of domestic demand for the oligopoly-produced commodity, and the country's ownership share of oligopolists also influence the effect.

Ogawa-The Welfare Effects of Attracting Foreign Direct Investment-434.pdf

10:00am - 10:30am

The increasing importance of CFC rules - Influence on real FDI and Tax Revenue for OECD+ countries

Axel Maximilian Prettl
University Tuebingen, Germany
Discussant(s): **Yoshitomo Ogawa** (Kinki University)

This paper provides an overview of the different CFC rule settings in the OECD and additional countries for the years 2004 to 2014 and compares them. According to the provided analyses CFC rules lead to more real foreign direct investments and have a positive effect on corporate tax revenue. Also stronger CFC rules seem to have a slightly positive effect on real investment in a foreign subsidiary as some former theory expected. The paper points out that CFC rules in the considered countries are very different in their specifications and they reach from very strict to very low binding. More countries implement a CFC legislation and the strictness of most of them rises over time. To numeralize these facts a new measurement of CFC strength is developed.

Prettl-The increasing importance of CFC rules-433.pdf

10:30am - 11:00am

Is it Luring Innovations or just Profit? The Case of European Patent Boxes

Federica Liberini[1], **Marko Koethenbuerger**[1,2], **Michael Stimmelmayr**[1,2]
[1]ETH Zurich, Switzerland; [2]CESifo
Discussant(s): **Axel Maximilian Prettl** (University Tuebingen)

The effectiveness of European patent boxes in triggering R&D and fostering new patentable innovations is the subject of a growing debate. These regimes are considered liable of tax-favouring already successful ideas, without imposing a nexus between the final location of the intellectual property (IP) and its related innovation. This paper brings the debate forward onto the assessment of the quantitative impact of patent box regimes on profit shifting by multinational firms. Our empirical strategy builds on a difference-in-difference model comparing the pre-tax profit of European subsidiaries affiliated to firm conglomerates that owned patents long before the introduction of IP boxes, to that of European subsidiaries affiliated to firm conglomerates with no historical record of patent ownership. We find that European subsidiaries affiliated to foreign IP owners report, after the introduction of a local patent box, on average 2.5 to 3.9 percent higher profit compared to European subsidiaries affiliated to non-IP-owning conglomerates.

Liberini-Is it Luring Innovations or just Profit The Case-423.pdf

9:00am - 11:00am
Emerald Bay 5, Harveys

E04: Public and Private Investment

Session Chair: **Tomomi Miyazaki**, Kobe University

9:00am - 9:30am

The Political Economy Of Public Investment When Population Is Aging: A Panel Cointegration Analysis

Philipp Jäger, **Torsten Schmidt**
RWI, Germany
Discussant(s): **Tomomi Miyazaki** (Kobe University)

Time preferences vary by age. Notably, according to experimental studies, senior citizens tend to discount future payoffs more heavily than working-age individuals. Based on these findings, we hypothesize that demographic change has contributed to the cut-back in government-financed investment that many advanced economies experienced over the last four decades. We demonstrate for a panel of 19 OECD countries between 1971 and 2007 that the share of elderly people and public investment rates are cointegrated, indicating a long-run relationship between them. Estimating this cointegration relationship via dynamic OLS (D-OLS) we find a negative and significant effect of population aging on public investment. Moreover, the estimation of an error correction model reveals long-run Granger causality running exclusively from aging to investment. Our results are robust to the inclusion of additional control variables typically considered in the literature on the determinants of public investment.

Jäger-The Political Economy Of Public Investment When Population Is Aging-367.pdf

9:30am - 10:00am

Cyclicality of Public Investment in Africa

Abdoulaye Ouedraogo[1], **Mehmet Serkan Tosun**[1], **Serdar Yilmaz**[2]
[1]University of Nevada, Reno, USA; [2]Africa Region, The World Bank, USA
Discussant(s): **Philipp Jäger** (RWI)

In this paper we examine the cyclicality of public investment in African countries using panel data for the 1996-2012 period. In addition to an overall analysis of the African continent, we also examine public investment in country sub-groups such as Sub-Saharan Africa (SSA), the West African Economic and Monetary Union (WAEMU), the Central African Economic and Monetary Community (CEMAC), and the South African Development Community (SADEC). Our analysis focuses on spatial spillovers from economic shocks using contiguity and distance based spatial weighting. While our results confirm procyclicality in public investment in Africa, the degree of procyclicality varies significantly across the country groups. Procyclicality becomes less significant when spatial spillovers are considered for WAEMU and CEMAC countries but it becomes stronger for SADEC countries.

Ouedraogo-Cyclicality of Public Investment in Africa-224.pdf

10:00am - 10:30am

Interactions between Regional Public and Private Investment: Evidence from Japanese Prefectures

Tomomi Miyazaki
Kobe University, Japan
Discussant(s): **Abdoulaye Ouedraogo** (University of Nevada, Reno)

The purpose of this paper is to examine the regional effects of public investment on business investment by using Japanese prefectures' data. The Japanese government has implemented regional public investment for macroeconomic stimulus measures as well as regional income distribution even before the 2008 global financial crisis. Thus, empirical investigation on the relationship between regional public and private investment in Japan may be helpful in ascertaining whether or not the regional public investment as a part of economic stimulus packages is useful to rejuvenate the regional economy through the capital formation of private sectors.

Empirical results show that while public investment stimulates the investment in transportation and communication industries, robust crowding-out effect is observed in services and financial sectors in rural areas. This suggests that public investment is not necessarily adequate to support the regional economy through stimulating regional private sector's capital formation.

Miyazaki-Interactions between Regional Public and Private Investment-127.pdf

9:00am - 11:00am

Emerald Bay 6, Harveys

E05: Fiscal Competition

Session Chair: **Johannes Pauser**, TU Dortmund University

9:00am - 9:30am

Yardstick Competition, Efficiency of Local Public Goods, and Fiscal Transfers

Yasuyuki Nishigaki, **Hideya Kato**
Ryukoku University, Japan
Discussant(s): **Johannes Pauser** (TU Dortmund University)

Yardstick competition theory depicts intergovernmental competitions with advantageous effects to discipline the performance of local governments. However, in yardstick competition, the equilibrium level of public goods provision is below the optimal level. In this paper, to improve the efficiency of yardstick equilibrium, we study the effects of bilateral intergovernmental transfers among local governments and tax-cum-transfer policy by central government. In the "voting with their feet" model, a bilateral voluntary transfer by local governments assures the optimal provision of public goods. We indicated that in a yardstick competition, a transfer program by the central government is needed to ease the under-provision of public goods. Our results, therefore, imply that the central government should intervene to improve the efficiency of resource allocation by local governments.

Nishigaki-Yardstick Competition, Efficiency of Local Public Goods, and Fiscal Transfers-256.pdf

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9:30am - 10:00am

Constrained Tax Competition – Empirical Effects of the Minimum Tax Rate on the Tax Rate Distribution

Axel von Schwerin[1], **Thiess Buettner**[1,2]
[1]FAU Erlangen-Nuremberg, Germany; [2]CESifo
Discussant(s): **Yasuyuki Nishigaki** (Ryukoku University)

The paper explores the effect of a minimum tax rate on the tax policy of jurisdictions competing for investment and business location. The testing ground is the universe of local municipalities in the German federation where a federal reform introduced a minimum tax rate on local business profits. The paper explores whether municipalities with tax rates above the minimum rate have reviewed their tax policy and decided to set higher tax rates. Quasi-experimental evidence is provided on tax-competition effects in the sense that jurisdictions competing with low-tax jurisdictions have responded with setting higher tax-rates.

von Schwerin-Constrained Tax Competition – Empirical Effects-254.pdf

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10:00am - 10:30am

Compete and Imitate: International Labor Income Tax Convergence

Nora Margot Strecker
ETH Zurich, Switzerland
Discussant(s): **Axel von Schwerin** (FAU Erlangen-Nuremberg)

With the free movement of firms, capital and high skilled labor, developed countries face diminishing ability to tax any of the three sufficiently to maintain or raise revenues. On the opposite end of the spectrum, developing countries face an inability to raise revenues given their weak institutions and (usually complicated and convoluted) tax systems. Both types change their taxes in response to to upward revenue pressure. Between developmentally similar countries, this convergence in the tax system can be thought of as tax competition, while countries that are at opposite ends of the development ladder are more likely to be engaging in tax imitation. I will implement spatial (political, demographic economic and geographic) distances to determine the channel via which countries converge in their policies.

Strecker-Compete and Imitate-399.pdf

10:30am - 11:00am

Fiscal Competition, Unemployment, And The Provision Of Productive Infrastructure

Johannes Pauser
TU Dortmund University, Germany

Discussant(s): **Nora Margot Strecker** (ETH Zurich)

This paper examines efficiency in the provision and utilisation of productive infrastructure in an international tax competition setting with employment and congestion externalities. In a framework where infrastructure quality and infrastructure utilisation enhance production, the approach derives the constrained efficient allocation with unemployment from rigid wages. In the non-cooperative equilibrium with head and source-based capital taxes, the level of the capital tax rate and infrastructure provision and utilisation levels are ambiguous and depend on the magnitude of both externalities. If the governments' toolkit of fiscal instruments is enriched with a user charge for firms both the employment of capital and the utilisation of infrastructure may be subsidised in the non-cooperative equilibrium. In such a policy framework, the non-cooperative equilibrium is constrained efficient as user charges alleviate the inefficiency arising from congestion, and are used to manipulate infrastructure utilisation appropriately to stimulate employment.

Pauser-Fiscal Competition, Unemployment, And The Provision-457.pdf

9:00am - 11:00am
Tallac, Harveys

E06: Government Policy in China

Session Chair: **Wei Li**, Cheung Kong Graduate School of Business

9:00am - 9:30am

Labor Regulations, Economic Agglomeration, and the China-India Productivity Gap in Manufacturing

Wei Li[1], **Cheryl Long**[2], **Lixin Xu**[3]
[1]Cheung Kong Graduate School of Business, China, People's Republic of; [2]Xiamen University; [3]The World Bank

Discussant(s): **Peter Varela** (Australian National University)

Using recent firm-level survey data, we study firm-level productivity differences between China and India by focusing on the role of industrial regulations and their effects on and the productivity consequences of economic agglomeration. We find evidence that a low level of economic agglomeration, a consequence of stringent labor regulation in India, is quantitatively important in accounting for India’s productivity disadvantage. Our results show that a simple yet novel measure of agglomeration could be a key determinant of regional productivity, and that labor regulation could have far-reaching consequences for a country’s competitiveness through the channel of industrial clustering.

Li-Labor Regulations, Economic Agglomeration, and the China-India Productivity Gap-474.pdf

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9:30am - 10:00am

Political Economy of Making an Authoritarian Constitution: The Case of China

Di Guo[1], **Kun Jiang**[2], **Yutong Wang**[3], **Chenggang Xu**[1]
[1]Hong Kong University, Hong Kong S.A.R. (China); [2]Roehampton University; [3]UCLA

Discussant(s): **Wei Li** (Cheung Kong Graduate School of Business)

This paper studies, theoretically and empirically, the rational of the Chinese Communist Party (CCP)’s constitutional transformation from totalitarian to authoritarian. The premise of our theory is that the rational of the Party is centered on its power, which relies on the support of social elites in the economy. When an economy is in transition, who are the elites is in change. From the Party’s stand, a totalitarian constitution may become suboptimal under that situation. Making an authoritarian constitution may create conditions for maintaining the Party’s power. Our theoretical predictions are supported by empirical evidence/tests based on Chinese data at firm level, city level and national level, during the period of 2002/2004 party/state constitutional changes.

Guo-Political Economy of Making an Authoritarian Constitution-354.pdf

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10:00am - 10:30am

Reliance on Verifiable Information to Collect Value Added Tax in China

Yunxia Bai[1], **Wei Li**[2], **Roger H. Gordon**[3], **Yao Zhang**[1]
[1]Tongji University, Shanghai, China; [2]Cheung Kong Graduate School of Business, China, People's Republic of; [3]Dept of Economics, UCSD, La Jolla, CA, USA

Discussant(s): **Chenggang Xu** (CKGSB)

We test the predictions of Gordon and Li (2009) on tax structures and how developing countries collect taxes under imperfect information and enforcement of compliance, using data from surveys of enterprises reporting annual sales of more than 5 million yuan. We find empirical support for the Gordon-Li (2009) hypothesis that the tax authorities will rely on information that is more easily observed and verified—the size of fixed assets and the number of employees—to estimate firm-level tax liabilities when information collected based on self-reporting is likely manipulated. In addition, we find that the development of financial sectors will mitigate the importance of those signals.

Bai-Reliance on Verifiable Information to Collect Value Added Tax-480.pdf

9:00am - 11:00am
Zephyr, Harveys

E07: Behavior of Elected Officials

Session Chair: **David Stadelmann**, University of Bayreuth (Germany)

9:00am - 9:30am

Term Limits for Mayors and Intergovernmental Grants: Evidence from Italian Cities

Chiara Dalle Nogare[1], **Björn Kauder**[2]
[1]University of Brescia, Italy; [2]ifo Institute, Germany
Discussant(s): **David Stadelmann** (University of Bayreuth (Germany))

We investigate how term limits for mayors influence central government transfers to municipalities. Estimates are based on a dataset comprising 106 Italian cities over the 1998-2010 period. In order to credibly identify the influence of term limits, our estimations include mayor fixed effects. We use a dynamic panel data estimation strategy as well as OLS. We also consider intra-term differences in the level of intergovernmental grants. We provide evidence that electoral incentives distort rather than discipline incumbent mayors' behavior, because transfers are higher before an election with an eligible incumbent, in line with the political budget cycle literature. This evidence is also consistent with the idea that the allocation of intergovernmental grants is subject to the influence of lobbying activities by eligible local government office-holders, as in Borck and Owings (2003).

Dalle Nogare-Term Limits for Mayors and Intergovernmental Grants-404.pdf

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9:30am - 10:00am

Does the Strength of Incentives Matter for Elected Officials? A Look at Tax Collectors

Sutirtha Bagchi
Villanova University, United States of America
Discussant(s): **Björn Kauder** (ifo Institute)

In Pennsylvania local property taxes are collected by municipal tax collectors whose compensation can vary widely in both structure and level across municipalities. This paper analyses the existence of a pay-performance relationship for these officials. Using data on the percentage of real estate taxes that are actually collected at the municipal level, the paper finds that as the compensation tax collectors receive goes up, they collect more in taxes. This relationship is true only for those collectors who are compensated on a commission basis and not for collectors who are compensated on the basis of a flat salary. Furthermore, the paper offers some evidence that local residents are more likely to seek the status of a "Qualified Tax Collector" when the compensation they receive is higher. Lastly, the paper also finds that as the compensation increases, elections for the office of tax collector are more likely to be contested.

Bagchi-Does the Strength of Incentives Matter for Elected Officials A Look-499.pdf

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10:00am - 10:30am

Electoral Cycles In MPs' Salaries: Evidence From The German States

Manuela Maria Krause, **Björn Kauder**, **Niklas Potrafke**
ifo Institute, Germany
Discussant(s): **Sutirtha Bagchi** (Villanova University)

Members of parliament (MP) often decide on their own salaries. Voters dislike self-serving politicians, and politicians are keen to gratify their voters. In line with the political business cycle theories, politicians thus may well delay deciding on increases in salaries until after elections. We investigate electoral cycles in salary increases of German state MPs. Using data for 15 states over the period 1980-2014, the results do not show that decisions on increases in MPs' salaries were influenced by elections. In fact, MPs' salaries increased by 0.29 to 0.37 percentage points when employees' salaries increased by one percentage point. Politicians can increase their salaries at any point of time in the legislative period: understanding that all politicians benefit from an increase in salaries, voters may only be disenchanted with politics in general, without punishing individual incumbent parties.

Krause-Electoral Cycles In MPs' Salaries-203.pdf

10:30am - 11:00am

Do Interest Group Affiliations Affect the Behavior of Politicians?

David Stadelmann[1], **Marco Portmann**[2]
[1]University of Bayreuth (Germany); [2]University of Fribourg (Switzerland)
Discussant(s): **Manuela Maria Krause** (ifo Institute)

We jointly analyze the effect of revealed constituent, interest group and political party preferences on the behavior of politicians. Voters reveal their policy preferences in referenda, interest groups as well as political parties reveal their preferences by providing voting recommendations while we observe politicians decisions on identical legislative proposals in parliament. Preliminary results suggest that politicians consider the preferences of all three principals. While constituents play a slightly larger role than their parties for majority-elected politicians the opposite is true for proportionally-elected politicians. For both types of politicians interest groups preferences matter too but to a relatively small extent.

Stadelmann-Do Interest Group Affiliations Affect the Behavior-358.pdf

9:00am - 11:00am
Tahoe A, Harrahs

E08: Corporate Taxation and Tax Avoidance

Session Chair: **Claudio Agostini**, Adolfo Ibáñez University

9:00am - 9:30am

Evaluating Transfer Pricing Reform: Evidence from a Natural Experiment in Chile

Sebastian Bustos[1], **Dina Pomeranz**[2], **Gabriel Zucman**[3]
[1]Harvard; [2]Harvard; [3]UC Berkeley
Discussant(s): **Claudio Agostini** (Adolfo Ibáñez University)

This paper documents the extent to which multinational firms operating in Chile shift profits to offshore tax havens and evaluates a major reform designed to curb this profit-shifting. We exploit administrative micro tax data containing information on the cross-border real and financial transactions conducted by all medium and large Chilean firms. From 2007 to 2011, Chilean firms that are part of a multinational group sent as much income to the British Virgin Islands as to the United States. In 2011, the Chilean tax administration considerably increased the reporting requirements and monitoring of firms with foreign affiliates and started enforcing strict rules on how intra- group transactions should be priced. We employ a matched difference-in-differences approach to estimate the impacts of this reform. The reform increased corporate income tax payments and reduced interest deductions. The increase in corporate income tax falls with firm size (+55% for the median firm, +9% at the 95th percentile).

Bustos-Evaluating Transfer Pricing Reform-503.pdf

9:30am - 10:00am

Not(ch) Your Average Tax System: Corporate Taxation Under Weak Enforcement

Pierre Bachas[1], **Mauricio Soto**[2]
[1]UC Berkeley; [2]Banco Central de Costa Rica
Discussant(s): **Gabriel Zucman** (UC Berkeley)

We use the unusual design of the corporate income tax in Costa Rica and a novel methodology, which combines bunching at tax notches with a discontinuity approach, to estimate important parameters for the design of optimal tax policy in lower-income countries. First, the elasticity of reported profits with respect to the tax rate is very large at roughly four. As a result the highest possible optimal tax rate is substantially lower than in rich economies. Second, we show that the cost elasticity is larger than the revenue elasticity. Firms' ease to understate profits by over-reporting costs rationalizes the use of broad tax bases with few deductions. Third, we provide evidence that tax evasion is a key driver, while real effects appear limited. Taken together, the data suggests that Costa Rican firms evade taxes on 70% of their profits and that the revenue maximizing rate is between 18-26%.

Bachas-Not(ch) Your Average Tax System-505.pdf

10:00am - 10:30am

Small Firms and Presumptive Tax Regimes in Chile: Tax Avoidance and Equity

Claudio Agostini
Adolfo Ibáñez University, Chile
Discussant(s): **Pierre Bachas** (UC Berkeley)

In general, special tax regimes create inefficiencies and might destroy horizontal equity. However, many countries have special tax regimes for small businesses or specific economic sectors. The goal is usually to reduce compliance costs, but also to reduce inequality since it is assumed that owners of small businesses are generally low-income taxpayers.

To study the magnitude of tax avoidance of special tax regimes in Chile and their effects on horizontal equity, I use administrative data from the Chilean IRS to simulate a tax reform that replaces them with a cash flow tax for small firms.

The results show that a reform of this type would have positive effects, especially in terms of horizontal tax equity as 85.6% of the profits from firms under presumptive taxes and 77.6% of the profits from the small firms under tax regimes respectively, belong to taxpayers in the top income decile.

Agostini-Small Firms and Presumptive Tax Regimes in Chile-239.pdf

9:00am - 11:00am
Tahoe B, Harrahs

E09: Tax Evasion

Session Chair: **Anne Brockmeyer**, World Bank

9:00am - 9:30am

The Lottery Receipt

Junmin Wan
Fukuoka University, Japan
Discussant(s): **Anne Brockmeyer** (World Bank)

To solicit information about transactions known only to firms and consumers, many governments have set up the lottery receipt experiment (LRE). First, it is found by field study and household survey that LRE in China has significantly improved tax declarations by asking for official receipts. Second, we show that if the government gives a subsidy to the consumer to buy information from the consumer in a competitive market, the consumer will declare the tax so that the firm cannot cheat, and thus both the cheating and auditing costs can be saved, Pareto-efficient taxation without collusive evasion becomes practicable.

Wan-The Lottery Receipt-403.pdf

9:30am - 10:00am

Tax Morale and Policy Intervention

Katarina Nordblom
University of Gothenburg, Sweden
Discussant(s): **Denvil Duncan** (Indiana University)

This paper deals with tax morale and how it may evolve over time. I apply mechanisms from social psychology to explain how personal norms may evolve due to own past behavior through self signaling and due to conformity based on social interactions. This results in multiple equilibria, so that norms may either grow stronger implying less evasion or be steadily weakened followed by increasing evasion.

If an economy is stuck on a trajectory towards the 'bad' equilibrium, a temporary policy which pushes people from the black to the white market could bring the economy to a trajectory towards the good equilibrium instead. If the temporary policy is sufficiently effective, the economy will stay on the positive trajectory also after the policy is abolished.

Observations from a recent tax reform in Sweden corroborate the theory and suggest that policy may indeed be a powerful tool in influencing both behavior and attitudes.

Nordblom-Tax Morale and Policy Intervention-376.pdf

10:00am - 10:30am

Casting The Tax Net Wider: Experimental Evidence From Costa Rica

Anne Brockmeyer[1], **Marco Hernandez**[1], **Spencer Smith**[2], **Stewart Kettle**[3]
[1]World Bank, United States of America; [2]Oxford University; [3]Behavioural Insights Team

Discussant(s): **Katarina Nordblom** (University of Gothenburg)

• Note that this paper cannot be downloaded and an Abstract is not available. Please contact the author (s).

9:00am - 11:00am
Tahoe C, Harrahs

E10: Personal Income Taxation

Session Chair: **Jean-Francois Wen**, University of Calgary

9:00am - 9:30am

A Note on the Splitting of Income under a Dual Income Tax

Seppo Kari, Olli Ropponen
VATT Institute for Economic Research, Finland

Discussant(s): **Jean-Francois Wen** (University of Calgary)

One of the issues of dual income tax systems is incentives to shift income. The Nordic countries address this issue by splitting income of closely held companies (CHC) into capital income and labor income parts by imputing a return on equity, categorized as capital income, and taxing the rest of the remuneration roughly at rates on labor income. There are two approaches to calculate the normal return: 1) impute a return on the purchase price of shares and 2) calculate a return on the net assets of the firm. In this paper we address the economic effects of the net-assets based splitting system. We show that at appropriately chosen parameter values the net-assets based split carries the properties of the neutral ACE tax. Therefore, the incentive problems of the Finnish taxation of CHCs, found in earlier studies, derive from wrong parameter values rather than wrong principles.

Kari-A Note on the Splitting of Income under a Dual Income Tax-322.pdf

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9:30am - 10:00am

Reforming Estate Taxation by Reversing the Generation-Skipping Transfer Tax

James Feigenbaum[1], **T. Scott Findley**[2]
[1]Utah State University, United States of America; [2]Utah State University, United States of America

Discussant(s): **Olli Ropponen** (VATT Institute for Economic Research)

Previous work on estate taxes has focused on an age-independent tax, as in the existing U.S. code, in which the tax depends only on the wealth and portfolio of the deceased as opposed to the characteristics of the heir. We propose a new approach to reforming the estate tax in which the tax rate paid by young heirs is set lower than the tax rate paid by older heirs. This results in a higher present value of income for households, leading to a larger capital stock and higher lifetime utility in the steady state.

Feigenbaum-Reforming Estate Taxation by Reversing the Generation-Skipping Transfer Tax-509.pdf

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10:00am - 10:30am

Inheritance Tax Planning: Magnitude, Means, and Motives

Oscar Erixson, **Sebastian Escobar**
Uppsala universitet, Sweden

Discussant(s): **T. Scott Findley** (Utah State University)

In this paper we study peoples' planning to avoid inheritance taxation shortly before they pass away. We find, similarly to the seminal work by Kopczuk (2007), that people who die from a lengthy terminal illness leave behind smaller estates and thus, pay less in taxes than those who die instantaneous. A substantial improvement relative to Kopczuk's work is that we can effectively control for responses in wealth that are caused by terminal illness but unrelated to tax planning by exploiting a tax reform which removed the incentives for married decedents to plan their estates to avoid inheritance taxation. The results from that exercise and several placebo tests, make us confident in concluding that the response of estate value to lengthy illness is due to tax planning.

Erixson-Inheritance Tax Planning-311.pdf

10:30am - 11:00am

Tax Penalties on Fluctuating Incomes: Estimates from Longitudinal Data

Jean-Francois Wen, **Daniel Gordon**
University of Calgary, Canada

Discussant(s): **Oscar Erixson**

Progressive personal income taxes imply that individuals with fluctuating incomes will pay more taxes over time than individuals with constant incomes of the same average value. The implicit tax penalty violates the principles of horizontal and vertical equity and may also harm efficiency by discouraging risk-taking activities, such as entrepreneurship.

This paper estimates the average size of the tax penalties on fluctuating incomes in Canada using longitudinal data and a tax simulator. The results are presented by income groups and separately for unincorporated and incorporated self-employment and wage/salary employment. The latter analysis is based on the fact that the self-employed have relatively volatile incomes. The size distribution of the tax penalty is also depicted.

The paper then shows the effect that various income averaging policies that were either proposed or used in the past would have on the size of the tax penalties.

Wen-Tax Penalties on Fluctuating Incomes-151.pdf

9:00am - 11:00am
Tahoe D, Harrahs

E11: Fiscal Rules

Session Chair: **Haizhen Mou**, University of Saskatchewan

9:00am - 9:30am

Budget Institutions and Government Effectiveness

Momi Dahan, **Michel Strawczynski**
Hebrew University, Israel

Discussant(s): **Kylie Coulson** (Curtin University)

Why is government effectiveness higher in some countries than in others? This study shows that the autonomy of the administrative staff plays a role in explaining the variation in government effectiveness for advanced countries. The degree of autonomy is represented in this paper by an index of budget centralization and a measure of the power of politicians to recruit top administrative officials. Employing an original dataset we find that these two measures of (dis)autonomy have a negative and significant effect on government effectiveness in OECD countries after accounting for a standard list of control variables. The negative impact of budget centralization remains significant using panel analysis with data that spans four different years (1991, 2003, 2007 and 2012). These results survive a long list of sensitivity tests.

Dahan-Budget Institutions and Government Effectiveness-156.pdf

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9:30am - 10:00am

Fiscal reaction functions in the EU - does a "correct" econometric modelling approach exist?

Ekkehard A. Koehler[1], **Wolf H. Reuter**[2]
[1]Walter Eucken Institut, Germany; [2]Austrian National Bank (OeNB), Economic Studies Division, and Vienna University of Economics and Business (WU), Department of Economics, Austria

Discussant(s): **Momi Dahan** (Hebrew University)

This paper analyses the fiscal sustainability of the EU member states by exploiting their fiscal reaction functions. Although the member states are closely intertwined we are the first to apply "second generation" panel techniques that control for correlation and cross-dependence among the member states. We identify a new econometric speciation and estimation strategy by comparing and combining the most common set-ups in the literature and by rigourously analysing the data and residuals of the econometric exercises.

Koehler-Fiscal reaction functions in the EU-479.pdf

10:00am - 10:30am

Can Fiscal Rules Constrain the Size of Government? An Analysis of the "Crown Jewel" of Tax and Expenditure Limitations

Paul Eliason[1], **Byron Lutz**[2]
[1]Duke University; [2]Federal Reserve Board of Governors, United States of America

Discussant(s): **Ekkehard A. Koehler** (Walter Eucken Institut)

In this paper we ask if fiscal rules are capable of altering budget outcomes by examining what is arguably the most stringent set of fiscal rules in the U.S.---Colorado's Taxpayer Bill of Rights (TABOR). Previous examinations of TABOR have universally come to the conclusion that it significantly reduced both taxation and spending -- i.e. that it caused a reduction in the size of government. To evaluate TABOR, we extend the synthetic control methodology of Abadie et al. (2010) to allow for estimating treatment effects for multiple outcomes (taxes and expenditures) simultaneously. Our results suggest that TABOR had no effect on the level of taxes or spending in Colorado. Instead, TABOR appears to have been partly evaded by policy makers and voters despite its stringency and partly nothing more than a signal of the state's preference over the size of its public sector.

Eliason-Can Fiscal Rules Constrain the Size of Government An Analysis of the Crown Jewel of Tax and.pdf

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10:30am - 11:00am

Do Balanced Budget Laws Matter in a Recession? Evidence from the Canadian Provinces

Haizhen Mou[1], **Michael Atkinson**[2], **Stephen Tapp**[3]
[1]University of Saskatchewan, Canada; [2]University of Saskatchewan, Canada; [3]Institute for Research on Public Policy, Canada

Discussant(s): **Byron Lutz** (Federal Reserve Board of Governors)

Since the mid-1990s, most Canadian provinces have enacted balanced budget laws (BBLs). Critics argue that these laws are empty political gestures that are ignored during economic slowdowns. We explore the effects of BBLs on budget outcomes in the Canadian provinces from 1981 to 2013 and find, after taking account of provincial-level business cycles, no obvious difference between the effects of BBLs during normal economic conditions and during recessions and recoveries. Provinces with stronger rules had a higher probability of balancing their budget, incurred smaller deficits, and accumulated less debt than they likely would have with weaker or no BBLs. We conclude that future design of BBLs needs to better account for the influence of jurisdiction-specific business cycles.

Mou-Do Balanced Budget Laws Matter in a Recession Evidence-355.pdf

9:00am - 11:00am
Glenbrook/Fallen Leaf, Harrahs

E12: Measuring Income Inequality

Session Chair: **Wojciech Kopczuk**, Columbia University

9:00am - 9:30am

Potential Determinants of Top Income Inequality

Saikat Sarkar, **Matti Tuomala**
School of Administrative Studies, York University, Toronto, Canada. Tampere University, Finland

Discussant(s): **Wojciech Kopczuk** (Columbia University)

Our analysis reveals that the rise in income inequality would be

partly based on economic fundamentals caused by increases in innovation-led growth, and partly on financial market excess caused at least in part by rent seeking activities. These activities help to generate bubbles in the financial market by manipulating stock price. Stock market

development along with the financial bubbles seem to be the important drivers of the observed increases in top income shares and are

inevitable part of the story in explaining raising income inequality.

Sarkar-Potential Determinants of Top Income Inequality-222.pdf

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9:30am - 10:00am

A time series analysis of household income inequality in Brazil 1977-2013

Enlinson Mattos[3], **Emerson Marçal**[2], **Marcel Caparoz**[1]
[1]Fundacao Getulio Vargas, Brazil; [2]Fundacao Getulio Vargas, Brazil and Mackenzie; [3]RC Consulting

Discussant(s): **Saikat Sarkar** (Saikat Sarkar)

This paper analyses the evolution of household income inequality in Brazil aggregated and regional from 1977 and 2013. Brazilian National Household Survey data is used and four income shares quantiles are analysed top 1%, top 10%, poorest 10% and poorest 50%. The novelty of our study is to use time series techniques to understand the phenomenon

of income inequality within this period: (i) Unobservable component (Harvey [1990]) and Markov-switching regime change model (Hamilton [1989]).Our results can be stated on two dimensnions. Allowing for three diferent regimes, top 1% and 10% (bottom, 10% and 50%) income individuals observe a reduction (increase) in their income share in Brazil and most regions only after 2002. Second, for those at the top income we canot reject that there is a trend different from zero in any period, different from those at the bottom in the 80's (negative) but getting back in recent years.

Mattos-A time series analysis of household income inequality-328.pdf

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10:00am - 10:30am

Estimating Income Distributions From Grouped Data: A Minimum Quantile Distance Approach

Tsvetana Spasova
University of Basel, Switzerland

Discussant(s): **Enlinson Mattos** (Fundacao Getulio Vargas)

In this work, we suggest a novel application of the minimum quantile distance approach for estimating income distribution from grouped data. Employing the Dagum distribution, we apply the suggested method to 30 European countries. Due to the fact that we also have representative microdata sets for all of the observed countries, we are able to compare our parametric estimates directly with estimates from the corresponding more informative and elaborate microdata sets. Our parametric estimates are very close to their corresponding counterparts computed directly from the microdata sets.

Spasova-Estimating Income Distributions From Grouped Data-307.pdf

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10:30am - 11:00am

Accounting for Business Income in Measuring Top Income Shares: Integrated Accrual Approach Using Individual and Firm Data from Norway

Wojciech Kopczuk[1], **Annette Alstadsaeter**[2], **Martin Jacob**[3], **Kjetil Telle**[4]
[1]Columbia University, United States of America; [2]Norwegian University of Life Sciences, Norway; [3]WHU – Otto Beisheim School of Management, Germany; [4]Statistics Norway

Discussant(s): **Tsvetana Spasova** (University of Basel)

How much of business income is captured by measures of personal income varies across tax regimes. Using linked individual and firm data from Norway, we attribute business income to owners as it accrues rather than when realized. This adjustment increases top income shares, but the effect varies dramatically depending on the tax regime in place. After a tax reform in 2005 that created strong incentives to retain earnings in the business, the increase is massive: accounting for earnings retained in the corporate sector in some years doubles the share of income of top 0.1%. As the result, traditional measures of top income shares become misleadingly low. We speculate on the implications for levels and trends in top income shares in other countries; in particular, we argue that top income shares in the US constructed using income tax statistics before 1987 are likely to be significantly understated relative to those afterwards.

Kopczuk-Accounting for Business Income in Measuring Top Income Shares-513.pdf

9:00am - 11:00am

Marla Bay/Emerald Bay, Harrahs

E13: Immigration

Session Chair: **Sajal Lahiri**, Southern Ilinois UNiversity Carbondale

9:00am - 9:30am

Immigration and the Use of Public Maternity Services in England

George Patrick Stoye
Institute for Fiscal Studies, United Kingdom

Discussant(s): **Sajal Lahiri** (Southern Ilinois UNiversity Carbondale)

Immigration has a number of potentially significant effects on host country economies. The current literature largely focuses on the impact on labour market outcomes, while relatively little attention is paid to understanding the pressures on demand for public services. This paper investigates the impact of immigration on the use and quality of publicly funded maternity services in England. It shows that areas with a greater concentration of immigrants have higher demands for maternity care, with significantly higher birth rates, greater rates of emergency cesarean sections and an increased cost per maternity patient even after controlling for local demographic and economic characteristics. However, despite no changes in overall hospital budgets, there is only mixed evidence that these increases in demand result in deterioration in the observable quality of maternity services, with increased incidence of some adverse birth outcomes, but no increases in 30 day emergency readmissions for mothers or children.

Stoye-Immigration and the Use of Public Maternity Services-231.pdf

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9:30am - 10:00am

Bitterness in Life and Attitudes towards Immigration

Panu Poutvaara[1], Max Steinhardt[2]

[1]Ifo Institute and University of Munich, Germany; [2]Helmut Schmidt University, Germany

Discussant(s): **George Patrick Stoye** (Institute for Fiscal Studies)

We provide new evidence on the determinants of individual attitudes towards immigration, using data from the 2005 and 2010 waves of the German Socio-Economic Panel. In particular, we show that people who feel that they have not got what they deserve in life are much likely to be worried about immigration. This pattern cannot be explained just by concerns that immigrants are competing with natives in the labor market. Instead, it appears that non-economic reasons play a major role in driving bitter people to oppose immigration.

Poutvaara-Bitterness in Life and Attitudes towards Immigration-385.pdf

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10:00am - 10:30am

Immigration as a Policy Tool for the Double Burden Problem of Pre-funding Pay-as-you-go Social Security Systems

Hisahiro Naito

University of Tsukuba, Japan

Discussant(s): **Panu Poutvaara** (Ifo Institute and University of Munich)

The effect of accepting more immigrants on welfare in the presence of a pay-as-you-go social security system is analyzed theoretically and quantitatively in this study. First, it is shown that if intergenerational government transfers initially exist from the young to the old, the government can lead an economy to the (modified) golden rule level within a finite time in a Pareto-improving way by increasing the percentage of immigrants to natives (PITN). Second, by using the computational overlapping generation model, I calculate both the welfare gain of increasing the PITN from 15.5 percent to 25.5 percent in 80 years and the years needed to reach the (modified) golden rule level in a Pareto-improving way in a model economy. The analysis shows that the PDV of the welfare gain amount to 20% of the initial GDP.

Naito-Immigration as a Policy Tool for the Double Burden Problem-419.pdf

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10:30am - 11:00am

Does the Presence of International Students Improve Domestic Graduations in the US?

Melaku Abegaz, Sajal Lahiri, AKM Mahbub Morshed

Southern Ilinois University Carbondale, United States of America

Discussant(s): **Hisahiro Naito** (University of Tsukuba)

We examine the impacts of international students on the degree completions of native students in the states of Illinois and California, U.S.A. Using Illinois Board of Higher Education and California Postsecondary Education Commission data on enrolments and graduations -- disaggregated by universities, programs, and types of students -- we follow a two-stage method. In the first stage, we estimate university `premiums' on graduations, separately for masters and PhD degrees, and then in the second stage we examine how these premiums are affected by the graduation rates of international students. We allow for possible two-way causality in the second stage. The results reveal that, for example, one percentage point increase in the share of international master's degree and PhD recipients increases master's and PhD graduation premiums by about 1 and 0.5 additional graduates, respectively, in Illinois universities. Our estimates also suggest that international students generate positive externalities on the university graduation premiums among the native students.

Abegaz-Does the Presence of International Students Improve Domestic Graduations-164.pdf

11:00am - 11:30am **Coffee Break**

11:30am - 1:30pm
Garden I, Harveys

F01: SMEs and Taxes

Session Chair: **Michelle Harding**, OECD

11:30am - 12:00pm

A Tale of Two Datasets: Business Survival in Administrative versus Survey Data

Tami Gurley-Calvez[2], Donald Bruce[1], John A. Deskins[3], Brian Hill[4]

[1]University of Tennessee, United States of America; [2]University of Kansas Medical Center, United States of America; [3]West Virginia University, United States of America; [4]Salisbury University, United States of America

Discussant(s): **Michelle Harding** (OECD)

A large literature examines drivers of small business survival and growth. Researchers have used both administrative records and survey data, but little is known about the implications of each type of data for reported estimates and the broader understanding of small business outcomes. We address two sources of data and assess how the use of each type explains variation in the existing literature. First, we examine business survival based on a matched administrative and survey dataset. Second, we use additional information available in the survey data to assess whether results differ when one is able to identify actual business closure, as opposed to mere attrition from the data for any reason. Our results identify important differences between estimates based on survey attrition versus confirmed closure, as well as between survey and administrative data more generally.

Gurley-Calvez-A Tale of Two Datasets-384.pdf

12:00pm - 12:30pm

The Case of Missing Companies: Mergers, Shutdown and Shell

Suranjali Tandon
National Institute of Public Finance and Policy, India
Discussant(s): **Donald Bruce** (University of Tennessee)

A company as an entity could cease to exist owed to its merger and dormancy in activity. The latter can be attributed two causes- nonviable production or shell companies. Therefore, three questions are posed- one, why do companies merge, two-why do companies shutdown and third- of those that disappear can they be identified as shell.

Using counterfactual It is found that companies that survived despite the inefficiencies and smaller market shares were the ones that had some foreign affiliation and were unrelated to existing business entities. On the other hand, the dormancy or shutdown can be attributed of lack of access to imported technology and low shares of market with dismal profitability. Lastly, the disappearance or shutdown of companies that may have been used for tax avoidance is supported by the data.

Tandon-The Case of Missing Companies-405.pdf

12:30pm - 1:00pm

Business Entity Choice, Entrepreneurship, and State Tax Policy

Sonja Pippin, Mehmet Tosun
University of Nevada Reno, United States of America
Discussant(s): **Suranjali Tandon** (National Institute of Public Finance and Policy)

This research contributes to the extensive literature by examining the relationship between tax policy, entrepreneurial activity and business entity choice. We test whether state corporate income and personal income tax rates as well as county level combined sales and use tax rates affect the number of schedule C filings and net business income from self-employment. Our findings show that state tax policy is significantly associated with the number of schedule C filings and the share of income from the schedule Cs. While higher corporate income tax rates imply higher share of sole proprietorships, the association with state personal income tax rates appears to be negative. Yet, the relationship is not robust to alternative specifications especially when spatial dependence is considered. We also find that the share of small establishments is higher in places with higher combined state and local sales tax rates and lower average combined sales tax rates in contiguous counties.

Pippin-Business Entity Choice, Entrepreneurship, and State Tax Policy-223.pdf

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1:00pm - 1:30pm

Taxing Small and Medium-Sized Enterprises: Income Tax, Tax Preferences and Simplification Measures in the OECD and Selected Partner Economies

Michelle Harding[1], Dimitra Koulouri[2]
[1]OECD, France; [2]OECD, France
Discussant(s): **Sonja Pippin** (University of Nevada Reno)

SMEs are a critical part of national economies due to their contribution to employment, innovation, economic growth and diversity. Understanding how the tax system affects SMEs is therefore important to develop policies that best support their creation and growth. This paper develops an analytical framework to assess the impact of taxation on SMEs. It uses this framework to consider the impact of tax systems on SMEs, looking specifically at the income taxation of SMEs, tax preferences targeted at SMEs and the impact of tax compliance and simplifications for SMEs, across 39 OECD and G20 countries. It concludes that careful design of government programs for SMEs, including special tax rules, can contribute to SME creation and growth by addressing market failures and the disproportionately high compliance burdens faced by SMEs.

Harding-Taxing Small and Medium-Sized Enterprises-454.pdf

11:30am - 1:30pm
Garden II, Harveys

F02: Environmental Policies

Session Chair: **Alfons J Weichenrieder**, Goethe University Frankfurt

11:30am - 12:00pm

Government Policies and Preferences for Environmental Quality

Marcelo Arbex, Christian Trudeau
University of Windsor, Canada
Discussant(s): **Alfons J Weichenrieder** (Goethe University Frankfurt)

This paper illustrates how different preferences for environmental quality and externalities (pollution) can be important for evaluating implications of policy interventions in the context of a federation. Regions are symmetric, except for their preferences for consumption and nature quality, and they face trade-offs between consumption, obtained through pollution-generating economic activities, and the quality of the environment. Pollution creates negative externalities on neighbors. Policies in our model mirrors those available in practice to federations. A Pigouvian pollution tax is more efficient. We show that lump-sum transfers can be a reasonable substitute for a pollution tax, in particular when preferences for environmental quality are (relatively) high in one of the regions. Quotas perform very well if regions have similar preferences for nature. Pollution (and production) will be concentrated in the regions that do not value nature as highly. We illustrate numerically the relationship between preferences for environmental quality and alternative government policies.

Arbex-Government Policies and Preferences for Environmental Quality-252.pdf

12:00pm - 12:30pm

Allocation mode, Efficiency of China's Carbon and Sulfur Emission and Environmental Policy

Rui-zhi Pang, Xue-jie Bai
Nankai University, RR China

Discussant(s): **Marcelo Arbex** (University of Windsor)

Chinese central government has adopted an administrative allocation mode of "one size fits all" to reduce its carbon and sulfur emissions in all provinces and cities. Using ZSG-DEA model of environmental production technology, the paper analyzes and evaluates the emission efficiencies of China's provincial CO2 and SO2, and gives a reallocation scheme about China's carbon and sulfur emission in 2015. Results show: Administrative allocation mode leads to an increasing gap of provincial emission-reduction ability, which makes provinces with higher efficiency difficult to achieve their emission-reduction targets but provinces with lower efficiencies easy to achieve their targets. Additionally, administrative allocation mode ignores the efficiency differences. On the contrary, ZSG allocation mode emphasizes on the Pareto optimality among economy, environment and energy. Based on the study result, the environmental policy on emission in China should be adjusted to achieve Pareto Optimality according to provincial emission efficiency.

Pang-Allocation mode, Efficiency of China's Carbon and Sulfur Emission and Environmental Policy-388.pdf

12:30pm - 1:00pm

Fertility and the Intragenerationally Efficient Environment and Tax Policy in Population Aging

Akira Yakita
Nanzan University, Japan

Discussant(s): **Rui-zhi Pang** (Nankai University)

In an overlapping generations model with endogenous fertility decisions, we show that when pollution abatement is sufficiently effective, wage income should be subsidized by a short-lived government with a planning horizon the same as the life span of the generation it represents. Although the wage subsidy raises the opportunity cost of rearing children, the effectiveness of abatement activities can raise the fertility rate on balance. We also show that longer life expectancy, i.e., population aging, requires the efficient policies to improve environmental quality even more and retard population growth in the long term.

Yakita-Fertility and the Intragenerationally Efficient Environment and Tax Policy-192.pdf

1:00pm - 1:30pm

Do Stringent Environmental Policies Deter FDI? M&A Versus Greenfield

Sylwia Bialek[1], Alfons J Weichenrieder[2]
[1]Goethe University Frankfurt, Germany; [2]Goethe University Frankfurt, Germany

Discussant(s): **Akira Yakita** (Nanzan University)

This study examines how environmental stringency affects the location decision of foreign direct investments. We analyze a firm-level data set on German outbound FDI and innovate on previous studies by controlling for the mode of entry and applying the mixed-logit analysis. The results show that Greenfield projects react to environmental regulation in a strongly different way than M&As. We find robust support for pollution haven hypothesis for polluting Greenfields. M&A investments in low polluting industries, on the other hand, seem to be attracted by stricter environmental regulation. We introduce a new instrumental variable for environmental stringency and apply it to verify the results.

Bialek-Do Stringent Environmental Policies Deter FDI M&A Versus Greenfield-168.pdf

11:30am - 1:30pm
Emerald Bay 4, Harveys

F03: Effects of Political Competition

Session Chair: **Mehmet Serkan Tosun**, University of Nevada, Reno

11:30am - 12:00pm

The Effects of Political Competition on the Funding and Generosity of Public-Sector Pension Plans

Sutirtha Bagchi
Villanova University, United States of America

Discussant(s): **Mehmet Serkan Tosun** (University of Nevada, Reno)

In politically competitive jurisdictions, there can be strong electoral incentives to underfund public pensions in order to keep current taxes low. I examine this hypothesis using panel data for 2,000 municipal pension plans from Pennsylvania. The results suggest that as a municipality becomes more politically competitive, it tends to have pension plans that are less funded, more generous, and that use higher interest rates to discount actuarial liabilities. The effects of political competition are pronounced in municipalities which have a higher proportion of less informed voters and are absent for defined contribution plans and pension plans offered by municipal authorities.

Bagchi-The Effects of Political Competition on the Funding and Generosity of Public-Sector Pension Plans-498.pdf

12:00pm - 12:30pm

Candid Lame Ducks

Mariana Lopes da Fonseca
Max Planck Institute, Germany

Discussant(s): **Sutirtha Bagchi** (Villanova University)

This study relies on a recent reform introducing gubernatorial term limits at the Portuguese local level to explore how an exogenous variation in eligibility for re-election affects local fiscal policy choices. Relying on electoral and fiscal outcomes for the past three complete electoral terms and a quasi-experimental diff-in-diff approach, the empirical analysis estimates how fiscal policy differs on average between re-eligible and term-limited incumbents. Results indicate that rather than engaging in opportunistic behavior, lame ducks pursue more conservative fiscal policies. Term limited officeholders choose lower property tax rates and reduced levels of current expenditure relative to re-eligible incumbents. Heterogeneous effects further suggest that ineligible mayors behave more truthfully, and do not engage in political business cycles.

Lopes da Fonseca-Candid Lame Ducks-214.pdf

12:30pm - 1:00pm

Fattening the `Pork Barrel' with Leftovers: Political Budget Cycle and Payments on Arrears

Luciano Greco[1], **Luigi Moretti**[2]
[1]University of Padova, Italy; [2]University of Bologna, Italy

Discussant(s): **Mariana Lopes da Fonseca** (Max-Planck Institute)

We investigate how payments on public investment arrears are influenced by the political cycle. We first develop a model where local politicians face term limits and take public finance decisions. Each year, incumbent politicians set the level of commitments for current and investment expenditures, taxes and loans; then, they decide the level of payments on committed expenditure (including arrears). Testable predictions suggest a political budget cycle where taxes, investment expenditure, and payments are used strategically by incumbent politicians. We test such predictions using a dataset of Italian municipalities. Our empirical findings confirm that politicians implement fiscal consolidation early after taking office; along the political cycle, commitment investment expenditure and taxes grow until the pre-electoral year, then dramatically shrink in the election year. We show that incumbent politicians regulate the timing of expenditure implementation by steadily increasing payments (on arrears) along the political cycle, reaching the maximum in the election year.

Greco-Fattening the `Pork Barrel with Leftovers-461.pdf

1:00pm - 1:30pm

State Government Finances and Legislative Term Limits Revisited

Pavel Aleksandrovich Yakovlev[1], **Mehmet Serkan Tosun**[2], **William P. Lewis**[3]
[1]Duquesne University, United States of America; [2]University of Nevada at Reno, United States of America; [3]Duquesne University, United States of America

Discussant(s): **Luciano Greco** (University of Padua)

This study estimates the effect of U.S. legislative term limits on state revenue, general expenditure and its main components (welfare, highways, health, education, and state aid to local governments). Two alternative measures of term limits are tested: 1) an original term limit index and 2) average legislative turnover rate. Controlling for economic, institutional, political, and demographic factors, we find that neither of term limits measure has a significant effect on the per capita size of state government. However, the two measures of term limits appear to have a significant effect on the distribution of public funds within the state budget.

Yakovlev-State Government Finances and Legislative Term Limits Revisited-482.pdf

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11:30am - 1:30pm

Emerald Bay 5, Harveys

F04: Local Fiscal Competition

Session Chair: **David R. Agrawal**, University of Kentucky

11:30am - 12:00pm

Do local governments compete in expenditures? Evidence from Colombian municipalities

Nicolas Pardo[2,5], **Frank M. Fossen**[1,3,4], **Lukas Mergele**[2,5]
[1]Freie Universitaet Berlin, Germany; [2]Humboldt-University of Berlin; [3]DIW Berlin; [4]IZA; [5]Berlin Doctoral Program in Economics and Management Science

Discussant(s): **David R. Agrawal** (University of Kentucky)

This paper explores the determinants of local public expenditures in a developing country. In particular, we study whether public expenditures in neighboring municipalities will influence local politicians' spending decisions, as many theories predict. Such spatial expenditure spillovers were understudied in previous research and mostly relied on state-level data from industrialized economies. Our first contribution is to analyze spatial fiscal interactions in a developing country setting. Second, we employ a panel data set of the universe of Colombian municipalities providing a rich source of policy variation. Third, we examine heterogeneous effects for a broad range of expenditure categories. Fourth, we offer a clean identification strategy exploiting exogenous variation in exposure of municipalities to changes in the world market price for oil, depending on the municipalities' endowment of oil resources. While we find strong evidence of spatial correlation of public spending, the use of the exogenous instrument reveals that causal spatial interaction effects are small.

Pardo-Do local governments compete in expenditures Evidence-412.pdf

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12:00pm - 12:30pm

Tax Effects of Amalgamations: Evidence from Swiss Municipalities

Florian Chatagny[1], **Benedikt Fritz**[2], **Marko Koethenbuerger**[1]
[1]ETH Zürich, Switzerland; [2]Deutsche Bundesbank
Discussant(s): **Frank M. Fossen** (Freie Universitaet Berlin)

Municipal mergers are one of the changes in municipal politics that feature prominently in many federally-organized countries. These changes are expected to trigger important economic and fiscal effects. In this paper we analyze how municipal amalgamation influences the distribution of tax bases and, related to it, the choice of tax rates at the municipal level. We also look at tax spillover effects on neighbours of amalgamated municipalities. We use a dataset on 2497 Swiss municipalities, among which 252 are the outcome of mergers, over 1973-2012. We find evidence that neighbouring municipalities experience an increase in their tax rates as well as a decrease in their tax base after an amalgamation takes place.

Chatagny-Tax Effects of Amalgamations-377.pdf

12:30pm - 1:00pm

Tax Competition With Heterogeneous Capital Mobility

John Douglas Wilson[1], **Steeve Mongrain**[2]
[1]Michigan State University; [2]Simon Fraser University
Discussant(s): **Florian Chatagny** (ETH Zürich)

An ongoing debate in the tax competition literature is the desirability for a system of countries, or regions, to restrict the preferential treatment of different forms of capital. A widespread belief is that without such restrictions, countries would aggressively compete for mobile capital, resulting in taxes that are far below their desirable level. We further investigate this question by departing from the bulk of the literature in three important ways. First, in addition of caring about tax revenue, countries also care about private sector income. Second, firms are distinguished by their country of origin. Finally, we consider both identical countries and countries that differ in size. We demonstrate how the relative desirability of the two tax regimes depends critically on country size differences and the distribution of moving costs. In some cases, preferential treatment is preferable. Large and small countries may also disagree about which regime is best.

Wilson-Tax Competition With Heterogeneous Capital Mobility-501.pdf

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1:00pm - 1:30pm

Cross-border Shopping and Use Tax Evasion: Theory and Evidence

David R. Agrawal[1], **Mohammed Mardan**[2]
[1]University of Kentucky, United States of America; [2]ETH Zurich, Switzerland
Discussant(s): **John Douglas Wilson** (Michigan State University)

Sales taxes are due at the point of sale for brick-and-mortar transactions; use taxes are due on goods purchased abroad. We develop a tax competition model that distinguishes between tax avoidance and tax evasion. Contrary to popular belief, we show that the optimal local use tax rate does not necessarily equal the local sales tax rate. Moreover, when localities can set use tax rates, the divergence of the two rates is stronger when the incentives for tax avoidance opportunities increase. We assemble the first panel dataset of use tax rates for every U.S. town. In response to exogenous changes in state-level policies that increase tax avoidance, the results of the empirical model confirm our theory. Further evidence shows that municipalities are on the left side of the use tax Laffer curve, which implies that the elasticity of use tax revenues is greater than the elasticity of sales tax revenue.

Agrawal-Cross-border Shopping and Use Tax Evasion-426.pdf

11:30am - 1:30pm

Emerald Bay 6, Harveys

F05: Fiscal Federalism

Session Chair: **Elisabeth Gugl**, University of Victoria

11:30am - 12:00pm

Too-Big-To-Fail in Federations

Klaas Staal
Karlstad University, Sweden
Discussant(s): **Elisabeth Gugl** (University of Victoria)

Consider jurisdictions of different size providing local public goods with positive spillovers. The socially-efficient expenditure levels can be induce by matching grants, but jurisdictions can exploit the rationale behind this system to induce bailouts. We formalize the too-big-to-fail result of Wildasin (1997) by giving an analytical proof that it exists in a subgame-perfect Nash equilibrium.

Staal-Too-Big-To-Fail in Federations-237.pdf

12:00pm - 12:30pm

Optimal Fiscal Decentralization With Asymmetric Regions

Martin Besfamille[1], **Antonio Andres Bellofatto**[2]
[1]Instituto de Economia, Pontificia Universidad Catolica de Chile, Chile; [2]School of Economics, University of Queensland, Australia
Discussant(s): **Klaas Staal** (Karlstad University)

This paper studies the optimal degree of fiscal decentralization in a federation. In our environment, regions possess different capital endowments. Two regimes are compared: partial and full decentralization. Under partial decentralization, regional governments have no tax powers and rely on central bailouts to refinance incomplete public projects. Under full decentralization, regional governments refinance incomplete public projects through capital taxes, in a context of tax competition.

We provide a normative comparison between partial and full decentralization and show how the optimal degree of fiscal decentralization hinges on the differences in capital endowments.

Besfamille-Optimal Fiscal Decentralization With Asymmetric Regions-391.pdf

12:30pm - 1:00pm

The Rotten Kid Theorem and Almost Transferable Utility

Elisabeth Gugl[1], **Justin Leroux**[2]
[1]University of Victoria, Canada; [2]HEC Montreal, Canada
Discussant(s): **Martin Besfamille** (Pontificia Universidad Catolica de Chile)

We assume like Bergstrom (1989) and Dijkstra (2007) that each child's utility is treated as a normal good in the altruistic head's utility function, and show that if utility functions lead to Almost Transferable Utility children can manipulate the tradeoff between their own utility and the parent's utility through their own actions, but they have an incentive to maximize the altruistic head's utility if the altruistic head also considers children's utilities as Hicksian substitutes and hence the rotten kid theorem holds. A special class of such altruistic utility functions that treat utilities of children as normal and Hicksian substitutes are the Generalized Utilitarian Welfare functions.

Gugl-The Rotten Kid Theorem and Almost Transferable Utility-167.pdf

11:30am - 1:30pm
Tallac, Harveys

F06: R&D Policies and Investment

Session Chair: **Di Guo**, The university of Hong Kong

11:30am - 12:00pm

Estimating the Local Average Treatment Effect of R&D Subsidies in a Pan-European Program

Paul Huenermund[1,2], **Dirk Czarnitzki**[1,2]
[1]Centre for European Economic Research, Germany; [2]KU Leuven, Belgium
Discussant(s): **Di Guo** (The university of Hong Kong)

We investigate the ffect of Europe's largest multilateral subsidy program for R&D-performing small and medium-sized enterprises on firm growth. The program was organized under a specific budget allocation rule, referred to as Virtual Common Pot (VCP), which is designed to avoid cross-subsidization between participating countries. This rule creates exogenous variation in treatment status and allows us to identify the local average treatment effect of public R&D grants. In addition, we compare the program's effect under the VCP rule with the standard situation of a Real Common Pot (RCP), where program authorities allocate a single budget according to uniform project evaluation criteria. Our estimates suggest no average effect of grants on firm

growth but treatment effects are heterogeneous and increase with project quality. A Real Common Pot would have reduced the cost of a policy-induced job by 27%.

Huenermund-Estimating the Local Average Treatment Effect of R&D Subsidies-141.pdf

12:00pm - 12:30pm

Will the real R&D employees please stand up? Effects of tax breaks on firm level outcomes

Irem Guceri
University of Oxford, United Kingdom
Discussant(s): **Paul Huenermund** (Centre for European Economic Research)

This paper evaluates the e ffect of tax incentives for R&D in a quasi-experimental setting. To do this, I exploit an exogenous reform in UK R&D tax policy, which changed the de finition of an SME from firms with fewer than 250 employees to those with fewer than 500 employees. I use the UK Business Enterprise Research and Development Survey (BERD), for which companies have no incentive to relabel their ordinary employees or spending as R&D. I fi nd that R&D tax incentives help to increase R&D spending at the company level; this translates to a user cost elasticity between -0.88 and -1.18. Further, the additional R&D generated through the tax relief can be attributed entirely to an increase in the number of R&D employees in the companies' workforce. Together, these results challenge a common narrative on the role of R&D tax incentives.

Guceri-Will the real R&D employees please stand up Effects-182.pdf

12:30pm - 1:00pm

On the Role of Public Polices and Wage Formation for Business Investment in R&D: a lon-run Panel Analysis

Ruben Schoonackers[1,2], **Freddy Heylen**[2], **Tim Buyse**[2]
[1]National Bank of Belgium, Belgium; [2]Ghent University, Belgium
Discussant(s): **Irem Guceri** (University of Oxford)

This paper studies the drivers of business funded and performed R&D in a panel of 14 OECD countries since 1981. More specifically, we analyse the effects of public R&D related policies and wage formation. We find that tax incentives are effective. Public funding can also be effective if subsidies are not too low, neither too high. R&D performed within the government sector and within universities is basically neutral with respect to business R&D. The higher education sector may, however, indirectly be of great significance as our results reveal human capital accumulation as a key driver of business R&D investment. We further find that wage moderation may contribute to innovation, but only in fairly closed economies with flexible labour markets. In highly open economies and economies with rigid labour markets rather the opposite holds. In these economies high wage pressure may enhance creative destruction and force firms to innovate.

Schoonackers-On the Role of Public Polices and Wage Formation for Business Investment-123.pdf

1:00pm - 1:30pm

Does Government-Subsidized Research and Development (R&D) Program Work? Evidence from China

Di Guo[1], **Yan Guo**[2], **Kun Jiang**[3]

[1]The university of Hong Kong, Hong Kong S.A.R. (China); [2]Peking University; [3]The University of Roehampton

Discussant(s): **Ruben Schoonackers** (National Bank of Belgium)

We examine the effects of government-subsidized R&D programs on the productivity of firms. Based on a panel dataset of Chinese firms, we identify and estimate ex-ante selection and ex-post effects of the Innovation Fund for Small and Medium Technology-based Firm (Innofund). We find Innofund-backed firms generate higher productivity after winning the support than their non-Innofund-backed counterparts and themselves before winning the subsidies. Meanwhile, a quasi-experiment approach is deployed to investigate how the governance and the institutions under which Innofund operate affect the aforementioned effects. We find stronger magnified effects of Innofund after the governance of Innofund program is changed to from a centralized to a more decentralized one due to exogenous policy change. Finally, we find that in regions where markets are less developed, the Innofund effects are stronger than those in other regions. This finding indicates the correction of market failures. Identification problems are addressed in this study as well.

Guo-Does Government-Subsidized Research and Development-341.pdf

11:30am - 1:30pm
Zephyr, Harveys

F07: Pension Systems and Reform

Session Chair: **Andreas Peichl**, ZEW, University of Mannheim

11:30am - 12:00pm

Fiscal Sustainability and Demographic Change: A micro approach for 27 EU Countries

Mathias Dolls[1,2], **Karina Doorley**[1,3], **Eric Sommer**[1,6], **Alari Paulus**[4], **Sebastian Siegloch**[1,5], **Hilmar Schneider**[1,3]

[1]Institute for the Study of Labor (IZA), Germany; [2]ZEW Mannheim; [3]Luxembourg Institute for Social and Economic Research (LISER); [4]ISER, University of Essex; [5]University of Mannheim; [6]University of Cologne

Discussant(s): **Andreas Peichl** (ZEW, University of Mannheim)

The effect of demographic change on the labor force and on fiscal revenues is topical in light of potential pension shortfalls. We evaluate the effect of demographic changes between 2010 and 2030 on labor force participation and government budgets in the EU-27. Our analysis involves the incorporation of population projections, and an explicit modeling of the supply and demand side of the labor market. Our approach overcomes a key shortcoming of most existing studies that focus only on labor supply when assessing the effects of policy reforms. Ignoring wage reactions greatly understates the increase in fiscal revenues, suggesting that fiscal strain from demographic change might be less severe than currently perceived. Finally, as a policy response to demographic change and worsening fiscal budgets, we simulate the increase in the statutory retirement age. Our policy simulations confirm that raising the statutory retirement age can balance fiscal budgets in the long run.

Dolls-Fiscal Sustainability and Demographic Change-176.pdf

12:00pm - 12:30pm

The Effect of Pension Tax Reductions on Labor Supply

Olga Malkova

University of Kentucky, United States of America

Discussant(s): **Eric Sommer** (Institute for the Study of Labor)

This study quantifies the effects of Russia’s 1964 and 1970 pension law amendments on old-age labor supply. The amendments gradually reduced the tax rate of employed pensioners from 84 to 50, to 25 and finally to 0 percent. First, this study exploits that the tax rate was reduced to 25% in eastern regions and to 50% in western regions within a differences-in-differences framework. This study finds that the pension tax rate from 50 to 25 percent results in a 29 percent increase in old-age employment rates five years after the amendment. Second, this study exploits that only old-age pensions were eligible for a tax reduction in a differences-in-differences framework. Reducing the pension tax rates across the country resulted in a 70 percent increase in employment rates five years after the amendment.

Malkova-The Effect of Pension Tax Reductions on Labor Supply-471.pdf

12:30pm - 1:00pm

{Labor market and savings responses to pension reforms -- Quasi-experimental evidence from Germany

Philipp Doerrenberg, **Mathias Dolls**, **Andreas Peichl**, **Holger Stichnoth**

ZEW, University of Mannheim, Germany

Discussant(s): **Olga Malkova** (University of Kentucky)

We exploit two characteristics of the German retirement institutions in order to identify a causal effect of pension payments on labor-market effects and savings.

See extended abstract for details.

Doerrenberg-{Labor market and savings responses to pension reforms -- Quasi-experimental evidence-468.pdf

11:30am - 1:30pm
Tahoe A, Harrahs

F08: Economic Development and Growth

Session Chair: **Amanda Ross**, West Virginia University

11:30am - 12:00pm

Bio-fuels, Price Supports, and Urban Growth in the American

Bo Jiang[1], **Wiliam Harvey Hoyt**[2], **Jonathan Elliott**[2]

[1]Southwestern University of Finance and Economics, Chin; [2]University of Kentucky, United States of America

Discussant(s): **Amanda Ross** (West Virginia University)

This study provides evidence of the impact of agricultural renton urban growth. We measure the opportunity cost of land by the annual weighted revenue and cost per acre of farm land, which are based on price, cost, land used, and productivity data on nine major agricultural commodities at county levels in U.S. We estimate that urban population will be 1.8% percent lower when agricultural revenue doubles, and 1.3% higher when agricultural cost doubles; urban population growth rate will be 1.1 (0.6) percent point lower (higher) when agricultural revenue (cost) doubles. These estimates of the impacts agricultural revenues and costs on urban growth, as well as the impacts of government subsidies, are then used to simulate the impacts of changes in governments subsidies, bio-fuel subsidies, and technological change in agriculture on urban growth .

Jiang-Bio-fuels, Price Supports, and Urban Growth in the American-397.pdf

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12:00pm - 12:30pm

Job Creation Tax Credits, Fiscal Foresight, And Job Growth: Evidence From U.S. States

Robert Chirinko[1], Daniel John Wilson[2]

[1]University of Illinois at Chicago; [2]Federal Reserve Bank of San Francisco, United States of America

Discussant(s): **Wiliam Harvey Hoyt** (University of Kentucky)

This paper studies the effects of job creation tax credits (JCTCs) enacted by U.S. states between 1990 and 2007 to gain insights about fiscal foresight (alterations of current behavior by forward-looking agents in anticipation of future policy changes). We investigate whether JCTCs affect employment growth before, at, and after the time they go into effect. A theoretical model identifies the key conditions necessary for fiscal foresight and generates several empirical predictions. We evaluate these predictions in a difference-in-difference regression framework applied to monthly panel data on employment, the JCTC effective and legislative dates, and various controls. Failing to account for the distorting effects of fiscal foresight can result in upwardly biased estimates of the short-run impact of the JCTC fiscal policy by as much as 36%. We also find that the cumulative effect of the JCTCs is positive, but it takes several years for the full effect to become apparent.

Chirinko-Job Creation Tax Credits, Fiscal Foresight, And Job Growth-339.pdf

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12:30pm - 1:00pm

What Matters More for Economic Development, the Amount of Funding or the Number of Projects Funded? Evidence from the Community Development Financial Investment Fund

Kaitlyn Harger[2], Amanda Ross[1], Heather Stephens[1]

[1]West Virginia University, United States of America; [2]Florida Gulf Coast University

Discussant(s): **Daniel John Wilson** (Federal Reserve Bank of San Francisco)

Using establishment-level data from the National Establishment Time Series database for California, and data on the location of disbursements from the Community Development Financial Institutions (CDFI) and New Market Tax Credit (NMTC) programs, we consider the effectiveness of these two programs in attracting new businesses to disadvantaged areas. Using a plausibly exogenous eligibility threshold, we find that higher levels of funding per project through the NMTC program result in an increase in the number of new establishments in that area. However, we find that the number of NMTC projects funded has no effect on attracting new firms to eligible tracts, and there is little evidence of a consistent effect of the CDFI program. We also find heterogenous effects of the NMTC program across industry and firm size. Our findings suggest that the amount of funding allocated to these areas matters more for economic development than the number of projects funded.

Harger-What Matters More for Economic Development, the Amount-108.pdf

11:30am - 1:30pm
Tahoe B, Harrahs

F09: Firm Behavior

Session Chair: **Jarkko Harju**, VATT Institute for Economic Research

11:30am - 12:00pm

The Growth and Human Capital Structure of New Firms over the Business Cycle

Udo Brixy[3,4], Martin Murmann[1,2]

[1]Centre for European Economic Research (ZEW), Mannheim, Germany; [2]University of Zurich, Switzerland; [3]Institute for Employment Research (IAB), Nuremberg, Germany; [4]Ludwig-Maximilians-Universität, Munich, Germany

Discussant(s): **Jarkko Harju** (VATT Institute for Economic Research)

Recent research suggests that employment in young firms is more negatively impacted during economic downturns than employment in incumbent firms. This questions the effectiveness of policies that promote entrepreneurship to fight crises. We complement prior research that is mostly based on aggregate data by analyzing cyclical effects at the firm level. Using new linked employer-employee data on German start-ups we show that under constant human capital of the firms' founders, employment growth in less than 1½-year-old start-ups reacts countercyclically and employment growth in older start-ups reacts procyclically. The young start-ups realize their countercyclical growth by hiring qualified labor market entrants who might be unable to find employment in incumbent firms during crises. This mechanism is highly important in economic and management terms and has not been revealed by prior research.

Brixy-The Growth and Human Capital Structure of New Firms over the Business Cycle-463.pdf

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12:00pm - 12:30pm

Rushing to Opportunities: A Model of Entrepreneurship and Growth

Nathan Seegert

University of Utah, United States of America

Discussant(s): **Martin Murmann** (University of Zurich / Centre for European Economic Research)

Entrepreneurship is fundamental to the growth of industries and cities. To better understand entrepreneurship and the policies that encourage it, this paper develops a model centered on a new tradeoff between fundamentals and opportunities. Early growth in industries and cities depend critically on the opportunities they provide; whether from entrepreneurship human capital accumulation or land in cities. The model explains when rushes occur and what makes rushes larger or smaller. This analysis provides a blueprint for evaluating policies aimed at encouraging growth. These policies are particularly important in developing countries that are experiencing rapid urban growth both in current cities and the number of new cities.

Seegert-Rushing to Opportunities-483.pdf

12:30pm - 1:00pm

Firm level investment spikes: evidence from the UK's Great Recession

Helen Miller[1], **Richard Disney**[1,2], **Thomas Pope**[1]

[1]Institute for Fiscal Studies, United Kingdom; [2]University of Sussex

Discussant(s): **Nathan Seegert** (University of Utah)

Firm investment is lumpy. We provide empirical evidence that variation in investment that happens as part of a spike drives variation in aggregate investment. We estimate a firm level investment hazard in which the probability that an investment spike occurs, conditional on the time since the previous spike, as a function of aggregate, industry and firm characteristics. We assess the relative importance of different macroeconomic factors in affecting annual investment variation and allow that firms respond differently to the 2008 recession according to duration and capital structure.

Miller-Firm level investment spikes-236.pdf

1:00pm - 1:30pm

How do small firms respond to tax schedule discontinuities? Evidence from South African tax registers

Wian Boonzaaier[1], **Jarkko Harju**[2], **Tuomas Matikka**[3], **Pirttilä Jukka**[4]

[1]National Treasury, South Africa; [2]VATT Institute for Economic Research, Finland; [3]VATT Institute for Economic Research, Finland; [4]UNU-Wider

Discussant(s): **Thomas Michael Pope** (Institute for Fiscal Studies)

In this paper we study the effects of various tax schedule discontinuities on the behavior of small firms using high-quality and population-wide tax register data from South Africa. We use the bunching method to analyze how these discontinuities affect the firm-size distribution. We first examine how the value-added tax threshold affects the sales distribution of firms. We also study the effects of two separate corporate income tax rate kinks. We find sizable bunching at each of these thresholds. The elasticity estimates for the corporate tax kink points are large, ranging from 0.17 to 0.7, whereas the elasticity of the value added is below 0.05. We find some suggestive evidence that part of the response is driven by tax evasion.

Boonzaaier-How do small firms respond to tax schedule discontinuities Evidence-276.pdf

11:30am - 1:30pm

Tahoe C, Harrahs

F10: Corrective Taxation

Session Chair: **Tuomas Kosonen**, Labour Institute for Economic Research

11:30am - 12:00pm

Pigouvian Taxation With Multiple Externalities And Costly Administration

Daniel Schaffa[1], **Daniel Jaqua**[2]

[1]University of Michigan, United States of America; [2]Albion College, United States of America

Discussant(s): **Tuomas Kosonen** (Labour Institute for Economic Research)

We generalize Pigouvian taxation to include costly administration and multiple externalities. When the administrative cost varies only with the pollution generating activity, the optimal tax is equal to the externality added to the marginal administrative cost. When administrative cost varies with the tax rate---there is an uncorrected externality. If there are uncorrected externalities then using a tax on one activity to induce changes in a different activity is welfare improving. Subsidizing a harmful activity may be optimal if that subsidy leads to less of a different harmful activity. When there are multiple production activities, we show that an output tax is the same as setting a tax on each activity equal to the output tax rate times that activity's marginal product. If the optimal activity mix changes with the scale of production and if higher scales of production use less harmful activity mixes, subsidizing a harmful production process is optimal.

Schaffa-Pigouvian Taxation With Multiple Externalities And Costly Administration-373.pdf

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12:00pm - 12:30pm

Optimal Public Transit in the Eternal City

Martin Adler[1], **Federica Liberini**[2], **Antonio Russo**[3], **Jos van ommeren**[4]

[1]VU Amsterdam; [2]ETH Zurich, Switzerland; [3]ETH Zurich, Switzerland; [4]VU Amsterdam

Discussant(s): **Daniel Jaqua** (Albion College)

We provide quantitative evidence on the effects of public transport provision on individual mode choice (i.e., cars versus public transport), car traffic flow and traffic congestion/delays.

We exploit quasi-experimental evidence from public transit strikes in the city of Rome, Italy. Specifically, we use hourly data on road traffic flow and speed, and combine it with data on public transport service, measured by the Agency for Mobility in Rome, covering the years from 2012 to 2015. Our data covers several strikes lasting one day or less, and a prolonged “white strike”, lasting roughly one month. Secondly, to quantify the social benefit of subsidies to public transport, we will construct a theoretical model of service supply by the public transport agency and of user modal choice and timing of trips. This model is calibrated using data provided by the Rome municipality and our own estimations.

Adler-Optimal Public Transit in the Eternal City-346.pdf

12:30pm - 1:00pm

Behavioral Responses to Pigouvian Car Taxes: Vehicular Choice and Missing Miles

Tuomas Kosonen[1], **Jarkko Harju**[2], **Joel Slemrod**[3]
[1]Labour Institute for Economic Research, Finland; [2]VATT Institute for Economic Research, Finland; [3]University of Michigan and Office of Tax Policy Research
Discussant(s): **Antonio Russo** (ETH Zurich)

We study the multiple margins of behavioral response to car taxes in Finland. We do this by exploiting multiple policy reforms and a randomized control trial that varies the salience of a public disclosure program that renders car tax evasion less attractive by overstating car mileage. Preliminary results suggest that car taxes do affect the vehicle choices of individuals, in part by affecting the choice of importing new versus used cars. We also find systematic evidence of tax evasion in the form of “missing miles”. The use of comparison information in the RCT reduced reported mileage. The public disclosure of mileage information affected real behavior, as it resulted in a decline in imported used cars once the tax evasion channel was shrunk by the tax enforcement measures of the customs.

Kosonen-Behavioral Responses to Pigouvian Car Taxes-308.pdf

11:30am - 1:30pm
Tahoe D, Harrahs

F11: Tax Progressivity and Income Distribution

Session Chair: **Katharina Jenderny**, Umeå University

11:30am - 12:00pm

Bracket Creep Revisited – With and Without r>g: Evidence from Germany

Junyi Zhu
Deutsche Bundesbank, Germany
Discussant(s): **Katharina Jenderny** (Umeå University)

Using German income distribution in 2009, this article studies the redistributive effects of bracket creep under various inflation scenarios. We develop a tax micro-simulation model for the Panel on Household Finance (PHF) data. The simulation yields an inverted U-shaped redistributive effect of the income tax and social benefit system with respect to the inflation rate, which contrasts with Immervoll (2005) who finds that fiscal drag always enhances the equalising effect. The nominal income growth as well as the deterioration of tax progression at the middle and top of the income distribution can be the impetus. When we introduce the empirical evidence that capital income grows faster than non-capital income r>g, the dual tax system implemented in 2009 further disequalises the after-tax income substantially. Allowing inflation compensation to lean towards the poor by boosting their share of capital income may not be favourable to redistribution.

Zhu-Bracket Creep Revisited – With and Without rg-172.pdf

12:00pm - 12:30pm

Female Top Income Earners

Kristin Gunnarsson, **Daniel Waldenström**
Uppsala University, Sweden
Discussant(s): **Junyi Zhu** (Deutsche Bundesbank)

In this paper we focus on females in the top of the income distribution and study if and how the female representation has changed during the last decades in Sweden by using longitudinal data. The results show a significant increase in the share of women in the top income percentile. By studying the income composition we see that capital income has played a significantly more important role for female incomes in the top than for males. Inherited capital seems to have played a relatively more important role for females than for males. By comparing 1, 3 and 5 year income averages we find that female’s incomes at the very top have been more volatile than males. We also present result of the importance of different backgrounds factors such as age, education, family status and number of children for women’s probability of making it to the top compared to men.

Gunnarsson-Female Top Income Earners-409.pdf

12:30pm - 1:00pm

An integrated approach for top-corrected Ginis

Maria Metzing, **Charlotte Bartels**
DIW, Germany
Discussant(s): **Kristin Gunnarsson** (Uppsala University)

Household survey data provide rich information on income, household context and demographic variables, but tend to under-report incomes at the very top of the distribution. Tax record data offer more precise information on top incomes at the expense of household context details and incomes of non-filers at the bottom of the distribution. We combine the benefits of the two data sources to improve survey-based Gini coefficients in two ways. First, we incorporate top income share estimates based on tax records with survey-based Ginis for the rest of the population following Atkinson (2007) and Alvaredo (2011). Second, we impute top fractile's income in EU-SILC survey data with the Pareto distribution coefficients obtained from tax records and then calculate the Gini. We find that both approaches produce rather similar results. The gap between unadjusted and top-corrected Ginis is highest in countries that rely exclusively on survey data as compared to register countries.

Metzing-An integrated approach for top-corrected Ginis-439.pdf

1:00pm - 1:30pm

Top Tax Progression in Germany

Katharina Jenderny
Umeå University, Sweden

Discussant(s): **Maria Metzing** (DIW)

This paper analyzes the effect of the introduction of a final withholding tax on capital income on the progressivity of the German income tax. The effects of this policy change on vertical and on horizontal equity are analyzed, with a particular focus on top income groups. Both the direct static reform effect and the reform effect with adjusted reporting behavior are simulated. 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. 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 in Germany-449.pdf

11:30am - 1:30pm

Glenbrook/Fallen Leaf, Harrahs

F12: Taxation and Insurance

Session Chair: **Andrea Papini**, University of Oslo

11:30am - 12:00pm

Income Mobility, Dynamics And Risk Over The Working Life: Income Insurance From Taxes And Cash Transfers In 2001–2008

Ilpo Suoniemi
Labour Institute for Economic Research, Finland

Discussant(s): **Andrea Papini** (University of Oslo)

Register based Finnish panel data are used to examine income income risk in the working age population. The paper considers the extent of risk reduction due to the tax-benefit system which is measured by successive differences between risk premia of factor, gross and disposable household income. Income risk has been estimated using a forward looking dynamic model for income mobility (deviations of log income from sub-population means) over a population strata by age, educational and socio-economic status The population groups having relatively high labour/factor market risk seem to benefit most from the implicit income insurance provided by the public sector. The role of direct taxes is substantially lower than that of public cash transfers. The results based on the dynamic model are quite similar to those which are based on observed ex post values. The findings are qualitatively robust to a particular value of the degree of risk aversion assumed.

Suoniemi-Income Mobility, Dynamics And Risk Over The Working Life-294.pdf

12:00pm - 12:30pm

Automatic Stabilization and Labor Supply

Mathias Dolls[1], Clemens Fuest[3], Andreas Peichl[1,2], Christian Wittneben[1]
[1]ZEW Mannheim, Germany; [2]University Mannheim, Germany; [3]Ifo Institute and University of Munich, Germany

Discussant(s): **Ilpo Suoniemi** (Labour Institute for Economic Research)

This paper estimates the stabilizing effects of tax and transfers systems through a marginal incentives channel. When income taxes are progressive, the tax rate that a household faces falls following an income decline, thereby increasing work incentives and hence labor supply. This effect offsets part of the initial income decline. The magnitude of the effect depends on the progressivity of the tax code, as well as the elasticity of labor supply.

We estimate a structural labor supply model and individual tax rates for households in the EU28 using the microsimulation model EUROMOD.

Our estimations show that up to ten percent of a fall in household income is offset by an increase in labor supply. The results reveal a large heterogeneity across countries, which is mainly due to differences in the progressivity of the tax systems. Differences in labor supply elasticities also play a significant role.

Dolls-Automatic Stabilization and Labor Supply-288.pdf

12:30pm - 1:00pm

The Impact of Financial Crisis on Savings Decisions: Evidences From Italian Pension Funds

Antonello Motroni[1], Mauro Marè[1], Luca Di Gialleonardo[1], Francesco Porcelli[2]
[1]Mefop spa, Italy; [2]Sose spa, Italy

Discussant(s): **Christian Wittneben** (ZEW Mannheim)

This paper provides an empirical analysis of the impact of the financial crisis on households' saving decisions in private pension. We used an original dataset made up of 3 surveys collected in 2008, in 2012 and in 2015 by Mefop on samples of 1000 interviewees. Each wave allows us to map saving decisions and personal characteristics (income, type of occupation, political orientation, financial literacy, etc.) in two distinct moment: before the crisis and after the crisis. Results shows that the probability to invest in a private pension scheme has been barely touched and in some cases it is also possible to register an increase.

Motroni-The Impact of Financial Crisis on Savings Decisions-309.pdf

1:00pm - 1:30pm

Business Income Risk and the Insurance Role of Taxation, Norway 1993-2013

Andrea Papini
University of Oslo, Norway

	Discussant(s): **Francesco Porcelli** (SOSE SpA and GAGE (University of Warwick)) Insurance against unexpected risk may be different for self-employed and wage earners. This paper studies the income dynamics of self-employed individuals in Norway in the period from 1993 to 2013 by using large administrative data sets, the composition and evolution of the inequality among self-employed, also by comparing results to the process observed among wage earners. While pre-tax and post-tax inequality remained stable for wage earners, pre-tax business income variance increased during the period. Furthermore, this rise is mainly explained by permanent shocks, while both levels and trends depend mostly on the transitory shocks among wage earners. The analysis of post-tax incomes shows that taxes and transfers attenuate the magnitude of variance in each year both for the self-employed and wage earners. However, at least until 2006, the post-tax inequality mimicked the pre-tax business income trend for the self-employed. Papini-Business Income Risk and the Insurance Role of Taxation, Norway 1993-2013-500.pdf
1:30pm - 3:00pm	**IIPF Board of Management Meeting II**
1:30pm - 3:00pm	**Lunch**
3:30pm - 4:30pm **Sand Harbor 1-3, Harrahs**	**Plenary IV: Hal Varian (Emeritus Professor, University of California at Berkeley, and Chief Economist, Google): Google Tools for Data** Session Chair: **Joel Slemrod**
4:30pm - 6:00pm **Sand Harbor 1-3, Harrahs**	**Awards Ceremony and IIPF General Assembly of Members** Session Chair: **Joel Slemrod** Agenda for the General Assembly of IIPF Members: 1. Opening 2. Minutes of the last meeting 3. Report by the President 4. Finances (Accounts 2015, Report by the Auditors, Revised 2016 budget and preliminary 2017 Budget) 5. Elections (Results of 2016 elections, 2017 elections: vacancies) 6. Amendment of the statutes 7. Congresses 8. Doctoral Schools...
6:00pm - 10:00pm **Sand Harbor 1-3, Harrahs**	**Conference Dinner (with pre-dinner reception)**