

XXXIX Kansantaloustieteen päivät

Finnish Economic Association XXXIX Annual Meeting

Jyväskylä
9.-10.2.2017

Programme
twitter: #ktpäivät

Thursday 9.2.2017

- 10:00-17:00 Registration
- 10:30-11.00 Coffee & Tea
- 11:00-11:05 Opening words
President of the Association **Meri Obstbaum** and Dean, Professor **Hanna-Leena Pesonen**
- 11:05-12:15 Plenary lecture by **Heski Bar-Isaac** (University of Toronto, Canada)
Adverse Selection and Efficiency
in Martti Ahtisaari Lecture Hall
- 12:15-13:05 Lunch break
- 13:05-15:05 Parallel Sessions
- 1a: Microeconomics I
 - 1b: Demand side issues in environmental markets
 - 1c: Innovation systems
 - 1d: Productivity and wages
 - 1e: Benefits and work
 - 1f: Health
 - 1g: Macroeconomics I
 - 1h: Economic forecasting
 - 1i: Stock Markets
- 15:15-17:15 Parallel Sessions II
- 2a: Microeconomics II
 - 2b: Dynamic Games and Incentives
 - 2c: Taxes and benefits
 - 2d: Public and regional economics
 - 2e: Chinese Economy
 - 2f: Macroeconomics II
 - 2g: Fiscal multipliers and economic forecasts
- 18:30 Reception hosted by City of Jyväskylä
- 19:30 Conference dinner at Harmooni Restaurant

Friday 10.2.2017

- 09:30-11:30 Parallel Sessions III
 - 3a: Microeconomics III
 - 3b: Energy Economics
 - 3c: Human capital and behavioural economics
 - 3d: Public and labour economics
 - 3e: Employment
 - 3f: Financial market regulation
 - 3g: Political economy
- 11:30-12:30 Lunch Break
- 12:30-14:30 Parallel Sessions IV
 - 4a: Environmental and industrial economics
 - 4b: Education
 - 4c: Public Economics
 - 4d: Macroeconomics III
 - 4e: International Macroeconomics
 - 4f: Strategic energy seminar

The Finnish Economic Association thanks University of Jyväskylä for hosting the KT-päivät, and City of Jyväskylä for organizing the reception. The Association also thanks Federation of Finnish Learned Societies, Yrjö Jahnsson Foundation and Bank of Finland for financial support.

Important locations

Main Conference Venue

Jyväskylä University School of Business and Economics (JSBE)
Street address: Mattilanniemi 2, Building Agora
40100 Jyväskylä
Conference registration in the lobby

Plenary Lecture

Martti Ahtisaari Lecture Hall (Auditorium 1)

Conference hotel

Sokos Hotel Paviljonki
Lutakonaukio 10

Reception

City Hall
Address: Vapaudenkatu 32
40100 Jyväskylä

Conference Dinner

Restaurant Harmooni
Väinönkatu 1
40100 Jyväskylä

Lunch Restaurants near the conference venue

Restaurant Piato
Agora-building

Restaurant Wilhelmiina
University Building MaA (next to Agora)

Hotel Alba
Ahlmaninkatu 4

Parallel sessions I: Thursday 9.2.2017 13:05-15:05 (2h)

Room
MaA105

Session 1a: Microeconomics I

Chair: Mats Godenhielm (University of Helsinki)

Free Riding and Bandwagon Effect in Boycott Dynamics

Yi Zheng (University of Helsinki)

Discussant: Topi Hokkanen (Aalto University)

Regulating a monopolist when carbon leakage is a credible threat

Topi Hokkanen (Aalto University)

Discussant: Mats Godenhielm (University of Helsinki)

Directed search with divisible goods

Mats Godenhielm (University of Helsinki)

Discussant: Yi Zheng (University of Helsinki)

Room
AgD121

Session 1b: Demand side issues in environmental markets

Chair: Anna Sahari (Aalto University)

The market for climate services - from supply to demand driven?

Adriaan Perrels (Finnish Meteorological Institute), Atte Harjanne, Karoliina Pilli-Sihvola, Reija Ruuhela, Juha Karhu

Discussant: Anna Sahari (Aalto University)

Technology Choices and Long-Run Energy Demand

Anna Sahari (Aalto University)

Discussant: Adriaan Perrels (Finnish Meteorological Institute)

Room
AgB201

Session 1c: Innovation systems

Chair: Heli Koski (ETLA & Aalto University)

Over-Declaration of Standard Essential Patents and Determinants of Essentiality

Robin Stitzing (Nokia Technologies Oy), Pekka Säskilahti, Jimmy Royer, Marc Van Audenrode

Discussant: Jussi Heikkilä (JSBE)

Do two-tiered patent systems induce sorting? Evidence from European countries

Jussi Heikkilä (Jyväskylä University School of Business and Economics), Michael Verba

Discussant: Tuomas Takalo (Bank of Finland)

Welfare Effects of R&D Support Policies

Tuomas Takalo (Bank of Finland), Tanja Tanayama, Otto Toivanen

Discussant: Heli Koski (ETLA/Aalto University)

Technology giants in patents wars: competition, litigations and innovation

Heli Koski (ETLA & Aalto University), Juha Luukkonen

Discussant: Robin Stitzing (Nokia)

Parallel sessions I: Thursday 9.2.2017 13:05-15:05 (2h) (cont.)

Room
AgDelta

Session 1d: Productivity and wages

Chair: Jari Vainiomäki (University of Tampere)

Small and Medium Firms, Aggregate Productivity and the Role of Dependencies

Paolo Fornaro (ETLA), Henri Luomaranta

Discussant: Satu Nurmi (Statistics Finland)

New entrepreneurs in theory and practice

Satu Nurmi (Statistics Finland), Mika Maliranta, Petri Rouvinen

Discussant: Saara Vaahtoniemi (University of Vaasa)

Finance sector wages and human capital: Finnish evidence

Saara Vaahtoniemi (University of Vaasa)

Discussant: Jari Vainiomäki (University of Tampere)

The development of wage dispersion and wage rigidity in Finland

Jari Vainiomäki (University of Tampere)

Discussant: Paolo Fornaro (ETLA)

Room
AgBeeta

Session 1e: Benefits and work

Chair: Sanna Tenhunen (Finnish Centre for Pensions)

Working while on a disability pension: The importance of different sociodemographic factors, timing of disability pension and cause of disability

Anu Polvinen (Finnish Centre for Pensions), Mikko Laaksonen, Juha Rantala, Marjukka Hietaniemi, Jari Kannisto, Susan Kuivalainen

Discussant: Ilpo Kauppinen (VATT)

Economic experiences, target-specific beliefs and demands for redistribution

Ilpo Kauppinen (Vatt Institute for Economic Research), Christina Fong, Panu Poutvaara

Discussant: Mauri Kotamäki (University of Turku, Tela)

Financial Incentives to Work Decomposed – The Finnish Case

Mauri Kotamäki (University of Turku & Tela)

Discussant: Sanna Tenhunen (Finnish Centre for Pensions)

Eläkeikä nousee mutta joustot säilyvät – kyselytutkimus vuoden 2017 eläkeuudistuksesta ja työssäjatkamisaikeista

Sanna Tenhunen (Finnish Centre for Pensions)

Discussant: Terhi Ravaska (University of Tampere & Labour institute for Economic Research)

Parallel sessions I: Thursday 9.2.2017 13:05-15:05 (2h) (cont.)

Room
AgC234

Session 1f: Health

Chair: Henri Salokangas (University of Turku)

Global economic crises and suicide mortality in 21 OECD countries in 1960-2011

Sanna Huikari (University of Oulu), Marko Korhonen

Discussant: Markku Siikanen (Aalto University)

Hospital Pharmaceutical Sales as an Investment?

Markku Siikanen (Aalto University)

Discussant: Mikko Nurminen (University of Turku)

Reality Check: The Effect of Health IT Adoption on Prescription Drug Abuse

Mikko Nurminen (University of Turku), Petri Böckerman, Tanja Saxell, Mika Kortelainen, Liisa Laine

Discussant: Henri Salokangas (University of Turku)

Forced migration and long-term mental health

Henri Salokangas (University of Turku), Jari Haukka, Jaana Suvisaari, Matti Sarvimäki, Pekka Martikainen

Discussant: Sanna Huikari (University of Oulu)

Room
AgGamma

Session 1g: Macroeconomics I

Chair: Marlène Isoré (University of Helsinki and Bank of Finland)

House prices, lending standards, and the macroeconomy

Aino Silvo (University of Helsinki and HECER)

Discussant: Petteri Juvonen (University of Jyväskylä)

Wage setting coordination in a small open economy

Petteri Juvonen (University of Jyväskylä)

Discussant: Matthias Striffler (University of Jyväskylä)

Monetary Policy, Private Debt and Financial Stability Risks

Eleonora Granziera (Bank of Finland), Greg H. Bauer

Discussant: Juuso Vanhala (Bank of Finland)

An extensive margin of financial accelerator: Assessing search frictions on the credit market

Marlène Isoré (University of Helsinki and Bank of Finland), Thomas Brand, Fabien Tripier

Discussant: Aino Silvo (University of Helsinki and HECER)

Parallel sessions I: Thursday 9.2.2017 13:05-15:05 (2h) (cont.)

Room
AgC232

Session 1h: Economic forecastig

Chair: Juha Itkonen (Bank of Finland)

Predictive Ability of Financial Variables in Changing Economic Circumstances

Jaana Rahko (University of Vaasa), Petri Kuosmanen, Juuso Vataja

Discussant: Juha Juntila (JSBE)

A Random Walk Down the Economic Policy Street: Effects of Economic Policy Uncertainty on Forecasting Future Real Economic Activity in the Euro Area and the UK

Juha Juntila (JSBE), Juuso Vataja

Discussant: Maritta Paloviita (Bank of Finland)

Drivers of experts' inflation expectations in the euro area

Maritta Paloviita (Bank of Finland), Tomasz Lyziak

Discussant: Juha Itkonen (Bank of Finland)

Nowcasting the Finnish economy with a large Bayesian vector autoregressive model

Juha Itkonen (Bank of Finland), Petteri Juvonen

Discussant: Jaana Rahko (University of Vaasa)

Room
AgB301

Session 1i: Stock Markets

Chair: Annika Lindblad (University of Helsinki)

Should you trust your broker

Timo Autio (Aalto University)

Discussant: Harri Pönkä (Ministry of Finance)

Sentiment and sign predictability of stock returns

Harri Pönkä (Ministry of Finance)

Discussant: Annika Lindblad (University of Helsinki)

Sentiment indicators and macroeconomic data as drivers for long-term stock market volatility

Annika Lindblad (University of Helsinki)

Discussant: Timo Autio (Aalto University)

Parallel sessions II: Thursday 9.2.2017 15:15-17:15 (2h)

Room
MaA105

Session 2a: Microeconomics II

Chair: Hannu Salonen (University of Turku)

Surviving international competition in the presence of wider objectives than profit maximisation

Johan Willner (Åbo Akademi University), Johan Flink, Annina Kainu, Sonja Grönblom
Discussant: Lauri Sääksvuori (THL)

Normative Conflict and Cooperation in Sequential Social Dilemmas

Lauri Sääksvuori (THL), Jakob Neitzel
Discussant: William Phan (University of Helsinki)

On endowments and indivisibility: Partial ownership in the Shapley Scarf model

William Phan (University of Helsinki), Patrick Harless
Discussant: Hannu Salonen (University of Turku)

Bonacich Measures as Equilibria in Network Models

Hannu Salonen (University of Turku)
Discussant: Johan Willner (Åbo Akademi University)

Room
AgDelta

Session 2b: Dynamic Games and Incentives

Chair: Tuomas Laiho (Aalto University)

Halfway in between Diamond and Bertrand: Strategic complexity and consumer deadlines

Saara Hämäläinen (University of Helsinki)
Discussant: Tuomas Laiho (Aalto University)

Optimality of deadlines and dynamic moral hazard

Tuomas Laiho (Aalto University)
Discussant: Artturi Björk (Aalto University)

Dynamic Wage setting without commitment

Artturi Björk (Aalto University)
Discussant: Julia Salmi (Aalto University)

Information design in reputation games

Julia Salmi (Aalto University)
Discussant: Saara Hämäläinen (University of Helsinki)

Parallel sessions II: Thursday 9.2.2017 15:15-17:15 (2h) (cont.)

Room
AgBeeta

Session 2c: Taxes and benefits

Chair: Olli Ropponen (VATT)

The Evaluation of the Sweets Tax

Riikka Savolainen (Labour institute for economic research), Tuomas Kosonen

Discussant: Seppo Kari (VATT)

Return of the investment fund system – Should we welcome it?

Seppo Kari (VATT)

Discussant: Viveka Tschamurov (Kela and University of Helsinki)

Estimating participation responses of couples using unemployment benefit reform

Viveka Tschamurov (Kela and University of Helsinki)

Discussant: Olli Ropponen (VATT)

Empirical Evaluation on the Effects of Interest Barriers: Case Finland

Olli Ropponen (VATT), Jarkko Harju, Ilpo Kauppinen

Discussant: Riikka Savolainen (Labour institute for economic research)

Room
AgC234

Session 2d: Public and regional economics

Chair: Simon Lapointe (VATT)

Distributional weights in environmental valuation and cost-benefit analysis: A case study

Väinö Nurmi (Finnish Meteorological Institute), Heini Ahtiainen

Discussant: Pekka Tiainen (TEM and University of Helsinki)

**Suomen ulosottojärjestelmän järjestelmäkriisi osana globaalia finanssikriisiä
Oikeustaloustieteellinen näkökulma**

Pekka Tiainen (TEM and University of Helsinki)

Discussant: Elias Oikarinen (University of Turku)

Revisiting the House Price-Income Relationship

Elias Oikarinen (University of Turku), Steven Bourassa, Martin Hoesli, Janne Engblom

Discussant: Simon Lapointe (VATT)

Diversity and municipal secession: evidence from referendums in Quebec

Simon Lapointe (VATT)

Discussant: Väinö Nurmi (Finnish Meteorological Institute)

Parallel sessions II: Thursday 9.2.2017 15:15-17:15 (2h) (cont.)

Room
AgB301

Session 2e: Chinese Economy

Chair: Kari Heimonen (JSBE)

How is Chinese Monetary Policy Transmitted? Disentangling Loan Supply and Loan Demand Responses

Riikka Nuutilainen (Bank of Finland), Max Breitenlechner

Discussant: Eleonora Granziera (Bank of Finland)

China Exposure

Kari Heimonen (JSBE), Heikki Lehkonen

Discussant: Anni Norring (University of Helsinki)

It is all fun and games until someone loses an eye: Emotions in asset markets

Heikki Lehkonen (JSBE), Kuntara Pukthuanthong

Discussant: Jenni Pääkkönen (Ministry of Finance)

Trusting Banks in China

Zuzana Fungáčová (Bank of Finland), Laurent Weill

Discussant: Mervi Toivanen (Bank of Finland)

Room
AgGamma

Session 2f: Macroeconomics II

Chair: Juuso Vanhala (Bank of Finland)

Secular Stagnation in a Monetary Union

Michaela Schmöller (Aalto University)

Discussant: Meri Obstbaum (Bank of Finland)

Internal references' effect on wage rigidity

Matthias Striffler (University of Jyväskylä)

Discussant: Michaela Schmöller (Aalto University)

Bankruptcies, creative destruction and economic growth

Tuomas Malinen (University of Helsinki), Andreas Hoffman, Leena Kalliovirta

Discussant: Mika Maliranta (Etna and JSBE)

Job flows and the mismatch of productivity and wage dispersion - Evidence on job creation in Finnish firms

Juuso Vanhala (Bank of Finland), Satu Nurmi, Matti Viren

Discussant: Mika Maliranta (Etna & JSBE)

Parallel sessions II: Thursday 9.2.2017 15:15-17:15 (2h) (cont.)

Room
AgC232

Session 2g: Fiscal multipliers and economic forecasts

Chair: Mika Nieminen (JSBE)

Government Spending Multipliers under Anticipation – Evidence from a Noncausal VAR

Jaakko Nelimarkka (University of Helsinki)

Discussant: Pasi Ikonen (Bank of Finland)

Real-time uncertainty in budget planning: Evidence from euro-area countries

Pasi Ikonen (Bank of Finland), Maritta Paloviita

Discussant: Jaakko Nelimarkka (University of Helsinki)

Taloukasvun ennustamisen sietämätön vaikeus: tilastollinen analyysi vuosien 1997-2015 aineistolla

Mika Nieminen (JSBE), Kari Heimonen

Discussant: Juha Ikonen (Bank of Finland)

Parallel sessions III: Friday 10.2.2017 09:30-11:30 (2h)

Room
MaD381

Session 3a: Microeconomics III

Chair: Jan Jääskeläinen (Aalto University)

Similarity and Value of Information

Lily Ling Yang (University of Sydney)

Discussant: Tsz-Ning Wong (Aalto University)

Dynamic Information Acquisition by Experts

Tsz-Ning Wong (Aalto University), Lily Ling Yang

Discussant: Jan Jääskeläinen (Aalto University)

Bidder behavior in incentive auction

Jan Jääskeläinen (Aalto University)

Discussant: Lily Ling Yang (University of Sydney)

Room
Agd225.1

Session 3b: Energy Economics

Chair: Rauli Svento (University of Oulu)

Missing effect of energy tax rebates on firm's competitiveness

Marita Laukkanen ((VATT)), Saara Tamminen and Kimmo Ollikka

Discussant: Santtu Karhinen (University of Oulu)

Profitability of a pumped hydro energy storage plant in different wind power scenarios

Santtu Karhinen (University of Oulu), Hannu Huuki

Discussant: Gianluca Trotta (University of Vaasa)

Factors affecting energy-saving behaviors and energy efficiency investments in British households

Gianluca Trotta (University of Vaasa)

Discussant: Rauli Svento (University of Oulu)

Market Power in the Capacity Market: The Case of Ireland

Juha Teirilä (University of Oulu)

Discussant: Marita Laukkanen (VATT)

Parallel sessions III: Friday 10.2.2017 9:30-11:30 (2h) (cont.)

Room
AgC234

Session 3c: Human capital and behavioural economics

Chair: Manuel Bagues (Aalto University)

Does Attending an Elite High School Have an Effect on Learning Outcomes? Evidence from the Helsinki Capital Region

Lassi Tervonen (VATT), Mika Kortelainen, Ohto Kanninen

Discussant: Antti Sieppi (JSBE)

Diversity of university studies and entrepreneurship

Antti Sieppi (JSBE)

Discussant: Lassi Tervonen (VATT)

Revealed preferences in a sequential prisoners' dilemma

Topi Miettinen (Hanken), Michael Kosfield, Ernst Fehr, Jorgen Weibull

Discussant: Manuel Bagues (Aalto University)

A walk on the wild side: An empirical investigation on the reliability of academic journals' black- and whitelists

Manuel Bagues (Aalto University), Mauro Sylos-Labini and Natalia Zinovyeva

Discussant: Topi Miettinen (Hanken)

Room
AgBeeta

Session 3d: Public and labour economics

Chair: Ohto Kanninen (Labour Institute for Economic Research)

Finnish basic income experiment in 2017

Jouko Verho (VATT), Kari Hämäläinen

Discussant: Terhi Maczulskij (Labour Institute for Economic Research)

How a job loss affect migration and future earnings?

Terhi Maczulskij (Labour Institute for Economic Research), Petri Böckerman and Tuomas Kosonen

Discussant: Tuomas Matikka (VATT)

How do small firms respond to tax schedule discontinuities? Evidence from South African tax registers

Tuomas Matikka (VATT), Wian Boonzaaier, Jarkko Harju, Jukka Pirttilä

Discussant: Ohto Kanninen (Labour Institute for Economic Research)

Do workers bunch at kink points in the debt enforcement payment policy rule?

Ohto Kanninen (Labour institute for economic research), Terhi Maczulskij, Hannu Karhunen

Discussant: Jouko Verho (VATT)

Parallel sessions III: Friday 10.2.2017 9:30-11:30 (2h) (cont.)

Room
AgDelta

Session 3e: Employment

Chair: Krista Riukula (Aalto University)

Estimating the effects of unemployment insurance duration using variation from a change in eligibility requirements

Tomi Kyyrä (VATT), Hanna Pesola

Discussant: Tapio Räsänen (Kela)

Back to work or stay-at-home mother? Maternal employment in Finland

Tapio Räsänen (Kela), Eva Österbacka, Anita Haataja and Maria Valaste

Discussant: Jaana Kari (LIKES and JSBE)

Childhood physical activity and long-term labor market attachment: Evidence from the Young Finns Study

Jaana Kari (LIKES, JSBE), Tuija Tammelin, Nina Hutri-Kähönen, Olli Raitakari, Jaakko Pehkonen

Discussant: Krista Riukula (Aalto University)

Parental Job Loss, Family Income and Child Outcomes

Krista Riukula (Aalto University), Kristiina Huttunen

Discussant: Tomi Kyyrä (VATT)

Room
AgC232

Session 3f: Financial market regulation

Chair: Karlo Kauko (Bank of Finland)

Saving Wall Street or Main Street

Markus Haavio (Bank of Finland), Antti Ripatti, Tuomas Takalo

Discussant: Ilkka Kiema (Labour Institute for Economic Research)

Ring-fencing, Banking Reform and Taxpayer Exposure

Rune Stenbacka (Hanken), Oz Shy

Discussant: Heikki Lehkonen (JSBE)

Western European banks' funding structures and Basel III's net stable funding ratio

Jari-Mikko Meriläinen (University of Vaasa)

Discussant: Mervi Toivanen (Bank of Finland)

Revisiting the Growth-Stability Tradeoff under Risk-based Capital Regulation (Are risk-weighted capital requirements optimal?)

Gene Ambrocio (Bank of Finland), Esa Jokivuolle

Discussant: Marlène Isoré (University of Helsinki and Bank of Finland)

Parallel sessions III: Friday 10.2.2017 9:30-11:30 (2h) (cont.)

Room

AgGamma

Session 3g: Political Economy

Chair: Antti Saastamoinen (VATT)

Regional Distribution of Political Power and Effects of Municipal Mergers

Tuukka Saarimaa (VATT), Oskari Harjunen, Janne Tukiainen

Discussant: Natalia Zinovyeva (Aalto University)

Top researchers as academic evaluators: benefits and costs

Natalia Zinovyeva (Aalto University)

Discussant: Antti Saastamoinen (VATT)

The flypaper effect in the Finnish high school funding and local spending preferences

Antti Saastamoinen (VATT), Mika Kortelainen, Jaakko Meriläinen

Discussant: Tuukka Saarimaa (VATT)

Parallel sessions IV: Friday 10.2.2017 12:30-14:30 (2h)

Room
AgDelta

Session 4a: Environmental and industrial economics

Chair: Olena Izhak (University of Helsinki)

Optimal clean-up of polluted sites

Pauli Lappi (University of Helsinki)

Discussant: Anni Huhtala (VATT Institute for Economic Research), Olli Ropponen

Impact of price uncertainty on nickel extraction with environmental effects - when to close a mine?

Anni Huhtala (VATT Institute for Economic Research), Olli Ropponen

Discussant: Anna-Maija Juuso (University of Oulu)

Would you pay extra to update your smart fridge's software?

Anna-Maija Juuso (University of Oulu)

Discussant: Olena Izhak (University of Helsinki)

Pharmacists, Doctors and Prescription Drug Costs: Lessons from Finnish Generic Substitution Policy

Olena Izhak (University of Helsinki)

Discussant: Pauli Lappi (University of Helsinki)

Room
AgC234

Session 4b: Education

Chair: Roope Uusitalo (JSBE)

Short- and Long-Term Effects of Public School Choice in Finland

Mika Kortelainen (VATT), Isa Kuosmanen, Liisa Laine, Miikka Rokkanen

Discussant: Hannu Karhunen (JSBE)

Trends and consequences of early school leaving

Hannu Karhunen (JSBE)

Discussant: Tuomo Suhonen (VATT)

Consequences of parents' higher education attainment and specialization: Evidence from changes in university accessibility

Tuomo Suhonen (VATT), Hannu Karhunen

Discussant: Roope Uusitalo (JSBE)

Lost Boys: Effect of Access to Upper Secondary Education on Crime

Roope Uusitalo (JSBE), Kristiina Huttunen, Tuomas Pekkarinen, Hanna Virtanen

Discussant: Mika Kortelainen (VATT)

Parallel sessions IV: Friday 10.2.2017 12:30-14:30 (2h) (cont.)

Room
AgBeeta

Session 4c: Public Economics

Chair: Kaisa Kotakorpi (University of Turku)

Take-up of welfare benefits

Tuuli Paukkeri (VATT and Aalto University)

Discussant: Risto Vaittinen (Finnish Centre for Pensions)

Demography and Recovery from the Financial Crisis in Finland

Risto Vaittinen (Finnish Centre for Pensions), Reijo Vanne

Discussant: Hanna Pesola (VATT)

The long-term effects of extended unemployment insurance benefits

Hanna Pesola (VATT), Tomi Kyyrä

Discussant: Kaisa Kotakorpi (University of Turku)

Complexity and take-up of benefits

Kaisa Kotakorpi (University of Turku), Tomer Blumkin, Tuomas Kosonen

Discussant: Tuuli Paukkeri (VATT and Aalto University)

Room
AgGamma

Session 4d: Macroeconomics III

Chair: Ilkka Kiema (Labour institute for economic research)

Identification and Estimation of non-Gaussian Vector Autoregressive Moving Average Models

Bernd Funovits (University of Helsinki)

Discussant: Juho Nyholm (HECER and University of Helsinki)

Multivariate All-Pass filters: a new method for estimating non-causal VAR models

Juho Nyholm (HECER and University of Helsinki), Bernd Funovits

Discussant: Markus Haavio (Bank of Finland)

Partial bank runs, a deposit guarantee, and recapitalization

Ilkka Kiema (Labour institute for economic research), Esa Jokivuolle

Discussant: Bernd Funovits (University of Helsinki)

Parallel sessions IV: Friday 10.2.2017 12:30-14:30 (2h) (cont.)

Room
AgC232

Session 4e: International Macroeconomics

Chair: Risto Rönkkö (University of Tampere and UNU-WIDER)

Interest Rate Convergence, External Balances and the Euro Crisis

Mika Nieminen (JSBE)

Discussant: Tuomas Malinen (University of Helsinki)

Effect of US anti-dumping measures on US-China bilateral trade

Min Zhu (University of Helsinki)

Discussant: Julia Niemeläinen (University of Helsinki)

External imbalances between China and the US: a dynamic analysis with a life-cycle model

Julia Niemeläinen (University of Helsinki)

Discussant: Min Zhu (University of Helsinki)

The economic effects on Russia of the present crisis

Seppo Ruoho

Discussant: Risto Rönkkö (University of Tampere and UNU-WIDER)

Balance sheet positions in OECD and post-Soviet countries since the 1990s

Risto Rönkkö (University of Tampere and UNU-WIDER), Juha Junntila, Kari Heimonen

Discussant: Mika Nieminen (JSBE)

Room
Agd225.1

Session 4f: Strategic energy seminar

Chair: Heli Koski (ETLA and Aalto University)

Knowledge spillovers from renewable energy technologies

Kimmo Ollikka (VATT), Hanna-Liisa Kangas, Kim Yukyeong

Discussant: Marita Laukkanen (VATT)

EL-TRAN – Towards Climate Neutral and Resource-scarce Finland: Current Research Challenges and Insights

Jari Kaivo-oja (University of Turku)

Discussant: Kimmo Ollikka (VATT)

BCDC-Large scale integration of renewables

Rauli Svento (University of Oulu)

Discussant: Jari Kaivo-oja (University of Turku)

Abstracts

Room
MaA105 Session 1a: Microeconomics I

Free Riding and Bandwagon Effect in Boycott Dynamics

Yi Zheng (University of Helsinki)

We develop a dynamic model of consumer boycott in which some environmentalists non-cooperatively and voluntarily abstain from purchasing at a firm using polluting production technology. The firm invests in the clean technology only if the boycotting group becomes sufficiently large. While the success of the boycott requires the joint contribution of the supermajority rather than the whole population, each utility maximising individual has the incentive to free ride (i.e., not boycott). We find the equilibrium path such that each individual chooses the optimal strategy while considering that others made decisions by flipping a coin. In equilibrium which free riding is allowed and not punished, consumers are willing to follow the environmentalists and join the boycotting group over time. In the circumstances that the size of boycotting group remains the same for several periods, non-boycotters are willing to deviate from the equilibrium, boycott against the polluting firm for a short period of time, and sacrifice themselves in terms of temporary utility loss with the hope of boycott success. Such consumer activism movement is similar to the Bandwagon effect. All consumers, except the loyal supporters of the firm who never boycott, are better off by not punishing other's deviation from the equilibrium strategy. The game thus becomes a one-sided War of Attrition in which only the firm can be defeated by the consumers but not vice versa.

Regulating a monopolist when carbon leakage is a credible threat

Topi Hokkanen (Aalto University)

We derive a direct mechanism to regulate a monopolist, when the planner faces a threat of carbon leakage due to heterogenous relocation costs. When relocation costs correlate positively with the monopolists' costs of abatement, the optimal policy will exclude sufficiently high type firms as the costs for inclusion exceed the benefits. We solve a well-known regulatory model for the monopolist and discuss the implications of relaxing positive correlation between the abatement costs and relocation costs.

Directed search with divisible goods

Mats Godenhielm (University of Helsinki)

We study a large frictional economy where sellers choose capacities and post prices or auctions to attract buyers. The difference to earlier literature is that the traded good is perfectly divisible and that each buyer can acquire fractional units if he is unable to secure a whole unit. We derive the equilibrium prices and capacities under constant marginal utility and confirm that equilibrium is constrained efficient. In addition we show that competition in multi-unit Vickrey auctions lead to the same measure of sellers and capacity as the planner's solution also with decreasing marginal utility. This facilitates finding equilibria as the solution to the planner's problem is easy to derive.

Abstracts

Room
AgD121

Session 1b: Demand side issues in environmental markets

The market for climate services - from supply to demand driven?

Adriaan Perrels (Finnish Meteorological Institute), Atte Harjanne, Karoliina Pilli-Sihvola, Reija Ruuhela, Juha Karhu

Climate services (CS) entail the transformation of climate observation and projection data, sometimes merged with other data, into customized products such as projections, educational and descriptive information, trends, economic analyses, assessments, risk maps, consultancy products, impact monitoring information, etc. CS can refer to intra-annual (seasonal) projections, multi-annual projections and information, long-term projections and information, and historical episodes. The H2020 study EU-MACS analyses the CS market structures and drivers, obstacles and opportunities from scientific, technical, legal, ethical, governance and socio-economic vantage points. The analysis is grounded in economic and political science theories on how service markets with public and private features can develop, and how innovations may succeed. A host of market distortions play a role, such as economies of scale and scope, differentiated entry regulation by EU member country, asymmetry of information between suppliers and users, principal-agent problems, competing innovations, etc.

Technology Choices and Long-Run Energy Demand

Anna Sahari (Aalto University)

This paper studies households' investments into energy-using durable goods. The analysis is based on detailed and extensive individual-level registry data on Finnish households' choice of heating technology at the moment of building a new detached house. The data include several observable characteristics of the house and house owner, as well as local electricity costs. These costs include the retail price of electricity and the price of electricity distribution, matched to each house at the postal code level. The regulated distribution prices are strongly persistent at the local level, providing a good approximation for long-term energy costs. A discrete choice model is estimated to uncover how prices and household characteristics impact the technology choice. The findings indicate that upfront investment costs and fuel costs are strong determinants of the investment decision. Increasing electricity prices induce substitution especially into ground source heat pumps and wood heating. This is leading to reductions in electricity demand and emissions due to heating; the elasticity of electricity demanded for heating purposes is estimated to be on average -0.35. The elasticity of demand for electric heating technology is estimated to vary from -0.41 to -1.18 within the observed price range. This high sensitivity to price speaks for forward-looking consumers as opposed to myopia.

Abstracts

Room
AgB201

Session 1c: Innovation systems

Over-Declaration of Standard Essential Patents and Determinants of Essentiality

Robin Stitzing (Nokia Technologies Oy), Pekka Sääksilähti, Jimmy Royer, Marc Van Audenrode

Standard Essential Patents (SEPs) cover technologies necessary to meet an industry standard established in Standard Setting Organizations (SSOs). SEPs are self-declared by patent-holding companies as essential for the implementation of the standard, and are not subject to any SSO review. Loss of enforceability due to failure to declare and the promise of royalty revenue create incentives for firms to over-declare SEPs or to at least to err towards declaring when in doubt. Changes to patent claims and standard specifications during the patent application prosecution can also imply that a declared patent application no longer matches the standard once granted. We analyze patent and company attributes that are associated with technical essentiality among SEPs of the 4G LTE cellular standard using a unique dataset. Our results show that declaration against a specific technical specification of the standard is a strong predictor of technical essentiality. While there is no general link between forward citations and technical essentiality, we find that citations from patents declared to the same standard predict technical essentiality. This correlation is driven by citations from technically essential SEPs. Patent ownership changes before the essentiality declaration do not affect standard essentiality. Our results provide guidance to the policy debate, and call for a recognition of SEP over-declaration in the economics literature on standardization.

Do two-tiered patent systems induce sorting? Evidence from European countries

Jussi Heikkilä (JSBE), Michael Verba

We analyze the sorting function of two-tiered patent systems and find evidence consistent with the view that two-tiered patent systems induce screening by invention type. Individual inventors and smaller inventor teams tend to self-select second tier patents.

Welfare Effects of R&D Support Policies

Tuomas Takalo (Bank of Finland), Tanja Tanayama, Otto Toivanen

We build a structural model of the R&D subsidy process which incorporates social externalities and fixed costs of R&D investments, and financial market imperfections. We estimate the model using R&D project level data from Finland. We then conduct a counterfactual analysis of an optimal R&D tax credit policy, the first and second best innovation support policies, and a laissez faire regime with no policies, and compare their welfare effects to the welfare effects of the subsidy policy used in practice in Finland. We find that the optimal R&D tax credit is close to the average R&D subsidy rate. R&D participation does not vary across regimes. The R&D investments and spillovers generated by the optimal R&D tax credit and subsidy policies are significantly higher than in the laissez-faire regime but significantly smaller than in the first and second best. However, when we take into account the costs of the tax credit and subsidy policies, neither of them markedly improves welfare compared to laissez faire.

Abstracts

Room
AgB201 Session 1c: Innovation systems (cont.)

Technology giants in patents wars: competition, litigations and innovation

Heli Koski (ETLA & Aalto University), Jari Luukkonen)

Between the years 2007 and 2012, there was a dramatic upsurge in the patent infringement cases involving major technology companies, particularly those competing in the smartphone markets. We use quarterly data from 2005 to 2014 to empirically explore the relationship between the patent litigations and the quantity and quality of patent applications filed in the USPTO by 23 major technology companies. We also empirically test the suggestion of prior literature that the fragmented ownership of patents in a certain technology field tends to generate patent portfolio races. Our empirical exploration shows that an increase in the number of patent infringement cases among the major technology companies is followed by an increase in the number of patent applications filed by the firms. The number of patent litigations faced by large technology companies does not, however, seem to be related to the quality of their patented ideas measured by forward citations though it clearly relates positively to patent family size. Our empirical findings indicate that patent wars may induce large technology companies to defensively seek extensive international patent protection to prepare for potential patent litigations rather than to protect their most valuable patents internationally. Our data further suggest that more fragmented ownership is not strongly related to the quantity of patent applications filed by the large technology companies. We find some evidence that more intense technological competition relates to larger patent family size though.

Room
AgDelta Session 1d: Productivity and wages

Small and Medium Firms, Aggregate Productivity and the Role of Dependencies

Paolo Fornaro (ETLA) Henri Luomaranta

We analyze the productivity contribution of Finnish firms, using data from 2002 until 2014, and assess the role of the dependency status (i.e. whether they are owned, at least partially, by a mother company) of small and medium enterprises in the manufacturing and services industries and whole private business sector. We find that dependent firms have shown a larger contribution to aggregate productivity growth, compared to the independent ones, regardless of the industry, size class and age groups considered. This result is mainly driven by the better reallocation of labor among dependent companies and by the positive productivity contribution of dependent entrants. Moreover, we find that dependent firms tend to reach their peak productivity earlier than their independent counterparts. Finally, we examine the subgroup of high growing enterprises and find that the positive effect of dependencies on the productivity contribution holds also for this class of firms.

Abstracts

Room
AgDelta Session 1d: Productivity and wages (cont.)

New entrepreneurs in theory and practice

Satu Nurmi (Statistics Finland), Mika Maliranta, Petri Rouvinen

Entrepreneurs have a central role in economic theory and are often perceived in economic policy as the primary source of new jobs, innovation and economic growth. Empirically, self-employment is overwhelmingly dominant proxy for entrepreneurship. However, the self-employed only draw a narrow picture of all entrepreneurial firms. Our analysis also includes entrepreneurs who are not officially classified as being self-employed but are nevertheless entrepreneurs. Using new data on business owners, we are able to compare the person-related and firm-related entrepreneurial characteristics based on different classifications of entrepreneurs. We are able to show that the sources of new entrepreneurs and the subsequent performance of their firms is closely related to the definitions and measurement of entrepreneurship.

Finance sector wages and human capital: Finnish evidence

Saara Vaahtoniemi (University of Vaasa)

I investigate how the finance sector wages and education level in Finland develop from 1990 to 2014. Prior literature using US data show that deregulation is associated with more demand for skill in finance, which also raises the wages in that sector. This paper considers the case of Finland, which differs from the US in terms of institutional and educational context. Mincerian wage regressions confirm that education and experience are positively associated with wages, and the returns on both education and experience are higher in the finance sector compared to business services as well as the rest of the private sector. Preliminary results indicate that the returns to education in the finance sector decrease after the financial crisis.

The development of wage dispersion and wage rigidity in Finland

Jari Vainiomäki (University of Tampere)

This paper examines the development of wage dispersion and wage rigidity in Finland since mid 1990's. We show that the increase in between-firms variance dominated during late 1990's, but after that the overall increase in wage dispersion has occurred within-firms. We estimate parametric measures for downward nominal and real wage rigidities using the methods developed in the International Wage Flexibility Project (IWFP). Thereby we update these measures for Finland until 2013, when previously estimates have been available only until 2000. Finally, we find that the primary margin to adjust wage costs in firms is the adjustment of employment, rather than other possible margins, such as hourly wages, overtime or regular working hours, or turnover of employees.

Abstracts

Room
AgBeeta Session 1e: Benefits and work

Working while on a disability pension: The importance of different sociodemo- graphic factors, timing of disability pension and cause of disability

Anu Polvinen (Finnish Centre for Pensions), Mikko Laaksonen , Juha Rantala, Marjukka Hietaniemi , Jari Kannisto, Susan Kuivalainen

Aims: The aim was to find out how different sociodemographic factors, causes of disability and the timing of disability are associated with engagement in paid work while on a full or partial disability pension. **Methods:** The data was a 10 per cent register-based sample of Finns. The data included 14,418 participants aged 20-62 years who were drawing full or partial disability pension in 2012. Logistic regression analysis was used to estimate odds ratios for working while on a disability pension. **Results:** 14 per cent of full disability pensioners and 76 per cent of partial disability pensioners were engaged in paid work. Working while on a full disability pension was more common among those married or cohabiting, those with higher education or socioeconomic status and those who had retired due to other than mental disorders. Working while on a partial disability pension was more common among older age groups, married or cohabiting, and those with higher education or socioeconomic status. Those receiving partial disability pension due to cardiovascular diseases were working more often than those retired due to mental disorders. Recent retirement was associated with working for both full and partial disability pension recipients. **Conclusions:** There are large socioeconomic differences in working among full and partial disability pensioners, which may further enlarge disparities in disability pensioners' levels of living and well-being.

Economic experiences, target-specific beliefs and demands for redistribution

Ilpo Kauppinen (VATT), Christina Fong, Panu Poutvaara

In this paper, we examine general and target-specific beliefs about the determinants of low and high incomes, and how these affect attitudes towards increasing taxes on those with low incomes and increasing transfers to those with low incomes. We find that high incomes are attributed to own effort to a larger extent than low incomes are blamed on the lack of effort. Those highlighting effort support less redistribution. Although support towards increasing taxes on those with high incomes and transfers to those with low incomes are related, there are also some interesting differences.

Financial Incentives to Work Decomposed – The Finnish Case

Mauri Kotamaki(University of Turku, Tela))

This paper analyses financial incentives to work from three perspectives. First, the participation tax rate (PTR) levels are calculated with numerous classifications: by age, education, family type, number of children, income quantiles and benefit type. Second, a question of how different parts of the tax and social security system affect work incentives is answered; the PTR is decomposed so that the quantitative contribution of different tax and social security components is given. Third, subgroup decomposition methods, typically used in literature of economic inequality, are applied in order to explain how variation in PTR is explained by various characteristics of individuals

Abstracts

Room
AgBeeta Session 1e: Benefits and work (cont.)

Eläkeikä nousee mutta joustot säilyvät– kyselytutkimus vuoden 2017 eläkeuudistuksesta ja työssäjatkamisaikeista

Sanna Tenhunen (Finnish Centre for Pensions)

Yksi vuoden 2017 eläkeuudistuksen tavoitteista on tukea työssä jatkamista. Näkyvimpiä muutoksia ovat eläkeiän alarajan nousu ja osittainen varhennettu vanhuuseläke, joka mahdollistaa eläkkeen nostamisen jo ennen eläkeiän alarajaa. Osittainen varhennettu vanhuuseläke ja mahdollisuus lykätä eläkkeelle siirtymistä tuovat joustavuutta eläkkeellesiirtymisikään. Eläkkeeseen tehtävä varhennusvähennys tai lykkäyskorotus puolestaan luovat kannustavan elementin eläkejärjestelmään. Tutkimuksessa tarkastellaan kyselyaineiston ja siihen liitettyjen rekisteritietojen avulla suomalaisten eläkeikää lähestyvien käsityksiä eläkkeelle siirtymisestä, sen lykkäämisestä tai varhentamisesta. Samalla pyritään selvittämään lykkäyskorotuksen ja varhennusvähennyksen merkitystä aiottuun eläkkeellesiirtymisikään. Toinen painopiste tutkimuksessa on eläkkeen ohessa työskentely. Etenkin osittaisen varhennettua vanhuuseläkkeen ohella työskentelyyn liittyvien aikomusten selvittäminen tuo lisätietoa eläkejärjestelmän ja työskentelyn kannustimien yhteydestä.

Room
AgC234 Session 1f: Health

Global economic crises and suicide mortality in 21 OECD countries in 1960-2011

Sanna Huikari (University of Oulu), Marko Korhonen

In this paper, we explore the actual origin of increases in suicide mortality during economic downturns with using fixed-effects models for panel data for 21 OECD countries for over 50 years' time period. We show that distinct economic crises do affect suicides, and that the effect comes often with the connection through unemployment. In addition, although economic crisis could affect suicide mortality by concomitant features of the crisis, e.g. by increasing unemployment, we assess also whether there is suicide mortality attributed to a 'crisis effect' beyond unemployment effect. As a result, we can find a 'crisis effect' on suicides beyond unemployment effect for working-aged and elderly male and female during global stock market and currency crises. For banking crises, the effect on suicide mortality seems to result merely solely via increase in unemployment. Furthermore, we find evidence that the effect of the unemployment on suicide mortality intensifies during global crises.

Abstracts

Room
AgC234 Session 1f: Health (cont.)

Hospital Pharmaceutical Sales as an Investment?

Markku Siikanen (Aalto University)

Most developed countries have two main pharmaceutical markets: the hospital and the retail pharmacy market. This multimarket setting allows the possibility that the market demands are linked. Hospital market prices are set through public procurement while the retail market prices are determined by the competition among monopolistic firms given the regulatory constraints. I put forward the hypothesis that the hospital market sales are strategic investments influencing retail market sales. Previous health economics and industrial organization literature on pharmaceuticals has not touched this topic. The hypothesis is tested by using a novel identification strategy based on a regression discontinuity design with data from Finnish public sector pharmaceutical procurement. Winning the hospital procurement increases the retail market pharmaceutical sales by 30% - 35% at the margin. The increase in the sales can be further decomposed in to price and quantity effects. Part of the effect is due to the increases in the prices of the pharmaceuticals in the retail market and other part is from the increase in the sold quantities.

Reality Check: The Effect of Health IT Adoption on Prescription Drug Abuse

Mikko Nurminen, University of Turku), Petri Böckerman, Tanja Saxell, Mika Kortelainen, Liisa Laine

Prescription drug abuse – defined as the use of prescription drugs for nonmedical recreational purposes – is a widespread and increasing problem globally. We examine the effects of electronic prescriptions (e-prescriptions) on the use and renewal of prescriptions for benzodiazepines that are among the most abused prescription drugs. We define potential prescription drug abusers as those patients who have several prescriptions for the same type of drugs from different doctors (“doctor shopping”) or even from the same high-volume doctor but from different pharmacies (“pharmacy shopping”) during a short period of time. Using patient-level data, we identify benzodiazepine prescriptions obtained from multiple physicians and pharmacies. We estimate the causal effects of e-prescriptions exploiting the gradual and plausibly exogenous rollout of a national e-prescription system in Finland. In addition to pinning down causality, our results are more generalizable as we do not focus only on specific medical professions or to some smaller geographic areas but study the effects of a nationwide system that is used by all public and private health care units in the country.

Forced migration and long-term mental health

Henri Salokangas (University of Turku), Jari Haukka, Jaana Suvisaari, Matti Sarvimäki
Pekka Martikainen

We examine the long-term mental health effects of internal displacement among people who were forced to migrate within Finland in the 1940s. Using this displacement during World War II as an exogenous shock to internal migration, we estimate the effect of forced migration on several mental health measures. The stresses and life changes associated with migration may have harmful long-term health effects, especially for mental health. These health consequences of forced migration are still relatively unknown. The lack of evidence largely follows from the absence of high-quality data on a migrated population and a proper control group. The evacuation of ceded Karelia and Finnish register data has potential to address these issues. The data comes from Finnish Population Censuses, Hospital Discharge registers and drug reimbursement registers.

Abstracts

Room
AgGamma Session 1g: Macroeconomics I

House prices, lending standards, and the macroeconomy

Aino Silvo (University of Helsinki & HECER)

I study the link between house prices, lending standards, and aggregate over-investment in housing. I develop a model of the housing market where the credit market is affected by asymmetric information. Selection is towards less creditworthy mortgage borrowers. Asymmetric information coupled with deadweight costs of default can create endogenous boom-bust cycles in house prices. I show that lending standards are loose and the incentives for less-than-creditworthy borrowers to apply for a loan are particularly strong first, when future house values are expected to be high, which leads to high leverage of borrowers; and second, when safe interest rates are low, which implies low costs of borrowing. However, there are strong non-linearities: rising house values first drive out the least-creditworthy borrowers, but attract them back as expectations on future values become high enough to counter-act risks inherent in high leverage. Finally, stricter default legislation is not necessarily effective in mitigating these incentive problems. The results shed light on incentive mechanisms that can help explain the developments in the U.S. housing market in the early 2000s.

Wage setting coordination in a small open economy

Petteri Juvonen, University of Jyväskylä)

This paper studies wage setting coordination in a two sector open economy DSGE model. Wages are set by sector specific non-atomistic unions that anticipate the effects of their wage demands on aggregate economy. It is found that in terms of steady state, large wage setters can increase the aggregate welfare over market allocation through exploitation of terms of trade externality. However this happens only when the strategic interaction is minimal, if unions play Nash game or only either of the unions sets the wage for both sectors. In pattern bargaining, a Stackelberg game, strategic behavior eats the aggregate surplus and only the leader gains at expense of the follower. Hence the steady state results of this paper do not support the importance of wage leadership of tradable sector or pattern bargaining in general. In terms of dynamics it is found that if non-tradable sector wages are begged to wage developments of tradable sector this produces large welfare losses for the non-tradable sector. This result speaks against the importance of wage norm set by the tradable sector.

Abstracts

Room Session 1g: Macroeconomics I (cont.)
AgGamma

Monetary Policy, Private Debt and Financial Stability Risks

Eleonora Granziera (Bank of Finland), Greg H. Bauer

Can monetary policy be used to promote financial stability? We answer this question by estimating the impact of a monetary policy shock on private-sector leverage and the likelihood of a financial crisis. Impulse responses obtained from a panel VAR of eighteen advanced countries suggest that the debt to-GDP ratio rises in the short run following an unexpected tightening in monetary policy. As a consequence, the likelihood of a financial crisis increases, as estimated from a panel logit regression. However, in the long run, output recovers and higher borrowing costs discourage new lending, leading to a deleveraging of the private sector. A lower debt-to-GDP ratio in turn reduces the likelihood of a financial crisis. These results suggest that monetary policy can achieve a less risky financial system in the long run but could fuel financial instability in the short run. We also find that the ultimate effects of a monetary policy tightening on the probability of a financial crisis depend on the leverage of the private sector: the higher the initial value of the debt-to-GDP ratio, the more beneficial the monetary policy intervention in the long run, but the more destabilizing in the short run.

An extensive margin of financial accelerator: Assessing search frictions on the credit market

Marlène Isoré (University of Helsinki and Bank of Finland), Thomas Brand, Fabien Tripier

This paper studies how much uncertainty in entrepreneurial returns matters for firm creation and destruction over time. We develop a model where the market for commercial loans is characterized by search frictions and a costly-state verification contract. New entrepreneurs undertake a costly search for a financial intermediary with whom they can contract on a loan. The terms of this contract, including a default threshold, are optimally determined so as to account for future idiosyncratic level and volatility shocks of business activities. An “extensive margin” of financial acceleration emerges from this endogenous credit conditions to new risky firms. We embed this mechanism into a general equilibrium model building on Christiano, Motto and Rostagno (2014). Thereby, we can assess the role of “risk shocks” in firm dynamics, and the importance of this mechanism along the business cycle.

Abstracts

Room
AgC234

Session 1h: Economic forecasting

Predictive Ability of Financial Variables in Changing Economic Circumstances

Jaana Rahko (University of Vaasa), Petri Kuosmanen, Juuso Vataja

A large body of literature has established stylized facts about the predictive links between different financial variables and the real economic activity across countries. Many studies have also shown that the predictive ability of financial variables is far from consistent and stable over time. However, it has remained surprisingly unexplored under which economic circumstances financial variables tend to have more, or alternatively, less useful predictive content for GDP growth. In this study, we analyze three key financial variables: the term spread, real stock returns and real short-term interest rate, and study how their predictive power relates to varying economic circumstances. To the best of our knowledge, this is the first paper to study extensively and systematically, how different economic factors are affecting the time-varying predictive ability of key financial variables in a large set of industrialized countries. Our results show that increased GDP growth volatility as well as times of recession and business cycle peaks are clearly linked with enhanced predictive content of financial variables. Factors connected to monetary policy play less significant role. Unconventional monetary policy (zero lower bound of interest rates) appears to mainly reduce the predictive ability of stock markets. Moreover, we find some evidence that inflation persistence may increase the predictive content of financial variables.

A Random Walk Down the Economic Policy Street: Effects of Economic Policy Uncertainty on Forecasting Future Real Economic Activity in the Euro Area and the UK

Juha Juntila (JSBE), Juuso Vataja

Recently introduced measure for Economic Policy Uncertainty (EPU) seems to have a strong role to play in forecasting out-of-sample values for the future real economic activity both for the euro area and the UK economies in the monthly data from 1997 - 2015. Inclusion of EPU measures for the US, UK and European economies improves the forecasting ability of models based on standard financial market information especially for the period after the 2008 global financial and real economy crisis. However, introducing the economic policy uncertainty to the forecasting model for the euro area data turns the previously observed positive forecasting power of the stock market returns to a negative one, and for the UK economy the stock market connection to the future real economic activity disappears completely after 2008. This calls for a deeper analysis of the relationships between the stock market performance, economic policy uncertainty and future real economic activity especially during and after the global financial crisis of 2008-2009.

Abstracts

Room
AgC234

Session 1h: Economic forecasting (cont.)

Drivers of experts' inflation expectations in the euro area

Maritta Paloviita (Bank of Finland), **Tomasz Lyziak**

This article analyses the formation of inflation forecasts set by professional forecasters in the euro area with a special focus on the role of ECB inflation projections. For this purpose we use a general model which integrates two theoretical models, i.e. the hybrid model of expectations, including rational and static expectations, and the sticky-information (epidemiological) model. The novel feature of our approach is that among determinants of inflation expectations we consider – except backward-looking factors – rational expectations assumption and the effects of the main communication tool of the ECB, i.e. the ECB inflation projections. We examine whether ECB inflation projections are still important in the formation of private sector forecasts once the impact of forward-lookingness of economic agents has been taken into account. On the top of that the model allows calculation of implicit (perceived) inflation targets and assessment of their consistency with the ECB inflation target. We study expectations' formation before and after the onset of the financial crisis and pay special attention to possible changes in expectations' formation over time. To explain our findings we study forecast accuracy of ECB inflation projections relative to private sector forecasts. Our analysis indicates that the formation of inflation expectations by professional forecasters in the euro area has changed recently. The importance of backward-looking mechanisms has decreased, while the importance of the perceived target has increased. The perceived inflation target remains broadly consistent with the official ECB inflation target in the medium-term; however its downward trend signals some risks of de-anchoring inflation expectations. The ECB inflation projections affect private sector inflation expectations and their importance for medium-term expectations has increased, but the magnitude of this effect is rather small and only to small extent can be explained by better forecast performance of the ECB.

Nowcasting the Finnish economy with a large Bayesian vector autoregressive model

Juha Itkonen (Bank of Finland), **Petteri Juvonen**

Timely and accurate assessment of current macroeconomic activity is crucial for policymakers and other economic agents. Nowcasting aims to forecast the current economic situation ahead of official data releases. We develop and apply a large Bayesian vector autoregressive (BVAR) model to nowcast quarterly GDP growth rate of the Finnish economy. We study the BVAR model's out-of-sample performance at different forecasting horizons, and compare to various bridge models and a dynamic factor model.

Abstracts

Room
B301

Session 1i: Stock Markets

Should you trust your broker

Timo Autio (Aalto University)

Stock brokers conduct a significant amount of research in order to have more accurate estimation of the values of the stocks. They use it first of all to optimise the portfolio's of their own but they also distribute this information to their clients. I study how a broker's incentive to maximize trading influences the motivation to distribute fundamental information about the assets' returns when the investor has limited capacity to process information. I construct a model to show that if the broker has scale advantage in research compared to its clients there can be situations when the client benefits from the information from the broker even though he knows that their incentives are not exactly aligned.

Sentiment and sign predictability of stock returns

Harri Pönkä, (Ministry of Finance)

We study the relationship between sentiment variables and the stock returns in international stock markets. We focus on the role of consumer and investor confidence, as well as the purchasing managers' index, that can also be seen as a sentiment indicator. We employ a factor-augmented probit model and study whether sentiment variables are able to predict market movements, over and above classic return predictors and factors based on a large panel of macroeconomic and financial variables.

Sentiment indicators and macroeconomic data as drivers for long-term stock market volatility

Annika Lindblad (University of Helsinki)

Do survey-based sentiment measures capture information in and beyond that in macroeconomic fundamentals, or can long-term stock return volatility be more accurately modelled by combining information in macro and sentiment variables? I use the GARCH-MIDAS framework of Engle et al. (2013) to examine the relationship between the macro economy and stock market volatility by focusing on the role played by survey-based sentiment indicators compared to macroeconomic variables. I explore the importance of absolute returns and recession probabilities by professional forecasters as determinants of long-term volatility, but find that out-of-sample the term spread is the best predictor for stock return volatility over longer horizons. I find that backward-looking macroeconomic data loses significance once sentiment data has been accounted for, a result echoed in the out-of-sample section. Especially the recession probabilities given by professional forecasters seem to include information beyond realised volatility and macroeconomic fundamentals. In general, while the GARCH(1,1) model is difficult to beat over short-horizon, over longer horizons both macroeconomic fundamentals as well as survey-based sentiment measures improve the predictability of volatility. Combining macroeconomic variables and sentiment data enables a larger portion of the total variance to be explained by the long-term volatility component.

Abstracts

Room
MaA105

Session 2a: Microeconomics II

Surviving international competition in the presence of wider objectives than profit maximisation **Johan Willner** (Abo Akademi University), Johan Flink, Annina Kainu, Sonja Gronblom

We ask how the scope for wider objectives of a public or private altruistic firm in a mixed oligopoly change when a country is exposed to international competition. The scope does not become more restricted if costs and demand are given, unless the trade partner is a low-cost country. In the case of endogenous and market-clearing wages, imperfect competition causes no welfare loss, so the wider objectives will not increase welfare. However, they increase the real wage if workers and firms are stationary, which may harm the country's competitiveness. The scope for wider objectives is then limited by the country's share of the labour force of the integrated economy. If workers and firms are mobile, the situation is the same as in a closed economy, unless there are productivity differences that can make it difficult to sustain free mobility and unrestricted trade.

Normative Conflict and Cooperation in Sequential Social Dilemmas

Lauri Sääksvuori (THL), Jakob Neitzel

"We investigate how conflicting normative views of fair contribution rules can be used to design sequential contribution mechanisms to foster cooperation. We show, using survey and experimental data, that individuals hold well-defined yet widely diverse normative views of fair contribution rules. We use information about the conflicting normative views of fair contributions to model cooperative behaviour in sequential collective action problems in the presence of wealth inequality. Our model predicts that a sequential mechanism which solicits contributions first from wealthy actors generates greater public good provision and narrows wealth inequality more than any alternative sequential mechanism. Our experimental data show that the mechanism with wealthy first-movers generates greater contributions and narrows wealth inequality more than the alternative mechanisms, as predicted. Our results suggest how altering the sequential order of contributions in heterogeneous populations may affect public good provision and help organizations to increase the total value of solicited contributions.

On endowments and indivisibility: Partial ownership in the Shapley Scarf model

William Phan (University of Helsinki), Patrick Harless

We introduce a parameterized measure of partial ownership, the alpha-endowment lower bound, appropriate to probabilistic allocation. Our main result is stark: Among all convex combinations of group strategy-proof rules, only Gale's Top Trading Cycles is efficient and meets a positive alpha-endowment lower bound.

Abstracts

Room MaA105 Session 2a: Demand side issues in environmental markets (cont.)

Bonacich Measures as Equilibria in Network Models

Hannu Salonen (University of Turku)

We investigate the cases when the Bonacich measures of strongly connected directed bipartite networks can be interpreted as Nash equilibria of a noncooperative game. One such case is a two-person game such that the utility functions are bilinear, the matrices of these bilinear forms represent the network, and strategies are norm bounded. Another example is a two-person game with quadratic utility functions. A third example is an $m + n$ person game with quadratic utility functions, where the matrices representing the network have dimension $m \times n$. For semistrongly connected directed bipartite networks we show that the Bonacich measures are unique and give a recursion formula for the computation of the measures. The Bonacich measures of such networks can be interpreted as a subgame perfect equilibrium path of an extensive form game with almost perfect information.

Room AgDelta Session 2b: Dynamic Games and Incentives

Halfway in between Diamond and Bertrand: Strategic complexity and consumer deadlines

Saara Hämäläinen (University of Helsinki)

We consider a new price search model with gradual information arrival and deadlines to study how consumers search within and across stores during a single search spell. This renders the effects of search costs softer than usual, which allows us to endogenize the intensity of competition in a way that avoids both Diamond and Bertrand paradoxes. To affect consumer search process, each firm can commit to any level of choice complexity.

Consumers prefer firms with lower intrafirm frictions but having low search costs intensifies price competition. This pins down the relative numbers of informed and uninformed consumers in the model. We show that there exist two similar inefficient equilibria, both with a prominent firm and a non-prominent firm, where their numbers are exactly the same. The outcome is thus precisely halfway in between Diamond and Bertrand equilibrium.

Optimality of deadlines and dynamic moral hazard

Tuomas Laiho (Aalto University)

This paper analyzes dynamic moral hazard with limited liability in a model where a principal hires an agent to complete a project. We first focus on moral hazard with regards to effort and show that if the agent is patient enough the optimal contract takes the form of a deadline contract. At the deadline the principal either fires the agent or lets him work part time depending on how impatient the agent is. We then extend the model to include moral hazard with regards to quality by considering an imperfectly observed quality choice. Contracts that implement high quality are of 'efficiency wages' type, i.e the principal leaves enough rents to the agent to incentivize high quality. The main result of the paper is that when the agent is impatient enough, moral hazard with regards to effort goes away but with regards to quality it can actually become worse.

Abstracts

Room
AgDelta Session 2b: Dynamic Games and Incentives (cont.)

Dynamic Wage setting without commitment

Artturi Björk (Aalto University)

A workers union with market power promises to set low wages in the hope that firms install a lot of irreversible capital. If the firms invest too much the union cannot resist the temptation to set a high wage. Hence the promise for low wages is not credible. In the one-shot game the level of investment is inefficiently low, i.e. there is hold-up. The efficient level of investment can be achieved if the union can commit to wages. How close to the commitment equilibrium can we get with reputation substituting for commitment in repeated interaction? Previous literature has assumed some punishment strategy (typically one-shot Nash equilibrium) for deviations. I use recursive methods to find the (endogenous) worst possible subgame perfect equilibrium to act as deterrent to deviations. Allowing for worse than one-shot Nash punishments reduces the effect of hold-up by xx-xx% depending on industry characteristics.

Information design in reputation games

Julia Salmi (Aalto University)

I build a technique to analyze reputation games with information design and utilize it to solve a generic product choice game. I show that when there is only one long-run player and the designer wants to maximize her payoffs, the information designer's problem can be solved recursively. In a dynamic game, an information designer can control continuation payoffs through beliefs. The optimal information structure rewards the long-run player after taking a disadvantaged action by both entering the next period with a favorable public belief and by Bayes persuading the future short-run players. Both fixed and designable public monitoring are considered.

Room
AgBeeta Session 2c: Taxes and benefits

The Evaluation of the Sweets Tax

Riikka Savolainen (Labour institute for economic research), Tuomas Kosonen

Our research question is whether a sweets tax is a suitable means to influence the consumer behavior, which allows us to contribute to the literature on health-related taxation. We will present the first results from a study that evaluates pass-through and the elasticity of the sweets tax introduced in Finland in 2011. Our data set has more than 300 million observations, starting from January 2010 and extending until December 2015. This week-level data set is geographically precise and contains very detailed product-level sales quantity and price information. The identification strategy relies on the fact that the present sweets tax is based on the custom tariff category, not, say, on the sugar content. As a result, there are close untaxed substitutes to taxed products and they act as a control group.

Abstracts

Room
AgBeeta Session 2c: Taxes and benefits (cont.)

Return of the investment fund system – Should we welcome it?

Seppo Kari (VATT)

Recent tax policy discussions in Finland have included proposals to reform corporate taxation by reintroducing tax-deductible reserves, which were an important element of Finnish business taxation from 1978 to 1992. The discussion has involved two types of reserves: profit reserve and investment reserve. The former allows for deferring tax payments, while the latter may be used also to cover investment outlay. The goal of this paper is to consider the various channels through which the reserves might affect the incentive to invest. The analysis is executed by introducing a dynamic investment model in the tradition of corporate tax theory and deriving the firm's cost of capital in the presence of a tax-deductible reserve. It finds that, compared to a standard corporate tax system, the profit reserve reduces the firm's effective tax rate and, therefore, affects symmetrically the after tax returns and after-tax costs. The effects of the profit reserve could be mimicked by a reduction in the legal tax rate. Instead, the effects of the investment reserve are much more complex, and the analysis splits into several cases. In one special case the effects are similar to the profits reserve, while in another they correspond to a neutral cash flow tax. Hence the incentive effects of an investment reserve are likely to depend on the characteristics of the firm and therefore the reserve might distort the allocation of resources.

Estimating participation responses of couples using unemployment benefit reform

Viveka Tschamurov (Kela & University of Helsinki)

Unemployed individuals with low earnings prospects often remain trapped in long-term benefit dependence, as the benefits may be withdrawn upon accepting a job offer. I investigate the effects of a policy change in Finland in 2013 whereby means-testing of labour market subsidy against spousal income was abolished. Means-testing implies that the recipient has to give up 50 cents in benefits for every euro earned in labour income above a certain threshold. This reform provides a quasi-experimental setup that contributes to the literature investigating the empirical relationship between labour force participation and the financial incentives for working which in turn depend on unemployment benefit generosity and individual earnings prospects. I consider married or cohabiting households of which either or both member of the couple receives either (1) labour market subsidy or (2) basic or earnings-related unemployment allowance. The former group is subject to the policy change while the latter one is not. I use a difference-in-differences model where the dependent variable is a binary choice of labour market participation. Since the financial payoff of the treatment to those being treated is a combination of income, taxes and benefits, I use a continuous treatment variable based on household-level variation in the household net wages and net non-wage income. I use the microsimulation model SISU to obtain the financial payoff of the treatment for each household."

Abstracts

Room
AgBeeta Session 2c: Taxes and benefits (cont.)

Empirical Evaluation on the Effects of Interest Barriers: Case Finland **Olli Ropponen** (VATT), Jarkko Harju, Ilpo Kauppinen

In order to protect their tax bases several countries have introduced anti-tax-avoidance measures into their legislations in recent years. This paper studies empirically the effects of an interest barrier (IB), an anti-tax-avoidance measure designed to restrict profit shifting taking place via interest and other financial payments. A cross-country firm-level Orbis database on Finnish and Swedish multinational enterprises (MNEs) is employed to study the effects of introducing an IB in Finland. Swedish MNEs serve as a control group in our difference-in-differences (DD) analysis. Variety of outcomes is studied. In addition to debt-related responses the paper also studies whether the IB had an effect on some other profit shifting channel or on real outcomes.

Room
AgC234 Session 2d: Public and regional economics

Distributional weights in environmental valuation and cost-benefit analysis: A case study **Väinö Nurmi** ((Finnish Meteorological Institute), Heini Ahtiainen

The economic valuation of public goods, including environmental ones, and the methods applied in Cost-Benefit Analysis (CBA) are built on the Kaldor-Hicks efficiency criterion and measuring in monetary terms whether winners have gained more than the losers have lost. Without adjusting the monetary welfare changes by differences in the social marginal utility of money, CBA is both systematically favorable to those who value money the least relative to alternative numeraires and asymmetric between agents' preferences. Distributional weights have been largely neglected in practical valuation studies in the past few decades with the exception of climate change economics, where it has been shown that the addition of weights can change the results by two orders of magnitude. Our hypothesis is that similar kinds of results could be obtained for other environmental goods at other than global scales. Whether or not the neglect of distributional weights is a problem depends on the use of taxes and the form of individuals' utility functions. We go through the theoretical arguments in favor of and against weighting, and present the options to design such weights, including the theory behind the different designs. We also test how the weights affect the results of CBA, using data from an international contingent valuation study on individuals' WTP for improving water quality, their income and estimated costs of improvement measures. We show that different weighting schemes (or their absence) can result in very different policy recommendations.

Abstracts

Room
AgC234 Session 2d: Public and regional economics (cont.)

Suomen ulosottojärjestelmän järjestelmäkriisi osana globaalia finanssikriisiä - Oikeustaloustieteellinen näkökulma

Pekka Tiainen (TEM and University of Helsinki)

Maksukyvyttömyysoikeus, insolvenssioikeus, perusteleo toiminta-ajatustaan luovalla tuholla. Missä määrin kyse on muusta? Voidaanko ongelmat ratkaista siirtymällä likvidaatiosta (perinnästä ja ulosotosta) rehabilitaation, että velallisen asemaa turvataan, jos kyse ei olekaan ylivelkaantumisesta ja maksukyvyttömyydestä vaan kokonaan muusta ja osaltaan virheellisestä velkomisesta?

Esitelmässä avataan ulosotto- ja perintäjärjestelmän nykykriisiä ja käsitellään teoriaperustaa sekä historiaa ja kansainvälistä taustaa ja tilastojen ja seurausten valossa, missä laajuudessa luovan tuhon lähtökohta insolvenssioikeuden ja prosessioikeuden kulmakivenä voidaan haastaa. Miten nykykriisiä voidaan purkaa muutoksilla toimintatavoissa sekä lainsäädännön ja oikeusjärjestelmäreformin keinoin?

Muun ohella tarkastellaan ulosoton suojaosuuden tasokorotuksen vaikutusta ulosottokeritymään ja toiselta puolen paremman työllisyyden hyötyihin, jos verot ja ulosotto yhdessä tulojen nousun aiheuttamien sosiaalisten tukien poistumisen kanssa veisi suojaosuuden ylittävää työtuloa kokonaan tai lähes kokonaan.

Hallitus on budjettiriihessään 2016 ottanut kantaa, että ulosottoon liittyviä työllistymisen kannustinloukkuja puretaan. Tarkoituksena on myöntää helpotuksia ulosottoon joutuneille ihmisille työllistymisen kannustamiseksi ja pienituloisten ylivelkaantuneiden henkilöiden aseman helpottamiseksi. Tarkoituksena on valmistelussa arvioida erityisesti ulosoton suojaosuuden korottamisen mahdollisuudet ja vaikutukset. Miten tämä vaikuttaisi ja mitä muita korjaustarpeita on? Tasokorotus on tehtävissä siten, että ulosottokaaren 4 luvun 48 §:n mukainen määräajoin maksettavan palkan ja muun etuuden ulosmittauksessa velallisen päiväkohtainen suojaosuus nostetaan. Jos se olisi 25 euroa, suojaosuus olisi 750 e/kk (lasketaan 30 päivää/kk) nykyisen 678 euron sijasta. Jos se olisi 30 euroa, suojaosuus olisi 900 euroa/kk. Jne. On sitten harkinnan asia, kuinka paljon nosto on tai toteutetaanko se ulosoton prosenttiosuuksia muuttamalla ja mihin tulotasoihin vaikutus ulotetaan. Korotus voisi olla suurempi jos se tulisi esim. puolen vuoden tai vuoden ulosoton jälkeen tai olisi kaksi porrasta. Se vaatisi lakiin lisälauseen.

Abstracts

Room
AgC234

Session 2d: Public and regional economics (cont.)

Revisiting the House Price-Income Relationship

Elias Oikarinen (University of Turku), Steven Bourassa, Martin Hoesli, Janne Engblom

Using data for the 50 largest U.S. Metropolitan Statistical Areas (MSAs) for the period 1980-2014, this study undertakes a systematic analysis of the relationship between house prices and personal income. We apply state-of-the-art panel data analysis tools, define income in multiple ways, allow for regional heterogeneity, and control for spatial dependence and endogeneity. We find that the house price-income ratio is not stable in the long run for most cities. In contrast, panel regression models that allow for regional heterogeneity and control for cross-sectional dependence yield stationary equations for MSA house prices. Among other findings, we show that relying on panel unit root tests is problematic. We also show that it is important to allow for heterogeneity across locations and to cater for endogeneity and cross-sectional dependence when analyzing the relationship between house prices and income.

Diversity and municipal secession: evidence from referendums in Quebec

Simon Lapointe (VATT)

This paper studies how ethno-linguistic diversity affects voters' choice of borders for their local jurisdictions. It takes advantage of a large and unique dataset of results from referendums on municipal secessions from the Canadian province of Quebec in 2004. In contrast to most of the literature on municipal consolidations, this dataset allows a direct investigation of voter preferences. I find that voters more willingly accept sharing a jurisdiction with people of different incomes when they share a common cultural group, suggesting that loyalty to one's ethnic group, and not only differences in preferences for the public goods, plays a significant role in border choice.

Abstracts

Room
AgB301 Session 2e: Chinese Economy

How is Chinese Monetary Policy Transmitted? Disentangling Loan Supply and Loan Demand Responses

Riikka Nuutilainen (Bank of Finland), Max Breitenlechner

While it is widely accepted in the U.S. and Europe that the supply of bank loans matters for the transmission of monetary policy, the evidence on China is less conclusive. Over the past 20 years the Chinese monetary policy framework and policy instruments available have been in transition to more market-oriented ones. At the same time the direct state control of the banking sector is decreasing and the financial markets are slowly becoming more mature. We use monthly data from 2004 to 2016 to study the effects of loan demand and supply shocks to economic activity in China. Using combinations of zero and sign restrictions, we identify monetary policy shocks that coincide with supply or demand responses on the loan market. This is the first paper that adopts this approach for China. Disentangling between the loan demand and supply provides further insights into the functioning of monetary policy transmission over the period of policy transition.

Preliminary results show that effects of monetary policy on output are linked to changes in both the demand and supply of bank loans. Therefore our results suggest that policy induced loan supply responses also matter for the transmission of China's monetary policy. We use both the quantity-based reserve requirement ratio policy tool as well as price-based interest rates and show that the transmission of monetary policy also depends on policy instrument. Furthermore, confirming exiting evidence, we find that monetary policy accounts for a relatively high share of the dynamics in economic activity in China.

China Exposure

Kari Heimonen (JSBE), Heikki Lehkonen

This study evaluates the role of China, China exposure, on international asset markets. We estimate the impact utilizing standard international asset pricing models. Our results indicate that the impact of Chinese stock market is relatively modest. Countries with the highest exposure are emerging economies and countries neighboring China.

It is all fun and games until someone loses an eye: Emotions in asset markets

Heikki Lehkonen (JSBE), Kuntara Pukthuanthong

Using daily data on emotions and facts related news and social media mentions, we study how sentiment, joy, gloom and other feelings affect international stock market returns. We find a statistically significant correlation between the changes in feelings and market indices and several variables to be able to predict short-term returns. Market sensitivity to emotions is larger in emerging countries than in developed markets and especially high in China. The differences in markets' emotional sensitivities can be explained with several cultural, political, economic, market behavior and market participants related variables.

Abstracts

Room Session 2e: Chinese Economy (cont.)
AgB301

Trusting Banks in China

Zuzana Fungacova (Bank of Finland), Laurent Weill

Trust in banks is essential for the effectiveness of the financial system. This study examines the determinants of trust in banks in China. We use the last wave of the World Values Survey which contains information on trust in banks in China in 2012. We perform ordered logit estimations to investigate the potential influence of a large set of individual and provincial indicators. We observe the influence of certain sociodemographic indicators. Membership in the Communist party and living in a rural area are negatively associated with trust in banks. Satisfaction with financial situation and age contribute to higher trust in banks, while being married and having higher education hamper it. Access to information from different sources does not have an impact on trust in banks. Economic values influence trust in banks as individuals who are in favor of inequality being an incentive for individual efforts or favor government ownership in the economy trust banks more.

Room Session 2f: Macroeconomics II
AgGamma

Secular Stagnation in a Monetary Union

Michaela Schmöller (Aalto University)

I propose a model of endogenous growth with nominal wage rigidities for a monetary union, which consists of a small member state and a large country which represents the rest of the union. By means of this framework, I derive growth implications for a currency union the single central bank of which faces constraints in economic stabilization of its member states by both the zero lower bound on nominal interest rates and by the necessity to conduct a one-size fits all monetary policy in the presence of idiosyncratic, country-specific shocks. I show that, in addition to a full employment state, there is the possibility that the monetary union settles in a so-called "stagnation trap", which is characterized by output being permanently below potential, low growth and persistent unemployment. The stagnation trap can be symmetric in the sense that union-wide weak aggregate demand pushes the monetary union into a liquidity trap. A further goal of this paper is to study whether an asymmetric stagnation trap is possible in which only the small country stagnates, while the rest of the currency union is at full employment and the zero lower bound constraint does not bind. I derive effective policy measures for lifting the monetary union out of economic stagnation and to analyze whether there are externalities of unilateral growth-promoting policies and if there is a role for policy coordination.

Abstracts

Room Session 2f: Macroeconomics II (cont.)
AgGamma

Internal references' effect on wage rigidity

Matthias Strifler (JSBE)

This study analyzes three prominent models of internal references and their impact on wage rigidity. With one exception these models suggest that internal references unambiguously increase wage rigidity. This study however provides analytical proofs and parametrization results of the models of Danthine and Kurmann (2007) and Koskela and Schöb (2009) which show that the effect of internal references on wage rigidity is ambiguous. This holds regardless of whether real or monetary shocks are considered. Furthermore, by including unemployment benefits into the outside option (external reference) of Danthine and Kurmann (2010), this paper shows that also the effect of monetary shocks on wage rigidity is ambiguous. The intuition is as follows: As internal and external reference are modeled as weighted average, an increase in the weight on the internal reference implies a simultaneous decrease in the weight on the outside option. Therefore, the effect of the internal reference relative to the external reference determines whether wage rigidity increases or decreases.

Bankruptcies, creative destruction and economic growth

Tuomas Malinen (University of Helsinki), Andreas Hoffman, Leena Kalliovirta

Do business bankruptcies foster or hinder economic growth? The idea of bankruptcy proceeding is to move assets to their highest and best use, with as little frictions as possible. Several authors have devised models that formalized the notion that recessions promote a more efficient allocation of resources by "cleansing" out less efficient production arrangements and redirecting resources into relatively more productive uses. If this "Schumpeterian hypothesis" is correct, increase in the bankruptcies during, for example, recessions would have a negative effect on the GDP per capita growth in short-run, but a positive effect in the long-run. In this article we set out to test this hypothesis. We will address this issue using a newly collected dataset on business bankruptcies from 16 developed countries. We analyze the time series properties as well as the cross-sectional dynamics of our data using different time series and panel data analysis methods. We estimate the relationship between bankruptcies, productivity, employment, capital formation and the GDP per capita growth using panel vector autoregression and panel vector error correction methods. Preliminary results show that business bankruptcies tend to have a long-run equilibrium (cointegrating) relationship with the GDP per capita, employment and capital formation. We find no long-run relationship between bankruptcies and labor productivity. Preliminary estimations show that increase in the number of business bankruptcies is negatively associated with economic growth in the short-run. We are currently in process of estimating the long-run relationship between associated variables.

Abstracts

Room
AgGamma Session 2f: Macroeconomics II (cont.)

Job flows and the mismatch of productivity and wage dispersion - Evidence on job creation in Finnish firms

Juuso Vanhala (Bank of Finland), Satu Nurmi, Matti Viren

This paper studies the role of labour productivity and wages for job flows and employment in Finland, with a particular emphasis on the dispersion of the former variables. Using firm-level micro data based on Statistics Finland's Financial Statements Statistics for 1999–2014, we examine how the dispersion and skewness of the distributions of these variables affects job flows and employment. We first document the considerable dispersion and the highly skewed distributions of both labour productivity and wages. Although both variables share a "Pareto-like" shape of distribution, the wage distribution is much more concentrated than that of labour productivity, reflecting the fact that other factors than productivity strongly influence wages. In addition we show that there are considerable sectoral differences in the shapes of the wage distributions. We then proceed to analyse how this mismatch between productivity and wages affects job flows and employment, by considering the role of the moments of the labour productivity and wage distribution for job flows. The analysis shows that job creation rates (both gross and net) depend positively on the size of wage and labor productivity dispersion in a model that also includes mean values of wages and productivity (and the relevant cross terms) in addition to GDP growth. The results could be interpreted as indicating that increased flexibility has a positive effect for employment and growth.

Room
AgC232 Session 2g: Fiscal multipliers and economic forecasts

Government Spending Multipliers under Anticipation – Evidence from a Noncausal VAR

Jaakko Nelimarkka (University of Helsinki)

Fiscal foresight, economic agents receiving information about future government spending has consequences on the consistency of results drawn from conventional VAR methodology. In this study, the effects of governments spending shocks are explored with the use of a noncausal VAR model, which induces a representation where both past and future exogenous variation influences the economic variables today. Overcoming noninvertibility issues, the exogenous term of the model is filtered both by the past and future observables, and the model is shown to nest a situation of fiscal foresight. The anticipated government spending shock is then extracted from covariation between future-dependence of output and total variation in defence spending. Last, the effects of government spending in the US economy are investigated by Bayesian inference on the noncausal VAR. The estimated spending multiplier for the US economy is lower than one.

Abstracts

Room AgC232 Session 2g: Fiscal multipliers and economic forecasts (cont.)

Real-time uncertainty in budget planning: Evidence from euro-area countries

Pasi Ikonen (Bank of Finland), Maritta Paloviita

Using rich panel data including potential output for euro-area countries, we analyse budget plans and their forecast errors. We find that forecasts of budget balances and macroeconomic conditions are systematically biased. Ex-ante and ex-post negative budget balances are subject to mean reversion (tendency towards more balanced budgets), which is systematically stronger in ex-post data. Budget balance nowcast errors have significantly contributed to budget balance forecast errors. Forecasted macroeconomic conditions and their forecasting errors, including potential output growth, have increased inaccuracy of budget balance forecasts. Even without intentional optimism in forecasting, real-time uncertainty may lead to large mistakes in budgetary planning.

Taloukasvun ennustamisen sietämätön vaikeus: tilastollinen analyysi vuosien 1997-2015 aineistolla

Mika Nieminen (JSBE), Kari Heimonen

Artikkelissa tarkastellaan kotimaisten tutkimuslaitosten ennusteita Suomen bruttokansantuotteen volyymin vuosimuutoksen osalta vuosien 1997-2015 aikana. Analyysi perustuu Jyväskylän yliopiston kauppakorkeakoulun järjestämän Talousennustajakilpailun aineistoon. Tutkimuslaitosten ennusteiden julkaisuajankohdissa on suuria eroja ja tästä johtuen ei ole mielekästä asettaa niitä paremmuusjärjestykseen. Empiiristen tulosten perusteella keskimääräisen ennustevirheen ja toteutuneen taloukasvun välillä on erittäin vahva lineaarinen yhteys. Mikäli BKT:n volyymin vuosimuutos on prosenttiyksikön yli tai alle 2,7 prosenttiyksikköä, niin keskimääräinen ennustevirhe kasvaa 0,7 prosenttiyksiköllä.

Room MaD381 Session 3a: Microeconomics III

Similarity and Value of Information

Lily Ling Yang (University of Sydney)

In this paper, we employ a novel approach to study the value of information in a game. A decision problem is similar to another if the optimal decision rule for the latter, when applied to the former, is better than making a decision without any information in the former. In a game, if the induced decision problem by a change in the strategies of other players is similar to the problem originally faced by the player, the player benefits more from her own information after the change. Using the concept of similarity, we study the value of information in various games, even when a closed form solution is not available.

Dynamic Information Acquisition by Experts

Tsz-Ning Wong (Aalto University), Lily Ling Yang

We consider a model of dynamic expertise, in which two biased experts exert efforts over time to discover the state of the world and are able to send verifiable messages to the decision maker. In contrast to the static model of Kartik, Lee, and Suen (forthcoming), information acquisition decisions can be complementary even when the experts have the same bias. This is because, once a less costly expert starts to acquire information, in the absence of a discovery, the beliefs of the experts and the decision maker diverge over time, and the decision maker's increasingly skeptical belief eventually incentivizes even the more costly expert to acquire information as well.

Abstracts

Room
MaD381 Session 3a: Microeconomics III (cont.)

Bidder behavior in incentive auction

Jan Jääskeläinen (Aalto University)

Allowing interindustry trading of radio spectrum licenses does not lead to reallocation of licenses to firms that value them the most. I study the incentive auction mechanism as a new way to encourage such reallocation. The mechanism is composed of a descending clock auction and a combinatorial ascending clock auction. The two auctions are held at a separate time resulting in buyers and sellers making bids sequentially. When bidders have decreasing marginal utilities they have an incentive to reduce demand in both auctions. In the case of increasing marginal utility, bidders exit descending auction early and use package bidding in the ascending auction.

Room
Agd225.1 Session 3b: Energy Economics

Missing effect of energy tax rebates on firm's competitiveness

Marita Laukkanen (VATT), Saara Tamminen and Kimmo Ollikka

Suomen energiaverotusta uudistettiin vuoden 2011 alusta. Energiahyödykkeiden verotus kiristyi ja lämmitys- ja liikennepolttoaineiden verotus pohjautui enemmän poltosta aiheutuviin hiilidioksidipäästöihin. Vuoden 2012 alusta muutettiin lisäksi energiaintensiivisen teollisuuden veronpalautusjärjestelmää niin, että palautusten ja niitä saavien yritysten määrä nousu merkittävästi. Tässä tutkimuksessa analysoidaan 1) energiaveropalautusjärjestelmää ja sen muutosta vuonna 2012 verrattuna sille asetettuihin tavoitteisiin ja 2) liikennepolttoaineiden verotuksen muutoksia vuonna 2011 ja sen vaikutuksia. Energiaverojen palautusjärjestelmää tarkastellaan kansainvälisen tutkimuskirjallisuuden perusteella ja suomalaisten yritystason mikrotietokantojen avulla. Analyysien pohjalta energiaverojen palautusjärjestelmä ei saavuta sille asetettua tavoitetta yritysten kansainvälisen kilpailukyvyyn tukemisesta merkittävästi. Lisäksi kyseisen järjestelmä havaitaan häiritsevän merkittävästi sekä toimialojen välistä että niiden sisäistä kilpailua ja suosivan erityisesti jo markkinoilla olevia hyvin suuria yrityksiä.

Profitability of a pumped hydro energy storage plant in different wind power scenarios

Santtu Karhinen (University of Oulu), Hannu Huuki

Increasing shares of variable renewable energy sources (RES) in the Nordic power market area has driven the market prices downwards. This affects directly to the profitability of conventional thermal power plants. Increasing uncontrollable and unpredictable variation in output and simultaneously decreasing thermal power capacity has raised concerns about power quality and adequacy. In this paper we focus on Finland, where political debate concerning two hydropower reservoirs has been going on for decades. As balancing-capable thermal power capacity is exiting the market, these investments are becoming ever more appealing. However, building the reservoirs would require major changes in the Finnish environmental legislation. In this study we quantify an alternative way to provide emissions-free balancing power capacity. Currently, there is no pumped hydro energy storage (PHES) capacity installed in Finland. We calculate long-term profitability of a PHES plant planned to be built in an old mine in Pyhäjärvi, Finland. As the first modeling part we estimate wholesale electricity prices as a function of wind power. The estimated price profiles are fed into a dynamic programming model, where PHES plant maximizes its profits. Positive externalities arise as power quality can be maintained also in situations with high balancing power demand.

Abstracts

Room
Agd225.1 Session 3b: Energy Economics (cont.)

Factors affecting energy-saving behaviors and energy efficiency investments in British households

Gianluca Trotta (University of Vaasa)

The objective of this paper is to identify the socio-demographic, dwelling, and environmental factors that have the most important influence to the daily energy-saving behaviors, the adoption of energy efficient appliances and the energy efficiency retrofit investments made by British households. This study uses data from the "Survey of Public Attitudes and Behaviours towards the Environment" (2009) and the "English Housing Survey" (2013-2014) and it employs three models, NLPCA, OLS-regression, probit. The results indicate that we can draw a specific household profile with specific features that make it keener to save energy through daily and/or energy efficient purchasing activities: (i) households who save energy in their daily activities are more likely to buy energy efficient appliances, but not to invest in high-cost energy efficiency retrofit measures; (ii) environmental variables are a good predictor of both energy-saving behaviors and investment in energy efficient appliances, but not of energy efficient retrofit measures; (iii) specific dwelling characteristics have an high explanatory power for energy efficient retrofit investments. By evaluating and understanding the household and dwelling characteristics that affect the energy saving behaviors and energy efficiency investments, we can untangle the complex relationships affecting energy conservation, get a clearer idea where and how energy and emissions savings can be made, and propose effective and targeted policies that promote energy-responsible lifestyles.

Market Power in the Capacity Market: The Case of Ireland

Juha Teirilä (University of Oulu)

An electricity market coupled with a capacity market based on reliability options is modelled as a two-stage game that allows firms' strategic behaviour both in the electricity market and in the capacity market. The model is applied to the Irish electricity market which is going to introduce a new market design by the end of 2017. As Ireland has one dominant firm in the electricity market there has been concerns that the new design enables abusing significant amount of market power both in the electricity and capacity market. This paper studies quantitatively whether there are economic incentives to abuse market power in the capacity market, what would be the main mechanisms to do so, what are the welfare costs, and which would be the most efficient ways to mitigate market power. Furthermore, it aims at understanding how the market powers in the two markets are interconnected. It is found that the dominant firm in Ireland does indeed have incentives and possibilities to execute market power in the capacity market. Ensuring enough new entry would mitigate market power. However, more important than the amount of entry is how the new entry bids in the capacity market. This is significantly affected by the competitiveness of the electricity market.

Abstracts

Room
AgC234

Session 3c: Human capital and behavioural economics

Does Attending an Elite High School Have an Effect on Learning Outcomes? Evidence from the Helsinki Capital Region

Lassi Tervonen (VATT), Mika Kortelainen, Ohto Kanninen

Finnish high schools are different in terms of learning outcomes, as measured by Matriculation Examination results. However, high schools differ also in terms of student characteristics and some of the schools can be seen as 'elite', as they are very selective in terms of academic ability of students. If elite high schools students end up with good learning outcomes, to what extent the results are due to the school environment and to what extent due to the baseline characteristics of students?

As a result of the high school application process, a cutoff GPA is determined for every school. Those who have a GPA above the cutoff are offered a seat, while those who have a GPA below the cutoff are not. This process offers quasi-experimental variation to study the effects of these schools on Matriculation Examination results using regression discontinuity design (RDD). Besides these average effects, we analyze whether eligibility to an elite high school has an effect on the distribution of learning outcomes and whether the effects vary depending on student background characteristics.

In the Helsinki Capital Region, an elite high school offer gives a possibility to study with high-achieving peers in terms of comprehensive school GPA. The peer group one gets is also often more homogenous in terms of GPA. In some cases, the peers are also more often female and have more often highly educated parents. Nevertheless, intention-to-treat and local average treatment effect estimates suggest that receiving an offer to an elite high school or enrolling to an elite high school does not have systematic positive or negative effect on learning outcomes.

Diversity of university studies and entrepreneurship

Antti Sieppi (JSBE)

Lazear's (2004, 2005) Jack-of-All-Trades theory supposes that entrepreneurs require a wide array of different skills to be successful while for non-entrepreneurs specialization is more profitable. Originally, the evidence for this theory was supplied in two manners: Firstly, by showing that those individuals with a more varied work history are more likely to become entrepreneurs and secondly, by showing that the individuals with a more specialized degree are less likely to become entrepreneurs. The first of part of the evidence has been well replicated and it seems to hold for the most part, but the second part has been left nearly untouched. This paper looks into the less explored part of the evidence using university student transcripts linked to a representative register data. The results show that Lazear's (2004, 2005) results based on a survey of Stanford MBA alumni might not be representative of university degrees in general and that the choice of a measure of specialization seems to affect the results significantly.

Abstracts

Room
AgC234 Session 3c: Human capital and behavioural economics (cont.)

Revealed preferences in a sequential prisoners' dilemma

Topi Miettinen(Hanken), Michael Kosfield, Ernst Fehr, Jorgen Weibull

We here experimentally investigate behavior and beliefs in a sequential prisoner's dilemma. Each subject had to choose an action as first-mover and a conditional action as second-mover, and they also had to state their beliefs about others' choices. We analyze to which extent subjects best-respond in all contingencies under their elicited beliefs. We use the data to compare the explanatory power of a few alternative other-regarding and moral preferences. We find that subjects' beliefs about others' choices are fairly accurate, but exhibit a slight consensus bias. The data show clear differences in explanatory power between the preference classes studied, both without and with control for the number of free parameters. The best-performing models explain 80-90% of observed behavior. We also show that optimism and consensus bias help to explain the biases in expectations.

A walk on the wild side: An empirical investigation on the reliability of academic journals' black- and whitelists

Manuel Bagues (Aalto University), Mauro Sylos-Labini and Natalia Zinovyeva

The referee system occupies a central place in the structure for authority in science. Its limitations and inefficiencies notwithstanding, it provides an institutional basis for the reliability and accumulation of knowledge, which is also largely consistent with both the normative structure of science and its reward systems (Zuckerman and Merton, 1971; Dasgupta and David, 1994). Lately, its functioning has been threatened by the emergence of a new industry, the so called 'predatory' publishers, which operate alleged scholarly journals that falsely claim to offer real and meaningful peer review (Bohannon, 2013; Butler, 2013). Using bibliometric information and data from a survey of 1,000 Italian researchers, we investigate the reliability of the black-list of 'predatory' journals elaborated by the American librarian Jeffrey Beall, with a particular focus on journals that also belong to indexes such as Scopus or ISI Web of Science which are usually used as whitelists by many.

Room
AgBeeta Session 3d: Public and labour economics

Finnish basic income experiment in 2017

Jouko Verho (VATT), Kari Hämäläinen

In November 2016, the Finnish government proposed a law on a universal basic income experiment. The experiment is a large scale randomized field experiment including 2000 individuals receiving partial basic income for two years. The target population is unemployed workers between 25 to 58 years of age. The basic income is 560 euros per month. It replaces minimum unemployment benefits but it is paid together with other social benefits. We describe the experimental setting and discuss the plans for the follow-up and evaluation of the proposed experiment.

Abstracts

Room
AgBeeta

Session 3d: Public and labour economics (cont.)

How a job loss affect migration and future earnings?

Terhi Maczulskij (Labour institute for economic research), Petri Böckerman, Tuomas Kosonen

We use linked firm-worker panel data from Finland to examine the effect of involuntary job loss measured as mass lay-off or plant closure on regional mobility. We also examine whether displaced movers gain earnings losses compared to displaced stayers, as documented in several studies. Our results show that job displacement positively affects propensity to migrate. In particular, the estimates represent an increase in the migration probability of 40-60%. Accordingly, the results show that migration may have an instant and negative effect on earnings right after migration, but that this relationship may turn positive or become insignificant as time passes. This relationship is stronger for men when we use hourly wages as the dependent variable.

How do small firms respond to tax schedule discontinuities? Evidence from South African tax registers

Tuomas Matikka (VATT), Wian Boonzaaier, Jarkko Harju, Jukka Pirttilä

This paper studies the responsiveness of small and medium-sized firms to various tax schedule discontinuities using high-quality and population-wide administrative data from South Africa. We find sizable bunching of firms at the thresholds where the corporate tax rate increases. The elasticity estimates for these corporate tax kink points are large, ranging from 0.17 to 0.7. Bunching is very sharp and reacts immediately to changes in the location of the kink points. These observations point to the direction that a sizable part of the response is driven by reporting behavior rather than changes in real activities.

Do workers bunch at kink points in the debt enforcement payment policy rule?

Ohto Kanninen (Labour institute for economic research), Terhi Maczulskij, Hannu Karhunen

This paper examines whether debt enforcement affects labor supply. We utilize total register data on enforcements from 2004 to 2015 collected by the National Administrative Office for Enforcement. These data are matched to the total Finnish population data from Statistics Finland which include information on individual's income, family and labor market status. As a general rule, one third of net income, excluding social subsidies, can be garnished. However, it is required by the law that a protected portion that is needed for the livelihood of the debtor and his or her debtor-supports (such as spouse and minor children) is left ungarnished. For example, the protected portion without any debtor-support was 540 euros per month in 2004 and 678 euros per month in 2015. In the empirical approach we thus utilize the discontinuities caused by the protected portion. The debt enforcement payment policy rule may affect debtor's incentives to work less if a higher portion of the net income is garnished. Our preliminary results show clear evidence of bunching around the kink point of the protected portion.

Abstracts

Room
AgDelta Session 3f: Employment

Estimating the effects of unemployment insurance duration using variation from a change in eligibility requirements

Tomi Kyyrä (VATT), Hanna Pesola

In Finland, the maximum duration of UI benefits remained the same for the decades, and for the 2014 change we do not have data yet. So there has been no variation in maximum benefit duration that one could have possibly exploited to identify the effect of UI benefit duration. However, what we can do is to exploit variation in remaining benefit duration at the beginning of subsequent unemployment spells. This is because workers who enter unemployment without satisfying the employment condition for a new UI period may be entitled to unused UI benefits from the previous unemployment spell. Within this group the remaining benefit duration can be anything between 0 and 499 days, being 0 for those who exhausted their UI benefits in the past and for those who have not received UI benefits before. To identify causal effects we take advantage of the 2003 change in the employment condition and exploit the benefit duration variation caused by the reform. Using this source of variation, we estimate the effects of UI benefit duration on the duration of unemployment spells and post-unemployment outcomes.

Back to work or stay-at-home mother? Maternal employment in Finland

Tapio Räsänen (Kela), Eva Österbacka, Anita Haataja, Maria Valaste

The labor force participation among Finnish women is comparatively high, almost as high as among Finnish men. However, during family formation the labor force participation among women is reduced for obvious reasons. Child care periods are relatively long in Finland and the possibility of child home care subsidy until the youngest child is three years of age reduces the actual labor force participation among women with children even further since the family leaves are predominantly used by mothers. In this paper, we investigate the impact of childbirth on mothers labor force participation. We scrutinize factors affecting labor force participation after childbirth, and especially characteristics of mothers (such as age, education, and previous work experience), family characteristics (such as number of children and fathers earnings), effects of business cycle (such as unemployment rate), and policy effects (such as municipal supplements for home care allowance, municipal support for private care, and the speed premium implemented in 2005). Our data is a 50 % random sample of Finnish mothers giving first birth between 1999 and 2009, about 11 000 mothers per year. Each cohort is followed up until 2013.

Abstracts

Room
AgDelta Session 3f: Employment (cont.)

Childhood physical activity and long-term labor market attachment: Evidence from the Young Finns Study

Jaana Kari (LIKES, JSBE), , Tuija Tammelin, Nina Hutri-Kähönen, Olli Raitakari, Jaakko Pehkonen

This paper examines the relationship between childhood physical activity and long-term labor market attachment. The data are drawn from the ongoing longitudinal Young Finns Study, which is combined with register-based data from Statistics Finland. The average of individual's employment and unemployment months are calculated over the period of 1997–2010, whereas the self-reported leisure-time physical activity is obtained at the ages of 9 and 15 years. To study the physical activity behavior between the ages of 9 and 15 years, participants are classified into five groups: persistently inactive, decreasingly active, moderately active, increasingly active, and persistently active. The results show that childhood physical activity increases the probability of being employed. The models that account for pre-existing health endowments, family income, and parent's education indicate that physical activity level at the age of 9 and 15 years is positively related to employment months and negatively to unemployment months. In terms of childhood physical activity behavior, persistently active individuals have the strongest labor market attachment compared to other activity groups. The findings provide evidence that the consequences of childhood physical activity can be far-reaching: childhood physical activity might not only promote health but also affect labor market outcomes later in life.

Parental Job Loss, Family Income and Child Outcomes

Krista Riukula (Aalto University), Kristiina Huttunen

We study the impact of parental job loss on child outcomes. We contribute to the recent literature by looking at the impacts of parental job loss that occur at different stages of childhood. Job loss occurring early in childhood results to a much larger decrease in cumulative family income than job loss during the teenage years. Male job loss has a bigger impact on family income than female job loss. Our results show very modest negative effects of male job loss on child outcomes. Female job loss occurring in early childhood results to decrease in crime rate in teenage years. The results suggest that income shocks during childhood do not have a big impact on children's medium term outcomes, such as crime and school grades.

Room
AgC232 Session 3f: Financial market regulation

Saving Wall Street or Main Street

Markus Haavio (Bank of Finland), Antti Ripatti, Tuomas Takalo

We build a dynamic stochastic general equilibrium model, where the balance sheets of both banks and non-financial firms play a role in macro-financial linkages. We show that in equilibrium bank capital tends to be scarce, compared with firm capital. We study the optimal structure of public funding in times of crisis. Bank capitalization provides a more effective way to stabilize the economy than direct lending to firms, but it also creates larger distortions. Weighing the social costs and benefits, we establish a pecking order of public interventions: the government should first capitalize banks but if the size of the funding program is large enough it should lend to firms too.

Abstracts

Room
AgC232

Session 3f: Financial market regulation (cont.)

Ring-fencing, Banking Reform and Taxpayer Exposure

Rune Stenbacka (Hanken), Oz Shy

The paper evaluates the effects of weak and strong ring-fencing on taxpayers' risk exposure imposed by the banking industry and the consequences for expected consumer welfare (expected depositor surplus plus borrower surplus less bailout taxes). We find no theoretical support for weak ring-fencing as a successful instrument to induce financial stability. Strong ring-fencing intensifies competition in the lending market, reduces equilibrium lending rates and banks' profits, and increases borrower and consumer surplus compared with weak or no ring-fencing. Despite this, the expected bailout costs with weak ring-fencing are lower than the bailout costs associated with no and strong ring-fencing because the loss burden is shifted from taxpayers to depositors.

Western European banks' funding structures and Basel III's net stable funding ratio

Jari-Mikko Meriläinen (University of Vaasa)

This study examines Western European banks' funding profiles. In particular, this study examines customer deposits and interbank deposits that are the two main sources of bank funding. The upcoming Net Stable Funding Ratio (NSFR) requires banks to acquire stable funding equivalently to the stability of their assets. According to the NSFR, customer deposits are considered to be a stable source of funding. In comparison, interbank deposits are seen as an unstable funding source. This study uses logit estimators to investigate the determinants of banks' funding structures. Furthermore, this study examines the effect of bank ownership type on customer deposit and interbank deposit funding. The results suggest that large and well capitalized banks are likely to have unstable funding profiles. Moreover, the liabilities of Western European stakeholder banks rather are more unstable than those of commercial banks.

Revisiting the Growth-Stability Tradeoff under Risk-based Capital Regulation (Are risk-weighted capital requirements optimal?)

Gene Ambrocio (Bank of Finland), Esa Jokivuolle

Are financial regulators putting too much emphasis on financial stability? What are the optimal risk-weights of capital requirements from the welfare point of view? To address these questions, we develop a model where banks can finance several types of loans which differ according to their risk, collateral quality, and contribution to aggregate output. Fluctuations in the supply of credit made available to entrepreneurs changes the composition of projects that are run in equilibrium. This, in turn, affects the rate at which capital is replenished in the economy. A key difference across entrepreneurial loans is that collateral is easier to value for less risky and lower productivity projects. We find that relative to a financial regulator whose objective is solely to make banks safer, a financial regulator who trades off growth against stability could feature a set of risk-weights which are flatter than the risk-weights motivated purely from the financial stability perspective.

Abstracts

Room AgGamma Session 3g: Political economy

Regional Distribution of Political Power and Effects of Municipal Mergers **Tuukka Saarimaa** (VATT), Oskari Harjunen, Janne Tukiainen

Municipality mergers are often seen as an effective way of exploiting economies of scale in municipal service provision. We contribute to the large and growing literature on the effects of municipal mergers by using geocoded data on local politicians' place of residence, public sector employment and house transactions, which allow us to study the merger effects at the pre-merger municipality level. We find that the expenditures in mergers evolve in the same way as in a control group of potential mergers that did not take place. These findings, however, hide substantial heterogeneity within the mergers. In particular, regions that gain only limited political representation suffer from a decrease in local public employment and house prices relative to regions in the same merger that are well represented in the new council.

Top researchers as academic evaluators: benefits and costs **Natalia Zinovyeva** (Aalto University)

I study the optimal composition of evaluation committees in terms of the research quality of their members. Using evidence from a large scale randomized natural experiment, I quantify the benefits that top researchers generate in terms of the quality of scientific evaluations. I then compare the opportunity cost of time of top scientists and other researchers. I find that better researchers are significantly tougher in their evaluations. An average candidate who is randomly assigned to a committee whose members have a one standard deviation higher research quality is 20% less likely to succeed. Candidates selected by committees of better research quality are more likely to have published in best academic journals and are less likely to have publications in journals that appear in a black list of predatory journals maintained by Jeffrey Beall. Similarly, they tend to produce more and better publications in the future. Yet, the opportunity cost of time of best researchers is also significantly higher. For top researchers, sitting in a national evaluation committee reduces their research output by about two publications in the following two years. At the same time, there is no significant effect of the evaluation burden on the research output of relatively less productive researchers.

The flypaper effect in the Finnish high school funding and local spending preferences **Antti Saastamoinen** (VATT), Mika Kortelainen, Jaakko Meriläinen

According to the standard theory of fiscal transfers, lump-sum intergovernmental transfers and private income should have equal effects to the local government's spending. The vast empirical evidence however has refuted this, finding significantly larger effects of grants on spending than the corresponding effect of private income. This has been dubbed as the "flypaper effect" in the literature as the grant money seems to stick in the hands of local government rather distributed back to citizens. Utilizing an identification strategy arising from a grant formula, we examine this in the context of Finnish high school system. We find that education grants have a significant effect on local education spending while effects of private income seems to be largely negligible. We also investigate whether municipalities have heterogeneous preferences towards education spending. These results suggest that municipalities might respond differently to education grants. In line with the previous literature, results indicate that municipalities with younger population seem to prefer higher level of education spending.

Abstracts

Room
AgDelta

Session 4a: Environmental and industrial economics

Optimal clean-up of polluted sites

Pauli Lappi (University of Helsinki)

A typical activity of environmental policy agencies is to clean-up polluted sites such as brown-fields and other hazardous waste sites. This study analyzes using a simple model the optimal timing of the clean-ups and their size as well as the optimal order to clean the sites. By the derived waiting rule it is generally not optimal to clean a site instantly but to wait with the cleaning, and information on the pollution damages and clean-up costs is not sufficient to decide the optimal clean-up order. These and other results are discussed in the context of brown-field development, mining legacy, and mine land rehabilitation. For example, the results imply that the optimal deposit by the mining firm to the rehabilitation fund is inversely related to the initial pollution level of the site.

Impact of price uncertainty on nickel extraction with environmental effects - when to close a mine?

Anni Huhtala (VATT Institute for Economic Research), Olli Ropponen

We consider a firm's decision to suspend extraction of a nonrenewable resource when prices are perceived to follow a random process. Our framework bears many similarities to Brennan and Schwartz (1985) who used option theory to examine the optimal time to develop and abandon a mine. We extend their framework of resource price uncertainty by modelling the fact that environmental and liability considerations imply that closing a mine is unlikely to be costless. Hence, an active firm implicitly possesses an option to optimally close down and abandon mines with economically valuable remaining reserves. We also discuss two additional variations of the model including technological uncertainty, or the implications of allowing 1) the level of output to follow a stochastic process, and 2) a possibility to make an investment in abatement technology to minimize environmental effects, or social costs of mining. To obtain a sense of the importance of these effects, we conduct a simulation analysis. Our analysis is parallel to the numerical exercises in the earlier work, but it is loosely based on the nickel market and a relatively new technology for nickel production, or heap leaching with biological activation applied in Talvivaara in Finland. We also consider the optimality of government policies to subsidize ongoing mining activities which generate social costs.

Abstracts

Room
AgDelta

Session 4a: Environmental and industrial economics (cont.)

Would you pay extra to update your smart fridge's software?

Anna-Maija Juuso (University of Oulu)

This paper discusses two of the main challenges of cybersecurity: information asymmetries and externalities. Consider a market of lemons, where the low-quality cars also generate more emissions, or a school that gets mold after being converted into a low-energy building. Similarly, insecure Internet of Things (IoT) devices purchased by uninformed consumers can be exploited by attackers to attack other Internet users generating an externality of insecurity, and mistakes made in the transformation of utilities networks to include Internet connectivity make them an easier target, ultimately threatening security of supply. It is apparent that an agent's decision to invest in the security of the connected devices and networks it owns also impacts the security of other agents. Therefore, in this paper, we present a model of cybersecurity as an externality generated by the private security investments made by agents. We analyze how the informational challenges encountered by the agents affect their incentives to invest in security and how this impacts overall cybersecurity. We also discuss ways in which these informational challenges can be addressed.

Pharmacists, Doctors and Prescription Drug Costs: Lessons from Finnish Generic Substitution Policy

Olena Izhak (University of Helsinki)

I analyze the effects of Generic Substitution policy on patients out of pocket costs and government expenditures in Finland. I also explore how pharmacists' and doctors incentives affect pharmaceutical companies' pricing decisions. I use a unique big data set which contains the information on over 30% individual prescriptions made in Finland in 2002 — 2013. I find that the average price of prescribed drugs increased within two years of implementation of policy. The average prices of dispensed drugs decreased gradually following the reform. On average about 20% of all drugs in my sample are substituted. I find that if each prescription been filled with the cheapest possible alternative, the total yearly saving from the reform within the first year would constitute over 110 million euros per year. Over a third of this sum would have come from the nervous system drugs, with the antidepressant citalopram accounting for most of the savings. The results confirm that doctors' and pharmacists' decision are instrumental in facilitating prescription drug cost savings and insuring the overall cost effectiveness of health care system.

Abstracts

Room
AgC234 Session 4b: Education

Short- and Long-Term Effects of Public School Choice in Finland

Mika Kortelainen (VATT), Isa Kuosmanen, Liisa Laine, Miikka Rokkanen

We study the short-term and long-term effects of a liberalization of school choice on various educational and labor market outcomes. We also study whether the reform had heterogeneous effects on students with different socio-economic background. Our analysis exploits a reform implemented in the mid-1990s in Finland. This reform allowed students to choose among public schools in their municipality. Our identification strategy is differences-in-differences with continuous treatment intensity. Based on our preliminary results the reform increased choice especially in large municipalities. We find no heterogeneity in the effect by parental background. For the short-term effects, we find that school choice had a small and positive effect on grades at the end of lower secondary school and high school graduation. For the long-term effects, we find that school choice had a small negative effect on income, and no effect on the probability of having a university degree.

Trends and consequences of early school leaving

Hannu Karhunen (JSBE)

The objectives of this study are threefold. First this paper presents descriptive evidence on dropout trends on upper secondary education in Finland. Second, this study evaluates how association between parent's income and children's probability to dropout has changed over time. Third, this paper also strives to study the consequences of early leaving compared to youths who manage to graduate. Outcomes (earnings, employment and the propensity of social exclusion) are compared to graduates up to seven years after enrolment. Study utilizes an administrative register data on all Finnish upper secondary school students who were admitted to general or vocational upper secondary school between 1992 and 2013. Preliminary results show that i) dropout rate of admitted vocational upper secondary school students has declined significantly since 1998; ii) negative association between parents' income and dropout propensity can be explained almost totally by previous school success (GPA from the 9th grade); iii) vocational school dropouts earn less and are more likely socially marginalize than graduates even if analysis is done using differences between same sex twins.

Abstracts

Room
AgC234 Session 4b: Education

Consequences of parents' higher education attainment and specialization: Evidence from changes in university accessibility

Tuomo Suhonen (VATT), Hannu Karhunen

Between the late 1950's and early 1970's, prospective university students in Finland experienced considerable changes in access to university education due to a tightened competition for universities' student seats and government policies that resulted in a rapid geographical expansion of the university system. We utilize the varying regional trends in educational access, resulting from these events, as a source of exogenous variation to study the causal relationship between parents' and children's education. We find large positive effects from parents' post-secondary educational attainment on children's education, even after adjusting the estimates for assortative mating. Additionally, by utilizing the differential trends in educational access across seven broad fields of university education, we find evidence of a considerable inter-generational transmission of field-specific human capital arising through parents' educational specialization.

Lost Boys: Effect of Access to Upper Secondary Education on Crime

Roope Uusitalo (JSBE), Kristiina Huttunen, Tuomas Pekkarinen, Hanna Virtanen

We exploit admission cutoffs at upper secondary schools in Finland to analyse the effect of education on inactivity and crime. We use register data and follow individuals 10 years after the upper secondary school application. Our results show that successful applicants near the admission cutoffs have larger probability to obtain upper secondary degree than applicants just below the cutoffs. They are also less likely to commit crime, both in the short and medium run.

Room
AgBeeta Session 4c: Public Economics

Take-up of welfare benefits

Tuuli Paukkeri (VATT & Aalto University)

Incomplete take-up is a common phenomenon across various social benefit programs. Understanding the nature of take-up can help in the design of efficient public programs. However, take-up is usually studied in a static context, by analyzing the correlation of the eligible individuals' characteristics in a certain year to the take-up decision in that same year. This approach could overlook how individuals' past experiences and future expectations about their income affect the current decision to take up or not. Analyzing the take-up of Finnish social assistance, I extend this framework by considering household characteristics over time as well. I estimate eligibility using Finnish Income Distribution Survey data, and combine information on income, labour market activity, and other characteristics to all household members for three years before the year when observed take-up or non-take-up occurs, and three years after. This approach reveals new insights about households' long-term economic needs, and helps to proxy for both past experiences and future expectations. A key finding is that those households that take up social assistance in the year they are eligible, are typically enduring low household income over a longer period. On the contrary, those who do not take up the benefit despite their eligibility that year, are experiencing only a short-term fall in income, which they recuperate already in the next year. The non-claimers have also experienced much more volatile income in the past. The findings suggest that take-up costs could be so high that they prevent households from applying it for expected short-term need only, perhaps finding other coping mechanisms instead.

Abstracts

Room
AgBeeta Session 4c: Public Economics (cont.)

Demography and Recovery from the Financial Crisis in Finland

Risto Vaittinen (Finnish Centre for Pensions), Reijo Vanne

In this article, we assess the size and scope of the already realised change in demography for macroeconomic developments in Finland using the National Transfer Accounts (NTA). It is a method to break down the national income and its use by age. Using the NTA, we demonstrate that population ageing has already had surprisingly large macroeconomic implications. The relatively sizeable current account surplus at the beginning of this century would have been substantially reduced because of ageing even without the concurrent structural problems of the export industry. Population ageing creates pressure to change the level and structure of consumption as well as relative prices. The growing need for mainly public health and old-age care services is a considerable challenge. There is a need for an extensive increase in labour supply to satisfy the current level of consumption with prevailing age profiles. The current level and age pattern of consumption relative to earnings needs to be adjusted, in one way or another, to make it sustainable long term.

The long-term effects of extended unemployment insurance benefits

Hanna Pesola (VATT), Tomi Kyyrä

This paper studies the effects of eligibility to extended unemployment insurance benefits on elderly unemployed in Finland. We exploit a sharp discontinuity in the eligibility to extended benefits which resulted from a reform in 2005. Due to the reform, benefit recipients born in 1949 were entitled to extended benefits two years earlier than those born in 1950. The results indicate that during the period 2003 to 2013 workers born on the first day of 1950 worked about 7 months more than those born one day earlier. There is also a noticeable difference in cumulative labor income between the two groups during these years but surprisingly only a minor difference in cumulative earned income. We find no difference in sickness benefits received during the same period.

Complexity and take-up of benefits

Kaisa Kotakorpi (University of Turku), Tomer Blumkin, Tuomas Kosonen

We study how the complexity of application procedures for benefits affect take-up. We utilize municipal-level variation in the procedures for applying for the municipal supplement to homecare allowance. We are able to analyze the effect of complexity on take-up in a setting where we have a well-defined measure of complexity, plausibly exogenous variation in this measure (based on place of residence), and where welfare stigma should not be a major concern. Further, the benefit is utilized by individuals from various types of backgrounds, which allows studying possible heterogeneities in the effect of complexity on take-up.

Abstracts

Room AgGamma Session 4d: Macroeconomics III

Identification and Estimation of non-Gaussian Vector Autoregressive Moving Average Models

Bernd Funovits (University of Helsinki)

This paper analyzes identifiability properties of structural vector autoregressive moving average (SVARMA) models and discusses estimation and testing strategies.

It is well known, that structural vector autoregressive (SVAR) models driven with Gaussian errors are not identified without imposing further identifying restrictions on the parameters. Lanne, Meitz, Saikkonen (2016, JoE) have recently shown that structural vector autoregressive (SVAR) models driven by independent non-Gaussian components are identified up to scaling and permutations which makes the typically imposed identifying restrictions testable.

Even in reduced form and assuming stability and invertibility, vector autoregressive moving average models are in general not identified without requiring certain parameter matrices to be non-singular. Spectral factorization techniques are employed to generalize the results by Lanne, Meitz, and Saikkonen to the non-Gaussian SVARMA case, i.e. we reduce the class of observational equivalence from the orthogonal matrices to permutations. Furthermore, we introduce a maximum-likelihood estimator of the non-Gaussian SVARMA model which is consistent and asymptotically normally distributed.

Multivariate All-Pass filters: a new method for estimating non-causal VAR models

Juho Nyholm (HECER and University of Helsinki), Bernd Funovits

In this paper, we analyze multivariate all-pass filters, i.e. rational matrix functions $V(z)$ for which $V(z)V(z^{-1})' = I$ holds. In particular, the poles of the determinant of all-pass matrix functions are the conjugated reciprocals of its roots. Multivariate all-pass filters are important for analyzing non-causal and non-invertible time series models as recently proposed in, e.g., Lanne and Saikkonen (2013). For i.i.d white noise input, all-pass models generate uncorrelated (white noise) processes; however, these processes are not independent in the non-Gaussian case. We use the theory of rational matrix factorization to gain insight into the structure of all-pass models. We propose a new estimation strategy for non-causal VAR systems which is more general than the one in Lanne and Saikkonen (2013).

Abstracts

Room
AgGamma Session 4d: Macroeconomics III (cont.)

Partial bank runs, a deposit guarantee, and recapitalization

Ilkka Kiema (Labour institute for economic research), Esa Jokivuolle

Casual empiricism shows that a distress that a bank or the economy faces might cause large-scale withdrawals of deposits also when bank deposits are protected by insurance or guaranteed by a government. Such withdrawals have been observed to be gradual and partial. Building on Kiema – Jokivuolle (2015), we present a new model of such “bank jogs”. In our model withdrawals are caused by the fear that both the bank and the government’s deposit guarantee might fail in the future. Guarantee failure is possible because, being sovereign, the government may choose not to keep its promises. This choice causes a fixed welfare cost (e.g., a reputational cost), which in a sufficiently severe crisis may be smaller than the costs from deposit guarantee payments. We also assume that, being welfare-maximizing, the government recapitalizes the bank during the bank run. When decisions concerning deposit guarantee payments are made, recapitalization costs are already sunk costs, but the partial bank run has reduced the costs that the remaining deposits might cause for the government. In this way, the depositors who withdraw during a partial bank run decrease the danger of a deposit guarantee failure and increase the incentives of the remaining depositors to keep their deposits in the bank. Bank stability is maximized and deposit interest rates are minimized when the deposit guarantee is perfect, but this is situation is not necessarily socially optimal.

Room
AgC232 Session 4e: International Macroeconomics

Interest Rate Convergence, External Balances and the Euro Crisis

Mika Nieminen (JSBE)

Typically, the catching-up process between rich Northern Europe and poor Southern Europe and the diverging cost competitiveness between the two regions are considered alternative explanations for the widening current account imbalances in the euro area. This paper proposes a new explanation for the imbalances which led to the 2009 euro crisis i.e. large interest rate differentials among the EMU-12 countries which prevailed before the adoption of the euro. This finding suggests that the euro crisis was, at least to some extent, a consequence of the initial convergence shock.

Effect of US anti-dumping measures on US-China bilateral trade

Min Zhu (University of Helsinki)

In this paper, I investigate how Chinese firms respond to the market-specific tariff shocks that arise from the US anti-dumping measures. Using Chinese product-level trade transaction data covering the period from 2000 to 2006, I first assess the possible trade dampening effect caused by the US anti-dumping measures on Chinese products. I find that anti-dumping measures severely distort bilateral trade flows between China and the US at product level. In particular, there is a significant negative impact on the extensive margin, i.e. a sharp decrease in the number of exporters. Nevertheless, there is a positive effect on the intensive margin, i.e. the surviving exporters actually increase their export volume. These findings imply that the surviving exporters increase their export volume by absorbing the market share left over by the exiting exporters.

I then estimate the impact of the US anti-dumping measures on Chinese exports on non-US markets. I do not find evidence that the US import restriction results in Chinese exports surging to alternative markets. To the contrary, I provide some evidence that the US anti-dumping measures have had a chilling effect on Chinese exports to third market. More specifically, the initiation of the anti-dumping duties in the US is associated with 35 percentage point reduction in the export volume of targeted Chinese products to other countries.

This research is still work-in-progress. I am currently working on the heterogeneous responses may have between single-product and multi-product exporters. I am particularly interested in examining whether the US anti-dumping measures cause within firm product switch.

Anti-dumping duties has become one of the most intensively used forms of trade restrictions in recent years. The large magnitudes of the anti-dumping duties imposed on product substantially distort trade flows. Despite the growing importance of anti-dumping duties in international trade, there is little understanding of their effects at the micro level. The study of how anti-dumping duties affect on targeted foreign exporters could provide new insights regarding the heterogeneous responses of firms to trade liberalization.

Abstracts

Room
AgC232

Session 4e: International Macroeconomics (cont.)

External imbalances between China and the US: a dynamic analysis with a life-cycle model **Julia Niemeläinen** (University of Helsinki)

Both China and the United States have had remarkable and persistent external imbalances during the past decades. By the end of 2015, the net foreign debt of the US had risen to 7.3 billion US dollars, whereas China had accumulated net foreign assets worth 1.6 billion US dollars. However, the literature based on the neoclassical growth theory (e.g. Ferrero (2010)) predicts that emerging, fast growing countries like China would experience capital inflows and trade deficits during periods of high productivity growth, contrary to what is observed in the data.

In this paper, I use a life-cycle model à la Gertler (1999) to analyse the effect of demographic transition and social security on the external imbalances. In particular, I investigate whether relatively fast population ageing and the increase of the old-age dependency ratio in China, combined with its low pension income, can be the drivers of its high savings and the persistent trade surpluses vis-a-vis the United States.

I find that the rapid demographic change in China can help to explain why the country has been accumulating net foreign assets over time, and the relatively low pension expenditures considerably strengthen the effects of the demographic transition. Furthermore, even though high productivity growth has a strong negative impact on the trade balance, the model still predicts a positive net foreign asset position and trade balance for most years in the sample period.

The economic effects on Russia of the present crisis **Seppo Ruoho**

The economic effects on Russia have been rather similar on Russia in comparison with the EU-countries. The slow-down of economic growth, change in the share of foreign trade. Turning to other market-areas may be difficult. The opportunities to run macro economic policies may turn out much more difficult than before due to financial strains. But economics is only part of the story.

Balance sheet positions in OECD and post-Soviet countries since the 1990s **Risto Rönkkö** (University of Tampere & UNU-WIDER), Juha Juntila, Kari Heimo-nen

In this paper, we construct a new disaggregated net financial wealth data set for the OECD and few emerging markets countries. Since the beginning of 1990s, the net financial wealth positions of countries have developed differently. First, for a group of central and northern European countries, as well as Canada and Japan, improvements in private sector net financial wealth have resulted in improvements in net financial wealth on aggregate level despite worsening public sector net financial wealth. Second, in the crisis-ridden countries of Portugal, Ireland, Iceland, Greece and Spain, improvements in the private sector net financial wealth have not compensated for deteriorating public sector positions. Third, the net financial wealth of post-communist transition economies decreased over the sample period due to worsening private sector positions, public sector positions, or both. However, this pattern has recently changed in most post-communist states.

Abstracts

Room Agd225.1 Session 4f: Strategic Energy Seminar

Knowledge spillovers from renewable energy technologies

Kimmo Ollikka (VATT), Hanna-Liisa Kangas, Kim Yukyeong

Mitigation of climate change requires a switch from fossil fuels to renewable energy sources, such as intermittent wind and solar production technologies. However, the increasing share of intermittent electricity production poses challenges to electric power systems. Intermittent energy production causes more and frequent demand-supply mismatches and thus a need of flexibility to the power grid. Many of solutions to increase flexibility, such as demand side management measures, integration of energy storage system or systemic innovations, require ICT technologies. Hence, it is expected that new energy innovations that combine renewable energy solutions together with ICT solutions are becoming more valuable. Furthermore, from the societal point of view, innovation actions are more valuable the more knowledge spills over from new inventions. In this paper we investigate the value of renewable energy innovations by using patent citation data. We use patent citations as indicator of knowledge spillovers generated by patents. We study whether inventions that are co-classified both as a renewable energy technology and information and communications technology receive more citations than pure renewable energy technology inventions. Moreover, we compare different renewable energy technologies to assess whether there are differences in the value of inventions between technology sectors. Our results show that co-classified patents indeed receive more citations than pure renewable energy patents. Particularly, co-classified patents receive more citations from ICT patents. PV and wind energy patents are two most cited technology fields of renewable technologies. Our results provide new insights for policy makers when deciding support policies on energy technology R&D activities.

EL-TRAN – Towards Climate Neutral and Resource-scarce Finland: Current Research Challenges and Insights

Jari Kaivo-oja (University of Turku)

Key questions of the EL-TRAN are: How can we use resources more efficiently to produce electricity and heat in Finland? How to design and scale the electricity transmission grid? How to make the Finnish electric energy system more climate neutral? EL-TRAN Consortium investigates what a resource efficiency means, how to implement such a system in Finland and elsewhere, what kind of policy problems are foreseeable in the process and how do we eventually resolve the problems of long-run energy production and consumption. The presentation informs about key research problems and finding of the EL-TRAN project. The Consortium is coordinated by the University of Tampere. It is part of the programme 'A Climate Neutral and Resource-Scarce Finland. The presentation will focus on some key topics, which are relevant for energy economists.

Abstracts

Room
Agd225.1 Session 4f: Strategic Energy Seminar (cont.)

BCDC - Large scale integration of renewables

Rauli Svento (University of Oulu)

The 'Cloud computing as an enabler of large scale variable distributed energy solutions: Bright Clouds – Dark Clouds' (BC-DC) project seeks to provide a research-based model for the development of variable, distributed production for energy. The Consortium aims at finding solutions that enable large applications of renewable resources in cost efficient ways. We study how economic market mechanisms combined with new generation ICT and digital services and modern weather forecasts enable this goal. A main goal of the project is to develop a cloud computing based market place of electricity trading where all these above mentioned items can be combined. The utilization of project deliverables shall be enhanced through a knowledge management research based interaction model. The aim of the interaction model is to establish an active community where the knowledge and understanding of the possibilities of distributed energy production of the researchers and members can be deepened and distributed.

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