Sixth ECINEQ Meeting
Luxembourg - July 13-15, 2015

Booklet of abstracts

Contents

Conference schedule

July 13, 2015

8.30 AM	9.30 AM	Registration
9.30 AM	11.00 AM	**Parallel Sessions (1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7)**
		Coffee Break
11.30 AM	1.00 PM	**Parallel Sessions (2.1, 2.2, 2.3, 2.4, 2.5, 2.6)**
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		Coffee Break
4.30 AM	5.15 AM	**Institutional Welcome**
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		To what extent has income inequality increased? Some data issues
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		Inequality when effort matters
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		The current trends in global inequality and their political implications
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Programme

Monday, July 13

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- Polarization and convergence: Measuring the process.,
  Gordon Anderson ***27***
- The use and abuse of entropy based segregation indexes,
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- Moving in and out of poverty in Mexico: What can we learn from Pseudo-Panel Methods?,
  Victor Perez ***20***
- The pace of poverty reduction,
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- Inequality of opportunity and growth: An empirical investigation in Brazil,
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- Inequality of opportunity in Spain: A parametric approach,
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- From specialization in task to separation of class: Assessing the effects of geographical occupational concentration on regional inequality,
  Andrew Silva ***26***
- Income dynamics of liberal professions, entrepreneurs and employees,
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- Exploring the impact of early childhood education on non-cognitive outcomes,
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- Lifetime Income Inequality: quantile treatment effect of retirement on the distribution of lifetime income.,
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- Inequalities between men and women in retirement pensions: Are determinants the same in the private and public sectors?,
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- Towards a distribution-sensitive Better Life Index: Design, data and implementation,
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- Earnings among nine ethnic minorities and the Han majority in China's cities,
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List of abstracts

Supplemental Poverty Measurement: Adding Imputed In-Kind Benefits to Thresholds and Impact on Poverty Rates for the United States

Thesia Garner, Marisa Gudrais
Session 1.2

The Supplemental Poverty Measure (SPM) statistics, released by the U.S. Census Bureau since 2011, are based on resources that account for noncash benefits for food, rent, and utilities; however, the SPM thresholds are based on food, clothing, shelter, and utilities (FCSU) spending and Supplemental Nutrition Assistance Program (SNAP) noncash benefits. No other noncash benefits for food, rental, or energy assistance are accounted for in the thresholds. Thus, thresholds and resources are inconsistently defined; consistency in the thresholds and resources was listed as necessary in the March 2010 Interagency Technical Working Group (ITWG) guidelines on developing a SPM. Accounting for noncash benefits in the thresholds is a challenge as the Consumer Expenditure Interview Survey (CE), data source upon which the thresholds are based, collects limited or no information on these other benefits.

The purposes of this study are to impute rental noncash benefits and additional food benefits to consumer units participating in the CE, estimate SPM thresholds using these data, and produce poverty rates. Imputing these additional noncash benefits to the CE involves three steps: 1. assign program eligibility to consumer units using their characteristics and program eligibility guidelines; 2. adjusted eligibility for participation using rates based on administrative data; and 3. assign benefit values, also from administrative data, to consumer units assumed to be participating in the noncash benefit programs. The value of noncash benefits are added to FCSU expenditures at the micro-level to estimate new SPM thresholds. These thresholds, in turn, are used to produce poverty rates for the U.S. as a whole and for age and housing tenure subgroups. SPM thresholds with imputed benefits are statistically significantly higher than those without these benefits. The differences in poverty rates based on the two sets of thresholds, and the same resource measure, are statistically significantly different from zero. SPM poverty rates are higher.

JEL codes: D12, I3, I32

Link to the PDF file

Moving in and out of poverty in Mexico: What can we learn from Pseudo-Panel Methods?

Victor Perez
Session 1.2

This paper introduce estimates of poverty mobility in Mexico using repeated cross-sectional data from 1992 to 2012. We estimate and contrast the mobility rates obtained with two pseudo-panel methods commonly cited in the literature, but for which there is limited comparative evidence. We compute bootstrapped standard errors and confidence intervals to assess the differences between methods. Our results suggest that both approaches generally produce similar trends of mobility, with differences mainly associated with the persistence of shocks parameter and to economic crises. We use longitudinal information to contrast the pseudo-panel figures with those from panel data, but doing so require several assumptions to overcome data comparability issues. Under these assumptions, both pseudo-panel methods provide poverty mobility figures whose confidence intervals intersect with those of the panel data. This is of particular interest for policy makers, as cross-sectional information is usually available for longer periods of time, with higher frequency and with bigger sample-sizes than typical panel surveys. Finally, our evidence suggest that an important fraction of the Mexican population moves into and out of poverty over short periods of time; yet, there seems to be a high, but declining rate of poverty persistence. Substantial heterogeneity arises when we analyse disadvantaged groups of the population, which highlights the specificities of poverty dynamics.

JEL codes: 132

Link to the PDF file

The pace of poverty reduction

Richard Bluhm, Denis de Crombrugghe, Adam Szirmai

Session 1.2

The pace of poverty reduction through growth vs. redistribution is at the heart of current debates on equitable development. In this paper, we argue that empirical poverty decompositions should build in the inherent boundedness of the poverty headcount ratio directly. As a solution, we propose a fractional response approach to estimating poverty decompositions, and present extensions dealing with unobserved heterogeneity, measurement error and unbalancedness. Using a large new data set, we estimate income and inequality (semi-)elasticities of poverty for the 2$ a day and 1.25$ a day poverty lines. The models fit the data remarkably well over the entire data range. We highlight the relevance of focusing on semi-elasticities for policy purposes and, building on the improved accuracy of the fractional response results, we present poverty projections from 2010 through 2030. Finally, we discuss some implications of these results for the post-2015 development agenda.

JEL codes: I32, C25, O10, O15

Link to the PDF file

Gini-PLS Regressions

Stéphane Mussard, Fattouma Souissi

Session 1.6

Data contamination and excessive correlations between regressors (multicollinearity) constitute a standard and major problem in econometrics. Two techniques enable solving these problems, in separate ways: the Gini regression for the former, and the PLS (partial least squares) regression for the latter. Gini-PLS regressions are proposed in order to treat extreme values and multicollinearity simultaneously.

JEL codes: C3, C8.

Link to the PDF file

Unconditional quantile regression-based decomposition method: evidence from rural-urban inequality in Senegal

Abdoul Aziz Junior Ndoye

Session 1.6

In this study, I provide a Bayesian estimation method for the unconditional quantile regression model based on the Recentered Influence Function (RIF). This approach is used to extend the Oaxaca-Blinder decomposition for quantile regression to non-linear models. The method makes use of the dichotomous structure of the RIF and estimates a non-linear probability model by a logistic regression using a Gibbs within a Metropolis-Hastings sampler. This approach performs better in the presence of heavy-tailed distributions. Applied to a nationally representative household survey, the Senegal Poverty Monitoring Report (2005), the empirical results demonstrate that the high rural-urban inequality in Senegal is attributed in particular to the difference in returns to various covariates. In contrast, the contribution of the difference of the observed characteristics is low even for lower quantiles.

JEL codes: C11, C14, C52.

Link to the PDF file

Estimating Income Distributions From Grouped Data: A Minimum Quantile Distance Approach

Tsvetana Spasova

Session 1.6

In this work, we suggest a novel application of the minimum quantile distance approach for estimating income distribution from grouped data. Employing the Dagum distribution, we apply the suggested method to 30 European countries. Due to the fact that we also have representative microdata sets for all of the observed countries, we are able to compare our parametric estimates directly with estimates from the corresponding more informative and elaborate microdata sets. Our parametric estimates are very close to their corresponding counterparts computed directly from the microdata sets.

JEL codes: C13, C46, D31

Link to the PDF file

A simple empirical test for equalizing opportunities with an application to Progresa

JoseLuis Figueroa, Dirk Van de gaer

Session 1.3

We propose a simple test to establish whether a social program equalizes opportunities or not. The procedure is based on a comparison of the distribution of expected outcomes conditional on children's circumstances when treated and when not treated. The procedure does not require the researcher to arbitrarily choose an inequality measure. It is applied to evaluate the effect of

Progresa, the Mexican conditional cash transfer program, on inequality of opportunity for both school enrollment and passing to the next grade. Our findings are that Progresa partly compensates for unequal opportunities.

JEL codes: I24,I38,D63

Link to the PDF file

Inequality of Opportunity and Growth: an Empirical Investigation in Brazil

Geoffrey Teyssier

Session 1.3

Does inequality matter for economic growth? The question is controversial. A recent trend of the literature has suggested viewing income inequality as a composite measure of two more relevant kinds of inequalities: inequality of opportunity and inequality of effort. These inequalities are thought to be more relevant than income inequality, both normatively and in terms of their effects on medium to long run growth. Inequality of opportunity is unfair in that it is derived from factors over which individuals have no control, and is thought to be detrimental to economic growth. Inequality of effort, on the other hand, is fair in that it is a result of individuals' responsible choices, and is expected to be beneficial for economic growth. This hypothesis, according to which inequality matters for growth to the extent that it reflects equity issues, offers a promising explanation to the mixed evidence found by empirical studies about the effect of inequality on growth: the effect of income inequality would depend on which of its ethical component dominates. The hypothesis has received strong evidence from Marrero and Rodríguez (2013) in the US. However, it needs to be validated on different samples, especially in developing countries, in order to gain legitimacy. This is the purpose of this paper, which investigates the effect of inequality of opportunity and inequality of effort on Brazilian municipalities' growth from 1980 to 2010 using the decennial national censuses ran by the IBGE. Results from various OLS and FE regressions provide strong support in favor of a negative effect of inequality of opportunity and a positive effect of inequality of effort.

JEL codes Codes: D63, O15, O40.

Link to the PDF file

Inequality of Opportunity in Spain: a Parametric Approach

Jose Maria Sarabia, Vanesa Jorda, Faustino Prieto

Session 1.3

In this paper we measure the extent of inequality of opportunity in Spain in 2005. We rely on the idea that differences in earning can be ethically fair if they come from choices that individuals are completely responsible for, called efforts. Unacceptable disparities are those come from external factors called circumstances. We use a flexible parametric form to model the joint distribution of circumstances and efforts. Our model avoids the need to break continuous variables of circumstances into groups, while also allowing for the use of categorical variables such as gender or race. Using data from Living Conditions Survey, we estimate the level of inequality of opportunity in Spain. Our results are robust to different parametric functional forms and indicators of parental education.

JEL codes: D31, D63, J62

Link to the PDF file

Victims of austerity: tax-benefit changes and disposable incomes of low-wage lone parents in rich countries

Yekaterina Chzhen
Session 1.7

Mounting pressure from the financial markets prompted most industrialized countries to engage in fiscal consolidation since 2010-2011, with social transfers among the most popular targets of austerity policies. To analyse the effect of the economic crisis and the ensuing fiscal consolidation measures on the living conditions of income-poor children across the OECD and/or the EU, this paper investigates changes in disposable incomes of low-wage lone parent households since 2008. As lone parent families are consistently found to be at the highest risk of poverty, the evolution of disposable incomes of low-wage lone parents illustrates more broadly the effects of social policy reforms on the most vulnerable households with children in society. The paper uses the model family method coupled with tax-benefit simulation techniques for the period 2008-2013. Family benefits have been particularly hard hit between 2008 and 2013. Their real value declined for lone parent households (with two school-age children) earning 20% of the average wage in 16 out of 37 countries, although in 11 of them, increases in housing benefits, in-work benefits or social assistance made up for it at least partially. Taking all social transfers into account, low-wage lone parents saw their net incomes fall in real terms in 11 out of 37 countries, often in spite of growth in average earnings: Greece, Ireland, Italy, Lithuania, Latvia, the Netherlands, Norway, Portugal, Slovakia, Spain, and the UK. Overall, these results suggest that low-wage lone parent families were some of the greatest victims of the economic crisis and the ensuing austerity measures.

JEL codes: D31, I38, J13.

Link to the PDF file

Lifetime Income Inequality: quantile treatment effect of retirement on the distribution of lifetime income.

Malgorzata Kozlowska
Session 1.7

This study attempts to estimate the causal effect of staying longer in the labor force on the distribution of lifetime income and to assess its consequences for overall inequality in lifetime income. Results for cross-national setting are estimated through Local Quantile Treatment Effect estimator by Abadie, Angrist and Imbens (2002), and are confronted with the Instrumental Variables Quantile Regression by Chernozukov and Hansen (2005). Relevant country specific estimates rely on Frandsen, Froelich and Melly (2012) approach. While the results of cross-national setting clearly suggest heterogenous effect across the distribution, negative at the bottom tail, increasing in magnitude across the quantiles, the results of country specific estimates are less readible. The effect of postponing retirement to later ages on the overall inequality is being assessed based on the notion of Stochastic Dominance by Abadie (2002).

JEL codes: D31, I32

Link to the PDF file

Inequalities between men and women in retirement pensions: Are determinants the same in the private and public sectors?

Carole Bonnet, Dominique Meurs, Benoît Rapoport

Session 1.7

Only quite recently have inequalities between men and women in retirement pensions become a research topic. If the pension gender gap is well documented, reflecting both women's lower participation rate in the labour market and their lower average earnings, it is more difficult to assess differences in the distribution of pensions between men and women. There are three main reasons for this difficulty. Information on income dispersion for men and women over the life cycle is rare. The French retirement system is composed of separate systems for different sectors (private sector employees, civil servants), and women are more present in the public sector than in the private sector and systems apply different rules for calculating pensions. Finally, the systems create different links between pensions and career patterns. We show that pension dispersion differs relatively little for men and for women within the retirement system of a given sector. However, the causes of these inequalities are not the same for men and for women. Using a regression-based decomposition of the Gini coefficient to measure the impact on pension dispersion of the different calculation elements, we show that for both sexes, and for retirees from both the public and the private sectors, pension dispersion is due mainly to dispersion of the wage used to calculate the pension. Among women, pension dispersion is also due in part to dispersion in contribution periods. Finally, differences between men and women are less marked among civil servants employed by the central state. We also decompose the Gini coefficient by source of income (component of pensions) in order to measure the impact of institutional rules intended to reduce inequalities. While these minima for pensions are explicitly designed for this, their impact is in fact small for private sector employees. Minima have a larger impact for civil servants.

JEL codes: J14, J16, H55

Link to the PDF file

The impact of participation tax rates on labor supply decisions

Charlotte Bartels, Nico Pestel

Session 1.4

This paper investigates the importance of work incentives for the decision to take up work. Tax-benefit system inherent work incentives at the extensive margin are measured by the Participation Tax Rate (PTR), a concept established by optimal tax theory. Low work incentives are expected to increase the probability of favoring unemployment and transfer recipience over labor market participation. We provide evidence that decreasing PTR, i.e. increasing work incentives, does increase the probability of taking up work signifcantly, although the size of the effect is small.

JEL codes: H24, H31, J22, J65

Link to the PDF file

From Specialization in Task to Separation of Class: Assessing the Effects of Geographical Occupational Concentration on Regional Inequality

Andrew Silva

Session 1.4

This paper tests for the effects of geographical agglomeration of labor occupation on the local homogeneity of the occupational distribution, and in turn the local homogeneity of the income distribution. As agglomeration economies require not only economies of scale but economies of scope, we expect to observe that regions of highly aggregated occupations are both relatively concentrated and relatively specialized (i.e. more homogeneous). Using U.S. Census data from 2000 to 2012, I empirically test for the effects of occupational concentration on the labor task distribution by constructing an index based on the ratio of high-skill to low-skill job function intensity (the task ratio), which I then assign to geographical obser- vational units. Theoretical motivation is derived from Duranton and Puga (2005), in which the authors model a potential economic transition from industrial special- ization to occupational (functional) specialization, a consequence of which being that specialized geographical regions become fully homogeneous in labor occupa- tion. Using both spatial econometric models and fixed-effect approaches, I find that certain occupations (e.g. "mathematical and computer" occupations) tend to increase homogeneity (i.e. reduce the Gini index) of the task distribution, while other occupations (e.g. service oriented occupations) tend to reduce homogeneity. This research has the potential to shed light on how fundamental economic forces geographically segregate workers by occupation, therefor segregating them by in- come, and potentially by social class. Implications range from potential efficiency gains arising via industrial zoning policy, to negative social consequences via "social isolation" (Wilson 1987).

JEL codes: J01, R12

Link to the PDF file

Income dynamics of liberal professions, entrepreneurs and employees

Mirko Felchner

Session 1.4

The aim of this study is to analyze the income dynamics of self-employed, i.e. entrepreneurs and liberal professions, and employees in Germany. The special interest of the author is on the income dynamic of liberal professions and entrepreneurs and how they differ from employees. To model the dynamics a lagged dependent variable is added to a classic Mincer equation. The resulting problem of endogeneity by correlation of the error term with a suspected unobserved heterogeneity is encountered by a dynamic panel data estimator. Using this method, the speed of adjustment is estimated based on data from the German Socioeconomic Panel of the DIW for the years from 2000 until 2012. The coefficient for the adjustment speed is significantly different from zero for both the self-employed and employees. Overall, entrepreneurs and professionals yield very similar results and have an almost twice as high speed of adjustment than employees.

JEL: D31, C23

Link to the PDF file

Income stratification and the measurement of interdistributional inequality between multiple groups

Paul Allanson

Session 1.1

This paper proposes a new class of stratification indices that measure interdistributional inequality between multiple groups. The class is based on a conceptualisation of stratification as a process that results in a hierarchical ordering of groups and therefore seeks to capture not only the extent to which groups form well-defined strata in the income distribution but also the scale of the resultant differences in income standards between them, where these two factors play the same role as identification and alienation respectively in the measurement of polarisation. The properties of the class as a whole are investigated as well as those of selected members of it: zeroth and first power indices may be interpreted as measuring the overall incidence and depth of stratification respectively, while second and higher power indices members are directly sensitive to the severity of stratification between groups. An illustrative application provides an empirical analysis of global income stratification by regions in 1993.

JEL codes: D31, D63

Link to the PDF file

Polarization and Convergence: Measuring the Process.

Gordon Anderson

Session 1.1

Polarization and convergence are inherently dynamic processes which correspond to transitions between departure and arrival states defined over groups which are in some sense ordered. They are can be concerned with the realignment, disappearance or emergence of groups, yet their measurement is conventionally based upon a "distance weighted" analysis of the anatomy of the arrival state distribution at a given point in time. When analysis deems the arrival state distribution to be polarized or converged, the presumption is that it was the consequence of such a process. However, apparently polarized (converged) arrival states may have been arrived at via convergent (polarizing) processes from even more polarized (converged) departure states. Here it is argued that polarization and convergence are more appropriately studied and understood in the context of indices reflecting the anatomy of transitions between states. They should not necessarily depend upon a between or within group cardinal ordering, however, if a metric by which the states are cardinally ordered is available distance weighting of the indices is appropriate. Accordingly indices are developed which identify polarization or convergence based upon the nature of the underlying transition process. They do not necessarily depend upon a between or within group cardinal ordering, however, if a metric by which the states are cardinally ordered is available, an appropriate distance weighting of the indices is possible. They do not depend upon the "squareness" of the transition matrix, that is to say they can deal with disappearing and emerging groups. 2 examples exemplify their use.

JEL codes: C14; I32; O1.

Link to the PDF file

The Use and Abuse of Entropy Based Segregation Indexes

Martin Watts
Session 1.1

The Use and Abuse of Entropy Based Segregation Indexes

There has been growing support for using entropy based indexes to measure segregation. Mora and Ruiz-Castillo (2009, 2011) advocate the use of the Mutual Information (MI) Index for investigating occupational segregation, after comparing its properties with those of the entropy information index, H, and the related normalized index H*, as well as non-entropy based indexes. Frankel and Volij (2011) show that MI is the only index which, with the exception of Composition Invariance, satisfies their substantive group of properties, namely Scale Invariance, Symmetry, Independence, the Organisation Division Property and Group Division Property. Also, MI exhibits Strong forms of Group Decomposability, Local Decomposition and Transpose Invariance. The multi-cohort Karmel-Maclachlan Index (IS) shares somey of the properties of MI. This paper argues that the MI index has many desirable properties which make it suited to the time series analysis of school and occupational segregation, in particular, but i) the Strong Group Decomposability property must be exploited with caution, because, under some circumstances, exploiting Local Decomposability is more useful in generating meaningful comparisons of index magnitudes; ii) marginal dependence should be addressed by the application of the Deming and Stephan (DS) algorithm; and iii) the solution provided by Mora and Ruiz-Castillo (2009, 2011) to the issue of the margin dependence of MI is flawed, and exploitation of the Shapley decomposition cannot usually be justified and has limited value anyway.

JEL codes: D63, J15

Link to the PDF file

Locus of Control and low-wage mobility

Daniel Schnitzlein, Jens Stephani
Session 1.5

We investigate whether non-cognitive skills - in particular Locus of Control - are important determinants of mobility processes at the low-wage margin. Our results reveal a significant amount of state dependence in low pay even after controlling for non-cognitive skills. Furthermore, compared to individuals with an external Locus of Control, individuals with a more internal Locus of Control have a significantly higher probability of being higher-paid instead of low-paid. Conditional on being low-paid, individuals with an internal Locus of Control have a significantly higher probability of moving to higher-paid employment in the following year than individuals with an external Locus of Control. Our results suggest that having an internal Locus of Control is an important non-cognitive skill in the context of low wages. It may help individuals to avoid low-wage jobs and to move from low-paid jobs to higher-paid jobs.

JEL codes: J30, J60

Link to the PDF file

Exploring the impact of early childhood education on non-cognitive outcomes

Daniela Del Boca, Enrica Maria Martino, Chiara Pronzato

Session 1.5

The purpose of our research is to analyze the effect of early childcare on non cognitive outcomes. Preschool education analysis has gained increasing attention in economics following Heckman's argument that investing in children may both reduce inequality and improve human capital, thus representing an equity-efficiency improving public policy. Early childhood intervention in fact would reduce inequalities by affecting the personality formation process, which fundamentally shapes cognitive and non cognitive skills, strongly related to future life outcomes (see, among others, works from Heckman and Duncan). We contribute to the literature analyzing the effect of childcare on some non cognitive skills, namely schooling attitude and readiness, socio-relational variables and scores in the strength and difficulties questionnaire, using a newly available dataset from the survey "Reggio Children Evaluation". We measure the effect of high quality childcare by specifically studying Reggio educational approach, which has gained growing international recognition since the 1990s, its principles being taught throughout the world by an internationally recognized teacher training center. Unobserved heterogeneity may bias our results; to give causal interpretation to the strong correlations found in the first OLS analysis, in which we control for all possible sources of observable heterogeneity (robustness checks are performed via matching procedures), we perform an IV regression using distance from home to school as an instrument for the choice regarding formal childcare and the type of school (municipal, private or religious). We find that Reggio approach significantly improves children' schooling attitude and reduces their difficulties when entering primary school. Moreover, heterogeneous effects appear for different subgroup of the population, namely they are stronger for girls and children of lower educated or working mothers. We thus provide further evidence that investments in preschool education have the potential to be an effective policy to reduce inequality of opportunities since the earliest years of life.

JEL codes: H4 J2 J13

Link to the PDF file

The roles of cognitive and non-cognitive skills in moderating the effects of mixed-ability schools on long-term health

Anirban Basu, Andrew Jones, Pedro Rosa Dias

Session 1.5

We examine heterogeneity in the impacts of exposure to mixed-ability 'comprehensive' schools in adolescence on long-term health and smoking behaviour. We explore the roles that cognitive and non-cognitive skills may play in moderating these impacts. We use data from the 1958 National Child Development Study (NCDS) cohort, whose secondary schooling years lay within the transition years of a major reform that transformed secondary education in England and Wales from a selective system of schooling to mixed-ability comprehensive schools. We adopt a local instrumental variables approach to estimate person-centred treatment (PeT) effects of comprehensive over selective schooling system. Our results indicate that the newer comprehensive schooling system produced significant negative effects on long-term health and increased smoking behaviour among a small fraction of individuals, for whom the effects were persistent over time. The ATE and TT were quantitatively similar and statistically insignificant indicating that cognitive abilities, the major driver for selection in to comprehensive schools, did not moderate the effects. The PeT

effects indicate that individuals with lower non-cognitive skills were most likely to be negatively affected by exposure to mixed-ability schools. Our results also show that cigarette smoking could be a leading transmission channel of the long-term impact on health outcomes.

JEL: D63; H230; H00; C21,C26,I12,I28

Link to the PDF file

Income mobility in Ecuador: new evidence from individual income tax returns

Liliana Cano

Session 2.3

While many studies have recently documented the decline in income inequality in most Latin American countries since the 2000s, less attention has been paid to the study of income mobility in this region. This paper investigates intragenerational income mobility in Ecuador with a focus on the top and middle of the distribution. First, we study whether the evolution of top income shares has been accompanied by an increase or a decrease in mobility for high-income groups. Second, we analyse whether a surging Ecuadorian middle-class has arisen. Our study is based on personal income tax returns from 2004 to 2011, and information on individual characteristics such as age, gender, marital status, geographical region of origin and level of education from the Ecuadorian Civil Registry.

We have two main motivations for this study. The first is based on the growing interest in the study of top shares of income using income tax data and national accounts. Since the seminal work of Piketty (2001) and Piketty and Saez (2003) on the long-run distribution of top incomes in France and in the United States, the evolution of income concentration in different countries has received much attention both in research and in politics. In the first part of this paper we follow this growing literature and by employing individual income tax returns data and external controls for total income and population, we compute series on top shares of income for Ecuador from 2004 to 2011. Afterwards, we analyse income mobility at the top of the distribution.

The second motivation is based on the study of intragenerational mobility, especially on the study of Latin American's growing middle class. A recent economic report from the World Bank (Ferreira et al., 2013) has documented the expansion of the middle class in this region by approximately 50% over the last decade. The change in the size and the composition of this social class must imply a reduction of income inequality in some way. Estimates of economic mobility and the middle class in Ecuador are scarce, mainly because of a lack of panel data that looks at how the income of individuals changes over time. By using panel data from income tax returns, in the second part of this paper we contribute to this discussion by measuring income mobility at the middle of the income distribution. Then, we analyse the factors that influences economic mobility in this South American country.

We have found three main empirical results. First, income mobility in Ecuador is low for top incomes; the probability of remaining in the top 1% after three years is nearly 50%, and it remains stable by the end of the period. Second, there is a high degree of mobility for the rest of the income distribution. Individuals are more likely to experience upward mobility than downward mobility, especially those in the middle-income deciles. Third, regression results suggest that the initial position in the income distribution is highly related to the probability of upward or downward mobility. Moreover, education was the most important determinant that influences upward movements. The probability of moving up in the income distribution was higher for those tax filers starting in the 6th decile and who had a high school degree. Additionally, being a woman with an educational degree rather than being a women with no scholar degree, increased the odds of moving up in more than 10 centiles. From our results, it appears that the demand for skills explains the reduction of inequalities in a South American country such as Ecuador. To our knowledge, this is the first time that research uses panel data from income tax returns to measure income mobility in Ecuador.

JEL codes: D31; H24; N36; O54

Link to the PDF file

One size doesn't fit all. A quantile analysis of intergenerational income mobility in the US (1980-2010)

Juan C. Palomino, Gustavo A. Marrero, Juan G. Rodríguez

Session 2.3

Using family income from the Panel Study of Income Dynamics (PSID), we apply Quantile Regression to estimate the Intergenerational Income Elasticity (IGE) by percentiles in the U.S. from 1980 to 2010. For the whole period, the IGE shows a Ushape across the income distribution, with maximum values at the tails (0.66 at the 10th percentile and 0.48 at the 90th percentile) and a minimum value -highest mobility- of 0.37 at the 70th percentile. These values contrast with the Ordinary Least Square estimate, which is 0.47. The trend evolution of the IGE varies also across the income distribution. While for all percentiles up to the median (and OLS) the trend of IGE was decreasing in the 80s and 90s and slightly increasing in the 00s, the IGE remained relatively stable for the richer along the whole period. With respect to the channels of intergenerational income transmission, son's education and race were found to be important.

JEL: D31, D63

Link to the PDF file

Long-run determinants of intergenerational job status mobility

Juan Gabriel Rodriguez, John Bishop, Haiyong Liu

Session 2.3

There are conflicting views of the primary role of inequality in economic development. Many believe that higher income shares at the top reflect substantial economic contributions while others think that these increases in top shares have not translated into higher economic growth. Others have pointed out that, regardless of the origin of total inequality, higher inequality could hurt economic performance by decreasing intergenerational mobility. We contribute to this debate on inequality and intergenerational mobility by examining the relationship between job status mobility and past inequality. We find a robust negative effect of lagged inequality on upward intergenerational job status mobility and a robust positive effect of lagged inequality on downward intergenerational job status mobility. In addition, we find that the quality of political institutions and religious fractionalization both contribute positively to job status mobility. Higher levels of past GDP result in less upward job status mobility and more downward job status mobility. JEL codes: J62, D31, I30

Link to the PDF file

Equality of Opportunity: Theory and Evidence

Francisco Ferreira, Vito Peragine
Session 2.4

Building on earlier work by political philosophers, economists have recently sought to define a concept of equity that accommodates the fairness of reward to individual responsibility and effort, while allowing for the existence of some inequalities which are unfair and should be compensated. This paper - commissioned as a chapter for the Oxford Handbook of Well Being and Public Policy - provides a critical review of the economic literature on equality and inequality of opportunity. A simple 'canonical model' of equal opportunity is proposed, and used to explore the two fundamental concepts in this (relatively) new theory of social justice: the principles of compensation and reward. Ex-ante and ex-post versions of the compensation principle are presented, and the tensions between them are discussed. Different approaches to the measurement of inequality of opportunity - and empirical applications - are reviewed, and implications for the measurement of poverty and of the rate of economic development are discussed.

JEL codes: D63, I32

Link to the PDF file

A general approach to income dynamics and inequality

Francesca Marino, Vitorocco Peragine, Laura Serlenga
Session 2.4

This paper introduces a unified approach to inequality, crossing the empirical literature on earning dynamics, which decomposes inequality into permanent and transitory components, and the theory of Equality of Opportunity (EOp), where inequality may arise both from factors beyond individuals' control (circumstances and luck) and from individual choices (effort). We argue that the methodological strategy of the former may help obtain a finer decomposition of inequality compared to the existing empirical contributions in the EOp domain. Indeed, (i) we take formally into account the role of luck, (ii) we discuss how circumstances, effort and luck may contribute to permanent and transitory inequality and (iii) we are able to track which source of unfair inequality explains the observed changes in income distribution over time. The empirical application of this decomposition on a panel of individuals, extracted from the Italian Survey of Household Income and Wealth (SHIW) over the period 1998-2012 reveals that observed circumstances (geography and family background) and unobserved ones, explain on average almost 50% of overall income inequality; moreover, the unobserved heterogeneity explains larger shares of the residual variance in the oldest cohort compared to the youngest one. JEL codes: C23, D31, D63

Link to the PDF file

Accounting for the Spouse when Measuring Inequality of Opportunity

Andreas Peichl, Martin Ungerer
Session 2.4

Existing literature on inequality of opportunity (IOp) has failed to address the question as to how the circumstances and choices of spouses in a couple should be treated. By omitting information relevant to the spouse in IOp estimations, the implicit assumption was full responsibility for the partner's income, effort and circumstance variables. In this paper, we discuss whether or not the partner's characteristics should be treated as responsibility factors. Using German micro data, we analyze empirically, how IOp estimates are affected when a partner's circumstance or effort variables are included as own circumstances in the analysis. Our analysis indicates that including spouse's variables can increase IOp measures by more than 20 (35) percent for gross (net) earnings. The less the responsibility assumed for the partner's variables, the higher the IOp estimate.

JEL codes: D63, H2, J62

Link to the PDF file

Fuzzy Ranking of Human Development: A Proposal

Buhong Zheng, Charles Zheng
Session 2.1

In this paper we propose to measure human development as a fuzzy concept and characterize a fuzzy relation for its ranking. We stress that there exists a great deal of vagueness in measuring a country's level of human development; one such source of vagueness we investigate is the weighting embedded in UNDP's human development index. We propose to evaluate the resulting fuzziness in human development ranking with a truth value function. A truth value is simply a function of the probability that a randomly drawn bundle of weights will rank one country as having a higher level of human development than another country. We derive general closed-form and easily computable formulae for calculating these truth values. The method derived is equally applicable to fuzzy rankings with other composite indices. JEL codes: I31, O12

Link to the PDF file

A Multidimensional Approach to Children's Opportunities

Maximilian Stockhausen, Charlotte Bartels
Session 2.1

In recent decades, single parents and unmarried couples increasingly replaced the traditional nuclear family. This paper investigates if the increased variety in living arrangements affected disparities in children's resources in a multidimensional space. Children's later achievements not only depend on their material standard of living (1) but also their parents' time (2) and education (3) as well as publicly provided childcare (4). Using SOEP data 1991-2011, we compute multidimensional inequality and poverty indices suggested by Maasoumi to incorporate disparities in various dimensions into a single measure. An inequality decomposition by family type reveals that the observed decline in multidimensional inequality is mainly due to decreased differences within family types.

JEL codes: D63, I32, J12

Link to the PDF file

Towards a distribution-sensitive Better Life Index: Design, data and implementation

Koen Decancq
Session 2.1

The OECD has introduced its Better Life Index as a tool to chart the overall multidimensional well-being of its member countries. The Better Life Index relies only on aggregate indicators, and hence remains insensitive to the shape of the multidimensional well-being distribution. This paper discusses how a distribution-sensitive Better Life Index can be designed and implemented. Based on five concrete recommendations for the design of the index a family of indices is suggested. These indices are shown to be decomposable in interpretable building blocks. A rich and broad micro-level data set is necessary to implement the distribution-sensitive Better Life Index. Unfortunately, no such data set is currently available for all OECD member countries. I construct therefore a so-called synthetic data set that relies on information about macro-level indicators and micro-level data from the Gallup World Poll. The implementation of the distribution-sensitive Better Life Index is illustrated with this synthetic data set. The illustration indicates that the Scandinavian countries are top-ranked whereas Greece, the Russian Federation and Turkey occupy the bottom positions. The results reveal a considerable heterogeneity in the level and composition of multidimensional inequality across the OECD member countries.

JEL codes: I31, C43, O1.

Link to the PDF file

Income Inequality, Neighbourhood Effects and Product Quality

Namrata Gulati, Prabal Roy Choudhry
Session 2.5

In this paper we analyze the effect of income inequality on market outcome and hence the welfare of the consumer in the industry which is both horizontally and vertically differentiated. The idea is that any income distribution over the spatial horizon is reflected in the demand structure and this shapes the market outcome. We consider a setting where the rich and poor live side by side on a linear city and two duopolist firms are positioned at the two ends of the city. We find that for a homogenous distribution of income or when the poor's income or density is too low, both firms offer the same quality. For a homogenous income distribution firm does not perceive much benefit from product differentiation. Given this, for a very high difference in the fixed costs, both firms offer the low quality. But when the difference in the fixed costs is low, both firms offer the high quality. For a more heterogeneous income distribution and an intermediate range of the difference in fixed costs, one firm offers the high quality and the other the low quality. Product differentiation on one hand allows firm to alleviate price competition and, on the other hand, serves consumers' demand better. We show that although in general a rise in income inequality has a spiraling negative effect on the welfare of the poor, there are situations, particularly when the poor income is very low, when an increase in the rich income could be welfare improving for the poor.

Link to the PDF file

The Role of Minimum Wage and Income Transfer Policies on the labour market: the case of Argentina

Fernando Groisman

Session 2.5

The objective of this study is to examine the impact that changes in minimum wage and the main income transfer programs have had on the economic participation of the population and the informal sector in Argentina. The magnitude and importance that both policies have had in the Argentine case makes it possible carry out an in-depth analysis of these topics. In effect, minimum wage was periodically modified between 2002 and 2014 to be among the highest in the Latin American region while the mentioned income transfer program - called the Universal Child Allowance - has benefited some 40 percent of children residing in the country since its implementation.

The obtained evidence suggests that modifications to minimum wage did not produce adverse effects on employment or have a substantial impact on the probabilities of entering the informal sector. Regarding the income transfers, it was possible to confirm that it did not encourage adults in beneficiary households to become economically inactive.

JEL: J2, J4, J6

Link to the PDF file

The Impact of Trade on Wage Inequality in Developing Countries: Technology vs. Comparative Advantage

Nathalie Scholl

Session 2.5

During the expansion of world trade since the 1980s, measures of inequality have risen not only in developed countries, but also throughout the developing world. This stylized fact is contrary to the predictions of classical trade theory that in countries with high endowments of unskilled labor, their wages should rise relative to those of skilled labor. This paper empirically tests the effects of trade on wage inequality in a differentiated panel framework where countries are classified according to their relative human capital endowments, constituting also the relevant comparative advantage in trade. Employing a newly constructed measure of technological change, an important source of omitted variable bias is removed which has not been addressed in the literature so far. Including the measure, several effects such as an equalizing impact of exports otherwise attributed to trade are substantially reduced, underscoring the importance of controlling for technological change. The paper furthermore isolates Heckscher-Ohlin "trade" effects from technology transfer effects, which conflate the former due to opposite impacts. Technology transfer is found to take place in particular through trade flows classified as medium-technology intensive, whereby both equalizing and disequalizing effects arise depending on the trading partner's relative human capital endowment, and the country's own endowment. Evidence is also found for pure "trade"-effects, supporting the Heckscher-Ohlin predictions of the effects of trade on wage inequality once the heterogeneity of the trading partners and the traded goods is taken into account. JEL codes: F14, F16, J31

Link to the PDF file

Cutting out the Middleman: Crowdinvesting, Efficiency, and Inequality

Hans Peter Grüner, Christoph Siemroth

Session 2.2

We show that direct investments by consumers without the use of financial intermediaries can efficiently allocate financial capital to firms seeking funding for production of a novel consumption good. In our setting, consumers are also investors, and their privately known consumption preferences are correlated. Hence, consumers can use their own preferences to identify worthwhile investment opportunities and tend to invest in firms whose product they like. A socially optimal capital allocation and complete information aggregation about consumer preferences is achieved if and only if all groups of consumers have enough wealth to invest. If some groups of consumers cannot invest, then capital flows reflect preferences of the wealthy but not necessarily future aggregate demand. Traditional financial intermediaries can improve the allocation of capital only if wealth inequality prevents an efficient allocation of capital by consumers, but financing via intermediaries never reaches the social optimum.

JEL codes: D31, D53, D82

Link to the PDF file

Of Proprietors and Proletarians

Mario Holzner, Stefan Jestl

Session 2.2

A multilevel mixed-effects logistic regression model was used in order to analyse the determinants of household mortgage indebtedness on the household as well as the country level. Novel cross-country HFCS data for 15 euro area economies was employed. The quantitative analysis confirms earlier historical evidence and descriptive analysis. Countries that pursuit a social housing policy, keep income inequality low and preserve a competitive tradables sector have low levels of household mortgage indebtedness. By contrast deliberate ownership societies with low levels of competitiveness and limited income redistribution capacities have to bear wide spread mortgage indebtedness and related macroeconomic imbalances. This is the price for exchanging proprietors for proletarians.

JEL-Classification: D31, G21, F32

Link to the PDF file

Family relations and economic security of households in Poland

Marek Kosny

Session 2.2

Economic security, considered as a characteristic of household, concerns not only its current situation and immediate future. Due to the demographic situation of many modern societies, issue of economic security is often considered also in the long term (especially in context of financial situation in retirement). In this sense intergenerational relationships can be seen as an important factor

influencing economic security. The main aim of this paper is to discover relationships between the level of economic security and the family situation. Depending on circumstances and horizon of analysis, both children and parents can be guarantors of economic security of respondents, but also a threat to it.

JEL codes: D19, I31

Link to the PDF file

Mapping the Occupational Segregation of White Women in the US: Differences across Metropolitan Areas

Olga Alonso-Villar, Coral Del Río

Session 2.6

This paper seeks to investigate the occupational segregation of white women in the U.S. at the local labor market level, exploring whether the segregation of this group is a homogeneous phenomenon across the country or there are important disparities in the opportunities that these women meet with across American urban areas. An important contribution of this paper is that, apart from quantifying the extent of segregation it also assesses the consequences of that segregation taking into account the "quality" of occupations that the group tends to fill or not to fill. The analysis shows that between 20% and 40% of white women working in a metropolitan area would have to shift occupations to achieve zero segregation in that area. Differences regarding the nature of that segregation are even stronger. In some metropolitan areas, the uneven distribution of white women across occupations brings them a per capita monetary gain of about 21% of the average wage of the area while in other metropolitan areas this group has a per capita loss of nearly 11%.

JEL codes: R23, J15, J16, J71, D63

Link to the PDF file

A STUDY OF THE GENDER WAGE GAP BY LEVEL OF EDUCATION IN SPAIN

Patricia Gomez-Costilla, Carmen Garcia Prieto, Noelia Somarriba Arechavala, Mari Cruz Merino Llorente

Session 2.6

ABSTRACT This paper studies the gender wage gap using Spanish data from the European Union Statistics on Income and Living Conditions (EU-SILC). We employ the stochastic frontier approach to measure wage discrimination against women and analyse inefficiency in the job search process. In this study, we consider a wide set of human capital variables, information concerning the demand side of the job market and some personal characteristics of workers. The analysis shows the existence of gender discrimination against women. The wage a woman can earn in the best offer available given their personal skills, is an average 11% lower than the wage a man with the same skills could be paid. The average efficiency found is very similar for both men and women, and the mean estimated level is 88Focusing on educational attainment, workers were split into three educational groups: non-educated and primary education, secondary education, and tertiary education, a different frontier being estimated for each. We find a significantly lower level

of gender discrimination in the case of tertiary educated workers, in addition to which mean level of efficiency is also less.

JEL codes: J16, J31

Link to the PDF file

Has Gender Convergence in Sweden Come to a Halt? A Study of the Gender Disposable Income Gap, 1983-2010

Birgitta Jansson

Session 2.6

This study investigates the development of the gender gap calculated as individual disposable income for women and men in Sweden by using register data for the total population from 1983 to 2010. The analysis is carried out not only at the median but also at six different percentiles, investigating the differences in the gender gap according to the income distribution and the existence of sticky floors and glass ceilings. The results show that despite the stable and high female labor force participation rates since the early 1990s, the gender disposable income gap has widened during the past decade, especially for women under 50 years old. The results indicate that the gender convergence in individual disposable income that took place in Sweden since 1983 has ground to a halt during the last decade. JEL: D31, N34, J79

Link to the PDF file

An Asset Based Indicator of Wellbeing for a Unified Means Testing Tool: Money Metric or Multidimensional?

Martina Menon, Federico Perali, Eva Sierminska

Session 3.1

In order to effectively implement social inclusion and protection policies advocated by the Europe 2020 strategy, European member States are committed to modernize and harmonize their welfare systems and the quality of the means test- ing tools adopted to correctly identify the beneficiaries of welfare policies. This study contributes to the literature on means testing by implementing a comparison between a multidimensional money metric of wellbeing based on equivalent current incomes and a disaggregate multidimensional indicator of exclusion. Both indexes account for relevant dimensions of exclusion such as income, financial and non financial wealth, health status and differences in family structure. The study shows that in terms of targeting efficiency the approach based on a money metric index is superior. The comparison is relevant both from an empirical and a policy point of view because only a unified means testing tool would pave the road towards harmonized welfare policies across European countries.

JEL codes D13 H31 I32 O15

Link to the PDF file

Does the choice of well-being measure matter empirically? An illustration with German data

Dirk Neumann, Koen Decancq
Session 3.1

We discuss and compare five measures of individual well-being, namely income, an objective composite well-being index, a measure of subjective well-being, equivalent income, and a well-being measure based on the von Neumann-Morgenstern utilities of the individuals. After examining the information requirements of these measures, we illustrate their implementation using data from the German Socio-Economic Panel (SOEP) for 2010. We find sizeable differences in the characteristics of the individuals identified as worst off according to the different well-being measures. Less than 1the individuals belong to the bottom decile according to all five measures. Moreover, the measures lead to considerably different well-being rankings of the individuals. These findings highlight the importance of the choice of well-being measure for policy making.

JEL codes: D31, D63, I30.

Link to the PDF file

empirical welfare analysis when preferences matter

Christelle Sapata, Jean-Francois Carpantier
Session 3.1

The conditional equality and egalitarian equivalence were proposed by Fleurbaey (2008) to provide better foundations to interpersonal comparisons in the context of heterogeneous preferences and multidimensional welfare. Decoster and Haan (2014) were the first to propose an implementation of the egalitarian equivalence, but a limitation of their approach was to capture preferences at the group level (based on socio-economic variables) and not at the individual level. Our contribution is to extend their model by using information on individual preferences, derived from the potential discrepancy between the group level optimal choice and the revealed choice of the individuals. We implement the conditional equality and egalitarian equivalence criteria on a 2004 US microeconomic dataset and show in our sample that up to 18% of the worst-off are no longer categorized as worst-off when the empirical approach accounts for individual preferences. More generally, this approach refines the evaluation of redistributive policies.

JEL codes: C35, D31, D63, H24, H31, J22

Link to the PDF file

Communication problems? The role of parent-child communication for the subsequent health behavior of adolescents.

Daniel Avdic, Tugba Büyükdurmus
Session 3.5

We contribute to the literature on the determinants of socioeconomic health disparities by studying how the health behavior of adolescents may arise from the degree of communication between parent

and child. Parent-child communication may function as a mediator between family background and subsequent poor health behavior, potentially reconciling previous mixed evidence on the relationship between child health and social status. Using data from a unique German child health survey we construct an index of parent-child communication quality by comparing responses to statements about the children's well-being from both children and their parents. Applying the constructed communication measure in a continuous treatment empirical framework, allowing for estimation of non-linear effects, our results show that improved parent-child communication monotonously reduces the smoking prevalence of adolescents by as much as 70%, irrespective of social background. More complex relationships are found for risky alcohol consumption and abnormal body weight.

JEL-codes: C31; I14; J13.

Link to the PDF file

The impact of economic disadvantages during childhood on income during adulthood. A causal analysis for Spain.

Begoña Cueto, Patricia Suárez, Vanesa Rodríguez

Session 3.5

The correlation of the economic, social and educational achievements between generations of the same family is a matter of great interest to the social analysis of the equality of opportunities. Our goal in this paper is to quantify both the incidence and intensity of the intergenerational transmission of poverty in Spain. We apply Propensity Score Matching to the module-specific data on intergenerational transmission of disadvantages from the Living Conditions Survey (2005 and 2011) to study the existence of causality between the economic difficulties during childhood and poverty during adulthood. There is a gap of 6 to 10 points in the poverty rate during the adulthood depending on the existence -or not- of economic difficulties during the adolescence, being this gap higher in 2011 than in 2005. After using propensity score matching, we obtain that, once controlled the effect of the educational level and the labour situation of the parents as well as the characteristics of the household, the existence of economic difficulties during adolescence increases the probability of poverty in the adult stage in 5-6 points in 2011 (half of the observed gap) while it has not effect in 2005. Therefore, in this year, the greater probability of poverty during adulthood of people with economic difficulties during childhood is explained by other characteristics such as the level of education of the parents or their labour market status (included in the estimation of the propensity score). According to our results, the existence of economic difficulties during adolescence has a greater effect in times of economic crisis.

JEL codes: J62, D31.

Link to the PDF file

Childhood Circumstances and Adulthood: The Effect of Financial Insecurity

Marta Barazzetta, Andrew E. Clark, Conchita D'Ambrosio

Session 3.5

We investigate the consequences on cognitive and non-cognitive outcomes later in life of children grown up with a mother who went through a major financial problem. Using the Avon Longitudinal

Study of Parents and Children we show that being brought up in a family whose mother has at least one major financial problem has negative consequences on both cognitive and non-cognitive achievements at age sixteen and eighteen even after controlling for income and a set of standard variables. We distinguish further between events taking place during early and late childhood given the importance of the timing of the event on child development. We show that the consequences of major financial problems are stronger than those of income on antisocial behaviour, emotional and behavioural difficulties in both periods of childhood, with a larger effect in late childhood especially for emotional symptoms. The number of years the mother reported a major financial problem significantly affects educational achievements instead only if experienced during late childhood, and for achieving the highest education level.

JEL codes: I31, I32, D60

Link to the PDF file

Top Incomes and the Measurement of Inequality: A Comparative Analysis of Correction Methods using Egyptian, EU and US Survey Data

Vladimir Hlasny, Paolo Verme

Session 3.2

It is sometimes observed and frequently assumed that top incomes in household surveys worldwide are poorly measured and that this problem biases the measurement of income inequality. This paper tests this assumption and compares the performance of inequality correction methods that focus on reweighting or replacing the top-income distribution. The European Union's Statistics on Income and Living Conditions (EU-SILC), the United States' Current Population Survey (US-CPS) and the Egyptian Household Income, Expenditure and Consumption Survey (EG-HIECS) are used as prototypes of data sets with different characteristics. Results indicate that survey response probability is negatively related to income per capita thereby confirming that unit non-response biases the measurement of inequality. Reweighting and replacing correction methods lead to upwards adjustments of inequality with the former providing larger adjustments than the latter. When using reweighting methods, the higher the level of geographical disaggregation the lower the estimated bias of the Gini. Middle levels of geographical disaggregation are found to perform better than hyper aggregation or hyper disaggregation. When using replacing methods, the Pareto coefficient is sensitive to the cut-off point applied to top incomes. The use of Pareto distributions results in larger corrections as compared to the use of generalized beta distributions but the difference is not very large.

JEL codes: D31, D63, N35

Link to the PDF file

Wages, Capital and Top Incomes: The Factor Income Composition of Top Incomes in the USA, 1960-2005

Anthony B. Atkinson, Christoph Lakner

Session 3.2

This paper is motivated by two observations. First, top income shares in the United States increased rapidly since the 1980s. Second, at the same time, the share of income from labour at the

top of the income distribution increased substantially. Using data derived from tax records, we study the joint distribution of capital and labour incomes. The marginal distributions of labour and capital income have both become more unequal. Using a non-parametric copula framework, we show that incomes from labour and capital have become more closely associated at the top. This can explain why the top income share in terms of total income increased faster than in either of the marginal distributions. Furthermore, the association is asymmetric such that top wage earners are more likely to also receive high capital incomes, compared with top capital income recipients receiving high wages. Hence the richest tax units are highly paid but also receive high incomes from capital, while there remain some rentiers who receive little income from work.

JEL codes: D33, D31, D63.

Link to the PDF file

The Role of Capital Income for Top Income Shares in Germany

Charlotte Bartels, Katharina Jenderny

Session 3.2

A large literature has documented top income share series based on income tax statistics using the common methodology established by Piketty (2001, 2003). The widespread disappearance of capital income from the income tax base poses a major challenge to the comparability of these series both over time and between countries. In Germany, capital income was gradually excluded from the income tax base between 2001 and 2009. Using a rich data set containing all income taxpayers' files we provide a homogeneous top income share series including full capital incomes from 2001 to 2010. Missing capital income since 2009 is extrapolated using a composite measure of stock dividends and interest income tax ows. We find that up to the top percentile the drop displayed in the German raw-data series in 2009 is largely attributable to the disappearance of capital income from the income tax base and not to the crisis. However, the very top of the income distribution is disproportionately hit by the crisis.

JEL codes: D31; H2

Link to the PDF file

The Political Economy of Early and College Education - Can Voting Bend the great Gatsby Curve?

Christopher Rauh

Session 3.6

High inequality goes hand in hand with low intergenerational earnings mobility across countries. In an overlapping generations model, calibrated to the US, education policies are endogenized via probabilistic voting. Exploiting cross-country variations in the bias in voter turnout towards the educated, I replicate the negative relation between inequality and public education expenditure and account for nearly one-quarter of the differences in inequality and mobility. For the US, I find that compulsory voting could foster mobility, whereas inequality is hardly affected. Differences across countries in tertiary education characteristics, in particular the college premium, account for 65

JEL codes: E24, H52, I23

Link to the PDF file

Education Hierarchy, Redistribution and Growth

Andreza Lucas
Session 3.6

Education is a central issue for most development strategies. Higher investments in education are positively correlated with economic development and growth. Two important decisions about education policies are: "How much investment?" and "How two invest it?" This paper discusses these questions from the normative perspective. As hierarchy, it means the different level into education is divided. Departing from an economy without government intervention, it analyses how a proportional taxation, used to finance education influence long run economic outcomes. It shows that: in a society with many educational levels the long run equilibrium can comprise a multiple of economic classes; facilitate entry in high education increases equity in the economy, but may be also decrease quality; the best economic outcomes in terms of both equity and efficiency are obtained when there is both public and private provision of education, and public investment in education is more effective when addressed to both the basic and advanced level.

JEL codes: H4, I2, I3.

Link to the PDF file

Analyzing inequality of opportunity in educational achievements

Casilda Lasso de la Vega, Agurtzane Lekuona, Susan Orbe
Session 3.6

Inequalities in educational achievements can stream from different sources. Some of them are beyond the student's control and cause ethically illegitimate inequalities. In contrast there are others related to the student's effort that lead to ethically legitimate inequalities. The theory of Inequality of Opportunity suggests either compensating illegitimate inequalities or rewarding those raised from effort disparities. Then it is necessary firstly to disentangle the overall inequality into two uncorrelated components, one capturing the fair inequality and the other the unfair one. Jusot, Tubeuf and Trannoy (Health Economics, 2013) develop a procedure for measuring unfair inequality in health in which three alternative normative criteria are assumed. This paper takes this proposal as a basis for assessing unfair inequalities in the educational field. Data from the OECD's Program for International Student Assessment (PISA) database 2012 are used.

JEL codes: I24,

Link to the PDF file

The equalising power of internal immigration and its impact on economic growth of Southern Italy

Giorgio Liotti, Salvatore Villani
Session 3.3

According to some scholars, immigration can have a very relevant role in the reduction of inequality. It has happened in the past and it may also happen in the future, as it is possible and desirable.

However, migration in itself does not resolve the issue of the inequalities. At most, it would shift it forward, because redistribution through immigration does not exempt from previously creating a basic set of rules and institutions aimed at stimulating a major cooperation by countries to change the legal management systems of migration and correct their redistributive effects. In light of these studies, the need for additional in depth research on the impact of immigration on regional disparities and income inequalities has become evident, especially in the long run. The present paper moves, therefore, in this direction, focusing on the regional impact of internal migration and attempting to demonstrate, with reference to the Italian case, how out-migration can increase income inequalities, thus hindering economic growth and exacerbating economic imbalances between the richest and poorest areas of the country, while immigration can reduce income inequalities and mitigate economic imbalances, according to the hypothesis of skilled immigration equalising, formulated in 2008 by Kahanec and Zimmermann (cf. Kahanec, Zimmermann, 2008 and 2009).

JEL codes: C23, E64, J15.

Link to the PDF file

Wages of childhood immigrants in Sweden - education, returns to education and over education

Katarina Katz, Torun Österberg

Session 3.3

We analyse full-time monthly wages of childhood immigrants who arrived before the end of compulsory school-age. Therefore their highest educational credentials as well their work-experience are acquired in Sweden in nearly all cases. We use a detailed disaggregation of background countries, which shows considerable heterogeneity, in education-occupation mismatch, in returns to education and in birth-country coefficients, unexplained by wage models. Both the non-European childhood immigrants and of those from Southern Europe suffer a wage disadvantage relative to natives, men to a larger extent than women. This is the case both for unadjusted wages and for wages adjusted for a large number of individual and job characteristics, although the gaps in adjusted wages are smaller than those in unadjusted. Returns to education are generally lower for non-European childhood immigrants than for natives. Since this is found to be a main mechanism behind the wage differential, we conclude that it is childhood immigrants with a long education who are most disadvantaged relative to Swedish-born with the same level of schooling. Overeducation is more frequent among most groups of childhood immigrants than among natives, but this makes only a small contribution to the wage differentials

JEL-codes: J31, J61, J15, I24

Link to the PDF file

The Effects of the Free Movement of Persons on the Distribution of Wages in Switzerland

Tobias Müller, Roman Graf

Session 3.3

This paper combines a wage decomposition method with a structural econometric model in order to determine to what extent the free movement of persons (FMP) can be made responsible for the

observed changes in the wage structure of natives in Switzerland. First, we identify the changes in returns to observable and unobservable skills of natives between 2002 and 2010, using non parametric and parametric decomposition techniques. Second, we estimate a structural model of the Swiss labor market in order to simulate the changes in returns to skills that would have been observed in the absence of the FMP. Third, we combine the two types of analyses and discuss whether the FMP can be considered as being a main cause of the increasing polarization of the Swiss wage distribution.

JEL codes: F22, J31, D33

Link to the PDF file

How do European citizens cope with economic shocks? The longitudinal order of deprivation

GUIO Anne-Catherine, POMATI Marco

Session 3.7

The recent economic crisis had a dramatic impact on European citizens, leading to more people experiencing poverty and material deprivation. At EU level, the number of people suffering from severe deprivation in 2012 reached more than 49.000.000, i.e. an increase of 8.7 millions people since 2009. The main contribution of this paper is to understand which items people have to go without as their deprivation increase, using the longitudinal component of EU-SILC. By definition, curtailment is a temporal process which to be fully understood necessitates longitudinal data. Although only a subset of deprivation items is available in the longitudinal dataset, this allows us to compare the order of curtailment obtained by using longitudinal and cross-sectional data. An IRT model is also estimated on cross-sectional data and used to confirm and aid the interpretation of the results. Interestingly, the results suggest a large degree of homogeneity across the EU in how households curtail expenditure, despite the large differences in material and social contexts between Member States.

Link to the PDF file

The risk of financial crises: Does it involve real or financial factors?

Karolin Kirschenmann, Henri Nyberg

Session 3.7

The recent financial crisis appears to point to credit booms as the most important driver of crises. However, could macroeconomic factors such as income inequality potentially be the real root cause of financial crises? We explore a broad variety of financial and macroeconomic variables and employ a general-to-specific model selection process to find the most reliable predictors of financial crises in 14 developed countries over a period of more than 100 years. Our in-sample results indicate that income inequality has predictive power in addition to and above loan growth and several other financial variables. Out-of-sample forecasts for individual predictors in different time periods show that their predictive power tends to vary considerably over time, but income inequality yields individual predictive power in each forecasting period.

JEL codes: C33, C53, E44, G01

Link to the PDF file

Assessing the impact of social transfer income packages on child poverty: A European cross-national perspective

Elena Bárcena-Martín, M. Carmen Blanco-Arana, Salvador Pérez-Moreno

Session 3.7

Children are generally at a higher risk of poverty than the population as a whole, although the mechanisms that lead to their socioeconomic vulnerability vary widely across European countries. This paper assesses to what extent some general characteristics of social transfer systems explain the variation in levels of child poverty across 30 European countries. In contrast to previous studies that mainly focus on the redistributive impact of social transfers, we examine several indicators of the adequacy, efficiency and incidence of social transfers. Using a multilevel framework, we find lower child poverty rates in countries with more generous and more efficient social transfer that focus to a larger degree on children, even after controlling for country living standard and labour market performance. We confirm previous results that find that the variation in child poverty is mainly due to contextual factors and to a lesser degree to individual factors.

JEL: D31, I32, I38

Link to the PDF file

Income Inequality and Opportunity Inequality in Europe: Recent Trends and Explaining Factors

Daniele Checchi, Vitorocco Peragine, Laura Serlenga

Session 3.4

This paper studies the recent evolution of economic inequality in Europe. By using the two most recent waves of the EU-SILC database reporting information on family background (2005 and 2011), our analysis provides estimates of inequality in about 30 European countries in the two different periods; moreover it provides some evidence on the relationship between the evolution of inequality and some institutional aspects for those countries. We complement the standard analysis of income inequality with an analysis of inequality in the space of opportunities. Our results also highlight some differences between the ex-ante and ex-post approaches: existing data indicate that equality of opportunity, in the ex-ante version, is more correlated with educational variables, while ex-post equality of opportunity is also associated to union presence, labour market policies and parental leaves. However, the distinction between the two approaches is not always so clear-cut in the empirical analysis, depending of the specification adopted.

JEL codes: D63, E24, J5

Link to the PDF file

Inequality of Opportunity in Sub Saharan Africa

Paolo Brunori, Flaviana Palmisano, Vito Peragine

Session 3.4

A recent economic literature addressing the measurement of inequality of opportunity has grown from early work by van de Gaer (1993) and Roemer (1998). The conceptual basis for the definition of inequality of opportunity is provided by the distinction between individual efforts and predetermined circumstances. This approach considers inequality due to the former not ethically offensive, while it suggests that difference in individual outcome due to the latter represent a violation of the principle of equality of opportunity and should be removed.

This approach has been implemented in a large number of empirical studies. Inequality of opportunity has been estimated in a number of countries and in a number of individual dimensions. However, this paper represents the first attempt to evaluate inequality of opportunity in a large number of Sub-Saharan Africa countries. Based on a number of recent survey we estimates inequality of opportunity in: Comoros, Democratic Republic of Congo, Ghana, Guinea, Madagascar, Malawi, Niger, Nigeria, Rwanda, Tanzania, and Uganda. For Nigeria, Tanzania and Uganda we are able evaluate changes in inequality of opportunity exploiting two waves of the same surveys.

JEL codes: D63

Link to the PDF file

Inequality of opportunity and economic performance

Gustavo Marrero, Juan Gabriel Rodríguez

Session 3.4

The study of the impact of inequality on economic performance is again in the agendas of pundits and policymakers. The high inequality reach by some economies after the Great Recession and the renovated debate on the main sources of overall inequality have triggered the interest for this topic. This work delves into a recent proposal of this literature according to which total inequality is actually a composite measure of inequality of opportunity (bad for growth) and inequality of effort (good for growth). To evaluate this theory, we first analyze the necessity of distinguishing between the two components of total inequality and revise the nascent literature on this topic. Based on the theoretical model proposed in Marrero and Rodríguez (2014), we derive a growth equation that relates economic performance with the different components of overall inequality. This model serves to better understand the existing controversy in the inequality-growth literature, and guide us to develop an alternative empirical less data-consuming cross-country empirical strategy. Applying a long-run cross-country analysis (growth is measured in a 20-years, 10- years and 5-years basis between 1985 and 2010) our main conclusion is that inequality of opportunity always harms growth, while total inequality has an unclear impact on subsequent growth.

JEL codes: D63, E24, O15, O40.

Link to the PDF file

The Wealth Distribution in Bewley Economies with Capital Income Risk

Jess Benhabib, Alberto Bisin, Shenghao Zhu
Session 4.2

We study the wealth distribution in Bewley economies with idiosyncratic capital income risk. We show analytically that under rather general conditions on the stochastic structure of the economy, a unique ergodic distribution of wealth displays a fat tail.

JEL Numbers: E13, E21, E24

Link to the PDF file

Intergenerational wealth mobility and the role of inheritance: Evidence from multiple generations

Adrian Adermon, Mikael Lindahl, Daniel Waldenström
Session 4.2

This study estimates intergenerational correlations in mid-life wealth across three generations, and a young fourth generation, and examines how much that can be explained by inheritances. Using new unique Swedish evidence we find parent-child rank correlations of 0.3-0.4 with little additional impact coming from grandparents. Correlations are attenuated when using at a young age, illuminating previous findings in the literature. Bequests and gifts strikingly account for between half and three fourths of the wealth correlation while income and education explain little. We are also the first to compare estimates using wealth in mid-life to estimates using wealth at death.

JEL codes: D31, J62,

Link to the PDF file

Explaining Income Inequality and Social Mobility: The Role of Fertility and Family Transfers.

Diego Daruich, Julian Kozlowski
Session 4.2

How much of social mobility and income inequality is due to initial opportunities relative to adult income risk? Previous studies have yielded very wide estimates due to data limitations. To provide a more precise answer this article builds on a standard heterogeneous agent life cycle model with idiosyncratic income shocks. We propose that fertility differentials between rich and poor households can lead to substantial differences in the resources available for children, which can be important for their adult outcomes. Accounting for this is essential for the proper evaluation of initial opportunities, so we extend the model to introduce the role of families through endogenous fertility, family transfers and education. We find that initial conditions as of age 13 account for more of adult income inequality than do labor income shocks. Moreover, fertility differentials and family transfers are found to account for over 50% of the social mobility in the data.

JEL codes: D91, J13, J24, J62.

Link to the PDF file

Wealth gender differences: the changing role of explanatory factors over time

Eva Sierminska, Daniela Piazzalunga, Markus M. Grabka
Session 4.6

In this paper we set out to investigate the explanatory factors of that have contributed to changing wealth levels covering the period of the Great Recession. Given the large labor market changes, which have taken place during this time in Germany we expect the process of accumulating wealth to have changed. In particular, we investigate the role of labor supply (which has largely increased for women in the years considered), the portfolio composition, and changes in marital status. We find the increased participation of women in the labor market and particularly their occupation structure had an increasing role in wealth accumulation. We also find an important role of marital transitions particularly for those never married.

The changing role of explanatory factors has altered the wealth gap in Germany. Consequently, in the second part of the paper we extend the existing literature and investigate the changing gender wealth gap over time, which has resulted from these changes, both at the mean and across the wealth distribution.

We use micro data from the German Socio-Economic Panel (years 2002, 2007, 2012), which uniquely provides wealth information at the individual level. Preliminary results show that the mean wealth levels have been decreasing since 2002 for both women and men. However, while the decrease was similar for both men and women in the period 2002-2007, men lose more than women in 2007-2012, and the wealth gender gap shrank from 30,000EUR to 27,000EUR, but this trend hides heterogeneities along the wealth distribution.

JEL codes: D31, D13

Link to the PDF file

Assortative mating and earnings inequality in France

Arnaud Lefranc, Nicolas Fremeaux
Session 4.6

This paper analyzes economic assortative mating in France. We first provide descriptive evidence on the statistical association in various economic attributes of spouses (education, earnings, market wage rate) among French couples. Second, we assess the contribution of assortative mating to earnings inequality between couples. Our estimates account for possible biases in the estimation of assortative mating arising from sample-selection into the labor force. We also develop a new methodology for assessing the disequalizing impact of marital choice when labor force participation is endogenous with respect to match characteristics. Our results indicate a strong degree of assortative mating in France. The correlation coefficient for education is above .5. Correlation in earnings is lower but sizable : around .2 for annual earnings and .35 for full-time equivalent earnings. Assortative mating tends to increase inequality among couples. The effect on the distribution of annual incomes remains moderate and explains 3 to 10% of measured inequality, depending on the counterfactual we use. The effect is however much larger for inequality in earnings potential and represents between 16% and 30% of observed inequality.

JEL codes: J12, J22, D31

Link to the PDF file

Income Inequality in Europe: What role does gender inequality play?

Agnieszka Gehringer, Stephan Klasen, Carlos Villalobos

Session 4.6

In this paper, we examine the impact of gender inequality on household income inequality in European countries. Since many households consist of males and females, the impact of gender inequality on income inequality will depend not only the level of gender inequality in earnings and unearned incomes, but also on the economic fortunes of gender-imbalanced households (particularly single-headed households), the way males and females sort to form households, and the extent of gender inequality at different parts of the household income distribution; given these complex links, it is not obvious that there is a direct and empirically sizable link between gender and income inequality. In this paper we first show descriptively that the high prevalence and generally low incomes of many female-headed households would be one feature of the income distribution in Europe where closing gender gaps could help reduce income inequality. In a series of decomposition exercises we then show that the impact of gender inequality on income inequality is generally quite modest and differs substantially between European countries. We confirm that improving the economic fortunes of female-headed households (particularly female elderly living alone as well as lone mothers) would tend to reduce income inequality in most European countries, while improvements in labor force participation and earnings of females will not have a substantial impact on affecting income inequality in Europe.

JEL codes: D63, J16, J7

Link to the PDF file

Does Self-Employment Really Raise Job Satisfaction? Adaptation and Anticipation Effects on Self-Employment and General Job Changes

Dominik Hanglberger, Joachim Merz

Session 4.3

Empirical analyses using cross-sectional and panel data found significantly higher levels of job satisfaction for the self-employed than for employees. We argue that by neglecting anticipation and adaptation effects estimates in previous studies might be misleading. To test this, we specify models accounting for anticipation and adaptation to self-employment and general job changes. In contrast to recent literature we find no specific long-term effect of self-employment on job satisfaction. Accounting for anticipation and adaptation to job changes in general, which includes changes between employee jobs, reduces the effect of self-employment on job satisfaction by two-thirds. When controlling for anticipation and adaptation to job changes, we find a positive anticipation effect of self-employment and a positive effect of self-employment on job satisfaction in the first years of self-employment. After three years, adaptation eliminates the higher satisfaction of being

self-employed. According to our results, previous studies overestimate the positive long-term effects of self-employment on job satisfaction.

JEL codes: J23, J28, J81

Link to the PDF file

Which Inequality Makes People Dissatisfied with Their Lives? Evidence of the Link between Life Satisfaction and Inequalities

Laura Ravazzini, Florian Chávez Juárez

Session 4.3

This paper aims at establishing a clear link between different types of inequality and life satisfaction in Europe. Indices of income inequality and of inequality of opportunity are proposed to identify the relationship with life satisfaction using six waves of the European Social Survey (ESS). In addition, reference groups based on similarly old and educated individuals are created to account for differences in relative income. Results show that income inequality, high levels of inequality of opportunity and negative relative economic well-being reduce people's life satisfaction in Europe. Moreover, there is no common European trend, but marked differences in the relationship between inequality and life satisfaction exist between macro European regions. In this regard, Eastern European residents are more concerned by income inequality, whereas in the rest of Europe there is apprehension for inequality of opportunity. Income inequality seems to be the predominant type of inequality when the level of economic development is relatively low. In Southern Europe, all types of inequality negatively affect life satisfaction.

JEL codes: D31, I31, J62.

Link to the PDF file

Upward Social Mobility, Well-being and Political Preferences: Evidence from the BHPS

Andrew Clark, Emanuela D'Angelo

Session 4.3

The paper uses 18 waves of BHPS data to provide evidence of the roles of both own social status and upward mobility relative to one's parents on job and life satisfaction, preferences for redistribution, pro-public sector attitudes and voting. Both own social status and greater mobility with respect to parents are positively associated with subjective well-being. However, this symmetric effect disappears for political preferences. While greater social status is associated with less favourable attitudes to redistribution and the public sector, greater upward mobility is associated with more Left-wing attitudes. These attitudes translate into actual reported voting behaviour. Upwards social mobility produces satisfied Left-wingers.

JEL codes: A14, C25, D31, D63, J28, J62

Link to the PDF file

Monetary Policy and Inequality in the UK

Haroon Mumtaz, Angeliki Theophilopoulou

Session 4.7

The UK has experienced a dramatic increase in earnings and income inequality over the past four decades. We use detailed micro level information to construct historical measures of inequality from 1968 to 2008. We study whether monetary policy shocks played a significant role in explaining this increase before and after 1993. We find that contractionary monetary policy shocks lead to a deterioration in earnings and income inequality and contribute to its fluctuation. Our evidence suggest that this effect is smaller during the inflation targeting period.

JEL codes: E2, E3, E4, E5

Link to the PDF file

Decomposing income changes in the UK in the 2000s

Iva Tasseva

Session 4.7

Using microsimulation techniques, parametric and non-parametric methods, we decompose changes in the entire distribution of household disposable income in the UK in 2001-11 due to fiscal policy changes (policy effects), benefit take-up (take-up effect), changes in population characteristics and the returns to these characteristics (non-policy effect). We also isolate the automatic stabilisation effect of the tax-benefit system. The paper builds on the current literature, which has examined the effect of fiscal policy changes on the income distribution without explaining the non-policy effects. We decompose the pre-recession (2001-07) and recession (2007-11) periods separately. Our results are consistent with the existing evidence showing that policy effects in the UK have reduced the level of income inequality while non-policy effects have increased it. Non-policy effects explain a significant share of the changes in household disposable income. For example, in both periods higher education expansion has lead to income increases for the richest decile groups and so, to increased income inequality. Finally, the increased level of inequality due to the non-policy effects would have been even higher if it was not for the automatic stabilisation effect of the tax-benefit system.

JEL codes: D31, H23, H53

Link to the PDF file

The heterogeneous cyclicality of income and wages among the distribution

María Cervini-Plá, Antonia López-Villavicencio, José I. Silva

Session 4.7

We investigate the cyclicality of real wages and income using individual data for the UK over the 1991-2008 period. By paying special attention to the heterogeneity among different earnings and income groups, we document that individuals at the top of the distribution are more cyclical

than lower ones. Moreover, the estimated cyclicality is considerably higher in recessions than in expansions for top-incomes. We also show that real wages and income are roughly acyclical for low wage and income workers. Instead, their adjustment to the cycle takes place through transitions to and from unemployment.

JEL codes: E24, E32, J31.

Link to the PDF file

Perception of Corruption and Public Support for Redistribution in Latin America

Xavier Ramos, Mónica Oviedo, Esther Hauk

Session 4.4

This paper studies the relationship between people's beliefs about the quality of their institutions, as measured by corruption perceptions, and preferences for redistribution in Latin America. Our empirical study is guided by a theoretical model which introduces taxes into Foellmi and Oechslin's (2007) general equilibrium model of non-collusive corruption. In this model perceived corruption influences people's preferences for redistribution through two channels. On the one hand it undermines trust in government, which reduces people's support for redistribution. On the other hand, more corruption increases income equality leading to a higher demand for redistribution. Thus, the effect of perceived corruption on redistribution cannot be signed a priori. Our novel empirical findings for Latin America suggest that perceiving corruption in the public sector increases people's support for redistribution. Although the positive channel dominates in the data, we also find evidence for the negative channel from corruption to demand for redistribution via reduced trust.

JEL codes: D31, D63, P16

Link to the PDF file

THE ROLE OF REDISTRIBUTIVE PREFERENCES AND BELIEFS ABOUT THE ORIGIN OF SOCIAL INEQUALITY IN THE INEQUALITY-GROWTH NEXUS

Sandra Bohmann

Session 4.4

Both, the influence of perceptions of social justice and corresponding redistributive preferences on actual redistribution, as well as the connection between actual (income) inequality and growth, have been extensively investigated in theoretical and empirical literature. It has been found that beliefs about the fairness of the process that underlies the distribution of economic benefits affect the amount of redistribution that is demanded and deemed just. The relationship between fairness preferences and perceptions of social justice within a certain population and economic growth of the respective country, however, has been largely neglected so far. I suggest that whether the current level of redistribution in a country is in accordance with the level that is deemed just by its population given their beliefs about the origin of social justice may moderate the relationship between inequality and growth. After identifying the theoretical links between beliefs about the source of socio-economic inequality, fairness preferences and growth I use data from the World Values Survey and other large international databases to test whether beliefs about the origin of inequality and redistributive preferences moderate the relationship between inequality and growth. No evidence for the theory can be found. The lack of evidence for my theory might be due to the low availability of data or a model misspecification. Further research using more sophisticated methods is needed before the theory can be confidently rejected.

JEL codes: O47 H21 D63

Link to the PDF file

Biased Perceptions of Income Inequality and Redistribution

Carina Engelhardt, Andreas Wagener

Session 4.4

When based on perceived income distributions rather than on objective ones, the Meltzer-Richard hypothesis and the POUM hypothesis work quite well empirically: there exists a positive link between, respectively, perceived inequality and perceived upward mobility and the extent of redistribution in democratic countries, although such a link does not exist when objective measures for inequality and social mobility are used. Our observations suggest that political preferences and choices might depend more on perceptions than on facts and data.

JEL codes: H53, D72, D31

Link to the PDF file

Tracking and the Intergenerational Transmission of Education: Evidence from a Natural Experiment

Simon Lange, Marten von Werder

Session 4.8

Proponents of tracking argue that the creation of more homogeneous classes increases efficiency while opponents fear that tracking aggravates initial differences between students. We estimate the effects on the intergenerational transmission of education of a reform that delayed tracking by two years in one of Germany's federal states. While the reform had no effect on educational outcomes on average, it increased educational attainment among individuals with uneducated parents and decreased attainment among individuals with educated parents. The reform thus lowered the gradient between parental education and own education. The effect is driven entirely by changes in the gradient for males.

JEL codes: I24; I28; J62.

Link to the PDF file

The impact of school fees on schooling outcomes and the intergenerational transmission of education

Sonia Bhalotra, Kenneth Harttgen, Stephan Klasen
Session 4.8

We study the impact of the abolition of primary school fees on completed schooling levels and social mobility. Using a large and representative data set of about 1 million children from 67 developing countries and measuring cohort and country specific exposure to the reform, we find that attending all of primary school in a fee-free regime is associated with roughly 0.2 more years of schooling than attendance in a fee-paying regime. The increase in school years created by removing fees is systematically larger for children of women with less schooling, so the removal of fees is progressive in its impact and improves the inter-generational mobility of education. The benefits of free schooling are, on average, larger for boys than for girls, and slightly larger for Africa than the rest of the developing world; but in Africa the impact is less progressive than elsewhere. Also, in Africa and in Africa alone, transitional cohorts who experienced partial-exposure to the fee-free regime had lower educational attainment and we argue that this may be the result of over-crowding in schools just after the lifting of fees. Investigating differential pre-trends in education between reforming and non-reforming countries, we find that reforming countries had a weaker positive trend before they reformed, which implies that our estimates are likely to under-estimate the actual benefits of reform.

JEL: D30, I20, O10.

Link to the PDF file

Identifying the Determinants of Intergenerational Mobility

James Best
Session 4.8

In this paper I develop a novel method for putting bounds on the role of environmental privileges (disadvantages) for children with high (low) earning parents in determining the intergenerational elasticity of income. To use this method it is sufficient to have data on the intergenerational and inter-sibling elasticities of income. Using this method we can examine the counterfactuals of giving a poorer child the environment of a richer child; equalising the privileges, such as human capital investment, associated with family income; and equalising the family environmental factors not associated with parental income. Furthermore, this method allows us to identify how good parental income is as a measure of family environment. The approach I develop can nest the models, and relax some of the identifying restrictions, used in the twin decomposition studies common in behavioural genetics.

I apply the method developed to data on the income elasticities between American males of different types of relation: fraternal twins, identical twins and father-son relationships. The results of this application suggest that a 1 percent increase in the privilege associated with parental income would increase child income by approximately 1 tenth of a percent. Equalising, to the mean, the environmental privileges across the population would result in an approximately 30 percent drop in the intergenerational elasticity of income and a 5 percent drop in the variance of income across the population.

JEL codes: I24, J24, J62

Link to the PDF file

A graph-based approach to inequality assessment

Arsen Palestini, Giuseppe Pignataro
Session 4.1

In a population consisting of heterogeneous types, whose income factors are indicated by nonnegative vectors, policies aggregating different factors can be represented by coalitions in a cooperative game, whose characteristic function is a multi-factor inequality index. When it is not possible to form all coalitions, the feasible ones can be indicated by a graph. We redefine Shapley and Banzhaf values on games on graphs to deduce some properties involving the degrees of the graph vertices and marginal contributions to overall inequality. An example is finally provided based on a modified multi-factor Atkinson index.

JEL codes: C71, D63, D85

Link to the PDF file

Who's afraid of aggregating money metrics?

Kristof Bosmans, Koen Decancq, Erwin Ooghe
Session 4.1

We provide an ethical justification for the aggregation of money metrics. The key axiom is a transfer principle (among individuals with the same preferences) that preserves the overall efficiency of the distribution. This transfer principle, together with a handful of other standard axioms, characterizes a continuous, increasing, and Schur-concave welfare function defined over money metrics.

JEL codes: D61, D63, I30

Link to the PDF file

Representation of a Separable Symmetric Preorder, with Application to Welfare and Poverty Measurement

Natalie Naïri Quinn
Session 4.1

Several characterisation results in the literature on social welfare and poverty measures rely on a result due to Debreu (1960) and thus invoke his non-necessary topological conditions on the domain and the relation. This restricts the types of information to which the measures may be applied. I relax the topological conditions to the point of necessity, while introducing symmetry. This enables me to determine necessary and sufficient conditions for representation of a binary relation on a symmetric product space by a symmetric and additively separable real-valued function. The relation of this result to abstract but general results is explored. The application of the result to social welfare and poverty measurement is demonstrated. It enables characterisation results to be extended to a more general domain, encompassing measures which exhibit discontinuities and utilise a broader class of information types than real-valued indicators of wellbeing. This is of particular relevance to multidimensional poverty measurement.

JEL codes: D63, I32

Link to the PDF file

Inequality Is Bad for Growth of the Poor (But Not for That of the Rich)

Roy van der Weide, Branko Milanovic
Session 4.5

The paper assesses the impact of overall inequality, as well as inequality among the poor and among the rich, on the growth rates along various percentiles of the income distribution. The analysis uses micro-census data from U.S. states covering the period from 1960 to 2010. The paper finds evidence that high levels of inequality reduce the income growth of the poor and, if anything, help the growth of the rich. When inequality is deconstructed into bottom and top inequality, the analysis finds that it is mostly top inequality that is holding back growth at the bottom.

JEL codes: D31

Link to the PDF file

On Distributional change, Pro-poor growth and Convergence, with an Application to Non-Income Dimensions in India

Shatakshee Dhongde, Jacques Silber
Session 4.5

Using the concept of relative concentration curve this paper proposes new graphical tools and indices to measure distributional change, beta- and sigma-convergence and the pro-poorness of income growth. A distinction is made between a non-anonymous and an anonymous analysis. The approach is then extended to compute the income pro-poorness of the growth rates of other characteristics, such as education and health. An empirical illustration based on state-wide Indian data on literacy and infant survival levels in 2001 and 2011 highlights the usefulness of the proposed measures. It appears that growth in literacy and infant survival shares was relatively higher in poorer states.

JEL codes: D31 - I32 - O15

Link to the PDF file

The Role of Inclusive Growth in Ending Extreme Poverty

Christoph Lakner, Mario Negre, Espen Beer Prydz
Session 4.5

The goal of eradicating extreme poverty by 2030 is becoming increasingly prominent in international development. This paper simulates a set of scenarios for poverty from 2011 to 2030, under different assumptions for growth and the degree to which this growth is inclusive. When holding within-country inequality unchanged and per capita growth similar to recent decades, our baseline simulations suggest that the number of extreme poor (living below .25/day) will remain above 450 million in 2030, resulting in a global extreme poverty rate above 5.4%. However, if the incomes of the bottom 40% in each country grow 2pp faster than the mean, the global poverty rate could reach 3% in 2030. Conversely, it would increase beyond 11% in 2030 if the bottom 40% grows 2pp slower than the mean. Our main findings hold up when we use the 2011 PPPs, rather than the

2005 PPPs. We also test the robustness of our results to alternative growth scenarios, as well as different formulations of how this growth is distributed across the distribution.
JEL codes: D31, I32, O15

Link to the PDF file

Ex post inequality of opportunity comparisons

Vito Peragine, Marc Fleurbaey, Xavier Ramos
Session 5.2

The inequality of opportunity literature has proposed a number of criteria and methods to rank outcome distributions. Two main approaches have been proposed: the ex ante approach, where the focus is on the inequalities between individual opportunity sets, and the ex post approach, where the focus is in the outcome inequalities among individuals at the same effort level. In particular, the ex post approach proposes a partition of the population into tranches, a tranche being a set of the individuals with the same effort level. Once this partition is made, measuring inequality of opportunity amounts to measuring outcome inequality within each tranche. In this paper we propose a new set of ex post criteria. We define a class as a set of individuals that sit at the same position in their respective tranche distributions. Members of the same class, in our construction, have exerted different degrees of responsibility; however, via the effect of the circumstances, they are at the same position in their tranche distribution. Our criteria will be based on the idea of reducing the inequality between classes. We characterize them axiomatically and we compare them with existing criteria; then we propose some scalar measures. We show that our ex post criteria are mostly obtained from "seemingly" ex ante properties. In the second part of the paper we apply our new criteria to measuring inequality of opportunity in Germany, by using the German Socio-Economic Panel (SOEP) for the first decade of the 2000s. Our results show that the class approach does yield different point estimates of inequality of opportunity with respect to the ex ante type and the ex post tranche approaches, both in absolute levels and as percentage of outcome inequality. However, the ordering of the three approaches crucially depends on the number of types, tranches, and classes.
JEL codes: D63, I32

Link to the PDF file

Measurement of Inequality of Opportunity Based on Counterfactuals

Dirk Van de gaer, Xavi Ramos
Session 5.2

The theoretical literature on inequality of opportunity formulates basic properties that measures of inequality of opportunity should have. Standard methods for the measurement of inequality of opportunity require the construction of counterfactual outcome distributions through statistical methods. We show that, when standard parametric procedures are used to construct the counterfactuals, the specification used determines whether the resulting measures of inequality of opportunity satisfy the basic properties.
JEL: D31, D63

Link to the PDF file

Equality of opportunity: How to encompass fifty shades of Luck

Arnaud Lefranc, Alain Trannoy
Session 5.2

Equality of opportunity is usually defined as a situation where the effect of circumstances on outcome is nullified (compensation principle) and the effort is ackowledged (reward principle). We propose a new version of the reward principle and we show that luck can be introduced in two ways in the definition of these principles, depending on whether the correlation between luck and circumstances should be nullified and whether the correlation between luck and effort should be rewarded. This leads to two distinct formulations (before-luck and after-luck) of the compensation and reward principles. Each combination of principles correspond to a particular view about how luck affects the opportunities of success.

JEL codes: D63, J62, C14

Link to the PDF file

Modern Family: Female Breadwinners and the Intergenerational Transmission of Gender Norms

Panos Mavrokonstantis
Session 5.6

This paper investigates the intergenerational transmission of gender norms. The particular norm under consideration is the traditional view that it is the role of the mother to look after young children and the role of the father to be the breadwinner. A model of identity formation is developed, where a child's gender norm is endogenous to two main sources of gender socialisation: her family on the one hand, and society at large on the other. Using data from the Next Steps survey and the International Social Survey Programme, this study examines the intergenerational transmission of gender norms in England by investigating how family and society norms affect the development of children's beliefs. Findings indicate between-sex heterogeneity in the transmission of gender norms from parents to children. While boys raised in modern families (i.e. where the mother is the breadwinner) are less likely to develop traditional norms, girls raised in modern families are actually more likely to do so; in opposition to their family's but in line with society's norm. Examining further outcomes associated with gender norms, we find that girls raised in modern families are also less likely to state that being able to earn high wages is important for them, and are less likely to pursue a science degree at university level. Using the predictions of our theoretical model, these empirical findings can be explained by between-sex heterogeneity in preferences for conformity to the family. Evidence is presented supporting this theoretical prediction.

JEL codes: D10, J16, Z13

Link to the PDF file

Sons as widowhood insurance

Sylvie Lambert, Pauline Rossi

Session 5.6

Exploiting original data from a Senegalese household survey, we provide evidence that fertility choices are partly driven by women's needs for widowhood insurance. We use a duration model of birth intervals to show that women most at risk in case of widowhood intensify their fertility, shortening birth spacing, until they get a son. Insurance through sons might entail substantial health costs since short birth spacing raises maternal and infant mortality rates.

JEL codes: D13, I15, J13

Link to the PDF file

Women Left Behind? Poverty and Headship in Africa

Annamaria Milazzo, Dominique van de Walle

Session 5.6

Abstract: This paper is motivated by two stylized facts about poverty in Africa: female headed households tend to be poorer and poverty is falling in the aggregate since the 1990s. This begs the question: How have female headed households fared, and what role have they played, in the impressive recent aggregate growth and poverty reduction experienced across Africa? Using data covering the entire region, this paper revisits the current prevalence and characteristics of female headed households, whether their prevalence is rising over time, what factors are associated with such changes since the mid-1990s and whether poverty has fallen commensurately for households headed by men and women. Counteracting higher GDP, other subtle transformations occurring across Africa-changes in marriage behavior, family formation, health and education-are putting upward pressure on female headship. On balance, a rising share of households is female headed. This is happening alongside declining aggregate poverty incidence. However, rather than being left behind, female headed households have generally seen faster poverty reduction. Indeed, as a whole this group is contributing almost as much as male headed households to the decline in poverty despite their smaller share in the population.

JEL codes: I31, I32, J12

Link to the PDF file

Multidimensional Affluence in Income and Wealth in the Eurozone - A Cross country comparison using the HFCS

Sine Kontbay Busun, Andreas Peichl

Session 5.3

Abstract This paper applies multidimensional affluence measures to a new dataset on income and wealth in 15 Eurozone countries. We start our analysis by examining the income and wealth distributions separately for each country, and extend it to a multidimensional setting by considering

the joint distribution of income and wealth. The results indicate that the percentage of households affluent both in income and net wealth are less than 10% except in Cyprus, France, Italy and Slovenia. Investigating the joint distributions of income and net wealth yields that France demonstrates a more homogenous distribution of richness among affluent households compared to the other countries in the sample. Portugal demonstrates a higher concentration of richness in the hands of few compared to most of the other countries in the sample. The degree of countries' affluence rankings differs with respect to the measures of multidimensional affluence considered.

JEL codes: D31, D63, I31

Link to the PDF file

The Individualization of Wealth. Evidence from France

Nicolas Fremeaux, Marion Leturcq

Session 5.3

A growing literature highlights that inequalities in wealth have increased in the last decades: in their extensive work, Piketty and Zucman (2014) show that wealth to income ratio are back to their 19th century levels, including in France. Moreover, a burgeoning literature tends to show that besides the traditional gender wage gap, wealth is also unequally distributed between men and women (Bonnet et al. (2013), Simierska et al. (2010)). Wealth comes from the accumulation of savings over the life cycle, inheritances and sharing through marriage. However, sharing through marriage tends to equalize wealth between men and women. As a consequence, differences in wealth result from different career paths between men and women, as well as marital history of individuals: the gender wealth gap stems either from large differences between single females and single males or from differences between the wealth married females and married men hold individually. Moreover, at the macro level, several demographic changes induce an individualization of wealth: increase in cohabitation rates, more pre-nuptial contracts (Frémeaux and Leturcq, 2013), increase in divorce and 2nd marriage rates.

The goal of this article is twofold. First, we aim at measuring the share of wealth hold by an individual and not a couple and its change over time. Second, it aims at understanding the mechanisms behind the individualization of wealth. We test several assumptions related to the changes in the demographic structure of the population as well as assumptions related to changes in the structure of wealth. On that purpose, we use data from the 1998 and 2010 cross sections of the French wealth survey (Enquête Patrimoine 1998 and Enquête Patrimoine 2010). The surveys allow us to identify the owner of each asset among couples, the share of the asset owned by each member, or if the asset is jointly owned.

We show that the wealth tends to become more individual in the beginning 2010s than in the late 1990s in France. There are two mechanisms at stake: increase in the number of divorcees as well as their relative wealth but also increase in the number of affluent couples opting for a pre-nuptial contract separating assets. This study is still work in progress; we are now working on the understanding of the change in the wealth structure.

JEL codes: J12, D31

Link to the PDF file

Income Inequality and Top Incomes in Uruguay. Evolution and mobility patterns

Burdín Gabriel, Mauricio De Rosa

Session 5.3

This paper analyzes the evolution of income inequality and characterizes income mobility in Uruguay during the period 2009-2012, focusing on top income groups. The study exploits novel individual-level panel data based on personal income tax records, which contain information on income, taxes and individual attributes (sex, age) and covers 75% of the Uruguayan population aged 20 and over. The main findings of the paper are the following: (1) pre-tax income inequality decreased during the period of study, even though the fall is milder in tax records than in harmonized household surveys; (2) the top 1% income share remained stable at 14% over the period and top income positions are highly persistent: the annual persistent rate at the top 1% is approximately 80%; (3) women's persistent rates at the top of the income distribution are slightly lower than men's; (4) comparisons by income sources show that capital and self-employment income are relatively more mobile than wages, salaries and pensions; (5) the comparison between annual and permanent income-based inequality measures suggests that the equalizing effect of income mobility is modest, at least for the short period considered (1.4 p.p. and 0.5 p.p. reduction in the Gini index and the top 1% income share respectively); (6) finally, personal income taxation in Uruguay redistributes roughly 2 p.p. of the Gini index. This paper contributes to the literature on income mobility in Latin America where, due to the lack of individual-level panel data, previous studies have mainly relied on pseudo panel techniques. The paper also adds to the emerging literature on top income mobility. Despite the short time dimension of the panel precludes the study of the evolution of income mobility in a long time span, it allows to examine how mobility patterns vary by income strata and between different demographic groups and income sources.

JEL codes: D31, H24, O54

Link to the PDF file

Welfare measures to assess urban quality of life

Francesco Andreoli, Alessandra Michelangeli

Session 5.7

The standard index of urban quality of life is an approximated measure of the liveability of a city. In fact, this index associates a bundle of amenities with the implicit marginal prices of these amenities, and not with the prices of infra-marginal units. In this paper, we adjust the standard measure to value bundles that can differ from the reference bundle of amenities for which marginal prices are estimated. Our methodology relies on a welfare measure representing individual willingness to give up (accept) to ensure (forego) that a change in the current distribution of amenities across areas will take place, keeping the level of utility unchanged. We obtain a new measure, the value-adjusted quality of life index, which can be identified from parametric models of consumer preferences. We use this index to measure the quality of life in the city of Milan.

JEL codes: D6, H4, R1

Link to the PDF file

Rethinking adaptation policy for coffee production in Nicaragua in a dual perspective: farmers perceptions and regional vulnerability indicators

Sonia Quiroga, Cristina Suárez, Juan Diego Solís

Session 5.7

This paper aims to analyze coffee producer's vulnerability and adaptive capacity to climate change in Nicaragua. We analyze farmer's perceptions and income distribution to identify adaptation needs in terms of adaptation measures and economic support. The analysis was conducted through a survey to representative farmers jointly with an analysis of vulnerability indicators. A Heckman selection model was estimated to analyze jointly the probability of being able to cope with climate change and the level of adaptive capacity that farmers perceive. This analysis links subjective and objective factors in order to have a more clear perspective on adaptation policies. Nicaragua by its geographical position is one of the four countries of Central America most affected by climate change, and coffee production is expected to vastly shrink in some critical areas, suitability being reduced by up to 40% in the country. Since nearly a third of its working population depends on coffee for a living, and coffee provides up to 20% of GDP, the climate pressures to this sector will likely to increase the vulnerability of unflavored communities. Data collection was done through a survey to 215 farmers in the departments of Jinotega and Estelí, where most of the "in shadow" coffee production is located and representing both central highlands and hilly volcanic regions. From this population, a stratified random sampling proportional to farmer type was assigned. Then vulnerability indicators were linked to the data through geographical information. Adaptation to climate change requires that farmers using traditional techniques of agricultural production first notice that the climate is changing and that this represents a threat to their production. Potential responses to climate change effects on agriculture include farm level adaptation, through capacity building or financial transfer tools. Results are deemed to determine the marginal effects associated with the funding sources. We find that vulnerability is significant when measuring the ability to cope with climate change.

JEL codes: Q15, Q54, I32, O54, C34, C35

Link to the PDF file

Distributional changes in basic services accessibility

Ambra Poggi

Session 5.7

We explore distributional changes in basic services accessibility (public transport, postal services, banking services, grocery services and primary health service) across EU regions over the period 2007-2012. We investigate distinct facets of distributional changes. On one hand, we study σ-convergence as the change in the Gini coefficient over time expressing this change as the net effect of β-convergence when offset by re-ranking among EU regions. On the other hand, we analyze the surfacing of two-peaks in the 2012 distribution using stochastic kernels since the emerging of a two-peaks distribution has a natural interpretation in terms of polarization. We find evidence of divergence since re-ranking offsets the substantial reduction in inequality induced by β-convergence between 2007 and 2012. We also find evidence of a polarization process: regions are polarizing into low-levels services and high-levels services groups. Regions catch up with one another but only within particular subgroups.

JEL: I30, D3, O47

Link to the PDF file

Robust measures of intergenerational poverty transmission for Europe: the role of education

Luna Bellani, Michela Bia

Session 5.4

This paper examines the causal channels through which growing up poor affects the individual's economic outcomes as an adult. We contribute to the growing literature on intergenerational transmission, on the one end providing a quantitative measurement of the causal effects of poverty in childhood, applying a potential outcome approach to this question and implementing a series of robustness checks. On the other end, analyzing the impact of the interplay between growing up in poverty and individual human capital accumulation on the children outcomes later in life. The analysis is based on the module on intergenerational transmission of 2011 of the EU-SILC data, where retrospective questions about parental characteristics (such as education, age, occupation) were asked. We find that even after controlling for possible unobserved confounders, e.g. child ability, being poor in childhood significantly decreases the level of income in adulthood, increasing the average probability of being poor. Moreover, our results reveal a significant role of human capital accumulation in this intergenerational transmission.

JEL codes: D31, I32, J62

Link to the PDF file

Behind a Stable Poverty Rate: Changes in the Duration of Poverty Episodes in the United States since the mid-1980s

Iryna Kyzyma

Session 5.4

According to the U.S. Census Bureau, the poverty rate did not change much in the United States over the last 25 years: it is estimated at 15 percent in the late 2000s as in the mid-1980s. This paper aims to look 'behind' the stability of the US official poverty rate by investigating what has happened to the underlying duration of poverty episodes. It is indeed well-known that a static poverty rate hides important changes in the dynamic structure of poverty. This knowledge, however, is often neglected in the evaluation of temporal trends in cross-sectional poverty rates. I propose a methodological framework which makes it possible to estimate the entire duration distribution of poverty episodes and decompose its change over time into the contributions induced by the changes in the composition of the poor and the structure of poverty. My approach builds on the estimation of the flexible hazard function, conditional on both observed and unobserved heterogeneity, which I use to recover the entire unconditional cumulative distribution of poverty episodes by their duration. Using monthly data from the 1984 and 2008 panels of the Survey of Income and Program Participation, I show that albeit the poverty rate was relatively stable in the US, the share of individuals with long poverty episodes has increased over time. This increase, however, was not the same for everyone. In particular, individuals living in single families, families where the head is young, black or uneducated person have experienced a disproportionally large increase in the amount of time spent below the poverty line compared to other population subgroups. The observed changes in the duration of poverty are induced by the changes in the structure of poverty rather than the characteristics of the poor. Looking inside the structure of poverty, I find that its contribution to the upward trend in the duration of poverty is mainly driven by the increased duration dependence and the enhanced effects of unobserved heterogeneity. At the same time, changes in the effects of individual attributes have contributed to the shift in the duration distribution of poverty episodes only to a minor extent.

JEL codes: C41, D39, I32.

Link to the PDF file

Poverty Persistence in Rural Indonesia: What are the Roles of Public Services and Community Infrastructures?

Rythia Afkar
Session 5.4

This paper use four rounds of panel data of household and community surveys from 1993-2007 to investigate the persistence of poverty in rural Indonesia using state dependence approach with a particular focus on the role of public services and community infrastructures. Regression results from dynamic probit models show strong evidence of state dependence effect of poverty. In addition to the relevant household and household head characteristics, this paper points to the importance of public services such as sufficient education facilities as well as community infrastructures such as technical irrigation system, paved main road, electricity, and pipe water services, in determining household poverty status. Important policy implications that can be useful for designing effective policies and targeting for poverty reduction programs are also discussed in this paper.

JEL codes: I32, R20, O12

Link to the PDF file

Disentangling annuities and transfers: redistribution in Greek retirement benefits

Chrysa Leventi, Manos Matsaganis
Session 5.8

The objective of this paper is to identify the relative importance of annuities and transfers in Greek retirement benefits and draw conclusions as to their impact on intergenerational and intragenerational equity. As one of the core objectives of a pension system is to redistribute income over the life span of individuals, their equity effects are examined by adopting a longitudinal approach. This approach compares the balance between the net present value of total contributions paid and pensions received by individuals throughout the course of their lives. The difference between the two is the implicit transfer that can be either positive (a transfer received by the rest of society) or negative (a transfer paid to the rest of society). The methodological line of inquiry involves the analysis of a representative sample of retirees from the biggest social insurance fund of the country in 2008. Annuities and transfers were calculated according to the rules that were in place both before and after the major pension reform that took place in Greece in 2010. The impact of the 2010-2013 austerity measures on lifetime pension benefits were also taken into account. Our findings suggest that the vast majority of retirees are receiving positive -and quite substantial, in absolute terms-net transfers from the system. This outcome implies that the underlying pension rules seriously deviate from actuarial fairness and are thus violating the principle of intergenerational equity.

JEL codes: D31, H55, J26

Link to the PDF file

A Note on Income and Utility Generalized Transfers Principles

Mickaël Beaud, Stéphane Mussard, Marc Dubois
Session 5.8

In a generalized utilitarian framework in which individuals have common utility, it is possible to represent formally the decision-maker's value judgments about inequality. In this framework, the necessary and sufficient conditions to fulfill the generalized income Transfers Principles are provided thanks to Bell's polynomial. Then, the normative contents of the generalized degree stochastic dominance order are provided.

JEL codes: D3; D6; H2.

Link to the PDF file

Early retirement disincentives: Effectiveness and implications for distribution and welfare

Timm Bönke, Holger Lüthen, Daniel Kemptner
Session 5.8

This paper evaluates the effectiveness of early retirement disincentives introduced in Germany and investigates the distributional, individual welfare, and fiscal implications employing high quality administrative data drawn from the German pension register. We set up a detailed model of the German social security and tax system with a focus on the PAYG-pension system. Utilizing the phasing in of a recent pension reform - impacting subsequent birth cohorts to a different degree - we estimate the parameters of a structural dynamic retirement model. This enables us to analyze whether and to what extent disincentives are able to steer retirement behavior. Distributional effects are calculated as the changes in Gini coefficients of expected remaining lifetime consumption, individual welfare effects are assessed by equivalent and compensating variations. We find that the associated welfare losses are largest for medium income individuals and are only partially compensated by recently introduced subsidies for private old age provisions. At last, we consider the fiscal implications and compute the net public returns of the introduction of retirement disincentives. The simulated public returns per capita translates into overall public gains for the cohorts 1939-1945 of about 10 billion Euros.

JEL-Codes: C61, H55, J26

Link to the PDF file

Bayesian Inference of Welfare and Inequality for Qualitative Data

David Gunawan, Duangkamon Chotikapanich
Session 5.1

Recently, there is a growing interest on measuring welfare and inequality of non-income well-being distributions. The standard measures, such as Lorenz curve and Gini index, developed for income inequality have been increasingly used to measure the inequality of non-income well-being distributions. However, in many situations, the data are of ordinal categorical in nature. Allison and Foster (2004) show that these standard measures are inappropriate when dealing with categorical data since these data lack cardinal meaning. The ordering can be reversed if the cardinal scale,

with which the ordinal categories are evaluated, is changed. Yalonetzky (2013) and Allison and Foster (2004) outlined the inequality and stochastic dominance conditions for ordinal data. Abul Naga and Yalcin (2008) and Cowell and Flachaire (2012) proposed a parametric inequality indices for the ordinal categorical data. However, there is an evident lack of statistical inference in the literature on measurement of welfare and inequality with ordinal data. In this paper, we extend a Bayesian approach of Chotikapanich and Griffiths (2006) to assess the dominance relationships and also propose a method to estimate the inequality indices for the ordinal categorical data. Bayesian inference offers a new way of assigning probability to represent uncertainty. The outcomes from well-being distribution comparisons are reported in terms of posterior probability that dominance exists. Estimates of minimum and maximum of posterior probabilities of dominance may also be obtained. The posterior probability density function (pdf) and the 95% credible intervals of inequality estimates may also be obtained. The methodology is applied to Self Reported Health Status (SRHS) data for Australia for the years 2002, 2005, 2008, and 2010.

JEL codes: C11, I14, I32

Link to the PDF file

Robust "pro-poorest" poverty reduction with counting measures: the anonymous case

Francisco Azpitarte, Jose Gallegos, Gaston Yalonetzky

Session 5.1

When measuring poverty with counting measures, it is worth inquiring into the conditions prompting poverty reduction which not only reduce the average poverty score further but also decrease deprivation inequality among the poor, thereby emphasizing improvements among the poorest of the poor. For comparisons of cross-sectional datasets of the same society in different periods of time (i.e. an anonymous assessment), Lasso de la Vega (2010) and Alkire and Foster (2011) developed a first-order dominance condition based on counting poverty headcounts, whose fulfillment ensures that multidimensional poverty decreases for a broad family of counting poverty measures. Further, Chakravarty and Zoli (2009) and Lasso de la Vega (2010) derived a second-order dominance condition based on reverse generalized Lorenz curves, whose fulfillment ensures that multidimensional poverty decreases along with a reduction in deprivation inequality for a broad family of inequality-sensitive poverty measures. However, both conditions hold for a predetermined vector of weights for the poverty dimensions. In this paper we refine the second-order conditions in order to obtain necessary and sufficient conditions whose fulfillment ensures that multidimensional poverty reduction is robust to a broad array of weighting vectors and inequality-sensitive poverty measures. We illustrate these methods with an application to multidimensional poverty in Peru before and after the 2008 world financial crisis.

JEL codes: I32

Link to the PDF file

Ranking distributions of an ordinal attribute

Nicolas Gravel, Brice Magdalou, Patrick Moyes

Session 5.1

This paper establishes an equivalence between three incomplete rank- ings of distributions of an ordinally measurable attribute. The first rank- ing is that associated with the possibility of going

from distribution to the other by a finite sequence of two elementary operations: increments of the attribute and the so-called Hammond transfer. The later transfer is like the Pigou-Dalton transfer, but without the requirement - that would be senseless in an ordinal setting - that the "amount" transferred from the "rich" to the "poor" is fixed. The second ranking is an easy-to-use statistical criterion asso ciated to a specifically weighted recursion on the cumulative density of the distribution function. The third ranking is that resulting from the comparison of numerical values assigned to distribu- tions by a large class of additively separable social evaluation functions. Illustrations of the criteria are also provided.

JEL codes: C81, D63, I1

Link to the PDF file

A participation based theory of economic inequality under different electoral rules: the case of New Zealand

Araz Aminnaseri, Irma Mooi-Reci

Session 5.5

Abstract: Proportional representation is generally known to be associated with higher electoral participation in the literature of politics. By the same token, the relation between higher turnout and better chances for the left parties to garner support at the ballot is stressed by multiple previous studies. On the other hand, left partisanship of the government and the lower level of income inequality are known to be in positive relation in democratic countries. However New Zealand is a clear outlier and an example of simultaneous diminish in inequality and electoral turnout since the electoral reform of 1996 and switch to proportional representation. Utilizing a market competition framework, this paper argues that what matters for the level of inequality is not the rate of electoral participation, but rather the distribution of voters across the economic distribution. It is this effect that allows for the proportional representation to mitigate the economic inequality. Data is used from New Zealand Election Study surveys for 1990, 1993 and 2011 as well as the Manifesto Project dataset on the party electoral platform. Out quantitative analysis involves regression and variance analysis.

JEL codes: D72 D63

Link to the PDF file

Probabilistic Targeting

Eugenio Peluso, Philippe De Donder
Session 5.5

Abstract We show that a transfer targeting a minority of the population is sustained by majority voting, however small the minority targeted, when the probability to receive the transfer is decreasing and concave in income. We apply our framework to the French social housing program and obtain that empirically observed departures from these assumptions are small enough that a majority of French voters should support a positive size of this program. We also provide a sufficient condition on this probability function under which more targeting results in a lower equilibrium size of the transfer system.

JEL codes: D720, H530, I380

Link to the PDF file

Towards an Understanding of the Political Economy of Multidimensional Poverty Measurement

Stefano Barbiera, Sean Higgins
Session 5.5

In a game-theoretic framework, we study how scalar multidimensional poverty measures affect the strategic interactions of ministers responsible for reducing deprivations in the measure's dimensions. Ministers share a common interest in reducing measured multidimensional poverty, but also have preferences over alternative uses of their allocated budgets; we think of improvements in the scalar multidimensional poverty measure as a public good for ministers, who therefore can free ride on each other's antipoverty spending. The allocation of resources across ministers and the measure's parameters (the weights assigned to each dimension and the extent of deprivation depth aversion) affect equilibrium size and composition of antipoverty spending. For common parameterizations, a reallocation of budgets that improves measured poverty reduction always decreases total antipoverty spending in equilibrium. Similarly, choosing weights such that the poverty measure is effectively unidimensional favors measured poverty reduction, while antipoverty spending is larger with a multidimensional measure. Increasing deprivation depth aversion may increase or decrease the resources actually spent on the poor, depending on whether disparities across dimensions are due mostly to the number of deprived households, or to their average deprivation. We illustrate using data from Mexico, the first country to adopt an official multidimensional poverty measure.

JEL: C72, H41, I32.

Link to the PDF file

Long term social welfare: mobility, social status, and inequality

Claudio Zoli, Koen Decancq
Session 6.2

Recently there has been a growing interest in the empirical association between income inequality and social mobility. Little is known on the normative nexus between both notions, however. In this paper, we axiomatically characterize a family of multiperiod social evaluation functions that allows to include concerns about income inequality and social mobility in a transparent and explicit way. The two core ideas of our characterization are a requirement of consistency of the social evaluation for the addition of an income source with the same mobility structure, and teh requirement that the effect of social mobility vanishes when there is no inequality in the society or a subgroup thereof. We obtain a multiperiod rank-dependent social evaluation function that additionally gives a prominent role to the notion of social status in this dynamic context. We discuss various special cases that belong to the characterized family of social evaluation functions, and we present a welfare decomposition that combines in an intuitive way the key components of the evaluation: average income, income inequality and mobility.

JEL codes: D31, D63, I30.

Link to the PDF file

Intergenerational income mobility: the role of the reference group.

Martin Leites, Xavier Ramos
Session 6.2

This paper models the role of reference groups as a mechanism for inequality persistence across generations. Reference group theory suggests that culturally shaped processes alter individuals' ambition. As a result, relative deprivation effects may discourage (encourage) low-background individuals from making adequate mobility-enhancing investments. The model confirms that reference groups could be an inequality transmission mechanism across generations, and demonstrates that both the size and direction of this effect depend on, (a) the composition of the reference group, (b) the intensity and functional form of income comparisons, (c) the ex-ante inequality between agents with different social origins and the reward of effort, and (d) the information about their peers and past income mobility. This model is more general than previous models and its findings are in stark contrast to models based upon self-fulfilling beliefs and fatalistic predictions. Finally, our model explicitly links two fields of literature for the first time, the reference group theory and aspiration failure models.

JEL codes: A14, I30, J62.

Link to the PDF file

Changing Income Inequality and Panel Income Changes

Robert Duval-Hernandez, Gary S. Fields, George H. Jakubson
Session 6.2

When economic growth (or economic decline) takes place, who benefits and who is hurt how much? The more traditional way of answering this question is to compare two or more comparable cross sections and gauge changing income inequality among countries or individuals. A newer way is to utilize data on a panel of countries or a panel of people and assess the pattern of panel income changes. How do these two approaches relate to one another? This paper shows, first, that it is possible to have all four combinations - rising or falling inequality and divergent or convergent panel income changes, and second, under what conditions, for various measures of rising/falling inequality and various measures of divergent/convergent income changes, each of the four possible combinations can arise.

JEL codes: J31, D63.

Link to the PDF file

Inequality of Opportunity in Health in Indonesia

Florence Jusot, Marta Menéndez, Sabine Mage

Session 6.6

Whereas health equity issues are undoubtedly more relevant in developing countries, research on health inequalities and, more specifically, on inequality of opportunity in the health dimension, remains scarce in this context. This paper explores the degree of inequality of opportunity in health in a developing country, using the 2007 Indonesian Family Life Survey, a large-scale survey with extremely rich information about individual health outcomes (biomarkers and self-reports) and individual circumstances. We compute a continuous synthetic index of global health status based on a comprehensive set of health indicators and subsequently implement non-parametric and parametric methods in order to quantify the level of inequality of opportunity in the health dimension. Our results show large inequality of opportunities in health in Indonesia, compared to European countries. Concerning transmission mechanisms, parental (particularly maternal) vital status appears as the main channel. Compared to what has been observed in more developed countries, the effect of parental education on health is relatively smaller, and mainly indirect (passing through descendants' socioeconomic, marital and migration statuses), while the existence of long-term differences in health related to religion, language spoken and particularly province of location suggest a relatively higher relevance of community belonging variables for health equity in the context of a developing country as Indonesia.

JEL codes: D63; I14; O15

Link to the PDF file

The Equality of Opportunity for Health in the United States: An Analysis using NLSY

Jie Chen

Session 6.6

We define a measure for equality of opportunity (EOp) for health and test the existence of health inequity in the Unite States using data from the National Longitudinal Survey of Young 1979 (NLSY79). Two decomposition methods are then used to study the channels through which inequality of opportunity arises. We simulate counterfactual health distributions and compute equity

indices for various policy states. Policy simulations suggest that the most effective way to reduce inequality of opportunity for health is through interventions on income condition on education attainment.

JEL codes: I14 D63 I31

Link to the PDF file

Inequality of Opportunity in Adult Health in Colombia

Johanna Fajardo-Gonzalez

Session 6.6

This paper measures inequality of opportunity in adult health using the 2010 Colombia's Living Standards and Social Mobility Survey. I use stochastic dominance tests to capture differences in the conditional distributions of self-assessed health. This test is an initial assessment of inequality emerging from early life circumstances such as parental education and household socioeconomic status in childhood. I also calculate a dissimilarity index to provide a measure of inequality of opportunity in health, and obtain the relative contributions of various circumstances to the variation in the dissimilarity index using the Shapley value decomposition. Because a limited set of circumstances are observed in the data, my estimation of inequality of opportunity provides a lower bound on the true inequality of opportunity. The findings suggest that there is substantial inequality of opportunity in adult health, and differences in household socioeconomic status during childhood and parental educational attainment appear to be the most important dimensions of inequality of opportunity in adult health.

JEL codes: D39, D63, I14

Link to the PDF file

Drivers of wealth inequality euro area countries

Sebastian Leitner

Session 6.3

This paper investigates the sources of inequality in household gross and net wealth across eight euro area countries applying the Shapley value approach to decomposition. The research draws on micro data from the Eurosystem Household Finance and Consumption Survey 2010. Dispersion in bequests and inter vivos transfers obtained by households are found to have a remarkable effect on wealth inequality that is stronger than the one of income differences. In Austria, Germany and Cyprus the contribution of real and financial assets inherited or received as gifts to gross and net wealth inequality attains about 40%. Nevertheless, also the distribution of household characteristics (age, education, size, number of adults and children in the household, marital status) within countries shapes the observed wealth dispersion.

JEL codes: D31, D63, O52

Link to the PDF file

Household wealth in the euro area: The importance of intergenerational transfers, homeownership and house price dynamics

Thomas Mathä, Alessandro Porpiglia, Michael Ziegelmeyer

Session 6.3

Results from the Eurosystem Household Finance and Consumption Survey reveal substantial variation in household net wealth across euro area countries that await explanation. This paper focuses on three main factors: i) homeownership, ii) housing value appreciation and iii) intergenerational transfers. We show that these three factors, in addition to the common household and demographic factors, are relevant for the net wealth accumulation process in all euro area countries, and that, using various decomposition techniques, differences therein, in particular in homeownership rates and house price dynamics, are important for explaining wealth differences across euro area countries.

JEL codes: D31, E21, O52

Link to the PDF file

The Relative Role of Socio-Economic Factors in Explaining the Changing Distribution of Wealth in the US and the UK

Frank Cowell, Eleni Karagiannaki, Abigail McKnight

Session 6.3

The US and the UK experienced substantial increases in net wealth over the period 1994/95-2005/06, largely driven by house price booms in each country. The distribution of these gains across households led to a slight increase in wealth inequality in the US but a substantial fall in inequality in the UK. We use a decomposition technique to examine the extent to which changes in households' socio-economic characteristics explain changes in wealth holdings and wealth inequality. In both countries we find that changes in household characteristics had an equalising effect on wealth inequality; moderating the increase in the US and accounting for over one-third of the fall in UK inequality.

JEL codes: D31, D63, I31

Link to the PDF file

The Great Recession, Austerity and Inequality: Evidence from Ireland

Michael Savage, Tim Callan, Brian Nolan, Brian Colgan

Session 6.7

Income inequality has been rising in most OECD countries since well before the onset of the Great Recession. The advent of the Great Recession and the widespread adoption of fiscal austerity policies have heightened concern about inequality and its effects not only on societies but also in potentially undermining recovery to robust growth. Against that background, we examine how the distribution of income has evolved in Ireland over the period from before the Great Recession though its onset and impact up to 2013, the year in which the bail-out programme was successfully

completed. While overall inequality (measured by the Gini coefficient) has been broadly stable throughout the recession in Ireland, analysis of decile shares and of the evolution of real incomes by decile shows that income positions in the bottom decile deteriorated during the Great Recession. Discretionary policy changes had a negative impact across all income deciles. The most negative impact was on the highest income decile (a loss of over 15 per cent), with the next highest impact on the bottom income decile (a loss of over 12 per cent). The combined impacts of discretionary and automatic elements of the tax and transfer system significantly reduced gross inequality in each year of the recession. Using the longitudinal element of SILC, the falling average income in the bottom decile was found to be driven more by large declines in the income of those entering the bottom decile in each year, rather than a decline in the income of those already in the bottom decile. Despite the stable level of overall income inequality during the Great Recession in Ireland, the analysis here has revealed significant changes in the underlying distribution of income.

JEL codes: D30, D31, H23

Link to the PDF file

Crisis, Austerity and Automatic Stabilization

Mathias Dolls, Clemens Fuest, Andreas Peichl, Christian Wittneben

Session 6.7

We analyze how reforms of tax-benefit systems in the period 2007-2013 have affected the automatic stabilization capacity for households as well as government budgets in the EU-27 based on harmonized European micro data and counterfactual simulation techniques. Factors like unemployment benefits or (progressive) income taxes can stabilize individual (and aggregate) income and smooth consumption demand in case of an income and unemployment shock. Our analysis allows to disentangle automatic changes in net government intervention from those that take place after explicit government legislature (discretionary changes) as well as changes in actual incomes and behavioral responses. We find automatic stabilizers to be generally heterogeneous across countries-both in levels and in terms of policy changes over the crisis. Stabilization coefficients vary from less than 25% in Eastern European countries to almost 60% in Belgium, Germany, and Denmark.

JEL codes: E63, H31, H12

Link to the PDF file

Tax-benefit systems, employment structures and the distribution of household disposable income:the UK versus Ireland

Denisa Sologon, Philippe Van Kerm, Cathal O'Donoghue

Session 6.7

Isolating the effect of various influences on income inequality is of great policy importance both in Europe and worldwide. The interest on this particular issue has further raised as the recent financial crisis greatly affected the earning profiles of the vulnerable and reshaped the disposable income distribution in many countries. Traditionally, comparison studies analysed the changes of inequality through the lens of summary indices. This method however, can be crude because of the considerable variations in the institutional and demographic settings. In particular, the intertwined

nature of the tax policies and the income distribution creates a complex nonlinear pattern than cannot be fully captured by indices.

Abstract The goal of this paper is to enhance understanding of the functioning of the tax-benefit systems in Europe and of their interactions with different employment, returns and demographic structures in shaping the distribution of disposable household income in Europe. We focus on two countries, the UK and Ireland, which were hit particularly hard by the recession. The paper proposes a unified framework where (i) we use comparable data (EU-SILC) to evaluate the nature of the differences in household disposable income inequality between the selected countries and (ii) extend the methodology developed in Bourguignon, Ferreira and Leite (2007) by developing a structural household income distribution model which incorporates the tax-benefit rules through micro-simulation techniques (EUROMOD), building on the progress made in tax-benefit simulations, and in decomposing income distributions. The contribution of tax-benefit systems, market composition, returns and demographic structures to the differences in inequality is assessed using (a sequence of) simulated counterfactual distributions of household disposable incomes that would prevail in each country, if these factors (and their subcomponents) were swapped between countries. The decomposition is evaluated by assessing the ceteris paribus effects and the interactions between components, as proposed by Biewen (2012). This simulation device is descriptive by nature, but the apparatus offers sufficient sophistication to allow detailed analysis of the way tax-benefit systems can interact with employment structures, return and demographics in determining the distribution of household disposable income and in explaining the cross-national differences in disposable income inequality.

Abstract We find that the drivers of the differences in inequality between the UK and Ireland did change during the crisis compared with 2007. The UK tax-benefit system determines a higher degree of inequality than the Irish tax-benefit system, effect which intensified during the crisis. The UK market composition renders a lower degree of inequality than the Irish structure, effect maintained during the crisis. Among the market subcomponents, the negative effect of in-work doubled. The UK returns were more equalizing than the Irish returns before the crisis and the effect tripled during the crisis. The main driver were labour market returns,: their effect reversed during the crisis indicating that the UK labour market returns became less disequalizing than Irish labour market returns. Private pensions in the UK are less disequalizing than Irish pensions, and the effect became roughly 50% stronger during the crisis. The Irish demographic characteristics render a higher degree of inequality than the UK demographics, and the effect became 10 times higher during the crisis.

JEL codes: C0;D3;J3

Link to the PDF file

Why is income inequality so high in Spain?

Carlos Gradín

Session 6.4

We investigate the reasons why income inequality is so high in Spain in the EU context. Taking Germany as a reference, we first show that the inter-country differential in inequality is driven by inequality among households who participate in the labor market. Then, we conduct an analysis of different household income aggregates, and decompose the inter-country gap in inequality into characteristics and coefficients effects based on regressions of the Recentered Influence Function for the Gini index. Our results show that higher inequality in Spain, as compared with Germany, is largely associated with the lower employment rates, especially in part-time jobs, the lower size of working units, as well as the lower attained education. Only the higher prevalence of extended families in Spain prevents the inequality gap to be even larger. This is mainly because

the pension system substantially reduces inequality among economically active households in Spain, compensating the weaker equalizing effect of taxes and the failure of other social benefits such as child or housing allowances. The analysis of the situation in 2008 helps to separate more permanent factors, such as the weak redistributive effect of the tax-benefit system or the role education and demographic variables, from the direct effects of the Great Recession on employment and the rise of unemployment benefits.

JEL codes: D63, I32, J21, J82.

Link to the PDF file

Why Has Inequality in Germany Not Risen Further after 2005?

Kai Daniel Schmid, Miriam Rehm, Dieter Wang

Session 6.4

In this paper we explore the reasons for the trend reversal in the development of household market income inequality in Germany in the second half of the 2000s. We analyse to what extent the increasing relevance of capital income as well as the rising share of atypically employed persons have affected the development of income inequality over the last two decades. We use household data from the German Socio-Economic Panel from 1991-2011 and decompose market income into four income sources: (1) household labour income from full-time work, (2) household labour income from atypical work, (3) household capital income from interest and dividends and (4) household capital income from rental and leasing. We apply the factor decomposition method suggested by Shorrocks (1982) to analyse the contribution of these income forms to overall inequality. Our results suggest that changes in the distribution of capital income, especially interest and dividend income, were a key factor both in the strong increase of inequality in the first half of the 2000s and in the subsequent trend reversal. This finding contrasts with the reasoning that labour market developments were the main cause behind changes in German inequality.

JEL codes: D31, D33

Link to the PDF file

Does economic freedom increase income inequality? Evidence from the EU countries

Salvador Pérez-Moreno, María J. Angulo-Guerrero

Session 6.4

Over the past decades there have been considerable changes in policies and institutions in favor of economic freedom in the EU countries. This trend coincides with widespread increases in income inequality in numerous member states. To what extent does economic freedom encourage inequality? This paper examines the relationship between economic freedom and income inequality in the EU countries using panel data for the 2000s. The empirical evidence suggests that economic freedom seems to entail greater income inequality. However, not all areas of economic freedom affect income distribution similarly. While government size and regulation appear to be robustly associated with income inequality, legal system and property rights, sound money, and freedom to trade internationally seem not to be significantly related with income distribution in the European context.

JEL codes: C82, D31, E02

Link to the PDF file

Time trends in food consumption economies of scale in Sri Lanka: An equivalence scales based analysis

Maneka Jayasinghe, Christine Smith, Andreas Chai, Shyama Ratnasiri

Session 6.8

When making welfare comparisons across different households, the possibilities for household consumption scale economies must be taken into consideration. The ability of household members to enjoy scale economies may not only depend on the household size, but also on the household spending capacity. While there exists the difference in food consumption patterns among the rich and the poor at a given point of time, the food consumption patterns may also drastically change, with changing income levels, advancing technologies and increasing mobility, over time. This study attempts (1) to discover the intertemporal trends in food consumption scale economies in Sri Lanka during the period of 1990/91 to 2009/10, (2) to examine what factors have contributed to such time trends in food economies of scale, and (3) to examine the extent to which the historical poverty rate patterns, based on per-capita income (PCI), vary significantly after food consumption scale economies are allowed for. The Engel equivalence scale approach is used for the analysis. The results reveal that equivalence scales have decreased over time, suggesting that households enjoy greater economies of food consumption in the present than in the past, except for among urban residents. We find that the changes in the household food consumption patterns together with electrification have made substantial contributions towards enhancing greater food scale economies in recent times. Our finding that the household enjoy greater food economies at present than in the past implies that actual poverty rates have declined even more over the last two decades than conventional poverty measurements suggest.

JEL codes: D12 I32 D63

Link to the PDF file

Fostered-in Children in Niger: A Test of the Cinderella Effect

Eliane El Badaoui, Lucia Mangiavacchi

Session 6.8

This paper deals with the time allocation of fostered-in and biological children in Niger. Time allocated by the child to market work, housework, and schooling are analysed simultaneously allowing for correlations among the error terms. The focus is on the impact of fostering-in, a common institution in West Africa, whereby a non-orphaned child is sent to live temporarily in other households to have better education opportunities. Fostering-in decision is treated as endogenous and estimates are performed on different sub-samples to test for heterogeneity in household composition. Results suggest that fostered-in children do more hours of both market and domestic work than children living with their biological parents, mostly for boys. Fostered-in girls are additionally discriminated in terms of school attendance. The estimated correlations between the unobservable factors affecting the child time allocation suggest that the time devoted

to domestic work does not prevent school attendance while market labour supply does. Children doing market labour are also more likely to perform household chores.

JEL codes: J13; J22; O12.

Link to the PDF file

Intra-household decisions and discrimination: Orphanage, bargaining and child labour

Katia Covarrubias

Session 6.8

A limited body of literature explores the relationship between changing household structure and childhood investments from the perspective of subgroups of children that are subject to marginalization due to external factors. This relationship is explored in the context of orphan children in Tanzania in the context of their participation in work versus schooling decisions, taking into consideration that this sub-population may be subject to lower investments, potentially through the channel of reduced altruism, if Hamilton's Rule of biological proximity and altruism is proven true. A panel of 3,457 orphan and non-orphan children obtained from a nationally representative survey collected in 2008 and 2010 in Tanzania is exploited to predict activity selection and participation as a function of the role of orphan status in connection with parental, caretaker and household characteristics, in tests of Hamilton's Rule, and intra-household bargaining in the child time use decision-making process. Orphan children are found to be marginalized within their households in terms of human capital investments vis-à-vis work responsibilities, potential channels pointing towards labour-substitution effects. Results are found to support Hamilton's Rule but not in rural areas. Bargaining is not consistently observed. The longitudinal analysis reveals evidence of the inter-generational transmission of education from parent to child.

JEL codes: D13; D64; J22

Link to the PDF file

Multidimensional Poverty Indices and First Order Dominance Techniques: An Empirical Comparison of Different Approaches

Iñaki Permanyer, Azhar Hussain

Session 6.1

In this paper we contrast different perspectives to the measurement of multidimensional poverty. Using data from 38 Demographic and Health Surveys around the developing world, we have compared the performance of two broad approaches: multidimensional poverty indices and first order dominance techniques (FOD). Our empirical findings suggest that the FOD approach might be a reasonable cost-effective alternative to the United Nations Development Program (UNDP)'s flagship poverty indicator: the Multidimensional Poverty Index (MPI). To the extent that the FOD approach is able to uncover the socio-economic gradient that exists between countries, it can be proposed as a viable alternative to the MPI with the advantage of not having to rely on the somewhat arbitrary and normatively binding assumptions that underpin the construction of UNDP's index.

JEL codes: I32; D63; O1

Link to the PDF file

More on multidimensional, intertemporal and chronic poverty orderings

Florent Bresson, Jean-Yves Duclos
Session 6.1

As noted by Bourguignon & Fields (1997), being poor can generate significant well-being losses, whatever the extent of observed deprivations, so that marginal changes that lift individuals out of poverty can result in non-marginal variations of poverty and well-being. This paper investigates the consequences of such discontinuities for obtaining robust ordering of intertemporal or multidimensional poverty and contrasts the corresponding stochastic dominance conditions with the one suggested in Duclos, Sahn & Younger (2006) and Bresson & Duclos (2015) that were proposed for classes of poverty indices that show continuity at the frontier of the poverty domain. We prove that the necessary and sufficient conditions for testing the robustness of poverty orderings with respect to the poverty frontier and the poverty index result in an impossibility of testing this robustness from a practical point of view. However, robustness checks can be performed when restrictions are added on the shape or on the location of the poverty frontier. We also show how the suggested tools can help study chronic poverty, the chronic poor being those in the bottom part of the poverty domain (see for instance Jalan & Ravallion, 2000, Foster, 2009).

JEL codes: D63, I3.

Link to the PDF file

Successful Ageing and Multidimensional Poverty: The case of Peru

Javier Olivera, Isabelle Tournier
Session 6.1

This study investigated the determinants of Successful Ageing (SA) in a sample of 4,151 Peruvians aged between 65 and 80 years and living in poverty. A key contribution of this study is to combine the conceptual appeal of SA to measure well-being in old age with the multi-dimensional poverty counting approach developed in the economic literature. This setting allows for moving beyond the dichotomy of successful and usual ageing to take advantage of the full distribution of success along a set of dimensions of well-being. The data are drawn from the ESBAM survey, which is the baseline to evaluate the non-contributory public pension program Pension 65. Nine indicators of SA have been used to assess the dimensions of physical health, functioning, cognition, emotional health, and life satisfaction. The variables associated with a higher number of satisfied indicators were male gender, younger old age, literate, employed, low food insecurity, good nutritional status, normal blood pressure, absence of disabilities, non-smoker, empowerment, good self-esteem, absence of mental disability, and less frequent contact with a social network. From a policy perspective, the results of this study report a remarkably stable effect of three variables affecting SA that can be relatively easy to measure, monitor, and influence by public intervention. These variables are food security, nutrition quality, and self-esteem.

Link to the PDF file

Cost of Inequality, the Uniform Rule and Cooperative Games

Giuseppe Pignataro, Arsen Palestini

Session 6.5

The assessment of income inequality can be investigated looking at the solution concepts of the cooperative game theory. We propose a multi-factorial decomposition of the Atkinson index by income sources and evaluate it as a cooperative game of the social cost of inequality. This framework extends the distributive and eficient properties of the uniform rule (Sprumont [35]) in a setup with heterogeneous income sources and single-peaked preferences. We provide an axiomatic foundation of this preference-based allocation rule, called weakly uniform rule, with a further comparison with the solution concept of nucleolus. Suficient conditions for their coincidence are therefore defined. Finally we characterize a welfare loss game expressed as the difference between the sum of inequalities generated by each source and the cost of the entire distribution. We show that income factors' contributions may increase or decrease the income inequality in the society ensuring different perspectives in terms of public policies.

JEL codes: C71; D33, D63; D71; I32

Link to the PDF file

Interpersonal Income Movements

Pauline Mornet

Session 6.5

In this paper, we focus on interpersonal income movement. We consider that an individual evaluates his/her change of income over time, not only according to his/her previous personal situation, but also according to the economic situation of the other individuals in the population. In that way each individual determines how much better/worse his/her situation has become with regard to other individuals' previous situation. By adapting a recent axiom of weak aggregation (decomposition) introduced in the literature of inequality, we characterize the general structure of interpersonally decomposable income movement measures. Income movement measures consistent with our decomposition process break down into interpersonal within-group and between-group income movement components that are easy to interpret. Furthermore such components provide more information than components ensuing from usual decomposition processes. Finally, we demonstrate that the structure of our interpersonal income movement measures is consistent with some well-known directional income movement measures.

JEL codes: J60, D31, D63

Link to the PDF file

An empirical analysis about the impact of income components on inequality in European countries

Michele Zenga, Leo Pasquazzi
Session 6.5

In this work we use data relating to the year 2012 of the European Union Statistics on Income and Living Conditions (EU-SILC) to analyze and compare the impact from income components, taxes and social contributions on inequality among households in four major euro area countries: France, Germany, Italy and Spain. To this aim we first aggregate, for each household, gross income components into four main components which reflect roughly speaking: (i) employee income, (ii) income from self-employment, (iii) social transfers and (iv) residual income components. Next, we evaluate the contribution from each income component to inequality in the distribution of gross household income as measured by Zenga's point and synthetic inequality indexes. At this step we apply a very simple decomposition rule which gives rise to readily interpretable results. Finally, to assess the impact from taxes and social contributions, we subtract the latter from gross household income and evaluate the inequality indexes on the distribution of net disposable household income as well.

JEL codes: D30, D31, D33

Link to the PDF file

Child poverty and Deprivation in Bosnia and Herzegovina: Application of National Multiple Overlapping Deprivation Analysis (N-MODA)

Lucia Ferrone, Yekaterina Chzhen
Session 7.2

This paper uses the MODA methodology to analyse child poverty and multiple deprivation in Bosnia and Herzegovina (BiH). According to recent analyses of nationally representative data from the Household Budget Survey for 2007 and 2011, children in BiH are more likely to live in poor and/or materially deprived households than the population as a whole. This paper analyses the incidence and intensity of multidimensional child deprivation as well as the overlaps between monetary poverty and multiple deprivation.

JEL codes: I31, I32, J13

Link to the PDF file

Using ordinal variables to measure multidimensional poverty in two South Mediterranean countries

Valérie Berenger
Session 7.2

The main goal of this paper is to highlight the empirical contribution of methodological refinements to "counting approach" poverty measures, and to use ordinal variables as a means of understanding multidimensional poverty in two South Mediterranean countries, namely Egypt and Jordan.

The paper relies on the general framework proposed by Silber and Yalonetzky (2013) to compare multidimensional poverty measures, such as the measure based on the Alkire and Foster approach (2011) and applied by UNDP in the construction of the MPI, and others that are sensitive to the distribution of deprivation counts for individuals, such as the family of poverty measures introduced by Chakravarty and D'Ambrosio (2006) and Rippin (2010), and those based on the extension of the Aaberge and Peluso approach, suggested by Silber and Yalonetzky (2013). The findings we obtained make it possible to highlight the complementarities between the various poverty measures. These complementarities prove to be particularly useful when analyzing poverty trends at the country level as well as when making a distinction between urban and rural areas.

JEL codes: I32, D63

Link to the PDF file

Multidimensional Poverty Dynamics: Methodology and Results for 34 Countries

Sabina Alkire, Jose Manuel Roche, Ana Vaz

Session 7.2

This paper sets out a systemic account of multidimensional poverty dynamic using the Alkire-Foster Adjusted Headcount Ratio and its consistent sub-indices. It also scrutinizes three approaches to assessing the pro-poorness of multidimensional poverty reduction. These techniques were then applied to the analysis of changes in multidimensional poverty based on the Global MPI and related destitution measure. The analysis focused on 34 countries and 338 sub-national regions, covering 2.5 billion people, for which there is a recent MPI estimation and comparable Demographic and Health Survey (DHS) dataset for analysis across time. First, it assesses overall changes in poverty and its incidence and intensity, and compares this with changes in .25 poverty. Next, utilizing the property of subgroup decomposability, it examines changes in the MPI and its consistent sub-indices over time across urban-rural regions, sub-national regions and ethnic groups. The decomposition analysis identified relevant national patterns, including those in which the pace of poverty reduction is higher for the poorest subgroups. Finally, the paper analyses the dynamics of a strict subset of the poor, who are identified as 'destitute' using a more extreme deprivation cutoff vector, and studies relative rates of reduction of destitution and poverty by country and region. In the course of this extensive empirical analysis, some further research questions emerge.

JEL codes: I3, I32, D63, O1

Link to the PDF file

How income mobility and income growth explain income inequality trends

Nicolas Herault

Session 7.6

Explaining and reconciling concomitant changes in income inequality and income mobility remains a challenging task. The departure point of this paper is to recognise that over any time period all individuals experience either an income gain or an income loss. The new method proposed in this paper shows how changes in inequality are explained by income mobility and the equalising effect of income growth. Moreover, it shows explicitly how the distributional effect of income growth

depends on the distribution of income gains and losses. One of the new insights of the application to US data for the 1970/2009 period is that most of the equalising effect of income growth occurs through income gains rather than income losses even in times of recession. The analysis also reveals some interesting trends regarding income mobility and the business cycle.

JEL codes: D31, D63

Link to the PDF file

Does Globalization Affect Top Income Inequality?

Rene Cabral, Rocio Garcia-Diaz, Andre Mollick

Session 7.6

Abstract: We re-examine in this paper the role of globalization on top income shares (five classes from top 0.1% to top 10% of the income distribution) for a sample of 15 economies over the period 1970-2004. We build on previous works by investigating financial globalization measures that complement trade openness. Our system GMM (SGMM) estimations allow for a robust treatment of the endogeneity between income concentration and GDP per capita (as well as with taxation or government size). We find three interesting new results. First, the financial integration measure based on portfolio equity and FDI stocks (GEQ) turns out to have a large impact on top income shares, suggesting that the channel through which globalization affects income concentration is through FDI/equity flows. Second, we find strong support for the progressivity of taxation: there is an almost one to one negative effect of higher tax on top income (top 0.1%), which declines monotonically until the top 10% class. Finally, partitioning the sample into GEQ below and above (panel) averages, for relatively low levels of financial globalization increases in GEQ lead to positive effects on income of the extremely rich households. No such result is found for more financially integrated economies, with only an indirect impact through higher domestic taxation on capital and labor income.

JEL codes Numbers: F31, F32, F33, F34.

Link to the PDF file

The Dynamics of Earnings in Germany: Evidence from Social Security Records

Timm Bönke, Matthias Giesecke, Holger Lüthen

Session 7.6

This paper employs high-quality German administrative data from 1960 to 2009 to shed light on the age related patterns of idiosyncratic earnings volatility over complete life cycles and how these patterns evolve from cohort 1935 to 1974. We analyze earnings dynamics by decomposing residual earnings auto-covariances into a permanent and a transitory component. Combining a rich model with very long data, we are the first to scrutinize differences of earnings dynamics across generations' life cycles. The general life cycle pattern is a permanent component increasing in age and a u-shaped transitory component. Comparing earnings dynamics across cohorts, overall variance rises through an increase in both components. Starting with the baby-boomer generation, the relative importance of the transitory component increases during early and late stages of the life cycle while the relative importance of the permanent component rises in between. This implies a structural shift in the variance composition.

JEL codes: D31, D33, H24.

Link to the PDF file

Nonlinearity and cross-country dependence of income inequality

Tuomas Malinen, Leena Kalliovirta

Session 7.3

We use top income data and the newly developed regime switching Gaussian mixture vector autoregressive model to explain the dynamics of income inequality in developed economies within the last 100 years. Our results indicate that the process of income inequality consists of two equilibriums identifiable by high inequality, high income fluctuations and low inequality, low income fluctuations. Our results also show that income inequality in the U.S. is the driver of income inequality in other developed economies. Both economic and institutional changes emanating from the U.S. explain this dominance.

JEL codes: C32, C33, D30

Link to the PDF file

Reversal of the Kuznets curve: Study on the inequality-development relation using top income shares data

Elina Tuominen

Session 7.3

Recently published top 1% income share series are exploited in studying the inequality-development association in 26 countries from 1900 to 2010. The top income shares data are of high quality and provide interesting possibilities for studying slow development processes. Because many empirical inequality-development studies have challenged the use of quadratic specifications, this study addresses the issue of functional form by applying penalized spline methods. The relationship between top 1% income shares and development is found to experience a reversal at the highest levels of development and, thus, a positive association is now observed in many "advanced" economies. In an additional analysis covering a shorter time period, the discovered positive relationship holds at the highest levels of development when controls for two sectoral measures are included.

JEL codes: N30, O11, O15

Link to the PDF file

Convergence and Mobility: Semiparametric Country Classification Sans Frontiers.

M. Grazia Pittau, Roberto Zelli, Gordon Anderson
Session 7.3

There is a long established practice in the empirical growth and convergence literature of classifying countries into groups or clubs by arbitrarily specifying group boundaries. A problem with this approach is that determining boundaries in a particular fashion also determines the nature of the group in a way that is often prejudicial for analysis. For example determining classes by quantiles automatically determines the size of the classes so that issues such as "the disappearing middle class" cannot be addressed. Similarly fixing class boundaries as some deterministic function of a location measure (some proportion of the mean or median for example) locks the progress of the class into the progress of the whole distribution. All of this must ultimately affect the way transition and class mobility behavior is evaluated. Here a semi parametric technique for class categorization without resort to arbitrarily specified frontiers is proposed and the convergence of classes and country mobility between them is studied in the context of the size distribution of per capita GDP of countries. Category membership is partially determined by the commonality of behaviors of their members with respect to their observable behavior. The determination is partial in the sense that only the probability of category membership in each category is determined for each country. Such an approach does not inhibit the size of classes or the nature of transitions between them. A study of the world distribution over the 40 years preceding 2010 reveals substantial changes in class sizes and mobility patterns between them which are very different from those observed in a fixed class size analysis. Furthermore the fixed class size analysis appears to exaggerate the degree of long run mobility. The onset of the 1990s appears to be a watershed, prior to that time countries were polarizing after that time there has been a substantial converging trend. The post 1993 mobility pattern has accordingly been welfare improving for rich and poor classes. With a decline in the welfare of the middle income group consistent with it merging with the poor group in the last five years of the observation period.

JEL codes: C14; I32; O1.

Link to the PDF file

Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany

Clemens Fuest, Andreas Peichl, Sebastian Siegloch
Session 7.7

Corporate taxes are often seen as measures to tax the rich. However, corporations cannot bear the burden of taxation and the taxes will be passed onto individuals which could have adverse redistributive implications. In this paper, we study the incidence of corporate taxes on wages. Because of endogeneity problems very few studies have been able to identify the incidence of corporate taxes on wages. We circumvent these problems by using an 11-year panel of data on 11,441 German municipalities' tax rates, 8 percent of which change each year, linked to administrative matched employer-employee data. Consistent with our theoretical model, we find a negative effect of corporate taxation on wages: a 1 euro increase in tax liabilities yields a 77 cent decrease in the wage bill. The direct wage effect, arising in a collective bargaining context, dominates, while the conventional indirect wage effect through reduced investment is empirically small due to regional labor mobility. High and medium-skilled workers, who arguably extract higher rents in collective agreements, bear a larger share of the corporate tax burden.

JEL codes: H2, D3, J3

Link to the PDF file

Income Distribution and the Current Account: A Sectoral Perspective

Jan Behringer, Till van Treeck

Session 7.7

We analyse the link between income distribution and the current account through a descriptive analysis for the G7 countries and a series of panel estimations for the G7 countries and a larger sample of 20 countries for the period 1972-2007. We find that, firstly, rising personal inequality leads to a decrease of household net lending and the current account, ceteris paribus. The effect is strong for top household income shares, but much weaker for the Gini coefficient of household income. This finding is consistent with consumption externalities resulting from upward-looking status comparisons. Secondly, an increase in the corporate financial balance leads to an increase in the current account, i.e., consumers do not fully 'pierce the corporate veil'. There is also tentative evidence that the corporate net lending and the current account increase as a result of a decline in the share of wages in value added. The joint effects of changes in personal and functional income distribution contribute to a significant degree to explaining the global current account imbalances prior to the Great Recession.

JEL codes: D31, D33, E21, F41, G3

Link to the PDF file

The Consequences of the Value-Added Tax on Inequality

Kaisa Alavuotunki, Jukka Pirttilä

Session 7.7

The adoption of the value-added tax has arguably been one of the most important tax policy measures worldwide, but is also one of the most heatedly debated. While some argue that the VAT has served as a useful tool to boost government revenue, others claim that it is also a regressive tax, contributing to increased inequality within the developing world. Using newly released high-quality macro data, this paper offers updated estimates of the revenue impacts of the VAT and the first estimates on its consequences on inequality at the macro level. The results from instrumental variable estimations reveal that the revenue consequences of the VAT have been less positive than earlier work indicates. VAT adoption has not led to increased inequality, suggesting that the move to the VAT has not undermined equitable development.

Link to the PDF file

Do tertiary dropout students really not succeed in European labour markets?

Sylke Schnepf
Session 7.8

Due to the huge expansion of tertiary education over the last decades tertiary dropout students constitute a growing distinctive group in labour markets. University dropout is regularly discussed as a 'negative' indicator, among others in research focusing on educational inequalities. However, research on actual career trajectories of dropout students is virtually non-existent. After developing a theoretical framework on dropouts' labour market chances in a cross-national context, the study estimates the association between tertiary dropout and career chances in 15 European countries. Using data from the 2011 Programme for the International Assessment of Adult Competencies (PIAAC) estimates derive from the application of logistic regressions and propensity score matching taking a variety of individual background characteristics including cognitive skills into account. Results indicate that dropout is repeatedly a 'positive' indicator in the labour market across countries since first dropout decision is often not permanent and second dropouts progress better than equally educated adults who never enrolled in tertiary education in about half of the labour markets examined. This questions whether indeed tertiary dropout increases educational inequalities, as educational inequality research generally concludes. Tertiary dropouts fare especially well in countries where the generally educated are underrepresented due to a low share of tertiary graduates and a high share of upper secondary educated with vocational orientation.

JEL codes: I21

Link to the PDF file

The Race Between Education and Technology Revisited. An Integrated Approach to Explaining Income Inequality

Petra Sauer, Narasimha Rao, Shonali Pachauri
Session 7.8

We analyze the presumed inequality increasing effect of technological change and the mitigating role of education in this context. In order to do so, we take an integrated approach in two respects. First, we look at a broad set of countries, including Advanced as well as Developing Economies, and analyze global and differential broad regional trends in income inequality. Second, we examine a broad set of determinants besides education and technological progress in order to disentangle the concerning effects. We assembled a unique dataset that combines multiple income inequality indicators, the income Gini coefficient and a ratio of extremes, with the most recent data on multiple drivers. In accordance with theoretical predications, we find that increasing income inequality can be explained by technological progress to a large extent. We were not able to find the strong mediating effect of education which is implied by Tinbergen's and Goldin and Katz's "Race between Technology and Education". In contrary, we find a more equal distribution of education to increase income inequality in the global sample as well as in Advanced Economies. After accounting for the demographic structure of the population the effect is not significantly different from zero. However, in Developing Economies, the rise in basic schooling has contributed to increasing the share of income accruing to the bottom decile of the income distribution.

JEL codes: I24, F16,F66

Link to the PDF file

Are income poverty and perceived financial difficulties dynamically interrelated?

Sara Ayllón, Alessio Fusco
Session 7.8

An individual's economic welfare can be assessed both objectively, through the standard income poverty approach, or subjectively on the basis of the individual's perceived financial difficulties. Despite being distinct concepts highlighting different dimensions of disadvantage, income poverty and perceptions of financial difficulties are likely to be dynamically interrelated. The aim of this paper is to determine whether there are dynamic cross-effects between both processes. Using Luxembourg survey data, our main result highlights the existence of a feedback effect from past perceived financial difficulties on current income poverty suggesting that subjective perceptions can have objective effects on an individual's behaviour and outcomes.

JEL codes: D31, D60, I32

Link to the PDF file

Fiscal Policy and Ethno-Racial Inequality in Bolivia, Brazil, Guatemala and Uruguay

Nora Lustig
Session 7.4

African descendants and indigenous peoples in Latin America face higher poverty rates and are disproportionately represented among the poor. The probability of being poor is between two and three times higher for indigenous and Afro-descendants than whites. Using comparable fiscal incidence analyses for Bolivia, Brazil, Guatemala and Uruguay, I analyze how much poverty and inequality change in the ethno-racial space after fiscal interventions. Although taxes and transfers reduce the ethno-racial gaps, the change is very small. I also assess whether fiscal policy is neutral or whether it favors the disadvantage or the non-disadvantaged group.

JEL codes: H22, I3, O1

Link to the PDF file

Earnings among nine ethnic minorities and the Han majority in China's cities

Bjorn Gustafsson, Xiuna Yang
Session 7.4

This paper asks if economic growth and steps towards a market economy have affected earnings gaps between the Han and nine large urban ethnic minorities: Zhuang, Hui, Manchurian, Tujia, Uighur, Miao, Tibetan, Mongol and Korean. It also asks how earnings premiums and earnings penalties have changed for the nine ethnic minorities. For the analysis we use a subsample of the 2005 China's Inter-Census Survey. We find examples of three different changes over time: An ethnic minority for whom earnings development has been more favourable than for the Han majority; a second category in which development has been similar; and a third category in which development has been unfavourable. We conclude from the analysis that it can be misleading to infer the experience of one ethnic minority from that of another.

JEL codes: J15; J31; J7;

Link to the PDF file

Ethnic Fractionalization and its Effect on Social Cohesion: "It's the Social Exclusion, Stupid!"

Irene van Staveren, Zahid Pervaiz

Session 7.4

The theory about missing links of development often lacks behind the empirical estimations of such links. A consensus has emerged that ethnic fractionalization has a negative impact on development and growth, also when controlled for income inequality. The assumed channel is social cohesion. We analyse the effect of fractionalization on social cohesion with a different inequality measure, namely a social measure of inequality: the Inclusion of Minorities Index. Our results indicate that it is social exclusion, which reduces social cohesion, rather than diversity as such. We conclude that future studies of social cohesion may benefit from using measures of social exclusion instead of ethnic diversity.

JEL codes: O11; Z13.

Link to the PDF file

On the decomposition by sub populations of the point and synthetic Zenga inequality indexes

Michele Zenga

Session 7.1

The Radaelli (2008) decomposition by k subpopulations of the Zenga (2007) point index is based on the decomposition of the point uniformity measure. In this work, we first obtain, by the use of the relation between the mean value M of a mixture and the means of the k subpopulations of the mixture, a k by k additive decomposition of the difference between the upper mean and the lower mean. Then, dividing both sides of the above mentioned decomposition we obtain a k by k additive decomposition of the point measure. From this latter decomposition, with simple "aggregations", we obtain a k additive decompositions of the point measure, and the decomposition of the point measure into the within and the between components. The decompositions proposed in this paper are applied to the net disposable income of the 8151 Italian households partitioned in three macroregions, supplied by the 2012 Bank of Italy sample survey on household income and wealth. This application shows that the values of the conditional relative frequencies a(g|h)and p(l|h) help in the interpretation of the 3 by 3 contributions Bhlg as well as in the interpretation of the 3 contributions Bhl..

JEL codes: C1,R2,C40

Link to the PDF file

The decompositions of rank-dependent poverty measures using ordered weighted averaging operators

Aristondo Oihana, Ciommi Mariateresa
Session 7.1

This paper concerns with rank-dependent poverty measures and shows that an ordered weighted averaging, hereafter OWA, operator is underlying in the definition of these indices. The dual decomposition of an OWA operator into the self-dual core and the anti-self-dual remainder allows us to propose a decomposition for all the rank-dependent poverty measures in terms of incidence, intensity and inequality. In fact, in poverty fields it is well known that every poverty index should be sensitive to the incidence of poverty, the intensity of poverty and to the inequality among the poor individuals. However, the inequality among the poor can be analyzed in terms of either incomes or gaps of the distribution of the poor. And depending on the side we focus on, contradictory results can be obtained. Nevertheless, the properties inherited by the proposed decompositions from the OWA operators obliges the inequality components to measure equally the inequality of income and inequality of gap overcoming one of the main drawbacks in poverty and inequality measurement. Finally, we provide an empirical illustration showing the appeal of our decompositions for some European Countries in 2005 and 2011.

JEL codes: C02, C44, D63, I32

Link to the PDF file

A class of income polarization indices based on decomposable inequality measures

Chiara Gigliarano, Daniel Nowak, Karl Mosler
Session 7.1

The well-known index of income bi-polarization proposed by Wolfson (1994) requires the two groups to be split according to the median income and, therefore, to be non-overlapping. Aim of this paper is to propose an extension of the Wolfson index that allows for any possible partition of the population in two or more (also overlapping) groups. Our class of indices maintains the simplicity and immediate comprehension of the Wolfson index, though being much more flexible. An application is then provided to German and Italian income data.

JEL codes: I32, D63, C43

Link to the PDF file

Inequality and Poverty in Africa: Regional Updates and Estimation of a Panel of Income Distributions

Duangkamon Chotikapanich, William Griffiths, Prasada Rao, Gholamreza Hajargasht, Charley Xia

Session 7.5

The African region is of critical importance in the context of global poverty and inequality. Over the last two decades, there has been uneven growth performance among countries from the region. Africa is the only region where the number of absolutely poor, as measured by the World Bank's international poverty lines of /day and /day, has been increasing over the last two decades. A key determining factor is the extent of inequality and the nature of income distributions among African nations. With the availability of 2005 and 2011 purchasing power parity and per capita real income data from the International Comparison Program (ICP) and increased coverage and availability of country-specific income distribution data over recent years, it is now possible to update previous work investigating changes in inequality and poverty in Africa. Chotikapanich et al (2012) estimated global and regional inequalities for 1993 and 2000. Warner et al (2013) extend the results to include those for 2005 by making use of purchasing power parity data from the 2005 ICP round. The present paper has two objectives. First objective is to update previous estimates for inequality and poverty in Africa for 1993, 2000 and 2005 and to extend the estimates to include results for 2010. Second objective, given the importance of the effect of the global financial crisis on Africa (Milanovic 2009), is to compile a panel of income distributions for a large number of countries in Africa for the years between 1997 and 2010. Where annual country-specific income distribution data are available, we fit mixtures of lognormal distributions to that data. To overcome data unavailability for some country-year combinations, we develop a technique to interpolate and extrapolate income distributions for years and countries for which no data are available. Extensive and comprehensive analysis is done on the change in income distributions, inequality and poverty for the region as a whole and for relative movements between countries in the region.

JEL codes: C13, C16, D31

Link to the PDF file

Intergenerational mobility and the rise and fall of inequality: Lessons from Latin America

Guido Neidhoefer

Session 7.5

Countries with a high level of inequality show also a high association between parents' and childrens' economic outcomes; i.e. low intergenerational mobility. So far, this relationship has been investigated in cross-country comparisons and for rising inequality. This study focuses on countries where inequality has fallen in an analysis between and within countries. The laboratory for this exercise is Latin America: On the one hand, the region displays the world's highest levels of inequality and intergenerational persistence of socioeconomic status; on the other, while worldwide inequality has been rising, most Latin American countries experienced a significant decrease in inequality in the last decade. Multiple sources of data are used: i) the public opinion survey Latinobarometro. ii) the Socio-Economic Database for Latin America and the Caribbean. iii) World Bank Data. iv) Harmonized micro data from several household surveys of various Latin American countries. All data sources share the great advantage of comparability between countries and over time. One stylized finding, is that in some countries where inequality has significantly fallen,

measurably higher intergenerational mobility can be observed. Moreover, changes in inequality and changes in mobility are negatively associated. However, this relationship is not true for all of the analyzed countries. Still, the micro analysis reveals that higher inequality influences intergenerational mobility negatively in a between and within country set up. Hence, patterns which has been identified in the past literature to influence intergenerational mobility (e.g. economic growth, returns to education, public investment in human capital and other institutional factors) are evaluated, shedding light on the different developments across countries.

Link to the PDF file

Spatial Inequality and Stochastic Convergence in India: 1960-2011

Sanghamitra Bandyopadhyay, Jan Luksic

Session 7.5

We track trends of spatial inequality across Indian states to test for stochastic convergence in relative incomes between 1960-2011. We use a set of new tools in the time series literature to document the relative income trends. Unit root tests suggest that the shocks to relative incomes across the Indian states are permanent, thus contradicting the stochastic convergence hypothesis. Interval estimates of the largest autoregressive root for the relative incomes of 15 Indian states are very wide. We also estimate confidence intervals of the half life of the relative income shocks that are robust to high persistence and small samples, and our results suggest that in most cases they die out within 10 years, suggesting mean reversion. Finally, we estimate a fractionally integrated model for the relative income process and obtain mixed evidence of mean reversion in the data, with six out of the fifteen states experiencing mean reversion. In sum, while the evidence obtained does not support the stochastic convergence hypothesis, new metrics designed specifically to deal with intermediate stages, such as that of mean reversion, reveal that the relative incomes have a relatively short half life and that some states' relative incomes are mean-reverting.

JEL codes: C32, D31, O47

Link to the PDF file

How to Identify a Linked Subset of Multidimensionally Poor? An Ordinal Approach

Sabina Alkire, Suman Seth

Session 8.2

A reduction in overall poverty may not necessarily improve the situations of the poorest. In order to pay particular attention to the poorest, it is crucial to distinguish them from the moderately poor population. In income poverty measurement, this distinction is made possible by merely defining a more stringent poverty cutoff. In this paper, we explore such distinction mechanisms in a multidimensional counting framework, under the practical assumption that many variables for assessing deprivations are ordinal. We particularly examine two approaches that capture two distinct forms of stringent multidimensional poverty. In order to empirically assess the distinction between these two approaches, we examine the evolution of multidimensional poverty in Nepal. Our findings show crucial differences between these two approaches.

JEL codes: I3, I32, D63, O1

Link to the PDF file

Differences in needs and multidimensional deprivation: a household-based approach to measurement

Yadira Diaz

Session 8.2

Most of the multidimensional policy indices currently in use select the household as their unit of analysis. However, they either assume the same set of needs across households or ignore that demographically dissimilar households have significantly different needs. Therefore, small households register a systematically lower number of dimensions in deprivation, and conversely, larger households register a systematically larger number of dimensions in deprivation. Household comparability, in those cases, is unsatisfactory. This paper proposes a family of multidimensional deprivation indices based on metrics that account for differences in needs at the household level. Our family of indices constitutes a parametric measurement approach that enhances household comparability. It attempts to describe how much deprivation households of different sizes and compositions may exhibit in order to be catalogued as equivalently deprived. We built upon the Alkire and Foster (2011) family of multidimensional poverty indices, proposing to discount for household needs and to take into account the scale economies that arise at this level. We demonstrate the advantages of our proposed method using the 2013 Paraguayan living conditions survey and simulation methods. Final results shed light on the relevance of accounting for differences in needs across demographically heterogeneous households. This paper provides a tool for policy makers to rank multidimensionally deprived households.

JEL codes: D63, I32

Link to the PDF file

Assortative mating, joint labour supply and spouses earnings correlation: which do matter for long-term trends in US household earnings inequality?

Koen Decancq, Andreas Peichl, Philippe Van Kerm

Session 8.6

We study the impact of changes in assortative mating, in spouses joint labour supply and earnings correlation on trends in household earnings inequality in the US between 1978 and 2008. In this period, we note an increase in household earnings inequality as well as an increase in the correlation between earnings of both partners in the household. To quantify the impact of increased assortative mating on household earnings inequality, we use a novel copula-based decomposition technique. In particular, we quantify the contribution to increased household earnings inequality of three different channels: (1) the changed assortativeness in the marital selection based on demographic variables such as education and race; (2) the changed assortativeness in the joint labor supply decision and (3) the changed assortativeness in earnings in two-earner couples. We estimate a detailed parametric model of the joint earning distribution of husbands and wives based on data from the March Supplement of the Current Population Survey (CPS). A counterfactual analysis based on

this model reveals that the contribution of these channels—that is the change in assortativeness—had very limited contribution to the change in income inequality overall.
JEL codes: C16, D31, J12

Link to the PDF file

Social assistance and labor market intra-household decisions. Evidence from a regression discontinuity design

Marcelo Bergolo, Estefania Galvan
Session 8.6

This paper investigates for intra-household responses in labor market behavior of couples to a cash transfer program in Uruguay –Asignaciones Familiares-Plan de Equidad (AFAM-PE), and explores whether changes in women´s own resources control affect additional domains, as their responsibility in specific decisions of household. The identification strategy exploits both the fact the monetary transfer is targeted to women and a local random assignment into the AFAM-PE which exogenously change the intra-household distribution of resources across applicant households. Based on a regression discontinuity design and in a follow-up survey, the study finds that the financial incentives of the program have significant negative effects on the formality choice of women at the eligibility cut-off, but no robust effect on the margin of employment. This responses appears to be associated to movements across registered and unregistered jobs, and do not depend on their partner´s labor supply. In contrast, there are no significant evidence of labor market responses of men to AFAM-PE. When other spheres of the household decision-making are explored, suggestive evidence is found that the AFAM-PE increase the likely that women in eligible households make decisions (according to their perceptions) on her own.
JEL codes: H31, O15, D13

Link to the PDF file

Sharing Rule and Intra-Household Inequality

Jean-Paul Chavas, Martina Menon, Pagani Elisa, Perali Federico
Session 8.6

We investigate the relationship between the sharing rule and intra-household inequality in the context of a collective household model. By examining how individual preferences affect the relationship between centralized and decentralized demand, we show that, in general, income shares are equal to the product of two weights: the Pareto weight and a weight reflecting income effects across individuals. We also show how the latter weights play a role in the evaluation of both household welfare and intra-household inequality as measured by a family of entropy indexes, such as the Theil index, that are a function of the sharing rule.
JEL codes: D11, D12, D13.

Link to the PDF file

On the poverty-happiness feedback loop

Sara Ayllón
Session 8.3

This paper studies to what extent poverty and psychological well-being can be thought of inputs in a feedback loop by which poverty may exert an influence on unhappiness and, at the same time, past low levels of general satisfaction with life may lead to economic hardship. This interrelationship is studied by means of an econometric strategy with feedback effects using data from the German Socio-Economic Panel (SOEP) for the period between 1992 and 2010. Results indicate that when accounting for high-order dynamics, past poverty experiences do not increase the probability of feeling unhappy which can be interpreted as a certain degree of psychological adaptation to poverty. On the other hand, unhappiness has a (short-lived) positive influence on the probability of being in poverty. Evidence suggests that psychological uneasiness can be added as an explanation to persistent poverty.

JEL codes: I31, D60

Link to the PDF file

Absolute Wealth, Relative Deprivation and Relative Satisfaction as Determinants of Depressive Symptoms: Evidence From Mexico

Lucio Esposito, Adrian Villasenor
Session 8.3

Abstract. Adopting Fehr and Schmidt's (1999) framework of 'self-centred inequality', we study absolute achievement, relative deprivation and relative satisfaction as predictors of depressive symptoms. Our empirical analysis is based on the 2012 Mexican Demographic and Health Survey, which is nationally representative and covers 43,912 individuals. We find that each of those variables is a significant predictor for the intensity of depressive symptoms, with a positive coefficient for relative deprivation and negative coefficients for absolute wealth and relative satisfaction. In addition, we show that the inclusion of interaction terms enables a better understanding of the role of demographic variables such as gender and age, which have received particular attention in the medical literature.

JEL: D63, D31, I14

Link to the PDF file

Endogenizing take-up of social assistance in a microsimulation model: A case study for Germany

Jürgen Wiemers
Session 8.7

Microsimulation studies typically assume that all entitlements to means-tested benefits are actually claimed by eligible households, despite a large body of research that suggests that take-up rates are substantially below 100%. The assumption of full take-up tends to exaggerate the simulated increase in caseloads and fiscal costs of a social policy reform. This paper investigates the impact of non-take-up for two hypothetical scenarios, namely increasing and decreasing the base amount of social assistance in Germany by Euro 100 per month. We find a substantial effect of considering non-take-up on the simulated change in fiscal costs and in particular on the change in caseloads, where the full take-up assumption exaggerates the latter change by a factor of about two.

JEL codes: I38, H31, C15

Link to the PDF file

Determinants of European wage differentials: a microeconomic analysis

João Pereira, Aurora Galego

Session 8.7

In this paper we further investigate the determinants of wage differences in Europe, by decomposing countries' wage differences across the wage distribution. Unlike previous studies, we analyse the contribution of covariates to the wage decomposition components (wage structure and wage composition) by employing a recent methodology proposed by Firpo et al (2009) and Fortin et al. (2011). We use data from the EU-SILC data base for male workers from 9 European countries. We conclude that both wage structure and wage composition effects contribute to explaining wage differentials, but that wage structure is more important. Differences in the estimated constant seem to be the most significant factor explaining the importance of the wage structure effect. The differences in the composition effect, in turn, are explained by differences in education, in occupational structure, in the percentage of workers with supervisory responsibilities and to a lesser extent by differences in the industrial structure and in workers' level of experience.

JEL codes: C21; D31; J01.

Link to the PDF file

Using the Household Finance and Consumption Survey (HFCS) for a joint assessment of income and wealth taxes: Prospects, limitations and suggestions for policy simulations

Sarah Kuypers, Gerlinde Verbist, Francesco Figari

Session 8.7

We explore the prospects for using the Eurosystem Household Finance and Consumption Survey (HFCS) dataset as an underlying micro-database for policy simulation across euro zone countries. In particular, we consider the issues to be addressed and the advantages arising from building a database from the HFCS for the EU tax-benefit model, EUROMOD. EUROMOD is currently running mostly on EU-SILC data, but is built in a way that maximises its flexibility and possibility to simulate tax-benefit policies on different databases. This will allow expanding the policy domains currently covered in EUROMOD with dimensions like wealth taxation, which recently gained much prominence, in the academic as well as the public debate. As the HFCS only contains gross income amounts which are not suitable for redistributive analysis, the purpose of this paper is to derive net incomes by simulating the gross-to-net transition with EUROMOD taking into account all important details of the social security and personal income system. In order to identify the issues and illustrate their importance a trial database for Belgium is constructed. We conclude that, although transforming the HFCS into a database for EUROMOD would require a significant amount of effort, this is surely to be worthwhile because of the interesting possibilities to extend the policy scope of EUROMOD and to consider jointly the redistributive effect of income and wealth taxes. Moreover, the derivation of disposable income allows one to consider the joint distribution of income, wealth and consumption, which can be used to analyse issues relating to inequality and poverty.

JEL codes: C15, H24, I3

Link to the PDF file

Decline in inequality and formalization of labour market. The case of urban salaried workers in Argentina and Brazil in the 2000s

Roxana Maurizio

Session 8.4

Although inequality and labour informality are still distinctive characteristics of Argentina and Brazil, during the last decade the two countries have been successful in reversing the negative trends of the 1990s. This paper presents a comparative analysis of the labour formalization process that took place in Argentina and Brazil during the 2000s, through a study of the flows towards labour formality, the causes behind them and the interrelations of this process with the changes occurred in labour institutions and with the reduction in income inequality. The study contributes to two debates. The first one refers to the role of labour market flexibilization in employment formalization. The second one is related to the reduction of income inequality. Most of the literature places emphasis on the evolution of the returns to education. This study complements this approach by analysing the contribution of formalization to the reduction of inequality in these countries. The results show that labour formalization has reached all the categories of workers, has been concomitant with real minimum wage increases, and has had equalizing effects.

JEL codes: D31, J31, J46

Link to the PDF file

Distributional Effects of Subsidizing Retirement Savings Accounts: Evidence from Germany

Giacomo Corneo, Carsten Schröder, Johannes Koenig

Session 8.4

We investigate the distributional effect of the Riester scheme, a German private pension subsidization program. A recently collected survey data set by the German central bank called Panel of Household Finance (PHF) allows very accurate calculations of the subsidies received by participants. The distribution of the subsidy total is clearly unequal with 38% of the aggregate subsidy accruing to the top two deciles of the population, but only 7.3% to the bottom two. And yet, we find that the Riester scheme is mildly progressive when looking at standard inequality measures. To reconcile these contradictory impressions of the Riester scheme we decompose its impact into effects due to differential participation and due to differential subsidization. Participation is the most important driver of the inequality enhancing effects, while the intensity of subsidization works in the opposite direction. However, the direction of the intensity effect is mainly due to low incomes at the bottom of the distribution and not due to generous subsidies. Regressions

of the participation decision suggest that it is the form of subsidization that largely influences participation.

JEL codes: D31, H55, J32, D14, I38

Link to the PDF file

Do Political Connections Depress the Union Wage Effect? Evidence from China

Yang Song, Jidong Yang, Qijing Yang

Session 8.4

The average labor income in China has been growing very fast over the past thirty years. However, labor income inequality has also been increasing during this time period. In order to increase labor income and maintain social stability, China's government tries to encourage the development of firms' trade unions to strengthen the bargaining power of workers, and increase the proportion of labor remuneration in primary distribution. However, the Chinese unions differ from other countries in that they are generally subordinate to the Chinese government. According to the Chinese Union Law, each level of the government must establish the local federation of trade unions to manage all unions within respective jurisdictions, and the Chinese Federation of Trade Unions is responsible for managing all local-level trade unions and belongs to the Chinese central government.

Given the unique features of the Chinese unions, we examine how the political connections would affect the functioning and impact of labor unions in China's context based on a survey of 1268 firms in 12 cities. We first develop some theoretical hypotheses to elaborate how unions can affect wages and how political connections would interact with the union wage effect, and then utilize the dataset to test our theoretical predictions. We verify our theoretical hypotheses through the empirical analysis that unionization can increase wages, but this union wage effect is significantly depressed by firms' political connections. Through a detailed analysis of the mechanism behind the empirical results, we conclude that unions increase wages by strengthening the bargaining power of workers, while this bargaining power can be weakened by firms' political connections.

JEL codes: J51, D33, K31

Link to the PDF file

Ranking Alternative Non-Combinable Prospects: A Stochastic Dominance Based Second Best Solution

Gordon Anderson, Teng Wah Leo

Session 8.1

The problem considered here is that of dealing with the "incompleteness" property of Stochastic Dominance Orderings by quantifying the extent to which distributions differ when there is no dominant distribution at a given order. For example consider the frequently encountered policymaker's choice problem when facing a set of distinct, non-combinable policy options. When policies are not combinable, the classic comparative static or first best solution to the choice problem is not available, and the policymaker's problem becomes one of identifying the second best solution. The approach proposed here is an elaboration of a technique employed in the optimal statistical testing

literature. It is supposed that policies could be combined so that the ideal first best "stochastically dominant" optimal envelope policy outcome is constructed under the policymaker's given imperative. Then the second best policy whose outcome most closely approximates this unattainable ideal is selected by employing a statistic that measures proximity of alternative policies to that ideal. The statistic is shown to obey an Independence of Irrelevant Alternatives proposition. The paper concludes with 3 illustrative examples of its use.

JEL codes: I31, I32.

Link to the PDF file

Second-Order Discrimination and Stochastic Dominance

Rafael Salas, John Bishop, Lester Zeager

Session 8.1

We offer an alternative formulation of the second-order discrimination curve (SDC) that yields orderings of distributions equivalent to those from second-order stochastic dominance. In the original formulation of the SDC, this equivalence is only satisfied for uniform distributions. Our formulation is a natural refinement of the first-order discrimination curve and the zero-moment interdistributional Lorenz curve. It also has a clear economic interpretation, as it compares the probabilities that randomly selected individuals in the reference and comparison distributions belong to subgroups having the same per capita income. We apply this measure to distributions of income for seniors (age 50 and older; the baby boomers) and nonseniors in the U.S. and find that the nonseniors second-order dominate the seniors, whether we compare truncated income distributions for discrimination (economic advantage) or compare the entire distributions for stochastic dominance, whereas first-order comparisons of the same groups are inconclusive.

JEL codes: D31, I3, C1

Link to the PDF file

Tests for Richness and Poorness: A Stochastic Dominance Analysis of Income Distributions in Hong Kong

Sheung-Chi Chow, Francis Lui, Ma. Rebecca Valenzuela, Wing-Keung Wong

Session 8.1

In this paper, we propose the use of new stochastic dominance tests to achieve a more robust analysis of relative welfare levels in the study of income distributions. In particular, we applied the theory of descending stochastic dominance to enrich results that are obtained using the standard stochastic dominance techniques. The feasibility of the proposed approach and the new tests of richness and poorness developed for it are demonstrated using distributions of incomes in Hong Kong. Empirically, we find that between the years 2001, 2006 and 2011, the year 2006 had the most favourable income distribution in the sense of having the highest welfare level in the income distributions. Across age groups, our new test of poorness reveal that, at the lowest income levels, the younger age groups have less proportions of poor income units compared to their older counterparts; while our test for richness show that, at the upper end of the income scale, the 65+ age group has the higher proportions of very rich individuals compared to all the other groups in the distribution. These help explain the high level of inequality in Hong Kong.

JEL codes: C19, C44, I30

Link to the PDF file

A comparison of major world inequality data sets: LIS, OECD, SILC, WDI and EHII

James Galbraith, Jaehee Choi, Béatrice Halbach, Aleksandra Malinowska, Wenjie Zhang
Session 8.5

We present a comparison of coverage and values for five inequality data sets that have world-wide or major international coverage and independent measurements that are intended to present consistent coefficients that can be compared directly across countries and time. The comparison data sets are those published by the Luxembourg Income Studies (LIS), the OECD, the European Union's Statistics on Incomes and Living Conditions (SILC) and the World Bank's World Development Indicators (WDI).The baseline comparison is with our own Estimated Household Income Inequality (EHII) data set of the University of Texas Inequality Project. The comparison shows the historical depth and range of EHII and its broad compatibility with LIS, OECD and SILC, as well as problems with using the WDI for any cross-country comparative purpose. The comparison excludes the large World Incomes Inequality Database (WIID) of UNU-WIDER and the Standardized World Income Inequality Database (SWIID) of Frederick Solt; the former is a bibliographic collection and the latter is based on imputations drawn, in part, from EHII and the other sources used here.

JEL codes: C89, D63

Link to the PDF file

Global inequality: Relatively lower, absolutely higher

Miguel Niño-Zarazúa, Laurence Roope, Finn Tarp
Session 8.5

This paper measures trends in global interpersonal inequality during 1975-2010 using data from UNU-WIDER's World Income Inequality Database. The picture that emerges of the evolution of inequality during the past 35 years using 'absolute,' and even a 'centrist' measure of inequality, is found to be irreconcilable with the results obtained using standard 'relative' inequality measures such as the Gini or Mean Log Deviation. Relative global inequality has declined steadily and substantially over the decades, driven by declining inequality between countries, in large part resulting from the emergence of India and China. In contrast, 'absolute' inequality, as captured by the Variance, has increased dramatically and unabated. Like the Variance, our 'centrist' inequality indicator, the Krtscha measure, also registers a pronounced increase in inequality over the decades. Unlike the Variance, but in line with our 'relative' inequality measures, the Krtscha registers a notable decline in global inequality during 2005 to 2010. A critical question posed by our findings is whether it is plausible that 'absolute' and 'centrist' measures of inequality would ever signify declining inequality in the face of global economic growth of the scale experienced during recent decades. Using counterfactual analyses we conclude that it is not feasible for 'absolute' measures to decline in such circumstances but possible, if very demanding, for 'centrist' measures like the Krtscha to do so.

JEL codes: D31, D63, E01, O15

Link to the PDF file

The global distribution of education: 1970-2010

Vanesa Jorda
Session 8.5

In this paper, we introduce a comprehensive database for mean years of schooling and inequality measures of education which aims to provide more accurate estimates than the existing series. Previous works compute mean years of schooling as a weighted average of the official duration of each cycle and attainment rates, thus omitting differences in educational achievement within levels of education. Some studies break down educational cycles into complete and incomplete to partially overcome this shortcoming. The main limitation would be the assumption that all individuals who did not complete the level attained the same years of schooling. This choice yields biased results and, more importantly, the direction of the bias cannot be approximated. We use a flexible parametric functional form to estimate the distribution of education in 143 countries over the period 1970-2010. This methodology allows us to impose more reliable assumptions about the distribution of years of schooling within each educational stage. We present a complete picture of the global distribution of schooling. Our results point out a steady expansion of all levels of education along with a gradual decrease in inequality over the last 40 years.

JEL codes: O15, I24, C18

Link to the PDF file

Middle class income dynamics and mobility: an Italian perspective

Chiara Assunta Ricci
Session 9.3

This paper aims to investigate the drivers of mobility of the middle class in Italy and assessing the changes of middle class members vulnerability during the beginning current recession phase. To this aim, we use the longitudinal component of the SHIW dataset and cluster individuals in three groups (low, middle and high class) according to income thresholds obtained following the method proposed by Esteban, Gradín, and Ray (2007). The findings reveal a general impoverishment of the middle class due to the economic recession and show an increasing rigidity of the Italian social structure, because lower entry and exit rates between classes emerges after 2008. Furthermore, through a multinomial logit regression, we study the association between downward or upward movements of middle class members and their characteristics, also focusing on the role played by some demographic and economic events affecting individuals and households in the observed time period (i.e. changes in household composition and employment statuses). Comparing regressions' results for the periods 2002-2006 and 2008-2012, different probabilities to move characterise the various groups of individuals and, mostly, the association between the occurrence of positive and negative trigger events and individual mobility strengthens in 2008-2012, maybe due to the growing weakness of the welfare state and the increasing inability of the families to cope with the difficulties.

JEL codes: D31; D63; I32

Link to the PDF file

Family background and youth labour market outcomes across Europe

Gabriella Berloffa, Eleonora Matteazzi, Paola Villa
Session 9.3

The present work investigates the intergenerational transmission of unemployment and inactivity in a cross-country comparative analysis. Using the 2005 and 2011 EU-SILC ad-hoc modules on intergenerational transmission of disadvantages, we study the extent to which parental educational and occupational background affect youth labour market outcomes. We focus on young people aged 25-34. Empirical findings provide evidence of an intergenerational persistence of worklessness. Having had working parents during adolescence positively affect youth labour market outcomes in all country groups. Separate estimation by gender reveals that the mothers' working condition systematically and largely reduces their daughters' inactivity, while fathers' employment generally increases sons' probability to be employed. Empirical evidence suggests that policies should pay attention to both youth and parental unemployment.

JEL codes: J16, J62, J64

Link to the PDF file

Labour Outcomes and Family Background: Evidence from the EU during the recession

Silvia Avram, Olga Canto
Session 9.3

A large body of literature in economics aims to understand the transmission mechanisms through which intergenerational economic and social advantage persists. Evidence shows that individuals born into low socioeconomic status families tend to experience worse labour outcomes when adults than otherwise similar peers. Recessions, however, may have a significant impact on how certain elements of this transmission process operate in some countries but not in others (e.g. due to diverse changes in returns to education or occupation and the role of family networks). Using EU-SILC data for 2005 and 2011 we compare the different role of family background on labour outcomes in five EU countries before and after the Great Recession using a multidimensional family background that avoids undesirable cohort effects. Our results suggest that family background affects job quality (wages and being on a temporary contract) beyond its effect on education but we do not find any evidence that this effect is moderated by the economic cycle.

JEL codes: I24, I26, J31

Link to the PDF file

The credit behavior of households - a behavioral approach

Florian Chávez-Juárez
Session 9.7

The access to credit is generally seen as an important ingredient for development. However, over the last years reports on families contracting excessive debt and falling into credit traps have also increased. In this paper I develop a model of family credit behavior based on insights from behavioral economics. I particularly consider phenomena like keeping-up-with-the-Joneses, a limited time horizon, gain-loss-asymmetry and over-confidence. The model coherently reproduces the level and the distribution of debt over for all socioeconomic groups. The results suggest that the use of a reference-group dependent utility and the precise definition of the reference group are crucial elements in explaining the debt levels of the different socio-economic groups. A policy simulation shows that reducing the amount of available credit (ceiling) might have beneficial effects on consumption and consumption inequality. In this respect, the findings contradict the idea that access to credit is positive for families in all situations.

JEL codes: C63, D03, D14, D31, D91, G02

Link to the PDF file

You, Me and the Mean: A Semi-parametric Approach to the Redistributive Effects of Transfer Programs

B.Cecilia Garcia-Medina

Session 9.7

I empirically examine how changes in the receipt of social program benefits associated to reforms in government transfer programs have affected the Canadian income distribution over the 1996-2006 period. Using the national Survey of Labour and Income Dynamics, I apply nonparametric decomposition methods to construct density counterfactuals that identify the distributive effects of each transfer programs. These counterfactual densities are constructed by reweighting the observed income distribution with propensity score functions that reflect changes in the probability of receiving program benefits from 1996 to 2006. This method enables me to identify the redistributive role played by transfer programs that were contemporaneously changed, and the locus in the income distribution where programs have their greatest effects. I find that programs influence different regions of the distribution, and that reforms to the Social Assistance program have reduced its redistributive effectiveness, whereas Child Benefits, Employment Insurance and Old Age Security are more redistributive than in 1996. This technique may uncover possibly unintended distributional outcomes of transfer programs.

JEL codes: H23, D31, I38

Link to the PDF file

"Forced" Gifts: a Burden of Being Friend

Erwin Bulte, Ruixin Wang, Xiaobo Zhang

Session 9.7

Gift exchange serves as a signal of friendship, and may help to build and foster reciprocal relationships. Such relationships are especially important in the context of imperfect markets, as they enable individuals to access support or assistance in times of need or hardship. However, gifts can only serve as a credible signal of friendship if they are sufficiently generous. When average income in society increases, "gift competition" may be the result. We demonstrate, theoretically as well as empirically, that gift competition may adversely affect the welfare of the poor - especially when their own incomes do not increase. We use a unique data set from 26 villages in rural China, and show that people have to increase their gift expenditures, in expense of their consumptions, to credibly signal their willingness to engage in reciprocal exchange as others spend more on gifts.

JEL codes: O16, O17, L14

Link to the PDF file

Dynamics of income rank volatility: Increasing instability among the poor in US but not in Germany

Louis Chauvel, Anne Hartung, Flaviana Palmisano

Session 9.4

The aim of this paper is to provide a new methodology to estimate and compare profiles of income volatility over time and across distributions. While most of the existing studies, focusing on income and earnings, obtain volatility estimates that can be affected by the variation of inequality over time. This paper proposes a framework that, based on appropriate measures of income ranks, can be used to estimate volatility in a variation-to-inequality neutral fashion. This methodological framework is applied to evaluate and compare profiles of rank volatility in Germany and US in the last three decades. It is shown that while overall the poorer are more rank volatile than the richer in both countries, this trend has been declining in Germany as opposed to US.

JEL codes: D31, I3, D3.

Link to the PDF file

Measuring Vulnerability Using the Counting Approach

Indranil Dutta, Ajit Mishra

Session 9.4

Vulnerability has become an integral part of any deprivation assessment. In this paper we take a fresh look at measuring vulnerability, where we separate out the identification part of whether an individual is vulnerable from the aggregation part as has been done in the multi-dimensional poverty context. In doing so, we have also been able to deal with one of the crucial problems that we see in the multi-dimensional context, which is that of weights used on the different dimensions under aggregation. In this case the probabilities are used as the natural weights. We axiomatically characterize this new measure of vulnerability and thus also provide a theoretical underpinning to many of the empirical applications in this field.

JEL codes: I32.

Link to the PDF file

The Vulnerable Are Not (Necessarily) the Poor

Sanghamitra Bandyopadhyay
Session 9.4

In this paper I examine the concept of "vulnerability" within the context of income mobility of the poor. While the concept of poverty is well developed, the concept of vulnerability is less established in the economic literature. I test for the dynamics of vulnerable households in the UK using Waves 1 - 12 of the British Household Panel Survey and find that, of three different types of risks for which I test, household-specific shocks and economy-wide aggregate shocks have the greatest impact on consumption, in comparison to shocks to the income stream. I find vulnerable households up to at least 10 percentile points above the poverty line. Savings and earnings from a second job are not significantly associated with smoothing consumption of all vulnerable households. The results strongly indicate that income transfers and benefits assist the vulnerable in smoothing consumption. Thus, traditional poverty alleviating policies are not likely to assist the vulnerable.

JEL codes: I3, I32, I38.

Link to the PDF file

Folding and unfolding multidimensional poverty indicators: An analysis of sub-group decompositions in a ranking for Chile, Colombia, Ecuador and Peru

Andrea Franco Correa
Session 9.1

Rankings of multidimensional poverty indicators are being increasingly used to compare different countries. Few examples had dug into the regional differences found in counting measures. This paper uses the sub-group decomposability property of counting methods, and measures regional decompositions in a ranking of individual poverty for Chile, Colombia, Peru and Ecuador, using one particular method, the Alkire-Foster's Adjusted Headcount Ratio. The case presented in this paper is particularly interesting, as the multidimensional poverty indicator in which it is based uses the individual as a unit of analysis. Dividing the population in age categories, the paper introduces the limitations of creating a national ranking for sub-populations with different indicators for comparative purposes. Stochastic dominance conditions of first and second order, as well as Hasse Diagrams are obtained to find out a partial ordering when, all the other things being stable, a different poverty line is decided. The results show that the decision about a poverty line can be restricted to a relevant boundary in which more strong dominance conditions are found. The selection of the boundary relies heavily on the particular context of analysis and the objective of the measure.

JEL codes: I32, D31, O54

Link to the PDF file

Multidimensional poverty measurement: Making the identification of the poor count

Iñaki Permanyer, Tim Riffe

Session 9.1

The success of any poverty eradication program crucially depends on its ability to identify who is poor and who is not. In this paper, we show that the state-of-the-art methodology that is used to identify the poor in multidimensional contexts the dual cutoff method suggested by Alkire and Foster is insensitive to many of the subtle considerations that should be incorporated when making such delicate decisions. The simplicity of the counting approach that underlies the dual cutoff method precludes the possibility of generating 'poor-identification rules' that are sensitive to interactions between the different dimensions of poverty. To go beyond the apples-and-oranges aggregation procedures characterizing the dual cutoff method, we suggest a much broader identification approach that contains the latter as a particular case. Our empirical findings using 48 Demographic and Health Surveys across the developing world suggest that the percentage of households that are inconsistenly identified as 'poor' according to the dual cutoff and some of the methods suggested in this paper is around 30% - a result with enormous implications for the identification of the potential beneficiaries of poverty eradication programs worldwide.

JEL codes: I32; D63; O1

Link to the PDF file

Gender and Spatial Disparity of Multidimensional Poverty in Iran

Hosnieh Mahoozi

Session 9.1

Demonstrating frequency, intensity and disparity of poverty among the various gender and spatial subgroups of the society is the main intention of this paper. Respecting the demands, to the extent admitted by the available data, of Sen's (1987) Capabilities Approach to the assessment of human well-being, this paper estimates multidimensional poverty in Iran. In this study Alkire-Foster method is applied, which is flexible to use in various context of data and dimensions, and is able to capture the intensity as well as the incidence of poverty. In order to estimate disparity of poverty, the multilevel regression models have been utilized with the premise that the households are nested within provinces. Therefore, the disparity of poverty incidence -between and within provinces- was estimated using a multilevel logit regression model, while the variation of intensity of poverty among the poor was estimated applying multilevel linear model. The results concluded remarkable disparity among different subgroups in Iran, while the female-head households and rural households are heavily disadvantaged compared to the male-head and urban peers.

JEL codes: I32, D63, O53

Link to the PDF file

Assessing distributional and poverty trajectories under different policy and growth scenarios: A microsimulation model for Botswana

Jann Lay, Simone Schotte
Session 9.5

This paper presents a simple analytical framework to discuss and empirically assess the key drivers of poverty reduction and distributional change. The model can be used for an indicative analysis of the effectiveness of various economic and social policies and helps to overcome the lack of timely micro data in many developing countries. The sequential model combines data and projections on key macroeconomic and socio-demographic indicators with a behavioral microsimulation model that mimics the household income generation process. We focus on the effect of changes in the size, composition, sectoral division and productivity of the labor force on poverty and inequality. For the specific case of Botswana our simulations illustrate that the baseline growth scenario is associated with moderate poverty reduction. We simulate a national poverty headcount of 16.7 percent for 2013 (down from 19.4 per cent in 2010). Our projections for 2018 vary between 11.6 percent under an optimistic growth and 17.1 percent under a low growth scenario. Somewhat lower growth, hence, would put the possible gains at risk. In addition, current growth patterns are not likely to improve Botswana's unequal distribution of income, but may even further increase disparities. Disaggregating the occupational structure of poor versus non-poor households, we find that the lack of employment remains a key challenge for poverty reduction in Botswana. We show that the pace of poverty reduction could be accelerated significantly if more employment is generated although the distribution of income may - again - become more unequal. This is why redistributive policies may have to be put in place and simulations of increasing public transfers suggest that there is scope for much better targeting of such transfers to reduce poverty and improve the distribution of income at relatively low costs. Another policy option to reduce poverty and inequality consists in the expansion of primary education, especially in rural areas and urban villages, as those with no completed education are at the highest risk of poverty.

JEL codes: D31, I32, O55

Link to the PDF file

Inequality and Growth: Why Physical and Human Capital Interactions Matter

Nikos Benos, Stelios Karagiannis
Session 9.5

We investigate the relationship between economic growth and income inequality under the influence of human and physical capital accumulation, using a panel of US state-level data. Our empirics account for cross-section dependence and parameter heterogeneity, in non-stationary series. We find that the inequality-growth relationship is characterized by non-linearities, as inequality dampens growth in states with low physical capital, while high physical capital states enjoy a growth boost. In both cases, the influence of inequality on growth diminishes with human capital.

JEL codes: D31, O40, C23

Link to the PDF file

Who Got What, Then and Now: A Fifty Year Overview from Global Consumption and Income Project

Arjun Jayadev, Rahul Lahoti, Sanjay Reddy
Session 9.5

Using newly comprehensive data and tools from the Global Consumption and Income Project (www.gcip.info), covering most of the world and five decades, we present a portrait of the changing global distribution of consumption and income and discuss its implications for our understanding of inequality, poverty, inclusivity of growth and development, world economic welfare, and the emergence of a global 'middle class'. We show how regional distributions of income and consumption have evolved very differently over time. We also undertake sensitivity analysis to quantify the impact of various choices made in database construction and the analysis. We find that whereas overall levels of income have increased, that the global distribution has become more relatively equal due to falling inter-country relative inequality, and that by some measures global poverty has declined greatly but it has hardly declined by others, even over the entire study period. The global middle class has grown markedly in certain countries but only slightly worldwide. Most of the marked global changes have occurred after 1990. China's rapid economic growth is by far the most important factor underlying them, notwithstanding sharply increasing inequalities within the country. Most improvements outside of China are associated with rapid developing country growth in the last decade of the study, and are therefore of uncertain durability. Country-experiences vary widely and there is some evidence of 'inequality convergence' with previously more equal countries becoming less equal over time and the obverse. We provide support for some previous findings (e.g. the replacement of the global 'twin peaks' by a unimodal distribution) but also arrive at some conclusions that overthrow old 'stylized facts' (e.g. that the Sub-Saharan African countries, and not Latin American ones, have the highest levels of inequality in the world, when measured using standardized surveys).

JEL codes: I30, O10, O15

Link to the PDF file

Inequality of opportunity in education: Evidence from Indonesia, 1997-2007

Rajius Idzalika, Maria C. Lo Bue
Session 9.2

Education is a strong predictor for economic performance. Therefore, educational inequality particularly in opportunity could make significant contribution to earning disparities. Following Ferreira and Gignoux (2014) parametric method, we construct aggregate indices of inequality of educational opportunities for fourteen Indonesian provinces in the years 1997, 2000 and 2007. Our particular and original contribution is to define individual indices of inequality of opportunity which measure the strength of the influence of predetermined circumstances on individual educational achievements. We found that-along the period considered- there has been a declining trend in inequality of educational opportunities but not in all the provinces. Our findings also suggest that gender and parental educational background are the most significant factors for school survival and that the effect that circumstances exert on individual educational achievements tend to substantially persist over time and to likely influence future earnings perspectives. Moreover, our causal model which utilizes the aggregate inequality indices suggests the positive impact on educational budget. However, there is not enough evidence that educational budget effectively reduces inequality of opportunity in education.

JEL codes: D39, D63, I29, O53

Link to the PDF file

Relative Deprivation and School Enrolment in Mexico

Lucio Esposito, Adrian Villasenor
Session 9.2

Abstract. Empirical evidence of the role played by relative deprivation as an explanatory variable for social outcomes other than subjective well-being is still rather scarce. Using data from the extended-questionnaire section of the 2010 Mexican census (2.9 million households), we provide solid evidence of relative deprivation as being a negative predictor of school enrolment, a finding which is in line with sociological and child development research. Marginal effects of relative deprivation are found to be stronger at higher standards of living and for older children. This is the first paper employing both linear and distribution-sensitive indices of relative deprivation as explanatory variables; an analysis of these indices in the cases of underlying distributions with different levels of skewness is provided.

JEL codes: D31, D63, I24

Link to the PDF file

Inequality of opportunity at school in rural Bangladesh: to what extent are pupils' efforts constrained by family background?

Niaz Asadullah, Alain Trannoy, Sandy Tubeuf, Gaston Yalonetzky
Session 9.2

The notion of inequality of opportunity draws a distinction between ”legitimate” and ”illegitimate” sources of differences in wellbeing outcomes. While legitimate differences can be attributed to effort and illegitimate differences to circumstances (beyond people's control), the cut between the two sources is not clear. Specifically, legitimate inequality may be undermined by the importance of the correlation between effort and circumstances (e.g. family background) as underlined by John Roemer. This paper focuses on evaluating the importance of the correlation between circumstances and effort when measuring inequalities of opportunity in education. The school experience and performance are particularly interesting because they strongly impact on future adult life. We use data from a unique survey on secondary school education in rural Bangladesh with two indicators of performance, 14 indicators of students' effort, and a large set of circumstances. We find that the correlation between effort and circumstances represents 40% of the contribution of effort to the total variance in both Mathematics and English test scores. This result suggests that while the normative position on how to treat the correlation between circumstances and effort made little difference in health in France (10% according to Jusot et al. 2013), it does matter in education, and confirms the importance of social determinism at school.

JEL codes: I24.

Link to the PDF file

Intermediate views on vertical equity of taxes and benefits

Ivica Urban
Session 9.6

Relative income view is dominant in the research of redistributive effect of taxes and benefits. Rare studies placed in alternative inequality views, such as absolute inequality view, indicate that our judgements on vertical equity of taxes and benefits are strongly dependent on the choice of income inequality view. This paper extends Kakwani's (1977a, 1977b) and Lambert's (1985, 2001) models for evaluation of vertical equity of taxes and benefits, using the framework for analysis of intermediate inequality views, recently proposed by Bosmans et al (2013). In the heart of the new method is the construction of counterfactual vertically neutral equal-yield taxes and benefits, for each tax and benefit in the system, and for different inequality views. The distributions of actual taxes and benefits are then compared to the distributions of counterfactual instruments. This enables us, first, to reveal whether a tax and a benefit is vertically equitable or inequitable; and second, to order taxes and benefits according to the magnitude of vertical effect they achieve, for different inequality views.

JEL codes: D63, H22, H23

Link to the PDF file

Monotonic redistribution of non-negative allocations: a case for proportional taxation revisited

André Casajus
Session 9.6

We reconsider Casajus' (2014, Theoretical Economics, forthcoming) characterization of proportional taxation by three properties of redistribution: efficiency, symmetry, and monotonicity. When restricted to non-negative allocations, these properties only imply proportional taxation in a weaker sense - the tax rate may vary with overall performance but not in an arbitrary fashion. On the restricted domain, proportional taxation is characterized by the afore-mentioned properties together with positive homogeneity, i.e., upscaling performances implies upscaled rewards after redistribution.

JEL codes: C71, D63, H20

Link to the PDF file

Tax evasion and the optimal non-linear labour income taxation

Salvador Balle, Lucia Mangiavacchi, Luca Piccoli, Amedeo Spadaro
Session 9.6

The present work studies optimal taxation of labour income when taxpayers are allowed to evade taxes. The analysis is conducted within a general non-linear tax framework, providing a characterisation of the solution for risk-neutral and risk-averse agents. For risk-neutral agents the optimal government choice is to enforce no evasion and to apply the original Mirrlees' rule for the optimal

tax schedule. The no evasion condition is precisely determined by a combination of a sufficiently large penalty and a constant auditing probability. Similar results hold for risk-averse agents. Our findings imply that a government aiming at maximizing social welfare should always enforce no evasion and provide simple rules to pursue this objective.

JEL codes: D31, H21, H26

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