

CESifo Bulletin

Volume 14 No. 2
April 2004

WHO GAINS FROM CHILD LABOUR?

Condemned in some countries, frowned upon in others, tolerated in a few, the most natural thing in many: child labour is a fact of life. But who reaps the benefits? **Marco Manacorda** has the surprising answer. *(page 7)*

TAXING MULTINATIONALS

With some multinationals' turnover surpassing the GDP of many developing countries, they ought to be a juicy source of tax revenue. But only if the international tax system is well designed to tap this source. **Harry Grubert**, of the U.S. Treasury Department, will refine his work on this while at CES. *(page 6)*

GROWTH AND UNCERTAINTY

The dampening effect of uncertainty on growth has been studied extensively at the microeconomic level. Not so at the macroeconomic level. **Cecilia García-Peñalosa** aims at correcting that deficiency. *(page 3)*

POSITIVE TREND FIRMS UP

The positive outlook of the previous **Ifo World Economic Survey** held steady under the latest WES findings. More in the Ifo News section. *(pages 4-5)*

FIXING EDUCATION

After the jolt caused in many countries by the findings of the 2002 PISA study, experts have been tripping over themselves to come up with recommendations for improvement. But one area has been left out. **Jörn-Steffen Pischke** is doing research on that. *(page 3)*

THE DYNAMICS OF UNEMPLOYMENT

Understanding the factors governing the dynamics of the circumstances leading to unemployment is sine qua non for devising the appropriate policy response. That's the field **Lorenzo Cappellari** will devote his research to while at CES. *(page 7)*

BEHAVIOURAL GAMES

The so-called other-regarding features, such as fairness, equity, and reciprocity, play a significant role in behavioural economics. **Hideshi Itoh** will apply his insights on these features to contract theory. *(page 6)*

ATTRACTING MOBILE TAX BASES

It is unclear whether competition among governments to attract mobile tax bases is harmful or beneficial. **Guttorm Schjelderup** is doing research on the issue. *(page 8)*

IFO NEWS

(p. 4-5)

MUNICH SEMINARS

(p. 5)

CESIFO INTERNATIONAL SPRING CONFERENCE

(p. 2)

MUNICH ECONOMIC SUMMIT

(p. 2)

HANS MÖLLER SEMINARS

(p. 5)

FEATURED RESEARCHERS

- Lorenzo Cappellari (p. 7)
- Cecilia García-Peñalosa (p. 3)
- Harry Grubert (p. 6)
- Hideshi Itoh (p. 6)
- Godfrey Keller (p. 8)
- Fahad Khalil (p. 8)
- Marco Manacorda (p. 7)
- Jörn-Steffen Pischke (p. 3)
- Guttorm Schjelderup (p. 8)

MUNICH ECONOMIC SUMMIT 2004

Focusing on the likely risks to European integration posed by the EU enlargement, the third **Munich Economic Summit** will address a variety of issues associated with or arising from the EU's social union, the migration patterns expected for the coming years and the adoption of the proposed EU Constitution.

To be held on 18 June 2004 in its traditional venue –Munich's prestigious Hotel Bayerischer Hof–, the Summit will attempt to shed light on such questions as how countries with greatly differing economic and social standards can co-exist, considering the level of expected migration, or whether the welfare state in its Western European form would still be capable of



*Stamp of success:
The list of participants reads like a Who-is-Who
of the world of politics, economics and business.*

Further info on this and previous summits at
www.munich-economic-summit.com

surviving. Would, in this light, a European social union be a sensible solution? And what political framework would be needed to ensure that the potential advantages of migration are fully utilised, whilst at the same time creating sufficient employment for the migrants?

Numerous heavyweights from the world of politics, business and the media as well as renowned economists have confirmed their attendance to discuss these issues. Co-organised by CESifo and the BMW Foundation Herbert Quandt, this annual policy forum has Bavaria's premier Edmund Stoiber as its patron, and is now firmly established in the European summit agenda for major decision-makers.

REPORT:

CESIFO INTERNATIONAL SPRING CONFERENCE 2004

Once again, CESifo's **International Spring Conference** attracted over 100 high-ranking participants from industry, banks and government, as well as a bevy of journalists from major media companies.

Held on 18 and 19 March on the premises of the ARtrium complex of the British Embassy in Berlin, the conference focused, as traditionally, on the prospects for the European economy in the coming months.

Sir Peter J. Torry, the British ambassador, welcomed the participants before they embarked on lively discussions, triggered at first by Jim O'Neill, of Goldman Sachs. He asserted that the dollar would fall farther against the euro due to the burden embodied by the U.S.'s



The ARtrium courtyard

huge trade deficit. Hans-Werner Sinn, the Ifo Institute President, begged to differ. He retorted that some signs were already evident that this deficit was starting to shrink, and that the eastern European countries were by now fairly awash with

euro notes, both elements contributing to a strengthening of the dollar against the European currency rather than to a further decline.

Next on the day's agenda were various aspects of foreign direct investment, first from a global perspective, and then focused on central and eastern Europe and the People's Republic of China.

The second day dealt with some major branches of European industry. The overall assessment was that an upswing would make itself noticeable during the rest of this year, provided of course that confidence in the global economy continued to increase. This positive trend would gather pace during 2005.

JS

GROWTH, INEQUALITY AND OUTPUT VOLATILITY

García-Peñalosa



*Cecilia García-Peñalosa
CES visitor in April-May*

Making decisions when uncertainty prevails is a risky thing. Small wonder, then, that microeconomic theory has extensively analysed the impact of uncertainty on economic decisions. Yet only recently have economists started to address the role of risk in macroeconomics. Understanding the effects of uncertainty on economic aggregates, such as output growth, education, or the distribution of income, is hence a busy field for economists.

One such economist is **Cecilia García-Peñalosa**, who has worked on the determinants of economic growth. In a first strand of papers, García-Peñalosa explored the relationship between growth and the distribution of income. This work led to a major survey in the *Journal of Economic Literature* (jointly with Philippe Aghion and Eve Caroli), which analysed both the impact of distribution on growth and that of growth on distribution. The importance of distribution for the growth process, and the emphasis that political theorists place on institutions as a determinant of inequality, has led her to exam-

ine the relationship between institutions and growth, a line she will continue to pursue –jointly with Theo Eicher– while visiting at CES.

Recently, she has turned her attention to the question of whether countries with greater growth volatility tend to have more unequal distributions of income. This interest has resulted in a number of papers, both empirical and theoretical, jointly with Richard Breen, Daniele

Checchi and Stephen Turnovsky. Overall, they find that a greater volatility of the growth rate is associated with a more unequal distribution of income, a more unequal distribution of human capital, and a lower average educational attainment.

Together with Theo Eicher, García-Peñalosa is organising the "Growth and Institutions" workshop for the upcoming CESifo Venice Summer Institute 2004.

García-Peñalosa is a research fellow at the French "Centre National de la Recherche Scientifique", based at GREQAM, Marseille. Her Ph.D. is from the University of Oxford, and she has held previous positions at the Universitat Autònoma de Barcelona and Nuffield College, Oxford.

EUROPEAN VS. U.S. PRODUCTIVITY

The differences in labour productivity –and productivity growth– between Europe and the United States have been striking enough for long enough to merit attention by economists and policy-makers alike. To take stock of current research and findings on this issue, the Banque de France, Munich's Ifo Institute for Economic Research and Paris's Centre d'Études Prospectives et d'Informations Internationales jointly organised a work-

shop called "Divergences in Productivity Between Europe and the United States".

Held in Paris on 21-23 March 2004, the well-attended workshop performed international comparisons and discussed productivity measurement issues and determinants, focusing on a number of countries and on the effect of such factors as information technology, innovation and outsourcing on growth and competitiveness.

FIXING EDUCATION

Pischke



The education systems of many countries are perceived to be in trouble: witness the tortured discussions in Germany following the country's dismal showing among the 32 countries covered by the OECD-organised PISA study.

Education economists have been discussing possible remedies for decades. A large part of these discussions has focused on resource-based policies: smaller classes, better paid teachers, and the like.

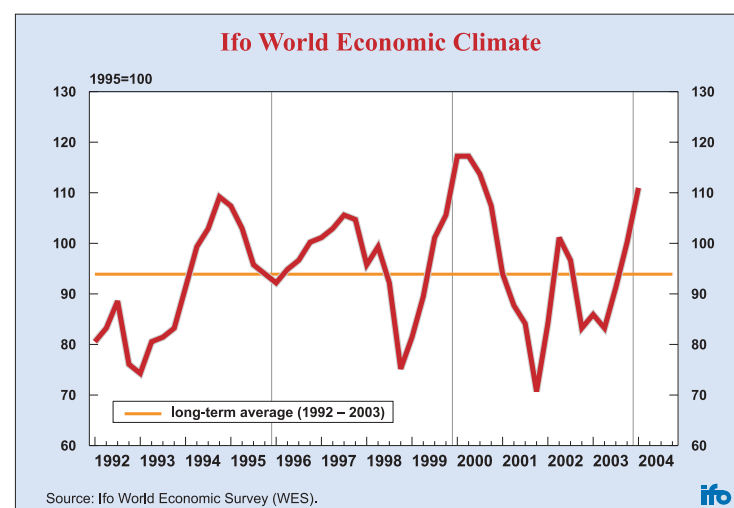
Jörn-Steffen Pischke, a Professor at the London School of Economics, feels that comparatively little attention has been spent on other features of the organisation of educational systems. One such feature is the degree of tracking and selection in secondary school: policies range from early selection, as in Germany, to comprehensive school systems, as in the United States. In a recent paper, he compares the success of students in Great Britain in the 1960s and 1970s, when the country switched from a selective to a comprehensive school system.

Another area that Pischke has been investigating is the apprenticeship system in German-speaking countries. Unlike in other countries, firms play a large role in the vocational training of youths in this system. How do the outcomes for the participants compare to countries with more school-based learning? Pischke is investigating these issues with data from Germany and Austria, an undertaking that will occupy him during his stay at CES in June 2004. He will also deliver the keynote lecture at the CESifo Area Conference on Employment and Social Protection, to be held 11-12 June this year. Pischke received his Ph.D. from Princeton University. After working for two years at the Centre for European Economic Research (ZEW) in Mannheim, he spent seven years as an assistant professor at MIT. He is a former co-editor of the *European Economic Review*.

Ifo NEWS

WORLD ECONOMY: STRONGER GROWTH EXPECTED

The World Economic Survey (WES) indicator for the world economic climate showed a sharp rise in January 2004 in comparison to the last survey, in October 2003. The uninterrupted increase in the world indicator since July 2003 was mainly due this time to the more favourable assessments of the current situation. The already optimistic expectations for the next six months again improved slightly.



Still on the right track

The economic expectations for the coming six months are at the highest level since 1985, pointing to a pronounced upswing of the world economy. They show at present a rating of 7.3 on the WES grading scale (which goes from 1 to 9). The assessments of the present economic situation also improved considerably and have now surpassed the "satisfactory" level. But: The appraisals of the current state of the economy are significantly less positive than in 2000 and the high level of the climate index results mainly from very optimistic economic expectations. Nevertheless, the data provided by the new WES point to continuing economic upswing in all surveyed regions of the world. In all areas of the world, the recovery is seen in the opinion of the WES experts as robust, and a continuation of the upturn is expected to last for the next 1 to 2 years.

W. EUROPE: RETURNING CONFIDENCE

The panel's assessments have followed a positive trend since July 2003. An improvement of the current economic state has been reported from all Western European countries, except Denmark and Portugal. The economic expectations have been upgraded significantly in all Western European countries and are, among all WES regions, the most optimistic. Both growth of capital expenditures as well as increasing private consumption are expected to support economic recovery in the coming year. In the United Kingdom, growth of private consumption is expected to slow down somewhat in the course of the next six months.

INFLATION

An average 2.7% increase in consumer prices is expected for the

world economy in 2004, which is slightly lower than the latest estimate for 2003 (2.9%) and much lower than the estimate at the beginning of last year (3.2%). In the euro area, inflation for 2004 is seen to remain close to the 2% mark (1.9%). The range of inflation estimates in the euro area is expected to shrink. In the United States no change of the inflation rate is expected (2.2% in 2004 and 2003).

GROWING OVERVALUATION OF THE EURO

An increasing majority of WES experts is regarding the euro as overvalued. To a lesser degree, this assessment also holds for the British pound, whereas the US dollar is seen as undervalued by even more experts than in the two previous surveys. In contrast, the survey experts assess the Japanese yen as nearly at the appropriate value.

Ifo BUSINESS SURVEY MARCH 2004

As in the previous month, the Ifo Business Climate index of manufacturing, construction, retailing and wholesaling in Germany fell in March. The expectations for the next six months have clearly worsened. Of particular concern is the indicator of the current business situation, which has declined for the first time in six months.

Retailing was particularly affected, where both the business situation and the expectations have worsened. But also in manufacturing the business climate declined. In contrast, the business climate improved somewhat in construction and wholesaling, which both registered improvements in the current business situation. The positive responses also included improvements in the export expectations.

A special evaluation of survey responses in manufacturing returned before and after the events in Madrid showed no significant differences. The worsening of the business climate in March can thus not be dismissed as merely temporary. The economic recovery continues to suffer from weak domestic demand. Worries over the continuation of the economic recovery have grown.

PAN-GERMAN Ifo BUSINESS CLIMATE INDEX

The Ifo Business Climate index for trade and industry - based on the results of the Ifo Business Survey - for all of Germany instead of the previous separation into western and eastern Germany was presented for the first time in February. The step has been taken since the business cycles in western and eastern Germany have largely converged, despite the differences in level. For international comparisons only pan-German time series are suitable. In addition, almost all official agencies have converted to presenting numbers only for Germany as a whole. On this occasion the index has also been readjusted from the base year of 1991 to the new base year 2000. This also ensures better comparability with

the official statistics, which are mostly based on 2000. All business survey data will continue to be separated for western and eastern Germany in the Ifo Database along with the Ifo Business Climate time series for Germany as a whole. In the monthly journal, *ifo Konjunkturperspektiven*, the detailed sector results (manufacturing, construction, wholesaling and retailing) will continue to be published for western and eastern Germany. The transition to a pan-German presentation of the sectors is planned for a later date.

STUDY: GERMANY'S TRADE WITH THE EU ACCESSION COUNTRIES

On 1 May 2004 ten countries will join the European Union. Because of the already concluded treaties between the joining countries and EU, the product flows in important fields of internationally traded goods have expanded strongly so that a major portion of the economic effects of extensive free trade has already been achieved by the markets. For 2004 a growth of German exports to these countries will average 3%, and for 2005 growth of 2.3% is predicted. For goods imported from the EU accession states an average increase of 9.7% is expected for 2004 and 8% for 2005. If the forecast proves correct, Germany's trade balance with the EU accession states will be negative in the coming years for the first time.

HEALTH CARE REFORMS

A very interesting lecture was delivered by **Bert Rürup**, member of the German Council of Economic Advisers and one of the main designers of the recent health care reforms, within the framework of the **Munich Seminars**, co-organised by CESifo and the *Süddeutsche Zeitung*.

In his well-attended presentation, Rürup admitted that the implementation of the reforms had caused irritation and had deficiencies. He defended the main features of the reform and said that there was no choice but to introduce the controversial fee for visits to a doctor's practice.

The speaker contradicted the opinion that there was a cost explosion in health

service in recent years. The spending ratio, i.e. the spending of statutory health insurers (GKV) as a percentage of GDP has stood at six to seven percent for the past 25 years. In the same time health insurance premiums increased from 8 to 14.5 percent, which is primarily due to the rise in unemployment. The German system is neither decrepit nor is it on the brink of a breakdown, it is just too expensive. The economist identified the reasons as a lack of efficiency, particularly the low level of competition and false incentives.

Rürup criticised that the fundamental problems in financing the GKV were not addressed in the recent reforms. Linking health-care costs to labour costs is the key weakness of the German system. It is a "growth reducer" in two respects: An increase of contribution rates by one percentage point leads to a reduction of up to 170,000 jobs. In addition, the growth of the health sector has been retarded. True reform must allow for such growth.

Rürup expects new health reforms already in 2007 and argues for a system of "lump sum" contributions per patient.

APPOINTMENT

Klaus Abberger will join the Business Surveys department starting in May. He is slated to become head of this department in November this year, taking over from Gernot Nerb, who held the post on a provisional basis concurrently with his position as head of the Industry Branch Research department.



Abberger earned his B.A. in economics at the University of Constance, where he then became an assistant professor. His particular area of interest is research in non-parametric methods.

Specialized in econometrics and statistics, he finished in 2003 his habilitation at the same university, where he then became an assistant professor. His particular area of interest is research in non-parametric methods.

HANS-MÖLLER SEMINARS

27 April 2004

Hideshi Itoh

Hitotsubashi University

Moral Hazard and Other-Regarding Preferences

27 April 2004

Cecilia García-Peñalosa

GREQAM and CNRS

Macroeconomic Volatility and Income Inequality in a Stochastically Growing Economy

11 May 2004

Jean-Robert Tyran

University of Copenhagen

Money Illusion and Coordination Failure

25 May 2004

Theo Eicher

University of Washington

Endogenous Institutions and Growth

MUNICH SEMINARS

Confirmed Lecturers

26 April 2004

Erwin Huber

State Minister and Head of the Bavarian State Chancellery

Der Staat 2020 – Strategien in der Globalisierung

03 May 2004

Lord Hurd of Westwell

The Political Background to Economic Reform in Europe

17 May 2004

Patrick Artus

Chief Economist, CDC IXIS, Paris
What Are the Policy Reactions to the Increased Competition from Emerging Countries and to Ageing?

12 July 2004*

Jürgen von Hagen

Zentrum für Europäische Integrationsforschung (ZEI), Bonn

* The topic for this seminar has not yet been released. For the latest info, check the www.cesifo.de website.

TAXING MULTATIONALS

Grubert



Harry Grubert

Reveled by anti-globalisation activists and lauded by those cooler heads who can see their positive contributions outweighing the negative ones, multinational corporations have a way for staying permanently in somebody's sights. With some of these corporations' annual turnover exceeding the GDP of many a developing country, this interest is anything but unexpected.

One such head aiming his sights at them is **Harry Grubert**, an economist in the Office of Tax Analysis at the U.S Treasury Department. He is engaged in research on international tax issues and in the formulation and analysis of tax proposals.

He will be visiting CES again in April-May, where he will continue research on the design of international tax systems and the behaviour of multinational companies. The specific questions he will attempt to answer are how important is income shifting by multinational corporations? And, will formula apportion-

ment make it better? The emphasis will be on the ways different tax systems distort company decisions on where to locate and how much to transact with affiliates as opposed to unrelated parties.

In a recent CESifo Working Paper, he looks at the tax burden on direct invest-

ment from three perspectives. First, he shows how the effective tax rate on direct investment can be affected by company tax planning. He emphasises the importance of intangible assets like patents and the multilateral nature of tax planning. Then he decomposes the overall tax burden on U.S. manufacturing abroad into its possible determinants. Among the various components considered are the location of real assets, the location of debt and share of income accounted for by royalties. To round it up, he finally studies tax competition at the company level by identifying the types of subsidiaries that host countries offer tax concessions to. As expected, potentially mobile companies, such as those in electronics and computers, and companies that sell a large share of their output abroad enjoy lower than average tax burdens in any location.

Grubert is an associate editor of *International Tax and Public Finance*.

BEHAVIOURAL CONTRACT THEORY

Itoh



Hideshi Itoh

The data from experiments on ultimatum games, gift exchange games, public goods games, trust games, and so on, demonstrate that people deviate from self-interest in systematic ways. Based on the evidence, researchers in behavioural economics and behavioural game theory have recently developed new theoretical models that incorporate other-regarding features such as fairness, equity, and reciprocity.

Hideshi Itoh, a professor of economics and management at the Graduate School of Commerce and Management, Hitotsubashi University (Tokyo) and CES visitor from April to June, will apply to contract theory those theories of other-regarding preferences that can explain many experimental results, in order to generate new theoretical insights into issues on organisations and human resource management.

Standard contract theory has been successful in explaining various incentive problems and institutional designs, in particular, in the field of organisational and personnel economics. However, researchers in other disciplines have criticised the self-interest hypothesis over the years.

Furthermore, psychologists have long been pointing out the possibility that extrinsic motivation may crowd out intrinsic motivation. Itoh believes that developing "behavioural contract theory" that uses experimental/field evidence and psychological intuition to generalise the standard assumptions could contribute to encouraging more productive interactions among the students of organisations from various

disciplines. As a start, he has analysed how incentives are affected by other-regarding behaviour in the stylised principal-agent relationships with moral hazard, and what kinds of preferences are desirable for the principal. He plans to continue this line of research during his stay at CES.

Itoh received his Ph.D. from the Graduate School of Business, Stanford University, in 1988. He was a faculty member at the Department of Economics, Kyoto University, and Institute of Social and Economic Research (ISER), Osaka University. He has held visiting appointments at the Graduate School of International and Pacific Studies, University of California at San Diego, and at the universities of Stanford and Columbia. He is currently a co-editor of the *Journal of the Japanese and International Economies*.

Itoh is the recipient of the 2003 Nakahara Prize of the Japanese Economic Association (awarded each year to a Japanese economist under the age 45 who has accomplished internationally recognised academic research). He is internationally known for his research on co-operation among multiple agents.

EARNINGS MOBILITY AND UNEMPLOYMENT DYNAMICS

Cappellari



Lorenzo Cappellari

Observing individuals undergoing some adverse state such as poverty or unemployment at a given point in time is only partially informative about the urgency of policy interventions to help them. Understanding the factors governing the dynamics of those circumstances is a necessary step towards a better understanding of labour market functioning and a more effective policy design.

Lorenzo Cappellari has worked extensively on the empirical analysis of income dynamics, a research line he will continue to pursue while visiting CES.

In a first strand of papers, Cappellari has focused his attention on Italian panel micro-data and has looked at the longitudinal evolution of earnings inequality and the process governing transitions at the bottom end of the earnings distribution scale. Main findings show that earnings differentials are largely persistent, so that much of the increase in inequality observed in Italy in recent years can be ascribed to a divergence of life-cycle wage profiles. In addition, one of the main determinants of being trapped into low paid occupations seems to be past low pay in itself, an example of state dependence effect.

In a second group of papers, written jointly with Stephen Jenkins of the University of Essex, he has used British panel micro-

data and developed a model of low income transitions that allows for the possibility of missing information over time, finding that 'attrition' should not be ignored when studying such phenomena, and that state dependence explains a relevant share of poverty persistence.

Currently, Cappellari and Jenkins are working on the joint analysis of earnings mobility and unemployment dynamics, shedding light on

the existence and characteristics of 'low-pay/no-pay cycles', an issue at the heart of today's British labour market policies, particularly given the emphasis recently placed on getting the unemployed back to work. Their preliminary findings indicate that the dynamics of the two phenomena are strongly related, suggesting that measures designed to raise the earnings potential of the low-paid may also reduce their chances of becoming unemployed in the future.

Lorenzo Cappellari is an assistant professor at Università del Piemonte Orientale in Novara, a research associate at the Centre for Household, Income and Labor economics in Turin, and a research fellow at the Institute for the Study of Labor in Bonn. His research focuses on earnings and unemployment dynamics, education, job satisfaction, and applied microeconomics. He earned his Ph.D. from the Department of Economics, University of Warwick.

MUNICH LECTURES IN ECONOMICS VIDEOS

Over the past ten years, some of the greatest names in economics have delivered notable lectures within the **CES Munich Lectures in Economics** series.

Amongst the lecturers, each of whom has been the **Distinguished CES Fellow** for a given year, are **Avinash K. Dixit** (Princeton), **Anthony B. Atkinson** (Oxford), **Jean Tirole** (Toulouse), **Paul Krugman** (MIT), **Rudiger Dornbusch** (MIT), **Guido Tabellini** (Bocconi), **Peter A. Diamond** (MIT), **Oliver Hart** (Harvard), **Nicholas**

H. Stern (Formerly World Bank, now HM Treasury), and **James Poterba** (MIT).

The lectures have been preserved as videos. In order for newer generations to enjoy these valuable documents, CESifo has re-coded the entire set of videos to bring them up to the latest standard. Just download the Codex 9 version for your PC's media player from the MSN website, and click on to

www.cesifo.de/link/ces-munich-lectures.htm

Enjoy!

WHO GAINS FROM CHILD LABOUR?

Manacorda



Who in the household reaps the benefits from child labour? Is it the parents or the siblings or the working children themselves? To answer these questions, **Marco Manacorda** dug deep: he used micro data from the 1920 U.S. census and brought his findings into his latest paper, called *Child Labor and the Labor Supply of Other Household Members: Evidence from 1920 America*.

In his paper, Manacorda compares labour supply and schooling choices of parents and siblings of working and non-working children. Using an instrumental variable technique, his empirical analysis shows that the parents of working children are as likely to work as the parents of non-working children, while working children's siblings are more likely to attend school and less likely to work. The analysis suggests that parents do not privately benefit from child labour but redistribute the additional resources among the children themselves. Parental exploitation is therefore unlikely to be at the root of child labour.

Manacorda will further pursue at CES his long-standing research into the causes and consequences of child labour, where he also plans to deliver a short course on "The Economic Analysis of Child Labour". Currently, his work focuses on the gender differential in child labour force participation in India. This research aims at understanding the forces behind lower school participation and higher (domestic) work by girls compared to boys. Concurrently, he is using the Uruguayan ECH to analyse the effect of high school construction on teenagers' school attendance and work, as well as an array of other behaviours of these children and their family members.

Manacorda earned his Ph.D. at UCL in 2000, and his area of specialisation is empirical labour economics. Between 2000 and 2002 he was a lecturer in Economics at Queen Mary University of London (on leave until 2005). Currently, he is a Research Fellow at the LSE.

THE RIGHT INCENTIVES

Khalil

Incentives are the catalysts for action. Learning how to devise them and how to apply them can thus be a rewarding endeavour.

Fahad Khalil, who will be visiting CES in June, is engaged in refining the theory of incentives and its applications. In recent papers, he has studied problems in corporate governance, optimal task design, and health economics.

In a paper on corporate governance he studies the incentives of multiple financiers who need to jointly monitor and extract income from a common agent or entrepreneur. He shows that monitoring may collapse and debt-like features appear in financial contracts because of free-riding by multiple financiers in their contributions to monitoring.

His health economics paper studies the optimal design of payment schemes by third-party purchasers of health care to providers of care, who have superior information about the types of patients



they treat. Even with limited information, consumers or patients can exert demand-side discipline. It is shown that when third-party purchasers design payment schemes, they ought to keep in mind this demand-side effect since alternative schemes can make better or worse use of consumers in providing incentives to suppliers.

Lastly, his paper on task-design addresses the problem of providing incentive for planning activity when the outcome of planning is unobservable information. It is shown that a threat of termination can relax this moral hazard problem, which can make it optimal to partially separate the planning and implementation tasks.

Khalil obtained his M.A. in Economics from Dhaka University, Bangladesh (1985) and his Ph.D. in Economics from Virginia Tech (1991), following which he joined the Economics department at the University of Washington, Seattle.

ATTRACTING MOBILE TAX BASES

Schjelderup

Is competition among governments to attract mobile tax bases harmful (fewer public goods) or beneficial (less government waste)? Does the answer to this question depend on the design of political institutions and the type of democracy?



These questions have fostered a large literature within the fields of both tax competition and political economy, and **Guttorm Schjelderup** is among those who have contributed to both fields. He will –jointly with Andreas Haufler– continue to pursue his interest in these issues during his CES visit in May. The emphasis will be on how institutions and the political process matter for the structure and design of the public sector and the way it uses its instruments. In a recent work with Eckhard Janeba, based on a generalised version of the comparative public finance model, they considered the role of political institutions by comparing parliamentary democracies (as in most European countries) and presidential-congressional systems (as in the U.S.). They found that the conditions for voter welfare to improve when competition for capital intensified were less stringent under a presidential-congressional system than under parliamentary democracies. This type of insight may lay the foundation for explaining other differences across the Atlantic related to the public sector.

Guttorm Schjelderup is professor at the Norwegian School of Economics and Business Administration (NHH) and research director at the Centre for International Economics and Shipping. His research focuses on international public finance, multinationals, and trade. Schjelderup was a staff member of the World Bank before he joined the academic community, and he obtained his Ph.D. from the Department of Economics at NHH.

LEARNING ECONOMICS

Keller

In many areas of human activity, an agent has to choose from a number of actions, each with a cost and an uncertain reward. Some of these actions are highly likely to produce a short-term gain, while others, such as gathering information to eliminate some of the uncertainty, may result in only a long-term benefit.

Godfrey Keller has devoted much of his research activity to an exploration of theoretical models of learning in economics, and will continue to do so, jointly with Sven Rady, while visiting CES. Early articles focused on optimal behaviour of monopolists and duopolists in a dynamic framework when the underlying economic environment was continually subject to random changes.



Their recent work is in a more abstract multi-agent setting where the players can learn not only from their own costly experiments but also by observing the actions and outcomes of others. This is essentially a model of information generation, and as such is about the private provision of a public good. Consequently, the free-rider

problem leads to a fundamental inefficiency, but this can be ameliorated by the players sharing the burden more equitably, and greatly so by “taking turns” more and more often. This model of “exponential bandits” is already being used by other researchers as a building block in their own models of irreversible investment, for example. Whilst at CES, Keller and Rady hope to extend their results to more general “Poisson bandits”, which present a greater technical challenge.