



## Programm

### Bildungsökonomischer Ausschuss des Vereins für Socialpolitik

13./14. März 2014

**Tagungsort:** ifo Institut, Poschingerstr. 5, 81679 München

**Generalthema:** „Ökonomik der Schulbildung“

#### Mittwoch, 12. März 2014

20.00 Uhr                      Get-together im Augustiner Restaurant (Neuhauser Straße 27)

#### Donnerstag, 13. März 2014

08.45 – 09.00 Uhr              Begrüßung (Ludger Wößmann)

09.00 – 10.00 Uhr              **Katja Görlitz** (FU Berlin)  
*The Effect of High School Curriculum on University Enrollment  
and the Choice of College Major*

10.00 – 11.00 Uhr              Tobias Meyer, **Stephan L. Thomsen** (NIW & Leibniz Universität  
Hannover)  
*Are 12 Years of Schooling Sufficient for Preparation for Tertiary  
Education: Evidence from the Reform of Secondary School  
Duration in Germany*

11.00 – 11.15 Uhr              *Kaffeepause*

11.15 – 12.15 Uhr              **Maresa Sprietsma** (ZEW Mannheim)  
*Human Capital Contracts*

12.15 – 13.15 Uhr              **Renate Neubäumer** (Universität Koblenz-Landau), **Steffen  
Müller** (Universität Erlangen-Nürnberg)  
*Unemployment Risk during Working Life: The Role of Training  
Occupation and Size of Training Plant*

13.15 – 14.15 Uhr              *Mittagessen*

- 14.15 – 15.15 Uhr **Guido Schwerdt** (Universität Siegen), Martin R. West (Harvard University)  
*The Effects of Test-based Retention on Student Outcomes over Time: Regression Discontinuity Evidence from Florida*
- 15.15 – 16.15 Uhr *Keynote Lecture:*  
**Manfred Prenzel** (TUM School of Education, TU München)  
*Forschungsvariationen zu PISA*
- 16.15 – 16.30 Uhr *Kaffeepause*
- 16.30 – 17.30 Uhr **Poster Session**
- Simone Balestra, **Uschi Backes-Gellner** (Universität Zürich)  
*Heterogeneous Returns to Education Over the Wage Distribution: Who Profits the Most?*
- Lutz Bellmann** (IAB Nürnberg), Philipp Grunau, Ute Leber, Martin Noack  
*Further Training of Atypically Employed Workers*
- Jens Mohrenweiser, **Friedhelm Pfeiffer** (ZEW Mannheim)  
*Does a Pilot Intervention at Upper Secondary School Increase Orientation towards University Education?*
- Agnes Bäker, Susanne Breuninger, Jasmin Joecks, Julia Muschallik, **Kerstin Pull** (Eberhard Karls Universität Tübingen)  
*Career Success in Academia*
- Natalia Danzer, Martin Halla, **Nicole Schneeweis** (Johannes Kepler Universität Linz), Martina Zweimüller  
*Parental Leave and Child Development*
- Kamila Danilowicz, Johannes Meya, **Robert Schwager**, Katharina Suntheim (Georg-August Universität Göttingen)  
*PODESt - Persönliche und organisatorische Determinanten eines erfolgreichen Studiums*
- Frauke Peter, Johanna Storck, **C. Katharina Spieß** (DIW Berlin), Vaishali Zambre, Martin Ehlert, Claudia Finger, Alessandra Rusconi, Heike Solga  
*Best Up – A Field Experiment to Evaluate Education Policies*
- Eric A. Hanushek, Guido Schwerdt, Simon Wiederhold, **Ludger Wößmann** (LMU und ifo München)  
*Returns to Skills around the World: Evidence from PIAAC*
- Thomas Zwick** (Universität Würzburg), Robert Wagner, Jens Mohrenweiser  
*Determinants of Skilled Labour Market Entrants' Wages: Adverse Selection with Symmetric Information?*

17.30 – 18.30 Uhr

### **Mitgliederversammlung**

Tagesordnung:

1. Genehmigung des Protokolls der Sitzung 2013 in Wuppertal (elektronisch zugestellt)
2. Bericht des Vorsitzenden
3. Aufnahme neuer Mitglieder
4. Vorschläge für Gäste/neue Mitglieder
5. Preis für bildungsökonomische Forschung
6. Förderung bildungsökonomischer Forschung
7. Struktur zukünftiger Sitzungen
8. Sitzung 2015: Termin, Ort und Generalthema
9. Verschiedenes

19.00 Uhr

### **Stadtführung**

20.00 Uhr

**Abendessen**, Weißes Bräuhaus (Tal 7)

## **Freitag, 14. März 2014**

09.00 – 10.00 Uhr

**Tobias Klein** (Tilburg University)  
*The Decision to Attend College in Germany*

10.00 – 11.00 Uhr

**Patrick Puhani** (Leibniz Universität Hannover)  
*Do Boys Benefit from Male Teachers in Elementary School? Evidence from Administrative Panel Data*

11.00 – 11.15 Uhr

*Kaffeepause*

11.15 – 12.15 Uhr

**Bernd Fitzenberger**, Stefanie Lickleder (Albert-Ludwigs-Universität Freiburg)  
*Skill Formation and Transitions: The Last Two Years in a German Lower Track Secondary School*

12.15 – 13.15 Uhr

*Keynote Lecture:*  
**Eric A. Hanushek** (Stanford University)  
*Conclusions, Policy Implications, and Open Questions from Research on Teacher Quality*

13.15 – 14.00 Uhr

*Kleiner Imbiss*

## **Abstracts**

### **Donnerstag**

#### **The Effect of High School Curriculum on University Enrollment and the Choice of College Major**

Katja Görlitz (FU Berlin)

This paper investigates the causal effect of a curriculum reform in high school on university enrollment and college major choice. The reform decreased the freedom of choice in course selection and thereby increased the mandatory hours in the subjects German, foreign language and mathematics. As the reform was implemented only in one German state, a difference-in-difference approach and a synthetic control group approach is applied using administrative data covering all German students. While we find increased university enrollment rates for both males and females, the college major choice was only affected for males insofar as the probability to study a STEM-subject ("Science, Technology, Engineering or Mathematics") increased slightly.

#### **Are 12 Years of Schooling Sufficient for Preparation for Tertiary Education: Evidence from the Reform of Secondary School Duration in Germany**

Tobias Meyer, Stephan L. Thomsen (NIW & Leibniz Universität Hannover)

An important education reform in Germany reduced the duration of university preparatory schooling from 13 to 12 years, but left the curriculum unchanged. In the state of Saxony-Anhalt the reform was completed in 2007 with a double cohort of graduates, providing a natural experiment. We use primary panel data from this double cohort to evaluate the effects on success in tertiary education. Our findings show that the reform has heterogeneous effects on success in university education. Among others, students with only 12 years of schooling have some difficulties and skill deficits at university, but no higher drop-out probability.

#### **Human Capital Contracts**

Maresa Sprietsma (ZEW Mannheim)

By issuing human capital contracts, private investors gain the right to obtain a share of student's future earnings. Although still rarely used, this form of private financing of higher education could not only help to alleviate tight public educational budgets in the future but might also be a promising investment alternative to traditional financial assets. Using a dataset covering 1% of German households for the period 1995-2009, we evaluate the return and risk properties that can be expected from human capital contracts. The results of our simulations show that funds of human capital contracts provide low risk exposures to stocks and bonds. As a result, risk-adjusted returns of funds of human capital contracts are significantly positive under fairly weak conditions. Thus, human capital contracts potentially offer large diversification benefits for investors and might be a way to improve the state's educational budget.

#### **Unemployment Risk during Working Life: The Role of Training Occupation and Size of Training Plant**

Renate Neubäumer (Universität Koblenz-Landau), Steffen Müller (Universität Erlangen-Nürnberg)

The authors analyze the role training occupation and size of training plant play for the risk of unemployment during working life. They develop the hypothesis that firm size and training

occupations are indicators for different training strategies of firms, which lead to different risks of unemployment. To test this hypothesis, the authors use administrative German employee data for the years 1985-2005 and use the aggregate unemployment within a period of 15 years as a measure of unemployment risk. Unemployment risk is much higher the smaller the training plant is and varies greatly with training occupation.

### **The Effects of Test-based Retention on Student Outcomes over Time: Regression Discontinuity Evidence from Florida**

Guido Schwerdt (Universität Siegen), Martin R. West (Harvard University)

A growing number of American states require that students who do not demonstrate basic reading proficiency at the end of third grade be retained and provided with remedial services. We exploit a discontinuity in the probability of third grade retention under Florida's test-based promotion policy to study the causal effect of retention on student outcomes over time. Although conventional OLS estimates suggest negative effects of retention on achievement, regression discontinuity estimates indicate large positive effects on achievement and a reduced probability of retention in subsequent years. The achievement gains from test-based retention fade out over time, however, and are statistically insignificant after six years.

## **Poster Session**

### **Heterogeneous Returns to Education Over the Wage Distribution: Who Profits the Most?**

Simone Balestra, Uschi Backes-Gellner (Universität Zürich)

This study presents evidence of heterogeneous returns to education over the wage distribution. The authors use instrumental variable quantile regression and data from the Swiss Labor Force Survey to identify the causal link between education and earnings at different quantiles of the conditional distribution of wages. The results provide evidence that there is no unique causal effect of schooling and that for each individual the effect may be above or below those extensively documented by ordinary least squares or two-stage least squares. In particular, while ordinary quantile regression estimates increasing returns in the quantile index, once the endogeneity of schooling is taken into account the authors instead observe higher returns at lower quantiles of the wage distribution. Interpreting the quantile index as a measure of unobserved wage determinants (e.g., ability), the findings suggest that less able individuals profit more from one additional year of education. The authors also investigate the presence of heterogeneity between and within educational paths, comparing the returns of academic education with the returns of vocational education over the wage distribution. The results indicate that academic education brings a significant return premium in the upper part of the wage distribution. However, such premium vanishes around the third decile and becomes negative at the bottom of the distribution.

### **Further Training of Atypically Employed Workers**

Lutz Bellmann (IAB Nürnberg), Philipp Grunau, Ute Leber, Martin Noack

In the course of the Hartz reforms, the German labour market has experienced a marked increase in atypical employment during the pre-crisis period from 2004 to 2007. Aside from potentially beneficial flexibility effects, these labour market phenomena run the risk of old-age poverty if atypical employment does not serve as stepping stone into “normal” employment. Regarding investments into education as important vehicle in this respect, we investigate the impact of atypical employment on the participation in further training. Using both the BIBB/BAuA-Employment Survey and the Microcensus, we find that atypical employment impairs further training investment, particularly with temporary and marginal work. Moreover, this effect seems to only hold for formal/non-formal further training, whereas for informal training – presumably due to lower access restrictions – the impact is much smaller or even insignificant. We also show that atypical workers are less satisfied with their opportunities to improve their skills, indicating that the lower participation is at least not exclusively driven by the demand side.

### **Does a Pilot Intervention at Upper Secondary School Increase Orientation towards University Education?**

Jens Mohrenweiser, Friedhelm Pfeiffer (ZEW Mannheim)

The paper analyses the effect of a pilot intervention programme to improve academic study orientation among pupils at upper secondary schools. The programme supports pupils to attend lectures at a university and to perform a corresponding internship in the same field. Participation was voluntarily but restricted to twenty students per school. Since school size varies considerably, this restriction is used for identification. We conducted repeated classroom surveys with participants and control groups of non-participants containing psychological scales of career choice readiness. Our econometric findings suggest that participation in the programme improves the intended outcomes in two dimensions: students from comprehensive schools strengthened their intention to university education, while participants from grammar schools increased their level of information on career choices.

## **Career Success in Academia**

Agnes Bäker, Susanne Breuninger, Jasmin Joecks, Julia Muschallik, Kerstin Pull (Eberhard Karls Universität Tübingen)

In a series of projects, we analyze the determinants of career success in academia. Financed by the Federal Ministry of Education and Research and based on a data set of app. 400 researchers in economics and business administration from Austria, Germany and the German-speaking part of Switzerland, we investigate the effects of (inter)national mobility and mentoring on a researcher's academic success as measured by time to tenure, by the reputation of the tenure granting institution and by publication productivity. Further, we also analyze how childbearing (the "if" and the "when") is related to research success.

## **Parental Leave and Child Development**

Natalia Danzer, Martin Halla, Nicole Schneeweis (Johannes Kepler Universität Linz), Martina Zweimüller

Parental leave policies have been expanded in most OECD countries during the last two decades. Austria is among those countries offering a generous system of paid parental leave combined with job protection. In this paper, we investigate whether parental leave furthers child development using a major reform of the Austrian parental leave system. In 1990, the duration of parental leave has been expanded from one to two years and applied to children born after June 30. Our research design is based on a Regression-Discontinuity Difference-in-Difference approach. Combining various sources of administrative data, such as social security records, the birth register, health insurance funds and the Austrian marriage register, we investigate whether parental leave has an impact on the child's education, health and medium-run labor market outcomes. The data also allow us to analyze potential channels by investigating the reform's effects on maternal labor supply, earnings, marriage stability and family size.

## **PODESt - Persönliche und organisatorische Determinanten eines erfolgreichen Studiums**

Kamila Danilowicz, Johannes Meya, Robert Schwager, Katharina Suntheim (Georg-August Universität Göttingen)

Ziel des Projektes PODESt ist es, Faktoren zu identifizieren, die zu guten Studienleistungen und einem erfolgreichen Studienabschluss beitragen. Der Fokus liegt dabei auf der Analyse von Mikro-Daten der Studierenden der Georg-August-Universität Göttingen. Die anonymisierende Zusammenführung von Prüfungs- und Studienverlaufsdaten mit administrativen Stammdaten, wie der Hochschulzugangsberechtigung und der regionalen Herkunft, erlaubt eine detaillierte ökonomische Analyse von Studierendenbiographien ganzer Kohorten. Erste Ergebnisse bestätigen die hohe Prognosekraft der Note der Hochschulzugangsberechtigung für den Studienerfolg, gemessen an Hand der Abschlussnote oder der Wahrscheinlichkeit, den Abschluss zu erwerben. Die Form dieses Zusammenhangs variiert jedoch zwischen den Fakultäten: Während es Studienanfänger mit mäßiger Abiturnote an allen Fakultäten schwer zu haben scheinen, einen Abschluss zu erhalten, gelingt dies an manchen Fakultäten mit höherer Wahrscheinlichkeit als an anderen. Tendenziell erhält ein Student in den Fakultäten, in denen es, bedingt auf die Abiturnote, wahrscheinlicher ist, den Abschluss zu erwerben, dann aber schlechtere Noten. Dies deutet auf unterschiedliche Studien- und Prüfungskulturen hin: Während in manchen Fakultäten der Leistungsnachweis im Wesentlichen im erfolgreichen Abschluss zu bestehen scheint, legen andere Fakultäten möglicherweise größeres Gewicht auf die Differenzierung der Noten zwischen den Absolventen.

## **Best Up – A Field Experiment to Evaluate Education Policies**

Frauke Peter, Johanna Storck, C. Katharina Spieß (DIW Berlin), Vaishali Zambre, Martin Ehlert, Claudia Finger, Alessandra Rusconi, Heike Solga

What prevents high school students from a non-academic family background to decide in favor of university education? Despite the fact that these high school students obtain a university-entrance degree, they often choose another track of post-secondary education. The literature offers a variety of reasons to explain this choice behavior. However, much less is known about effective and efficient policy measures to influence high school students' decisions. Findings suggest two possible channels: (1) information asymmetry and (2) financial constraints. This field experiment aims at determining and evaluating potential policy interventions. We test two treatments (1) *providing information* and (2) *providing financial subsidy*. The information treatment comprises a presentation on returns to university and potential financing strategies. The subsidy is a simple grant similar to the "Deutschland Stipendium" to reduce high school students' financial burden. The randomized sample consists of 27 upper secondary schools in Berlin. We survey the high school students at five points in time starting in May 2013, which allows us to observe their actual transition after graduation with the *Abitur* in 2014/2015.

## **Returns to Skills around the World: Evidence from PIAAC**

Eric A. Hanushek, Guido Schwerdt, Simon Wiederhold, Ludger Wößmann (LMU und ifo München)

Existing estimates of the labor-market returns to human capital give a distorted picture of the role of skills across different economies. International comparisons of earnings analyses rely almost exclusively on school attainment measures of human capital, and evidence incorporating direct measures of cognitive skills is mostly restricted to early-career workers in the United States. Analysis of the new PIAAC survey of adult skills over the full lifecycle in 22 countries shows that the focus on early-career earnings leads to underestimating the lifetime returns to skills by about one quarter. On average, a one-standard-deviation increase in numeracy skills is associated with an 18 percent wage increase among prime-age workers. But this masks considerable heterogeneity across countries. Eight countries, including all Nordic countries, have returns between 12 and 15 percent, while six are above 21 percent with the largest return being 28 percent in the United States. Estimates are remarkably robust to different earnings and skill measures, additional controls, and various subgroups. Intriguingly, returns to skills are systematically lower in countries with higher union density, stricter employment protection, and larger public-sector shares.

## **Determinants of Skilled Labour Market Entrants' Wages: Adverse Selection with Symmetric Information?**

Thomas Zwick (Universität Würzburg), Robert Wagner, Jens Mohrenweiser

This paper analyses the consequences of negative selection on entry wages of skilled employees. It uses German linked employer employee panel data (LIAB) and introduces a measure for relative productivity of skilled job applicants based on their apprenticeship wages. It shows that post-apprenticeship employer changers are a negative selection from the training firms' point of view. Negative selection leads to lower average wages of employer changers in the first skilled job in comparison to stayers. The determinants of skilled entry wages for employer movers and stayers are very similar, however. In addition, the variance of entry wages for movers by occupation is larger than that of stayers (even if we take the larger wage variance at the end of apprenticeship into account). Both patterns suggest that the labour market for apprenticeship graduates is characterised by symmetric information.



## **Freitag**

### **The Decision to Attend College in Germany**

Tobias Klein (Tilburg University)

There is a wealth of theories that seek to explain why many gifted children do not attend college even though the monetary and non-monetary returns to doing so are extremely high. However, none of these theories has been brought to data to assess whether the effects are quantitatively strong enough to indeed explain individual behavior. In this paper, we take the observed relationship between parent's socio-economic status and college attendance of their children as a starting point. We formulate a realistic life cycle model of consumption in which educational choice influences future earnings possibilities and labor supply. The model is state-of-the-art in that it features uncertainty about future wages and endogenous dynamic labor supply. On top of that, we incorporate an extensive list of reasons into the model that could in principle explain the observed pattern. These include missing or biased information about the returns to college education, missing role models, budget constraints, debt aversion, and risk aversion. We then use data from the German Socio-Economic Panel (GSOEP) to assess whether these reasons are important enough in the sense that they are quantitatively strong enough so that they can explain the decision not to attend college despite the high life time returns.

### **Do Boys Benefit from Male Teachers in Elementary School? Evidence from Administrative Panel Data**

Patrick Puhani (Leibniz Universität Hannover)

With girls having overtaken boys in many education indicators, the "feminization" of elementary school teaching is causing debates about disadvantages for male students. Using administrative panel data on the universe of students, teachers and schools for a German state, I exploit within school and within teacher variation to determine teacher characteristics' effects on students' tracking outcomes. Germany tracks students at age 10 into more or less academic school types. I hardly find any effects of teacher's gender on boys' or girls' school track recommendation or school choice.

### **Skill Formation and Transitions: The Last Two Years in a German Lower Track Secondary School**

Bernd Fitzenberger, Stefanie Lickleder (Albert-Ludwigs-Universität Freiburg)

This paper provides an empirical analysis of the development of students of the lower secondary track during their last two years in school (8th and 9th grade of school) focusing on school performance, career planning, and transition after school. We find that only a small fraction of students start an apprenticeship after grade 9. One of the main reasons is that students with better grades tend to choose further schooling over apprenticeship, hoping that this will improve their future career options. Students with poor grades usually opt for pre-vocational training but only a small number accomplishes the transition from grade 9 to an apprenticeship. The latter option seems to be particularly open to male students with a migration background. We also find some evidence that the transition decision into one of the three alternatives is already affected by characteristics measured at the end of 7th grade.