



# **TriEcon Workshop on Education Economics**

Institute for Labour Law and Industrial Relations in the European Union | Trier University

# **TriEcon Workshop on Education Economics**

December 5th - 6th, 2024

### Venue:

Institute for Labour Law and Industrial Relations in the European Union (IAAEU) Trier University, Campus II Behringstraße 21 54296 Trier

# Welcome to the Institute for Labour Law and Industrial Relations in the European Union

The Institute for Labour Law and Industrial Relations in the European Union (IAAEU) was established as a public foundation in 1983 and is funded by the state government of Rhineland-Palatinate. While being a public foundation, the IAAEU is also a research institute of Trier University and is situated in the heart of the Petrisberg Technology Park on Campus II. The IAAEU comprises two working groups of which one engages in research in the area of European labour law (Legal Team) and one engages in the theoretical and empirical analysis of personnel and labour economic issues (Economics Team). Since January 2012 Laszlo Goerke is one of the directors of the IAAEU and head of the Chair of Personnel Economics at Trier University. He is also a research fellow of the Institute of Labor Economics (IZA) and the CESifo Group Munich.

For detailed information have a look at our website: http://www.iaaeu.de/en

### **About TriECON**

TriECON is a workshop series initiated and conceptualized by the Institute for Labour Law and Industrial Relations in the European Union (IAAEU) in cooperation with the Chair of Personnel Economics at Trier University. Each workshop is designed to offer a platform for scientific exchange on a particular topic. The workshop series supports the networking among scientists and promotes the exchange of research ideas and results with other scientists as well as with the wider, interested public.

We hope you will have a pleasant event and gain some new insights!

For information about the upcoming workshops, we invite you to visit the corresponding website.

# **Venue & Social Programme**

Trier University, Campus II (Building H) Behringstraße 21

54296 Trier

Room: K101

#### **Transfer to dinner location:**

17:30 scheduled end of workshop day 1 Transfer to city centre with public transport (Bus 14 or 4)

Optional: Stroll through the Christmas market with mulled wine near the dinner location

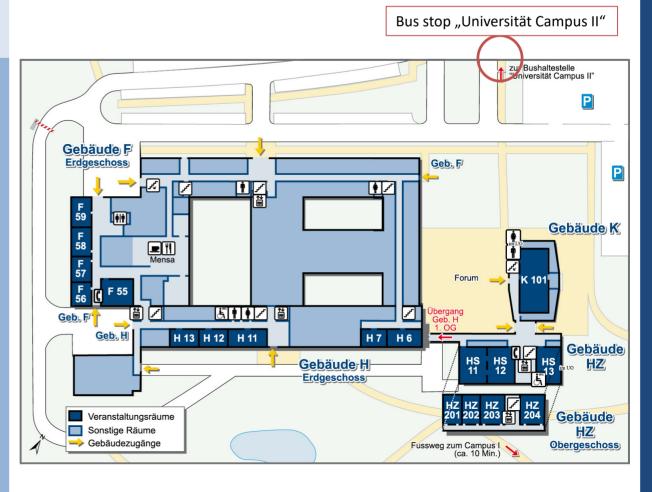
**Dinner: 19:00** 

Zur SIM Brasserie

Simeonstraße 59

54290 Trier

(opposite of the Porta Nigra)



# **Schedule – TriEcon Workshop on Education Economics**

### Thursday, December 5th, 2024

12:00 – 12:30	Registration (K101)
12:30 – 12:40	Welcome (K101)
12:40 - 14:00	Session I (K101)
14:00 – 14:20	Break (K101)
14:20 – 15:40	Session II (K101)
15:40 – 16:10	Break
16:10 – 17:30	Session III (K101)
17:30	Transfer to city centre with public transport
19:00	Conference Dinner

### Friday, December 6th, 2024

09:00 – 10:20	Session IV (K101
10:20 - 10:40	Break
10:40 - 12:00	Session V (K101)
12:00	Farewell (K101)

# Programme – Thursday, December 5th

12:00 – 12:30	Registration K101		
12:30 - 12:40	Welcome and Opening, K101		
12:40 – 14:00	SESSION I, K101 (Chair: Sander de Vries)  Maria Berrittella: The parental and gender role on student mobility for tertiary education in Italy		
	Sander de Vries: Performance standards in education (Discussant: Maria Berrittella)		
14:00 – 14:20	Coffee Break		
14:20 - 15:40	SESSION II, K101 (Chair: Annika Backes)		
	<b>Thomas Senterre:</b> Wage gaps between natives and first/second-generation immigrants with a Master's degree (Discussant: Laszlo Goerke)		
	Annika Backes: Neighbor effects on college-major choice (Discussant: Sumit Deole)		
15:40 – 16:10	Coffee Break		
16:10 - 17:30	SESSION III, K101 (Chair: Nathalie de la Cruz Aquino)		
	Majlinda Joxhe: Math exposure and university performance		
	Nathalie de la Cruz Aquino: Self-regulation and school outcomes in Latin America		
	(Discussant: Majlinda Joxhe)		
17:30	Transfer to city centre		
19:00	Dinner		

# Programme – Friday, December 6<sup>th</sup>

08:30 - 09:00	Registration
09:00 - 10:20	SESSION IV, K101 (Chair: Casemiro Campos)  Casemiro Campos: The oscars of education (Discussant: Hester Burn)
	Hester Burn: The long-run effects of extended play-based learning in early childhood
	(Discussant: Yue Huang)
10:20 - 10:40	Coffee Break
10:40 - 12:00	SESSION V, K101 (Chair: Theresa Geißler)
	<b>Uğur Aytun:</b> The impact of Syrian refugees on the overeducation of natives: Evidence from Turkish labor markets
	Theresa Geißler: Who bears the brunt? Tuition fees and educational mismatch
	(Discussant: Uğur Aytun)
12:00 – 12:15	Farewell

#### Session I

Francesco Salomone Marino, Maria Berrittella: The parental and gender role on student mobility for tertiary education in Italy

This article examines how differently the family background affects the choice of sons and daughters to move to another region for tertiary education and how the mother's role on student mobility differs from that of the father. We apply multinomial logistic regression to longitudinal data on high school-university transition regarding southern students enrolled at university in Italy. The results are an interplay amongst parental education and occupation, parental and descendant gender, and geographical mobility trajectories. The mother's education is less dominant than the father's education, the opposite occurs for occupation. There exists a gender imitation effect: mothers with higher position are more dominant on student mobility for daughters than for sons. Southern students from privileged families are more inclined to migrate for tertiary education; but we also show that disadvantaged parents may also invest in student mobility to allow a better social position to the descendants.

#### Sander de Vries: Performance standards in education

Although many education programs use performance standards to dismiss low performing students, their effects are unclear. Using a difference-in-differences design and rich administrative data, I study the effects of implementing performance standards in the first year of bachelor programs in the Netherlands. I find that performance standards do not deter prospective students from enrolling. This is surprising, given that they significantly increase dropout. In the long run, implementing performance standards does not improve students' education degree attainment, enrollment duration, or subsequent labor outcomes. Additional survey evidence suggests that students experience considerable disutility due to performance standards.

#### Session II

**Thomas Senterre, François Rycx, Mélanie Volral:** Wage gaps between natives and first/second-generation immigrants with a Master's degree: How much does the field of study matter?

Using matched employer-employee data for the 1999-2016 period which allows us to analyse 35,979 workers graduates from university with a Master's degree in Belgium, this paper aims to quantify the contribution of the field of study to the wage gaps between native-born workers and first-and second-generation immigrant workers from developing countries. To do so, we first use a benchmark regression model explaining how the interaction between workers' origin (across generations) and field of study impacts the real gross hourly wage. We include a set of covariables relative to worker', firm' and employment's characteristics. Our preferred results estimate that the first-generation immigrants from developing countries earn less than native-born workers, even when they are in higher-paid fields. Their second-generation counterparts have a partial catch-up effect, with better returns than the first-generation. We then apply the recent Gelbach's (2016) decomposition method, which allows us to quantify the contribution of each variable with econometric improvements. We finally reproduce our decomposition in the Oaxaca-Blinder decomposition to obtain the price effects (potential discrimination) for each covariate. The underlying results show that the contribution of the field of study is to the (slight) advantage of second-generation immigrants, who are better represented in higher-paid fields than natives. However, we observe significant price effect relative to the field of study to the disadvantage of first- and second-generation immigrants from developing countries. These may be linked to the segmented assimilation theory and potential discrimination.

#### Annika Backes, Dejan Kovac: Neighbor effects on college-major choices

We investigate how college and major choices of individuals are influenced by older neighbors and peers. Using the universe of high school and college admission data in Croatia from 2009 to 2015 we employ a RDD to get causal estimates. By exploiting time and program variation in admission cutoffs we find that having an older neighbor that got admitted and enrolled to a program increases the probability to apply to this program by about 20% (evaluated at the sample mean) compared to having a neighbor that barely missed the admission score. We find that this effect consistently only holds for the closest neighbors both in terms of distance and age difference (1 year apart). A heterogeneity analysis shows that female students are more likely to be influenced by older neighbor's choices, and male older neighbors admission has a larger impact on both male and female students compared to female older neighbors. The effect is stronger if the student-neighbor pair lives in a city/ region that does not have its own university, implying that the value of information in rural areas is higher. We find evidence that students don't follow their older neighbors to programs with low or medium demand, but instead we find a higher probability to apply for programs when the older neighbor got admitted to a high demand (more prestige) program. From policy perspective this is an important finding showing that alumni communities can be beneficial in attracting new talents, especially for the elite universities.

#### Session III

Graziella Bertocchi, Luca Bonacini, Majlinda Joxhe, Giuseppe Pignataro: Math exposure and university performance: Causal evidence from twins

We estimate the causal effect of mathematics exposure during high school on major selection and the university performance utilizing a unique administrative dataset of twins extracted from the student population enrolled in an Italian university. We employ a novel empirical strategy based on a Twin Fixed Effect (TFE) estimator, which allows us to neutralize the bias due to omitted factors, such as family background. We find that attending a low-math school causes a decrease in the probability of enrolling in STEM majors but an improvement in the performance, as measured in terms of on-time graduation and grades. Specifically, our TFE estimates show a downward bias in Ordinary Least Squares (OLS) coefficients. Moreover, the negative effect of low-math exposure on STEM enrollment is primarily driven by female twins in opposite-sex pairs. Additionally, we observe that the impact of a low-math high school background is amplified following a high school reform that increased math content in traditionally low-math curricula. Comparison with a Difference in Differences (DiD) estimator, when using the entire population, shows that DiD underestimates the reform's impact on STEM choices and fails to detect performance improvements due to non-random selection into treatment. Our TFE estimates suggest that while increased math exposure does not make STEM majors more attractive, it provides students with skills that may improve their university performance.

Nathalie de la Cruz Aquino: Self-regulation and school outcomes in Latin America

Using 2019 data on around 80 thousand 6th grade students from 16 Latin American countries, I investigate the relationship between self-regulation and school outcomes in 6th graders. I find that self-regulation has a large and positive significant effect on students' standardized test scores across disciplines, even after controlling for a rich set of student and family controls and school fixed-effects. The effects appears to be similar for all students along the conditional quantile distribution of performance in math. It has a higher effect on girls than boys, but not a big difference between the different socioeconomic quantiles, and its effect depends on the country's context. Once accounting for school fixed-effects, the effect of self-regulation for math, Spanish and science test is similar.

#### **Session IV**

Casemiro Campos: The oscars of education: The effects of a tournament between public schools

Despite discussions of performance-related incentive pay for teachers, limited research exists on the effects of combining financial and non-pecuniary group incentives within the public education system. This study presents evidence from a rank-order tournament among schools in Brazil. Yearly, top-performing schools receive a non-pecuniary recognition and a financial prize. Further, low-performing schools are designated to a support program, where they are allocated an extra budget and paired with an awardee to implement a cooperation program. A differences-in-discontinuities design is implemented by exploring the timing and eligibility criteria, revealing substantial improvements in students' test scores due to the tournament's introduction. Eligible schools locally outperformed non-competing schools by 0.23 and 0.34 standard deviations in Portuguese and Mathematics, respectively. Furthermore, by exploring an exogenous cutoff that assigns the support program to schools, I implement a fuzzy regression discontinuity design and document a significant improvement in scores three years later upon the assignment.

Hester Burn: The long-run effects of extended play-based learning in early childhood

Governments around the world are investing heavily in early childhood development, however it is still not clear what skills early childhood development policies should target or how they are best implemented. In this paper I evaluate the long-run effects of an extended play-based learning policy for early childhood in Wales - the 'Foundation Phase' (FP) - on cognitive and noncognitive outcomes. I find no evidence of long-run treatment effects, in aggregate, at ages 11 or 16. However, at age 16, male FP pupils are less likely to achieve a good pass in school leaving examinations or to enrol in the academic track for post-16 education than their male peers who received formal schooling between ages five and seven. I find no evidence that the timing of Special Educational Needs or ADHD diagnoses, or the quality of Secondary schools, are drivers of these effects. I conclude that there may be adverse FP effects for the long-run academic attainment and progression of male pupils. This finding is in line with other literature which finds that male children benefit less than female children from self-directed learning environments in early schooling.

#### Session V

Uğur Aytun, Seyit Mümin Cilasun: The impact of Syrian refugees on the overeducation of natives: Evidence from Turkish labor markets

The effects of migration on labor market outcomes, such as earnings and employment, have been well studied in the literature. However, little attention is paid to how natives adjust their skills to occupations when faced with a massive migration shock. This paper analyzes the effect of Syrian refugee inflows into Turkey beginning in 2011 on the education-job matching of the native population. Using 2004 to 2019 waves of Turkish Labor Survey and and regional-level Syrian refugee data, we employ a difference-indifferences methodology that takes into account endogenous location choices of refugees. We find that 10% point increase in the migrant-to-native ratio significantly reduces the overeducation of native men in informal employment by 12%. However, subsample regressions reveal significant negative effects of overeducation for native men with low educational attainment and 18-34 years of age. We also find a significant negative effect of migration on overeducation in younger and less educated women in the formal sector. These findings suggest a role for informality and the displacement or effect of labor demand of employment in understanding the sources of changes in overeducation against a sudden labor supply shock.

Theresa Geißler: Who bears the brunt? Tuition fees and educational mismatch

This paper provides the first comprehensive analysis of the impact of tuition fees on post-graduate outcomes in Germany, with a particular focus on educational mismatch. Exploiting the quasi-experimental introduction of tuition fees in selected federal states between 2006 and 2014, the study investigates how these fees affect the likelihood of educational (mis)match among graduates. The findings show that graduates from fee-charging states are significantly more likely to experience overeducation and less likely to achieve an educational match. These results are robust across various sensitivity tests and are not influenced by local labor market conditions at the time of graduation. By incorporating data on internal migration and first-time enrollment trends across states, the analysis addresses potential selection bias. Heterogeneous effects are observed based on the state of graduation and parental educational background. Results are partially mediated through a reduced likelihood of selecting high-skill occupations post-graduation.

# **Participants**

Last Name	First Name	Affiliation
Aytun	Uğur	Kütahya Dumlupınar University
Backes	Annika	Halle Institute for Economic Research (IWH)
Berrittella	Maria	University of Palermo - Department of Economics, Business and Statistics
Burn	Hester	Institute for Social and Economic Research, University of Essex
Campos	Casemiro	Goethe University Frankfurt
Clemens	Marco	IAAEU
de la Cruz Aquino	Nathalie	Freie Universität Berlin
de Vries	Sander	Vrije Universiteit Amsterdam
Deole	Sumit	IAAEU
Geißler	Theresa	IAAEU
Goerke	Laszlo	IAAEU
Hartmann	Sven	IAAEU
Huang	Yue	IAAEU
Joxhe	Majlinda	University of Bologna
Kyzyma	Iryna	Observatoire national de l'enfance, de la jeunesse et de la qualité scolaire
Matschke	Xenia	Trier University
Sadowski	Dieter	IAAEU
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Schmitt	Paul	Observatoire national de l'enfance, de la jeunesse et de la qualité scolaire
Senterre	Thomas	Université Libre de Bruxelles, SBS-EM (CEB and DULBEA) and Université de Mons (Soci&ter)

# Notes

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