Lukas Rosenberger

Munich Graduate School of Economics www.lukasrosenberger.github.io/academic/

Primary Fields: Economic Growth, Economic History

Secondary Fields: Innovation, Comparative Development, Political Economy **Research Topics:** Technological Progress, Human Capital, Industrial Revolution

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REFERENCES

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Joel Mokyr

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EDUCATION

2016 - 2022	Ph.D. Economics	LMU Munich
2014 - 2016	M.Sc. Economics (with distinction)	LMU Munich
2013 - 2014	Studies in M.Sc. Economics	University of Duisburg-Essen
2010 – 2013	B.A. Public Administration	University of Erfurt

RESEARCH VISITS

10/2021 - 06/2022	Northwestern University	Host: Joel Mokyr
01/2020 - 05/2020	Brown University	Host: Oded Galor

JOB MARKET PAPER

Invention and Imitation during the Industrial Revolution (with Carl Hallmann and Emre E. Yavuz, Northwestern)

This paper provides the first evidence on idea growth and international idea diffusion at the industry and technology level during the Industrial Revolution. Our empirical approach focuses on the perspective of one country to obtain quantitatively comparable measures of idea growth and incoming idea diffusion. Using patent data from France 1791 to 1855, we distinguish invention and imitation patents. In the particular historical context, imitation mostly reflects the diffusion of British ideas to France. Our main result is a large and highly significant positive correlation of idea growth and idea diffusion across industry and technology. We argue that the result informs a debate among two views of idea growth and international idea diffusion which have conflicting predictions on the sign of this correlation. The simultaneity view, on the one hand, predicts a positive correlation because of knowledge spillovers or because invention and imitation are complementary activities. The leader–follower view, on the other hand, predicts a negative correlation because of variation of advantages in invention across sectors, for example due to directed technical change. While the evidence on the correlation confirms the simultaneity view

and rejects the leader—follower view, we show that the leader—follower view is nevertheless right about its additional prediction of specialization on invention or imitation across sectors. Based on the revealed relative technological lead of industries, we document a clear pattern of specialization and validate with historical evidence that it reflects absolute advantages in invention.

OTHER WORKING PAPERS

Knowledge, Education, and Economic Growth: Evidence from the Enlightenment in France (with Uwe Sunde, LMU Munich). Status: Draft forthcoming

This paper advances and empirically establishes the hypothesis that economic growth depends on the interaction between two notions of productive knowledge: human capital—knowledge embodied in people—and non-rival ideas—codified knowledge. The analysis uses a unique historical setting in France in the Enlightenment to disentangle variation in both dimensions of productive knowledge and to identify their interaction. The empirical strategy exploits spatial variation in education which was predetermined for historical reasons and time variation of Enlightenment which made codified knowledge widely available. Using novel data on establishment and curriculum of all public secondary schools in France from 1500 to 1800, the analysis first establishes that the geography of schools and a scientific curriculum was determined by historical factors going back to late-Roman period, as well as religious competition during the sixteenth century. Then, the analysis shows that cities with scientific education exhibited a greater demand for codified productive knowledge during the Enlightenment, as measured by subscriptions to the newly available Encyclopedia. Reversely, the analysis also shows that the availability of codified knowledge increased the demand for scientific education, as reflected in enrolment in scientific subjects at schools of the revolutionary period. Finally, the analysis documents that education was instrumental for the adoption of codified knowledge as proxied by subsequent economic growth and innovation and patenting activity. The evidence is consistent with the view that human capital acquired in schools provided students with a "scientific literacy" necessary to utilize the ideas which spread during industrial enlightenment.

WORK IN PROGRESS

Napoleon's schools: Education and Invention during the Industrial Revolution in France

Catch-up, forging ahead, or falling behind? Technological gaps during the first Industrial Revolution (with Carl Hallmann and Emre Enez Yavuz, Northwestern)

The Emergence of Political Dynasties during Democratization: Evidence from France (with Guillaume Blanc, Brown)

PRESENTATIONS

2021	Northwestern, Econ History Lunch (scheduled); Warwick CAGE doctoral school "Economic growth and development"; LSE, Graduate Econ History Seminar; Zurich Virtual FRESH Meeting; LMU Munich, Macro and Innovation Seminars
2020	Brown, Growth Lab; Northwestern, Econ History Lunch; LMU Munich, Macro Seminar
2019	DEGIT, Odense; EEA, Manchester; EHES, Paris; VfS, Leipzig; German Historical Institute, Paris; LMU Munich, Macro Seminar
2018	World Economic History Congress, Boston (co-author); Spring Meeting of Young
2017	Economists, Palma de Mallorca ASREC Europe, Bologna; Culture, Diversity, and Economic Development doctoral workshop, Groningen

TEACHING

2019, 2020	Macroeconomics (M.Sc.)	Teaching assistant
2018	Intermediate Macroeconomics (B.Sc.)	Teaching assistant
2020, 2021	Seminar Human Capital and Development (B.Sc.)	Co-Organizer
2019, 2020	Seminar Economics of Religion (B.Sc.)	Co-Organizer
2019	Seminar Long-run Growth & Comparative Dev. (M.Sc.)	Supervisor
2018	Seminar Demography and Development (M.Sc.)	Supervisor
2018	Seminar Economics of Aging and Longevity (B.Sc.)	Supervisor
2018	Seminar Conflict and Development (B.Sc.)	Supervisor
2017-2021	9 Bachelor and 2 Master theses	(Co-)Supervisor

SERVICE TO THE PROFESSION

Referee: Quarterly Journal of Economics, Journal of Economic Growth
Conference Organization: Munich Young Economists Meeting 2019 (co-organizer)

AWARDS AND GRANTS

2020 DAAD Short-Term Grant for research stay at Brown (c.5.000€)

2019–2021 Add-on fellowship for interdisciplinary economics, Joachim Herz Stiftung (12.500€)

2016–2019 Full doctoral scholarship, German Research Foundation (GRK 1928)

2016 VAC Award for 3rd best Master's degree, Summer 2016

WORK EXPERIENCE

2013 Intern, Federal Statistical Office, Wiesbaden

TECHNICAL SKILLS

LATEX, R, Stata, some Python and GIS

RESEARCH LANGUAGES

German, English, and French

Last updated: October 14, 2021