

DOMINIK NAEHER

Goethe University Frankfurt
Faculty of Economics and Business Administration
Theodor-W.-Adorno-Platz 4, RuW, Postbox 46
60323 Frankfurt am Main, Germany

Phone: +49 163 907 3944
Email: naeher@econ.uni-frankfurt.de
Date of birth: September 6, 1988
Nationality: German

CURRENT POSITION

Research and teaching assistant to Professor Matthias Schündeln, since 2014
Goethe University Frankfurt

RESEARCH INTERESTS

Development Economics, International Economics, Applied Economic Theory

EDUCATION

Ph.D. Economics, Graduate School of Economics, Finance, and Management, (expected) 2018
Goethe University Frankfurt, Advisors: Matthias Schündeln, Mirko Wiederholt
M.Sc. Quantitative Economics, Goethe University Frankfurt 2016
Diploma in International Relations, University of London International Programmes 2016
M.Sc. Economics, TU Dortmund University, Germany 2013
Exchange semester: Complutense University of Madrid, Spain (Spring 2012)
B.Sc. Business Mathematics, TU Dortmund University 2011
Exchange semester: University of Iowa, Iowa City, USA (Fall 2010)

RESEARCH WORK IN PROGRESS

Agricultural Input Decisions in the Presence of Complementarities: A Rational Inattention Model (JMP)
Attentional Barriers to Technology Adoption
Determinants of Farmers' Demand for Agricultural Extension: Theory and Evidence from Sub-Saharan Africa (with Matthias Schündeln)
Why Don't Farmers Use Synergistic Inputs Together on the Same Plots? Evidence from Maize Farmers in Tanzania (with Sara Savastano)

PUBLICATION

An Empirical Estimation of Asia's Untapped Regional Integration Potential Using Data Envelopment Analysis, *Asian Development Review*, 2015, vol. 32, no. 2, pp. 178–195.

PROFESSIONAL EXPERIENCE

World Bank, Washington, D.C. 09/2016 - 02/2017
Consultant, Office of the Vice President, Operations Policy & Country Services
Asian Development Bank, Frankfurt 12/2015 - 08/2016
External relations consultant, ADB European Representative Office
Center for Financial Studies, Goethe University Frankfurt 10/2013 - 09/2014
Research assistant, Sustainable Architecture for Finance in Europe
Fraunhofer Institute for Material Flow and Logistics, Dortmund 05/2011 - 11/2011
Research assistant, Department of Intralogistics and IT Planning
KfW Development Bank, Managua, Nicaragua 01/2011 - 03/2011
Intern, Financial cooperation with Central America
Dr. Bergmann - Dr. Rohde & consulting group, Bochum 04/2007 - 01/2008
Student assistant, Data analysis center

RESEARCH EXPERIENCE

African Center for Economic Transformation , Accra, Ghana	02/2017
Research visit, cross-country study on economic transformation	
Asian Development Bank , Manila, Philippines	02/2015 – 04/2015
Intern, Independent Evaluation Department, study on regional integration	
Faculty of Economics and Social Sciences , TU Dortmund University	04/2011 – 09/2013
Research assistant, Chair of Macroeconomics and Applied Economics	
Faculty of Mathematics , TU Dortmund University, Research assistant	10/2009 - 03/2010

TEACHING EXPERIENCE

Goethe University Frankfurt, Teaching Assistant
Development Economics III , Spring 2015, Spring 2017
Microeconomics II , Spring 2016
Evaluation of Development Policy: Methods and Applications (Master-level seminar), with Professor M. Schündeln, Fall 2014, Fall 2017
Pyongyang University of Science and Technology, Visiting Lecturer
Instructor for Introductory Econometrics , Spring 2017
TU Dortmund University, Teaching Assistant
Higher Mathematics I , Fall 2010
Mathematics pre-semester course , Fall 2008

CONFERENCES AND SEMINAR TALKS

3rd FHM Workshop in Development Economics, Heidelberg University (October 2017); Research Lecture Series, Pyongyang University of Science and Technology (April 2017); Brown Bag Seminar, African Center for Economic Transformation, Accra (February 2017); Development Economics Brown Bag Seminar, Goethe University Frankfurt (February 2016); ERCD Seminar Series, Asian Development Bank, Manila (April 2015)

GRANTS AND STIPENDS

Carlo Schmid Fellow, DAAD and German National Academic Foundation	2016 - 2017
Deutschland Scholarship, German Federal Ministry of Education and Research	2014 - 2015
PhD Stipend, GSEFM	2013 - 2014
Erasmus scholarship, EU	2012
PROMOS travel grant, German Academic Exchange Service (DAAD)	2010

OTHER SKILLS

Languages: German (native), English (fluent), Spanish (fluent), Romanian (intermediate)
Software: Stata, Matlab, R, SPSS, C++, zTree, LaTeX, Scientific Workplace, Microsoft Office

REFERENCES

Matthias Schündeln	Mirko Wiederholt	Hartwig Schafer
Professor of Economics	Professor of Economics	Vice President, Global Themes
Goethe University Frankfurt	Goethe University Frankfurt	The World Bank
+49 69 798-34798	+49 69 798-33818	+1 202 473-3720
schuendeln@wiwi.uni-frankfurt.de	wiederholt@wiwi.uni-frankfurt.de	hschafer@worldbank.org

ABSTRACTS

1. “Agricultural Input Decisions in the Presence of Complementarities: A Rational Inattention Model” (Job Market Paper)

Abstract: This paper investigates an empirical puzzle in technology adoption: the observation that farmers in Sub-Saharan Africa who have successfully adopted modern agricultural inputs on their farm tend to spread synergistic inputs across plots rather than combining them. Existing theories are unable to account for this behavior, because they focus on explaining adoption decisions of individual inputs and abstract from the complexity of these decisions in the presence of complementarities. This paper proposes a novel explanation that is based on a rational inattention channel. In the model, combining modern inputs offers potential synergy effects, but cultivation practices have to be adapted to specific field and seasonal conditions in order to achieve optimal outcomes. By devoting attention to their plots, farmers can reduce uncertainty about optimal practices and thereby increase the expected return of joint input use. I show that taking into account a limited attentional capacity can explain why farmers may rationally decide not to combine complementary inputs on the same plots or abstain from adopting profitable inputs altogether. The identified mechanism is in line with evidence on the limits of human cognition and generates testable predictions that coincide well with empirical patterns in agricultural input use.

2. “Attentional Barriers to Technology Adoption”

Abstract: The economic literature has considered various channels to explain imperfect adoption of generally profitable technologies, ranging from lack of knowledge and learning to risk aversion, credit constraints, and behavioral biases. This paper focuses on a channel which has been less investigated: attentional barriers to technology adoption. I study a rational inattention model in which agents decide how to allocate their scarce attention between different actions, and whether to adopt a certain technology. In the model, adoption requires agents to choose between different ways of applying the technology, the returns to different ways of usage depend on the fundamental state of the economy, and agents can reduce uncertainty about optimal actions by processing information. I identify the role of attention-related parameters in determining optimal adoption behavior and show that if agents' opportunity cost of attention is sufficiently large, non-adoption of profitable and economically feasible technology can be an equilibrium outcome. The paper provides an alternative mechanism to rationalize imperfect uptake and usage of modern technologies, which complements the insights of existing theories in this context.

3. “Determinants of Farmers’ Demand for Agricultural Extension: Theory and Evidence from Sub-Saharan Africa” (with Matthias Schündeln)

Abstract: We model farmers as facing a limited amount of attention which has to be allocated between the agricultural production process and other relevant actions. Agricultural advisory services are available to farmers at no monetary cost, but positive effects on productivity are only realized if farmers devote attention to requesting and listening to advice. The model suggests that farmers may increase their demand for extension, if their marginal utility of income increases due to negative shocks on wealth. To test the model, we study the empirical link between non-agricultural shocks at the household level and farmers’ demand for agricultural advice based on a large observational dataset of farmers in Sub-Saharan Africa.

4. “Why Don't Farmers Use Synergistic Inputs Together on the Same Plots? Evidence from Maize Farmers in Tanzania” (with Sara Savastano)

Abstract: In many African countries, modern agricultural inputs are commonly provided in packages through NGOs and government subsidy programs. Despite the strong expectation that farmers will use these inputs together, the empirical evidence on the extent to which farmers are combining inputs on individual plots is relatively weak. This paper addresses this gap by exploring empirical patterns in input usage at the plot level for a large sample of maize farmers in Tanzania.

5. “An Empirical Estimation of Asia’s Untapped Regional Integration Potential Using Data Envelopment Analysis”

This paper uses bilateral flow data on multiple dimensions of economic integration to construct a composite index of regional integration outcomes covering 19 regions in various parts of the world. As a first step, the multidimensional indicator is used to rank regions according to their current degree of regional integration, which allows for a direct comparison of Asia’s regional integration performance with those of other regions of the world. As a second step, the constructed indicator of regional integration outcomes is used as the output variable in a data envelopment analysis to estimate Asia’s untapped regional integration potential.

This paper has been published:

Naeher, D. (2015). An Empirical Estimation of Asia’s Untapped Regional Integration Potential Using Data Envelopment Analysis. [*Asian Development Review*](#), 32(2): 178-195.

An earlier version appeared as a working paper:

Naeher, D. (2015). An Empirical Estimation of Asia’s Untapped Regional Integration Potential Using Data Envelopment Analysis. [*ADB Economics Working Paper Series*](#), No. 445.