

C. FRIEDRICH KREUSER

Research Topics: Economic Growth, Industrial Organisation and Macroeconomics, Labour Economics
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EDUCATION

PhD Economics, Trinity College Dublin	2017–2022
Dissertation: <i>Essays in Productivity</i> , supervised by Prof. Carol Newman.	
Job Market Paper: <i>Declining Allocative Efficiency, Falling Labour Shares, and Corporate Lobbying in European Manufacturing</i>	
MSc Economics, (Merit), London School of Economics and Political Science	2016–2017
MCom Economics, (Cum Laude), Stellenbosch University	2013–2014
with a semester at the University of Zürich	
BCommHons Economics, (Cum Laude), Stellenbosch University	2012
BComm Law, (Cum Laude), Stellenbosch University	2009–2011

ACADEMIC POSITIONS

Lecturer, Stellenbosch University	2025+
Research Associate, King's College London	2023–2024

RESEARCH EXPERIENCE

Principal Investigator, United Nations University World Institute for Development Economics Research (UNU-WIDER) funded project	2022–2023
This UNU-WIDER funded project examined the impact of mergers and merger control on the decomposed components of markups at the industry level. Please see the Active Research section for additional information.	
PhD Research Intern, Central Bank of Ireland	2022–2023
Researcher on a project using Irish administrative credit data to examine the role of credit conditions, contract terms, and loan structure on small firm survival over the business cycle and during COVID-19 specifically.	
Researcher, UNU-WIDER and the South African National Treasury (SA-NT)	2015–2022
Constructed versions 1 and 2, and oversaw the construction of version 4 of the South African Revenue Service and National Treasury database. This data includes individual, firm, and transaction level components. Management responsibilities include coordination with data teams to clean, structure, and maintain the integrity of large-scale administrative tax data. Relevant projects received funding from UNU-WIDER. Please see the Publications section for additional information.	
Researcher, UNU-WIDER and SA-NT	2015
Contracted by UNU-WIDER and the South African National Treasury to estimate parameters for South African macroeconomic models. Please see the Publications section for additional information.	
Researcher, Research on Socio-Economic Policy at Stellenbosch University	2013–2015
Part-time development economics researcher in projects focused on labour, education, and health care.	

PUBLICATIONS

Kreuser, C. F. & Newman, C. (2018). Total Factor Productivity in South African Manufacturing Firms. *South African Journal of Economics*, 86(S1), 40–78. <https://doi.org/10.1111/saje.12179>

Pieterse, D., Gavin, E., & Kreuser, C. F. (2018). Introduction to the South African Revenue Service and National Treasury Firm-Level Panel. *South African Journal of Economics*, 86(S1), 6–39. <https://doi.org/10.1111/saje.12156>

Meisser, L. & Kreuser, C. F. (2017). An Agent-Based Simulation of the Stolper-Samuelson Effect. *Computational Economics*, 50(4), 533–547. <https://doi.org/10.1007/s10614-016-9616-x>

Burger, R. P., Coetze, L. C., Kreuser, C. F., & Rankin, N. A. (2017). Income and Price Elasticities of Demand in South Africa: an Application of the Linear Expenditure System. *South African Journal of Economics*, 85(4), 491–514. <https://doi.org/10.1111/saje.12167>

WORKING PAPERS

Kreuser, C. F., Kilumelume, M., & Burger, R. P. (2024). Market Power and Merger Control in South Africa. *WIDER Working Paper*, 2024/31. <https://doi.org/10.35188/UNU-WIDER/2024/489-2>

Ebrahim, A., Kreuser, C. F., & Kilumelume, M. (2021). The Guide to the CIT-IRP5 Panel Version 4.0. *WIDER Working Paper*, 2021/173. <https://doi.org/10.35188/UNU-WIDER/2021/113-6>

Kreuser, C. F. & Brink, D. (2021). Total Factor Productivity in South African Manufacturing Firms 2010–17. *WIDER Technical Note*, 20/2021. <https://doi.org/10.35188/UNU-WIDER/WTN/2021-20>

Hlatshwayo, A., Kreuser, C. F., Newman, C., & Rand, J. (2019). Worker Mobility and Productivity Spillovers: an Emerging Market Perspective. *WIDER Working Paper*, 2019/114. <https://doi.org/10.35188/UNU-WIDER/2019/750-7>

Kreuser, C. F. & Rankin, N. A. (2017). Capital and Labour Substitutability in South Africa. *Research Project on Employment, Income Distribution and Inclusive Growth REDI3x3 Working Paper*, 36. [Available Here](#)

Burger, R. P. & Kreuser, C. F. (2017). Unequal Partners: The Determinants and Consequences of Latent Female Household Bargaining Power. *Research Project on Employment, Income Distribution and Inclusive Growth REDI3x3 Working Paper*, 44. [Available Here](#)

Kreuser, C. F., Burger, R. P., & Rankin, N. A. (2015). The Elasticity of Substitution and Labour-Displacing Technical Change in Post-Apartheid South Africa. *WIDER Working Paper*, 2015/101. <https://doi.org/10.35188/UNU-WIDER/2015/990-9>

TEACHING EXPERIENCE

Visitor, Stellenbosch University

Microeconomics 871 - General Equilibrium Theory and Information Economics

2024

Language	English
Credits	A third of a 20 credits course; Compulsory
Level	Master's
Number of Students	26
Teaching Format	4 Lectures and 4 Tutorials (2 hours each) In person only

Responsibilities

Responsibilities include presenting lectures, updating teaching materials, setting and grading of tutorials, essays, and exams. Administrative responsibilities include managing online content, timely response to student emails, and timely submission of grades.

Course Content

Topics in the General Equilibrium Theory component include Feasible Allocations; Pareto Optimality; Edgeworth Box diagrams; Contract Curves; Barter and Competitive Equilibria; Competitive Equilibrium with Production; Walras's Law; Aggregate and Excess Demand; and the First and Second Welfare Theorems.

Topics for the Information Economics component include Adverse Selection; Moral Hazard; Pooling and Separating Equilibria; Individual Rationality and Incentive Compatibility constraints; and risk preferences.

Readings

Jehle, G. & Reny, P. (2011). *Advanced Microeconomic Theory, 3rd Edition*,. Financial Times|Prentice Hall, Harlow, England

Teaching Fellow, Trinity College Dublin

ECU44122/44124 Game Theory

2021/22

Language	English
ECTS Points	ECU44122, 10; ECU44124, 5; Optional
Level	Fourth year of Bachelor's programme (Senior Sophister)
Number of Students	ECU44122, 40; ECU44124, 6
Teaching Format	10 Lectures and 4 Tutorials (1 hour each) In person with live streaming and recording (Canvas)

Responsibilities

Responsibilities include presenting lectures, ensuring that recording and live-streaming facilities function, updating teaching materials, holding regular office hours, and the setting and grading of assignments, essays, and exams. Administrative responsibilities include managing online content on Blackboard, timely response to student emails, and timely submission of grades.

Supervision

Students were required to attend at least one supervised session in relation to the research assignment portion of the course. The assignments took the form of essays and were around 1,400-1,600 words in length and counted toward 30% (ECU44122) and 50% (ECU44124) of their grade. Students were required to model a real-world strategic interaction by expanding on the tools developed through the course.

Supervised sessions focused on supporting students to better apply their intuition, to critically assess their real-world interaction to capture the most relevant elements, to clarify misunderstandings of the assignment and modelling approach, and to support their deeper understanding of modelling in general. These sessions were conducted online and ranged from half an hour to an hour in length. Struggling students were actively encouraged to make additional appointments.

Course Content

Topics include simultaneous and sequential move games with complete, incomplete, perfect, and imperfect information. Examples of more advanced topics include: First- and Second Price Sealed Bid Auctions; Pooling, Semi-Pooling, and Separating Equilibria; and Perfect Bayesian Equilibrium.

Readings

Harrington, J. E. (2015). *Games, Strategies and Decision Making*. Worth Publishers

Osborne, M. J. (2009). *An Introduction to Game Theory*. Oxford University Press

Teaching Fellow, Trinity College Dublin (continued)

EC7035 - International Macroeconomics

2019/20

Language	English
ECTS Points	5; Optional
Level	Master's
Number of Students	12 (Total master's class size - 21)
Teaching Format	4 Lectures (2 hours each) and 3 tutorials (1 hour each) In person only

Responsibilities

Responsibilities include the creation of a new syllabus, the creation of new slides and teaching materials, presenting lectures and tutorials, holding regular office hours, and the setting and grading of exams and problem sets. Administrative responsibilities include managing online content on Blackboard, timely response to student emails, and timely submission of grades.

Course Content

Dynamic Stochastic General Equilibrium (DSGE) models covered include the Small Open Economy Real Business Cycle Model, the Import-Export (MX) and Import-Export-Non-Tradables (MXN) models, and New Open Economy Macroeconomic models (NOEM).

Students were required to derive the set of equilibrium processes, to determine the sign and relative magnitude of model-specific shocks to steady state values, and to describe the shape of the resulting impulse response. Log-linearisation was introduced in the NOEM section of the course. Students were provided with optional Dynare code to examine these impulse responses along with the role of external debt elastic interest rates further. Students were introduced to model calibration.

Additional topics include introduction to national accounting, the current account and current account sustainability, and international real interest rate determination.

Readings

Obstfeld, M. & Rogoff, K. (1996). *Foundations of International Macroeconomics*. MIT Press

Uribe, M. & Schmitt-Grohé, S. (2017). *Open Economy Macroeconomics*. Princeton University Press

Teaching Fellow, Trinity College Dublin (continued)

EC7006 Part C - Labour Search and Matching in Macroeconomics

2018/19

Language	English
ECTS Points	Half of a 10 credit course; One of three optional topics
Level	Master's
Number of Students	2 (Total master's class size - 8)
Teaching Format	4 Lectures (2 hours each) and 3 tutorials (1 hour each) In person only

Responsibilities

Responsibilities include the creation of new syllabus, the creation of new slides and teaching materials, presenting lectures and tutorials, holding regular office hours, and the setting and grading of exams and problem sets. Administrative responsibilities include managing online content on Blackboard, timely response to student emails, and timely submission of grades.

Course Content

Relevant topics include the baseline Real Business Cycle (RBC), the New-Keynesian model (NKM) with sticky wages, and the Diamond-Mortensen-Pissarides (DMP) model. Extensions to the DMP model include job destruction, exogenous labour turnover, and on-the-job-search. Due to the nature of the course, lectures on the RBC and NKM models focused on the response of labour to productivity shocks. These models received more complete treatment in the Monetary Policy module taught as a Teaching Assistant, below.

Additional topics include labour market definitions, stylized facts about the labour market over the business cycle, job- and worker-flows, the Shimer exercise, the Beveridge Curve, and the Hanson-Rogerson indivisible labour model.

Readings

Pissarides, C. A. (2000). *Equilibrium Unemployment Theory*. MIT press
Romer, D. (2012). *Advanced Macroeconomics (4th Edition)*. McGraw-Hill

Master's Level Teaching Assistant, Trinity College Dublin

General Information

Language	English
ECTS Points	20 credits per year, 10 of which are optional.
Level	Master's
Number of Students	6–22 students
Teaching Format	6–8 tutorials per semester (1 hour each) In person or online (Microsoft Teams)

General Responsibilities

Responsibilities include presenting and grading weekly tutorials; timely submission of grades; managing Blackboard and Microsoft Teams facilities in so far as they are related to tutorials; supporting the improvement of previous problem and solution sets; creating new problem sets; creating slides and other teaching materials to reinforce content from main lectures; contributing to lecture materials (EC7037); holding regular office hours; the flagging of students falling behind an intervening where possible; and assisting with the setting of exams.

Master's Level Teaching Assistant, Trinity College Dublin (continued)

EC7005/EC7031 Introduction to Macroeconomics

2018/19–2021/22

Course Content

Topics include the Permanent Income and Random-Walk Hypotheses, precautionary savings, investment with and without adjustment costs (q-Theory), budget deficits, fiscal policy, and the Overlapping-Generations model.

Readings

Romer, D. (2012). *Advanced Macroeconomics (4th Edition)*. McGraw-Hill

EC7006/EC7033 Economic Growth

2018/19–2020/21

Course Content

Topics include the Solow-Swan, Ramsey-Kass-Koopmans, Diamond, AK, Romer, and Schumpeterian growth models.

Readings

Aghion, P. & Howitt, P. (2009). *The Economics of Growth*. MIT Press

Romer, D. (2012). *Advanced Macroeconomics (4th Edition)*. McGraw-Hill

EC7006/EC7035 International Macroeconomics

2018/19–2021/22

Course Content

Please see page 4 for details on DSGE components in the course lectured for the 2019/20 academic year. Additional topics include financial globalisation and global imbalances, international currency exposures, covered interest parity, and the use of publicly available international macroeconomic data.

Readings

Obstfeld, M. & Rogoff, K. (1996). *Foundations of International Macroeconomics*. MIT Press

Uribe, M. & Schmitt-Grohé, S. (2017). *Open Economy Macroeconomics*. Princeton University Press

EC7006/EC7037 Monetary Policy

2018/19–2021/22

Course Content

Topics include the RBC model, the Money-in-Utility and Cash-in-Advance extensions to the RBC model, the NKM with adjustment costs and Calvo-Pricing, the Lucas critique, the Barro-Grodon Model, optimal monetary policy, and the Taylor Rule.

Readings

Gali, J. (2015). *Monetary Policy, Inflation, and the Business Cycle: an Introduction to the New Keynesian Framework and its Applications*. Princeton University Press

Walsh, C. E. (2010). *Monetary Theory and Policy*. MIT Press

Bachelor's Level Teaching Assistant, Trinity College Dublin

EC1030 Mathematics and Statistics

2017/18

Language	English
ECTS Points	10, Not Optional
Level	First year of Bachelor's programme (Junior Fresh)
Number of Students	14–20
Teaching Format	5 tutorials per week for 8 weeks (1 hour each) per semester In person only

Responsibilities

Responsibilities include presenting weekly tutorials, grading assignments and exams, and supporting students with textbook related software.

Course Content

Topics in Mathematics include linear matrix algebra, constrained and unconstrained optimisation, and basic integration. Topics in Statistics include probability theory, discrete and continuous random variables, sampling, confidence intervals, and hypothesis testing.

Readings

Jacques, I. (2015). *Mathematics for Economics and Business*. Princeton University Press

Kelly, A. & Sanjiv, J. (2013). *Communicating with Numbers* (international ed.). McGraw Hill

Post-Graduate Teaching Assistant, Stellenbosch University

Honours Econometrics

2015

Responsibilities include the setting up of tutorial syllabus and the teaching of practical sessions for honours econometrics students.

Topics include Ordinary Least Squares, discrete choice models, heteroscedasticity, qualitative data, instrumental variables, specification testing, stationarity, autoregressive processes, cointegration, and error correction models.

Honours and Master's Microeconomics

2013–2014

Responsibilities include the presenting and grading of post-graduate level microeconomics tutorials.

Topics include consumer and producer theory, partial equilibrium theory, static and dynamic games of incomplete information, evolutionary game theory, choice under uncertainty, discounted utility, adverse selection, moral hazard, general equilibrium theory, and social choice and welfare.

SOFTWARE

Stata (Advanced)

All standard regression techniques for cross-section, time series and panel data. Extensive experience with non-linear seemingly unrelated regression analysis, instrumental variable techniques, ordered and multinomial response models, regression discontinuity design, matching models, sample selection models, and non-parametric estimation. Experience with spatial models and sentiment analysis. Advanced programming experience in MATA. Experience with SQL, SDMX, and JSON data sources.

Matlab/Octave (Intermediate)

Experience with numerical computation including constrained and unconstrained optimisation techniques. Experience with Gauss-Jacobi, Gauss-Seidel, fixed-point, and Newton's methods. Experience with Taylor approximations, numerical integration, and advanced experience with Dynare.

Intermediate (Intermediate)

Experience with symbolic and numerical computation including constrained and unconstrained optimisation techniques. Extensive experience with programming and solving symbolic models including phase diagrams.

Python (Intermediate)

Experience with standard data analysis packages, standard numerical packages, unstructured big text data, and standard machine learning techniques including supervised and unsupervised learning, classification, natural language processing, sentiment analysis, and basic neural networks with TensorFlow and Theano through Keras. Extensive experience in web scraping using Selenium and standard packages.

R (Intermediate)

Experience with standard regression techniques, unstructured big text data, sentiment analysis, visualisation, classification, and interaction with SQL.

SQL (Intermediate)

Experience in managing large separate databases for use with Stata, R, and Python. Experience with database management, joining, case statements, time and date data, text data, and standard aggregation and grouping techniques.

LANGUAGES AND NATIONALITY

Languages English, Afrikaans

Nationality South Africa

SCHOLARSHIPS

Grattan Scholarship for PhD in Economics at Trinity College Dublin	2017–2021
Commonwealth Scholarship for MSc in Economics at the London School of Economics and Political Science	2016–2017
Economic Research Southern Africa Scholarship for MCom in Economics at Stellenbosch University	2014
Heyning-Roelli Stiftung Scholarship for a semester of study at the University of Zürich	2014

Declining Allocative Efficiency, Falling Labour Shares, and Corporate Lobbying in European Manufacturing

Job Market Paper

In recent decades advanced economies have experienced falling labour shares of income and increases in product market concentration. These trends are largely attributed to a shift in activity toward more productive firms with low labour shares. We show that while reallocation-driven productivity and labour share growth are negatively correlated, the relationship is driven by geo-industries with lower rates of negative allocative efficiency growth experiencing lower declines in the reallocation component of their labour share. Matching firm-level data from Orbis to lobbying data from the European Transparency Register, the intensity of lobbying by corporate interests in a geo-industry is shown to predict the coexistence of falling labour shares and declining allocative efficiency. Lobbying appears to work through constructing barriers to entry by first limiting productive shifts of activity and, in the long run, promoting shifts toward high-markup low-labour share firms. These effects are more pronounced in industries with increasing output concentration where lobbying is further related to the long-run exit of more productive firms.

Market Power and Merger Control in South Africa

with Michael Kilumelume and Rulof Burger.

We estimate structural, materials, and labour markups for the South African economy at the three-digit industry level for 2012–19. The fall in structural labour and material markups found for the numerical majority of industries are generally isolated to smaller industries, with industries accounting for a higher proportion of sales generally experiencing smaller downward shifts. We show that material-based markups are increasing over this period. Upward markup pressure in structural and labour markups are primarily driven by compositional shifts of surviving firms, while materials markup growth is driven by the average firm in a given sector. We show that merger intensity is positively related to structural markup growth, with a 1% increase in the proportion of cumulative mergers over 2013–18 being related to around a 0.28% increase in structural markup growth over the period from 2012–19. We find that large vertical mergers are positively related to structural and materials markup growth while being negatively related to labour markup growth. Large horizontal mergers generally increase labour and structural markups.

Worker Mobility and Productivity Spillovers: an Emerging Market Perspective

with Ayanda Hlatshwayo, Carol Newman, and John Rand.

This paper uses matched employer-employee data from South Africa to examine the extent to which technology transfers between firms through the hiring of workers. Allowing for differential spillovers based on observable technology differences between sending and receiving firms, we find strong evidence for positive productivity spillovers through worker mobility. In contrast to previous studies set in more advanced economies, our results suggest that negative spillovers can occur. Firms that hire workers from less productive firms experience a decline in productivity in the following year compared with similar firms that do not hire any workers. This, we suggest, may be explained by the high skills deficit in the South African labour market, and an important mechanism for technology transfers in the future may be driven by investments in firm-level training initiatives.

Total Factor Productivity in South African Manufacturing Firms 2010–17

with Daniel Brink.

This paper introduces a new implementation of the control function approach often used to estimate total factor productivity that allows for a more consistent convergence of production function elasticities. Using this approach, we update Kreuser and Newman's (2018) productivity estimates for the South African Manufacturing Sector using Administrative data from 2009-2017. Limited productivity growth is found for the period from 2009-2017, with the majority of variance in sectoral productivity attributable to allocative efficiency. We find that more allocatively efficient industries are generally more capital-intensive and have significantly higher capital elasticities while having only slightly higher labour elasticities.

REFERENCES

References available on request.