

Kevin Kotzé

University Education

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| 2014 | University of Stellenbosch: PhD in Commerce (Economics) |
| 2006 | University of Stellenbosch: Masters in Commerce (Economics) |
| 2003 | University of South Africa: Bachelor of Commerce [Honours] (Economics) |
| 1996 | University of Natal: Bachelor of Commerce (Economics, Finance & Management) |

Professional Development

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| 2022 | Barcelona Macroeconomics Summer School (Time Series Models for Macroeconomic Analysis: Luca Gambetti) - Universitat Pompeu Fabra |
| 2022 | Barcelona Macroeconomics Summer School (Time Series Methods for Risk Analysis: Christian Brownlees) - Universitat Pompeu Fabra |
| 2019 | Barcelona Data Science Summer School (Deep Learning: Alexandros Karatzoglou & Ilias Leontiadis) - Universitat Pompeu Fabra |
| 2019 | Barcelona Data Science Summer School (Machine Learning in Social Sciences: Stephen Hansen, Omiros Papaspiliopoulos & David Rossell) - Universitat Pompeu Fabra |
| 2016 | Barcelona Macroeconomics Summer School (Recent Developments in Forecasting: Barbara Rossi) - Universitat Pompeu Fabra |
| 2011 | Dynare Summer School (Dynamic Stochastic General Equilibrium Models) - Banque de France |
| 2009 | Barcelona Macroeconomics Summer School (DSGE Models, Methods and Problems: Fabio Canova) - Universitat Pompeu Fabra |
| 2009 | Economic Research Southern Africa (Assessing Future Economic Developments and Policy Evaluation using Aggregate Dynamic Models, Methods and Applications: Alexander Ludwig) - University of Witwatersrand |
| 2009 | Economic Research Southern Africa (Likelihood Methods in Financial Econometrics: Stan Hurn) - University of Stellenbosch |
| 2008 | Economic Research Southern Africa (Time Series Workshop: Katarina Juselius) - University of Cape Town |
| 2005 | Erasmus Universiteit Rotterdam: M.Sc. (Econometrics) - completed several econometrics courses while on an exchange programme |
| 2002 | Chartered Financial Analyst Institute: Completed Level I of the CFA programme |
| 2002 | Association of Collective Investment Schemes: Level I and Level II |

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| 1999 | South African Institute of Financial Markets: Registered Person (Equity, Fixed Interest, & Futures Markets) |
| 1999 | Securities Institute (UK): International Capital Markets Qualification |
| 1998 | Chartered Institute of Bankers (UK): Certificate for Financial Advisers |
| 1998 | Chartered Insurance Institute (UK): Life and Pensions Foundation Certificate |

Research Interests

- Macroeconomics, Monetary Economics, International Finance, Time Series Analysis, Machine Learning & Econometric Modelling.

Working papers

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| 2022 | “Big data forecasting of South African inflation”, <i>South African Reserve Bank Working Paper Series</i> , WP/22/01, with Byron Botha, Rulof Burger, Neil Rankin & Daan Steenkamp. |
| 2017 | “Fiscal Policy Uncertainty and Economic Activity in South Africa”, <i>School of Economics Macroeconomic Discussion Paper Series</i> , Number 2017-02. |

Peer Review Publications

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| 2023 | “Big data forecasting of South African inflation”, <i>Empirical Economics</i> , forthcoming, with Byron Botha, Rulof Burger, Neil Rankin & Daan Steenkamp. |
| 2021 | “Unemployment fluctuations and currency returns in the United Kingdom: Evidence from over one and a half century of data”, <i>Journal of Multinational Financial Management</i> , Vol. 61, pp. 1-14, with Deven Bathia, Riza Demirer & Rangan Gupta. |
| 2020 | “Forecasting with second-order approximations and Markov-Switching DSGE models”. <i>Computational Economics</i> , Vol. 56, pp. 747-771, with Sergey Ivashchenko, Semih Emre Çekin & Rangan Gupta. |
| 2020 | “Monetary Policy and Financial Frictions in a Small Open-Economy Model for Uganda”, <i>Empirical Economics</i> , Vol. 59, pp. 1213-1241, with Francis Leni Anguyo & Rangan Gupta. |
| 2020 | “Monetary Policy, Financial Frictions and Structural Changes: A Markov-Switching DSGE approach”. <i>Economic Research</i> , Vol. 33, No. 1, pp. 1538-1561, with Francis Leni Anguyo & Rangan Gupta. |
| 2020 | “Inflation Dynamics in Uganda: A Quantile Regression Approach”. <i>Macroeconomics and Finance in Emerging Market Economies</i> , Vol. 13, No. 2, pp. 161-187, with Francis Leni Anguyo & Rangan Gupta. |
| 2017 | “Forecasting South African Macroeconomic Variables with a Markov-Switching Small Open-Economy Dynamic Stochastic General Equilibrium Model”, <i>Empirical Economics</i> , Vol. 53, No. 1, pp. 117-135, with Mehmet Balcilar & Rangan Gupta. |
| 2017 | “The Role of Oil Prices in the Forecasts of South African Interest Rates: A Bayesian Approach”, <i>Energy Economics</i> , Vol. 61, pp. 270-278, with Rangan Gupta. |
| 2015 | “Measuring Core Inflation in South Africa”, <i>South African Journal of Economics</i> , Vol. 83, No. 4, pp. 527-548, with Stan Du Plessis & Gideon Du Rand. |

- 2015 “Forecasting Macroeconomic Data for an Emerging Market with a Nonlinear DSGE Model”, *Economic Modelling*, Vol. 44, pp. 215-228, with Mehmet Balcilar & Rangan Gupta.
- 2014 “Spillovers in Exchange Rates and the Effects of Global Shocks on Emerging Market Currencies”, *South African Journal of Economics*, Vol. 82, No. 2, pp. 209-238, with Haakon Kavli.
- 2012 “Trends and Structural Changes in South African Macroeconomic Volatility”, *ERSA working paper*, Number 297, with Stan Du Plessis.
- 2011 “Forecasting Performance of an Estimated DSGE model for the South African Economy”, *South African Journal of Economics*, Vol. 79, No. 1, pp. 50-67, with Sami Alpanda & Geoffrey Woglom.
- 2010 “The Role of the Exchange Rate in a New Keynesian DSGE model for the South African Economy”, *South African Journal of Economics*, Vol. 78, No. 2, pp. 170-191, with Sami Alpanda & Geoffrey Woglom.
- 2010 “Should Central Banks of Small Open Economies Respond to Exchange Rate Fluctuations? The Case of South Africa”, *ERSA working paper*, Number 174, with Sami Alpanda & Geoffrey Woglom.
- 2010 “The Great Moderation of the South African Business Cycle”, *Economic History of Developing Regions*, Vol. 25, No. 1, pp. 105-125, with Stan Du Plessis.

Teaching Experience

- 2022 University of Cape Town: Time Series Analysis (Masters & PhD), 1/2 International Finance (Masters & PhD) and International Finance (Honours).
- 2021 University of Cape Town: Time Series Analysis (Masters & PhD), 1/2 Macroeconomic Modelling & Policy Analysis (Masters & PhD) and International Finance (Honours).
- 2020 University of Cape Town: Time Series Analysis (Masters & PhD), 1/2 Advanced Macroeconomic Theory (Masters & PhD) and International Finance (Honours).
- 2019 University of Cape Town: Time Series Analysis (Masters & PhD), 1/2 Macroeconomic Modelling & Policy Analysis (Masters & PhD) and International Finance (Honours).
- 2018 University of Cape Town: Time Series Analysis (Masters & PhD), 1/2 Macroeconomic Modelling & Policy Analysis (Masters & PhD) and International Finance (Honours).
- 2017 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and International Finance (Honours).
- 2016 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and International Finance (Honours).
- 2015 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and 1/2 International Finance (Honours).
- 2014 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and 1/2 International Finance (Honours).
- 2013 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and 1/2 International Finance (Honours).
- 2012 University of Cape Town: Time Series Analysis (Masters & PhD), 2/3 Advanced Macroeconomics (Masters & PhD) and 1/2 International Finance (Honours).

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| 2011 | University of Cape Town: Time Series Analysis (Masters & PhD) and 1/2 International Finance (Honours). |
| 2010 | University of Cape Town: Time Series Analysis (Masters & PhD) and 1/2 International Finance (Honours). |
| 2009 | University of Cape Town: Time Series Analysis (Masters & PhD) |
| 2009 | University of Stellenbosch: Advanced Econometrics (Postgraduate) |
| 2008 | University of Stellenbosch: Advanced Econometrics (Postgraduate) |
| 2007 | University of Stellenbosch: Advanced Econometrics (Postgraduate) |
| 2006 | University of Stellenbosch: Advanced Econometrics (Postgraduate) |
| 2005 | University of Stellenbosch: Advanced Econometrics (Postgraduate) |

Course Development

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| 2022 | University of Cape Town: Macroeconomic Modelling in Developing Countries. Intensive ten-day short course that specifically caters for researchers from African policy-making institutions. |
| 2021 | University of Cape Town: Data Science for Economists. Intensive ten-day short course that specifically caters for researchers from African policy-making institutions. |
| 2019 | University of Cape Town: Macroeconomic Modelling and Machine Learning in Developing Countries. Intensive six-day short course that specifically caters for researchers from African policy-making institutions. |
| 2018 | University of Cape Town: Macroeconomic Modelling in Developing Countries. Intensive six-day short course that specifically caters for researchers from African policy-making institutions. |
| 2017 | Bank of Uganda: Introduction to Dynamic Macroeconomic Models. Intensive ten-day short course that specifically caters for central bank researchers. |

Thesis Supervision

- 4 PhD students (2 completed, 1 about to submit and 1 currently working on his dissertation)
- 15 Masters students (all completed)
- 4 Honours students (all completed)

Management, Leadership and Administration

Commerce Faculty (UCT):

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| 2020-2021 | Ad-hominem promotions working group committee |
| 2019-.. | Student emergency crisis committee |
| 2011-2012 | Programme convener: MPhil (Mathematical Finance) |

School of Economics (UCT):

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| 2016-.. | Convenor of the Old Mutual Budget Speech Competition |
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| 2016-.. | Administrator for School of Economics Macroeconomic Discussion Paper Series |
| 2016-.. | Postgraduate committee (Macroeconomics and Financial Economics) |
| 2011-.. | Undergraduate concessions committee |
| 2011-.. | Undergraduate student advisor |
| 2010-.. | Quantitative methods and econometrics committee |
| 2010-.. | Macroeconomics committee |
| 2016-18 | African Economic Research Consortium (AERC) comprehensive examinations committee |
| 2016-18 | African Economic Research Consortium (AERC) curriculum evaluation committee |

Other:

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| 2022-.. | Established researcher rating: National Research Foundation (NRF) |
| 2013 | Referee: Economic Society of South Africa conference |
| 2011 | Referee: Economic Society of South Africa conference |
| 2010-.. | Served as external examiner for the following courses: Macroeconomic Theory [Masters] (University of Pretoria), Open-Economy Macroeconomics [Masters] (University of Pretoria), Dynamic Economic Modelling [Masters] (University of Stellenbosch), Financial Economics [Masters] (University of Stellenbosch), Financial Econometrics [Honours] (University of Stellenbosch), Macroeconomics [Honours] (University of Stellenbosch), Advanced Econometrics [Masters] (University of Stellenbosch), Monetary Economics [Masters] (University of Stellenbosch), Asset Pricing [Masters] (University of Pretoria), Macroeconomics [Honours] (University of Western Cape), International Finance [Honours] (University of Western Cape), Macroeconomics [Masters] (University of Western Cape), Political Economy [PhD] (University of Pretoria) |
| 2010-.. | Served as referee for Computational Economics, Energy, Energy Economics, Emerging Markets Finance & Trade, Empirical Economics, Economic Modelling, International Journal of Forecasting, South African Journal of Economics, Studies in Economics and Econometrics, South African Journal of Economic and Management Studies, African Scientific, & Economic Research Southern Africa. |

Social Responsibility

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| 2019-.. | Create and maintain the <i>School of Economics Macroeconomic Discussion Paper Series</i> , which seeks to promote current macroeconomic research that has been generated by those who are associated with the School of Economics at the University of Cape Town. It is also registered on most of the economic research portals, such IDEAS & RePEc (see, https://sites.google.com/site/soemacroeco/ for additional details). |
| 2019-.. | Create and maintain South African macroeconomic datasets, which include current and historic real-time data vintages (see, https://gitlab.com/KevinKotze/sarbcurent for additional details). |
| 2019-2022 | South African Reserve Bank research fellowship. |
| 2007-2008 | Econex – statistical modelling and data analysis that was used for expert testimony at the Trade & Competition Commission relating to one of the longest and largest matters that had been heard (JTI vs BATSA). |
| 2004 | Department of Trade & Industry - Research report on Capacity Constraints in African countries (with Ronelle Burger and Rulof Burger). |

Corporate Experience

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| 2018-.. | Predictive Insights - Chief Technology Officer & Executive Director - Responsibility: Technical infrastructure and lead developer of time-series models |
| 2005-2011 | IPOS (previously Synovate Aztec) - Statistical modelling development and research in the field of consumer behaviour and marketing research |
| 2002-.. | Oasis Group Holdings - Economic and financial market research for a group of financial services companies |
| 1999-2002 | Oasis Group Holdings - Director of Oasis Crescent Management Company (South Africa) and Oasis Global Management Company (Guernsey) - Responsibility: Head of Collective Investment Schemes (Mutual Funds) in South Africa and Guernsey |
| 1997-1998 | R. P. Hodson (Financial Services) Ltd. UK (now The Oval Group) - Senior Investment Officer Assistant |
| 1996-1997 | R. P. Hodson (Financial Services) Ltd. UK (now The Oval Group) - Administrative Assistant |

Computing Languages

- R, Python, Julia, Matlab, Gauss, C++, Fortran, Cuda, \LaTeX , JavaScript, Html , CSS , Yaml

Other Interests

Triathlon (Ironman Africa Championship: 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2017, 2018, & 2019), Trail running (+200km Mustang Trail Run [Nepal] 2015, +60km Giants Cup Trail Run 2014, +100km Amatola Trail Run 2005 [4th] 2004 [7th]), and most other sport.

January 2023