Curriculum Vitae Elizabeth Louisa Roos

PERSONAL DETAILS

Surname Roos

Name Elizabeth Louisa

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EDUCATION

2006 - 2012 Ph.D. in Economics, Centre of Policy Studies, Faculty of Business and

Economics, Monash University, Australia.

Oct 2002 - Mar 2003 Exchange program (Socrates/Erasmus program), School of Business,

Public Administration and Technology, University of Twente, The

Netherlands.

Feb 2001 - Nov 2003 Master of Economics, University of Pretoria, South Africa. Feb 1999 - Nov 2000 Honours in Economics, University of Pretoria, South Africa.

Feb 1996 - Nov 1998 Baccalaureus Commercii (BCOM) in Economics, University of Pretoria,

South Africa.

PRINCIPAL APPOINTMENTS

May 2018 - present Research Fellow (Level C), Centre of Policy Studies, Victoria University, Melbourne.

Feb 2014 – April 2018 Research Fellow (Level B), Centre of Policy Studies, Victoria University,

Melbourne.

Apr. 2011 – Jan 2014 Research Fellow (Level B), Centre of Policy Studies, Monash University,

Melbourne.

July 2006 - Nov 2011 Tutor, Department of Economics, Monash University, Melbourne.

Feb. 2000 – May 2006 Lecturer, Department of Economics, University of Pretoria, South Africa.
Feb. 1999 - Nov 1999 Tutor, Department of Economics, University of Pretoria, South Africa.
June 1999 – June 2002 Damelin (Hatfield), Lecturing Introductory Economics, Pretoria, South

Africa.

PUBLICATIONS

Refereed journal articles

- 1. Van Heerden, J.H., and E. L. Roos. (2020). The possible effects of the extended lockdown period on the South African economy: a CGE analysis. South African Journal of Economics. (forthcoming)
- 2. Roos E.L., and Adams, P.D. (2020). *The economy-wide impact of subsidy reform: A CGE analysis*. World Trade Review. Volume 19 Special Issue s1: The trade impacts of fossil fuel subsidies. http://dx.doi.org/10.1017/S1474745620000257
- 3. Roos E.L., Horridge JM., van Heerden JH., Adams PD., Bohlmann HR., Kobe K and Vumbukani-Lepolesa B. (2019). *National and regional impacts of an increase in value-added tax (VAT): A CGE analysis for South Africa*. South African Journal of Economics. Vol. 88:1 March 2020. http://dx.doi.org/10.1111/saje.12240

- 4. Bohlmann, H.R., Horridge, J.M., Inglesi-Lotz, R., Roos, E.L. and Stander, L. (2019). *Regional employment and economic growth effects of South Africa's transition to low-carbon energy supply mix*. Energy Policy, Vol 128, pp. 830-837. https://doi.org/10.1016/j.enpol.2019.01.065
- 5. Kilimani, Nicholas., Van Heerden, J.H., Bohlmann, H., and Roos, L. (2018). *Economy-wide impact of drought induced productivity losses*. Disaster Prevention and Management: An International Journal. Vol 27, no 5, pp. 636-648. https://doi.org/10.1108/DPM-05-2018-0155
- 6. A.A. Yusuf, E.L. Roos and J.M. Horridge. (2018). *Indonesia's moratorium on palm oil expansion from natural forest: Economy-wide impact and the role of international transfers*. Asian Development Review, Vol 35, no2, pp. 85-112. https://doi.org/10.1162/adev_a_00115
- 7. Roos, E.L., Adams, P.D., and van Heerden, J.H. (2015). *Construction a CGE database using GEMPACK for an African country*. Computational Economics. Volume 46, Issue 4, Page 495-518. DOI 10.1007/s10614-014-9468-1
- 8. Roos E.L and Giesecke J.A. (2014). *The economic effects of lowering HIV incidence in South Africa: a CGE analysis*. Economic Modelling, Volume 39, April 2014, pp 123-137. http://dx.doi.org/10.1016/j.econmod.2014.02.028
- 9. Roos E L. and Jordaan A. C. (2006). *Access to information and communication: Estimating the determinants of Internet usage in South Africa*. Journal for Communication Sciences in Southern Africa Vol 25, Issue 1, Jul, Pages: p.1-22.

Book Chapters

- 1. Van Heerden, J.H, Roos E.L, Kilimani, N and Adams P.D. (2019). *Any rain on Victoria Lake is only a drop in the bucket: a CGE analysis of the effects of droughts on food security in Uganda*. Chapter for Economy-wide Modeling of Water at Regional and Global Scales. Editor Professor Glyn Wittwer. Springer. ISBN 978-981-13-6100-5. https://doi.org/10.1007/978-981-13-6101-2
- 2. Tran, N., Roos, E.L., Giesecke, J.A., and Madden, J.R. (2018). *Can regionally-targeted temporary visas be an effective policy instrument? A General Equilibrium Analysis*. In J. Poot and M. Roskruge (eds.) Population Change and Impacts in Asia and the Pacific. New Frontiers in Regional Science: Asia Perspectives. ISBN 978-981-10-0229-8.

 DOI: 10.1007/978-981-10-0230-4_7

Articles and book chapters under review

1. Roos, E.L and Adams, P.D. (2020). *Fiscal Reform: A Computable General Equilibrium (CGE) analysis*. International Journal of Islamic and Middle Eastern Finance and Management.

Working papers

- 1. Tran, N., Roos E.L., Asiimwe, W. and Kisakye, P. (2020). *Constructing a 2016/17 Social Accounting Matrix (SAM) for Uganda*. Centre of Policy Studies Working Paper Series, G-302. http://www.copsmodels.com/elecpapr/g-302.htm
- 2. Roos, E.L and Adams, P. (2020). Fiscal Reform-Aid or Hindrance: A Computable General Equilibrium (CGE) analysis for Saudi Arabia. Centre of Policy Studies Working Paper Series, G-298. http://www.copsmodels.com/elecpapr/g-301.htm
- 3. Roos, E.L. (2020). *Provincial Equitable Share allocations in South Africa*. Centre of Policy Studies Working Paper Series, G-298. http://www.copsmodels.com/elecpapr/g-298.htm
- Roos, L and Adams, P. (2019). The economy-wide impact of subsidy reform: A CGE analysis.
 Centre of Policy Studies Working Paper Series, G-293. http://www.copsmodels.com/elecpapr/g-293.htm
- 5. Bohlmann, H.R., Horridge, J.M., Inglesi-Lotz, R., Roos, E.L. and Stander, L. (2018). *Regional economic effects of changes in South Africa's electricity generation mix*. Economic Research Southern Africa (ERSA) Working Paper Series, No 756. https://econrsa.org/publications/working-papers/regional-economic-effects-changes-south-africas-electricity-generation
- 6. A.A. Yusuf, E.L. Roos and J.M. Horridge. (2017). *Indonesia's moratorium on palm oil expansion from natural forest: Economy-wide impact and the role of international transfers*. Centre of Policy Studies Working Paper Series, G-276. http://www.copsmodels.com/elecpapr/g-276.htm

- 7. Kilimani, Nicholas., Van Heerden, J.H., Bohlmann, H., and Roos, L. (2016). *Counting the cost of drought induced productivity losses in an Agro-based economy: The case of Uganda*. University of Pretoria Working paper series No 2016-49. June. https://www.up.ac.za/media/shared/61/WP/wp 2016 49.zp91640.pdf
- 8. Dixon, P., Rimmer, M. and Roos, L. (2014). *Adding financial flows to a CGE model of PNG*. Centre of Policy Studies Working Paper Series, G-242. http://www.copsmodels.com/elecpapr/g-242.htm
- 9. Roos, E.L. (2013a). *Modelling the impact of HIV/AIDS: A literature review*. Centre of Policy Studies Working Paper Series, G-233. http://www.copsmodels.com/elecpapr/g-233.htm
- 10. Roos, E.L. (2013b). *Construction of a database for a dynamic CGE model for South Africa*. Centre of Policy Studies Working Paper Series, G-234. http://www.copsmodels.com/elecpapr/g-234.htm
- 11. Roos, E.L. (2013c). *Labour-market database for South Africa with HIV/AIDS detail*. Centre of Policy Studies Working Paper Series, G-235. http://www.copsmodels.com/elecpapr/g-235.htm
- 12. Roos, E.L. (2013d). *Developing a baseline forecast for a South African dynamic CGE model* (SAGE-H) with HIV/AIDS detail. Centre of Policy Studies Working Paper Series, G-236. http://www.copsmodels.com/elecpapr/g-236.htm
- 13. Roos, E.L. (2013e). *Theoretical specification of a labour-supply module, including HIV/AIDS, for South Africa*. Centre of Policy Studies Working Paper Series, G-241. http://www.copsmodels.com/elecpapr/g-241.htm
- 14. Tran, H., Roos, L., and Giesecke, J. (2012). *DIAC-TERM: A Multi-regional model of the Australian economy with migration detail.* Centre of Policy Studies Working Paper Series, G-238. http://www.copsmodels.com/elecpapr/g-238.htm
- 15. Roos, E.L., Adams, P., and van Heerden, J. (2012). *Construction and updating of a Ugandan CGE database*. Centre of Policy Studies Working Paper Series, G-226. http://www.copsmodels.com/elecpapr/g-226.htm

Other publications

Van Heerden, J.H., Bohlmann, H.R., Giesecke, J.A., Makochekanwa, A., Roos, E.L. (2007). *Higher Education Impact: Universities in the South African Economy*. Higher Education South Africa, Pretoria.

PRESENTATIONS AND CONFERENCE PAPERS

- Roos. E.L, and Adams, P.D. Fiscal Reform an aid or hindrance to economic diversification in Saudi *Arabia: A Computable General Equilibrium (CGE) analysis*. Middle Eastern Economic Association (MEEA) 19th International Conference of MEEA. Istanbul, Turkey. 9-11 October 2020. Presented via Zoom.
- 2. Roos. E.L, and Adams, P.D. Fiscal Reform an aid or hindrance to economic diversification in Saudi *Arabia: A Computable General Equilibrium (CGE) analysis*. Economic Research Forum (ERF) 25th Annual Conference-GCC, growth and diversification strategies. Kuwait. 10-12 March 2019.
- 3. Roos. E.L, P. D Adams and J.M Horridge. *National and regional impacts of an increase in value added tax (VAT): A CGE analysis for South Africa*. Presented at the North American Regional Sciences (NARSC), San Antonio, USA. 8-11 November 2018.
- 4. Roos. E.L, and P. D Adams. *The economy-wide impact of subsidy reform: A CGE analysis for Saudi Arabia*. Presented at a workshop on the Trade impacts of fossil fuel subsidies, Geneva, Switzerland. 5 October 2018.
- 5. Roos. E.L, P. D Adams and J.M Horridge. *Constructing a regional Computable General (CGE) model and database for South Africa*. Presented at the North American Regional Sciences (NARSC), Vancouver, Canada. 9-11 November 2017.
- 6. Adams, P. and Roos. E.L. *Structural Reform in the Gulf Cooperation Council Region Case study (1) Taxation reform in Saudi Arabia*. Presented at the 19th Annual Conference on Global Economic Analysis, Washington DC, United States. 7-9 June 2016.
- 7. Giesecke, J., Tran, N., Roos, E.L., and Madden, J. *Regionally targeted migration policy as an instrument for regional development: a general equilibrium assessment.* 18th Annual Conference on Global Economic Analysis, Melbourne, Australia, 2015.

- 8. Horridge, J.M., Roos, E.L., and Yusuf, A. *Creating a baseline simulation using IndoTERM* (2006-2030). Presented at the 23rd Pacific Conference of the Regional Science Association International (RSAI) & the 4th Indonesian Regional Science Association (IRSA) Institute. 2-4 July 2013.
- 9. Roos, E.L., Adams, P., and van Heerden, J. *The economic impacts of newly discovered oil in Uganda, using a recursive dynamic CGE model*. Presented at the 16th Annual Conference on Global Economic Analysis, Shanghai, China. 12-14 June 2013.

REFEREEING ACTIVITYFOR PEER-REVIEWED JOURNALS

1. January 2020. Journal: Energy Reports.

Title: Electricity Transmission and Distribution Losses and Economic Growth in South Africa Ref: EGYR 2019 1132

2. May 2020. Applied Economics,

Title: Do South African fiscal reforms benefit women?

Ref: APE-2020-0357

COMMISSIONED STUDIES

- 1. "Scenario analysis of potential New South Wales (NSW) responses to address COVIC-19". This project was commissioned by the New South Wales Treasury and includes the development of scenarios and the application of the VURM model to analyse the impact of COVID-19 and the government responses on the NSW economy. Duration: July December 2020.
- 2. "Economic value of natural gas in the Indonesian economy". This project was commissioned by the World Bank and includes the development of a CGE database with explicit representation of the oil and gas sector. Duration: January December 2020.
- 3. Review the database construction process for the MyAGE model (dynamic model for Malaysia). Work completed for the Malaysian Ministry of Finance. 18-29 November 2019.
- 4. "Develop a new 2016/17 Social Accounting Matrix (SAM) for Uganda". The project was developed for the Ugandan Ministry of Finance, Planning and Economic Development. This projects includes a training course in the development of the SAM and the development of a CGE database for the UgAGE model. Duration: September 2018 August 2019.
- 5. "A regional dynamic computable general equilibrium (CGE) model of South Africa". The model, including a balanced database, is developed in partnership with the Department of Economic at Pretoria University (UP) and the Gauteng Provincial Treasury (GPT). Duration: March 2017 April 2018.
- 6. "To Construct, Apply and Transfer a Static and Dynamic Computable General Equilibrium (CGE) Model for Saudi Arabia". The model, including a balanced database, was developed in partnership with the National Industrial Clusters Development Program (NICDP). Several training courses were designed and presented to NICDP staff. Duration: August 2014 April 2015.
- 7. "To Construct, Apply and Transfer a Static and Dynamic Computable General Equilibrium (CGE) Model for Jordan". The model, including a balanced database, was developed for the Ministry of Planning. Several training courses were designed and presented to government officials. Duration: August 2013 May 2014.
- 8. "INDOTERM30: A regional dynamic computable general equilibrium (CGE) model of Indonesia". This model, including a balanced regional database, was developed in partnership with the Centre for Economics and Development Studies (CEDS) located at the Padjadjaran University and the National Planning Agency (BAPPENAS). This was an AusAID PSLP-funded project. Duration: January 2013 June 2014.
- 9. "To Construct, Apply and Transfer a Static and Dynamic Computable General Equilibrium (CGE) Model for Uganda". This model, including databases, was developed for Oxford Policy Management (OPM) on behalf of the Ministry of Finance, Planning and Economic Development. Several training courses were designed and presented to government officials. Duration: June 2011–March 2017.

10. "Build, run and transfer a dynamic regional CGE model of the Australian economy with migration-relevant labour market detail". For the Australian Department of Immigration and Citizenship. Duration: August 2011 – September 2012.

TEACHING

• Training for the staff visiting from the NZIER. The training included database development and GEMPACK modelling training. NZIER staff visited in April 2018 and 2019.

Selected lecturing and tutoring responsibilities in one week intensive computable general equilibrium modelling courses organised by the Centre of Policy Studies, Monash University or related to specific projects. Examples are:

- Practical CGE Modelling course using the ORANIG model, September 2019 (Vienna), July 2020, 2019, 2018, February 2015, July 2014, October 2013, July 2009, Feb 2007 (Melbourne), November 2011 (Uganda), December 2009 (Malaysia).
- North American Regional Science Conference (NARSC) presenting the TERM-USA model during a one-day workshop: 2018 (San Antonio); November 2017 (Vancouver); November 2016 (Minneapolis).
- Practical CGE Modelling course using the VUME model, November 2017, 2016, 2015 (Dubai).
- Dynamic Single country CGE Modelling course in September 2015 (Uganda), November 2012 (Uganda).
- Regional CGE Modelling course (MMRF) in 2010 (Stellenbosch, South Africa), November 2008 (Pretoria, South Africa).
- Dynamic Regional CGE Modelling (TERM) course in August 2014 (Bandung, Indonesia), September 2013 (Warsaw).
- 2012 2013: Lecturing *Quantitative Economic Policy (ETC4430)*, Centre of Policy Studies, Monash University, Australia.
- 2006-2011: Tutoring Microeconomics (ECC1000), Macroeconomics (ECC1100), Department of Economics, Monash University.
- 2000-2006: Lecturing *Introductory Micro (EKN110)* and *Macroeconomics (EKN120)*, *Honours Macroeconomics (MEK780)* and *Honours Development Economics (EOG780)*, Department of Economics, University of Pretoria, South Africa.
- 1999: Tutoring *Economics (EKN110, EKN120)*, Department of Economics, University of Pretoria, South Africa.

SCHOLARSHIPS AND OTHER RECOGNITIONS

- 1. 2006 2010: International Postgraduate Research Scholarship and Monash Graduate Scholarship to study for the PhD degree in Economics at Monash University, Australia.
- 2. 2002 2003: Study bursary awarded from the University of Twente (The Netherlands) to be part of the Socrates/Erasmus exchange program.
- 3. 2001: University of Pretoria Academic Achievement bursary for Postgraduate Study at the University of Pretoria.