# Economic Research Southern Africa Activity

# April 2022 – March 2023

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## Director's Statement

Economic Research Southern Africa (ERSA) aims to both broaden the scope of economic research in Southern Africa, and to deepen its quality to ensure greater international exposure of research conducted in Southern Africa. Serving this, ERSA provides development and training, the opportunity for publication, contributions to economic debate and forums for networking.

Under the **Skills Development program**, 3 workshops were held: Cohort 8 – Time Series Economics and Cohort 7 and 8 – Cross Section Econometrics. These workshops successfully covered intermediate economic techniques, with the attendants predominantly from historically disadvantaged institutions. The **Graduate Training Program** provided one course on advanced academic techniques and issues: Advanced Empirical Methods in Finance and Economics. Many of the workshops are returning to in-person engagements, resulting in higher unit costs than in the last two years. While the online format remains an important platform with significant opportunity to reach a broader audience and reduce costs, there are several challenges that remain important. Access to information technology, load shedding and poor access to quality Wi-Fi can be disruptive and undermines the learning opportunities, especially for the financially disadvantaged students. Related to this, access to statistical and similar programs is a challenge which needs to be seriously considered going forward. The online format does not easily lend itself to engagement between participants, potentially weakening a key learning opportunity in these workshops.

The **Working Paper Series** continues to be a central pillar of strength in terms of ERSA's activities and remains an important contribution to the development of research as well as academic opportunity. In the past year ERSA has chosen to only publish working papers that are within its stated research themes and to remove the financial incentive for successful journal publication. As a result, the number of submissions has fallen, but quality and alignment with themes remains strong.

A new **Research Committee** was established towards the end of the year, with Steve Koch (University of Pretoria) as the chair. The Committee is expected to support ERSA in establishing a stronger pipeline of commissioned research projects and papers for publication. As this reform matures, the volume of working papers and discussion documents is expected to increase.

The Workshop series produced a total of 7 events, which yielded participation from international and local scholars as well as international and local policy stakeholders. The events included the Second University of Pretoria Economics PhD Workshop, which brought together PhD and other post-graduate students, academics and practitioners. This was a forum for the students to present and receive comments and feedback on their work. A Macroeconomics workshop on Research and Modelling was presented by Professor Junior Maih (Norges Bank, Norway). This was a well-attended workshop which focussed on economic foundations of macroeconomic models and how they relate to policy issues. An in-person workshop on Competition Policy and Regulation in Digital Markets was a series of lectures on relevant competition and regulatory issues in digital markets. The SAMNET workshop on Emerging Markets was a collaboration between ERSA, University of Pretoria and the CEPR. The objective was to create a regular appointment for international and national research community to present their most recent work and to discuss important economic policy issues confronting emerging markets. ERSA collaborated with the Climate Vulnerability forum and the V-20 Group as a Regional Partner in 2023. The aim was to deepen the debate on how South African economies are affected by Climate Change, to encourage researchers to use the Data Explorer Indicators in their research and to make policy makers aware of the issues and the resources that can be used to understand the issues. ERSA assisted the Brookings Institute with the dissemination of their Foresight Africa 2023 Report titled A Southern African Perspective. This event presented as a hybrid panel discussion with an interactive question and answer session.

This year, ERSA has introduced **Discussion Documents** as a broad category of non-technical reviews and summaries designed to be read by a wider audience than the Working Papers. The series started with a group of research on basic income support, followed by documents on the impact of the FATF grey listing, the forces influencing the yield curve, and global experience with youth employment programs. As governance and quality assurance systems are strengthened, it is envisioned that these will become increasingly important outputs for ERSA.

In conclusion, the building blocks to develop ERSA's contribution to a broad and diverse audience of interested users are firmly in place. The established business of ERSA remains solid and will continue to evolve to provide it's best contribution to deepening and improving the quality of research in the region. The challenge for the organisation is enhancing its role in informing a broader audience and increasing its contribution to economic policy debates.

The foundation of the working paper series provides a solid and extremely valuable contribution to the economics academy on which to build bridges to the broad community of interested users. Webinars, podcasts, policy briefs/bulletins, and our engagements with social media have developed over the past year to provide the technology through which those bridges can be built.

Going forward, initiatives to formalise **a cohesive work program** based on current and policy-relevant issues, adequate financial resourcing, high-quality and diverse academic inputs, and accessible communication initiatives aimed at the right audiences are to be strengthened. This will put in place a formal pipeline of research and policy-relevant outputs aimed at servicing the organisation's mandate.

**Matthew Simmonds**
Executive Director

**Income and Expenditure Statement**

## Economic Research Southern Africa (NPC)

(Registration number: 2010/002225/08)
Financial Statements for the year ended 31 March 2023

### Detailed Income Statement

| Figures in Rand | Notes | 2023 | 2022 |
|---|---|---|---|
| **Operating expenses** | | | |
| Accounting fees | | 166 578 | 193 637 |
| Advertising | | 10 000 | 2 811 |
| Auditors remuneration | | 63 763 | 59 225 |
| Bank charges | | 26 430 | 26 875 |
| Board Stipend | | 53 850 | 83 473 |
| Board meetings | | 59 254 | - |
| Conferences and workshops | | 914 785 | 4 984 |
| Department of labour compensation | | 13 027 | 12 323 |
| Depreciation, amortisation and impairments | | 13 696 | 2 371 |
| Development and research fees | | 1 696 680 | 330 000 |
| ED Stipend | | - | 89 444 |
| ERSA Instituition of Economic Policy Studies | | 1 033 750 | 1 376 082 |
| ERSA Prizes | | 71 723 | 83 740 |
| Employee costs | | 5 928 852 | 4 494 395 |
| Entertainment | | 16 053 | 6 282 |
| GIZ project expense | | - | 569 159 |
| HR - Labournet & Consulting | | 12 842 | 35 006 |
| IT expenses | | 363 038 | 329 186 |
| Insurance | | 38 899 | 37 160 |
| Lease rentals on operating lease | | 625 559 | 1 005 983 |
| Media consultant expense | | - | 664 290 |
| Movement in provision for development and research costs | | - | 1 492 100 |
| Movement in provision for research costs | | - | (171 818) |
| Office expenses | | 38 693 | 19 182 |
| Postage | | 18 036 | 41 846 |
| Printing and stationery | | - | 6 032 |
| Promotions | | 14 651 | - |
| Research costs | | 762 865 | 520 884 |
| SAMNET expense | | 850 174 | 329 490 |
| Secretarial fees | | 2 000 | - |
| Small assets written off | | 3 178 | - |
| Staff welfare | | 8 459 | 9 856 |
| Storage fees | | 49 026 | - |
| Subscriptions | | 21 271 | 2 105 |
| Sundry | | 17 051 | 17 723 |
| Telephone and fax | | 76 551 | 154 174 |
| Training | | 213 572 | 301 594 |
| Travel - local | | 88 135 | 31 462 |
| | | **13 272 441** | **12 161 056** |

**Policy Research Program**

**Policy Associate Report: Neryvia Pillay-Bell**
**March 2023**

I am pleased to provide an overview of my work activities and outputs over the past year. As a Policy Associate, I have been engaged in various research projects, and I would like to highlight the following accomplishments.

I completed a working paper that examines the characteristics of South African retirement funds, utilising administrative data from the Financial Sector Conduct Authority (FSCA). This research provides valuable insights into the design and efficiency of retirement funds in South Africa and has implications for the retirement industry and policy-making. I believe this work contributes to our understanding of the dynamics of retirement funds and can help inform decision-makers in the financial sector.

I have been collaborating with Konstantin Makrelov at the South African Reserve Bank (SARB) on a paper that explores the relationship between banks' capital buffers and credit extension. This ongoing research aims to shed light on the impact of capital buffers on banks' lending behaviour and financial stability. Our findings can have implications for banking regulations and risk management practices, and I am committed to producing high-quality research that can contribute to policy discussions in the financial sector.

I have also been conducting research on the long-term impact of grants on labour supply. This research investigates how social welfare programs can affect individuals' labour market participation and has implications for social policy and poverty alleviation efforts. I believe this work can provide valuable insights for policymakers and stakeholders interested in understanding the effects of grants on labour market dynamics and economic outcomes.

In addition, I have started two new research projects that examine the potential impact of a basic income grant on inflation, and the likelihood of future inflation eroding the real value of current public debt. This research addresses emerging issues and can contribute to discussions on fiscal policy and social welfare programs. I am excited about the potential implications of this research and look forward to sharing our findings in the future.

These projects demonstrate our commitment to conducting rigorous research that can inform policy-making decisions, and I look forward to continuing my research endeavours in the coming year.

**Policy Associate Report: Lucas Mariani**
**March 2023**

I joined ERSA in June 2020 to manage and conduct independent policy-related research and spend time interacting with academics and potential partners to ERSA's projects. I am also tasked with developing ERSA's training in empirical methods and firms and development research areas.

As part of the Graduate Training program, I organised, developed, and taught one course in hybrid form last year. This course was aimed to equip policymakers, PhD Students, academics, and policymakers to modern techniques in causal analysis using topics in corporate finance, applied macroeconomics, and development economics. The course comprised 1 month of classes via Zoom and one week in person at the University of Pretoria. The course received more than 100 applications in which around 20 participants were selected from both the academic and policy worlds. I am planning to organise a similar course this year given the high interest and positive feedback given by participants.

In the past year, I started two projects using data from the SARS firm-level panel on issues related to the effects of firm dynamics on aggregate productivity, structural transformation, and development. In the first project, I am working with Silvia Marchesi. We analyse the effects of South African Government Bonds inclusion on the Citigroup World Government Bond Index (WGBI) firms' resource allocation and their effects on aggregate productivity. Recent literature shows that foreign capital inflows can reduce resource misallocation and improve aggregate productivity in emerging economies. Our project leverages South African inclusion in the index along with rich firm-level tax data from South Africa to analyse the effects of sovereign debt demand upsurges on firm-level and aggregate productivity. The advantage of exploiting a country's inclusion in the WGBI allows us to overcome the endogeneity concerns since sovereign debt flows are endogenous to macroeconomic conditions. Specifically, we take advantage of the sudden and unanticipated announcements of this country's inclusion in the index. The result of such a project will be published as an ERSA Working Paper Series in the following weeks.

In the second project, I will analyse the effects of the Southern African Development Community Integrated Regional Electronic Settlement System (SADC-RTGS) on South African exports and importers. The system has been in operation since July 2013. It is an automated interbank settlement system that settles payment obligations between participating banks in real-time. The system decreased transaction costs and time to settle transactions between firms in the region and could potentially increase trade integration of Southern African economies. I will shed some light on these effects by exploiting SARS data on all customs data from all South African firms and check if economic integration spurred due to SADC-RTGS.

Besides these projects using SARS data, I have also been involved in a policy report analysing the effects of the potential grey-listing of South Africa by the Financial Action Task Force (FATF). This Discussion Document summarises the recent developments in South Africa on the possibility of being grey-listed by FATF. This Discussion Document discusses what grey-listing entails, why it is done, why South Africa might be grey-listed, the measures they have put in place (to date) and the potential consequences of being added to the grey list. The paper also discusses the possible repercussions of such an event on capital flows.

This last year has been essential to becoming more acquainted with the opportunities and context of Southern Africa. It has been a productive one in terms of research. I look forward to the following year.

## The Events Program

11 events took place during the 2022 – 2023 period, which are listed in the table below:

| Start | End | Area | Topic | Presenter | # Attendees |
|---|---|---|---|---|---|
| 21-Jun | 21-Jun | PhD Workshop | Second University of Pretoria Economics PhD Workshop | Manoel Bittencourt and Jesse Naidoo (UP) | 12 |
| 04-Jul 22-Aug | 08-Jul 26-Aug | Skills Development | Cohort 8: Time series | Renee van Eyden (UP) | 25 |
| 20-Jun | 18-Jul | Graduate Training | Advanced Empirical Methods | Lucas Mariani (ERSA) | 26 |
| 05-Sep | 08-Sep | Macroeconomics | Workshop on Macroeconomic Research and modelling | Junior Maih (Norges Bank) | 35 |
| 30-Sep | 30-Sep | Industrial Organization | Competition Policy and Regulation in Digital Markets | Lukasz Grzybowski (UCT) | 33 |
| 31-Oct | 04-Nov | Skills Development | Cohort 7: Cross-Sectional Techniques | Steve Koch / Matthew Clance (UP) | 25 |
| 28-Nov | 29-Nov | SAMNET | Emerging Markets Back in the Spotlight: Risks and Policy Options | Nicola Viegi (UP) | 28 |
| 06-Feb | 08-Feb | PhD Workshop | ESSA PhD Conference 2023 | Heinrich Bohlmann (ESSA/UP) | 50 |
| 21-Feb | 21-Feb | CVM3 Regional Project | Climate Vulnerability Monitor, 3rd Edition (CVM3) | Brent Cloete | 53 |
| 27-Feb | 27-Feb | Brookings Institute | Foresight Africa 2023 Report: A Southern African Perspective | Gracelin Baskaran | |
| 27-Mar | 31-Mar | Skills Development | Cohort 8: Cross-sectional Techniques | Steve Koch / Matthew Clance (UP) | 25 |

Please see the reports under Appendix I

## The Publication Series

### Statement by the Chair of the ERSA Editorial Committee

The ERSA working paper, policy paper, and discussion documents remain active and constitute a core element of the ERSA initiative to stimulate the range and depth of research in economics and policy debate in Southern Africa.

The ERSA editorial team is responsible for the evaluation of the working papers. The publication rate of the working paper series remains at a satisfactory level. In the last annual Report, ERSA was able to report the publication of 876 Working Papers and 28 Policy Papers at that time. From April 2022 to March 2023, this has increased to 884 Working Papers with 2 Occasional papers and 9 Discussion Documents. There were no Policy Papers or Policy Bulletins submitted for this period.

The distribution of the topics of papers is wide-ranging and represents the general coverage of the ERSA research themes.

What is pleasing about the papers appearing in the ERSA series is that they are meeting a high success rate in terms of publication in peer-reviewed journals. To date, 435 out of the 884 Working Papers have been published, with the list of journal publications in the table below.

The evidence is thus consistent with the stated objective of ERSA: increase the publication profile of South African economists and promote policy debate.


Yours truly,

**Guangling Liu**
**Editor**

**Working Paper – Journal Publication Breakdown April 2022 to March 2023**

| WP# | Author/s | Title | Journal | Ranking |
|---|---|---|---|---|
| 671 | D. Liu | Capital controls and foreign currency denomination | 2022, North American Journal of Economics & Finance | **Top 100 – 200** **R5000** |
| 693 | B. Okumu | Economic valuation of forest ecosystem services in Kenya: implication for PES Schemes and participatory forest management | 2022, Journal of Forest Economics | **>100** **R0.00** |
| 726 | P. Nkosi | South African attitudes about nuclear power: the case of nuclear energy | 2022, Energy Economics & Policy | **>100** **R0.00** |
| 772 | H. Ntuli | Quotos vs Information Provisioning for Community Wildfire Conservation in Zimbabwe: A framed field experiment approach | 2023, Environmental & Resource Economics | **Top 30 - 100** **R20 000** |
| 794 | C. Samkange | Efficiency of SA water utilities: a double bootstrap DEA analysis | 2022, Applied Economics | **Top 30** **R35 000** |
| 803 | G. Murwirapachena | The effects of presentation formats in choice experiments | 2022, Environmental Economics & Policy Studies | **>100** **R0.00** |
| 809 | S. Koch | Modelling required energy consumption with equivalence scales | 2022, Energy Journal | **Top 30 - 100** **R20 000** |
| 836 | A. Oyenubi | Does Child Support Grant incentivise childbirth in South Africa | 2022, Economic Analysis & Policy | **>100** **R0.00** |
| 855 | R. Inglesi-Lotz | Impact of technological progress on carbon emissions in different country income groups | 2022, Energy & Environment | **>100** **R0.00** |
| 871 | M. Clance | Climate Change and Child Health: A Nigerian Perspective | 2022, Food Policy | **Top 30 - 100** **R20 000** |

## Economics Prizes

As a means of incentivising study in economics, ERSA has re-introduced it is the mechanism for the recognition of student performance in the economics discipline.

To this end, ERSA introduced monetary awards distributed to the best two economics students in South Africa across all universities, in each year of study. While very moderate in amount, the prizes nevertheless allow universities to recognise the best achievers in each year of study, and to motivate them to continue studying further in economics.

The prizes are R1000 for the first-placed student and R800 for the second-placed student.

This year, a total of 8 institutions (UFH has 2 campuses counted as 1 institution) submitted their top students' information for this program. The total number of prizes awarded was 89.

The following universities have applied for and are being awarded prizes for their top students. Details of student prize winners are listed in the table below.

| Institution | Placing | First Year | Second Year | Third Year | Honours | Masters | PhD |
|---|---|---|---|---|---|---|---|
| **U Cape Town** | First | | | | D Lam Loong In | G McHardy | L Njozela |
| | Second | | | | F Christie | T Evans | N Vellios |
| **Nelson Mandela University** | First | N Putela-Sidlayiya | M Daka | | N Vuba | NM Mwimba | M Mostwapong |
| | | RI Kwindingwi | A Mangaliso | VM Mapholi | | | |
| | | SA Mabuza | | N Maritz | | | |
| | | A Mazobe | E Sivuku | SM Mkandawire | N Sinzala | | |
| | | | | N Shange | | | |
| | Second | S Phathani | A Ndwangu | | O Mavuma | R Mwanyepedza | |
| | | KST Ndlovu | C Mashayamombe | DA Abrahams | | | |
| | | V Matshomo | | L Zwakala | | | |
| | | D Tshililo | | | TP Simwaka | | |
| | | | | C Nombewu | | | |
| **U Fort Hare (Alice Campus)** | First | O Landelo | J Mawere | P Sakha | P Mupondi | T Maxam | |
| | Second | L Mdebuka | N Buzheti | M Siko | T Dlepu | S Mpukumpa | |
| **U Fort Hare (East London Campus)** | First | C Mantshongane | T Mabhandi | N Blom | M Magadla | AZ Ndamase | |
| | Second | I Kondile | T Matsheza | S Mbadla | T Marowa | Z Makala | |
| **U Free State** | First | S Malek | M Malope | I De Klerk | T Semu | T Modiba | |
| **U Limpopo** | First | IN Serakwane | VP Mboweni | OM Majadiboni | DE Mohale | MM Madiope | |
| | Second | RJ Sekwele | S Majola | | | A Majeza | |
| **U Stellenbosch** | First | U Le Roux | G Crafford | SC Woolard | | | |
| | Second | B Roelofse | C Marshall | LJ Pearse | | | |
| **U Western Cape** | First | M Olivier | A Fredericks | E Little | J Du Plooy | EL Draai | V Matsebula |
| | | | | N Louw | | | |
| | | | | C Mulqueeny | | | |
| | | | | A Ratya | | | |
| | Second | B Hassan | N Brown | | M Nogaya | A Ndlebe | T Chivige |
| | | S Mhlongo | N Mahlombe | | | | |
| | | | C Wyngaaard | | | | |

## Skills Development Program

### Cohort 8: Time Series Econometrics
Instructors: Reneé van Eyden, Ruthira Naraidoo
4 to 8 July and 22 to 26 August 2022

**Introduction**
This document provides a brief account of the virtual offering of the Time Series Econometrics workshop of the ERSA-sponsored Skills Development program.

**Participants**
A total number of 24 participants were selected by ERSA in 2022 (refer to Appendix A for details on their affiliations).

**Scheduling and presentation**
Instead of having a weeklong face-to-face training in a computer lab on campus, we scheduled the course over a period of two weeks. Due to the availability of Prof Ruthira Naraidoo, the course was split over two separate periods, 4 to 8 July and 22 to 26 August 2022 – a total of 10 days of training.

All material was made available on Google Drive, with separate folders for daily announcements and meeting recordings, lecture material, practical applications, and textbook references. Daily announcements of topics covered (theoretical and practical) were posted and communicated in e-mail as necessary.

A total of 10 Zoom sessions were scheduled between two and two and a half hours each. Some sections of the material were covered during the live session, with the remainder consisting of video recordings accompanying written material. Examples of using the software were also narrated and made available as mp4 files.

In addition to live group sessions, individual sessions were scheduled as requested by participants, allowing for more effective communication and targeted discussion and clarification.

At the end of each week, a written assignment consisting of discussion questions and a dataset was given, with a solution made available for self-assessment.

Refer to Appendix B for a topic outline and course schedule communicated to participants.

**Positive aspects**
ERSA purchased a software license for each delegate that is valid for six months, supporting ongoing use of the software.

Participants can refer back to class recordings and other narrated material at a later stage.

Having individual sessions is probably the single most valuable aspect that I would encourage in a virtual course, as this helps to clear up many uncertainties that exist after engaging with the material and bring some of the human aspects back, as video cameras of participants remained switched off most of the time, while bandwidth better allows seeing a face on the other side when discussing problems in a one-on-one setting. In our experience, for this course, participants did not make use of the offering to the same extent as in previous ERSA workshops that we offered online.

**Negative aspects**

We do not have a formal attendance register, and there was no full attendance at all times, probably because the Zoom recordings were made available. It is sometimes also difficult to judge the extent to which participants engage with the material. Whereas some were active in the discussion and asked questions, some were quiet and did not contribute much, which is probably not very different from a regular class situation.

Prepared by Reneé van Eyden
Department of Economics
University of Pretoria

2023-04-24

**Appendix A**

*Cohort 8 participants*

| | Name | Surname | Affiliation | e-mail address |
|---|---|---|---|---|
| 1 | Kgabo | Rammutla | North-West University | rammutlak@gmail.com |
| 2 | Gildas | Magbonde | University of Cape Town | gildasmagbonde@gmail.com |
| 3 | Lydia | Chikumbi | University of Cape Town | lydiachikumbi@gmail.com |
| 4 | Sanele | Skeyi | University of Cape Town | SKYSAN001@myuct.ac.za |
| 5 | Tafadzwa | Lukwa | University of Cape Town | tafadzwalukwa@gmail.com |
| 6 | Assegid | Hellebo | University of Cape Town: Health economics | assegid2013@gmail.com |
| 7 | Khayakazi | Mswephu | University of Fort Hare | mswephu@gmail.com |
| 8 | Sandisiwe Abongile | Bom | University of Fort Hare | abongilebom@gmail.com |
| 9 | Sipokazi | Mayekiso | University of Fort Hare | smayekiso@ufh.ac.za |
| 10 | Frederich | Kirsten | University of Johannesburg | fkirsten@uj.ac.za |
| 11 | Queen | Mabe | University of Johannesburg | magadim@uj.ac.za |
| 12 | Regina | Conselho Mwiinga | University of Johannesburg | reginafj@yahoo.com |
| 13 | Pavan | Hiramoney | University of KwaZulu-Natal | 215063232@stu.ukzn.ac.za |
| 14 | Simbarashe | Tendengu | University of KwaZulu-Natal | 215063232@stu.ukzn.ac.za |
| 15 | Bothwell | Nyajena | University of Stellenbosch Business School | B.Nyajena@AFDB.org |
| 16 | Antonie | Pool | University of the Free State | poolan@ufs.ac.za |
| 17 | Khukanyile | Mali | University of the Western Cape | 3558441@myuwc.ac.za |
| 18 | Marshall | Petersen | University of the Western Cape | marshall.petersen@live.com |
| 19 | Shingiriria | Mashura | University of the Western Cape | mashursa@yahoo.com |
| 20 | Tshembani Mackson | Hlongwane | University of the Western Cape | tshembanihlongwane@gmail.com |
| 21 | Qoko | Alungile | Walter Sisulu University | alungileqoko52@gmail.com |
| 22 | Unathi | Dingiswayo | Walter Sisulu University | unathidingiswayo1@gmail.com |
| 23 | Xola | Ntshuntshe | Walter Sisulu University | kinsibanda@wsu.ac.za |
| 24 | Mbalenhle Precious | Jeza | University of Zululand | mbalipjeza@gmail.com; jezam@unizulu.ac.za |

**Appendix B**

## Cohort 8: Time Series Econometrics
4 to 8 July and 22 to 26 August 2022

Welcome to the first in a series of three workshops, focusing on Time Series, Cross Section and Panel Data Econometrics, respectively. Given our present health situation, we will not be able to meet in one location and will present the Time Series Econometrics course remotely (hopefully this may change for the second and third workshops). We trust that you will find the virtual learning experience equally enriching and helpful for your own research, teaching and supervision.

Your instructors for Time Series Econometrics:
Prof Reneé van Eyden, renee.vaneyden@up.ac.za
Prof Ruthira Naraidoo, ruthira.naraidoo@up.ac.za

Even though we are flexible in what we cover, a suggested outline and program are provided below. The aim is to acquire the necessary theoretical background but also to be exposed to hands-on empirical application, using software like EViews, Stata, Matlab and R. For this course in Time Series Econometrics, we will focus on EViews and Matlab.

During the period of training, you can expect to spend an estimated 40 hours on the course material, working through reading material, recorded lectures and practical assignments. Roughly half of the estimated time (20 hours) will be spent on online discussion using *Zoom*. In addition, your instructors will be available at all times should you encounter a problem while working through the material.

We assume the following prior knowledge; basic statistical methods, such as the calculation of means and standard deviations, as well as hypothesis testing, primarily t, z, F and $|^2$ distribution-based tests. Furthermore, a modest understanding of matrix algebra is assumed, implying that you can, for example, interpret the solution to the OLS problem, as well as follow the explanation of the concept of vector autoregression and multivariate cointegration. References will be provided should you feel that you need a refresher in basic statistics, hypothesis testing, the Classical Normal Linear Regression model and the OLS estimator, as well as violations of the Classical Assumptions and potential remedies.

The focus of the first Workshop is on modelling techniques for time series data when unit roots are present in the data. An overview of the technical characteristics of time series data and the concept of non-stationarity is provided, and the econometric techniques of cointegration and error correction modelling in single equations (residual-based cointegration) are discussed, with emphasis on empirical application. This is followed by the theory and application of vector autoregression and multivariate cointegration. The course concludes with a discussion on the application of volatility models.

**Communication and material**
You will receive an invitation and link to attend Zoom meetings in advance. The link for Monday's meeting (4 July) will be forwarded to you on Friday, 1 July.

Course material with detailed references on which material is relevant for each session will be uploaded to: https://drive.google.com/drive/folders/1hBkTFvMWyjJnlw1-zb89c_5xUkiZZlkb?usp=sharing

If you have any questions or concerns, please contact us at renee.vaneyden@up.ac.za or ruthira.naraidoo@up.ac.za.

On the next pages, refer to the topic outline and schedule for the Workshop.
We look forward to engaging with you!

**Planned topics to cover during the Time Series Econometrics workshop**

1) Research Orientation and the Econometric Approach to Analysis (mostly assumed prior knowledge)
   a) Research orientation
   b) The nature of the econometric approach
   c) Purposes of econometrics
   d) Introduction to the simple linear regression model
   e) OLS Estimator, properties
   f) The Classical Normal Linear Regression Model (CNLRM)
   g) Goodness of fit
   h) Hypothesis testing
   i) Example in EViews: Model Specification, Estimation, Evaluation and Interpretation

2) Time Series Econometrics (Part 1)
   a) Underlying data-generating process and concepts of stationarity and non-stationarity
   b) Unit root tests (ADF, PP, DF-GLS, Ng-Perronn, KPSS)
   c) Concept of cointegration
   d) Residual-based test for cointegration (Engle-Granger cointegration test
   e) Error correction model (ECM) specification
   f) Diagnostic checking
   g) Model simulation and response characteristics
   h) Practical exercise in EViews

3) Time Series Econometrics (Part 2)
   a) Vector autoregressive (VAR) model
   b) Impulse response and variance decomposition analysis
   c) Multivariate cointegration technique (Johansen Maximum Likelihood method)
   d) Block causality and exogeneity test
   e) Weak exogeneity tests and model identification
   f) Practical example and Exercise in EViews and Matlab/R

4) Volatility Models (Introduction and demonstration)
   a) Properties and theoretical and empirical Issues
   b) ARCH processes
   c) ARCH and GARCH models
   d) Estimation and prediction
   e) Interpretation and evaluation of results

Below, a suggested timeline is proposed. Reneé will be the principal instructor for 4-8 July, while Ruthira will facilitate the Workshop from 22-26 August.

**Suggested timeline for Workshop, 4-8 July 2022, 22-26 August 2022:**

| Monday, 4 July | Tuesday, 4 July | Wednesday, 6 July | Thursday, 7 July | Friday, 8 July |
|---|---|---|---|---|
| 09:00-11:30 Zoom meeting<br><br>☐ *Meet fellow workshop participants and your instructor for this week, Prof Reneé van Eyden*<br>☐ *Introduction to course material*<br>☐ *Overview of techniques covered in the course* | 09:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Time series concepts*<br>☐ *Stationarity vs. non-stationarity*<br>☐ *Data generating process (DGP)*<br>☐ *Unit root testing* | 09:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Engle-Granger (E-G) cointegration method*<br>☐ *Long-run cointegration*<br>☐ *E-G (residual-based) cointegration test*<br>*Engle-Granger (E-G) Error correction model*<br>☐ *Derivation of ECM from ARDL model* | 09:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Construction of ECM*<br>☐ *Diagnostic testing* | 9:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Brief comparison of 3 methods of cointegration*<br>- *Engle-Granger*<br>- *Pesaran et at. ARDL*<br>- *Johansen multivariate*<br>☐ *Introduction to structural modelling and simulation* |
| **In your own time:**<br>**Optional refresher:**<br>☐ Basic statistics (mean, standard deviation, variance, etc.)<br>☐ Hypothesis testing<br>☐ CLRM and OLS<br>☐ Classical Assumptions of CLRM and violations | **Material to revise on your own:**<br>☐ Time series concepts<br>☐ Stationarity and non-stationarity<br>☐ Unit root testing (Watch narration of Stationarity and URT) | **Material to revise on your own:**<br>☐ E-G cointegration test | **Material to revise on your own:**<br>☐ Construction of ECM<br>☐ Diagnostic testing | **Material to revise on your own:**<br>☐ Structural modelling and simulation |
| **Practical application in EViews:**<br>☐ *Work through Example 1 (South African Export demand)*<br><br>**Software support:**<br>☐ EViews online tutorials on www.eviews.com<br>☐ Download *EViews Illustrated* from eviews.com under Learning Resources | **Practical application in EViews:**<br>☐ *Work through Example 2, Pract 1 (South African rand-US dollar exchange rate – unit root testing)* | **Practical application in EViews:**<br>☐ *Work through Example 2, Pract 2 (South African rand-US dollar exchange rate – long-run cointegration relationship)* | **Practical application in EViews:**<br>☐ *Work through Example 2, Pract 3 (South African rand- US dollar exchange rate – ECM and diagnostic testing)* | **Practical application in EViews:**<br>☐ *Work through Example 5, (Constructing a small-scale macro model)* |

| Monday, 22 August | Tuesday, 23 August | Wednesday, 24 August | Thursday, 25 August | Thursday, 26 August |
|---|---|---|---|---|
| 09:00-11:30 Zoom meeting<br><br>☐ *Meet your instructor for this week, Prof Ruthira Naraidoo*<br>☐ *Introduction to course material for second week*<br>☐ *Vector autoregression*<br>☐ *Impulse response functions and variance decomposition* | 09:00-11:00 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Vector autoregression*<br>☐ *Impulse response functions and variance decomposition* | 09:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Vector autoregression*<br>☐ *Impulse response functions and variance decomposition* | 09:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Concept of multivariate cointegration*<br>☐ *Johansen cointegration test*<br>☐ *Vector error correction model (VECM)*<br>☐ *Diagnostic testing* | 9:00-11:30 Zoom meeting<br><br>☐ *Questions on previous day's material*<br>☐ *Volatility models* |
| **Material to revise on your own:**<br>☐ Basic matrix algebra such as matrix inversion<br>☐ Enders: chap 5 and Hamilton: chap 10-11<br>☐ VAR model<br>- Practical: work through the 'Matlab Pre-requisite' folder | **Material to revise on your own:**<br>☐ Granger Causality<br>☐ Weak and strong exogeneity<br>☐ Impulse response function and Variance decomposition | **Material to revise on your own:**<br>☐ VARs and Structural econometric models | **Material to revise on your own:**<br>☐ Johansen multivariate cointegration test<br>☐ Construction of VECM<br>☐ Diagnostic testing | **Material to revise on your own:**<br>☐ Volatility models |
| **Practical application in Matlab:**<br>☐ Coding an unrestricted VAR as in Kilian textbook Chap 2 equation (2.3.1)<br><br>**Software support:**<br>☐ Matlab | **Practical application in EViews:**<br>☐ *Work through VAR example in EViews; Stock and Watson example*<br>- *Try also replicating these in Matlab* | **Practical application in EViews:**<br>☐ *Work through VAR example in EViews; Stock and Watson example*<br>- *Try also replicating these in Matlab* | **Practical application in EViews:**<br>☐ *Work through VECM example in EViews* | **Practical application in EViews:**<br>☐ *Work through GARCH model example in EViews*<br><br>** *Complete Evaluation Part 2 and submit to instructor, ruthira.naraidoo@up.ac.za for feedback.* |

26 April 2023

Attention: ERSA Board Economic Research Southern Africa

Dear Sir/Madam

## Report: ERSA Skills Development Workshop

## (Cross-Section Econometrics, Cohort 7, Session 2)

In this document, we present a report on the Workshop hosted by the Department of Economics at the University of Pretoria, between 31 October and 4 November 2022.

The seventh cohort, consisting of 26 delegates initially registered for the Workshop, which is designed to deepen economic research capacity through the training of young academics, many of whom are PhD students employed or studying in Economics Departments at academic institutions in South Africa.

The Report is organised under the following headings:

- Background;
- Selection of participants;
- Format and timing of delivery of the program;
- Topics covered during the Workshop; and
- Feedback from participants and our impressions.

As in the past, we thank ERSA for the opportunity granted to participants to be part of the program and for lecturers from the University of Pretoria to be involved in the training.

Sincerely,


Steve Koch
Professor
Department of Economics

## Cohort 7: Cross Section Econometrics
31 Oct to 4 Nov 2022

### Background
The ERSA-sponsored Skills Development program commenced in November 2013, after the ERSA board accepted a proposal for the offering of intermediate Econometrics training to academics from South African universities. The motivation for the project stems from the fact that a significant number of academics affiliated with South African Universities, and employed within Economics departments around the country, are inadequately trained in Econometrics. They are consequently not suitably equipped to conduct empirical research and/or supervise students. This Workshop aims to bridge this gap by providing intermediate Econometrics training.

The workshops run over five days in a well-equipped econometrics laboratory at the Department of Economics, University of Pretoria, although the meetings have been online since Covid. They are designed to be of particular benefit to economists and social scientists in the academic, and also public and private sectors, wanting to know how to use time series, cross section and panel data techniques to inform research, student supervision and policy making.

### Selection of participants
Given the ongoing demand for econometrics training and capacity building, the fifth cohort of academics was selected by the ERSA Skills Development Committee. Twenty-six delegates were scheduled to attend the Workshop; however, three informed ERSA they were not attending, while not all of the remaining 23 attended every session. The group comprises representatives from the NMMU; TUT; University of South Africa; University of Limpopo; University of Mpumalanga; University of Zululand; University of KwaZulu Natal; University of the North-west; University of Johannesburg; University of Lesotho.

The participants in this Workshop are listed below, together with their affiliations.

| Name | Surname | Affiliation | e-mail address |
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|---------|---------|------------------------------|---------------------|
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| Ruth | Castel Branco | University of the Witwatersrand | ruthcastelbranco@gmail.com; ruth.castel-branco@wits.ac.za |
| Dorah | Dubihlela | Walter Sisulu University | ddubihlela@wsu.ac.za |
| Ivan | van der Merwe | University of the Free State | vdmerwei@ufs.ac.za |

## Format and timing of delivery of the program

The Workshop was conducted online via Zoom, with the aim of participants acquiring the necessary theoretical background and being exposed to hands-on empirical application, using STATA, although some discussion included R.

The instructors for the Cross-Section workshop were Prof Steve Koch and Dr Matthew Clance.

A typical day started at 8:30 and ended at 16:30 with a "lunch" break of one hour and a mid-morning and mid-afternoon "coffee/tea" break of 15 to 20 minutes.

Slides with references and practical exercises with solutions were made available in electronic format. Time was divided between theoretical discussions and practical applications.

Workshop participants were not overly talkative, although Q & A was encouraged. Although the majority had prior exposure to some software, few had exposure to programming, which is typically necessary for undertaking cross-section analysis. Thus, practical work was often slower than expected.

## Topics covered during the Workshop

The topics below were addressed during the week.

1. Using Stata to Read Data, Manipulate and Present Data (1 day)
    1.1. Reading data, manipulating, compressing, loops
    1.2. Do files v data files v log files
    1.3. Assisted practical (examples of reproducible work)
    1.4. Developing tables
    1.5. Creating illustrations
    1.6. Assisted practical (example journal tables and figures)
2. OLS and LPM
    2.1. Heteroscedasticity (1 day)
        2.1.1. Robust estimation
        2.1.2. GLS
        2.1.3. Assisted practical (examples GLS and FGLS)
    2.2. Categorical variables
        2.2.1. As controls: Categories for dummies
        2.2.2. As outcomes: LPM and probit/logit
        2.2.3. Assisted practical (binary models)
3. Multinomial Models, IV and Heteroskedastic IV (1 day)
    3.1. Endogeneity issues
        3.1.1. IV/2SLS
        3.1.2. Control functions
        3.1.3. Assisted practical (wage equation)
    3.2. Other ID Strategies
        3.2.1. Heteroskedastic IV
        3.2.2. Other moments?
        3.2.3. Assisted practical (wage equation)
    3.3. Multinomial models
4. Treatment Effects (1 day)
    4.1. Regression Discontinuity
    4.2. Difference-in-Difference

       4.3. Matching models
       4.4. Assisted practical
           4.4.1.  RD
           4.4.2.  Matching
5.  Smorgasbord (1 day)
       5.1. Bootstrap standard errors
       5.2. Selection, censoring and truncation
       5.3. Quantile regression
       5.4. Assisted practical
           5.4.1.  Quantile wage equation
           5.4.2.  Two-part model and selection wage equation

The following prior knowledge was assumed: Basic statistical methods, such as the calculation of means and standard deviations, as well as hypothesis testing, primarily t, z, and F distribution-based tests. A modest understanding of matrix algebra was assumed (meaning that the participant can, for example, interpret the solution to the OLS problem, as well as follow the explanation of IV and heteroskedastic IV).

Topics 3 and 4 received emphasis and more time was spent on them than on the others.

**Feedback from participants and our impressions**
In general, the delegates were grateful for the opportunity granted to them, although only a few were eager to engage via the online platform. We did feel it benefited the students, although we will only later see if this training gets used in further research.

This time around, the short-term STATA license was excellent, since everyone was operating under the same software circumstances, even though basic programming skills did not appear extensive. Although this is a stickier subject, such skills are becoming more important, but are beyond the scope of a week-long methods course.

As in the past, we thank ERSA for the opportunity granted to the participants to be part of the program and for lecturers from the University of Pretoria to be involved in the training. We undertook to keep in contact with the delegates and we invited them to contact us when they needed assistance in applying the techniques they were exposed to during the Workshop.

# Report Skills Development Workshop

## Cohort 8, Cross Section Econometrics
27 – 31 March 2023
Instructed by: Steve Koch, Matthew Clance

The ERSA-sponsored Skills Development program commenced in November 2013, after the ERSA board accepted a proposal for the offering of intermediate Econometrics training to academics from South African universities. The motivation for the project stems from the fact that a significant number of academics affiliated with South African Universities, and employed within Economics departments around the country, are inadequately trained in Econometrics. They are consequently not suitably equipped to conduct empirical research and/or supervise students. This Workshop aims to bridge this gap by providing intermediate Econometrics training.

The workshops run over five days in a well-equipped econometrics laboratory at the Department of Economics, University of Pretoria, although the meetings have been online since Covid. They are designed to be of particular benefit to economists and social scientists in the academic, and also public and private sectors, wanting to know how to use time series, cross section and panel data techniques to inform research, student supervision and policy making.

## Selection of participants
Given the ongoing demand for econometrics training and capacity building, the eighth cohort of academics was selected by the ERSA Skills Development Committee. Twenty-eight delegates were scheduled to attend the Workshop; however, three informed ERSA they were not attending, while attendance was fairly poor for the remaining 25. The group comprised of representatives from the North-West University, Walter Sisulu University and the Universities of Cape Town, Fort Hare, Free State, Johannesburg, KwaZulu Natal, Stellenbosch Business School, Western Cape, Witwatersrand and Zululand. The participants registered for this Workshop are listed below, together with their affiliations.

| Name | Surname | Affiliation | e-mail address |
|---|---|---|---|
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| Queen | Mabe | University of Johannesburg | magadim@uj.ac.za |
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| Celeste | Campher | University of the Free State | camphercs@ufs.ac.za |
| Ruth | Castel Branco | University of the Witwatersrand | ruthcastelbranco@gmail.com |
| | | | |

## Format and timing of delivery of the program

The Workshop was conducted online, via Zoom, with the aim of participants acquiring the necessary theoretical background and being exposed to hands-on empirical application, using STATA, although some discussion included R.

The instructors for the Cross-Section workshop were Prof Steve Koch and Prof Matthew Clance.

A typical day started at 8:30 and ended at 16:00 with a "lunch" break of one hour and a mid-morning and mid-afternoon "coffee/tea" break of 15 to 20 minutes.

Slides with references and practical exercises with solutions were made available in electronic format. Time was divided between theoretical discussions and practical applications.

Workshop participants were not overly talkative, although Q & A was encouraged. Although the majority had prior exposure to some software, few had exposure to programming, which is typically necessary for undertaking cross-section analysis. Thus, practical work was often slower than expected.

## Topics covered during the Workshop

The topics below were addressed during the course of the week.

1. Using Stata to Read Data, Manipulate and Present Data (1 day)
    1.1. Reading data, manipulating, compressing, loops
    1.2. Do files v data files v log files
    1.3. Assisted practical (examples of reproducible work)
    1.4. Developing tables
    1.5. Creating illustrations
    1.6. Assisted practical (example journal tables and figures)
2. OLS and LPM
    2.1. Heteroscedasticity (1 day)
        2.1.1. Robust estimation
        2.1.2. GLS
        2.1.3. Assisted practical (examples GLS and FGLS)
    2.2. Categorical variables
        2.2.1. As controls: Categories for dummies
        2.2.2. As outcomes: LPM and probit/logit
        2.2.3. Assisted practical (binary models)
3. Multinomial Models, IV and Heteroskedastic IV (1 day)
    3.1. Endogeneity issues
        3.1.1. IV/2SLS
        3.1.2. Control functions
        3.1.3. Assisted practical (wage equation)
    3.2. Other ID Strategies
        3.2.1. Heteroskedastic IV
        3.2.2. Other moments?

3.2.3. Assisted practical (wage equation)
3.3. Multinomial models

4. Treatment Effects (1 day)
   4.1. Regression Discontinuity
   4.2. Difference-in-Difference
   4.3. Matching models
   4.4. Assisted practical
        4.4.1. RD
        4.4.2. Matching
5. Smorgasbord (1 day)
   5.1. Bootstrap standard errors
   5.2. Selection, censoring and truncation
   5.3. Quantile regression
   5.4. Assisted practical
        5.4.1. Quantile wage equation
        5.4.2. Two-part model and selection wage equation

The following prior knowledge was assumed: Basic statistical methods, such as the calculation of means and standard deviations, as well as hypothesis testing, primarily t, z, and F distribution-based tests. A modest understanding of matrix algebra was assumed (meaning that the participant can, for example, interpret the solution to the OLS problem, as well as follow the explanation of IV and heteroskedastic IV).

Topics 3 and 4 received emphasis and more time was spent on them than on the others.

**Feedback from participants and our impressions**

In general, the delegates were grateful for the opportunity granted to them, although only a few were eager to engage via the online platform. We did feel it benefited the students, although we will only later see if this training gets used in further research.

This time around, the short-term STATA license was excellent, since everyone was operating under the same software circumstances, even though basic programming skills did not appear extensive. Although this is a stickier subject, such skills are becoming more important, but are beyond the scope of a week-long methods course.

As in the past, we thank ERSA for the opportunity granted to the participants to be part of the program and for lecturers from the University of Pretoria to be involved in the training. We undertook to keep in contact with the delegates and we invited them to contact us when they needed assistance in applying the techniques they were exposed to during the Workshop.

## Social Media and Digital Transition

### Going Digital: Social media and Website update

As the Covid-19 Pandemic restrictions eased during 2021, ERSA continued to increase its online presence and grow its social media platforms. The general uncertainty of the pandemic meant that a strong digital presence was paramount. We strengthened our virtual research networks and encouraged discussions between academics, policy makers and students. We collaborated with international organisations such as the GIZ and the International Food Policy Research Institute, as well as South African and international universities. What proceeds is a high-level summary of how the mix of ERSA's followers and users has changed over the year.

During the 2021 financial year, the total followers across all the social media platforms grew by 28% from 2 788 followers in April 2021 to 3 579 followers in March 2022. Over the same period, the number of new users visiting our website decreased by 3%. New users visiting our website are mostly attracted to our website as new working papers are published. With the Covid-19 pandemic lockdowns and the subsequent lags in the research process, less research has been published on the website, when compared to our previous years. The following table shows the percentage change in website traffic (new users) and followers on each of our social media platforms over the past year.

| Year | YouTube | LinkedIn | Twitter | Facebook | Website traffic |
|------|---------|----------|---------|----------|-----------------|
| 2021 | 66 | 355 | 952 | 1415 | 31 060 |
| 2022 | 165 | 865 | 1086 | 1463 | 29 996 |
| %Δ | 150% | 144% | 14% | 3% | -3% |

Changes in ERSA's followers and new users on social media platforms and website (April 2021 – March 2022) during 2021

The largest percentage growth occurred in our YouTube (150%) and LinkedIn (144%) social media platforms, albeit the former started from a very low base (66 subscribers). The primary emphasis of the social media campaign was to grow our LinkedIn following, as this is the social media platform where our target market spends much time, and at the beginning of 2021, ERSA's LinkedIn presence was lagging relative to the other social media channels. It is important to determine whether or not the new followers are, in fact, the right followers. The graph below illustrates to which industries our LinkedIn followers belong and affirms that the following is growing in the right direction. During Q3 and Q4 of 2021, the LinkedIn campaign attracted followers primarily from the Financial Services, Higher Education, Research and Banking industries. Followers from new industries, such as the Insurance and Think Tank industries, were also attracted.

**Industries to which LinkedIn followers belong as of end Q3 2021 and Q4 2021**
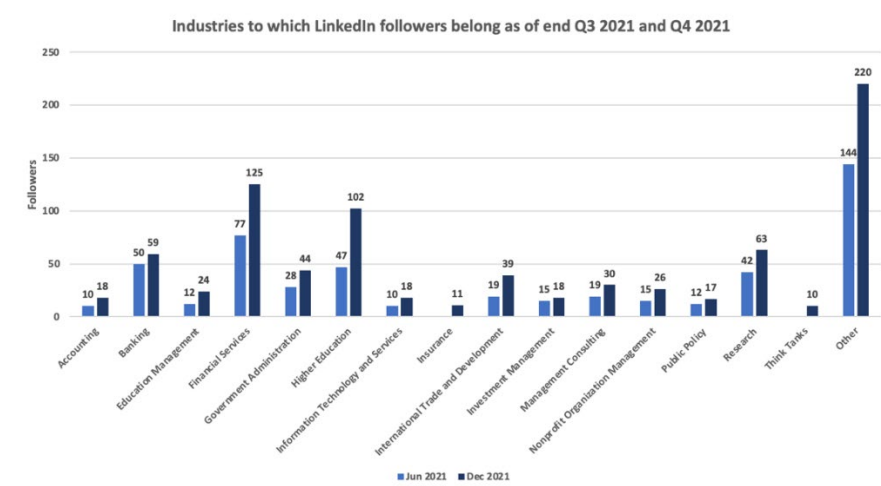


Consistency matters and by mapping the change in followers over time, we can determine which campaigns attracted fans. The graph below illustrates the number of followers gained each month on the various social media channels. LinkedIn consistently attracted more followers than the other channels (apart from September) and YouTube had a surge in followers in August. The growth in the LinkedIn following occurred at the same time as the Covid Project and the top videos on the YouTube channel in August were the first three Covid Project Discussions as well as Prof. Eric Leeper's SAMNet presentations. Twitter follower growth was consistent in 2021, but peaked in September, which is when ERSA hosted an IO Webinar by Eliana La Ferrara from Bocconi University, and an SC Webinar by Tim Besley from the LSE. The growth in followers linked to these campaigns emphasises the importance of using influencers, and tagging the correct organisations.

**New followers on social media channels over 2021**
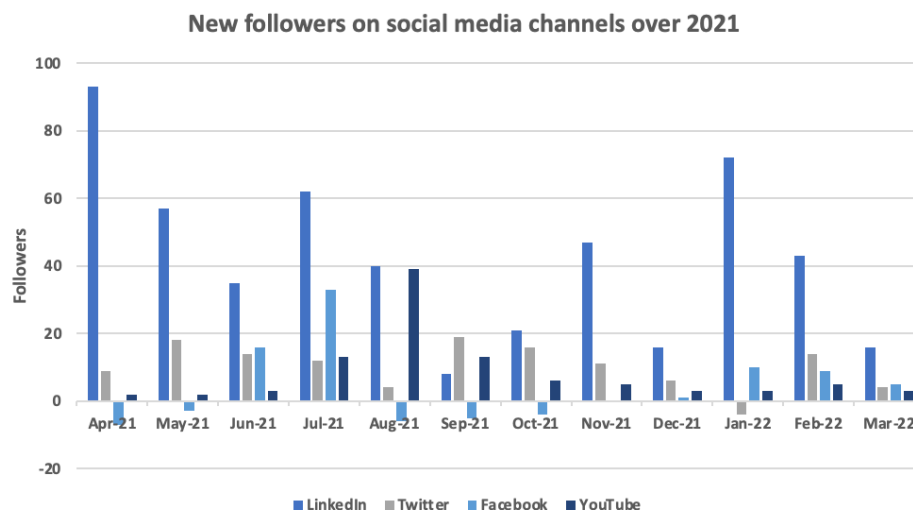


Overall, 2021 was a successful year in growing the social media presence. While the number of new users decreased slightly, we expect it to increase again in 2022 as the restrictions from the lockdown and state of emergency is lifted. ERSA has a comprehensive digital marketing strategy, including several marketing channels, which aims to promote our research and increase participation between academics, policy makers and students. And if you read this far, we know you are as passionate as we are about ERSA, so please do not forget to like us on our socials!

**Appendix I: Event Reports: April 2022 – March 2023**

### The Second University of Pretoria Economics PhD Workshop
21 June 2022
Convenor: Manoel Bittencourt

The second annual University of Pretoria PhD Workshop in Economics, organised by Manoel Bittencourt and Jesse Naidoo, was held on Tuesday, June 21st, 2022. The Workshop was open to PhD students at all African universities, and also to PhD students at institutions outside the continent working on topics related to Africa.

Both PhD students and academics from UP came to listen and give critique.

The Workshop featured twelve presentations by students at universities in South Africa, Togo, Benin, Japan, the Netherlands, and the United States. These presentations included papers on development, health economics, political economy, labour economics and international finance. Professors from universities in Europe, the United States, and South Africa served as discussants and gave critique and suggestions to the student presenters.

The first keynote address, by Augustin Fosu of the University of Ghana, covered some of the "hidden curriculum" for publishing in high-quality journals in economics. The second keynote, by Nathan Nunn of Harvard University, discussed some of the unique features of development in Africa compared to other regions of the world.

Practising economists in the public and private sector were also invited to attend the workshop dinner and meet with the students. Trust Gangaidzo, of Stellenbosch University, said of the Workshop that "[it] was a great platform to share, learn and receive constructive feedback, and network."

In 2023, the Workshop will be jointly organised with the Department of Economics at Stellenbosch University; the call for papers was published on March 1st, 2023.

**Advanced Empirical Methods in Finance and Economics Course**
28 June – 22 July 2022
Convenor and Instructor: Lucas Mariani

This course was advanced in empirical microeconomic methods in finance and financial intermediation, in which I revised the most widely used empirical methods in causal analysis in applied finance and economics. We covered recent developments in empirical research on several topics, including corporate and household bankruptcy and financial distress, relationship lending and loan contract design, credit shocks, borrowing constraints and informational frictions, and financial regulation. The main goal of the course is to enable students to learn the main empirical methods in applied economics and finance so they can use these tools in different environments, such as applied macroeconomics and microeconomics, development economics, and finance.

This advanced course in empirical methods was taught over four weeks (28 June – 22 July 2022) and comprised both lectures and practical sessions. During the first three weeks (starting on 28 June), the course was delivered via Zoom on Tuesdays, Wednesdays, and Thursdays from 5-7 pm (SAST). In the last week of the course (18-22 July), we met in person for the four-day practical sessions at the University of Pretoria. Funding to attend the in-person portion of the course was provided to students not based in Pretoria.

The course attracted 125 applicants, and we were only able to accept 25 highly motivated and capable students due to space constraints. We received applications from more than ten countries in Southern Africa, and the accepted students were a diverse group of researchers in the region, including participants originally from South Africa, Ethiopia, Zimbabwe, Zambia, Nigeria, Burkina Faso, and Namibia, both based in South Africa and abroad. Moreover, the participants were also a diverse group in terms of professional activity, including Ph.D. Students, Central Bankers, civil servants at National Departments, the National Treasury, and researchers in academic and non-academic institutions.

The feedback was very positive, and the participants considered the course relevant for their future endeavours both in terms of capacity building and the network of researchers in the same field as them.

**Competition Policy and Regulation in Digital Markets**
**30 September 2022**
Convenor: Lukasz Grzybowski

The ERSA workshop on "Competition Policy and Regulation in Digital Markets" took place on September 30 in Mont Fleur conference venue near Stellenbosch. The scientific committee included Prof. Lukasz Grzybowski from the University of Cape Town and Prof. Willem Boshoff from the University of Stellenbosch. The workshop organisation and logistical issues were managed by Yoemna Mosaval, and the workshop communication by Margaux Giannaros from Economic Research South Africa (ERSA).

The Workshop was advertised using the ERSA mailing list and by individual invitation of people from governmental institutions such as the South African Competition Commission. We have received about 25 submissions and included 13 papers in the program. The presenters were mainly doctoral students, post-docs and researchers in the early stages of academic careers. They represented six universities across South Africa, including the University of Cape Town, the University of Stellenbosch, the University of Johannesburg, the University of Pretoria, the University of Witwatersrand and UNISA. There were also participants from the Competition Commission, ERSA and economic consulting firms. The papers were discussed by senior academics who were invited to the Workshop as discussants. Overall, there were 28 participants. The full list of participants and the program of the Workshop are attached below.

The objective of the Workshop was to gather researchers from different institutions in South Africa, and create a platform for discussion and exchange of ideas to improve the quality of written research papers and reports. This is especially important for young researchers who do not have many opportunities to participate in such events nationally or internationally. The Workshop met these objectives according to feedback received from the participants.

**Appendix A**

## List of participants

|  | First Name | Surname | Affiliation |
|---|---|---|---|
| 1 | Megan | Friday | Acacia Economics |
| 2 | Ryan | Hawthorne | Acacia Economics |
| 3 | Zubair | Patel | Acacia Economics |
| 4 | Elvis K. | Avenyo | CCRED, University of Johannesburg |
| 5 | Tankiso | Thibane | Competition Commission |
| 6 | Siphosethu | Tetani | Competition Commission |
| 7 | Bradley | Kent | ERSA |
| 8 | Elias | Masilela | ERSA |
| 10 | Jan-Louis | van Tonder | Genesis Analytics |
| 11 | Aimee | Hare | J-PAL Africa |
| 14 | Petrus | Potgieter | UNISA |
| 15 | Lukasz | Grzybowski | University of Cape Town |
| 16 | Paul | Dunn | University of Cape Town |
| 17 | Grace | Nsomba | University of Johannesburg |
| 18 | Julius | Nyamwena | University of Johannesburg |
| 19 | Alexander | Zimper | University of Pretoria |
| 20 | Dumakude | Nxumalo | University of Pretoria |
| 21 | Wawa | Nkosi | University of Stellenbosch |
| 22 | Prince | Changole | University of Stellenbosch |
| 23 | Wihan | Marais | University of Stellenbosch |
| 24 | Willem | Boshoff | University of Stellenbosch |
| 25 | Yegnaew | Shiferaw | University of Witwatersrand |
| 26 | Amy | Visser | University of Stellenbosch |
| 27 | Ronan | Morris | University of Stellenbosch |
| 28 | Margaux | Giannaros | ERSA |

**Appendix B**

## Workshop Program

| | |
|---|---|
| 15-9:30 | Welcome |

9:30-11:00                                            **Session 1**

Chair: Lukasz Grzybowski (University of Cape Town)

Elvis Avenyo (University of Johannesburg, CCRED)
*Digital platforms and development: A survey of the literature?*

Yegnanew Shiferaw ( University of Johannesburg)
*Analysis of gender gaps and differences in access to and use of digital technologies in small areas of South Africa: An application of the spatial Fay-Herriot model*

Bonface Munene
*Disruptive technologies, agricultural productivity and economic performance in Kenya*

| | |
|---|---|
| 11:00-11.30 | Coffee Break |

11:30-13:00                                           **Session 2**

Chair: Willem Boshoff (University of Stellenbosch)

Grace Nsomba (University of Johannesburg, CCRED)
*The regulation of interconnection and regulatory alignment in the Southern African Development Community*

Petrus Potgieter (UNISA)
*The profitability of flat-price broadband with an over-the-top subscription content product – benefits from cooperation*

Zubair Patel (University of Cape Town & Acacia Economics)
*The impact of mobile phones on change in employment status in South Africa*

| | |
|---|---|
| 13:00-14:00 | Lunch Break |

| 14:00-16:00 | **Session 3** |
|---|---|

Chair: Alexander Zimper (University of Pretoria)

Wawa Nkosi (University of Stellenbosch)
*The relationship between mergers and cartels in South Africa*

Dumakude Nxumalo (University of Pretoria)
*Estimating bank substitutability using personal transactional account usage in South Africa*

Jan-Louis van Tonder (Genesis Analytics)
*The impact of household energy efficient products on consumers' willingness to pay: implications for regulation*

Wihan Marais (University of Stellenbosch)
*Competition between mobile telecoms firm from a global perspective*

| 16:00-16.30 | Coffee Break |
|---|---|

| 16:30-18:00 | **Session 4** |
|---|---|

Chair: Paul Dunn (University of Cape Town)

Julius Nyamwena (University of Johannesburg, CCRED)
*Online platforms as a route to markets, a case study of Airbnb South Africa and South African accommodation industry*

Megan Friday (Acacia Economics)
*The Law and Economics of Potential Competition in Digital Markets: Case Studies in Online Intermediation Platforms*

Prince Changole (University of Stellenbosch)
*A review of prohibited mergers: MIH/WBC*

| 19:00-21:00 | Workshop dinner |
|---|---|

# SAMNet – 1st ERSA/CEPR Workshop

## Emerging Markets Back in the Spotlight: Risks and Policy Options

28 – 29 November 2022
Convenor: Nicola Viegi

The Workshop took place on 28 and 29 November 2022 at the Leadership Centre of the University of Pretoria. It was organised in collaboration with the CEPR with the objective of creating a regular appointment for the international and national research community to present the most recent work and discuss the most pressing economic policy issues confronting emerging markets.

We received more than 50 high-quality submissions from across the world and the organising committee selected 10 papers reflecting rich research areas in emerging markets economics. We had 15 international guests and 25 local participants in the Workshop from five South African Universities, the SARB and private sector economists.

The participants appreciated the quality of the presentations and the level of the debate, together with the excellent organisation which made their stay in South African a very fruitful and interesting experience. The success of this 1st ERSA/CEPR workshop generates enough interest to make this an annual appointment, involving similar institutions in Asia with The South-East Asian Central Banks Research and Training Centre the most likely partner, and a further institution in Latin America. The objective is to make this ERSA initiative a regular international appointment that also promotes South–South research and policy collaboration.

## Participants

*National Institutions*
Economic Research Southern Africa, University of Pretoria, University of Free State, Wits Business School, National Treasury, South African Reserve Bank, University of South Africa, North West University, Nelson Mandela University, RMB Morgan Stanley, S&P Global, Codera analytics, ABSA Capital

*International Institutions*
IMF, World Bank, University of Oxford, Harvard Business School, University of Warwick, University of Mannheim, Bilkent University, Brookings Institution, Federal Reserve of Cleveland, Imperial College London, Imperial College London, University of Wisconsin-Madison, Northwestern University, Federal Reserve Bank of Minneapolis, Asian School of Business, University of Oslo

White Male 19, White Female, 8, Black Male 6, Black Female 8

## Budget

| SAMNet/CEPR WORKSHOP - University of Pretoria: 28 & 29 November 2022 | | | |
|---|---|---|---|
| | | | |
| **ERSA BUDGET** | | | |
| | | | |
| **ACCOMMODATION & CONFERENCE EXPENSES** | **R70 215.00** | | |
| Brooklyn Guesthouses Accommodation | | R51 250.00 | |
| Final Invoice for additional days | | R18 965.00 | |
| | | | |
| **TRAVEL COSTS** | **R289 315.65** | | |
| Invoice from CEPR for International flights | | R239 827.65 | 12700 USD @ R17,42 |
| International flights ERSA | | R20 530.00 | |
| Shuttle costs | | R16 027.00 | |
| Local flights | | R12 931.00 | |
| | | | |
| **OTHER** | **R18 400.00** | | |
| AudioRoom - Live Stream | | R17 940.00 | |
| Miscellaneous | | R460.00 | |
| | | | |
| **TOTAL** | **R377 930.65** | **R377 930.65** | |
| | | | |
| | | | |

## ESSA National PhD Conference
6 – 8 February 2023

The Economic Society of South Africa (ESSA), in collaboration with Economic Research Southern Africa (ERSA), hosted its first National PhD Conference over two days in February 2023. The Human Sciences Research Council (HSRC) also provided nominal support. This conference aimed to fill a gap for our best and brightest PhD students from all over the country – the opportunity to present their work in a dedicated space and get expert in-person feedback while also having a chance to meet and network with fellow students and experts in their field of research. We found that the larger biennial ESSA conference did not always deliver suitable outcomes for PhD students as they often ended up in poorly attended ghost sessions providing unsatisfactory feedback.

The conference was planned and approved by ESSA Council as far back as 2019. However, the Covid-19 pandemic and subsequent restrictions only made our in-person event possible in 2023. Following a meeting between the ESSA President and ERSA Executive Director in early 2022, ERSA pledged its support towards the organising and funding of the conference. Once all restrictions were lifted, ESSA and ERSA quickly moved forward with the planning of the conference. It was determined that a Historically Disadvantaged Institution (HDI) would be the perfect fit for the conference and in line with both ESSA and ERSA's developmental mandate. The University of Fort Hare (UFH) was selected, and duly accepted our invitation, to act as host to our first National PhD Conference. We thank UFH who provided the conference venue at their East London campus free of charge and helped with logistical planning.

The response to the conference was excellent. Despite relatively short notice, submissions from 45 students representing 12 higher education institutions were received. UCT and WITS, in particular, submitted many high quality papers. Following a rigorous selection process, 22 papers covering a wide variety of research topics were selected for presentation. Due to various practical constraints, this was the maximum number of participants we could accommodate whilst ensuring adequate time for all to present their work and receive feedback within our 2-day schedule.

The conference itself was an amazing success. The combination of high-quality papers, broad representation, and an esteemed panel of discussants were no doubt the key ingredients. I was personally most impressed with the time our panel of discussants – all very busy in their own right – gave up to give our students expert feedback and ensure their research would be better for it. Our ability to create a less intimidating environment for students also helped facilitate many interesting discussions and networking opportunities. Our gracious hosts at UFH ensured all participants were well taken care of throughout their stay. Feedback received from participants confirmed that the overall conference programme yielded massive value added.

All costs for participants, both students and discussants, were fully funded by ESSA and ERSA on a 50-50 basis. In this regard, ESSA would like to thank Matthew Simmonds, ERSA Executive Director, for giving his organisation's full support. ERSA did not only provide financial assistance, but also logistical and administrative resources, for which ESSA was most grateful. ESSA looks forward to continue building our relationship with ERSA to the benefit of our students and the broader economic research community.
Kind regards,

Heinrich Bohlmann
ESSA President

# Climate Vulnerability Monitor, 3rd Edition (CVM3)
## 21 February 2023

Economic Research Southern Africa (ERSA) collaborated with the Climate Vulnerability Forum and V-20 Group, as a Regional Partner in 2023. In this capacity, we helped to disseminate the Climate Vulnerability Report, 3rd Edition, and promote its accompanying resources – the Data Explorer and Impact Stories, and the Key Findings summarising the broad, insightful findings of the Report. We also published a Regional Analysis for Southern Africa, derived from the Report, and hosted a workshop to promote this work and resources.

The aim of this project is threefold: firstly, to deepen the debate on how Southern African economies are impacted by Climate Change and Climate Vulnerability, secondly, to inspire researchers to use the Data Explorer Indicators in their research, and thirdly, to make policy makers aware of these issues as well as the resources which can be used to further understand them.

ERSA promoted this project on its website, through e-mail campaigns and on social media. This Report will summarise important metrics from the Workshop, the publication outputs and social media campaigns. At the end, it will provide feedback and key learnings from this project.

**OVERVIEW: CLIMATE CHANGE AND CLIMATE VULNERABILITY**
The Climate Change and Climate Vulnerability Research Project brought 539 visitors to our website, and accounted for 685 pageviews since the beginning of 2023, when the campaign started. Apart from the research project landing page, the Workshop and Regional Report received the most pageviews – 195 pageviews for the Workshop page, and 130 for the Regional Report. The page dedicated to the Climate Vulnerability Monitor Report, was visited by 50 people, and received 81 pageviews and the page allocated to the Key Points was visited by 41 people and received 47 pageviews.

|  | Pageviews | Unique pageviews |
|---|---|---|
| Landing page | 210 | 176 |
| Workshop page | 195 | 145 |
| Key Points | 47 | 41 |
| Regional Report | 130 | 106 |
| Workshop Presentation | 22 | 21 |
| CVM3 Report page | 81 | 50 |
| **Total downloads** | **685** | **539** |

*Website pageviews for project*

The Key Points were very popular and downloaded 46 times. With only 41 people visiting this page, it was the most downloaded document of this project relative to the number of visitors. The Workshop presentation from the Regional Report was also very popular, receiving 16 downloads after having been visited by 21 people. The Regional Report was downloaded 67 times and the Climate Vulnerability Monitor Report was downloaded 27 times. It was requested that the latter be removed from the site, as the latest versions were available only on the original website. We would expect it to have been downloaded at least twice as much, since it was only available on the site for a week. Overall, 129 publication downloads from 539 people (24%) are satisfactory.

| | Downloads |
|---|---|
| Regional Report | 67 |
| Key Points | 46 |
| Workshop Presentation | 16 |
| **Total downloads** | **129** |

*Website downloads for ERSA publications*

The content on the website was promoted via an e-mail campaign (consisting of 4 specific e-mails and a newsletter) and a social media campaign (consisting of 7 posts on each LinkedIn and Twitter, and 3 videos on YouTube). The e-mail campaign had an average open rate of 37%.

Each social media post tagged the Climate Vulnerable Form and V20 Group, and some of these were shared by our partners. The table below illustrates the total reach, measured by impressions, and the average engagement rate (clicks relative to impressions) for the social media posts. For YouTube, the average engagement rate is the percentage of the video that was watched. There is more on this the following section, where the Regional Workshop metrics are discussed in more detail.

| Social media | Total reach (impressions) | Ave engagement rate (%, per post) |
|---|---|---|
| LinkedIn | 2285 | 4,0 |
| Twitter | 1458 | 4,1 |
| YouTube | 799 | 13,2 |
| **Total** | **4542** | **4,4** |

*Reach and engagement metrics for social media campaign*

Across all social media channels, we reached 4542 people, the highest reach being via LinkedIn, followed by Twitter and then YouTube. This is in keeping with our social media strategy, as we have the most followers on LinkedIn relative to the other channels. Engagement was slightly higher on Twitter, and people have so far watched 13,2% of the videos on YouTube. We are aware, that these metrics will change as the content will continue to be promoted via our campaign and social media algorithms.

**REGIONAL ANALYSIS WORKSHOP**

| | Total |
|---|---|
| No. of registrants | 130 |
| No. of attendees | 53 |

*Regristant and Attendees for Regional Workshop*

The Regional Workshop was an online event hosted on Zoom on 22 February 2023. Although 130 people registered, only 53 attended, and the average time in the webinar was 65 minutes of the total 90-minute discussion. Given loadshedding constraints, these metrics are good, and since there were many questions during the event, engagement levels were high, and we are very pleased with the quality of attendees and their level of engagement.
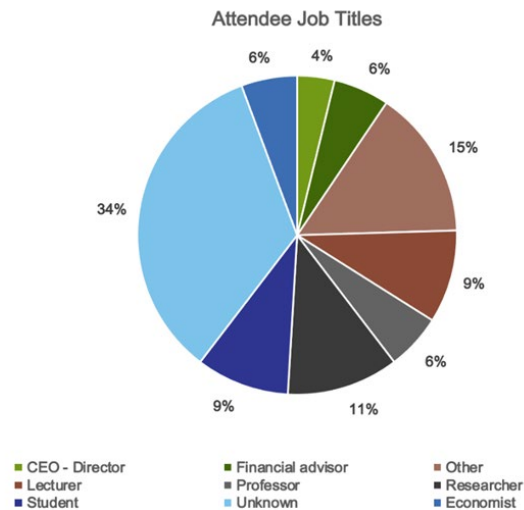
The following two pie charts reveal the industries and job titles of the workshop attendees. Unfortunately, not all the attendees completed their forms, which explains why the industry of 30% of the attendees and the job title of 34% of the attendees is unknown. 28% of the attendees belong

to the education industry, 12% to the Government sector and 7% to the financial services industry. The 'other' category (23%) consists of people from the energy and chemical, banking and securities, and consulting industries. People in the education industry are either students or academics pursuing research, and people in the government sector are policy makers. This is in keeping with our target audience and those who will benefit from this project and its resources.

**Attendee Industries**



- Education
- Financial Services
- Government - Federal
- Government - State & Local
- Other
- Unknown
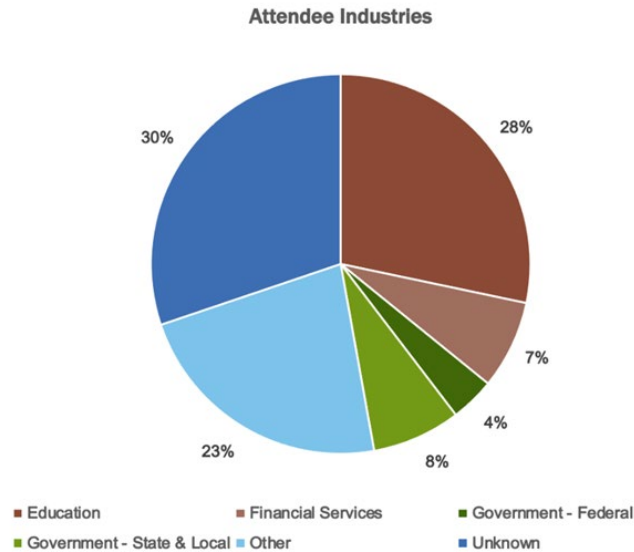
Analysing the attendees by job title reveals that lecturers, professors and students comprised 24%, while researchers comprised 11%. 10% of our attendees were either financial advisors or CEOs. The 'other' category, which accounts for 15% of the attendees, includes journalists, program managers and managing directors.

The attendees were, therefore, a combination or researchers and policy makers across relevant industries.

**Attendee Job Titles**



- CEO - Director
- Financial advisor
- Other
- Lecturer
- Professor
- Researcher
- Student
- Unknown
- Economist

Given that we wanted to encourage engagement, we uploaded the pre-recorded videos onto our website and YouTube Channel. The Background and Key Findings Video has so far only received 22

views, and the Data Explorer video has received 19 views. The watch time in these videos is very low – viewers, on average, are only watching 1,8% of the Data Explorer video, and 2,1% of the Background and Key Findings video.

The Regional Workshop video has reached 766 people so far and received 52 views. On average, people are watching 9,3% (under 10 minutes) of the Workshop.

| YouTube Videos | Impressions | Views | Watch time (%) |
|---|---|---|---|
| Workshop (90 mins) | 766 | 52,0 | 9,3 |
| Background and Key Findings (21 mins) | 17 | 22,0 | 2,1 |
| Data Explorer (8 mins) | 16 | 19,0 | 1,8 |
| Total | 799 | 93,0 | 7,5 |

*YouTube metrics for posted videos*

These metrics will increase as we continue to drive our viewers to this content, along with the various algorithms.

**FEEDBACK**

After our event, we requested feedback from our attendees. Below, we share the highlights they most enjoyed from the Workshop, and their key takeaways. Key highlights include:

- the panel discussion of the Report – specifically the economic indicators and policy implications
- a great presentation with a great panel

In future, people would like more information on economic impact assessments and a focus on modelling climate change impacts on economic indicators. People are curious about finding a way to measure/model/index climate policy and how that index can be used in evaluating its effects on economic activity. Additionally, people would like more time for the panel discussion and Q&A.

**Foresight Africa 2023 Report: A Southern African Perspective**
27 February 2023

As we continue to promote the discussion and development of economic policy in Southern Africa, ERSA helped facilitate and support the Brookings Institution in disseminating their Foresight Africa 2023 Report at the University of Pretoria. The launch was run as a hybrid panel discussion with an interactive Q&A session for the audience both online and in-person. Brookings Institution's Flagship Foresight Africa 2023 was written by over 60 distinguished authors from around the world, including academics, policymakers and the Mayor of Cape Town. It highlights seven key areas of focus this year:

1. Economic recovery and growth
2. Food security
3. Education and Skills
4. Health
5. Gender
6. Climate Change
7. Africa's cities

The panel that engaged on the above topics include the following: Matthew Simmonds (Executive Director, ERSA), Aloysius Uche Ordu (Director, Africa Growth Initiative, Brookings), Gracelin Baskaran (Senior Research Fellow, Africa Growth Initiative, Brookings). Mamokete Lijane (Chairperson, ERSA), Will Pearson (Senior Investment Advisor, Prosper Africa).

The panel discussants were given an opportunity to reflect on each relevant chapter of the Report, in addition to linking the Report's findings to their own industry and research experience.

Every year, this Report reflects on hindsight and captures the top policy priorities for the African region in the upcoming year. In this way, it provides scope for expanding and refining development policy in Africa. Emerging from the COVID-19 pandemic, Southern Africa, similar to that of Africa, has entered an environment of global uncertainty, high inflation, and high debt levels, all of which are straining economic growth and development going forward. As African states look to overcome their challenges and embrace new opportunities. These are many more issues were unpacked throughout the conference's presentations and discussions.

Some of the key areas of discussion included:

***Africa's Economic Recovery: What should policymakers do? (Prof. Njuguna, Kwakwa, Nicolas Kazadi, Ade Ayeyemi)***

- Africa's policymakers are not helpless. Domestic policy actions matter; the time to act is now.
- Reduce people's vulnerability/develop social safety nets to avoid setbacks/democratic backsliding.
- Don't waste the crisis! Reassess current approaches to borrowing and financing.
- Exploit opportunities in non-traditional sectors, e.g., sports and creative industries.
- Lesson from Ecobank: Africa's banking sector is an important partner in recovery.

***Food Security: What should policymakers do? (H.E. Hailemariam Dessalegn, Ahunna, Jeanine Cooper, Satu Santana)***

- Shift preferences to local brands; encourage domestic and regional competition.
- Invest in food systems that create jobs sustainable, and excellent nutritional outcomes.

- Re-examine conventional food policy.
- Accelerate implementation of AfCFTA to avert future food supply disruptions.
- Diversify Africa's food systems to include indigenous crops: sorghum, millets, teff, matoke, and cassava.

### *Education and Skills: What should policymakers do? (H.E. Kikwete, David Sengeh, Ruth Kagia, Safaa)*

- Recognise education losses of the pandemic and compensate for this setback.
- Use public resources on primary and secondary education to improve skills.
- Safeguard national security to mitigate the negative effects of insecurity on educational outcomes.
- Utilise new technologies and innovations to enhance learning.
- Ensure children acquire foundational and portable skills for technical and green jobs.

### *Health: What should policymakers do? (Nkengasong, Edwine Barasa, Winnie Byanyima, Michelle Williams, Lia Tadesse, Chikwe Ihekweazu)*

- Aim for health systems that are less dependent on imported medicines and vaccines.
- Leverage access to ICT and issue communication credits for enhanced network connection.
- Prioritise universal health coverage.
- Empower frontline workers and expand education for more nurses and midwives.
- Endorse, fund, and strengthen regional institutions such as the
- Africa CDC and AMA to end HIV/AIDS

### *Gender: What should policymakers do? (Jeni Klugman, Caren Grown, Cina Lawson, Malado Kaba)*

- Addressing gender disparities must be a necessary part of
- every policy
- Implement continental and international treaties.
- Relieve supply- and demand-side constraints to women's access to finance.
- Governments, civil society, and funders to act with expediency to reduce the gender equity gap.
- Involve a diverse group of women in every conversation.

### *Climate Change: What should policymakers do? (Kevin Urama, Hon. Bogolo, Mahmoud Mohieldin, John Mulligan and Gracelin Baskaran)*

- Climate change is a global commons problem, and thus, all actors must play their part.
- Preserve natural assets like the Congo rainforest to maintain carbon absorption.
- Fund climate change adaptation through equity investments and concessional financing
- Develop clean, sustainable national industrial policies and coordinate these policies at the regional level.
- Efforts to mitigate the effects of climate change pay for themselves.

### *Africa's Cities: What should Policymakers Do? (Jide Sanwo-Olu, Prof. Peter Nyong'o, George Hill-Lewis, Muhammad Gambo & KIPPRA scholars)*

- Learn from well-organised, economically efficient African cities.
- Ensure local governments have the financing to build smart, forward-looking cities.
- Prioritise climate-resilient housing/buildings to secure livelihoods and reduce emissions.

- Engage private sector and civil society organisations that act as both drivers and beneficiaries.
- Foster formalisation and privatisation.

The overall launch was a great success, with many high-level academics, embassy officials and private sector individuals networking after the event. The conference brought together an array of experience and knowledge into one room aimed at discussing key issues facing the developing South. The launch also proved to be a huge success for the ERSA team, who were able to assist in coordinating the launch within a very tight deadline. This was echoed by the Brooking team, who expressed their gratitude for ERSA's professionalism and overall organisation regarding the launch.

## Appendix II: Working Papers published: April 2022 - March 2023

### Working paper 884
**Title:** Demographic changes and asset prices in an overlapping generations model
**Author(s):** Ghislain H. Demeze-Jouatsa, Frank Riedel, Beatrice D. Simo-Kengne
**Publication date:** March 2023

**Abstract:** We examine the effect of demographic shifts on asset prices in an overlapping generations model with endogenous population dynamics. We establish a robust inverse relationship between returns and the old dependency ratio. We document the absence of a simple monotonic relationship between asset prices and demographic parameters. Returns depend on the joint evolution of fertility, mortality, and lifetime work in a complex way that we quantify. We carry out an extensive empirical study involving 55 countries. Both theoretical and empirical findings reconcile existing propositions on the population age structure and asset returns for riskless and short-lived risky assets.

### Working paper 883
**Title:** Why and how to measure the contribution of South Africa's ocean economy
**Author(s):** Odwa Mtati, Stephen G. Hosking
**Publication date:** November 2023

**Abstract:** We examine the effect of demographic shifts on asset prices in an overlapping generations model with endogenous population dynamics. We establish a robust inverse relationship between returns and the old dependency ratio. We document the absence of a simple monotonic relationship between asset prices and demographic parameters. Returns depend on the joint evolution of fertility, mortality, and lifetime work in a complex way that we quantify. We carry out an extensive empirical study involving 55 countries. Both theoretical and empirical findings reconcile existing propositions on the population age structure and asset returns for riskless and short-lived risky assets.

### Working paper 881
**Title:** Local-Currency sovereign risk on South African government bonds
**Author(s):** Mulalo Mamburu
**Publication date:** November 2022

**Abstract:** While local-currency bond markets have become a dominant source of emerging-market financing and an integral component of the global financial system, market-observed measures of sovereign default risk are still based on foreign-currency-denominated debt. This note replicates and assesses the Du-Schreger credit risk spread on local-currency debt for South Africa for the period between January 2008 and December 2021. This credit spread is found to be a good measure of local-currency sovereign risk for South Africa during the period under review as it captures the evolution in key developments relevant to domestic sovereign risk while being less responsive than market-based measures to global developments that are not directly linked to fiscal risk.

## Working paper 880

**Title:** Characteristics of the South African retirement fund industry
**Author(s):** Johannes W. Fedderke, Neryvia Pillay Bell
**Publication date:** September 2022

**Abstract:** Using administrative data, we examine three characteristics of the South African retirement fund industry–funding stability, risk sharing and efficiency–over the period 1996-2018. We find that there have been significant decreases in assets per member for private funds, pension funds and retirement annuities, which could reflect decreasing funding ratios in the retirement fund system. The retirement fund industry in South Africa is dominated by DC funds. Households, therefore, bear a greater risk which they may not be equipped to withstand. We find that South African retirement funds are not operating at an efficient scale. There are strong significant economies of scale present in the industry with total administrative costs increasing by only 72% when the total number of fund members doubles. Preservation funds and retirement annuities are found to be most efficient and operating at an efficient scale. None of the benefit structures are operating efficiently but hybrid funds are the most efficient.

## Working paper 879

**Title:** Import tariff pass-through effect and the spatial distribution of domestic consumer goods prices: Zimbabwe (2009-2014)
**Author(s):** Everisto Mugocha, Haroon Bhorat
**Publication date:** August 2022

**Abstract:** The study of import tariffs pass-through has been observed to be crucial for policy making, for instance, this may inflate some goods' prices thus harming individual welfare. However, the extant literature on the import tariffs pass-through effect has largely ignored the possibility of spatial dependence between domestic goods prices which may brew imprecise estimates. Hence, this study proposes an extension of the traditional empirical model for estimating the import tariff pass-through effect by introducing controls for the domestic spatial dependence of prices. The estimates rely on a panel dataset of consumer goods for Zimbabwe, which has both the individual and time spatial effects. The spatial econometrics model used in this study all agree that there is positive spatial dependence of domestic goods' prices in Zimbabwe over the period 2009 to 2014. When compared to our modified model, the traditional import tariffs pass-through model was found to highly overestimate the import tariffs pass-through effect. The study found that a positive and significant portion of import tariffs is being passed on to domestic goods prices in Zimbabwe. Thus, there is a need for policy to be cautious of the import tariffs increase in relationship to national inflation, and poverty targets.

## Working paper 878

**Title:** Does 'price framing' influence empirical estimates in Discrete Choice Experiments: The case study for the South African wine industry
**Author(s):** Lydia Chikumbi and Milan Scasny
**Publication date**: July 2022

**Abstract**: The approach and survey used to examine non-market value in a stated preference study can influence the outcomes and impact the validity and reliability of value estimates. While prior research has investigated the impact of 'price framing' on decision-making in other disciplines, (i.e. marketing & psychology), little is known about its validity and reliability in Discrete Choice Experiments (DCEs) and environmental valuation. The study explores the effect

of 'price framing' on DCE measurements. The tests are carried out using data from a choice experiment on preferences for natural preservatives in wine. The same respondents completed a nearly identical DCE survey, one with a real price and another with a percentage price change as cost attribute. 611 respondents completed the survey, and a panel mixed logit model was used for the analysis. Results demonstrate that 'price framing' remarkably influenced respondents WTP changes in attributes. The data reveals that while the rank order of importance of attributes, signs, and significance levels are similar for the two samples, they differ in the parameter magnitudes. The study sheds light on the establishment of guidelines for developing valid cost attributes in DCEs studies.

## Working paper 877

**Title:** The long-term effects of early-life exposure to weather shocks: Evidence from Tanzania
**Author(s):** Ermias G. Weldesenbet
**Publication date:** April 2022

**Abstract:** We examine whether early-life exposure to rainfall shocks has a long-term impact on health, education, and the socioeconomic statuses of individuals in rural Tanzania, where livelihoods heavily depend on rain-fed agriculture. We use a unique panel of data from a Kagera Health and Development Survey (KHDS) in which children were followed from childhood (1991) to adulthood (2010) together with historical rainfall data. We apply a sibling fixed-effect estimator to overcome potential endogeneity issues. We find that rainfall in birth year affects the education and socioeconomic statuses of children in adulthood. A 15 percent increase in rainfall in one's birth year and birth village (relative to average village rainfall) leads children to have more years of schooling and live in a household in 2010 that scores 0.19 higher on an asset index. We then explore the relationship between early-life rainfall and childhood nutritional status to identify early-life rainfall's initial effect. We find that higher birth-year rainfall leads to significant decreases in height and weight deficits in children. A 15 percent increase in rainfall in one's birth year and birth village (relative to average village rainfall) improves height-for-age z score by 0.20 and weight-for-age z score by 0.26. When taken together, our results point to the importance of early childhood nutrition intervention. Sensitivity checks show that the results are robust to sample selection.

**Discussion Documents published**

### Discussion document 1
**Title:** Universal Basic Income: How the experience in developing countries can inform the discussion in South Africa
**Author (s):** Jéssica Gagete-Miranda
**Publication date:** August 2022

**Abstract:** This paper considers how the COVID-19 pandemic gave new traction to the discussion about Universal Basic Income (UBI), particularly in South Africa, where members of government and civil society have been advocating for transforming the special COVID-19 social relief of distress grant into a UBI scheme.

### Discussion document 2
**Title:** COVID-19 and the South African Economy
**Author (s):** Christopher Loewald, Matthew Stern
**Publication date:** September 2022

**Abstract:** As South Africa looks to navigate itself out of a COVID-induced recession and to restore economic growth and create new jobs, a more active and informed policy response is needed. As a small, open and exposed economy, the policy options available to South Africa are somewhat limited.

### Discussion document 3
**Title:** Can a universal basic income contribute to breaking structural poverty in South Africa?
**Author (s):** Kelle Howson, Zimbali Mncube
**Publication date:** September 2022

**Abstract:** Much of the debate about the introduction of a universal basic income grant (UBIG) in South Africa is concerned with its feasibility and sustainability. This paper asks important questions, but they can only be understood in relation to the long-term social and economic benefits of a UBIG.

### Discussion document 4
**Title:** The macroeconomics of establishing a basic income grant in South Africa
**Author (s):** Daan Steenkamp, Hylton Hollander, Roy Havemann
**Publication date:** September 2022

**Abstract:** This paper  offers a discussion on the macroeconomics of establishing a basic income grant. It uses a DSGE model to explore the feedback effects between macroeconomic factors pertaining to a basic income grant.

### Discussion document 5
**Title:** Economic impacts of FATF recommendations and grey-listing announcement,
**Author (s):** Jacobus Nel, Lucas A. Mariani
**Publication date:** November 2022

**Abstract:** This Discussion Document summarises the recent developments in South Africa on the possibility of being grey-listed by FATF (the Financial Action Task Force) in October 2022. The FATF is an intergovernmental body that promotes policies to protect the global financial system against money laundering and terrorist financing.

**Discussion document 6**
**Title:** A systematic and historical review of basic income support programs in middle-income countries
**Author (s):** Biniam E. Bedasso, Ermias Woldensenbet
**Publication date:** November 2022

**Abstract:** As one of the most structurally unequal countries in the world which also enjoys a reasonably progressive political environment, South Africa has emerged as one of the few places where an intensive public debate on basic income support is taking place in earnest.

**Discussion document 7**
**Title:** South Africa's yield curve conundrum
**Author (s):** Daan Steenkamp, Ruan Erasmus
**Publication date:** November 2022

**Abstract:** South Africa's sovereign yield curve is one of the steepest in the world. We show that South Africa's curve has steepened over recent years and that this can be explained by an increase in the term premium embedded in long rates.

**Discussion document 8**
**Title:** Importance of employment programs for the youth in South Africa
**Author (s):** Jéssica Gagete-Miranda, Michelle Pleace
**Publication date:** January 2023

**Abstract:** The present Report reviews the literature on interventions to enhance employment – primarily focused on the youth – and discusses how such interventions might help the youth unemployment issue in South Africa.