# SAMUEL WILLS

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Nationality: Australian

<b>EDUC</b>	ATION
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2010-2014 D.Phil (Ph.D.) in Economics University of Oxford, Pembroke College - Thesis: "Macroeconomic policy in resource-rich economies", Advisor: R. van der Ploeg - Fully funded on General Sir John Monash Award: Australia's top postgraduate award (A\$ 150,000) - Awarded 2012 David Walton Scholarship for top D.Phil candidate in macroeconomics or finance 2008-2010 M.Phil in Economics University of Oxford, Pembroke College - Thesis: "Volatility and macroeconomic policy in resource-rich economies", Advisor: R. van der Ploeg - Fully funded on Commonwealth Scholarship (£, 70,000) - Awarded 2009 Pembroke College Collingwood Prize for academic achievement **B.Com** in Actuarial Studies and Finance 2003-2007 University of New South Wales, New College - Thesis: "The pricing of tranched longevity bonds", Advisor: M. Sherris - University Medal in Actuarial Studies, First Class Honours, High Distinction weighted avg. mark

- Awarded 2007 Investec Prize for "Most outstanding all-round student" in commerce or economics

#### EMPLOVMENT

EMPLOYME	NT		
2022-	The World Bank, Macroeconomics, Trade and Investment	Country Economist	
	- Led the Bank's economic policy engagement with the Governments of Kiribati and Nauru		
2021-2022	University of Cambridge, Queens' College	Macroeconomics Supervisor	
	- Taught 1st-year macroeconomics		
2017-2020	Rokos Capital Management (global macro hedge fund)	Economist	
	- Responsible for the firm's macroeconomic forecasting, views and strategy for Australia and New 2		
	- Consistent 4 and 5 star (/5) performance reviews		
2016-2017	University of Sydney, School of Economics	Assistant Professor (tenure-track)	
	- Researched and Designed/Convened/Lectured 1st yr macroecon	nomics course (10 tutors/800 students).	
2013-2016	University of Oxford, OxCarre, Department of Economics	Research Fellow	
- Principal Investigator on individual ESRC Future Research Leaders Grant (£ 150,000)		lers Grant (£ 150,000)	
	- Research areas: macroeconomics/finance/natural resource economics/development economics		
2012	The Bank of England	David Walton Scholarship Intern	
	- Built empirical model of QE & money flows now used in Monetary Policy Committee suite of m		
2009	Australian Department of Prime Minister and Cabinet  Strategy and Delivery Division Intervi- Advised Prime Minister and senior Department officials on microeconomic reform		
2008	McKinsey and Company  Business Analyst		
<ul> <li>Advised Australian Securities and Investments Commission on strategy during the financial</li> <li>Advised major banks, financial firms and retail businesses on corporate strategy</li> </ul>		strategy during the financial crisis	
		rporate strategy	
2006	Australian Prudential Regulation Authority (APRA)	Actuarial Analyst (Co-Op Scholar)	
	- Monitored liquidity and capital adequacy of Australian insurers		
2005-2006	Taylor Fry Consulting Actuaries	Actuarial Analyst (Co-Op Scholar)	
- Analysed and prepared reports on the actuarial liabilities of Australian insurers		ralian insurers	

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2004-2005 Westpac Bank – Interest Rate Risk Management

Analyst (Co-Op Scholar)

- Developed model to improve coordination of asset and liability duration

#### PART-TIME APPOINTMENTS/CONSULTANCY

2016-	University of Oxford, OxCarre, Department of Economics	External Research Associate
2014-	Australian National University, Centre for Applied Macro. Analysis	External Research Associate
2017-2021	University of Sydney, School of Economics	External Research Associate
2013-2016	University of Oxford, Pembroke College	Junior Research Fellow
2013-2016	London School of Economics, Centre for Macroeconomics	Research Associate
2015	University of California, Berkeley	Visiting Scholar
2014	Australian National University	Visiting Scholar
2013-2014	International Monetary Fund and UK DFID	Commissioned Researcher
	- Studied how oil exporters should manage sovereign wealth funds and foreign currency reserves	
2011-2014	World Bank	Short-term Consultant
	- Provided analysis for CEMs on Iraq and Uganda, and briefing reports on oil and fiscal policy in Libya	
2012	Natural Resource Charter	Consultant Economist
	- Prepared case studies on auctioning resource exploration rights and taxing revenues	
2011	International Growth Centre and Government of Ghana	Consultant Economist
	- Analysed and made recommendations on Ghana's Petroleum Revenue Management Act (2011)	

#### GRANTS, SCHOLARSHIPS AND PRIZES: SELECTION

2014	Scholarship to attend Lindau Nobel Prize Meeting on Economics
2012	Pembroke College Senior Studentship for academic achievement
2008-2010	Commonwealth Scholarship (£, 70,000)
2007	Ernst & Young, and EJ Blackadder Honours Excellence Scholarships
2007	Completed Part I and II qualifications of the Institute of Actuaries of Australia (out of III)
2003-2006	UNSW Actuarial Studies Co-Op Scholarship: 15 months of industry training (AU\$ 60,000)

#### **PUBLICATIONS**

(full details at www.samuelwills.net/research/)

- Natural Resource Funds: A Review (2022) with James, A., Retting, T., Shogren, J., Watson, B., *Annual Review of Resource Economics*, 14:621-646
- The rebuilding macroeconomic theory project part II: multiple equilibria, toy models, and policy models in a new macroeconomic paradigm (2020) with Vines, D., Oxford Review of Economic Policy, 36(3):427-497
- A workable strategy for Covid-19 testing: stratified periodic testing rather than universal random testing (2020) with Cleevely, M., Susskind, D., Vines, D., and Vines, L., Oxford Review of Economic Policy, 36(S1):S14–S37
  - Submitted to 10 Downing St and made a "valuable and significant contribution to UK COVID policy"
- Inequality: An Assessment (2019) with Mayhew, K., Oxford Review of Economic Policy, 35(3):351-367
- Measuring inequality (2019) with McGregor, T. and Smith, B., Oxford Review of Economic Policy, 35(3):368-395
- Left in the dark? Oil and rural poverty (2018) with Smith, B., Journal of the Association of Environmental and Resource Economists (JAERE), 5(4)
  - Used satellite data to show that oil booms do not reduce extreme rural poverty in developing countries.
  - Awarded the Ralph C. d'Arge and Allen V. Kneese Prize for the best paper in JAERE in 2018

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- Leave the volatility fund alone: Principles for managing oil wealth (2018), Journal of Macroeconomics, 55:332-352
- The rebuilding macroeconomic theory project (2018) with Vines, D., Oxford Review of Economic Policy, 34(1-2):1-42
  - Co-led project bringing together 18 leading macro-economists, including 2 Nobel Laureates, to understand how macroeconomics should respond to the 2008 crisis
  - Most-cited issue in the journal's history, and the subject of a week-long 'collection' in the Financial Times
- The financial system and the natural real interest rate: Towards a 'new benchmark theory model' (2018) with Vines, D., Oxford Review of Economic Policy, 34(1-2):252-268
- The elephant in the ground: Managing oil and sovereign wealth (2016) with van den Bremer, T. and van der Ploeg, R., *European Economic Review*, 82:113-131
  - Paper cited in Norwegian government reports behind the increase in the \$1 trillion sovereign wealth fund's equity mix, lower spending rule, and divestment of highly oil-exposed stocks
- Resource funds: Stabilizing, parking and intergenerational transfer (2016) with Venables, T., *Journal of African Economies*, 25 (S2): ii20–ii40
- Sovereign wealth funds and natural resource management in Africa (2016) with Senbet, L., and Simbanegavi, W., *Journal of African Economies*, 25 (Supp 2): ii3-ii19
- An empirical sectoral model of unconventional monetary policy: The impact of QE (2015) with Cloyne, J., Thomas, R., and Tuckett, A. *The Manchester School*, Vol 83: 51-82
- Securitization, structuring and pricing of longevity risk (2010) with Sherris, M. Insurance: Mathematics and Economics, Vol 46(1): 173-185
- Financial innovation and the hedging of longevity risk (2008) with Sherris, M., Asia Pacific Journal of Risk and Insurance, Vol 3(1): 1-14

#### **WORKING PAPERS**

(full details at www.samuelwills.net/research/)

- **Do natural amenities promote growth? Evidence from surf breaks** with McGregor, T., OxCarre Working Paper No. 170, University of Oxford
  - Received media coverage from Bloomberg, the Financial Times, the Economist, BBC World amongst others.
- Optimal monetary responses to news of an oil discovery OxCarre Working Paper No. 121, University of Oxford
- Why do so many oil exporters peg their currency? Foreign reserves as a de-facto sovereign wealth fund with Van der Ploeg, R., *IMF conference proceedings 2014*
- Integrating financial and demographic longevity risk models: A model for financial applications with Sherris, M., UNSW Working paper

#### **POLICY PAPERS**

(details at www.samuelwills.net/policy/)

- Stroock public forum on sovereign wealth, Jackson Hole (2016), preceding the Jackson Hole Economic Policy Symposium
- Economic diversification and growth in an era of oil and volatility (2016) Chapter 7 background papers with van der Ploeg, R. World Bank Country Economic Memorandum for Uganda
- Economic principles for resource revenue management (2015) with Venables, A. IMF Research Bulletin 16(3), 1-4
- Resource funds: Stabilizing, parking and intergenerational transfer (2015) with Venables, A. Brookings Institution
- A stable and efficient fiscal framework for Saudi Arabia (2015) by Alsweilem, K.A. (provided expert advice) Belfer Center Report, Harvard Kennedy School
- Monetary union and East Africa's resource wealth (2014) with van der Ploeg, F., World Bank Background Paper
- Genuine savings in East Africa (2014) with van der Ploeg, F., World Bank Background Paper
- Managing Libya's oil wealth (2014) World Bank Background Paper
- Oil revenue management for economic diversification (2012) Chapter 2 modelling with Venables, A. and van der Ploeg, F. in World Bank Country Economic Memorandum for Iraq

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- Harnessing oil revenues in Ghana (2011) with van der Ploeg F. and Stefanksi, R. International Growth Centre report

#### TEACHING EXPERIENCE

University of Cambridge: Undergraduate Economics

2021 Macroeconomics: Tutor at Queens' College

University of Sydney: Undergraduate Economics

2017 Introductory Macroeconomics ECON 1002: Course designer, convenor and lecturer.

2017 Honours Thesis Supervisor:

- "The Effects of Fiscal Stimulus on Unemployment: A local area analysis of Australia during the Global

Financial Crisis" by James Plummer (1st class Honours)

- "Spontaneous Optimism: Evidence from American Football" by Scott McElroy (1st class Honours)

### University of Oxford: M.Sc. in Economics for Development

2015 2016	NI 1D 1D	1	11 .
2015-2016	Natural Resources and Dev	elanment: Laurse designer	convenor and lecturer
2013 2010	1 vacurar resources and Dev	cropment. Course designer,	convenier and rectarer

2011 Mathematics and Statistics: Lecturer

2010-2011 Macroeconomics: Class Teacher (for Professor Christopher Adam)
 2010-2011 International Trade: Class Teacher (for Professor Adrian Wood)

University of Oxford: Undergraduate Economics

2013-2014 Introductory Macroeconomics: Teaching Assistant – prepared lectures for Sir John Vickers

University of New South Wales: B.Com in Actuarial Studies

2006-2007 Actuarial Studies and Finance ACTL 1001: Class Teacher (for Professor Michael Sherris)

2007 Financial Mathematics ACTL 2001: Class Teacher (for Professor Michael Sherris)

#### **PROGRAMMING LANGUAGES**

- Python (incl. PyTorch, SciPy and various econometrics packages), MATLAB, Stata, Eviews, Excel (incl. VBA)

## OTHER ACTIVITIES: SELECTION

2016-	Oxford Review of Economic Policy: Editorial Board	
2008-2017	Invited speaker at (selection): <b>Conferences:</b> Stroock SWF Forum, Jackson Hole (adjoining annual policy symposium); <b>Universities:</b> Oxford, Cambridge, Warwick, LSE, UC Berkeley, Sydney, Monash, ANU, UNSW, Hebrew U (Jerusalem), BI Business School (Oslo). <b>Central banks:</b> RBA, RBNZ, Bank of England, Norges Bank, US Federal Reserve Board	
2010-2011	President: Pembroke College Middle Common Room	University of Oxford
2009-2012	Australia Rules Football: Oxford University, 4x varsity match winners	University of Oxford
2005	Team Leader: Habitat for Humanity Global Village Program	Bohol, The Philippines
2004	Team Member: Habitat for Humanity Global Village Program	Sigatoka, Fiji

#### REFERENCES

<sup>-</sup> Details available upon request -