

# CURRICULUM VITAE

## Ralf Becker

Economics, School of Social Sciences  
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## TERTIARY EDUCATION

- 1998 – 2002 **Queensland University of Technology (QUT)**, PhD in Economics
- 2002 (Jan-Apr) **University of Oxford**, Visiting student on the invitation of Prof. David F. Hendry.
- 1992 – 1998 **Johannis Gutenberg University**, Mainz, Germany, German first degree in Economics.
- 1993 – 1994 **University of Glasgow**, Visiting student on the Erasmus Student Exchange scheme.

## QUALIFICATIONS

- Doctor of Philosophy, 2002, (QUT), principal supervisor Professor Stan Hurn
- Diplom-Volkswirt, 1998, (University of Mainz, Germany)

## PRESENT EMPLOYMENT

2005 – 2008          Lecturer, University of Manchester  
2008 – to date       Senior Lecturer, University of Manchester

## PREVIOUS EMPLOYMENTS

2002 – 2004          Lecturer, Queensland University of Technology  
1998 – 2002          Research Assistant and Tutor, Queensland University of Technology  
1997 (Aug – Nov)   Project Assistant, Deutsche Bank AG  
1993 – 1996          Survey Assistant, Hewitt Associates (part time)  
1991 – 1992          Social Service (in lieu of Military Service)

## MEMBERSHIPS

- Royal Economic Society
- European Economic Association

## PROFESSIONAL LEADERSHIP

- Senior Associate of the Economics Network

## **A. RESEARCH**

### **1. PUBLICATIONS**

#### **Books/Open Educational Resource**

1. CORE – Doing Economics (2019)(with Eileen Tipoe). Available at: [http:// https://www.core-econ.org/doing-economics/](http://https://www.core-econ.org/doing-economics/). [Accessed on 17 Oct 2019]

*Eileen Tipoe has been the lead author of this resource. I contributed and coordinated the R programming versions.*

#### **Edited Books**

1. *Advances in Economics and Econometrics: Theory and Applications*, eds. Becker R. and Hurn S., 2004, Edward Elgar

#### **Editor of Special Issue**

1. Special issue on Flipping and Alternative Use of Classroom Time, in *International Review of Economic Education*, aim to publish in 2018 (co-edited with Alvin Birdi)

#### **Academic Journal Articles**

1. Flipping the Classroom: Old Ideas, New Technologies Article reference (2018) (with Alvin Birdi), *International Review of Economics Education*, doi: [https://10.1016/j.iree.2018.06.001](https://doi.org/10.1016/j.iree.2018.06.001)
2. A Multivariate Kernel Approach to Forecasting the Variance Covariance of Stock Market Returns. (2018) (with A. Clements and R. O'Neill), *Econometrics*, 6,7. DOI: doi:10.3390/econometrics6010007.
3. Flipping Quantitative Tutorials. (2018) (with Steven Proud), *International Review of Economics*, <https://doi.org/10.1016/j.iree.2018.01.004>
4. What is the Globalisation of Inflation? (2017) (with G. Altansukh, G. Bratsiotis and D.R. Osborn), *Journal of Economic Dynamics and Control*, 74, 1-27.
5. Selecting volatility forecasting models for portfolio allocation purposes (2015) (with A.E. Clements, M.B. Doolan, A.S. Hurn) *International Journal of Forecasting*, 31, 849-861. DOI: <http://dx.doi.org/10.1016/j.ijforecast.2013.11.007>.
6. Measuring the Chinese business cycle (2012) (with Y. Wang) *Applied Economics*, 45, 3988-4003.
7. Modeling Electricity Prices in Point Process (2013) (with A.E. Clements and W. Zainudin) *Journal of Energy Markets*, Volume 6, Number 3 (June 2013)
8. A threshold cointegration analysis of interest rate pass-through to UK mortgage rates (2012) (with Denise R Osborn and Dilem Yildirim) *Economic Modelling* 29, 2504-2513 DOI information: 10.1016/j.econmod.2012.08.004.
9. *Semi-Parametric Forecasting of Realized Volatility* (2011) (with A.E. Clements and S. Hurn), *Studies of Nonlinear Dynamics and Econometrics*, Vol 15 (3), Article 1.
10. *Weighted smooth transition regressions* (2010) (with D. Osborn), to appear in: *Journal of Applied Econometrics*, DOI: 10.1002/jae.1222.

11. *An empirical analysis of mean reversion of the S&P 500's P/E ratios (2010)* (with J. Lee and B. Gup), Journal of Economics and Finance, 2010, DOI: 10.1007/s12197-010-9145-8.
12. *Testing for Nonlinearity in Mean in the Presence of Heteroskedasticity* (with A.S. Hurn), Economic Analysis & Policy, Volume 39, No 2, September 2009, 311-326.
13. *The Jump component of S&P 500 volatility and the VIX index* (with A.E. Clements and A. McClelland), Journal of Banking and Finance, Volume 33, Issue 6, June 2009, 1033-1038
14. *Are combination forecasts of S&P 500 volatility statistically superior?* (with A.E. Clements), International Journal of Forecasting, 2008, 24, 122-133.
15. *Modelling spikes in electricity prices* (with V. Pavlov and A.S. Hurn), Economic Record, 2007, 83, 371-382.
16. *Does implied volatility provide any information beyond that captured in model-based volatility forecasts?* (with Adam Clements and Scott White) Journal of Banking and Finance, 2007, 31, 2535-2549.
17. *A Stationarity Test in the Presence of an Unknown Number of Smooth Breaks* (with W. Enders and J. Lee), Journal of Time-Series Analysis, 2006, 27, 381-409.
18. *On the informational efficiency of S&P500 implied volatilities* (2006), The North American Journal of Economics and Finance, 2006, 17, 139-153. (Google Scholar Citation: 5)
19. *Using discrete-time techniques to test continuous time models for nonlinearity in drift* (2003) (with A.S. Hurn), Mathematics and Computers in Simulation, 2003, 64, 1, 121-131.
20. *A General Test for Time Dependence in Parameters* (with W. Enders and A.S. Hurn), Journal of Applied Econometrics, 2004, **19**, 899-907.

### **Book Chapters**

21. *Modeling inflation and money demand using a fourier-series approximation* (with W. Enders, S. Hurn), 2006, in: Nonlinear Time Series Analysis of Business Cycles, eds. Milas, C., P. Rothman and D. van Dijk, Elsevier.
22. *The impact of monetary policy in the UK on the relationship between the term structure of interest rates and future inflation* (with G. Bårdsen and A.S. Hurn), 2004, in: Advances in Economics and Econometrics: Theory and Applications, eds. Becker R. and Hurn S., Edward Elgar.

### **Working Papers**

1. Evaluating non-compulsory educational interventions – the case of peer assisted study groups, (with Maggy Fostier), University of Manchester Discussion Paper Series, EDP-1509.
2. A Kernel Technique for Forecasting the Variance-Covariance Matrix (2010) (with Clements A.E. O'Neill R.) National Centre for Econometric Research, Working Paper No. 64 and Centre for Growth and Business Cycle Research Discussion Paper Series, University of Manchester, No. 151.
3. Volatility and the Role of Order Book Structure (2010) (with A.E. Clements) National Centre for Econometric Research, Working Paper No. 64

4. A Cholesky-MIDAS model for predicting stock portfolio volatility (2010) (with Clements A.E. O'Neill R.) National Centre for Econometric Research, Working Paper No. 60 Centre for Growth and Business Cycle Research Discussion Paper Series, University of Manchester, No. 149
5. Forecast performance of implied volatility and the impact of the volatility risk premium (2010) (with A.E. Clements and C.A. Coleman-Fenn) National Centre for Econometric Research, Working Paper No. 45
6. A nonparametric approach to forecasting realized volatility (2010) (with A.E. Clements) National Centre for Econometric Research, Working Paper No. 43, a different version of this paper has been published in Studies of Nonlinear Dynamics and Econometrics.
7. Evaluating multivariate volatility forecasts (2009) (with A.E. Clements, M. Doolan, S. Hurn) National Centre for Econometric Research, Working Paper No. 41. (currently revised for new submission)
8. The Jump component of S&P 500 volatility and the VIX index (2008) (with A.E. Clements and A. McClelland, National Centre for Econometric Research, Working Paper No. 24. (now published in the Journal of Banking and Finance)
9. *Forecasting stock market volatility conditional on macroeconomic conditions* (2007) (with A.E. Clements), National Centre for Econometric Research, Working Paper No. 18
10. *Are combination forecasts of S&P 500 volatility statistically superior?* (2007) (with A.E. Clements), National Centre for Econometric Research, Working Paper No. 17 (now published in the International Journal of Forecasting)
11. *Does implied volatility reflect a wider information set than econometric forecasts?* (2007) (with A.E. Clements and J. Curchin), National Centre for Econometric Research, Working Paper No. 15
12. *Modelling Spikes in Electricity Prices* (2007) (with A.S. Hurn and V. Pavlov), National Centre for Econometric Research, Working Paper No. 10 (now published in the Economic Record)
13. *Testing for nonlinearity in mean in the presence of heteroskedasticity. Working paper* (2006) (with A.S. Hurn), National Centre for Econometric Research, Working Paper No. 8 (a shortened version is now published in Economic Analysis & Policy)

#### Papers being written or revised

1. Evaluating non-compulsory educational interventions – the case of peer assisted study groups, (with Maggy Fostier), University of Manchester Discussion Paper Series, EDP-1509. likely to be submitted to Journal of Economic Education.

## 2. RESEARCH GRANTS

Dates	Role	Project Title	Funder	Amount
2008-2010	Co-Investigator	<i>Novel econometric techniques for modelling and forecasting electricity prices and price volatility in Australia</i>	Australian Research Council – International Linkage Grant	A\$ 32,700
2003-2004	Co-Investigator	<i>Modelling Risk in the Electricity Market</i>	Ergon Energy	A\$ 8,000

### 3. SUPERVISION

Dates	Lead- or Co-Supervisor	Type	Name	Project Title	Submission/ Completion
2015-2019	Co	PhD	Alexander Squires	Donations to charities and local inequality	2020
2012-2016	Lead	PhD	Lars Knuth	DCC models with time-varying long-run correlation matrix	2016
2009-2013	Co	PhD	Gantungalag Altansukh	Forecasting under structural breaks	2013
2012-2013	Lead	MPhil	Hormoz Ramian	Estimating large variance covariance matrices	2013
2009-2013	Lead	PhD	Wannur Zainudin	Modelling Electricity Price Spikes using Hawkes Processes	2013
2008-2011	Lead	PhD	Robert O'Neill	Mutivariate Volatility Forecasting	2011
2007-2010	Co	PhD	Yuanyuan Wang	Chinese Business Cycle Modelling	2010
2007-2010	Co	PhD	Robert Anderson	Modelling of Inflation Expectations	2010
2006-2009	Co	PhD	Dilem Yildirim	Nonlinear Modelling	2009
2002-2005	QUT – Co	PhD	Scott White	<i>Estimating Parameters in Stochastic Differential Equations</i>	2005
2001-2004	QUT - Co	PhD	William Wild	<i>The Economics of Syndicated Loans</i>	2004

### 4. LECTUERS AND CONFERENCE ACTIVITY (\* = expenses paid)

Not comprehensively recorded

2019: Symposium of the Spanish Economics Association (\*), Invited Session on Economic Education; European Economics Association Conference (\*), Teaching Workshop; Developments in Economic Education Conference; Aston University

2018: CORE Workshop, R User Conference

2017: European Economics Association Conference (\*); Developments in Economic Education Conference;

2016: Huddersfield University(\*), Scottish Economics Conference (\*)

### 5. SUBSTANTIAL VISITS TO UNIVERSITIES

- 2003 (Aug) **Bank of Norway**, Visiting Scholar
- 2004 (Jan-Feb) **University of Alabama**, Visiting Scholar
- 2006 (July-Aug) **Queensland University of Technology**, Visiting Scholar

- 2008 (July-Aug) **Queensland University of Technology**, Visiting Scholar
- 2009 (Oct-Nov) **Queensland University of Technology**, Visiting Scholar

## 6. OTHER ESTEEM INDICATORS

### EDITORIAL WORK

- Co-editor (with Alvin Birdi) for Special Issue on “Flipped Classrooms and Alternative Uses of Lecture Time” for the International review of Economics Education

### CONFERENCE ORGANISATION

Over the last 6 years I was instrumental to the organisation of three major conferences at The University of Manchester, bringing more than 2,500 economists (from across the globe) to the University of Manchester. These conferences are significant showpiece events. Each of these conferences has been praised for its excellent organisation and will have contributed significantly to raise the profile of The University of Manchester in general but the Economics Department in particular.

- 2019 , **EEA-ESEM, 34<sup>th</sup> Annual Congress of the European Economic Association, 72nd European Meeting of the Econometric Society**, The University of Manchester, Head of local organising committee

I was the Lead of the Local organising committee. This involved the coordination of the successful bidding process (liaising with the University's Conference and Finance offices, Visit Manchester as well as the European Economic Association and the Econometric Society) and the subsequent lead of the local organisation process. This was only the third time (after 1991 Cambridge and 2010 Glasgow) that this conference was hosted in the United Kingdom).

This is the largest annual meeting of professional and academic economist in Europe and spans five days. Around 1,400 delegates came to Manchester in August 2019. The conference was very successful and contributed successfully to the outward presentation of the University of Manchester in general and the Economics Department in particular.

- 2015 **Royal Economic Society Conferences**, The University of Manchester, Head of local organising committee

For 2015 I was the head of Local organising committee. It was my role to oversee all local arrangements and liaise with the programme committee to ensure a smooth conference experience for delegates. This conference had specific importance to the Royal Economic Society as it celebrated its 125<sup>th</sup> birthday during this conference. This meant that a particularly prominent collection of scholars participated at his conference. Delegates commented on the faultless organisation.

- 2014 **Royal Economic Society Conferences**, The University of Manchester, Deputy Head of local organising committee

After the conference had been awarded to The University of Manchester I joined the local organising committee as Deputy. I was responsible for the local arrangements for venues and volunteers. This conference is the largest annual gathering of academic economists in the United Kingdom. Around 600 delegates (Delegates were mainly from the UK and Europe, but significant numbers also came from the US, Asia and Australasia) attended this three day conference. It was praised for its excellent local arrangements and friendly atmosphere.

## **B. TEACHING AND LEARNING**

### **1. CURRENT AND PAST TEACHING DUTIES**

Below is a listing of my current teaching commitments. Student Survey statistics relate to Question 4 (Ralf Becker's Teaching is excellent).

#### ECON10011 Studying Economics

A first year study skills course unit for a group of 150 1<sup>st</sup> year BSc Economics students. The main aim of this course unit is to help students develop essential study skills (planning, researching, writing, presenting) and help students understand the contributions and challenges of Economics as a broader discipline.

Taught for the first time in 2019/20

#### ECON10071/ECON20071 Advanced Mathematics, ECON20281 Further Mathematics

A first or second year mathematics unit which helps students develop the essential mathematical skills required for their further studies of economics. This unit is taken by close to 800 students which makes this a challenging unit to deliver not least because of the quite varied mathematical backgrounds by students with different educational histories.

My major contribution to this unit has been to ensure that the lectures contain significant active learning elements for students. This has been achieved by delivering some of the content through [online clips linked through BB](#) and has allowed me to deliver lectures at a more relaxed pace and indeed set apart time for students to practice on small problems during the lecture time. The second innovation for the mathematics unit has been the use of the Piazza discussion board platform. This has enabled me to deliver a very lively discussion board which has proven to be a very valuable learning and feedback resource for students.

Course	Level	Compulsory	Credits	Avg enrol.	2016/17 Score	2017/18 Score	2018/19 Score	2016/17 Resp.	2017/18 Resp.	2018/19 Resp.
Advanced Mathematics	1/2	Compulsory	10	691			4.52			31%
Further Mathematics	2	Compulsory	10	113		4.66			34%	

#### **Selected student comments:**

*"He usually explains those unclear questions we posted on discussion board in details, sometimes even makes a video to explain a particular concept, which are really helpful when I feel confused during practices or revisions."*

*"Dr. Ralf Becker was extremely committed to the subject and helping students, he was really passionate and was always posting useful introductory videos that were quite helpful. Dr. Becker's style of teaching couldn't be any better, I particularly found the analogy's he used, as well as the visual demonstrations as being quite useful."*

*"The organization and clarity of the structure of this course was really helpful. Also, there were lots of ways to get feedback as well as many ways to practice through online quizzes, exercise classes and extra exercises."*

*"Feedback provision was excellent and especially through 'Piazza'."*

### ECON20110 Econometrics

This is the workhorse econometrics unit for 2<sup>nd</sup> year economics students (with between 250 and 300 students). While the lectures in this unit are currently taught by other staff members, I taught half of this unit (2<sup>nd</sup> semester) for many years. In a caretaker role, I am currently acting as course convenor.

My major contribution to this unit is to design a blackboard page which clearly guides students through their learning process and is not only a repository of lecture slides. An important element in this is that I decided to make it obvious to students that the material covered in lectures is not the definition of the unit. This allowed me to use the lecture time in a way which adds more to student learning than merely being a content delivery tool. Additional material is provided often through [online clips](#) produced by myself. I also started to introduce R as the statistical software package taught in that unit.

Many if not all of the innovations I introduced to this unit are still in operation and contributing to the continued success of this unit.

Course	Level	Compulsory	Credits	Avg enrol.	2013/14 Score	2014/15 Score	2015/16 Score	2013/14 Resp.	2014/15 Resp.	2015/16 Resp.
ECON20110/ECON30370 Econometrics	1/2	Compulsory	20	290	4.67 (sd 0.71)	4.69 (sd 0.67)	4.72 (sd 0.64)	26%	27%	37%

#### **Selected student comments:**

*"the online element to your teaching style regarding tutorials and in general was a masterstroke."*

*"Just wanted to drop you a note to thank you for being such an amazing teacher/lecturer throughout the second semester for the Econ 20110 module. I've very much appreciated the additional videos and recordings that you've constantly uploaded for us to study and prepare over the entire semester; I understood Econometrics a whole lot better during my second semester although I was lost during the first."*

*"If you could vote, I would vote Mr. Becker as the best lecturer at the University of Manchester. He has completely changed his course to adapt for today's learning styles. I liked his teaching videos, the fact that in workshops you would receive a whole new set of problems to workout there and then."*

*"You taught me Econometrics this year. I have never met someone like you who put so much passion into teaching a subject. You cleared so much of my doubt I have in the subject and made me really interested to know more about how Econometrics works."*

*"The purpose of this email is to let you know that I really appreciate what I've learnt from econometrics throughout the year from both of your teaching. Even now at LSE, half of the modules that I'm taking now requires econometrics and that being said, the knowledge of econometrics is setting me apart from the rest of the students."*



### ECON20222 Quantitative Methods (joint with Martyn Andrews)

A second year econometrics units (with about 50 students) which allows students to learn about the essential empirical techniques required for economists. The empirical focus of this unit allows students without particularly strong mathematical background to learn about the exciting work done by empirical economists. A good working knowledge of statistical programming is an essential learning outcome of this unit.

This unit has a radical empirical approach to learning econometrics. As such the intensity of the statistical programming support is significantly higher than in other econometrics units. While this is a challenging aspect for most students, it has also proven to be a very rewarding learning experience for a number of students who will have to use their acquired programming skills for a substantial piece of empirical research. In order to facilitate the learning of the R programming language, I have created the [Econometric Computing Learning Resource](#) (ECLR).

Course	Level	Compulsory	Credits	Avg enrol	2016/17 Score	2017/18 Score	2018/19 Score	2016/17 Resp.	2017/18 Resp.	2018/19 Resp.
ECON20222 Quantitative Methods	2	Compulsory/ optional	20	42			4.73 (sd 0.65)			25%
<b>Selected student comments:</b> <i>"Ralf made a perfect connection between the microeconomic and practical R work and helps me to know how I could use microeconomic and R to solve real time problem. The project work is a very useful tool for me to practice what I learnt during the course. During this course, I not only learn the R and econometric theories, but also learn the ability to get to the crux of problem and try to solve it step by step. This could be the best course this semester for me!"</i> <i>"Ralf was perhaps the best lecturer I have ever had at Manchester in terms of student engagement, motivation to teach and personal commitment."</i> <i>"The course was terrifying at the beginning, with so much new concepts to take on, but as it goes I started to realize you and Martin never meant anything extremely hard to scares people off. The effort and care you spent in design the course became apparent as it goes. The concepts were set at introductory level and the coding part is fun and challenging."</i> <i>"I rate this course very high and gave lots of feedback when I did the course survey. I still remember the time that me and my friends read through all the research papers and got all the questions from demo classes done. It is like a fantastic learning journey for me to do programming, online test and research projects."</i>										

### ECON80021 Applied Econometrics (joint with Martyn Andrews)

This is a PhD level unit which focusses on developing a deep understanding of econometric computing for PhD students. Students learn how to use Matlab and Stata in order to undertake serious empirical work as required for PhD level work. In order to facilitate the learning of the Matlab programming language, I have created the [Econometric Computing Learning Resource](#) (ECLR).

Course	Level	Compulsory	Credits	Avg enrol.	2016/17 Score	2017/18 Score	2018/19 Score	2016/17 Resp.	2017/18 Resp.	2018/19 Resp.
ECON80021 Applied Econometrics	PG (PhD)	Compulsory	15	8	4.0 (sd 0.71)	4.67 (sd 0.58)	4.5 (sd 0.71)	71%	38%	50%
<b>Selected student comments:</b> <i>"You got a passion for teaching you mentioned that, and I can tell, but hey you got the talent too, it was quite nice to sit in time series with you even without ever having taken a time series course by itself or a Matlab one."</i> <i>"I think Dr. Ralf makes the information for this course attractive with all the video as and wiki pages that he creates. I find him really a passionate teacher. He motivates you in learning his material."</i> <i>"His knowledge of econometrics and willingness to have one on one sessions to better explain concepts and listen to concerns."</i>										

Previously I also taught on a range of other units:

- ECON10062 Introductory Statistics, ECON61001 Econometric Methods, ECON60901 Introductory Quantitative Methods.

## 2. PROGRAMMES TAUGHT ON AND RESPONSIBLE FOR

The bulk of the students taught on units in economics are from the following programmes:

BA (Econ) Economics and Social Studies, BSc Economics, Politics Philosophy and Economics, International Business, Finance and Economics, Modern History with Economics, Modern Language with Business Administration

### Programme Director

- MSc Economics, 2012-2013, BEconSc (now BSc Economics), Sept 2013- August 2016

## 3. OTHER TEACHING (internal and external to University of Manchester)

- PGCert HE - EDUC66091 Teaching and learning with technology, Faculty of Life Sciences Teaching and Learning Seminar Series (2018, 2019)

## 4. SCHOLARSHIP IN TEACHING AND LEARNING

### Editor of Special Issue

Issue on Flipping and Alternative Use of Classroom Time, in International Review of Economic Education, aim to publish in 2018 (co-edited with Alvin Birdi)

### Academic Journal Articles

Flipping the Classroom: Old Ideas, New Technologies Article reference (2018) (with Alvin Birdi), International Review of Economics Education, doi: <https://10.1016/j.iree.2018.06.001>

Flipping Quantitative Tutorials. (2018) (with Steven Proud), International Review of Economics, <https://doi.org/10.1016/j.iree.2018.01.004>  
Working Paper

Evaluating non-compulsory educational interventions – the case of peer assisted study groups, (with Maggy Fostier), University of Manchester Discussion Paper Series, EDP-1509.

This is currently being updated and prepared for journal submission.

## 5. NON-PUBLICATION SCHOLARSHIP IN TEACHING AND LEARNING

- I contribute regularly to the GTA and New Lecturers **Workshops run by the Economics Network**, 2013 to date. As a Senior Associate to the Economics Network I regularly contribute to workshops.

### Early Careers Workshops

2019 (hosted at The University of Newcastle) 2018 (University of Oxford), 2016 (Westminster University)

This two-day workshop is endorsed by both the Royal Economic Society and Scottish Economic Society and sessions are mapped against the UK Professional Standards Framework. They are typically attended by up to 40 early career academics from UK Universities (recently also Dutch Universities).

Themes at the workshop are: Making large group teaching, Using games and the media in teaching, Voice and presence in the classroom, Teaching interpretative sessions, Teaching analytical sessions.

My particular contributions at these workshops are to run the session on large group teaching and also have a hands-on session on creating video material for teaching.

### Graduate Teaching Assistant Workshop

2016 (Oxford, York), 2017 (Oxford, Warwick, Manchester), 2018 (Manchester, Bristol), 2019 (Manchester)

The workshops complement any generic-based institutional training graduate teaching assistants might receive and are facilitated by experienced economics lecturers. They are designed to give very economics specific advice to new teaching assistants around the themes of effective teaching of economics in small-group classes, tutorials, seminars and workshops, including: managing student expectations, students learning styles, different seminar types, dealing with diversity, marking and feedback.

These workshops typically have between 20 and 30 participants from the host University and regionally close other Universities. These workshops are always run by two Associates of the Economics Network.

#### Half Day workshop, The University of Hull (2019)

Together with another Senior Associate of the Economics Network we ran a half-day workshop to help departmental staff to embrace the teaching challenges faced by the economics department.

#### Revisiting the state of economics education (2015)

A one day event designed to explore reforms in economics education, which took place at the Bank of England on 17th March 2015.

- Organisation and contribution to **teaching specific workshops at Research conferences.**

#### Spanish Economics Conference, Alicante (2019)

I have been invited to present in a special session on teaching at this research conference by the Spanish Economic Association. This will be a two hour session and I will be talking on how to incorporate active teaching elements in large lectures, without the need for large redesigns.

#### EEA-ESEM, Lisbon (2017); Manchester (2019)

A session on teaching issues was organised for the 2017 and 2019 EEA-ESEM conferences and I spoke in these sessions on the particular of issue of using large lectures in a way which allows the incorporation of elements of active learning. These sessions have been attended by between 40 and 50 colleagues.

#### Royal Economic Society Conference, Manchester (2014)

I applied to the Programme Committee to run a teaching specific session at this research conference. This was done to bring the debate about curriculum reform to delegates at this conference. This was important as this debate was very mainly discussed in circles of colleagues very engaged in teaching issues. I felt it was important to expose a wider group of academics to this debate. It turned out to be a hugely popular session with about 100 delegates attending.

- **Fellow of the Institute of Teaching and Learning, The University of Manchester**  
This is a project specific, temporary fellowship (March to September 2020). I applied for a project with the aim to produce resources which will support colleagues and students in their adoption and use of online discussion boards. I have gained significant experience with their use and aim to pass on good practice around University and through Economics Network workshops.

### **Teaching Grants**

- University of Manchester, Investing in Success, 2012  
This grant was used as seed funding to create the [Econometric Computing Learning Resource](#) (ECLR).
- University of Manchester, CHERIL Grant, 2015  
This grant was used to start a total redesign process of our large 2<sup>nd</sup> year Econometrics unit. One outcome of this grant was the investment into a mobile online clip recording unit which is still used by colleagues in the department.

- Discover Economics, 2018/19 and 2019/20, RES Grant  
This is a grant from the Royal Economic Society to support the running of workshops to encourage students from a widening participation background and/or female students to discover the exciting possibilities an economics degree can open up.

## 6. CONTINUING EDUCATION OR EXTRA MURAL TEACHING - NA

## 7. INNOVATIVE WORK AND CONTRIBUTIONS TO CURRICULUM REFORM AND DEVELOPMENT

### OPEN ACCESS TEACHING RESOURCES

- Contribute **R-versions to the CORE Doing Economics** online resource, 2018 to date  
The CORE project is a collaborative initiative with the aim to deliver open-access resources for economics educators and students. It's problem-oriented approach allowing for quick incorporation of recent developments has been adopted for first year economics classes by a significant number of economics departments. My main contribution in this project has been to write R versions of the Doing Economics project. This supports the data-driven approach to teaching economics by allowing students to perform exploratory data analysis on a number of interesting data-sets which link closely to the chapters in the main teaching resources. This clearly links to my efforts to allow students to develop significant data skills.
- I have a YouTube Channel (<http://www.youtube.com/c/RalfBecker>) on which I publish many **online clips** I produce to support my student's learning. I have more than 5,000 followers and my clips have been viewed more than 1.3 million times.
- I have been instrumental in the creation and writing of the [Econometric Computing Learning Resource](#) (ECLR). This has been written to support our students' learning of statistical software (in particular R and MATLAB). It is heavily used by our own students but is also openly accessible.
- I have written a new website, which collates study advice for University of Manchester economics students (<https://manuniecon.github.io/EconSkills/>). It mainly collates existing support material from a range of resources (like the University Library or the Economics Network) and aims to make it easier for colleagues at the Department to provide consistent generic skills (researching, writing, presenting, data skills etc) advice to students without having to replicate advice resources.

### CURRICULUM REFORM AND TEACHING DEVELOPMENT

- Introduction of **Peer Assisted Study Scheme** for Econometrics

I believe I was the first lecturer in The University of Manchester who introduced a peer-assisted study scheme (PASS) scheme to a

second year course units. PASS schemes have traditionally been introduced to first year units to help students find their feet at university while, at the same time, helping them to better learn difficult material. An empirical investigation of the effectiveness (Evaluating non-compulsory educational interventions) established that this voluntary offer is used more by better students, but that, even allowing for this self-selection effect, an average effect of half a grade class (5 points) remains.

- Introduction of partially flipped tutorials and **active student engagement** in all my course units.  
Quantitative teaching in economics has long been characterised by monotonous frontal classroom teaching of heavy formal material. I have thoroughly reviewed my teaching and managed to ensure that all elements of my teaching now contain elements which actively engage students in their learning.  
Through my training activities for TAs but also through numerous conversations with colleagues (inside and outside The University of Manchester) I have helped tutorials in units not taught by myself to also re-evaluate the contributions contact time can have.
- Use of **online clips** to support teaching and student learning.  
In order to allow class time for active learning elements it was important to ensure that lecture times were not seen as the only content delivery vehicle available. I often deliver some of the content through specially produced online clips which are tied into the course unit by well-structured Blackboard pages (I receive regular praise by students and teaching prize nominations and the BB site is often mentioned by students in this context). These clips are appreciated by students and increasingly colleagues in my department are also using such clips (see (<http://www.youtube.com/c/RalfBecker>)). By delivering some content outside the lecture I am able to conduct lectures in a way which focus on engaging students by talking through extended examples, having students do little pieces of work in class and discuss with classmates or by being able to spend more time on crucial conceptual issues.
- Leadership of **Economics UG Review** Team.  
The Economics department initiated a substantial UG Curriculum review. This re-design process, which started in 2014 has, this year (the academic year 2019/20), come to its final implementation.  
In 2015 I was tasked to guide the department through the decision making process as well as the implementation period. I coordinated the consultation process (employers, students and staff) and departmental decision-taking process. I further guided the process through the School and Faculty approval procedures. While not all aspects of the implementation have worked out perfectly yet, we were able to design a programme which we feel is better able to allow students to tailor their degree according to their pre-requisite knowledge and aspirations.  
This process coincided with a period in which the Department was under significant pressure from external forces (perhaps most significantly the Post-Crash Economics Society (PCES), founded in 2012, and subsequent media reports) for teaching a narrow curriculum. Through engagement with students in general but also the PCES we eventually managed to create an atmosphere of constructive dialogue which resulted in a number of design decisions which would address aspects of the criticism to which the department was exposed. By maintaining open lines of communication and regular meetings with PCES I contributed to a thawing of what initially were quite frosty relations.

## **8. EXAMINATION RESPONSIBILITIES**

NA outside the University of Manchester

## **9. APPOINTMENTS HELD RELATED TO TEACHING AND LEARNING**

- Deputy Head of Discipline Area (from Jan 2016)
- Programme Director, BEconSc (now BSc Economics), (Sept 2013- August 2016)
- Coordinator of the Economic UG Review process (since Sept 2014)
- University Peer Support Strategy Board (2013-2016)
- University Learning through Research Board (2014-2015)
- Programme Director, MSc Economics, (2012-2013)
- Editor Economics Newsletter (2009 to 2012)
- Undergraduate Director, Economics, School of Social Sciences (2007-2009)
- BEconSc, Admissions Officer (2006)
- Special Circumstances Committee (SCC), Member (2006, 2015 to date), Convenor (2007 to 2014)

## **10. VOLUNTARY ACTIVITIES WITH STUDENTS**

- Since 2015 I have been a member of the BP Campus relations group which coordinates internship and post-degree employment opportunities. As part of this role I have been reviewing submissions to the Essay competitions.
- From 2013 to 2015 I ran a voluntary statistical programming group with a small group of students who wanted to develop their statistical skills. At least one student's future career path was significantly altered by this as we looked at an empirical electricity market dataset. This eventually gave the student the skills required to start an inter-disciplinary PhD with School of Electrical Engineering.

## **11. TEACHING AWARDS**

- University of Manchester Teaching Excellence Award 2011  
This was my first significant teaching award at The University of Manchester. It was in recognition of all around commitment to and excellence of teaching. This award gave me the confidence to look at my teaching and student support as my primary asset.
- Faculty of Humanities – Best in Blackboard Award 2011 – shortlisted
- Faculty of Humanities – Best in Blackboard Award 2012 – Highly commended
- Faculty of Humanities – Best in Blackboard Award 2013 – Highly commended  
This succession of Blackboard Awards was in recognition of my efforts to utilise the VLE as more than merely a delivery tool for

lecture slides. I was certainly at the forefront of this development in Economics and in the School. These awards, which are based on student nominations are an important recognition by my students that the efforts I have invested in using the VLE effectively are helping my students to learn.

- Economic Network – Best Economics Lecturer 2013, Runner-up  
This is an important national award (given every two years). It was based on the nomination from the School but also recognised that the innovations implemented in my teaching had the potential to have a wider impact. This award was the catalyst for my work with the Economics Network which has been very fruitful until today.
- The University of Manchester Student Union 2014 - Most Innovative Lecturer – Shortlisted  
This award came on the back of me producing a whole range of YouTube videos to support my students' learning. While student feedback in unit surveys had indicated that they thought this extra provision of learning resources was useful, being nominated for this award was a great indication of students and the Student Union recognising that this type resource can play an important role in our provision.
- Faculty of Humanities – Best in Blackboard Award 2014 – Special Award for continued excellence
- Faculty of Humanities – Best in Blackboard Award 2015 – Special Award for continued excellence  
Students continue to recognise that the VLE sites I provide contribute significantly to their learning.
- School of Social Sciences – Academic Advisor Prize 2019 – nominated by students
- Faculty of Humanities - Faculty Students' Outstanding Technology Enhanced Learning (TEL) Award, 2018/19  
As I have been moving into teaching the largest of classes (up to 800 students) it is excellent to be recognised by students to still be producing outstanding support for their learning. I am combining elements of teaching technology (Online discussion boards, great VLE sites, assistive YouTube clips) I have been adopting throughout my career to make learning in very large groups effective and enjoyable.

The continuing flow of teaching awards for different elements of my support for my student's learning is indication for my sustained contribution to students of The University of Manchester. Perhaps most importantly, I have worked to support colleagues in adopting these teaching innovations. Many economics course units have now well-structured extensive VLE sites, are using online video clips to support their delivery of course content and use online discussion boards effectively.

## **12. ACADEMIC ADVISING ACTIVITIES**

I have been an academic advisor to a group of 10-20 students every academic year since my employment with the University of Manchester started.

I have been member of a School of Social Sciences Working Group on Academic Advising.

In the last years I have been working with the School of Social Science Information Officer to improve the information to academic advisors. We created an advisor specific datasheet which summarised grades and attendance information for their group of advisees. I also wrote a small piece of software which makes the reference writing process less burdensome for advisors. This software provides



automatic draft references, with degree information, study years, grades and rank in cohort. This significantly reduces the amount of research required by advisors.

### **13. TEACHING ASSESSMENT SCORES**

Scores for most important units were reported in B.1.

### **14. ENGAGEMENT WITH PERSONAL AND PROFESSIONAL DEVELOPMENT IN RELATION TO TEACHING AND STUDENT SUPPORT**

I have been actively contributing, but also participating in Economic Network workshops. The Economics Network is a support network for teachers of economics at Higher Education institutions and arose from the old HEA subject centres. Sessions I have attended during these workshops as participant are

- Using games and the media in teaching
- Voice and presence in the classroom
- Teaching interpretative sessions

I have also attended workshops as part of the Economics Network project on Employability Skills in UK Economics Degrees. These were workshops which contributed to the design of the project but also a workshop which brought together academics, students and employers. I have been regularly contributing to Faculty of Humanities Teaching Showcases. More importantly I have been attending these showcases to learn from my colleagues.

In order to understand the possibilities of online delivery of learning I enrolled into three Massive Open Online Courses (MOOCs). Two of these I completed (Intro to Computer Science, 2014, with Highest Distinction, offered by Udacity; Our Earth: Its Climate, History, and Processes, 2015, with Distinction, offered by Coursera). Completing these units from the student perspective has been instrumental to my understanding of how to deliver course content outside of a classroom as well as the effective use of discussion boards. The lessons I learned from this have informed my work on classroom flipping and student engagement through discussion boards.

TACC500 Using Your Voice Effectively, January 2019. As I am regularly teaching to very large classes I attended this course in order to improve my way to communicate in large group settings.

I am aiming to apply for Senior Fellowship at the HEA in 2020.

### **C. ACADEMIC ENTERPRISE AND KNOWLEDGE TRANSFER**

- 1. PRESENTATIONS TO PROFESSIONAL AUDIENCE - NA**
- 2. EXECUTIVE EDUCATION OR CONTINUING PROFESSIONAL DEVELOPMENT. - NA**
- 3. CONSULTANCY WORK**

- Ergon Energy, Australia (2001-2003). Advice on negotiations with Queensland Treasury about risk-sharing agreement.
- Queensland Treasury (2001). Quantitative analysis to identify Queensland regions with a high incidence of problem gambling.

4. **PUBLIC POLICY SERVICE. - NA**
5. **CREATION OF INTELLECTUAL PROPERTY. - NA**
6. **LEADERSHIP IN ACADEMIC ENTERPRISE. – NA**
7. **RAISING CAPITAL. - NA**
8. **COMMUNITY OR PUBLIC ENGAGEMENT.**

School Governor St Clements Primary School (2013-2016), Openshaw, Greater Manchester (as part of the The University of Manchester School Governor Initiative, UMSGI).

#### **D. ACADEMIC SERVICE**

##### **1. ROLES OF RESPONSIBILITY.**

- **Deputy Head of Discipline Area** (from Jan 2016).

At a time when the Department was still under significant pressure to improve its teaching and learning provision to our students I was asked to become the Departments Deputy Head with responsibility for teaching and learning. In 2019 I confirmed with the Head of Department that I would carry on in this role for another three years.

The challenges in this position have been numerous. None more so than encouraging colleagues to respond to the challenges posed by the low NSS results and the public scrutiny regarding the economics curriculum (in Manchester but also more widely). The changes which needed implementing were numerous. While changes to the actual unit and programme offerings (see next bullet point) were perhaps the most eye-catching ones, in my view the more important changes were the raising of the profile of teaching and learning in the perception and awareness of colleagues in the department.

Together with the department's leadership team we decided to introduce individual teaching meetings (outside the discussions which individuals had as part of their PDRs). These were to be held before the start of teaching to discuss with colleagues the delivery of upcoming UG units. At the core of the meetings are reflective assessments of individual lecturers which are triangulated with the student feedback from SSLC and unit surveys as well as insights from previous year's grade distributions. The spirit of these meetings is wholly supportive (although this was not always perceived in that manner) and they were used to convince colleagues of a series of individual measures which would contribute to tackle the shortcomings in our offerings (too little historical context, too little real-life applications, too mechanical assessments, lack of useful feedback, etc.).

I believe that it is these meetings combined with many other smaller measures in the department which aim to make the teaching more effective and enjoyable, which has raised the importance of teaching in the department and has created an atmosphere in which colleagues care strongly and take pride in their teaching. This has not only been to the advantage of the department but also contributed to the development of the individual colleagues who, via these meetings, all receive detailed individual feedback on

their teaching.

- Coordinator of the **Economic UG Review process** (since Sept 2014).

In 2013/14 a number of events put significant stress on the economics department. In the NSS we landed at the bottom of the table of Russell Group economics departments and the Post-Crash Economics Society (PCES) published its first report on the state of economics education (alongside very wide-spread publicity). Independently, and with somewhat independent aims, a departmental internal process had started to rethink our core economics offerings.

The Head of Department at the time, Paul Madden, asked me to coordinate the review process and ensure that all voices (departmental, students and employers) are heard. As this all happened under the spotlight of considerable external scrutiny (PCES for curriculum, Faculty for NSS results) this turned out to be a challenging process. It is possibly my most important contribution to the department to have guided this process in a manner which led to decisive measures (a total revamp of all 1<sup>st</sup> and 2<sup>nd</sup> year core economics units) which were implemented in the swiftest possible manner (the last new units ran for the first time in 2018/19).

This review contributed significantly to the department's strengthening of its UG offering. Together with a range of other measures this resulted in a significant improvement of the department's NSS position (in the midfield of the Russell Group economics departments, 8/20 in 2018 and 14/21 in 2019).

#### **Other significant, departmental posts:**

- Programme Director, BEconSc (now BSc Economics), Sept 2013- August 2016
- Programme Director, MSc Economics, 2012-2013
- Editor Economics Newsletter (2009 to 2012)
- Undergraduate Director, Economics, School of Social Sciences (2007-2009)
- BEconSc, Admissions Officer (2006)
- Special Circumstances Committee (SCC), Member (2006, 2015 - to date), Convenor (2007 to 2014)

## **2. SERVICE ON COMMITTEES (SCHOOL, FACULTY, UNIVERSITY)**

I have, over the last two years, acted to as an advisor to the Head of School on a number of teaching related issues. In this function I have supported the HoS in making significant personnel decisions but also by talking to the Teaching Leadership of other departments in order to support these.

- Student Experience Programme Working Group (2020); SoSS Working Group on Assessment and Feedback (2019 – to date); SoSS T&L Committee, (2007 – to date); SoSS Special Circumstances Committee (2015 - to date); Periodic Review Board (Philosophy, SoSS, 2018); SoSS Working Group on Academic Advising (2016-2017); University Peer Support Strategy Board (2013-2016); University Learning through Research Board (2014-2015)

### 3. SERVICE ON EXTERNAL BODIES.

- I was a **member of the Advisory Group designing the standards document for the Degree Apprenticeship** for "[Professional Economist](#)". 2017-2018  
On the initiative of the Government Economic Service (GES) a working group was created in order to draft a standard for a Professional Economist Degree Apprenticeship. The group consisted of a range of economists from the Higher Education, The government and the commercial sectors. This group drafted the requirements for applicants as well as degree specific knowledge, skills and behaviours. My recent experience of guiding a curriculum reform process in our department put me in a good place to make contributions in this process. In August 2018 the new standard was approved for delivery and in September 2019 the first group of Professional Economist started their apprenticeships at the GES and the Bank of England.
- **Senior Associate** of the [Economics Network](#). 2016 to date.  
The Economics Network's aim is to enhance the quality of learning and teaching throughout the Higher Education economics community. It was initially a HEA subject centre, but when central funding for these subject centres ceased to exist it continued as an independent network financed by departmental subscriptions.  
A group of senior associates assists the Director (Prof Alvin Birdi, University of Bristol) in the running of the activities (a bi-annual conference, annual new lecturer training, graduate teaching assistant training, online resources, etc.). My main contribution in the Network has been to contribute to the running and design of the training workshops and associated support material. In future I will also contribute increasingly to research projects (e.g. student, public and employer surveys).
- **Representative** of the Economics Network on the **Royal Economic Society's Teaching and Learning Committee**.  
Under recent new leadership, spurred by recent debates about the value of professional economic advice, debates about the teaching of economics and recognition of underrepresentation of various minorities, the RES has widened its focus. It has therefore created this new committee.

### 4. ADMINISTRATIVE WORK UNDERTAKEN FOR THE NHS. - NA

### 5. EXTERNAL EXAMINER OR REFEREE

- Economic Modelling, Communications in Statistics, Journal of Empirical Finance, The Manchester School, Studies in Nonlinear Dynamics and Econometrics, International Journal of Forecasting, Quarterly Review of Economics and Finance, Journal of Banking and Finance, Asia Pacific Journal of Financial Studies, International Review of Economic Education

### 6. OFFICE IN LEARNED SOCIETY. - NA