

# Tom Holden: Curriculum Vitae

**Lecturer in Economics, University of Surrey**      **Born:** 13/04/1983      **Married**  
**DPhil in Economics, University of Oxford, 2013**      **Citizenship:** British      **No children**

**Web:** <http://www.tholden.org/>

**E-mail:** [thomas.holden@gmail.com](mailto:thomas.holden@gmail.com)

**Phone:** (+44) 7815 067 305

**Post:**

School of Economics, FASS  
Ground Floor AD Building  
University of Surrey, Guildford, Surrey  
GU2 7XH, England

**Education:**

DPhil in Economics, University of Oxford, October 2008 – May 2013

*Title: "Three essays in dynamic macroeconomics." Advisor: Professor Simon Wren-Lewis*

MPhil in Economics, University of Oxford, October 2006 – September 2008

BA (Hons) in Mathematics and Philosophy, University of Oxford, October 2001 – September 2005

**Employment:**

September 2011 – Now      Lecturer, University of Surrey, Guildford

Oct. 2010 – July 2011      Stipendiary Lecturer, Trinity College, Oxford

Oct. 2008 – Apr. 2010      Co-founder, Treasurer, Director, Wikimedia UK (registered charity)

August 2005 – June 2006      Programmer, EA Games, Criterion Studios, Guildford

**Academic visits:**

August 2015 – Feb. 2016      University of Washington

**Successful funding bids, consulting, academic awards and other achievements:**

July 2016      Granted EC Horizon 2020 bid (as Principal Investigator). Approximate value to U. of Surrey: £280,000. Details: <http://www.monroeproject.eu/>.

June 2016      Invited to give a course to the Deutsche Bundesbank on occasionally binding constraints and related issues.

April 2016      Invited to consult for the ECB on occasionally binding constraints, nonlinear estimation, and related issues.

December 2015      Invited to give evidence to IMF and CFPB on computational tools for macroeconomics.

October 2014      Invited to EC to give evidence on research and innovation in DSGE models.

February 2014      Thesis runner-up for the Edgeworth Prize.

January 2014      Granted EC FP7 bid (as CI), approximate value to U. of Surrey: £280,000.

January 2013      Granted ESRC bid (as CI), approximate value to U. of Surrey: £600,000.

October 2011      Max Weber Fellowship, European University Institute (declined).

October 2011      Royal Economic Society Junior Fellowship (declined).

October 2010      Stipendiary Lectureship, Trinity College Oxford.

April 2007      2007 International Econometric Games winning team member.

October 2006      ESRC 2+2 award, with additional advanced quantitative training stipend.

October 2005      EPSRC doctoral award for research in Analytic Topology (declined).

### **Working papers currently or previously in submission:**

“Existence and uniqueness of solutions to dynamic models with occasionally binding constraints.”  
*Revise and Resubmit, Journal of Political Economy.*

“Computation of solutions to dynamic models with occasionally binding constraints.”  
*Reject and Resubmit, Quantitative Economics.*

“Reconciling Jaimovich-Rebello Preferences, Habit in Consumption and Labour Supply.”  
(With P. Levine and J. Swarbrick.) *Revise and Resubmit, Economics Letters.*

“A Hawkes model of the transmission of European sovereign default risk.” (With Ana-Maria Dumitru.)  
*In submission, Review of Financial Studies.*

“Credit crunches from occasionally binding bank borrowing constraints.” (With P. Levine and J. Swarbrick.) *In submission, Review of Economic Dynamics.*

“Efficient simulation of DSGE models with occasionally binding constraints.” (With Michael Paetz.)  
*Revise and Resubmit, Journal of Economic Dynamics and Control (Lapsed).*

“Reconciling near trend-stationary growth with medium-frequency cycles.” *Under revision.*

“Data consistent modelling of medium-frequency cycles and their origins.” *Under revision.*

### **Other working papers in circulation or publicly presented, that are being prepared for submission:**

“Tractable estimation and smoothing of highly non-linear dynamic state-space models.”

“Learning from learners.”

“Medium-frequency cycles in a stationary world.”

“Medium frequency cycles, global imbalances, and the puzzles of open economy macroeconomics.”

“Financial crises and long-run growth.”

“Business cycles in space.” (With Jonathan Swarbrick.)

“Locally powerful test combination in finite samples.” (With Ana-Maria Dumitru.)

“Heterogeneous agents, menu costs and endogenous wage inertia.”

(With S. Deák, P. Levine and A. Mele.)

“An Empirical Assessment of a New Keynesian Behavioural Model based on Experimental and Macroeconomic Data.” (With S. Deák, C. Hommes and P. Levine.)

### **Policy papers:**

“Universal Basic Income as a tool for tax and benefit reform.”

*Social Liberal Forum Publication, Number 8, August 2017*

### **Software packages:**

“DynareOBC”: Package for the simulation of models with occasionally binding constraints in Dynare, available from <https://github.com/tholden/dynareOBC>.

“EST-NLSS”: Package for the estimation and smoothing of highly non-linear dynamic state-space models, available from <https://github.com/tholden/EST-NLSS>.

“Custom Dynare”: Version of Dynare supporting other non-linear estimation methods, plus parallelism, available from <https://github.com/tholden/dynare>.

“DynareRemoveLocalVariables”: A pre-preprocessor for Dynare that substitutes out model local variables, available from <https://github.com/tholden/DynareRemoveLocalVariables>.

“DynareTransformationEngine”: Capable of automatically defining shock processes (including spatially correlated ones), transforming variables to more accurate forms and performing stochastic detrending, available from <https://github.com/tholden/DynareTransformationEngine>.

“DoubleDouble”: Package for extended (“double double”) precision computation, available from <https://github.com/tholden/DoubleDouble>.

**Refereeing:** RES Conference 2016-2017, European Economic Review, Journal of Econometrics, Macroeconomic Dynamics, Oxford Economic Papers, Economic Modelling, International Review of Economics & Finance, Oxford Commonwealth Law Journal

**Presentations:**

2017 Durham, Netherlands' PBL, ERMAS, University of Surrey CIMS, ERCIM/CFE

2016 UBC, St. Louis Fed, ECB, Deutsche Bundesbank, T2M Bank of France, Bilkent U., TCD, Lancaster U., MACFINROBODS workshop National Bank of Belgium, SCE CEF, ESEM, WGEM ECB, Bank of Canada, U. of Glasgow, Dynare Conference: Bank of Italy, U. of St. Gallen

2015 U. of Washington, FRB, Dallas Fed, UT Austin, IMF, CFPB, Western Washington U., MACFINROBODS workshop City U., SCE CEF, U. of Surrey

2014 Nuffield NuMERIC conference, ESEM, EC Workshop: Research & Innovation in Applied Models of Growth for Policy-Making, Fall MWM, ERCIM/CFE, CIMS

2013 ESEM, EEA, SCE CEF, RES, City U., Birkbeck College

2012 ERCIM/CFE, Dynare Conference: Zurich, SCE CEF, Hamburg Workshop: Models of Expectation Formation, CIMS

2011 13<sup>th</sup> ZEW Summer Workshop for Young Economists, U. of Oxford, CMAIF, MWM, RES, 6th PhD Presentation Meeting of the RES

2010 XV Vigo Workshop on Dynamic Macroeconomics, U. of Birmingham, U. of Oxford, BMRC-QASS, Strasbourg Doctoral Workshop: Dynamic Macro

**Teaching and supervision:**

September 2017 PhD Student Jonathan Swarbrick placed at the Bank of Canada.

September 2017 Summer course on OBCs in DSGE models at the U. of Surrey.

June 2016 Course on OBCs and related topics at the Deutsche Bundesbank.

Autumn 2014 PhD mathematics lectures.

Summer 2014 and on Course leader for summer course in advanced macroeconomics at the U. of Surrey. Teaching courses on: Advanced MATLAB, Advanced Dynare, Non-linear Estimation.

Spring 2014 and on PhD macroeconomics lectures.

Summer 2012 and on PhD and masters supervision. Currently second supervisor to two PhD students)

Spring 2012, 2013 Intermediate Microeconomics, University of Surrey, Guildford.

Autumn 2011 and on Industrial Organization, University of Surrey, Guildford.

2008-2011 1<sup>st</sup> & 2<sup>nd</sup> year Macroeconomics and Quantitative Economics, Assorted Colleges, Oxford.

**Referees (contact details available on request, or via a search engine):**

Colleagues Professor Paul Levine (U. of Surrey: Research Group Leader)  
Professor João Santos Silva (U. of Surrey: Head of School)

Others Professor Fabio Ghironi (U. of Washington)  
Professor Peter McAdam (ECB)  
Professor Robert Kollmann (ECARES)  
Professor Guido Ascari (Oxford)