

Thomas Monk

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Citizenship: British

Current Positions: PhD Candidate, Economics, London School of Economics & CEP
Teaching Fellow, Department of Economics, LSE
Teaching Fellow, School of Public Policy, LSE

Fields of Concentration: Labour Economics, Economic History

Supervisors:

Professor Alan Manning
Professor John Van Reenen
Professor Guy Michaels

Education:

Ph.D., Economics, London School of Economics, 2026 (expected)
MRes, Economics, London School of Economics, 2021 (*with distinction*)
M.Sc., Economics, University College London, 2017 (*with distinction*)
B.A., Philosophy, Politics and Economics, University of York, 2014 (*first class*)

Fellowships, Grants, and Awards:

Machine Learning in Economics Summer Institute Participant, 2025, The University of Chicago Booth School of Business
Economic History Society Bursary, 2025
LSE Research and Impact Support Fund, AI Call (£5,000, PI), 2024
London School of Economics Departmental Fellowship, 2019-2025
Economic and Social Research Council Doctoral Studentship, 2019-2023
Google Cloud Platform Research Grant (\$1,000, PI), 2023
Yale Doctoral Fellowship, Yale University, 2018
Cowles Foundation & Economic Growth Center Fellowship, 2018

Presentations & Conferences:

“Occupational Reinvention: Evidence from a Century of Task and Technology Data”

Machine Learning in Economics Summer Institute (forthcoming), 2025, The University of Chicago Booth School of Business, USA

Economic History Society, 2025, Glasgow, UK

Teaching Experience:

London School of Economics:

2022-2025, Teaching Fellow to Prof. Guy Michaels, Labour Economics (MSc Economics)

2021-2025, Course Manager & Teaching Fellow to Prof. Dr Jeremiah Dittmar & Prof Mark Schankerman, Quantitative Approaches and Policy Analysis (MPA)

2022-2025, Course Convenor & Lecturer, Introduction to Quantitative Methods for the MPA Programme (MPA)

2023, Course Convenor & Lecturer, Introduction to Data Science for Public Policy (MPA)

2021-2023, Teaching Fellow to Prof. Daniel Sturm, Empirical Methods for Public Policy (MPP)

Summer 2022, Teaching Assistant to Dr Kevin Sheedy, Intermediate Macroeconomics (UG)

Summer 2020-2022, Teaching Assistant to Dr Kevin Sheedy, Introductory Macroeconomics (UG)

2020-2021, Teaching Assistant to Prof Steve Pischke, Prof Taisuke Otsu, Dr Marcia Schafgans & Dr Canh Dang, Introduction to Econometrics (UG)

Teaching Awards:

2025 Class Teacher Award, Department of Economics

2025 Class Teacher Award, School of Public Policy

2024 LSE Excellence in Education Award, School of Public Policy

2024 LSE Class Teacher Award, School of Public Policy (Highly Commended)

2023 LSE Excellence in Education Award, School of Public Policy

2023 LSE Class Teacher Award, School of Public Policy (Highly Commended)

2022 LSE Excellence in Education Award, School of Public Policy

2024 LSE Teaching Bonus Award, Department of Economics

2023 LSE Teaching Bonus Award, Department of Economics

2021 LSE Teaching Bonus Award, Department of Economics

Research and Work Experience:

Research Assistant to Professor Alan Manning, Centre for Economic Performance, London School of Economics, 2020-2022

Research Assistant to Professor Camille Landais & Professor Johannes Spinnewijn, STICERD, London School of Economics, 2017-2018

Work in Progress:

“Occupational Reinvention”

(This project is kindly supported by grants funded by the LSE's Research Impact and Support Fund 2024 and the Economic and Social Research Council.)

This paper looks to understand the long-term dynamics of within-occupation task change in response to technological shocks. We develop a unique longitudinal dataset by harmonizing the full historical corpus of the Dictionary of Occupational Titles (DOT) records with modern O*NET data to construct an eighty-year panel of detailed, long form, task measures. This rich dataset enables us to capture within-occupation task evolution, revealing how jobs reinvent themselves in response to technological shocks that static occupational classifications overlook. We map these detailed occupational task descriptions to technological waves, creating a time-varying index of technology exposure at the task level. We exploit the natural variation in timing of these shocks to causally identify the extent to which a given technology drives changes in occupational task content and further explore how technology changes the wage structure both within- and between-occupations.

“Technological Waves: Evidence from a Century of Patent Data”

This paper examines the long-run evolution of technology by uncovering “technological waves” from a century of patent data. We compile a comprehensive corpus of patent texts—focusing on abstracts and claims from 1930 until the present day to extract rich, domain-specific terminology. Employing unsupervised dynamic topic modeling techniques, we track the rise, peak, and decline of endogenously identified patent clusters, allowing the data to delineate the lifecycle of each technological wave rather than imposing a priori classifications. This approach captures established waves such as ICT, robotics, and artificial intelligence but also offers a framework for detecting nascent trends, such as Artificial Intelligence.

Working Papers:

“Occupational Skill Content and Technological Change”

Technological change events fundamentally change the type of tasks performed by human labour within occupations. We develop a predictive model, utilising machine learning techniques, and find that occupational skill intensity data can predict, to a high degree of accuracy, technological change event exposure, as measured by indices developed by Webb (2020). We link these predictions to skills data from a library of newspaper job vacancy adverts to understand how skill intensities have changed over time, and use this to predict historical occupational technological exposure. Change in occupational technological exposure, as predicted by changing skill intensities, is highly associated with important labour market outcomes.

“Public Opinion and Immigration”

(joint with Alan Manning)

Immigration in many high-income countries is often a fraught political issue. The share of

migrants has been rising yet typically more people want lower than higher immigration, though views on the issue are often very polarised with strongly-held views on both sides. Given this, understanding public opinion on immigration is obviously important and there is a large and growing academic literature on the subject. These studies often investigate how attitudes vary with demographics among people in the same country at the same point in time. But it is also likely that attitudes respond to country-level macro variables like the level and mix of immigration and the general state of the economy. To investigate the influence of macro-level variables requires data on multiple countries and years so that there is enough variation in the variables of interest. This data is relatively rare. To address this, we introduce a novel high-dimensional dataset, harmonising data on the 28 EU countries from Eurobarometer surveys over the period 2002-2019, and investigate the influences of macro-level variables on attitudes towards immigration.

“Uncertain Health and Wealth Inequality”

(Best Dissertation Prize, MSc Economics, University College London, 2017)

Precautionary saving is a key driver of wealth inequality within models of the Bewley-Huggett-Aiyagari canon. However, models with savings rates calibrated solely to idiosyncratic income risk find it difficult to replicate the vast wealth inequality empirically observed in the United States. This paper looks at a potential source of increased precautionary savings - idiosyncratic medical expenses shocks. This paper: i. establishes an identification procedure for medical expenditure shocks across the entire life cycle, ii. finds that idiosyncratic shocks are very highly persistent, iii. establishes the extent to which these shocks contribute to wealth inequality through the effect on savings behaviour.

Public Datasets & Code:

Dictionary of Occupational Titles (DOT) 1939-1991 (in progress): a novel dataset fully digitising all Dictionary of Occupational Titles (DOT) editions published between 1939-1991. This dataset includes titles, descriptions and SOC codes at the occupation level, cross-walking across each edition. This dataset allows for understanding the evolution of occupational skill requirements within-occupation over time.

Harmonised Eurobarometer 2003-2019 (forthcoming): this dataset harmonises responses from the 28 EU countries from Eurobarometer surveys over the period 2002-2019. We use the Standard Eurobarometer survey series, conducted in the Spring and Autumn of each year in a repeated cross-section, with around 1000 respondents from each EU country. The Standard surveys ask a range of repeated trend questions alongside a selection of rotating modules and individual demographic details, which have previously been difficult to understand across time and countries.

multe - multichoice logit estimator: a fast, Python implementation of an MLE estimator of the multichoice logit model, as described in Ophem, H.V., Stam, P. and Praag, B.V., 1999. Multichoice logit: modeling incomplete preference rankings of classical concerts. *Journal of Business & Economic Statistics*, 17(1), pp.117-128.