ALEXANDER COPESTAKE

Department of Economics, University of Oxford (+44) 7874 269605
Manor Road Building, Oxford, OX1 3UQ alexander.copestake@economics.ox.ac.uk

Statement of Interest

I am very interested in the impact of new technologies on growth and labor markets, particularly in developing countries. With coauthors Katherine Stapleton and Ashley Pople, I have access to all vacancies posted on India's largest online jobs site between 2010 and 2019, which we are using to investigate the impact of artificial intelligence on India's services-led growth model. I am therefore extremely keen to attend the workshop to hear more about the research frontier in the Economics of Digitization, so that we can use our data most effectively to contribute to the field.

Education:

BA Philosophy, Politics & Economics, Balliol College, University of Oxford 2015
MSc Economics for Development (with Distinction), University of Oxford 2017

DPhil candidate in Economics, University of Oxford, 2017 to present
Thesis title: "*China, AI and Liberalization: Essays in Applied Microeconomics*"
Fields: International Trade, Development Economics
Expected completion date: July 2021

References:

Professor Chris Woodruff
Queen Elizabeth House, University of Oxford
christopher.woodruff@qeh.ox.ac.uk

Professor Peter Neary
Economics Dept., University of Oxford
peter.neary@economics.ox.ac.uk

Professor Ian Goldin
Oxford Martin School, University of Oxford
ian.goldin@oxfordmartin.ox.ac.uk

Teaching Experience:

2020-21	International Trade – MSc Development Economics for Professor Chris Adam
2019-21	Development Economics – Undergraduate Economics for Dr Sanjay Jain
2019-20	Econometrics – Ph.D. Continuing Education for Professor Jonathan Michie

Research Experience:

3-9/2020	Research Assistant, Professor Ian Goldin, University of Oxford
6-8/2019	Fund Internship Program, International Monetary Fund, Washington D.C.
8-9/2017	Research Assistant, Professor Christopher Woodruff, University of Oxford

Honors, Scholarships, Awards:

2020	CSAE Grant for purchase of data on Indian services firms
2019	CSAE Travel Grant for exploratory fieldwork in India
2019	Geoff Riddell Scholarship, Vincent's Club, Oxford
2017	Kellogg Progress Scholarship, Clarendon Fund, Oxford
2016	Harvard Business School Credential of Readiness
2015	First in year, Development Economics Finals, Oxford
2015	Second in year, Economics of the Environment Finals, Oxford
2015	Westerman Pathfinders Scholarship, Balliol College, Oxford
2014	NT Huxley Exhibition, Balliol College, Oxford

Presentations:

2020	Oxford Trade Economics Workshop, Oxford Blavatnik School of Government, Royal Economics Society Symposium (*postponed due to Covid-19*), University of Warwick
2019	Queen Mary University of London, International Monetary Fund Fiscal Affairs Department

Research Papers in Progress:

"***Artificial intelligence, reshoring and services-led growth: Evidence from Indian job postings***" (with Katherine Stapleton and Ashley Pople)

With manufacturing increasingly dominated by China and industrial robotics, services-led development models have become targets for future employment growth. Increased capabilities in artificial intelligence could undermine this by displacing labour (e.g. chat-bots replacing call centres), or could support employment by increasing worker productivity and creating new tasks or products. Greater AI capabilities in rich countries could drive task reshoring, or create new tasks to offshore (e.g. data tagging). We first use existing AI measures to investigate these forces in administrative data on the Indian services sector, and find evidence consistent with firm-level productivity effects and industry-level displacement effects. Current work in progress uses vacancy postings from India's largest online jobs platform to extend the analysis.

"***Automation and market power: Evidence from Italy***" (with Joel Kariel)

Research Papers:

"***Multi-product firms, networks and quality-upgrading: Evidence from China in India***"

This paper exploits China's accession to the WTO to investigate the propagation of a supply shock across the Indian production network. Consistent with a model of multi-product manufacturers gaining access to higher-quality components, a fall in input tariffs raises revenue, quality and prices whilst lowering quality-adjusted prices and the probability of product exit. Upgrading persists for at least ten years; at the peak in 2010, products with a 10% higher pre-accession input tariff, and hence a larger post-accession fall in tariffs, have 5.3% higher quality. Broader input-output linkages then amplify this effect by up to 75%, with the first two links down the supply chain most significant. In contrast to existing literature focussed on negative demand effects of the 'China shock', these results highlight a potential beneficial impact in developing countries, namely supply-driven quality upgrading.

"***The heterogeneous pass-through of VAT changes***"

(Draft IMF Working Paper, with Matthieu Bellon and Aleksandra Zdzienicka)

We examine the role of market characteristics and timing in explaining observed heterogeneity in VAT pass-through. We first extend existing theory to characterize the roles of imperfect competition and product differentiation, then investigate these relationships empirically using a panel of 14 Eurozone countries between 1999 and 2013. We find important roles for product market regulation and product quality, and little impact of advance announcement of reforms. Our findings have important implications for policy-makers considering VAT rate adjustments, by illuminating which of the consumers or the producers would experience the brunt of a reform across different settings.

"***How important is worker quality in total factor productivity dispersion? Evidence from manufacturing firms in Ghana***" *(MSc thesis, awarded Distinction)*

This paper considers the importance of human capital in determining the dispersion of total factor productivity in Ghanaian manufacturing firms. The real value of manufactured output in approximately 200 firms in a 12-year panel is regressed on two measures of human capital to derive a TFP residual, using the Levinsohn-Petrin method to control for unobservable productivity shocks which would otherwise bias the estimates. Education of production workers is found to explain less than 2% of TFP dispersion, measured as the ratio of the 90th to 10th percentiles of firm productivity. Even when including an imputed variable for the impact of unobserved human capital, such as intelligence and motivation, worker quality explains

less than 15% of TFP dispersion. This suggests that it is predominantly differences in other factors which make some firms much less productive than others, contrasting with evidence from developed countries for a larger role for human capital. The importance of human capital as a determinant of TFP dispersion varies substantially across manufacturing industries. Several explanatory hypotheses are considered, and the results are found to be consistent with corresponding variation across industries in: i) the intrinsic productive value of human capital, ii) the degree to which the best managers are able to employ the best workers, and iii) the importance of some unmeasured physical capital with which human capital is complementary.

Personal Information:

Born: 19 June 1993
Citizenship: United Kingdom, Republic of Ireland
Software: Stata, Mata, MATLAB, R, OxMetrics, SQL, Python, Gephi