

## How Diverse Is Your Reading List? An Analysis Of BSc Economics Curriculum

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- Gender and ethnicity imbalance in Economics discipline has been a long-standing issue:
  - An AEA survey shows that among tenured and tenure-track faculty in economics, only 23.5% are women and only 6.3% are black or Hispanic (Bayer & Rouse, 2016).
  - A RES study shows that in the UK women only represented 26% academic economists in 2018/19, and around 8 percent of standard academic posts in economics were held by Black and minority ethnic women in 2018 (Bateman et al, 2021).
  - The recent RES report shows that out of all UK Economics undergraduate students in 2020/21, only 32% are female and white students account for 58.9% (Paredes Fuentes et al, 2023).
- The content of university knowledge remains dominated by the West for the West (Bhambra, et al. 2018).



- In this study, we present micro-level evidence on diversity within Economics by looking into the BSc economic curriculum in a top UK university.
  - Analyze data on gender, ethnicity, and geographic location of the authors in the essential reading lists for all BSc economics modules including both compulsory and optional ones.
  - Examine their relationship with the characteristics (gender, ethnicity) of module leaders who assign the readings.
- Similar studies are done in other disciplines, for example, political science (Arshad et al, 2021).



- Main findings
  - The evidence suggests that the essential reading lists are dominated by white male authors based in North America or Europe.
  - Modules with female lecturers or mixed (both male and female) lecturers tend to assign more readings by female authors compared to modules with male lecturers.
  - Modules with non-white lecturers tend to assign more readings by non-white authors compared to modules with white lecturers.



- Start with a first-year compulsory module:
  - We diversify the reading list to have a more diverse set of authors, topics, examples and applications.
  - We re-design the module research project, as part of summative assessment, to have more diverse perspectives reflected.
- Reflect on the supply of female and minority economists and offer some thoughts on how to address the diversity issue in both short and long terms.



## Data

- BSc economic curriculum (a 3-year programme) in a top UK university in 2021/22.
  - Compulsory modules (Years 1 and 2 mandatory ones)
    - Year 1: Economics (intro level), Statistics, Mathematics, Applied Econ (intro econometrics).
    - Year 2: Microeconomics (intermediate level), Macroeconomics (intermediate level), Econometrics (intermediate level).
  - Optional modules: all other 35 modules open for selection in Years 1,2 & 3.
- Reading lists for all modules (both compulsory and optional ones), obtained from both University library and module syllabi.



## Methodology

- Coding
  - Characteristics of authors of the readings (focus on essential readings)
    - Gender: male and female
    - Ethnicity: white, non-white and not clear
    - Geographic location (obtained at the time of publication): Asia, Australia, Europe, North America, South America, others
  - Characteristics of the module leaders who assigned the readings
    - Gender: male and female
    - Ethnicity: white, non-white and not clear



## Methodology

- Analysis
  - Descriptive statistics of characteristics (gender, ethnicity and geographic Location) of the authors in the reading lists.
  - Relationship between the characteristics of authors and characteristics of module leaders.
  - Analysis by nature of modules, compulsory vs optional ones, as well as aggregate level.



# **RESULTS I:**

## Characteristics (Gender, Ethnicity and Geographic Location) of the Authors



## Gender of the authorship

Statistics regarding the gender of the authorship for compulsory and optional modules across all three years.

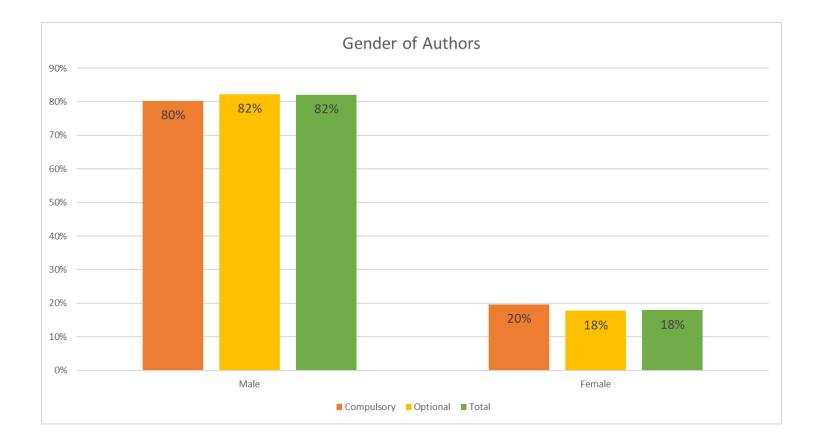
Gender						
	Compulsory		Optional		Total	
Male	53	80.30%	556	82.25%	609	82.08%
Female	13	19.70%	120	17.75%	133	17.92%
Total Authors	66	100.00%	676	100.00%	742	100.00%
# of Readings	20		506		526	

### Male-to-Female Ratio

- Compulsory: 4.08
- Optional: 4.63
- Total: 4.58



## **Gender of the authorship**





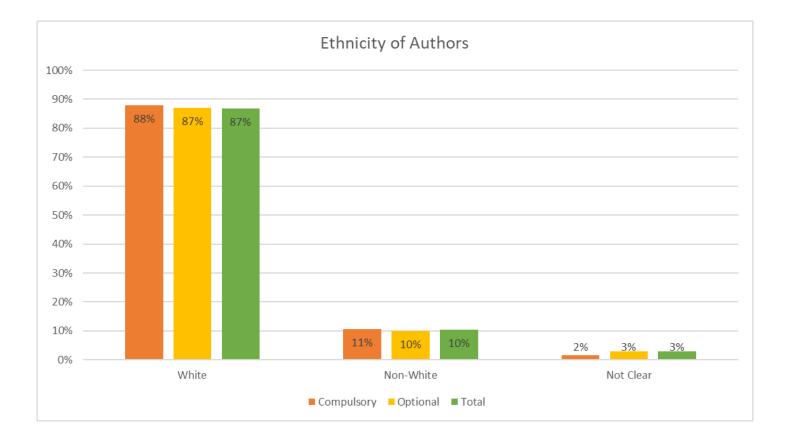
## Ethnicity of the authorship

Statistics regarding the ethnicity of the authorship for compulsory and optional modules across all three years.

Ethnicity						
	Compulsory		Optional		Total	
White	58	87.88%	586	86.69%	644	86.79%
Non-White	7	10.61%	70	10.36%	77	10.38%
Not Clear	1	1.52%	20	2.96%	21	2.83%
Total Authors	66	100.00%	676	100.00%	742	100.00%
# of Readings	20		506		526	



## **Ethnicity of the authorship**





## **Geographic location of the authorship**

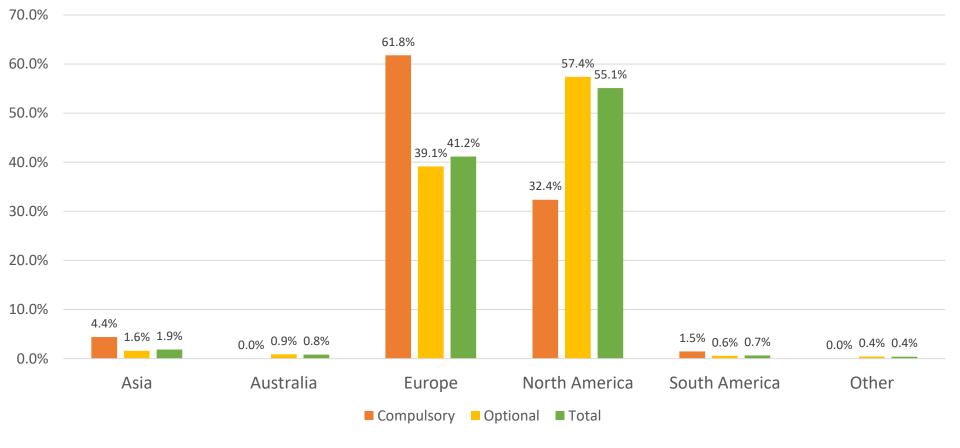
Statistics regarding the geographic location of the authorship, obtained through their affiliationn at the time of publication, for compulsory and optional modules across all 3 years.

Geographic Location						
	Compulsory		Optional		Total	
Asia	3	4.41%	11	1.61%	14	1.86%
Australia	0	0.00%	6	0.88%	6	0.80%
Europe	42	61.76%	268	39.12%	310	41.17%
North America	22	32.35%	393	57.37%	415	55.11%
South America	1	1.47%	4	0.58%	5	0.66%
Other	0	0.00%	3	0.44%	3	0.40%
Total Affiliations	68	100.00%	685	100.00%	753	100.00%
# of Readings	20		506		526	



## **Geographic location of the authorship**

#### Geographic Location of Authors



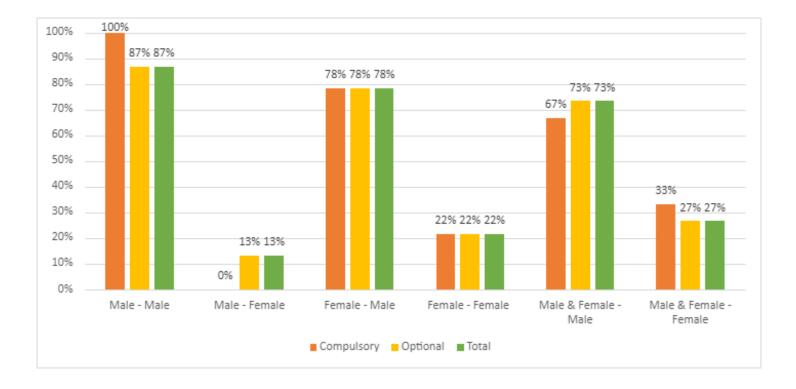


# **RESULTS II**

Relationship between the characteristics of authors and characteristics of module leaders



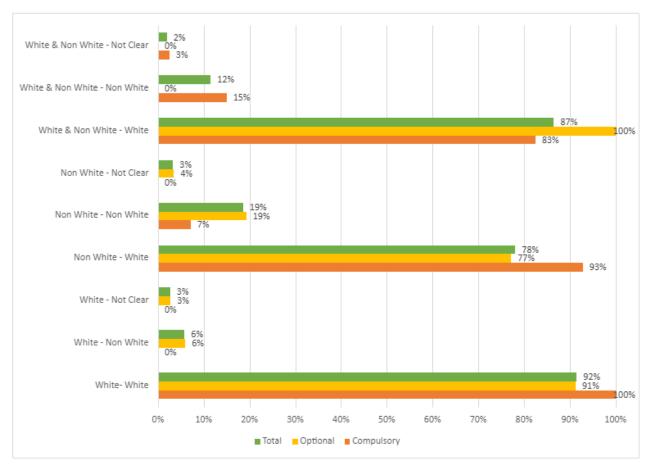
# Relationship between gender of module leaders and gender of authors



Note: (Male - Female) means Male Module Leaders & Female Authors



# Relationship between ethnicity of module leaders and ethnicity of authors



Note: (White - Non White) means White Module Leaders & Non White Authors



## **Diversify a first-year module: an example** (to be effective from 2023/24)

- Start with a first-year compulsory module "Applied Economics". It covers intro econometrics in the first half term, and focuses on the applications to various economics topics such as consumer demand, consumption and saving, employment and minimum wage and labour supply in the second half term.
- Actions taken:
  - Summarize the biographies and contributions of top Black, Asian and minority ethnic (BAME) and/or female economists.
  - Identify a list of videos by diverse economists on their research.
  - Diversify the reading list to have a more diverse set of authors, topics, examples and applications.
  - Redesign the module research project to have more diverse perspectives reflected.



## **Diversify a first-year module: an example**

Summarize the biographies and contributions of top BAME • and/or female economists at https://ideas.repec.org/top/top.person.all.html

Overview of Top BAME or Female Economists

William Nguyen UCL Department of Economics

Part of "Enhancing the Inclusivity of BSc Economics Curriculum" project (Project leads: Dr Dunli Li and Prof Aureo de Paula), sponsored by the Faculty of Social and Historical Solences (SHS) Dean's Fund. **+11C1** 



Name: Carmen M. Reinhart Institution: Harvard University



series and econometrics

variations from retail sales data using weekly scanner Lately, in her paper "Modelling Macroeconomic Vari after Covid-19" she has worked with modelling the in Covid-19 shock on various macroeconomic factors.

ot tests and a

Biographies: Asil Demirguc-Kunt (born in 1961) is a Turkish economist who is serving as the Chief Economist of the Furgee and Central Asia Region of the World Bank. She

has previously also served as Director of Development Policy

and Chief Economist of the Finance and Private Sector Development Network. Prior to joining the World Bank, she worked at the Federal Reserve Bank of Cleveland and Wester Economic Association. She received her Ph.D. From Ohio Sta

Academic Contributions: Asli Demirgue-Kunt's research nterest focuses mainly on fi

explores the relationship between financial development, fit performance, and economic development. She has created

Global Financial Inclusion (Findex) database which is the leading source of data on global access to financial services. One key insight from the database is how Covid-39 boosted the adoption of digital financial services, particularly in developing countries. She also created the Global Financial Developmen Report aimed to improve financial stability and to analyse the relationship between access to financial services and a

Name: Serena Ng

Institution: Columbia University

ice and b ing Her research

Biographies: Carmen Reinhart (born in 1955) is a Cuban-American economist who is the Minos A. Zombanakis Professor of the International Einspreia System at Narra ol and Chief Economist at the World Bank, In Rennergy school and Chief Economist at the World Bank. In the past, she was part of the advisory panel for the Federal Reserve Bank of New York. She has also served as Senior Policy Advisor and Deputy Director at the International Monetary Fund and Chief Economist for Bars Stems. She received her Ph.D. from Columbia University.

Academic Contributions: Carmen Reinhart's areas of expertise include macroeconomics and international finance. Her research focuses on globalisation and financial crites. Specifically, she works with capital flows, exchange rate policies, and banking and sovering nebt crites. Her book This Time is Different explores the similarities and patterns before minimum clicits. Schön, Sovering nebt crites relationship between banking and currency crites in her paper her twin crites. The Causes of Banking and Banker-offexpertise include ma ics and inte , concluding that banking crises typically precede currency crise



Biographies: Esther Dulfo (born in 1972) is a French-American economist. She is the Abdul Latif Jameel Pr of Poverty Alleviation and Development Economics at M She is also the co-founder of Abdul Latif Jameel Poverty Action Lab (J-PAL) which aims to reduce poverty through onducting experiments and research and advising olicymakers across the world. Dulfo was born and raised in aris graduated from the École Normale Supérieure before ing to America where she received her Ph.D. from MIT in

Academic Contributions: Esther Dulfo's fields of interest A second second

#### Overview of Top BAME or Female Economists

William Nouven UCL Department of Eco

Part of "Enhancing the Inclusivity of BSc Economics Curriculum" project (Project leads: Dr Dunii Li and Prof Aureo de Paula), sponsored by the Faculty of Social and Historical Sciences (SHS) Dean's Fund. ⁺UCL



Biographies: Raghuram Rajan (born in 1963) is an Indian economist who is the Katherine Durak Hiller Distinguished Service Professor of Finance at Chicage Booth. He served as the Governor of the Reserve Bank of India (2013-2016) and as Chief Economist and Director of Research at the International Biographies: Serena Ng (born in 1959) is a Chinese-American economist. She is the Edwin W. Rickert Professor of Economics at Columbia University. Perviously, the way a Monetary Fund (2003-2006). He also served as Chief Economic dvisor for the Indian Government and was the President of the American Finance Association He received his Ph.D. from IIT in 1991 with his thesis on banking.

economics: She is the Edwin W. Rickert Professor of Economics at Columbia University. Previously, the was a professor at the University of Michigan, and John Hopkins University. She has also worked for the Bank of Chanda as hear of the research department as well as for the National Bureau of Economic Research as research associate. She received her Ph.D. from Princeton University in 1993 for the thesis on time Academic Contributions: Raghuram Rajan's field of tion. His research focu es on banking, and financial regulation. His research because on banking. Finance, and its reals necessific advectoriest. His paper understanding of the relationship between the development of a country financial sector and its growth rate. He has also contributed to the field of releff in the paper. The Section the Section of the relation of the section of the section numerous prices including the Fischer Black Place for the best finance research under the age 40-60. Academic Contributions: Serena Ng's areas of interest nude concometrics, empirical macroeconomics, time ries, and Big Data. Her research focuses mainly on time ries and econometrics as shown by her most cited bilications, which include work on LAG length selection, un ot tests and approximate factor models. She has also work with machine learning to remove seasonal and cyclical variations from retail sales data using weekly scanner data.



Biographies: Atif Mian (born in 1975) is a Pakistani-American economist. He is the John H. Laporte, Jr. Class of 1967 Professor of Economics at Princeton University. Previously, Professor of Economics at Drinkowski, str. Austol 1967 Professor of Economics at Drinkowski, Providuly, he worked as professor at the University of California, Berkeley he Conter for Commonic Research in Paintain (ERP) in 2007, which aims to improve economic research and beaching: the obtained his bachelor's in Mathematics with Computer Science and Ph.D., in Economics both from MIT.

Academic Contributions: Atif Mian's areas of interest Academic Contributions: An Main 3 areas or interest involve macroeconomics, household debt, and finance. Har research focuses mainly on the relationship between finance and macroeconomics. His book "House of Debt" has contributed to our understanding of the cause of the Great Recession. It argues that the failure of banks is an inadequate explanation for the Great Recession but rather the main cause is the rise of household debt due to excessive mortgage lending. Currently, his research focuses on the implications of rising inequality for the macroeconomy. His paper "Indebted Demand" theories that large debt burdens lowers aggregate



Biographies: Hyun-Song Shin (born in 1959) is a South-Korean economist who is serving as Economic Adviser an Department at the Bank for International Settlements (BIS). Prior to joining the BIS, he was professor of economics a Princeton University and professor of finance at the London School of Economics. He has also served as Senior Advisor to the Korean president in 2010. He graduated from Oxford University where he received his doctorate degree. nics at

Academic Contributions: Hyun-Song Shin's research interest include finance and monetary economics. He specialises in banking, international finance and moneta economics. He has written many papers on the topics of leverage and liquidity for banks such as his book "Risk a Liquidity". He has also contributed to the field of currency crises through his paper "Unique Equilibrium in a Model o sen-ruthiting Currency Attacks" which concluded that th exists a unique equilibrium when financial variables are considered which diverges from models of complete information at the time. Currently, his research for the BIS focuses on the digital innovations within the financial secto such as cryptocurrencies ad that there



Biographies: Raj Chetty (born in 1979) is an Indian-American economist. He is William A. Ackman Professor of Public Economics at Harvard University. He is also the director of Opportunity Insight, an organisation that uses big data to films ublique form directored to Adventure the Mate Opportunity insign, an organisation that take so ig data to allow children from disadvantaged backgrounds better chances to succeed. He has previously taught at University California, Berkeley and Stanford University. He received his Ph.D. from Harvard University in 2003 and is one of its youngest tenured professors

Academic Contributions: Baj Chetty: a reas w man-inclué Padie Connenies, Beinvierna Economics and economic mobility and a policies. Hipper "When is like Land of Opportunity" has control the opport "When is like land being of the second mobility, especially in the US. Chetty research has also helped design government policies through combining empirical vedeores and economic demmind "Saferers and Taxation: Theory and Colones" espleres the "Saferers and Taxation Theory and Colones" designers the second taxation of the second demmind demmind the second demonstrations of the second demonstration of the second demand of the second demonstration of the second demand demonstration of the second demonstration of the second demand of the second demonstration of the second demand demand demonstration of the second demand demonstration of the second demand dema sing a field experiment in a grocery store



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Biographies: Aviral Kumar Tiwari is an Associate P at Rajagiri Business School (RBS), India. Prior to joi he served as Associate Professor at Montpellier Busis School, France, and as an Assistant Professor at IBS yderabad, India. After graduating with a degree in Eco om Lucknow University, Lucknow, India, he received h .Phil (in Labour Economics) and Ph.D. (in Energy and Environment) room ic Po Oniversity (reputa. A cademic Contributions: Aviral Kumar Timeri's research interest focus on various issues concerning energy, environment, toering, macroeconomy and growth & development. He has published in various journals of international repute including top ranked journals in the prestigiour Timeria Timers of Unit. His previous researches

resciptors rinancial Times Solist. His previous researches iave featured in journals such as Journal of Business Ethics, 'ourism Management, Annals of Tourism Research, international Review of Financial Analysis, Economic odelling and many others. He has been conferred the Best esearcher Award, 2015 by GRABS Educational Charitable rust, Chennal and a prettigious Prof. N J Manobar Rao ward for 2014 from The Indian Econometric Society for his

Biographies: Damy, Quah was born in Penang, in the Federation of Malaya which later became Malaysia. Quah obtained hils A.F. from Princeton University and hil P.D. from Harvard University. Quah was previously Assistant Professor of Economics at MT, and them at LSE Professor of Economics and International Development, and Director of the Saw Sweet Hock Southeast Atal Centers. He

erved as LSE's Head of Department for Economics, and ouncil Member on Malaysia's National Economic Advisory Academic Contributions: Danny Quah's research interests

Academic Contributions: Danny Quah's research interests lie in income inequality, economic growth, and international economic relations. Quah's work take an economic approach to world order - focusing on global power shift and the rise of the east, and alternative models of global power relations. Quah is Commissioner on the Spence Stiglitz Commission on Global Economic Transformation, and Stiglitz Commission on ocoas Economic (Transvermacum, am serves on the Executive Committee, International Economic Association and the World Economic Forum's Global Future Council for Geopolitics. He is Vice-Chair of Singapore's Advis ittee on Platform Worker



Biographies: Gita Gopinath (bor American economist who has serv managing director of the IMF, sir joining the IMF, Gopinath had a tw academic including at the econom University where she was the Joh International Studies and Econom an assistant professor at the Univ



Name: Ravi Jagannathar

Biographies: Ravi Jagannathan is a chaired professor at the Kellogg School of Management at Northwestern University: Ravi received a Ph. Di. Financial Economics ( and an M.S. in Financial Economics (1981) from Carnegie Mellon University, am M.B.A. from the indian institute of Management at Ahmedabad (1972), and a B.E. Im Mechanic

Engineering from the University of Madras (1970). His Ph.D. dissertation received the Alexander Henderson award for

Academic Contributions: Ravi Jagannathan's research Academic Contributions: Revi Jagannathan's resear Interestis Include asset priving, capital markets, portf performance appraisal, and financial institutions. Hi articles have appared in leading academic journals, in the Journal of Political Economy, Journal of Financial Scudies and in several graduate level textbooks. He is recognized internationaly for the di-

Institution

Fund (IMF)

Institution: Northwestern University

Academic Contributions: Trained as a public finance and labor exonomiat, Caroline Hoody is one of the world's leading obtains in the Commission of Education, Her research floatures colleges and universities. Her pioneering work in the field was transformative because the sam that applying economic thinking to education generates many important insight. Her work often draws upon models of diversional, linearities, and work often draws upon models of diversional, incentives, and the diversion service and the same service of the same s to identify trade barriers, supply b delivery of vaccines to low- and lov In 2021, Financial Times named G et design, finance, optimal pricing, social insurance schavioral economics. In addition, she is an ardent oter of the use of scientific methods (when feasible) in





Overview of Top BAME or Female Economists

Biographies: Janet Currie is the Henry Putnam Professor o Economics and Public Affairs at Princeton University and th Co-director of Princeton's Center for Health and Welbeing 5 also co-directs the Program on Families and Children at the National Bureau of Economic Research. informatic currently the Stewart C. Myers-Horn Family pressor of Finance and Entrepreneurship at the MIT Sloar pool of Management. Schoar received her Ph.D. in Economi from the University of Chicage in 2006, and the rh.D. in Eco academic career and her time at the Consumer Financial Protection Bureau, Schoar Is also a co-founder of ideace non-profit that uses research done in behavioral economi psychology in order to solve various social problems. mic Contributions: Janet Currie's current research

bealth care, environmental threats to health, the important ole of mental health, and the long-run impact of health whilems in memory and envir childhood. Currle was named

paychology in order to solve various social problems. Academic Contributions: Antionistic Koors's current research focuses on the areas of comment finance, on the grane method in the areas of comment finance, contributions of the areas of the solution of the solution contribution of the solution of the solution of the solution to comment finance and copylications by barling. Solve has the cited of the solution of the solution of comments provide the solution of the solution of the solution of the finance and the solution of the solutio problems in pregnancy and early childhood. Currle w one of the top 10 women in Economics by the Work Economic Forum in July 2015. She has served as the

President of the American Society of Health Economics, th Society of Labor Economics, and the Eastern Economic Association, and as the Vice President of the American Economic Association. She has served on the Board of Reviewing Editors of Science, as the Editor of the Journal of Economic Literature, and on the editorial boards of many oth



	Name: Carmen Reinhart					
	Institution: Harvard University					
100						

Biographies: Carmen Reinhart is the Minos A. Zombanakis Professor of the International Reancal System and Harving Directors at the International Reancal System and Harving Directors at the International Resources from date of the Economist at the investment bank Bear Sharman in the 1980s. The servers in the Advisory Paniel of the Federal Reserve Bank of New York and wars a member of the Congressional Buologic Office Paniel of Economic Advisors.

Academic Contributions: Carmen Reinhart's areas of e are in international linance, and macroecc chas helped to inform the understanding of fi-both advanced economics rises in both advanced accommiss and emerging market uring her cares, Beinhart has verden in numerous roles to detess policy challenges including most recently, the oronarium pandemism and its accommic impact. Banked more the top Commission worldwide based on publication of shouldy closeling, Beinhart has been listed among of shouldy closeling. Beinhart has been listed among olicy's Top 200 Global Thinkers, and Thompson Reuters' The forcity's Most Influential Scientific Minds.

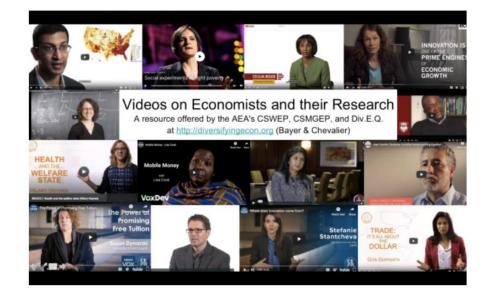
Name: Innet Currie

Institution: Princeton



## Diversify a first-year module: an example

- Identify a list of videos by diverse economists on their research and integrate the relevant videos to the module, for example:
  - Women in Economics Series: <u>https://learn.mru.org/women-</u> economics-series/.
  - Videos on economists and their research at <a href="https://diversifyingecon.org/videos-on-economists/">https://diversifyingecon.org/videos-on-economists/</a>





## **Diversify a first-year module: an example**

- Diversify the reading list to have a more diverse set of authors, topics, examples and applications. For example:
  - On the topic of employment and minimum wages, in addition to Card and Krueger (AER,1994), we add research in less developed countries/regions such as China, Thailand, Indonesia, Sub-Saharan Africa, and have discussion on the minimum wage puzzle in less developed countries to reconcile theory and evidence.
  - On the topic of labour supply, we add more readings on Female labour supply, e.g. Goldin, C. (AER, 2006) with video at <u>https://learn.mru.org/women-economics-series-claudia-goldin/</u>, and discussion in various countries such as China, Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam.



- Re-design the module research project, as part of summative assessment, to have more diverse perspectives reflected.
  - Before: ask students to study an economic question in a given country with a given dataset, e.g. "How effective are the measures implemented by the UK government to mitigate the COVID-19 pandemic?"
  - *After:* ask students to study an economic question in a country of their choice with suggested datasets, e.g. research the impact of Covid-19 on labour supply in a country of their choice and their subsequent policies.



## Discussion

- Move forward
  - Diversify the reading lists to have a diverse set of authors, topics, examples and applications for more modules.
  - Enhance the exposure of students to the work by female/ethnic minority economists ("*Role Model*" effect)
    - More female/ethnic minority professors teach UG modules.
    - Interviews with more female/ethnic minority professors.
  - Foster the learning environment for relevance, belonging, and growth mindsets.
    - Bayer et al. (2020) find that women and underrepresented minority students experience lower measures of relevance, belonging, and growth mindsets in introductory economic courses compared to men and non-underrepresented students.



## Discussion

- Move forward
  - In the longer term, increase the supply of female/ethnic minority economists.
    - Economics pipeline in undergraduates: Access, Continuation, and Degree outcomes (Paredes Fuentes et al, 2023)
    - Support those students so inclined to pursue their further study and academic careers. Some good practices includes the Economics PhD Applicant Mentoring Programme (AMP) which helps applicants from underrepresented backgrounds prepare their applications to economics PhD programmes by matching applicants to mentors who are PhD students in the top Economics departments, including UCL Economics.
    - Mentoring, retention and promotion of female and ethnic minority economists.



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## **Thank You!**

## Questions/Comments: dunli.li@ucl.ac.uk