

## Research signature and performance

### 1. Research signature and significance

Ed specializes in the study of 1) **collective action** in the **commons** and 2) **mechanisms for collective action**. Collective action is a central puzzle for political scientists, political economists, sociologists and public policy/public administration scholars. Many of the vexing and pressing problems that societies worldwide face today can be modelled as collective action problems – for example COVID 19, climate change, US-China relations, AI regulation, global governance, tragedy of the commons, among others. Ed's research is multidisciplinary, multi-method and multi-national, covering China, India, the US, Southeast Asia, Central Asia and Sub-Saharan Africa.

Ed's research signature on **collective action in the commons** (21 peer reviewed papers, 8 since promotion to Associate Professor in 2015) attempts to shed light on factors that influence collective action in the commons. In this body of work, he has studied the effects of [group size, composition and resource scarcity](#) (his most cited paper), [private property rights](#), [geography, urbanization, migration, ingenious local institutions, land consolidation](#) and [land fragmentation](#). In his second most cited [paper](#), Ed critiqued the conventional view on the tragedy of the commons and the Nobel Committee on Economics for their understanding of property rights.

On the other hand, his work on **mechanisms for collective action** (15 peer reviewed papers, 9 since last promotion), attempts to shed light on the black box of bureaucracies especially in developing countries, particularly the mechanisms, effects on behaviour and performance. In this body of work, he has studied: 1) nudging and showed that its effects are not durable ([Nature Human Behaviour](#)); 2) how the announcement of price increase affects consumption behaviour ([Nature Water](#)); 3) the supply and demand for bureaucratic corruption ([Public Administration Review](#)); 4) the perverse effects of foreign aid on incentives of bureaucracies ([Journal of Public Admin Res & Theory](#)); 5) the positive effects of foreign aid ([Governance](#)); 6) how policies and regulations should be designed when institutions are weak, missing and corrupted ([Policy Sciences](#)); 7) how digital technology adoption among cities can be explained by managerial contingency theory ([Cities](#)); 8) how beliefs of regulators matter ([Water Resources Management](#)); and 9) how variations in governance institutions can explain digital divide ([Telecoms Policy](#)) and water sector performance ([Water Resources Research](#)). Although he publishes in a wide variety of various journals, his study of agency problems has broad implications to understanding the incentives, behaviour and performance of bureaucracies in general.

Ed is also finishing a book manuscript entitled *Collective Action as Calculative Distrust: Synthesis, Theory, Mechanisms and Practice* to be submitted to a university press. The manuscript received the following endorsement from Nobel Laureate Oliver Williamson:

*“Eduardo Araral’s book is an interesting, instructive, and challenging contribution to the study of complex economic and political phenomena. It is interesting in that collective action is an important but poorly understood condition for which disciplined treatments are needed. It is instructive in that he is explicit about the key governance features upon which his analysis rests and contrasts his with others. And he is challenging in that he disputes a series of existing governance interpretations of trust, conflict, and cooperation that will doubtless be challenged by others in return. The book is a fascinating arena from which readers and researchers stand to gain.” – Oliver Williamson*

## 2. Research productivity and quality

As of January 2023, Ed has a total of **86 publications** of which 42 are in peer reviewed journals, 5 edited books, 13 book chapters, 12 commissioned policy reports and 14 op-eds. Since his last promotion in 2015, Ed has had 50 publications of which 21 are in peer reviewed journals, 2 edited books, 7 book chapters, 13 op-eds and 7 commissioned policy reports. Of his 21 journal papers since 2015, **46%** were published in the **top 10%** of Scientific Journal Rankings and **75%** in the **top 25%** while **47%** have an average World of Science (2022) impact factor of 8.7 - [Nature Human Behavior](#) (IF 24.2), [Science of the Total Environment](#) (IF 10.75), [Public Administration Review](#) (IF 8.4), [World Development](#) (twice) (IF 6.67), [Cities](#) (IF 6.0), [Land Use Policy](#) (twice) (IF 6.18), [Environment and Behavior](#) (IF 6.2) and Environmental Science and Policy (IF 6.4). Ed has 2 recent co-authored papers in Nature journals.

## 3. Citations Analysis

As of June, 2023, Ed's work has been cited 1,035 times in [Scopus](#) and 2,600 times in [Google Scholar](#). His citations have seen a significant [upward](#) trajectory, rising 5.6 times after his promotion in 2015. In 2022, he was listed [amongst the top 2 %](#) of scholars worldwide for their Field Weighted Citation Index (FWCI) based on a study by Stanford University / Elsevier. His FWCI for 2017-2021 is 4.31 with a high of 6.95 (2006-2021) and career average of 1.32. His work has also been **cited by top scholars** in the field, eight of whom have Scopus citations of at least 10,000, 23 have at least 5,000 and 130 have at least 1,000 citations. Since his last promotion in 2015, his papers have received significantly above **average citations vs. comparable papers** based on field citation ratios. His research on the commons was influential in setting the agenda and direction of the China Commons Research Program at Tsinghua University, the top University in China and among the top in Asia. This research program is the foremost authority on commons research in China.

## 4. International recognition as a researcher

Since his promotion in 2015, Ed has established an international reputation as a researcher. This is evident in his awards / recognitions, membership in editorial boards, invitations as key note / plenary speaker in international conferences and as reviewer of journals. For example, he was appointed as 1) [Co-Editor](#), since 2015, of the Cambridge University Press Elements Series in Public Policy, an authoritative collection of assessments of the state of the art and future research directions in policy research; 2) Associate Editor, since 2020, of the Oxford Research Encyclopedia of Environmental Science; 3) Editor (Special Content) (2023-2025) of [World Development](#), a leading journal in its field; he also served as Affiliate Editor (non-remunerated Associate) Editor from 2021-2022; 4) as keynote / plenary speaker in 10 international conferences and invited to present in 45 seminars/ international conferences, of which 50% were fully funded and 5) as a member of 8 international scientific / academic committees, 5 editorial boards and editor / co-editor for 4 special journal issues. Ed was also appointed [faculty member](#) of the Institutional and Organizational Economics Academy ([IOEA](#)) and as [faculty](#) of the [Coase](#) Institute which included Nobel Laureates Kenneth Arrow, Oliver Williamson, Doug North, Elinor Ostrom and Roger Myerson as faculty members. He is also a member of the selection committee of the 2023 Elinor Ostrom Award (the top award in the field) and appointed as [Chair](#) of the 2023 International Public Policy Association Award Committee for work on developing countries.

## 5. Awards/recognitions for research excellence

For his research, Ed received 5 awards / recognitions, 2 of which came after his last promotion in 2015. These awards include: 1) Fellowship (2021-22) at the Centre for Advanced Study of Behavioural Sciences ([CASBS](#)), Stanford University; past fellows include 30 Nobel Prize Laureates, 24 Pulitzer Prize Winners, 51 McArthur Fellows, 1 US Supreme Court Justice and the current President of Harvard University; 2) [Presidential Award](#) (2016) from the President of the Philippines; 3) [Elinor Ostrom Award](#) (2013) on Collective Governance of the Commons, the top award in the field; 4) citation by the NUS President in his 2010 State of the University Address; and 5) a Fulbright PhD Award.

## 6. Research independence, leadership & grants raised

Of his 59 scholarly work (peer reviewed papers / edited books/ chapters), Ed was the sole / lead author for 54% of the publications. Ed has also made key contributions to joint papers. From 2016-2022, Ed served as Co-director of the Institute of Water Policy which produced 750 publications of which 48% are in peer reviewed journals, 44% of which were published in the top 10 journal percentile of the World of Science. He was the PI / Co-PI for research grants totaling SGD 9.135M (USD6.76M), among the largest in the School - from the Singapore Ministry of Education (Tier 2), Social Science Research Council, Public Utilities Board, Tote Board, Microsoft, Amazon, Huawei, Apple, ADBI, US NSP and China NNRF.

## 7. Policy Engagement and Impact

Ed is both an academic and a policy entrepreneur with established reputation and extensive engagement among governments throughout Asia, among multinationals, donors and media. He has engaged with governments in Singapore, India, Vietnam, the Philippines, Indonesia, Brunei, United Arab Emirates, Kazakhstan, Russia, North Korea, Saudi Arabia, Myanmar and Uzbekistan. He has done / is currently doing consultancy work for the World Bank, UNDP, ADB, ADB Institute, Microsoft, Amazon, Apple, Huawei, Garena (Sea Group) and General Electric. Altogether, he has lectured in more than 250 Executive Education courses to more than 6,000 senior government officials from more than 50 countries throughout Asia (East, Southeast, South, Central, West Asia) and Africa. His research [work](#) was used by the World Bank to justify a USD2.23 Billion national poverty alleviation project in the Philippines which benefitted 24 million individuals, one of the largest of its kind in the world. He has served as adviser the Deputy Prime Minister, Finance Minister and Central Bank Governor of Kazakhstan. He helped set up the Golkar Institute in Indonesia which trains political leaders. He has presented to the Prime Minister and President of Vietnam, to Singapore's former Senior Minister Tharman Shanmugarratnam and to the Presidential Office and Cabinet of Uzbekistan.

## 8. Research Benchmarking

Ed's research performance is comparable to recently promoted full professors at the School and NUS and is higher in terms of percent of publications in top 10 and top 25 journal percentiles. Likewise, Ed's research performance overall is **comparable to and, in many cases, ahead** of his nine external peers who have been recently promoted to full professors from reputable Universities based on the Times Higher Education (THE) Rankings. These professors are from the University of Michigan-Ann Arbor, University of Wisconsin-Madison, University of Texas -Austin, University of Minnesota, Australia National University, Tsinghua University, Chinese University of Hong Kong, Hong Kong University and Hong Kong University of Science and Technology. For example, in publication metrics, Ed ranked #1 in terms of scholarly outputs, # 2 in citation counts, # 6 in terms of FWCI, # 1 in H index, # 1 in Google H index, # 4 in terms of % of publications in the top 10 percentile

of journals and # 2 in the Top 25 Journal Percentiles. He is also ahead of his peers in terms of research funds raised, practice led research, international awards, international consulting / government advisory work, executive education and media engagement. Ed's research is also much more international compared to his peers.