



HKUST PPOL

Newsletter Spring 2023



Division of
Public Policy

Research Grants and Awards
Research Showcase
News and Events



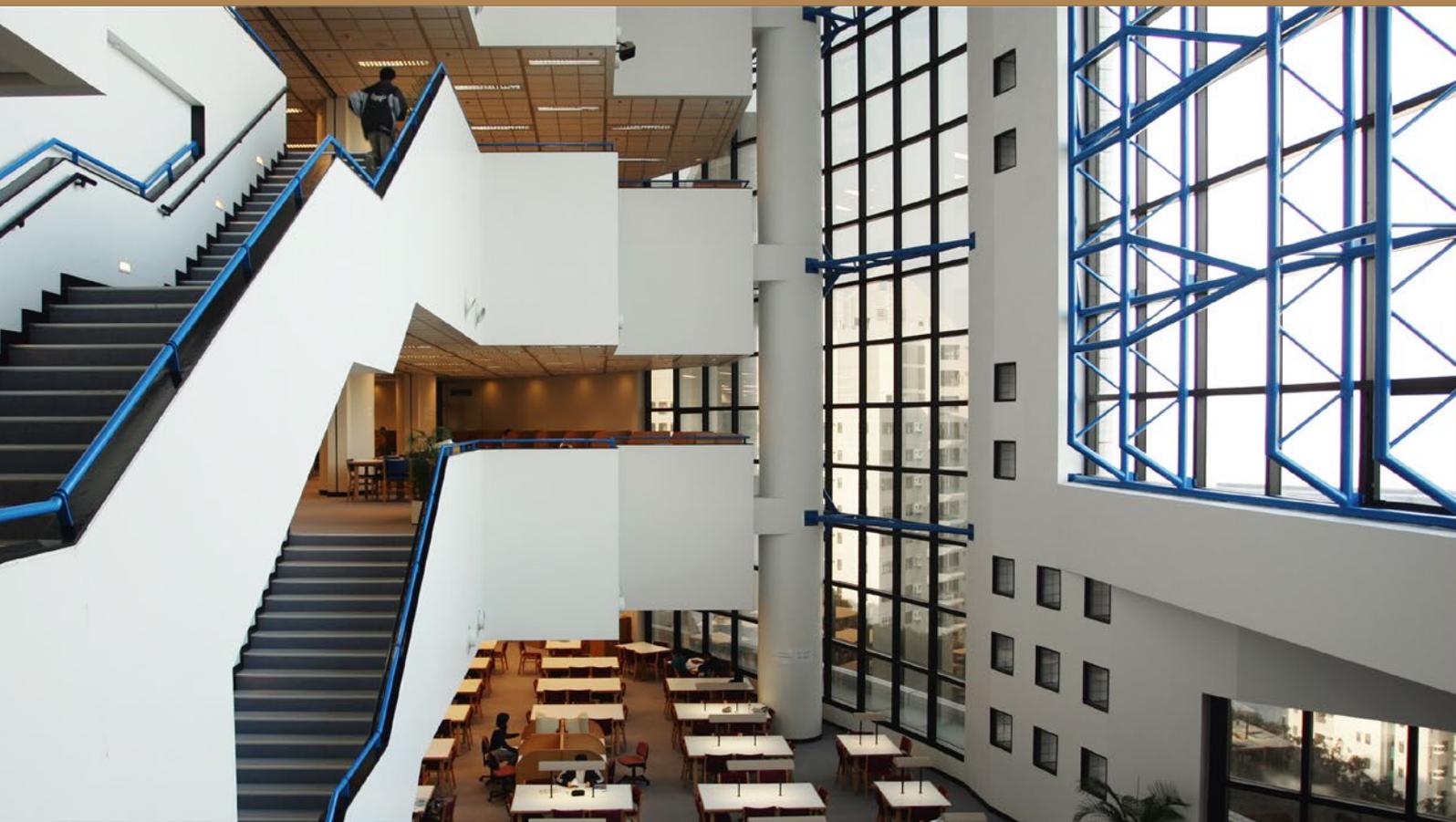
香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

PPOL

Division of Public Policy
公共政策學部

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The Acting Head's Message

Our previous newsletter was issued in September 2022, and this newsletter covers the intervening period. Two notably momentous events have marked this half-year period. The first is the rapid relaxation of COVID-related restrictions in Hong Kong. Few words can express the sea change in mood that this has brought about. As a result, the palpable enthusiasm and vigor that had been missing for three years have returned to our lives. The second event was the release of ChatGPT. Although there is no mention of ChatGPT in this newsletter, it is incumbent upon me to address it given its potential to upend so many jobs, tasks, and industries, particularly in education. As educators, my divisional colleagues and I have engaged in many discussions about ChatGPT and our response is evolving as our understanding evolves. Suffice it to say that, in combination, these events have added a flavor and spice that has been sorely lacking for quite some time!

Happy reading!



**Professor Naubahar Sharif,
Division of Public Policy, HKUST
March 2023**

Grants, Awards and Projects



Research and Community Grants



Principal Investigator:

**Prof. Naubahar
SHARIF**

PROJECT

Strengthening Family Relationships for Hong Kong's Ethnic Minority Communities in the Aftermath of COVID-19 Pandemic

Amount Awarded:
HK \$1,991,346 in January 2023
Funding Agency: Mental Health Initiatives Funding Scheme, Advisory Committee on Mental Health

This project aims to identify ethnic minority families to enhance their mental well-being and strengthen their familial relationships, through a collection of views, and stories from individuals regarding their family members, course and interactive group discussions and mindfulness-based activities to minimize emotional distress and improve inter-family harmony and relationships. This project is expected to significantly enhance understanding of conflict management and communication strategies within a familial context. The project will also enhance the ability of ethnic minority families to 'self-tackle' and 'self-restore' harmonious familial relationships through mindfulness-based practices to deal with family-related issues and distress.

PROJECT

Supporting Ethnic Minority Elderly with Mental Health Needs

Amount Awarded:
HK \$1,988,878 in January 2023
Funding Agency: Mental Health Initiatives Funding Scheme, Advisory Committee on Mental Health

This project aims to bridge the gap between Hong Kong's ethnic minority elderly and existing mental health support services in Hong Kong. It further aims to promote the proactive, early identification of 'hidden' cases of ethnic-minority elderly with, or at risk of, mental well-being issues, through the implementation of a suite of culturally sensitive, context-appropriate, and relevant programs/incentives for Hong Kong's ethnic minority elderly.

The project is expected to benefit the mental health of ethnic minority elderly who are ethnic Indians, Pakistanis, and Nepalese aged 65 or above. The collection of narratives and other life stories from the elderly participants will be important in enhancing their interpersonal communications, as well as understanding their backgrounds and how these factors, in turn, contribute to the mental health challenges (such as depression and/or anxiety) they are currently facing.

Research Grants



Principal Investigator:
**Prof. Pengyu
ZHU**



Principal Investigator:
**Prof. Alex
HE**

PROJECT

EV Charging Infrastructure Planning Based on an Integrated Model of Optimization Algorithms and Spatial-Temporal Analysis

Amount Awarded:
US\$500,000 in December 2022
Funding Agency: CLP Research Fellowship, CLP Group

This project aims to develop a planning model for an EV charging infrastructure based on trip trajectories and Point of Interest (POI) density, using a combined method of optimization algorithms and spatial econometric models, to develop a year-by-year plan for establishing charging stations (CSs) in Hong Kong in the coming 5 years.

By first predicting the expected growth in EVs number in HK in the next 5 years and making use of the existing survey data, people's travel behaviors and trajectories of EVs and the traffic flows per road will be presented by models and the charging demand will be estimated in detailed spatial and temporal scales. The EV charge waiting time will also be estimated to determine the allocation of CSs to the assigned parking lots. This project will help adjust CSs allocation conditioned by HK's policy regulations by predicting determinants such as the maximum number of charging posts per charging station and the maximum charging power, etc.

PROJECT

Technocrats and Mid-Level Policy Entrepreneurship in China: Explaining Local Policy Innovations in the Social Welfare Arena*

中國大陸的技術官僚與中層政策企業家：解釋社會福利領域的地方政策創新*

Amount Awarded:
HK\$ 527,051 in December 2022
Funding Agency: RGC - General Research Fund

Among the top 2% of the most cited scientists by Stanford University, Prof. He is ranked 823 out of 26,717 in the field of Political Science and Public Administration with a C Score of 2.7 (composite indicator for single-year Impact). The C-score focuses on impact (citations) rather than productivity (number of publications) and it also incorporates information on co-authorship and author positions (single, first, last author). Also, The C-scores are self-citations excluded. URL: <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4>

*This project is rated 5.0 full score by RGC

The proliferation of complex socioeconomic problems in contemporary societies requires innovative policy solutions. No innovation of significant magnitude is possible without 'champions' who energetically promote its introduction and diffusion. This project investigates how mid-level technocrats—who are traditionally described as mere implementers of dictated policies—drive local social welfare innovations in China. While China's dynamic policy experimentation and local innovations have been widely documented in the literature, there is a paucity of knowledge on the role played by technocrats at the middle and lower echelon of the bureaucracy. Through a compound comparative case studies design, this project intends to elucidate the unique role played by mid-level technocrats in social welfare innovations in China, their motivations, entrepreneurial strategies, processes, and outcomes.

Research Grants



Principal Investigator:
**Prof. Masaru
YARIME**

PROJECT

Public-Private Mix for Continuity of Care for Older Persons with a Focus on Hong Kong, Singapore, Indonesia, and Malaysia

Amount Awarded:
US\$24,900 in December 2022
Funding Agency: World Health Organization

Against the backdrop of rapidly aging populations, there is increasing recognition of the need to integrate various health services for the elderly, not only to provide more coordinated care but also to contain the rapid cost inflation driven primarily by the curative sector. In many Asian societies, there is a presence of mixed financing and provisioning of health services. Multiple public, for-profit, and non-profit agencies are involved in providing preventive, promotive, curative, rehabilitative, and home-based care for older persons. This public-private mix is however inadequately understood by policymakers, practitioners, and researchers in terms of its mechanisms and challenges. This project seeks to inform major stakeholders in the region by mapping the public-private mix for continuity of care that includes health services (including long-term) and social care in urban and rural contexts in select Hong Kong, Singapore, Malaysia, and Indonesia.

PROJECT

Public Perspectives on Personal Data Use for Personalized COVID-19 Advice

Amount Awarded:
5,000 GBP in November 2022
Funding Agency: Global Engagement Funds (GEF), University College London

This is a joint research project with Professor Carla-Leanne Washbourne and Ms. Veronica Qin Ting Li at the Department of Science, Technology, Engineering, and Public Policy (STEaPP) of UCL. Survey experiments in several large cities will be conducted, including Hong Kong and London, to understand how perspectives on sharing personal data for personalized COVID-19 advice differ across social, political, and cultural contexts.

This study will explore the broader implications of these attitudes toward personal data use for personalized advice on a wide range of public policy issues, given recent trends toward the broad use of big data analytics and personalized services. In the long term, it is expected to contribute to advising the design and regulation of personalized advice tools on a wide range of policy issues, from health to environment and sustainability.

Professor Naubahar SHARIF Received the Inaugural Cornell-HKUST Global Strategic Collaboration Award

Professor Naubahar Sharif, Professor of Public Policy and Head of the Division of Public Policy (PPOL) has received the inaugural, 2022 Cornell-HKUST Global Strategic Collaboration Award for his project on “Competing or Complementary Hegemons? An Analysis of the West’s Responses to China’s Belt and Road Initiative”.

Professor Sharif’s research interests include science, technology and innovation (STI) policy in Hong Kong and within the ‘Greater Bay Area’ of Southern China; automation in China; and the ‘Belt and Road’ initiative. In 2011 he completed the Executive Education program in Innovation for Economic Development at Harvard University. Professor Sharif has been nominated for the Michael G. Gale Medal for Distinguished Teaching, also has won the Interdisciplinary Programs Office’s Teaching Excellence Award (in 2020), the School of Humanities and Social Science (SHSS) Best Teacher Award (twice, in 2009 and 2016), and his course was nominated for the Common Core Excellence award. He has been awarded both ‘Public Policy Research’ (PPR) and ‘General Research Fund’ (GRF) grants by Hong Kong’s Research Grants Council (RGC). He has been the co-investigator for two ‘Strategic Public Policy Research’ (SPPR) grants awarded by Hong Kong’s Policy Innovation and Co-ordination Office (PICO) as well as a cross-institutional ‘Collaborative Research Fund’ (CRF) grant also awarded by the RGC. Professor Sharif’s research has had a demonstrable impact on society and his research was one of HKUST’s few ‘impact case study’ submissions (sole-authored) for its 2020 Research Assessment Exercise (RAE).

Each grant requires at least one principal investigator from HKUST and one from Cornell, the PI from Cornell is Dr. Ding Fei, senior research associate and lecturer in the Department of Global Development at Cornell University.

About Cornell University- HKUST Global Strategic Collaboration Award

Cornell University and HKUST have identified each other as strategic partners to foster deep collaborations in research and education, as part of Cornell’s Global Hubs initiative, which connects Cornell University with strong international peer institutions based in strategic locations worldwide.

The Cornell-HKUST Global Strategic Collaboration Awards (GSCA) have been established to bring faculty from partner institutions together to develop joint projects that will strengthen the two universities’ strategic priorities and develop cutting-edge multidisciplinary research to create academic and societal impact. Only up to five proposals each year are funded under Cornell’s Global Hubs initiative. Each successful proposal may receive up to the equivalent of USD \$5,000 from each university for a total of US\$ 10,000.



**Prof. Naubahar
SHARIF**

New Appointments



Prof. Alex HE

Joined the Division of Public Policy as an Associate Professor in December 2022.



Prof. Julien de TROULLIoud de LANVERSIN

Joined the Division of Public Policy as an Assistant Professor in October 2022.

On-going Research Projects

Leading Faculty	Funding Agency	Project
Prof. Naubahar SHARIF 白立邦 教授	Mental Health Initiatives Funding Scheme (Phase 1)	Preparing and Deploying Ethnic Minority Lay Leaders to Promote Mental Well-Being Among Hong Kong's Major Ethnic Minority Communities (2022- Now)
	Center for Aging Science, The HKUST	Towards a More Inclusive Hong Kong: COVID-19, Mental Well-Being, and Mitigation Strategies For a Multicultural Elderly Community (2022- Now)
	Institute for Emerging Market Studies, Center for Economic Policy, HKUST	Influence of an Interplay Between Culture and Chinese Outward FDI into Southeast Asia (2022- Now)
Prof. Kira MATUS 穆綺蘭 教授	RGC - General Research Fund	Towards 1.5C Lifestyles: What Motivates Sustainable Consumption Choices in Hong Kong? 邁向 1.5C 生活模式：是什麼推動香港的可持續消費選擇？ (2022-Now)
Prof. Ye QI 齊曄 教授	RGC - Strategic Public Policy Research Funding Scheme Institute for Emerging Market Studies	Developing a Green Finance Centre in Hong Kong in the Context of Green Development of the Guangdong-Hong Kong-Macao Greater Bay Area: Institutional Analysis and Policy Design 粵港澳大灣區背景下香港綠色金融中心建設的制度分析與政策設計 (2020- Now)
Prof. Masaru YARIME 鎗目雅 副教授	Institute for Emerging Market Studies	The Smart City as a Field of Innovation: Effects of Public-Private Data Collaboration on Innovation in the Guangdong Province and Implications for the Greater Bay Area (2022-Now)
Prof. Pengyu ZHU 朱鵬宇 副教授	RGC - Public Policy Research Funding Scheme	The Persistence of Behavioral Changes in Post-Pandemic Hong Kong: Implications for Transportation, Housing and Economic Development Policies 後疫情時代香港社會行為轉變的持續性研究：對於交通政策、住房政策以及經濟發展政策的指導意義 (2022-Now)
	Innovation and Technology Fund, Other Income (Non-Profit)	Strategic Planning for Transforming Hong Kong into a Leading Global Aviation and Innovation Hub 香港轉型成為世界航空與創新中心之策略規劃 (2021- Now)
Prof. Xiaofan ZHAO 趙小凡 助理教授	National Natural Science Foundation of China	Explaining Business Compliance: Evidence from Energy-Saving Regulation in China 中國企業服從節能減排規制的動因及其作用機制 (2022-Now)



Research Showcase

Research Showcase

Science, Technology, and Innovation Policy

He, Alex Jingwei. “Scaling-Up through Piloting: Dual-track Provider Payment Reforms in China’s Health System.”

Health Policy & Planning (2022).

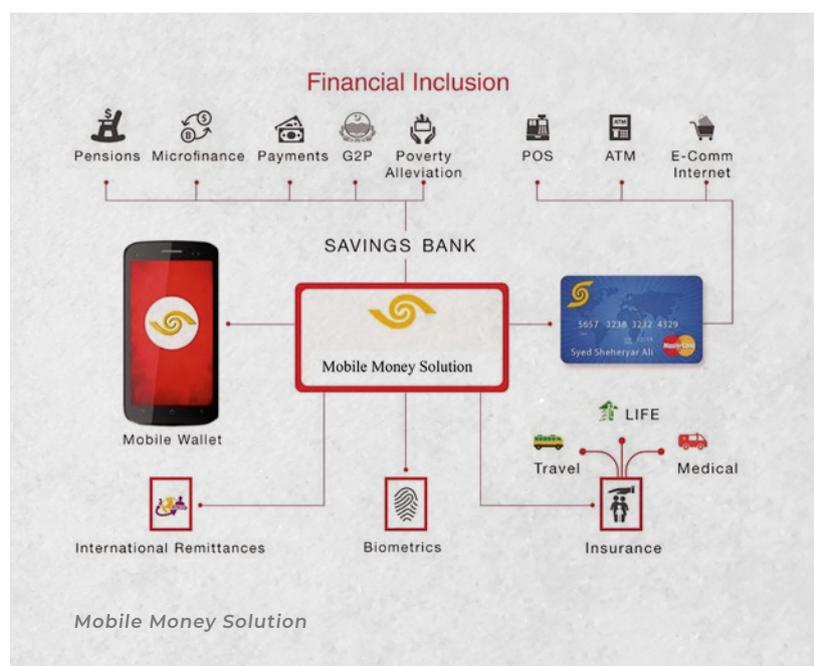


This paper puts forth ‘scaling up through piloting’ as a distinctive pathway for the strategic management of scaling up in the health sector. It analyses the recent development of provider payment reforms in China, focusing particularly on the ongoing pilot programs, namely diagnosis-related groups (DRGs) and diagnosis-intervention packets (DIP), that are being piloted in a dual-track fashion since 2020. Data were drawn from extensive documentary analysis and 20 in-depth interviews with key stakeholders, including decision-makers and implementers. It is found that scaling up through piloting helps

Chinese policymakers minimize the vast uncertainties associated with complex payment reforms and maximize the local adaptability of provider payment innovations. This pathway has forged a phased implementation process, allowing new payment models to be tested, evaluated, compared, and adjusted in a full spectrum of local contexts before a national rollout. Several key factors have been identified as crucial for strategic scaling-up: necessary central steering, a pragmatic piloting design, strong technical capacity, and effective policy learning mechanisms.

Sharif, Naubahar, and Athar Mansoor. “Pakistan Post and the Creation of an Innovative Business Model to Enhance Financial Inclusion.” Public Sector Reforms in Pakistan: Hierarchies, Markets and Networks.

Cham: Springer International Publishing, 2022. 251-273.



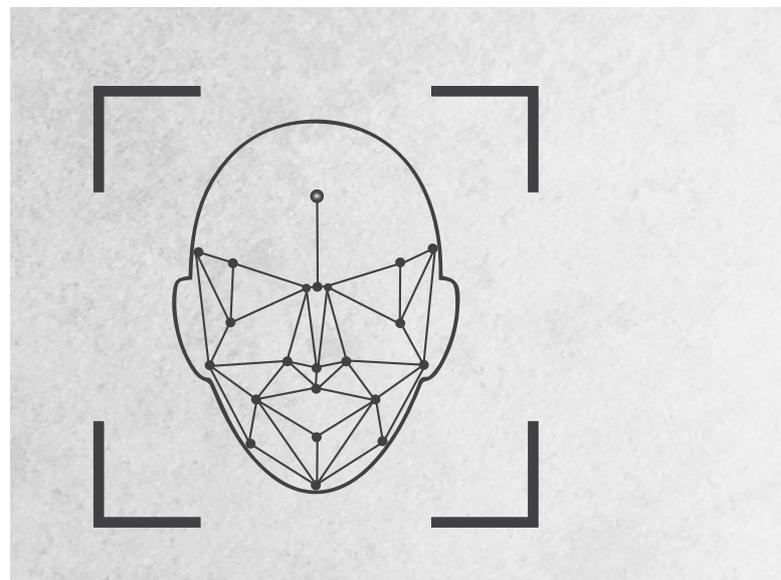
This book chapter investigates and analyses the efforts led by Pakistan Post to create a new business model characterized as a comprehensive public-private partnership (PPP) plan. This plan proposes combining Pakistan Post's network of post offices—which serve as savings banks—with mobile phone platforms, enabling people across Pakistan to access financial services either physically or virtually. Three key sets of issues were analyzed: First, the explication of the characteristics of this new information and communication technology (ICT)-driven PPP business

model within the specific context of Pakistan and assessment of the extent of the model's reliance on ICT. Second, a dissection of the PPP model to understand the degree to which it suits Pakistan's prevailing socioeconomic context. Third, a discussion of the applicability of the model—under which mobile phones serve as a key tool for solving social problems and creating social enterprises—to other neighboring South Asian economies such as Bangladesh, Sri Lanka, Bhutan, and Nepal—which represent similar levels of socioeconomic development.

Research Showcase

Li, Z., Guo, Y., **Yarime, M., & Wu, X.** (2022). Policy Designs for Adaptive Governance of Disruptive Technologies: the Case of Facial Recognition Technology (FRT) in China.

Policy Design and Practice, 1-14.

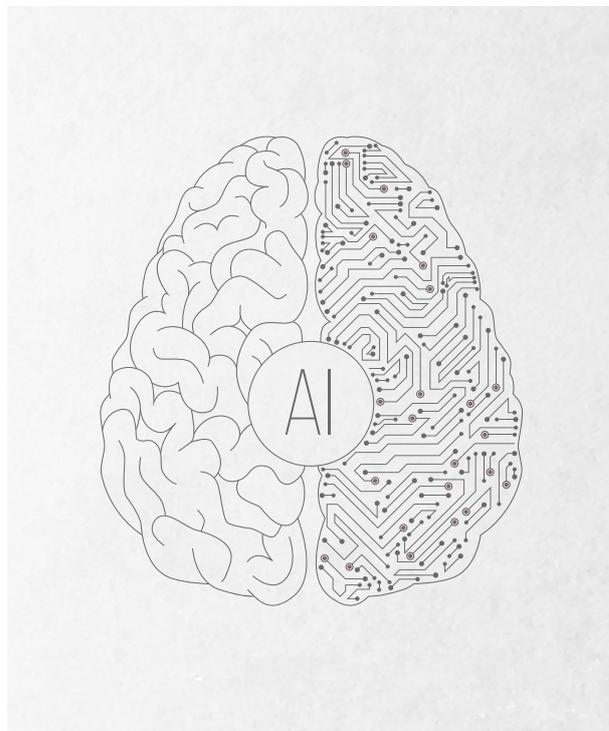


Recent regulations introduced by the Chinese government regarding big data technologies are welcome to those long concerned about the risks associated with their rapid deployment. However, these changes are not sufficient to safeguard privacy and data security. More importantly, these policies may not have fully accounted for the disruptive nature of these technologies. This paper examines the need and the

potential for new approaches in policy design regarding disruptive technologies by examining the case of facial recognition technology (FRT) in China. It is argued that adaptive governance provides a useful framework for future policy design. Regulatory sandbox approach, policy mix, and stakeholder engagement are among key policy measures to overcome regulatory challenges.

Papyshev, Gleb, and Masaru Yarime. “The Limitation of Ethics-Based Approaches to Regulating Artificial Intelligence: Regulatory Gifting in the Context of Russia.”

AI & SOCIETY (2022): 1-16.



This paper analyzes the emergence of the regulatory regime for artificial intelligence (AI) in Russia to illustrate the limitations of the unenforceable ethical approach implemented via industry self-regulation. Based on 50 interviews with policymakers, representatives of AI companies, and academics in the country, it shows that this regulatory regime was formed under the strong influence of Russian big tech companies, which saw an opportunity to avoid regulatory oversight by washing out concrete regulatory measures from the policy. This approach is part of a broader

protectionist sanction-proofing strategy for the local IT sector designed by the government, which can be characterized by lifting regulatory barriers for local companies. Unenforceable ethics-based self-regulation is a regulatory gift from the Russian government to the industry. This gift was intentionally designed because the government thought that prioritizing local innovation over consumer protection would benefit the public. However, the gift can also unintentionally undermine the public interest by providing an opportunity for ethics washing.

Research Showcase

Papyshev, Gleb, and Masaru Yarime. “The State’s Role in Governing Artificial Intelligence: Development, Control, and Promotion Through National Strategies.”

Policy Design and Practice (2023): 1-24.

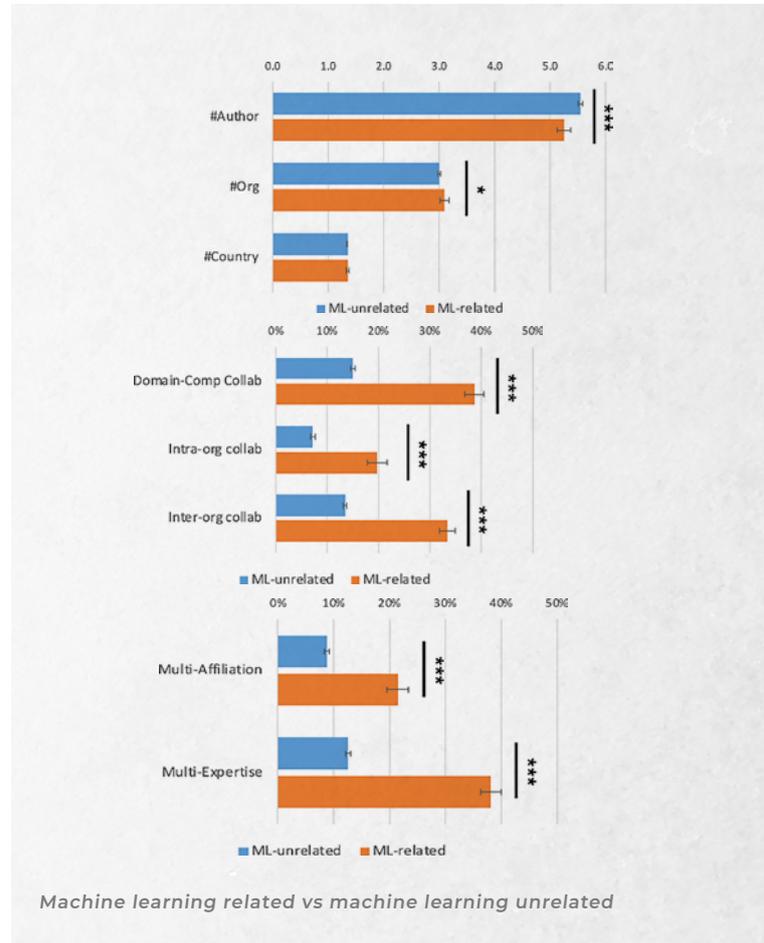
Develop		Control		Promote	
Primus inter pares	Countries	Command and control	Countries	Oligopoly/Self-regulation	Countries
The leading role of the state in facilitating and initiating AI projects; collaboration with different stakeholders; direct provision of state resources; prioritization of innovation over the protection of risks	Bulgaria; China; Czech Republic; Hungary; Japan; South Korea; Russia; Serbia	The leading role of the state as a guarantor that protects society from risks stemming from AI; rigorous regulatory frameworks; the state sets up the rules for the socio-technical system; prioritization of protection from risks over innovation	Austria; Belgium; Denmark; Estonia; Finland; Germany; Luxembourg; Malta; Mexico; Netherlands; Norway; Portugal; Sweden; Uruguay	Decentralized approach with the key role of the private sector; lack of policies and regulations; non-involvement of the state; self-organization and self-regulation by the industry; prioritization of innovation over protection from risks	Australia; India; Ireland; Lithuania; New Zealand; Saudi Arabia; Singapore; UK; US

This study investigates the texts of 31 national artificial intelligence (AI) strategies that numerous governments across the globe have issued, using qualitative content analysis and Latent Dirichlet Allocation (LDA) topic modeling methodologies. The findings of the qualitative content analysis highlight thirteen functions of the state, which include human capital, ethics, R&D, regulation, data, private sector support, public sector applications, diffusion and awareness, digital infrastructure, national security, national challenges, international cooperation, and financial support. These functions are combined into three general themes, representing the state’s role: development, control, and promotion. LDA

topic modeling results are also reflective of these themes. Each general theme is present in every national strategy’s text, but with different proportions. The combined typology based on two methods reveals that the countries from the post-Soviet bloc and East Asia prioritize the theme “development,” highlighting the high level of the state’s involvement in AI innovation. It is found that the countries from the EU focus on “control,” which reflects the union’s hard stance on AI regulation, whereas countries like the UK, the US, and Ireland emphasize a more hands-off governance arrangement with the leading role of the private sector by prioritizing “promotion.”

Thu, M. K., Beppu, S., Yarime, M., & Shibayama, S. (2022). Role of Machine and Organizational Structure in Science.

Plos one, 17(8), e0272280.



This study investigates the team structure of machine learning (ML)-related projects and analyzes the contribution of ML to scientific knowledge production under different team structures, drawing on bibliometric analyses of 25,000 scientific publications in various disciplines. It is suggested by regression analyses that (1) interdisciplinary collaboration between domain scientists and computer scientists as well as the engagement

of interdisciplinary individuals who have expertise in both domain and computer sciences are common in ML-related projects; (2) the engagement of interdisciplinary individuals seem more important in achieving high impact and novel discoveries, especially when a project employs computational and domain approaches interdependently; and (3) the contribution of ML and its implication to team structure depends on the depth of ML.

Research Showcase

Zhu, Pengyu, and Yuqing Guo. “Telecommuting and Trip Chaining: Pre-Pandemic Patterns and Implications for the Post-Pandemic World.”

Transportation Research Part D: Transport
and Environment 113 (2022): 103524.



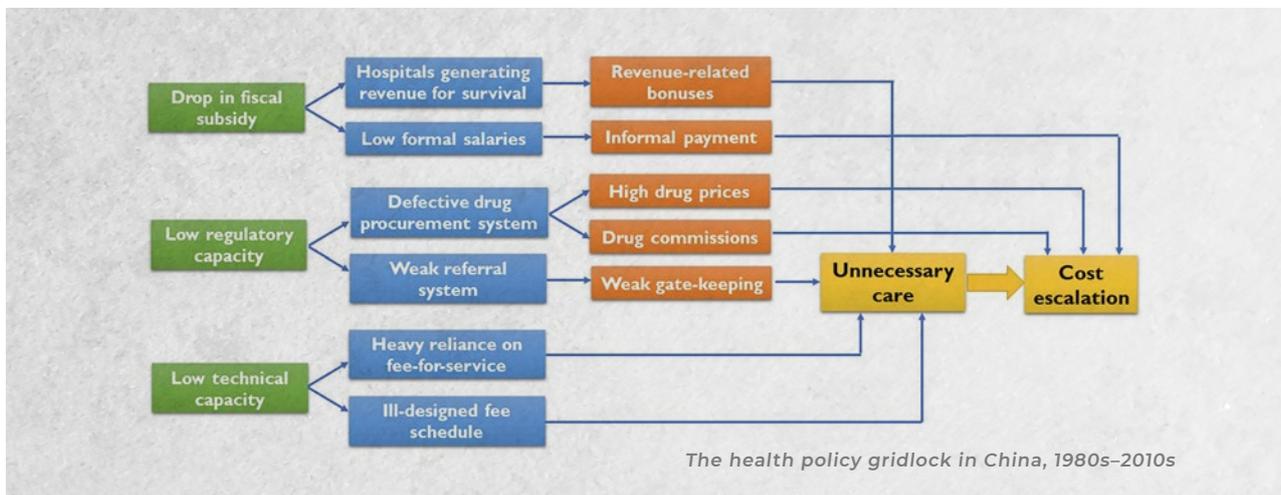
This paper investigates if there exist consistent modification influences of telecommuting on trip-chaining behavior in the decade prior to the pandemic using 2009 and 2017 U.S. National Household Travel Surveys, the findings show that telecommuting significantly increases people's propensity to chain trips, raises trip-chaining frequency, and encourages more complex trip chains. Furthermore, these impacts are significant on commuting days, which suggests that telecommuters still

have different trip-chaining behavior than non-telecommuters on the days when they commute to the workplace. While trip chaining has been encouraged under pandemic conditions to minimize health risks, heightened health concerns will fade as the pandemic recedes. With telecommuting likely to persist, unraveling how trip-chaining behaviour had changed in response to telecommuting before the pandemic can help policymakers better understand the long-term changes in travel behavior in the post-pandemic world.

Urban and Social Policy

He, Jingwei Alex, Fan, Yumeng, and Su, Rui. (2022). Seeking Policy Solutions in a Complex System: Experimentalist Governance in China's Healthcare Reform.

Policy Sciences, 55(4), 755-776.



The paper tackles the problem of “wicked” policy problems proliferation in complex systems by an experimental approach that offers a conducive framework to seek policy solutions amidst high levels of complexity in a multilevel governance structure. Four distinctive experimental modalities are conceptualized based on varying levels of technical and interest complexity, which represent salient constraints for policy reforms in a complex system, especially in the health sector. The four modalities:

trail-blazing pilots, crowdsourcing pilots, managed pilots, and road-testing pilots are all associated with distinct mechanisms of experimentation in a multilevel governance structure. Four illustrative cases from China’s massive experimental program of public hospital reform are presented to demonstrate how experimentalist governance seeks policy solutions in the health sector. It is proven that governance can play an instrumental role in seeking solutions for difficult problems in a complex policy system.

Research Showcase

He, Alex Jingwei, Azad Singh Bali, and M. Ramesh. “Active Stewardship in Healthcare: Lessons From China’s Health Policy Reforms.”

Social Policy & Administration 56.6 (2022): 925-940.



Word cloud of policy documents of the National Healthcare Security Administration (Chinese)

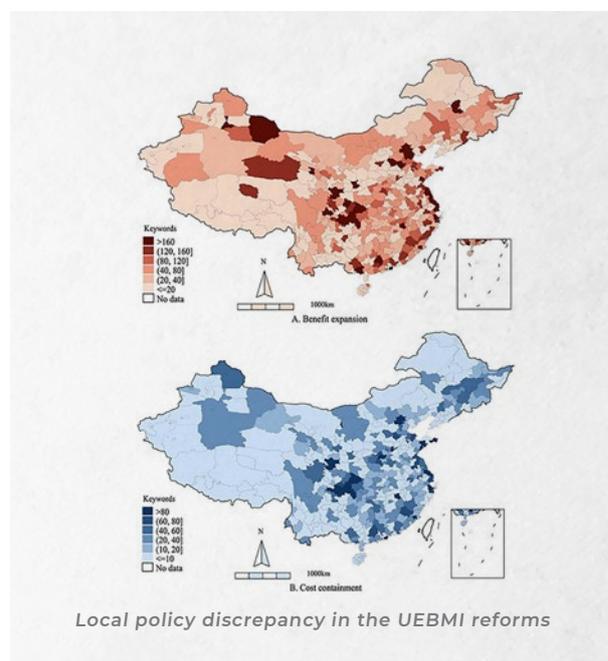
This paper conceptualizes the government’s role in contemporary health policy as one of “active stewardship” wherein the government is a central actor steering and coordinating the sector through a portfolio of diverse policy tools. In this conceptualization, the government is not a passive participant—in merely financing, delivering, or regulating the sector—but a steersman at the helm that sets policy objectives and actively pursues them. It is argued that active stewardship is central to achieving contemporary health policy priorities of universal healthcare. By

applying this conceptualization to China’s recent healthcare forms, it is shown that the role of the government in governing the sector has changed substantially over time, particularly since 2009, and the changes are showing promising results. China’s experience suggests that governments need to more actively guide and shape the behaviour of both public and private players in order to achieve the goals of universal health coverage. It also suggests that a high degree of policy capacity is essential if active stewardship is to be effective.

Liu, Kai, Wenting Liu,
and **Alex Jingwei He.**
“Evaluating Health Policies
with Subnational Disparities:
a Text-Mining Analysis of
the Urban Employee Basic
Medical Insurance Scheme
in China.”

Health Policy and Planning 38.1
(2023): 83-96.

This paper studies heterogeneous effects and distinct policy choices across localities under the same generic policy. By using the emerging ‘text-as-data’ methodology and drawing from subnational policy documents, this study developed a novel approach to policy measurement by analyzing policy big data. This approach is applied to examine the impacts of China’s Urban Employee Basic Medical Insurance (UEBMI) on individuals’ out-of-pocket (OOP) spending. Substantial disparities are found in policy choices across prefectures when categorizing the UEBMI policy framework into benefit-expansion and cost-containment reforms. Overall, the UEBMI policies lowered enrollees’ OOP spending in prefectures that embraced both benefit-expansion and cost-containment reforms. In contrast, the policies produced ill effects on OOP spending of UEBMI enrollees and uninsured



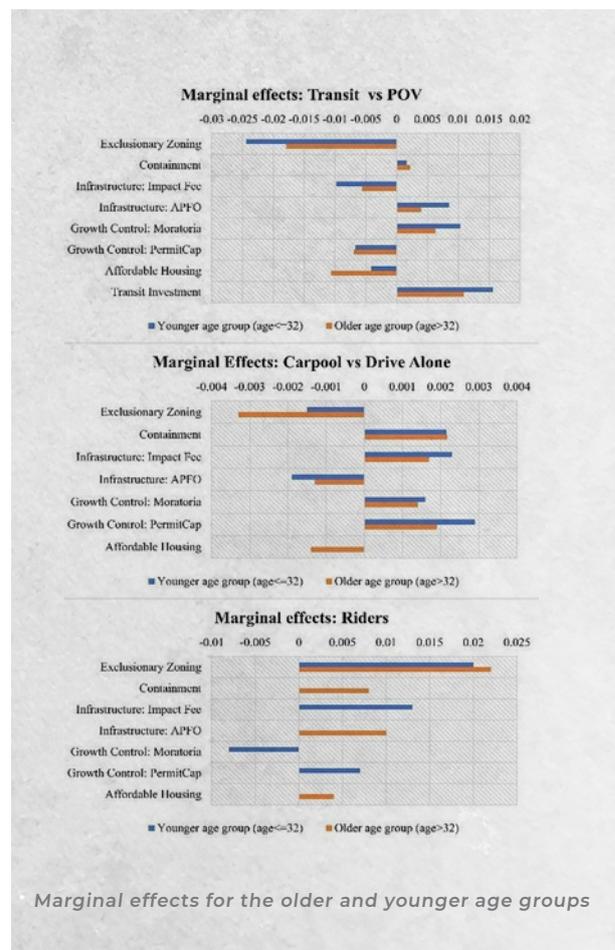
workers in prefectures that carried out only benefit-expansion or cost-containment reforms. The micro-level impacts of UEBMI enrolment on OOP spending were conditional on whether prefectural benefit expansion and cost-containment reforms were undertaken in concert. Only in prefectures that promulgated both types of reforms did UEBMI enrolment reduce OOP spending. These findings contribute to a comprehensive text-mining measurement approach to locally diverse policy efforts and an integration of macro-level policy analysis and micro-level individual analysis. Contextualizing policy measurements would improve the methodological rigour of health policy evaluations. This paper concludes with implications for health policymakers in China and beyond.

Research Showcase

Zhu, P., Tan, X., Zhao, S., Shi, S., & Wang, M. (2022). Land Use Regulations, Transit Investment, and Commuting Preferences.

Land Use Policy, 122, 106343.

This paper examines how various local land use regulations and transit investment, both measured at the aggregated metropolitan level, have affected people’s long-term travel behaviors over a 15-year period, and how these impacts differ between younger and older age groups. This study combines a set of land use regulation indices measured at the metropolitan level in 2003 with 15 years of travel data (2005–2019) from a pooled representative sample of over 8 million workers in the 50 largest U.S. metropolitan areas. Results show several local anti-sprawl land use regulations (e.g., growth containment, adequate public facilities, and moratoria), when combined at the metropolitan level, effectively reduced driving notwithstanding their marginal effects. Government investment in public transit also significantly increased commuters’ likelihood of using public transit and, carpooling, as well as increased carpool group size. Moreover, the commuting mode choices of younger workers are more responsive to transit improvements and land use regulations. Urban planners should commit to regional cooperative planning to promote effective land use regulations at the metropolitan level. Regional collaborative entities, such as metropolitan planning organizations should play a larger role in coordinating



local land use planning and regulations. To reduce automobile dependency, planners should commit to improving public transit through enhanced financial assistance, harnessing land use regulations in a more targeted way, and accommodating the needs of different age cohorts.

Zhu, P., Tan, X., Wang, M., Guo, F., Shi, S., & Li, Z. (2023). The Impact of Mass Gatherings on The Local Transmission of COVID-19 and The Implications for Social Distancing Policies: Evidence from Hong Kong.

Plos one, 18(2), e0279539.

This paper examines the impacts of mass gatherings on the local transmission of COVID-19 and evaluates the importance of social distancing policies. With an aggregated dataset of epidemiological, city-level meteorological, and socioeconomic data, a Synthetic Control Method (SCM) is used for constructing a 'synthetic Hong Kong' from over 200 Chinese cities. This counterfactual control unit is used to simulate COVID-19 infection patterns (i.e.,

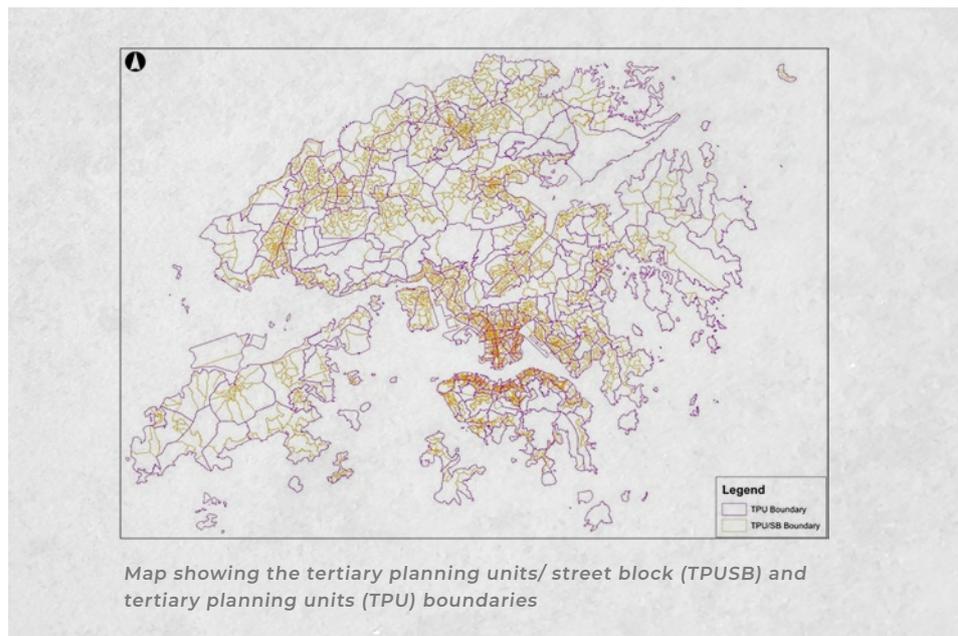
the number of total cases and daily new cases) in the absence of mass gatherings. Comparing the hypothetical trends and the actual ones, our results indicate that the infection rate observed in Hong Kong is substantially higher than that in the counterfactual control unit (2.63% vs. 0.07%). As estimated, mass gatherings increased the number of new infections by 62 cases (or 87.58% of total new cases) over the 10-day period and by 737 cases (or 97.23%) over the 30-day period. These findings suggest the necessity of tightening social distancing policies, especially the prohibition on group gathering regulation (POGGR), to prevent and control COVID-19 outbreaks.



Research Showcase

Zhu, P., Wang, K., Ho, S. N. R., & Tan, X. (2023). How is Commute Mode Choice Related to Built Environment in a High-Density Urban Context?

Cities, 134, 104180.



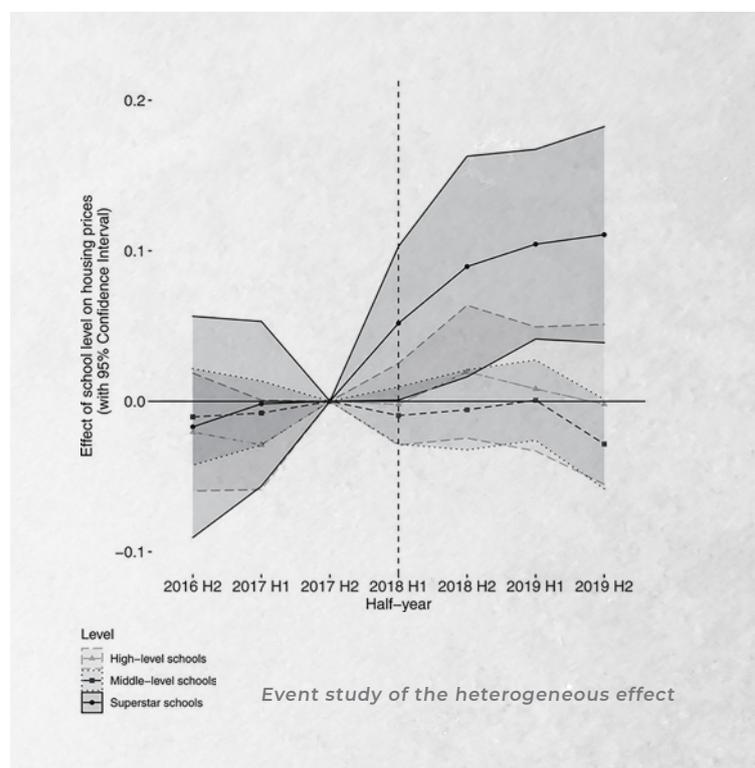
This paper addresses the unique challenges and problems associated with the built environment and travel behavior in extremely dense urban settings, using Hong Kong as a case study. In addition to investigating how built environment features are related to the choices between public transport and cars, public transportation is divided into three sub-modes to study the impacts of the built environment. Furthermore, how these relationships differ between millennials and older generations was tested. Results indicate that built environment characteristics are more influential in people's choices among different public

transport sub-modes than in their choice between public transport and cars. Compared to older commuters, millennials' choices of rail-based and mixed-mode public transport are more susceptible to built environment attributes whereas their effects on road-based transit usage are stronger for older commuters. These investigations provide important insights into individuals' commute mode choices in highly dense, transit-dominated urban contexts, and hence provide more reliable grounds for policymaking to encourage the usage of specific public transit sub-modes, and to meet the needs of different age groups.

Zhu, Pengyu, Yi Zhang, and Juan Wang. “Canceling The Admission Priority of Private Schools Enlarges Housing Price Gap in Public School Districts: Evidence from Shanghai’s New Admission Policy.”

Real Estate Economics 51.1 (2023): 49-67.

In this paper, the authors studied the effect of Shanghai’s unique admission policy measure for adjusting private and public school competition and discouraging private school choice priority to promote education equity. By examining the impact of the new admission policy on the capitalization of public education quality, boundary fixed effect and Difference in Differences (DID) analysis were applied to housing transaction records before and after the policy. The admission policy on average led to an additional 2% housing price premium for every standard deviation increase in public school quality. However,

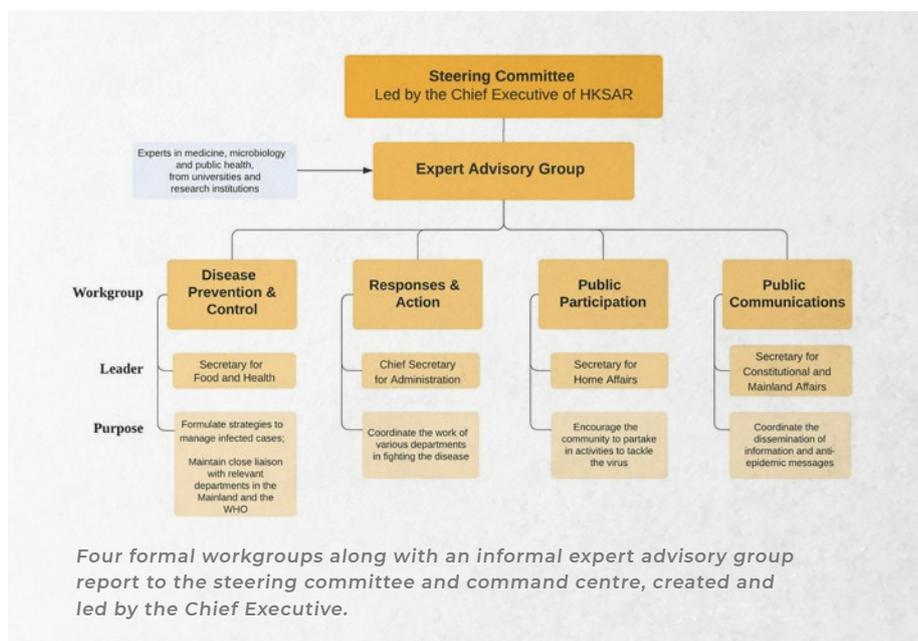


this average increase in premium was mainly driven by elite (top 5%) school districts, where an additional 8.6% housing price premium was generated by the policy. Housing prices in nonelite school districts, on the other hand, demonstrated no significant changes. These results indicate that the policy enlarges the housing price gap among school districts with different education quality. Thus, rather than promoting education equity, this policy may overall worsen the housing affordability in good public school districts and make access to quality education more exclusive.

Research Showcase

Matus, K., Sharif, N., Li, A., Cai, Z., Lee, W. H., & Song, M. (2023). From SARS to COVID-19: the Role of Experience and Experts in Hong Kong's Initial Policy Response to an Emerging Pandemic.

Humanities and Social Sciences Communications, 10(1), 1-16.



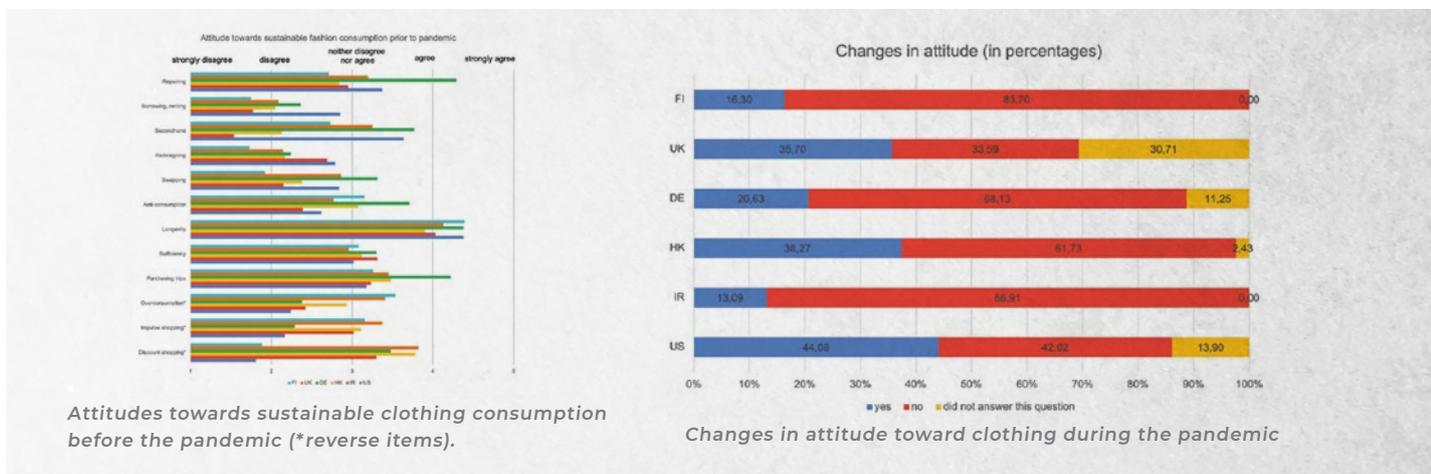
This paper studies how scientific advice was offered and how public health decisions were made under the context of the Covid-19 Pandemic outbreak in Hong Kong, at a time when trust in the Hong Kong government by Hong Kong people has hit an all-time low this research investigates the evolution of Hong Kong's science advisory mechanisms for public health from before SARS, after SARS, and during COVID-19 in 2020, including the roles of key organizations and departments, the establishment of new centers

and committees, and the creation of workgroups and expert advisory panels. This paper compares and analyses the reasons behind these differences in science advisory mechanisms between SARS and COVID-19. The findings from this research reinforce the unquestionable need for robust science advisory structures and knowledgeable scientific experts to solve health-related crises, though more research is required to understand the ways in which science advice influences both policy decisions and public acceptance of these policies.

Environmental Policy and Sustainability

Iran, S., Martinez, C. M. J., Vladimirova, K., Wallaschkowski, S., Diddi, S., Henninger, C. E., Helen McCormick, **Kira Matus**, Meike Sauerwein, Renu Singh, Loredana Tiedke, (2022). When Mortality Knocks: Pandemic-Inspired Attitude Shifts towards Sustainable Clothing Consumption in Six Countries.

International Journal of Sustainable Fashion & Textiles, 1(1), 9-39.



This paper studies how the change and disruption of the routine lives of citizens globally due to the COVID-19 Pandemic has impacted consumers' attitudes toward fashion and consumption practices, using terror management theory across six different countries, from the Middle East, Southeast Asia, Europe, and North America. A structured qualitative study with closed, open-ended, and multiple-choice questions was completed by a sample of consumers (N = 3748) across these countries. Among all participants, one-third reported that the pandemic had affected their attitude toward clothing and this study was mainly conducted to investigate the nature of those attitude changes. Qualitative analysis identified

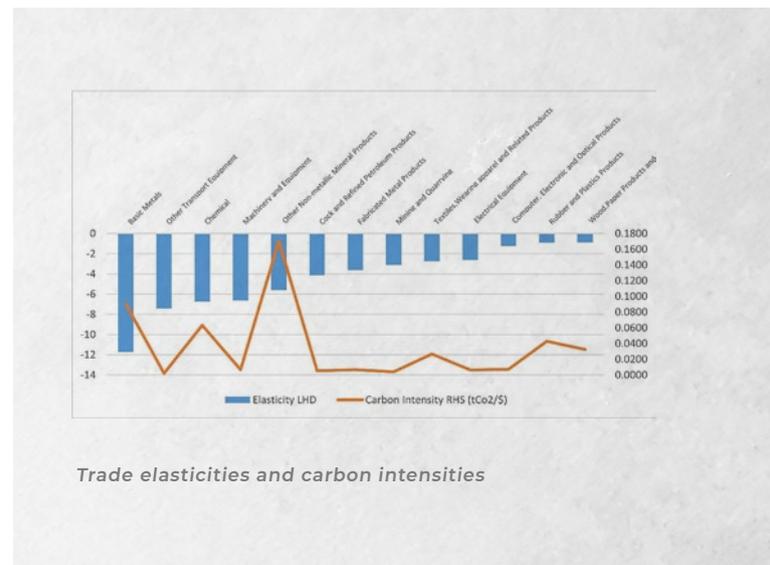
patterns of change in consumers' attitudes towards clothing (e.g., minimalism, grateful mindset, conscious mindset, decreased fashion desire, longevity, and style confidence), which reveal the potential for a lasting shift towards more sustainable consumption patterns. The results of this study highlight valuable managerial implications that the industry needs to respond to this shift in consumers' attitudes and move towards more sustainable business models and processes. These results are also relevant for predicting future consumption patterns, especially considering that pandemics may become a more regular part of life.

Research Showcase

Zhao, Bei, and Masaru Yarime. “The Impacts of Carbon Tariffs on International Trade Flows and Carbon Emissions: An Analysis Integrating Trade Elasticities With an Application to US-China trade.”

Energy Economics 115 (2022): 106337.

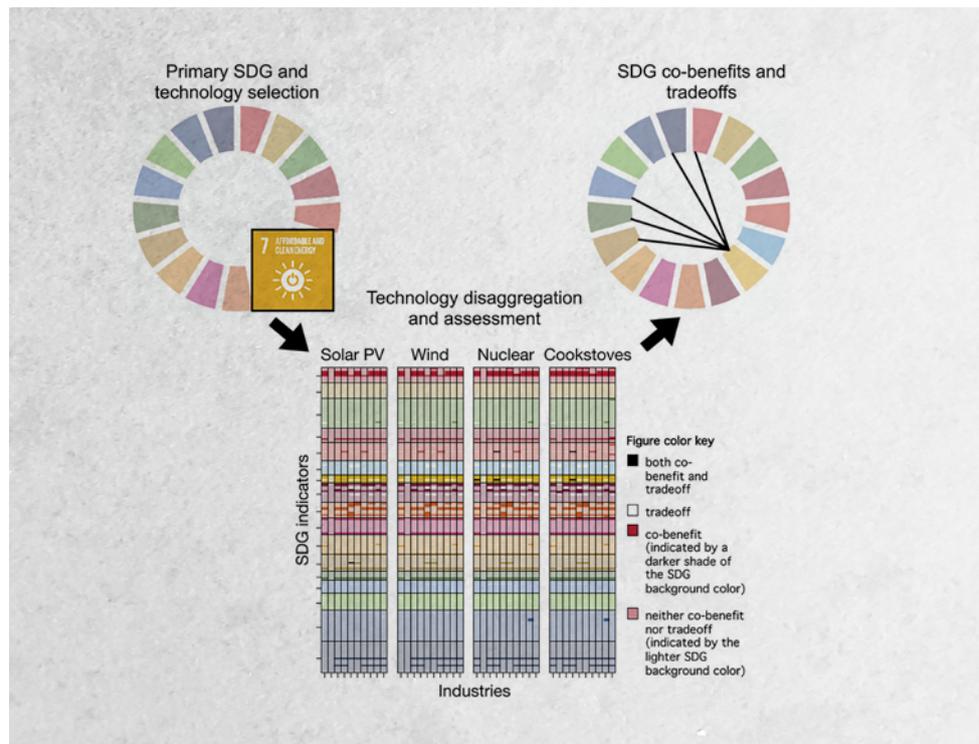
This paper aims at reducing the gap between trade economics and environment studies by integrating trade elasticities into the analysis of carbon tariffs' impacts on trade flows and carbon emissions embodied in exports. We start by adopting the gravity trade model and constructing a panel data set of 63 countries from 2005 to 2015 to calculate the trade elasticities across 13 industries. With a simple model that translates carbon tariffs into tariffs, the cross-country and cross-industry impacts of carbon tariffs were evaluated. A model to forecast the effect of carbon tariffs on China-US trade under different scenarios is also provided. It was discovered that industries' trade elasticities and carbon



intensities play an essential role in determining carbon tariffs' impacts. It is also shown that the threshold carbon tariffs for the 13 industries with an average of \$42/tCO₂. It is found that if the U.S. stopped importing from China by replacing all Chinese exports with its domestic productions, it would emit 88.8% fewer carbon emissions than China does, which would contribute to a 0.65% decrease in world carbon emissions. Other scenarios of replacing all Chinese exports with Canadian, Japanese, or Mexican exports show similar results. This paper illuminates the critical importance of incorporating trade elasticities when designing carbon tariffs.

Klemun, M. M., Ojanperä, S., & Schweikert, A. (2023). Toward Evaluating the Effect of Technology Choices on Linkages between Sustainable Development Goals.

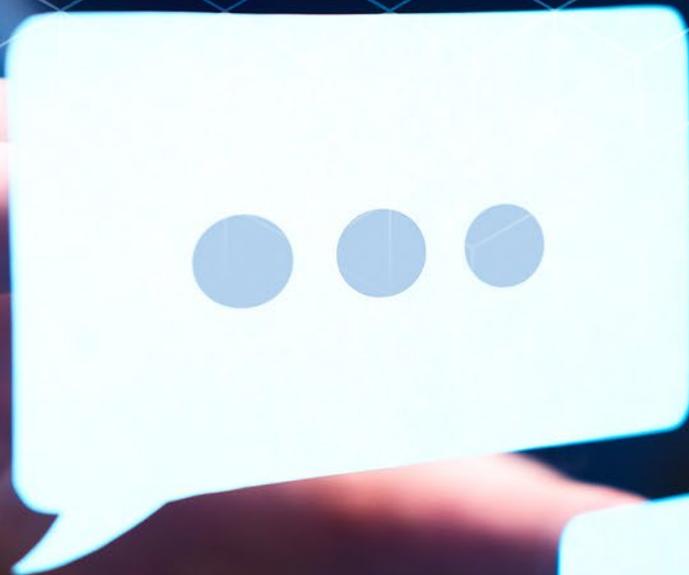
iScience, 26(2), 105727.



Linkages between the Sustainable Development Goals (SDGs) have sparked research interest because a better understanding of SDG co-benefits may enable faster progress on multiple sustainability fronts. However, SDG linkages are typically analyzed without considering the technologies used to implement a primary SDG, which may have secondary effects on other SDGs. Here, we outline an approach to study this problem by connecting the industries and services required to produce technology to the United Nations SDG indicator framework,

using SDG7 and four energy technologies as an illustrative case. We find that all technologies in our set involve potential co-benefits with SDGs 1, 8–10, 12–13, and 17, and trade-offs with SDGs 6, 8–9, 11–12, and 14–15. Deployment services primarily induce co-benefits; manufacturing has mixed impacts. Our work sheds light on the technology characteristics (e.g., scale, high- or low-tech) that influence linkages while also pointing to SDG-relevant characteristics not captured by UN indicators.

Public Policy Dialogue Series



Development vs. Environment: An Irreconcilable Dilemma?

The Public Policy Dialogue Series on 3 December 2022 invited Professor Anthony Cheung, Professor Tak-lok Lui, and Professor Christine Loh to share their views and insights from different angles on the topic of “Development vs. Environment-An Irreconcilable Dilemma?” and gave constructive suggestions for policy making regarding land use, sustainable development, and urban planning.



“It is strange to let “development vs. environment” continue as a non-death discourse, he argued that it should not be an either/or question.”

It was raised by Prof. Cheung that development without damaging the resources of the environment exists only in an ideal sense, but in reality, there are a lot of conflicts involved because of diverse interests, priorities, and power politics, taking the 17 United Nations Sustainable Development Goals as an example, Prof. Cheung pointed out that some of the Goals may be conflicting each other during implementation while taking environmental protection and country park conservation into consideration in land use and urban planning fulfills the goal of sustainability, the current situation of having only 7% of Hong Kong’s land for residential development resulting in inadequate living is not sustainable. He further pointed out that the present land use may not be entirely fair and efficient and that land use is a political issue. Then, Prof. Cheung touched on some myths about urban development in Hong Kong, for instance, it is commonly believed that reclamation is not necessary, and idle brownfield and private agricultural land can be used for housing, the reality is clearance of brownfield and agricultural lands also take time, and reclamation is unavoidable. 2nd, the small-house policy in the New Territories is blamed for land shortage, the reality is the application for small-house land use is confined to Village Environments & Village Type Development and is not suitable for large-scale residential development. He also questioned the notion that “Fanling Golf Club cannot be touched”. Drawing on Singapore’s Garden City story, Prof. Cheung suggested that authoritarian environmentalism still needs to face a lot of trade-offs and dilemmas. Looking forward to the Northern Metropolis that will

Public Policy Dialogue Series

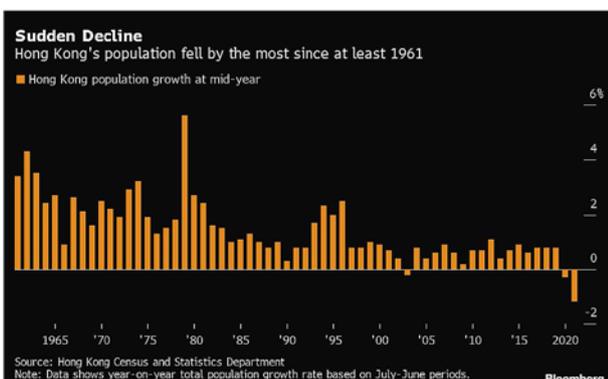
eventually accommodate 2.5 million residents and create 650,000 jobs, Prof. Cheung remarked it will be a big test case considering ecological conservation and urban development.

Prof. Lui approached the topic from a different angle. He pointed out that sustainability can no longer be seen as a matter of secondary importance, and that it is strange to let “development vs. environment” continue as a non-death discourse, he argued that it should not be an either/or question, our impacts on the environment cannot be contained by technology, or left to our neighboring regions/countries – the negative outcomes will come back and hit us, but he admitted that the reality is this discourse still serves as a policy strawman pushing us to make a choice. Instead, Prof. Lui suggested the discussion should move to the next level, such as accessibility and effectiveness of regulations and measures to embed sustainability in all planning and development matters. From Prof. Lui’s point of view, Northern Metropolis can serve as a test case in a way that prohibition of cutting corner behavior (e.g. dumping inconvenient facilities in spaces of “lower opportunity cost”, there should be short-term tacit measures to compromise longer-term development. He concluded that there will inevitably be debates and



disagreements and there is no perfect planning but a planning mindset should be adopted instead of dwelling on the “development vs. environment” argument.

Fusing the former two speakers, Prof. Loh compared the case in Singapore and Hong Kong, such as Singapore has 25% of its land reclaimed, while Hong Kong has only 6%, Hong Kong has its unique landscape of having extreme density, large elevated green areas, and extreme engineering on





slopes, that the policymakers should give a second thought on which areas should be protected vs. which are developed when concerning the country park land. She also touched on the issue of small houses, the gold course controversy, and the quantity-led vs quality-led issue regarding Northern Metropolis Development Strategy. Taking that Hong Kong's population growth fell and even became negative since 2020, and Shenzhen's GDP has become more or less the same as Hong Kong's, Prof. Loh recommended Hong Kong policymakers

rescale the perspective by not just looking at Hong Kong as a small unit but by imagining other possibilities and scenarios that Hong Kong can embrace through regional collaboration in the Greater Bay Area, such as learning from the solutions of Singapore and Shanghai to move their container ports further outward.

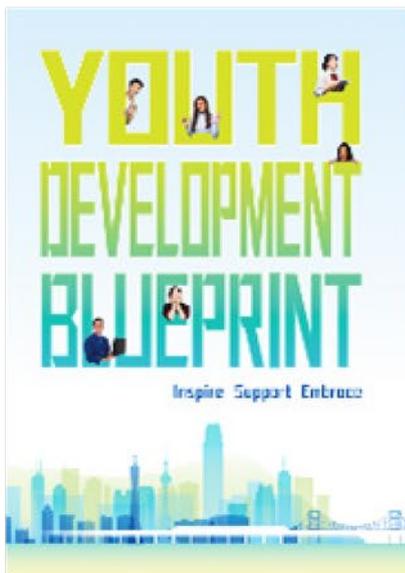
In the final section, all speakers agreed that the planning parameters in the future should not be confined to Hong Kong but Hong Kong within the Greater Bay Area region. The government should also consider other factors while planning. Still, due to One Country, Two Systems, policymakers should not assume Hong Kong would be entirely the same as the mainland in terms of mobility, the flow of people, and institutional arrangements. Nevertheless, the new parameters would give us a new way of thinking.



Public Policy Dialogue Series

Giving Hope to Young People: What Matters and How?

The Public Policy Dialogue Series on 7 January 2023, jointly organized by the Department of Asian and Policy Studies, the Academy of Hong Kong Studies in the Education University of Hong Kong, and the Division of Public Policy at the Hong Kong University of Science and Technology, invited Prof. Anthony B.L. CHEUNG, Prof. Tai-lok LUI, and Mr. Brian WONG to discuss whether the Hong Kong government's initiative on boosting the morale of Hong Kong youth is a promising policy.



“

The structural problems Hong Kong confronts today are numerous that include foundational stagnation, growing socioeconomic inequalities, and deep uncertainty over the political future as a city.

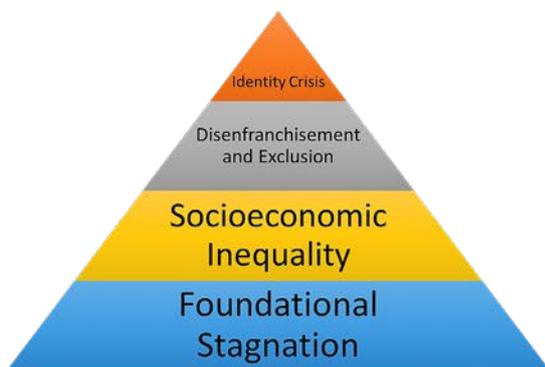
”

Prof. Cheung started the topic “Giving Hope to Young People: What Matters and How?” by quoting President Xi Jinping in his major address on the HKSAR’s 25th Anniversary “We must pay special attention to and care for young people. Hong Kong will prosper only when its young people thrive!” and the Hong Kong Government’s good intention to “provide young people with an enabling environment to cherish hope for the future, to strive for continuous growth, so that they can unleash their full potential in society and contribute to Hong Kong, the country and the world.” In the Youth Development Blueprint, Prof. Cheung pointed out that to address youth issues well, we should first understand youth issues well. Recalling how radical youth in 2019’s extradition protest forced the government’s hand and 40% of the arrested were students (with 20% of the arrested below the age of 18), Prof. Cheung remarked the youth of Hong Kong belong to “3D” generation, i.e. dispossessed, disenfranchised, disillusioned, the reality we are facing is a generation of youth torn between idealism and fatalism, that is having a great passion for Hong Kong, but pessimistic about the city’s future, acknowledging that the youth in Hong Kong care not only about material achievement and success in terms of study, employment, entrepreneurship, and home ownership, but they also have a vision in building a fair and progressive society that they can be proud of. By referring to Herzberg’s Two Factor Theory, Prof. Cheung elaborated that the youth need not just hygiene factors in material terms, but also need motivating factors in the forms of a sense of self-worth and self-actualization.



Prof. Lui then looked at the issue from an education perspective, pinpointing the value system and definition of “success” that has shaped the youth’s self-worth, irrationally thinking that getting a university degree is a must while rationally recognizing that a university degree is indeed a way to secure higher return in the long run make the youth and their parents stuck in a mono-track. He remarked that the topic is a tall agenda covering a lot of areas that we are not ready to go into.

Mr. Brian suggested that the fundamental problem that Hong Kong is its agency that the youth cannot get access to and have their voice heard. The structural problems Hong Kong confronts today are numerous that include foundational stagnation, growing socioeconomic inequalities, and deep uncertainty over the political future as a city. Despite the closer integration



with the mainland, the actual sense of proximity and closeness with the mainland has not increased over the past decade. There remains a deep-rooted sense of skepticism and weariness of the mainland, even though it is our country and we are



part of China. He presented a pyramid that can capture the problems and challenges that the youth face today, and outline some prospective solutions as to what could be done.

During the discussion session of this public policy dialogue series, the speakers addressed concerns and questions raised by different age groups of the audience and represented different prospects of the issues related to youth in Hong Kong, ranging from education to employment and development space of youth in an increasingly divisive complex society.



News and Events

PPOL Hosts the Data for Policy 2022 Conference in Hong Kong

Hosted by PPOL, Data for Policy 2022 Conference Asia-Pacific was a great success, with more than 100 participants joining in-person and online.

This year the Data for Policy Conference were organized in three locations - Hong Kong, Seattle, and Brussels - in close collaboration with University College London, The Alan Turing Institute, University of Cambridge, New York University, University of Washington, Bill and Melinda Gates Foundation, Lisbon Council, European Commission, OECD, and HKUST. PPOL hosted the first conference on Monday, 5 December, at HKUST's Jockey Club Institute for Advanced Study Lecture Theatre. The theme of this year's conference was "Ecosystems of Innovation and Virtual-Physical Interactions." In the opening remarks, Professor Masaru Yarime, Chair of the Asia-Pacific conference, highlighted the overall trend and challenges related to data and policy, and Professor Naubahar Sharif, Acting Head of the Division of Public Policy, addressed the challenges and barriers faced by policy-makers due to political, socio-economic and legislative constraints. The keynote speech by Professor Noboru Koshizuka from the University of Tokyo provided stimulating insights into the democratization of



data-driven innovation, decreasing cost in data access, data security across the border and the implementation of data-sharing platforms to establish autonomous distributed societies. Distinguished researchers, experts, and scholars participated in the conference from local and international leading universities and research institutes, including HKUST, CityU, CUHK, University of Tokyo, Seoul National University, Georgia Institute of Technology, University College London, Nanyang Technological University, University of Melbourne, Tsinghua University, Indian Institute of Technology Delhi, Xi'an Jiaotong-Liverpool University, Research Institute of Innovative Technology for

News and Events



the Earth, and United Nations University Institute in Macau. Innovative ideas were introduced, and diverse perspectives were exchanged on a wide range of issues in two plenary sessions and four presentation sessions. Among the topics discussed at the conference include smart cities, data governance, artificial intelligence, e-government, public participation, and the use of data for addressing sustainability challenges. Case studies in China, EU, United States, Japan, the Philippines, Russia, Singapore and United Kingdom were

presented to illuminate key opportunities and challenges in data and policy in different institutional environments. The audience both online and onsite actively participated in the discussion and raised thought-provoking questions to explore significant implications for public policy in the future. Some of the papers presented at the conference are expected to be included in a special collection of articles in the journal *Data & Policy* published by Cambridge University Press.



PPOL Co-hosts the Climate Adaptation and Resilience Conference (CARE 2022)

The Division of Public Policy is delighted to be a part of hosting the CARE conference with the Institute for the Environment, the Division of Environment and Sustainability, the Business School, the Center for Slope Safety, and the Department of Civil and Environmental Engineering.

Climate Adaptation and Resilience Conference (CARE2022) was a three-day climate and policy feast held at HKUST from 10 to 12 December 2022. Senior government officers, business representatives, industry leaders, investors, and academics were invited to talk about adaptation and resilience planning for climate change in Hong Kong.

Day 1 was Science and Policy Day, kick-started with a welcome speech by Prof.

GUO Yike, the Provost of HKUST. It was followed by a quick update on climate science by two authoritative experts, Prof. Petteri TAALAS, the Secretary-General of the World Meteorological Organization (WMO), and Prof. Panmao ZHAI, the Co-chair, Working Group I, Intergovernmental Panel on Climate change (IPCC). Head and directors from nine governmental bureaus and departments, including Hong Kong Observatory, the Environment and Ecology Bureau, the Development Bureau, the Civil Engineering and Development Department, the Drainage Services Department, the Agriculture, Fisheries, and Conservation Department, Architectural Services Department, the Water Supplies Department, the Housing Department, presented the Hong Kong government's efforts on climate adaptation policies, plans, and projects. The presentation from the government officials set the stage for in-depth deliberations for the two concurrent afternoon workshops.



News and Events



Workshop A combined a range of climate change policies, adaptation, mitigation, risk, and finance issues that are infrequently discussed and are closely related. It focused on decarbonization and adaptation into account in the government's major development plan. In Workshop B, urban planning, academic, healthcare, and community service experts shared how to prepare and counteract the significant impact of extreme weather, such as urban heat island issues and extreme heat and uncharted waters in the future.

Day 2 was the academic day focused on excess water challenges, forestry, heat stress, infrastructure, and health issues. Academics from Tsinghua University, HKUST, HKU, and CUHK, participated in discussions on important aspects of adaptation and resilience. Mr. Ye PAN, an MPhil student of PPOL, presented his work titled "City-level & international collaborative projects for climate

adaptation in China" in the "Forestry, Heat Stress, Infrastructure, and Health" session. Since there is an urgent need to improve urban resilience worldwide, particularly in China, he used a qualitative database method to study China's international collaborative projects on climate change adaptation.

Day 3 was a half-day Policy and Green Finance Forum that invited government representatives, business and finance leaders, investors, and scholars to deliberate on climate policy, risk management, talent, and finance for adaptation.



Student Activities

Master of Public Policy (MPP) Career Development Workshop

Our program regularly organizes career development workshops for our MPP students to cultivate their interests and better equip themselves for future career planning.



MPP Student Advisory Program

Each admitted MPP student would be assigned to one advisory group. The advisors would organize activities, and give students information and advice about educational issues, career planning, or personal development.

Master of Public Management (MPM) star-of-semester Dinner

MPM start-of-semester dinner was held on 10 Feb 2023 to welcome everyone back to school. Faculty and students had a great time getting together:



MPP student Sharing



CHEN Shou Chien

MPP Class of 2024
Bachelor of Management (2022)
University of Guelph

“The diverse two year MPP program with a comprehensive and rich curriculum has expanded my horizon in tackling global challenges from multiple perspectives. PAE in the second year is the cumulative highlight when I can apply all the professional skills and tools I have learnt in helping clients solve problems effectively, ranging from communication, information processing to policy analysis skills I believe the program setting will benefit me in adapting to the employment environment ahead, and improving my competitiveness as well.”



GIAM Li Ying Hillary

MPP Class of 2024
Bachelor of Social Science in Political Science (2021)
Singapore Management University

“The rigorous MPP curriculum has equipped me with relevant skillsets and knowledge to better approach policy problems in an increasingly volatile, uncertain, complex, and ambiguous landscape. The interdisciplinary nature of coursework has also enabled me to explore different policy fields in great depth and pushed me to evaluate policy development through a critical and constructive lens.”



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