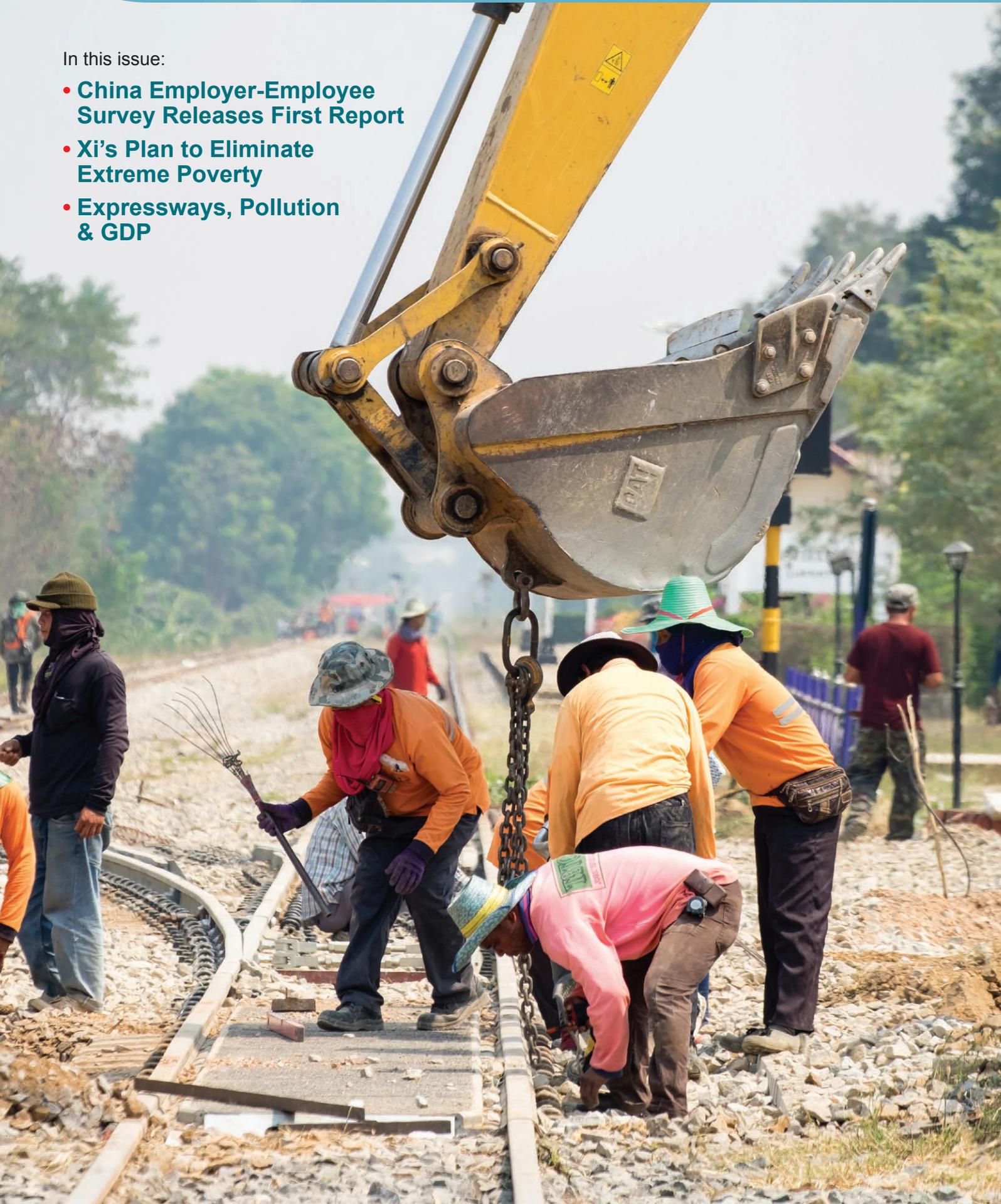




In this issue:

- **China Employer-Employee Survey Releases First Report**
- **Xi's Plan to Eliminate Extreme Poverty**
- **Expressways, Pollution & GDP**



DIRECTOR'S MESSAGE



In the second half of 2017, HKUST IEMS organized a full schedule of academic seminars and policy talks, and published five new Thought Leadership Briefs covering a range of important topics including: the effect of corporate

taxes on innovation, issues facing the financing of China's Belt and Road initiative, China's national expressways and the environment, FinTech in China and social mobility change for young consumers.

A highlight of the fall semester was the first report from the "China Employer-Employee Survey (CEES)" which revealed the challenges facing Chinese manufacturers and workers, and provided recommendations for policy makers and business leaders to "truly understand what drives and hinders the growth of China from ground up, so that they can make better evidence-based decisions." The survey, jointly initiated by researchers from Hong Kong University of Science and Technology, Stanford University, Wuhan University, and the Chinese Academy of Social Sciences, is one of the most comprehensive surveys of its type in China and surveyed more than 1200 companies and 11300 employees in the Guangdong and Hubei provinces in 2015 and 2016.

Other IEMS events addressed the balance between development and environmental quality in emerging markets, the effectiveness of poverty reduction strategies in China and Africa, and the challenges and opportunities of private equity investment in emerging markets.

IEMS FACULTY ASSOCIATES IN THE MEDIA

There are a lot of benefits from more immigration in East Asian countries, especially because many of these countries are aging at a very rapid pace, so that they are increasingly facing a scarcity of workers, especially low-skilled younger workers.

Albert Park

Director of IEMS in Forbes India <http://www.forbesindia.com/article/leaderboard/how-does-immigration-affect-global-business/47489/1>

China's ruling Communist Party approved a revised charter that enshrined President Xi Jinping's name under its guiding principles, elevating him to a status that eluded his two immediate predecessors. The risk is that there's not as much debate, that people might not be willing to speak out. It really depends on what kind of internal environment Xi creates in policy circles.

David Zweig

IEMS Faculty Associate in NDTV <https://www.ndtv.com/world-news/chinas-communist-party-elevates-xi-jingping-to-status-alongside-mao-1766281>

The number of contract workers serving Chinese state-owned enterprises fell 32,000 last year to 233,000, according to the state-run China International Contractors Association. Continent-wide there seems to be a decrease, due in part because of a downturn in the commodities cycle, it became unsustainable for many Chinese to continue their businesses.

Barry Sautman

IEMS Faculty Associate in the Financial Times <https://www.ft.com/content/7106ab42-80d1-11e7-a4ce-15b2513cb3ff>

More media coverage available at <http://iems.ust.hk/media-coverage>



CHINA EMPLOYER-EMPLOYEE SURVEY RELEASES FIRST REPORT



Time is running out fast for Chinese manufacturers to adapt to an increasingly hostile business environment, as well as for Chinese workers to upskill and keep their jobs in the face of automation and technological advances, a large scale cross-province survey has found. The “China Employer-Employee Survey”, jointly initiated by researchers from Hong Kong University of Science and Technology, Stanford University, Wuhan University, and the Chinese Academy of Social Sciences, is one of the most comprehensive surveys of its type in China. It surveyed more than 1,200 companies and 11,300 employees in the Guangdong and Hubei provinces in 2015 and 2016, in order to study how Chinese firms are coping with business challenges, and the implications for Chinese workers.

“Many people have speculated about how firms and workers are responding to rising labor costs and weakening external demand, but we really didn’t have very detailed data to know for sure what is happening in firms and to workers.” says **Albert Park**, Director of the HKUST Institute for Emerging Market Studies (IEMS), who is one of the founders of the project and chairs the project’s International Advisory Committee. “The survey helps policy makers and business leaders truly understand what drives and hinders the growth of China from ground up, so that they can make better evidence-based decisions.”

The business landscape is unforgiving - around 15.8% of firms have exited over the 18-month period prior to the 2015 survey in Guangdong, while nearly one fifth of the firms interviewed in Hubei in 2016 exited during the previous 30-months. Meanwhile, nearly 20% of surveyed firms earned negative profits in 2016, with 26% of state-owned enterprises (SOE) making losses, a much higher rate than for private or foreign firms.

It has been widely reported that labor costs have surged significantly in China, hurting China’s global competitiveness in labor-intensive sectors. The survey found that the Chinese wage level is now nearly the same as in Brazil and significantly greater than in other emerging markets such as Malaysia, Thailand, Mexico, Vietnam and India. Worker turnover is high too, with 26% of workers leaving Guangdong firms in one year (from 2015 to 2016).

In face of the severe challenges, China’s manufacturing sector is

making efforts to adapt. 40% of firms use automation equipment and some (7%) have adopted robots. The proportion of high-skill workers is increasing over time. Investment in R&D is being led by state-owned enterprises, exporters and high-tech firms, which has corresponded with an increasing share of sales driven by new products. Local governments across China provide an array of subsidies, especially via tax breaks, to attract and support businesses, and drive structural changes. More than half the firms reported receiving government subsidies, and these subsidies were larger for more capital intensive firms.

While Chinese workers benefit from a rising wage and better social protection mandated by law, researchers caution that they may eventually feel the pain from the struggles of the firms. The survey found that firms reduced employment of frontline production workers by 6.2% from 2014 to 2015, while employment of skilled workers has been stable. Globalization has actually reduced the demand for abstract (routine) job tasks in foreign firms and exporting firms, consistent with insourcing of routine jobs from more developed countries. But routine tasks are likely to be increasingly replaced by automation.

“The response to the ever challenging business environment is far from painless” says Prof Park. “More research is needed to find out if the various measures adopted by the government and firms are on the right track. It is very important to strike a balance between supporting businesses and protecting workers’ welfare.”

The CEES survey is conducted by the Institute for Quality Development Strategy at Wuhan University, with support from provincial governments. It is partially supported by funds from the World Bank awarded to HKUST IEMS, the Hong Kong Research Grants Council’s General Research Fund, the Chinese Academy of Social Sciences, and multiple grants from Chinese government sources.

The full, first report of the China Employer-Employee Survey (CEES) is available at <http://iems.ust.hk/cees>

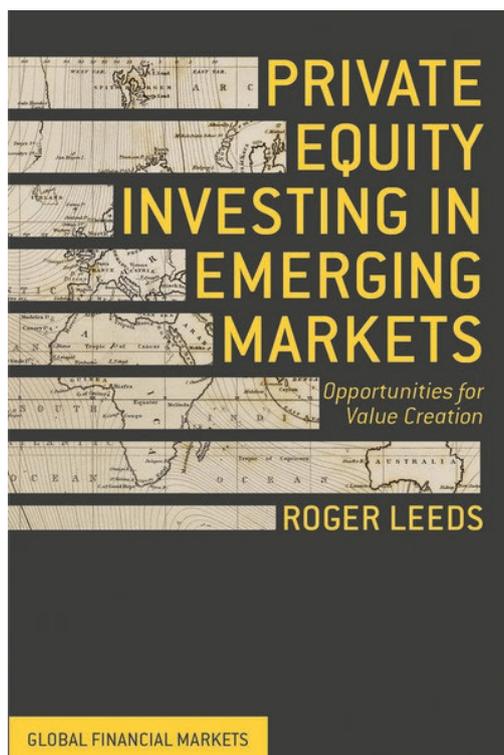


THE PRIVATE EQUITY ADVANTAGE

Although the private sector in China now accounts for about 70 percent of economic output, many small and mid-size firms persistently underperform relative to their counterparts in developed countries. At an IEMS & IPP -- EY Emerging Market Insights presentation, **Roger Leeds** (Johns Hopkins) drew on his recently published book "Private Equity investing in Emerging Markets" to explain why private equity investors are uniquely qualified to address two of the main causes for this underperformance: (i) Limited or no access to medium and long term capital

on affordable terms that companies require to grow, compete and generate sustained profitability; and (ii) limited specialized business expertise that small and mid-size businesses need as their growth accelerates, placing new, more complex demands on management. He explains why the case for this specialized investment mechanism is even more compelling in developing countries, where alternative sources of capital and business expertise are relatively scarce.

Private equity has a number of specific characteristics that sharply distinguish it from all other sources of capital available to private firms. In contrast to most Western countries, the companies targeted by most private equity investors in developing countries reside in the so-called "missing middle" - a vast universe of under-served, growth-oriented small and mid-size businesses. Leeds outlined a number of reasons as to why private companies consistently underperform in Emerging Markets. Private equity in developing countries bears little resemblance to its counterparts in more advanced countries, where it benefits from a supporting ecosystem which includes: credible public policy environments; confidence inducing legal frameworks; enforcement



of the rule of the law and efficient financial markets that offer firms affordable access to diverse sources of capital.

It is the absence of these success factors in emerging markets that allow private equity investors to capitalize on these opportunities whilst mitigating the risks. These sharp distinctions in private equity investing between emerging markets and developed countries not only create greater risks for developing countries, they also create greater opportunities for certain types of companies. These

riskier environments have the potential to generate more private equity investment opportunities by capitalizing on inefficiencies and information asymmetries. It is for these reasons that private equity has been growing so rapidly and has seen success in many emerging markets.

'Prof Leeds' talk was part of the HKUST IEMS & IPP - EY Emerging Market Insights Series, and was co-organized by HKUST Institute for Public Policy with support from EY.



Policy and Business Talk, "Private Equity Investing in Emerging Markets: Risk and Opportunities" by Roger Leeds (Johns Hopkins) on 2017.11.28
Video available at <http://iems.ust.hk/eyleeds>



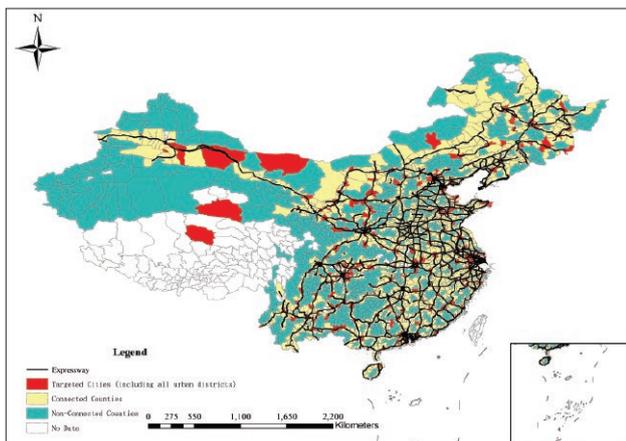
BALANCING DEVELOPMENT AND THE ENVIRONMENT

From the 1980s to 2015, China's national expressway network expanded from being non-existent to more than 111,000 kilometres, becoming the world's largest expressway system by length. Now, more than half of Chinese counties are connected to the system, transforming both less- and more-developed counties. This transformation is not uniform throughout the country, even though the expressway network was originally conceived of and implemented as a unified, economic policy that would benefit all.



In his academic seminar, **Guojun He** (HKUST) argues that blanket policies risk unintended consequences, and it is important to ask not only how such policies affected the country—at both the county and national levels—but also to understand the channels through which it did so. How does an economy rebalance economic production

and environmental preservation when its ability to generate income using environmental resources changes? Theoretically, we predict that an increase in the ability can have heterogeneous impacts on the economy's environmental quality and income. Empirically, we find that the dramatic expansion of China's national expressway system, which arguably enhanced the income-generating abilities of Chinese counties, indeed affects their economic and environmental performances differentially: expressway access increases pollution and GDP in initially poor counties, reduces pollution and GDP in initially rich counties, and reduces pollution while increasing GDP in counties with middling income levels.



In response, policy-makers should tailor their solutions depending on the development level of specific regions. Productivity-enhancing policies can cause different effects in different regions, as they choose different development strategies. The desired emission-income combination may depend on a region's initial income or environmental quality. In this context, a single, unified economic or environmental policy can cause welfare losses. Secondly, not only can redistributive policies tackle income inequality issues in China, but they can also address increasingly political environmental issues by incentivizing regions to reduce

pollution levels. Finally, large infrastructure projects or policies which transfer technology can be used to develop poorer regions faster, thus limiting the environmental impact of development. Otherwise, increases in productivity can degrade environmental quality, at least in the initial stages of economic development.



Meanwhile, **Susmita Dasgupta** (World Bank) presented research on the development and application of location specific biodiversity indicators to identify areas with critical biodiversity in the moist tropical forests of Bolivia, Cameroon and Myanmar. Whilst development and improvement of infrastructure, especially roads, is essential

for rural development, it also leads to destruction of forests and habitats of biodiversity. This is further exacerbated by insufficient information on location specific biodiversity which lends itself to development for economic gain in the face of inadequate information on environmental impact. Dasgupta was able to develop a methodology by which policymakers would be able to assess potential economic gains as well as potential biodiversity loss for infrastructure development or infrastructure improvement.

Dasgupta's findings emphasize that the extent of forest clearing is highly responsive to the distance to the nearest urban market. This responsiveness is lower for primary road links, because their higher average vehicle speeds and lower maintenance costs reduce the effect of distance to market. Using the estimated forest clearing response elasticities and a composite biodiversity indicator, this research computes an index of expected biodiversity loss from upgrading secondary roads to primary road status. The results identify areas in Bolivia, Cameroon and Myanmar where high expected biodiversity losses may warrant additional protection as road upgrading continues. In addition, they provide ecological risk ratings for individual road corridors that can inform environmentally-sensitive infrastructure investment programs.

As road upgrading will inevitably accompany rural development programs in many countries, the methodology developed by Susmita Dasgupta has the potential for more widespread application in all moist tropical forest countries.

Academic Seminar, "Balancing Development and the Environment in a Changing World: Expressways, GDP, and Pollution in China" by Guojun He (HKUST) on 2017.11.25
More information available at <http://iems.ust.hk/guodao>



Academic Seminar, "Minimizing Ecological Damage from Road Improvement in Tropical Forests" co-organized with HKUST Institute for Public Policy (IPP) by Susmita Dasgupta (World Bank) on 2017.11.23
Video available at <http://iems.ust.hk/forests>



DESIGNING A POVERTY REDUCTION STRATEGY - CHINA AND AFRICA'S EXPERIENCES



Photo by Samuel Vigier / Flickr. CC. <https://flic.kr/p/c3ix1b>

China has achieved remarkable progress in poverty reduction since the early 1980s. More than 800 million people living under US\$1.9 a day have been lifted out of poverty and China's contribution to reducing the rate of global poverty exceeded 70 percent. However, with the slowdown of economic growth and increase of income inequality, over time, the accuracy of targeting has deteriorated and the measured impact of the programs on rural income growth has declined. China needs to reform its targeted poverty reduction strategies to enable the poor to benefit more from poverty reduction interventions. In November 2013, President Xi Jinping proposed the strategy of "precision poverty alleviation" during his visit to western Hunan, and the strategy has become a significant part of China's effort to end extreme poverty by 2020. In his academic seminar, **Sangui Wang** (Renmin University of China) summarized the main policies and practices implemented under this strategy in recent years and discussed the progress made and the challenges that this effort faces.

Precision poverty alleviation aims to eradicate extreme poverty of under \$2.3 dollars a day by 2020 by targeting poor households and individuals as opposed to promoting regional development of poverty-stricken areas. Precision poverty alleviation includes accurate identification, assistance, management and assessment through which China has been able to identify 29.48 million poor households with a total population of 89.62 million as targets for poverty alleviation programs in 2013 – a figure that dropped to 43.33 million by the end of 2016. China has seen a dramatic reduction in poverty since the reform which has been in part, a result of fast and sustained economic growth, specifically, agricultural growth. Targeted poverty alleviation efforts have also helped to narrow the gap between different regions and the establishment of a social security system in rural areas since 2007 has accelerated economic and social development of poverty stricken areas in China. However, the high administrative cost and coordination challenges involved in delivering these precision poverty programs has led to over investment in some areas of China which in turn produces negative effects as the poor are no longer incentivized to

work. Additionally, China's unique political system and institutional regimen renders these precision poverty programs difficult to duplicate in other developing countries.

In his academic seminar, **Imran Rasul** (University College London) presented research on the role of delivery agents in the delivery of poverty alleviation programs in Western Uganda. The study identifies the delivery agent's social ties to potential recipients and the social context in which they operate as the key determinants of their behavior.

Many development organizations use delivery agents to allocate scarce resources across recipients. These agents often have social ties to some recipients and not others, which can lead to biased allocations. Rasul studies these issues in the context of an anti-poverty program in Western Uganda. A total of 4,741 farmers from 168 villages were surveyed with regards to their knowledge and adoption of improved seeds and modern techniques. BRAC (an NGO), offers a program delivered by locally recruited agents tasked to sell improved seeds to farmers and train poor farmers in modern techniques.

The study found that delivery agents were significantly more likely to target households to which they are socially tied than those in rival groups, a distinction exacerbated in villages where inter-group conflict is most salient.

The study also found that greater conflict between groups can enhance targeting within groups by delivery agents (parochial altruism). Such behaviors will potentially skew the allocation of the program and therefore, need to be taken into account when designing programs, recruiting delivery agents and incentivizing agents. Development programs that use locally hired agents need to account for the network structure of the agents they employ. This network structure not only includes their social ties and connections to their "in-group", but also the groups they are not connected to.

Academic Seminar, "Accurate Household Targeting: China's New Anti-Poverty Strategy" by Sangui Wang (Renmin University of China) on 2017.09.27
Video and slides available at <http://iems.ust.hk/targeting>



Academic Seminar, "Delivery Agents, Social Ties and Group Identity" Imran Rasul (University College London) on 2017.09.27
More information available at <http://iems.ust.hk/rasul>



20 CHALLENGES FOR INNOVATION POLICY STUDIES

Now that the field of innovation studies is fifty years old, the occasion has been marked by several studies looking back to identify the main advances made over its lifetime. In his academic seminar, **Ben Martin** (University of Sussex) looked at a list of 20 advances over the field's history, which include a move from the notion of individual entrepreneurs to corporate innovation activities and a shift from laissez faire to government intervention. Martin then set out 20 challenges for the coming decade. This intention was not to issue a prescriptive list, but rather, to prompt a debate within the innovation studies community on what are, or should be, the key challenges to take up, and more generally on what sort of field the community aspires to become.

He argued that the focus of empirical studies has failed to keep pace with the fast changing world and economy, especially the shift from manufacturing to services and the increasingly urgent need for sustainability rather than just economic growth, as well as the need for innovations that diminish rather than exacerbate inequality. Moreover, the very way that researchers conceptualise, define, operationalise and analyse 'innovation' may be too rooted in the past, leaving them less able to grapple with other less visible or 'dark' forms of innovation be it in the area of services or in organizational or non-technological forms. Martin argued that indicators used to measure traditional forms of innovation are now missing much of the innovative activity that occurs not in the form of manufactured product innovations, involve little formal R&D, are not patented and involve a more

incremental process than radical. The tendency to prefer measurable and traditional forms of innovation has also led to a neglect of financial innovations which has the potential to contribute to the latest economic crisis, the growing polarity between rich and

poor and the potential to shift and restructure economics to a new paradigm. In spite of significant poverty reduction achievements in China and in other emerging markets, Martin cited billions that are yet to benefit from economic and innovation development. This poses a challenge for the innovation studies community to develop the conceptual, methodological and analytical tools to study the shift to innovation for sustainable development through appropriate policies.



Academic Seminar, "20 Challenges for Innovation Policy Studies" by Ben Martin (University of Sussex) on 2017.10.12
Video available at <http://iems.ust.hk/martin>



FINANCIAL INCLUSION AND OUTPUT VOLATILITY



Achieving greater financial inclusion is a key policy priority for many emerging markets, but output volatility is also a central concern for policymakers specifically to insulate the economy from

shocks or to smooth fluctuations, which in turn could adversely affect the most vulnerable in society. If financial inclusion policies can affect output volatility, how do we reconcile the two, and what do policy makers have to consider when thinking about financial inclusion?

In his IEMS Academic Seminar, **Sasidaran Gopalan** (Lee Kuan Yew School of Public Policy, National University of Singapore) explored the extent to which financial inclusion mitigates or amplifies macroeconomic volatility using data from 1995-2013 of 103 emerging markets and developing economies (EMDEs) at different levels of economic development.

Financial sector development has been established as important for economic growth and as is the case with most macro-development issues, heterogeneity must be factored in. Gopalan emphasizes that the link between financial sector

development and subsequent economic growth operates very differently across regions, countries and levels of income, suggesting that the relationship between financial inclusion and output volatility is non-linear.

Gopalan's research reveals that financial inclusion amplifies output volatility in a consistent fashion. His research demonstrates that financial inclusion is positive and highly statistically and economically significant. Whilst there was no significant interaction between financial inclusion and a more stable banking system on output volatility, results showed that higher financial inclusion amplified output volatility only in the lower and lower-middle income countries. The impact of financial inclusion remains statistically insignificant in the upper middle/high income countries.

Financial inclusion must be undertaken in the presence of strong prudential regulatory frameworks, where the banking system is stable and not too fragmented, failing which volatility will be much greater.

Academic Seminar, "Financial Inclusion and Output Volatility: An Empirical Investigation" by Sasidaran Gopalan (Lee Kuan Yew School of Public Policy, National University of Singapore) on 2017.10.27
Video available at <http://iems.ust.hk/gopalan>



Thought Leadership Briefs

Between July and December 2017, the Institute published 5 Thought Leadership Briefs covering a wide range of topics and offer policy recommendations. The Briefs aim to disseminate research results effectively to business leaders, policy makers, the media and the public. Read the Briefs at <http://iems.ust.hk/tlb>

Issue #	Topic	Author(s)
16	Do Corporate Taxes Hinder Innovation?	Abhiroop Mukherjee (ECON) and Alminas Zaldokas (FINA)
17	China Cannot Finance the Belt and Road Alone	Alicia Garcia-Herrero (ECON)
18	Expressways in China: Impacts on Growth and the Environment	Guojun He (ECON, ENVR, PPOL)
19	Understanding the Globally-Mobile, Young Consumers from the Emerging Markets	Wei-fen Chen (IEMS)
20	FinTech and Financial Inclusion in China	Kellee Tsai (SOSC)

Executive Education Program on the Belt and Road

Designed for senior executives and professions in the government, non-profit and the private sector, "Opportunities from the Belt and Road" was an Executive Education Program co-organized with HKUST Leadership and Public Policy Executive Education (LAPP). It consisted of a series of interconnected and interactive seminars and aimed to provide participants with an up-to-date picture of how the Initiative is being implemented in countries around the world. It explored a range of topics including: impacts on trade and investment as well as internationalization of the renminbi, potential opportunities for Hong Kong businesses, and the roles that government and other stakeholders can play to take advantage of these opportunities.

The program featured world-class faculty from HKUST who are part of a strategic public policy research project on "Trade and Investment under One Belt One Road and Implications for Hong Kong" being undertaken by HKUST's Institute for Emerging Market Studies with support from Hong Kong's Central Policy Unit. Instructors also included prominent business leaders such as Dr. Victor Fung (Group Chairman, Fung Group), David Chao (First Vice President, Foreign Direct Investment (FDI) Advisory, United Overseas Bank Limited) and Nicholas Kwan (Director of Research, The Hong Kong Trade Development Council).

