



IN THIS ISSUE

Dear Colleagues and Friends,

Happy New Year!

It has been one year since the first issue of the TMCD Newsletter was sent and we have received good praise for it. We have found the TMCD Newsletter to be a good way to connect with old and new friends. Our newsletter has been a relevant tool to communicate our research findings, our activities and our future plans with academic and non-academic communities.

In the past year we worked very hard and we have had a list of very interesting events. Amongst them was the 6th Academy of Innovation and Entrepreneurship Annual (AIE) Conference, which we hosted in Oxford. We are very proud that the University of Oxford Vice-Chancellor, Prof Andrew Hamilton, gave the Keynote Speech at the Best Paper Awards Ceremony. This year's AIE Conference will take place in Xining, China, on 5-7 September. I look forward to meet many of you there.

In January, we have started the European Commission funded FP7 'MNEmerge Project'. In February, we will welcome Mr Yong LI, UNIDO Director General, to give the TMCD Distinguished Guest Lecture on 13 February.

Finally, we have designed a new logo for TMCD which represents evolution and progress.

Keep in touch with TMCD!

Xiaolan



TMCD Research

Learn more about the TMCD new funding awards and on-going research projects in pages 2-4.



TMCD Centre News

Read the news of the AIE Conference in page 6.



TMCD Publications & Events

TMCD & ODID Distinguished Guest Lecture with Mr Yong LI, UNIDO Director General on 13 February – see page 7.



TMCD Research Projects

European Commission FP7 € 2.5m Award to MNEmerge Project on MNEs and Development

The European Commission Framework Programme 7 (FP7) funded Euro 2.5 million project on MNEs and development, 'MNEmerge' ticks off in January 2014. This project aims to examine the role of multinational enterprises in global development, especially in achieving the Millennium Development Goals (MDGs). In particular, the project focuses on the impact of MNEs on local capabilities building and poverty alleviation, sanitation and health, renewable energy and sustainable development as well as global partnership through three case studies in Ghana, India and Brazil. A comparative study of the impact of Chinese versus OECD MNEs in Africa will be the research focus of the Oxford team, led by Prof Xiaolan Fu. The other partners in the consortium include Lappeenranta University of Technology, Kings College London, Brunel University, UNU-MERIT and the University of Turku as well as three institutions from Ghana, India and Brazil. LUT in Finland is the leading institution in coordinating the project.



John Fell Fund Sponsored Project on Mobile Technologies and Health



Our Fell funded pilot project is well underway and new proposals are already in the pipeline to extend the research. Having conducted preliminary analyses on household surveys relating mobile phone ownership and healthcare utilisation, we launched upon our qualitative fieldwork in Rajasthan, India and Gansu, China. The qualitative component, currently underway, is informing our understanding regarding the dynamics of mobile phone utilisation behaviours among rural residents as well as their healthcare needs. This will then facilitate the development of a household survey to more clearly discern how mobile phone utilisation behaviours affect access to healthcare among rural residents in Rajasthan and Gansu. The subsequent phase of the project will entail the development of mobile phone application(s) and an evaluation of the impact of the intervention on access to healthcare. Our multi-disciplinary team for this project includes Proochista Ariana (NDPH and TMCD), Marco Haenssger (TMCD), Xiaolan Fu (TMCD) Gari Clifford (Biomedical Engineering) and Felix Reed-Tsochas (SBS).

Latest Progress: ESRC/DFID Funded Project on the Diffusion of Innovation in Low Income Countries (DILIC)

The DILIC project aims to investigate the determinants and transmission channels for effective innovation creation, diffusion and adoption in low-income countries, where institutional, resource and affordability constraints are predominant. A major objective of the project is to collect comprehensive and updated data on innovation activities in Ghana. A critical milestone was achieved in January 2014, when the DILIC Ghana Innovation Survey was successfully completed. A total of 500 manufacturing firms have been surveyed throughout the country and their innovations activities recorded. The data collection was managed by the Science and Technology Policy Research Institute (CSIR-STEPRI), DILIC's partner on the field. The data collected will shed light on the critical role of innovation in the development of firms in low-income countries and on how innovations spread. Preliminary findings from the data will be published in the coming months.



British Academy Award on The Role of Internationalisation on Technological Capability-Upgrading in Developing Countries

The Role of Internationalisation on Technological Capability-Upgrading in Developing Countries Project explores how enterprises' internationalisation influences technological capacities in developing countries. Over the last few months, significant progress has been made in this project. Firstly, the research team explored the relationship between capability accumulation and firms' growth path based on a case study of Lenovo, a leading IT company in China. The research team sought to answer the question on how Lenovo achieved a prominent success in less than three decades. This study aims to enhance the understanding of the path of internationalisation, entrepreneurship and capability upgrading of Chinese multinational firms. Multiple case studies were also conducted with Huawei UK and ZTE UK to explore the paths of Chinese firms entering European and African markets and their technology upgrading mechanisms. This research attempts to analyse these companies' paths to market expansion and enterprises capability upgrading during their internationalisation process. The research identified two mechanisms of how technology is transferred within multinational corporations and how customers' interests promote innovations. Findings from the research are examined in two working papers on 'External technology base, absorptive capability and innovation performance of technological acquisition among Chinese firms' and on 'Sequence patterns of firms' M&As and Collaboration and innovation performance'.



TMCD Research Findings

Multi-dimensional Complementarities and the Growth Impact of Direct Investment from China on Host Countries by *Xiaolan Fu and Peter Buckley*

This paper examines the growth impact of developing country outward direct investment (OFDI) on economic growth in host developing countries using a cross country panel dataset of Chinese OFDI over the 2003-2010 period. It finds that the net growth effect of Chinese OFDI is determined by the multi-dimensional complementarities between the particular FDI flow, which is home country-specific, and the host economies. Although overall Chinese OFDI appears to have a positive and significant impact on the long-run economic growth of host economies, there are variations across countries in different geographical regions and with different natural resource endowments.

Source: Fu, X. and Buckley, P. (2013) 'Multi-dimensional Complementarities and the Growth Impact of Direct Investment from China on Host Countries', Paper presented at the 2013 Academy of International Business annual conference, Istanbul.

Complementarity between in-house R&D and technology purchasing: evidence from Chinese manufacturing firms by *Jun Hou and Pierre Mohnen*

In order to catch up with the current technological frontier, firms, especially in developing countries, try to acquire technological advancement through internal R&D efforts, as well as through external technology-sourcing activities. This study tests whether these two sources of technology acquisition are complements or substitutes for each other in small- and medium-sized Chinese manufacturing firms. The evidence that we present shows some signs of complementarity between the two sources of knowledge in reaching a higher unconditional intensity of product innovation for firms with 100–300 employees and, in general, a significant degree of substitutability between them in achieving higher levels of labour productivity.

Source: Hou, J. and Mohnen, P. (2013) 'Complementarity between in-house R&D and technology purchasing: evidence from Chinese manufacturing firms', *Oxford Development Studies*, 41 (3): 343-371

Transactions costs, market behaviour, and use of information technologies by Giacomo Zanello, C.S. Srinivasan and B. Shankar

Using a transactions costs framework, we examine the impact of information and communication technologies (mobile phones and radios) use on market participation in developing country agricultural markets using a novel transaction-level data set of Ghanaian farmers. Our analysis of the choice of markets by farmers suggests that market information from a broader range of markets may not always induce farmers to sell in more distant markets; instead farmers may use broader market information to enhance their bargaining power in closer markets. Finally we find weak evidence on the impact of using mobile phones in attracting farm gate buyers.

Source: Zanello, G., Srinivasan, C.S. and Shankar, B. 'Transactions costs, market behaviour, and use of information technologies', *Journal of Development Studies*, forthcoming.

Technology Sourcing Strategies and Innovation: the Substitutability Between M&A's and Collaborations by Xiaolan Fu, Zhongjuan Sun and Jizhen Li

External technology sourcing often involves Merger & Acquisitions (M&As) as well as collaborations with other research institutions or companies. What's the impact of sequence patterns of firms' M&As and collaborations on innovation performance? This question hasn't been studied very well under the strategy perspective, and it is our research objective. Based on fixed-effect Poisson regression and OLS of panel data from the questionnaire survey in high-tech sectors conducted by Ministry of Science and Technology, China (MOST), we found that the collaboration positively affects patent application while its positive affect to new products sale isn't robust. In spite of this, the sequence pattern of 'collaboration after collaboration' has a positive and significant impact to both patent application and new products sale. In addition, the M&As and the sequence pattern of 'M&As after M&As' do not have obvious impacts. Lastly, this paper provides evidence that the sequence patterns of 'M&As after collaboration' in a successive time has a negative impact on innovation performance.

Source: Fu, X., Sun, Z. and Li, J. (2013) 'Technology Sourcing Strategies and Innovation: the Substitutability Between M&A's and Collaborations', Paper presented at the TMCD-SBS Joint Graduate Workshop.

Social Capital, Firms Creation and Cluster Emergence of The Chilean Biomedicine Sector by Carmen Contreras

This paper explores the relevance of social relations for the location decision of firms and the growth of the biomedicine cluster in the metropolitan region of Chile. From the analysis of 27 in-depth interviews and survey responses from different actors in the biomedicine sector, it is possible to reconstruct the main aspects in the establishment of companies, their growth and the creation of relations among organisations within the cluster. Main results highlight the importance of social capital for location decision and financial access during the first stages of companies. This study aims to contribute to a deeper understanding of the role of social relations in the creation of a knowledge-based cluster in a developing country, as well as identify constraints and potential problems for the future growth of the cluster.

Source: Contreras, C. (2013) 'Social Capital, Firms Creation and Cluster Emergence of The Chilean Biomedicine Sector', Paper presented at the 2013 Annual Conference of Academy of Innovation and Entrepreneurship, Oxford.

AIE Conference

The 6th Annual Conference for the Academy of Innovation and Entrepreneurship (AIE 2013) was held in Oxford on 29-30 August 2013. The conference was hosted by TMCD, based at the University of Oxford, and co-organised by NERC and RCTI, both based at Tsinghua University. The main theme for this year's conference was 'Innovation and Entrepreneurship for Inclusive and Sustainable Development'.



The AIE 2013 programme consisted of a wide range of parallel sessions which covered 9 major topics and 44 sub-themes with more than 200 participants sharing their views and giving valuable contributions to academic thinking.

The conference featured prominent speakers from the academic and private sectors and from international organisations. Keynote speakers included **Calestous Juma** (Harvard University), **Luc Soete** (Maastricht University), **Anne Miroux** (UNCTAD), **Yves Doz** (INSEAD), **Augusto Alcorta** (UNIDO), **David Kaplan** (University of Cape Town), **Xiaolan Fu** (Oxford University), and **Rajneesh Narula** (University of Reading).

Dr Tom Hockaday, Managing Director of Isis Innovation, gave the AIE Conference dinner speech at Wadham College on 29 August. **Prof Andrew Hamilton** (Vice-Chancellor, University of Oxford) and **Prof Jian Gao** (Chair of the Department of Innovation, Entrepreneurship and Strategy at Tsinghua SEM) spoke at the **Best Paper Awards Ceremony**. The Best Paper Awards were sponsored by **Isis Innovation** and the **Journal of Entrepreneurship in Emerging Economies**.

Best Paper Awards

- **Innovation:** Mingqian Zhang (Shanghai International Studies University), Pierre Mohnen (UNU-MERIT), 'Innovation and Survival of New Firms in Chinese Manufacturing, 2000-2006'
- **Entrepreneurship:** Wong Poh Kam, Ho Yuen Ping (National University of Singapore), 'An exploratory cross-country analysis of the relationship between new firm entry and income inequality'



Conference Resources

Papers presented at the conference are collected in a conference proceeding document which is published online at the [TMCD website](#).

The Plenary Session on [Innovation & Entrepreneurship for Inclusive and Sustainable Development](#), the Plenary Panel Discussion on [The Transformation from Imitation to Innovation in Emerging Economies](#), and the [Best Paper Awards Ceremony](#) videos are available on the [TMCD website](#) and on [YouTube](#). The **Keynote Speakers** presentations can also be accessed on the [TMCD website](#).

AIE Conference 2014

The Call for Papers for the Annual Conference of Academy of Innovation and Entrepreneurship is now open. To learn more about AIE Conference 2014 visit the [AIE website](#).



TMCD in Discussion of Leading an International Research Institute for Innovation in Shenzhen

The governor of Guangdong Province, Zhu Xiaodan, carried out an in-depth consultation with departments of the British government, social organisations, research institutes, universities and multinational corporations during his visit to the UK from 26-28 September. During conversations with delegates from the University of Oxford, Zhu Xiaodan pledged full support for the University of Oxford to establish an International Research Institute of Innovation in Shenzhen. Zhu Xiaodan emphasised that the new Institute will encourage more British hi-tech enterprises, advisory bodies and solution providers to collaborate in the increase of green low-carbon development in Guangdong. This measure will also promote a pilot cooperation on carbon capture and storage, carbon trading, energy performance contracting, and other aspects as the popularisation and application of energy saving technology.



Photo: Shenzhen

Prof Xiaolan Fu Awarded High-End Foreign Expert Grant

Prof Xiaolan Fu has been awarded a High-end Foreign Expert grant, based at Tsinghua University, by the State Administration of Foreign Expert Affairs. Prof Fu was also invited as a Visiting Professor at the School of Economics of Fudan University.

Prof Xiaolan Fu elected Editor-in-Chief of JCEBS

Prof Xiaolan Fu was elected as the Editor-in-Chief of the Journal of Chinese Economic and Business Studies (JCEBS) published by Taylor and Francis. JCEBS is the official journal of the Chinese Economic Association (UK).

Prof Xiaolan Fu Speaks at WTO

Professor Xiaolan Fu gave a talk at the WTO 2013 Public Forum on 'Technology and Trade in Low Income Countries, SSAs and Small Vulnerable Economies'. In the panel debate organised by the Commonwealth Secretariat, Prof Fu reviewed the two-way relationship between trade and technology. She highlighted the state of the technology-trade nexus in the LDCs, SSA and SVEs, discussed what realistic prospects there may be for these countries to integrate productively into the global value chain, and what the implications for technology upgrading in these countries are. She also analysed the lessons that LDCs, SSA, and SVEs can learn from other advanced and developing countries such as China and examined the domestic and international policy instruments required to support them.



Photo: WTO Public Forum 2013

TMCD Organises Panel at the DSA Annual Conference

TMCD organised a panel at the Development Studies Association (DSA) Annual Conference on "Innovation and Industrialisation in Low Income Countries". The contributions of the panel provided a different view of innovation in low-income countries from that of innovation in developed countries.

TMCD Researcher Gives Seminar at Oxfam GB

The TMCD Researcher, Giacomo Zanello, gave a lunchtime seminar in Oxfam on the nature and diffusion of innovation in developing countries. The seminar was an opportunity to disseminate results from the DILIC project and to learn about Oxfam's experience on the ground. The seminar focused on demonstrating how firms in low-income countries (LICs) are innovative, how innovation in LICs is widespread in formal and informal businesses, and how it covers several fields. Zanello discussed the nature of innovation in LICs and presented a case study from the private sector in Ghana.



Photo: Giacomo Zanello presenting research findings on firm innovation in LICs

Forthcoming Events



TMCD Distinguished Guest Lecture

with Mr Yong LI,
United Nations
Industrial
Development

Organization (UNIDO) Director General. Mr LI has had an extensive career as a senior economic and financial policymaker. As Vice-Minister of Finance and member of the Monetary Policy Committee of the Central Bank in China, Mr. LI was involved in setting and harmonizing fiscal, monetary and industrial policies, and in supporting sound economic growth in China. He pushed forward financial sector reform, and prompted major financial institutions to establish corporate governance and to strengthen risk management. Mr. LI gave great importance to fiscal and financial measures in favor of agricultural development and SMEs, and the promotion of women empowerment. He played a key role in China's cooperation with multilateral development organizations, such as the World Bank Group and the Asian Development Bank. In the TMCD Distinguished Guest Lecture Mr LI will discuss the "Importance of Industrialization". The lecture will take place on **13 February 2014, 5.00pm at East School, Examination Schools, 81 High Street, Oxford, OX1 4AS.**

TMCD-Saïd Business School Joint Graduate Workshop, 3 February and 3 March 2014 at 09.30am

ICT4D Joint Workshops, weeks 2-8 in Hilary Term 2014

Previous Events

SBS & TMD Centre Joint Graduate Workshop

On 28 October and 22 November 2013 the Saïd Business School and TMCD co-hosted two Joint Graduate Workshops. The workshop on 28 October included presentations from TMCD researchers on 'China NGOs and ICT' by Sam Galler and on 'Productivity black box in developing countries – firm-level evidence from Tunisia' by Ji Eun Choi. On 22 November, Musheer Kamau, Zhongjuan Sun and Jun Hou presented their research on 'Innovation, technical change, and growth in the Caribbean, 'External technology sourcing and innovation' and 'The role of ICT in innovation', respectively.

TMCD Co-Hosts China Policy Forum

TMCD co-hosted the Oxford China Policy Forum with the Oxford Chinese Economy Programme (OXCEP) in St Edmund Hall. At the Forum, Professor Fu spoke of technology and innovation policy at the China Policy Forum. More details about the OXCEP Forum are available [online](#).

Selected Journal and Book Publications

Fu, X. and Zhu, S. (2013) 'Drivers of export upgrading', *World Development*, 2013, 51: 221-233

Fu, X., Xiong, H. and Li, J. 'Open Innovation as a response to constraints and risks', *Asian Economic Paper*, forthcoming

Fu, X. and Buckley, P. 'Multi-dimensional complementarities and the impact of Chinese outward direct investment on host countries', paper presented at the AIE Conference 2013.

Shen and Fu, X. 'The trade effects of US anti-dumping duty on China', *World Economy*, forthcoming.

Gebreeyesus, M. and Mohnen, P. (2013) 'Innovation performance and embeddedness in networks: evidence from the Ethiopian footwear cluster', *World Development*, 41: 302-316

Goedhuys, M., Janz, N. and Mohnen, P. (2013) 'Knowledge-based productivity in 'low-tech' industries: evidence from firms in developing countries', *Industrial and Corporate Change*, forthcoming.

Hou, J. and Mohnen, P. (2013) 'Complementarity between in-house R&D and technology purchasing: evidence from Chinese manufacturing firms', *Oxford Development Studies*, 41 (3): 343-371

Zanello, G. (with Srinivasan, C.S. and Shankar, B.) (2013) 'Rural-urban disparities in child nutrition in Bangladesh and Nepal', *BMC Public Health*, 13: 581

Zanello, G., Srinivasan, C.S. and Shankar, B. 'Transactions costs, market behaviour, and use of information technologies', *Journal of Development Studies*, forthcoming.

Zanello, G., Srinivasan, C.S.
'Information sources, ICTs and price information in rural agricultural markets', *European Journal of Development Research*, forthcoming.

Working Papers

6th Annual Conference of the Academy of Innovation and Entrepreneurship, Proceedings: Innovation and Entrepreneurship for Inclusive and Sustainable Development, [SLPTMD-WP-055](#)

Innovation and survival of new firms in Chinese manufacturing, 2000-2006, [SLPTMD-WP-056](#), (Mingqian Zhang and Pierre Mohnen)

Do Institutional Quality, Economic Freedom and Entrepreneurship Impact Foreign Direct Investment in Emerging Markets?, [SLPTMD-WP-057](#), (Hernán Herrera Echeverri, Jerry Haar, and Juan Benavides Estévez-Bretón)

External technology base, absorptive capability and innovation performance of technological acquisition among Chinese firms, [SLPTMD-WP-058](#), (Zhongjuan Sun)

Capability Accumulation and the Growth Path of Lenovo, [SLPTMD-WP-059](#), (Zhongjuan Sun, Wei Xie, Kuanrong Tian, and Yanyu Wang)

Policy dynamics and institutional dysfunctions in public agricultural research and innovation, [SLPTMD-WP-060](#), (Essegbey, G.O., Sakyi-Dawson, O., Fuseini, M., & Boadu, P.)

NSI to IDS: From the National System of Innovation to an African National Innovation and Development System (IDS), [SLPTMD-WP-061](#), (Mammo Muchie)

The diffusion of innovation in the private sectors in Low-income Countries (LICs): A systematic literature review, [SLPTMD-WP-062](#), (Giacomo Zanello, Xiaolan Fu, Pierre Mohnen, and Marc Ventresca)

TMCD Visitors & Staff

TMCD Centre Visiting Scholars

Prof Poh Kam

Wong is the Director of the Entrepreneurship Centre at the National



University of Singapore. Prof Wong is a Research Visitor at TMCD from January to July 2014.

TMCD Centre Research Students

Cintia Kulzer

Sacilotto is a DPhil candidate in Development Studies. Her DPhil research analyses



the causes and consequences of industrial cluster relocation. Cintia has recently presented her research at the 7th Conference on Micro Evidence on Innovation in Developing Economies (MEIDE) in Chile and at the 1st Conference on Latin American Network for Learning and Innovation and Competence Building Systems (LALICS) held in Brazil.

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