Abstracts of Presentation

Plenary Panel 1: Prospects of China Becoming a Center for Global-class Technological Innovation and Entrepreneurship?

China’s role in the greening of capitalism: Driver, innovator, adapter?
John Mathews, Macquarie University

Western industrialism has achieved miracles, promoting unprecedented levels of prosperity and raising hundreds of millions out of poverty. Industrial capitalism is now diffusing East, where Japan was the first, then the four Tigers (Korea, Taiwan, Singapore and Hong Kong) and now China are all incorporating themselves into the global industrial world. As China, India, and other industrializing giants grow, they are confronted with an inconvenient truth: They cannot rely on the “Business as usual” conventions of capitalism (fossil-fueled energy systems; resource throughput rather than circularity; generic finance) because these do not scale. By necessity, a new approach to environmentally conscious development is already emerging in the East, with China leading the way. As opposed to western zero-growth advocates and free-market environmentalists, it can be argued that a more sustainable capitalism is being developed – as counterpart to the all-too obvious black developmental model based on coal.

State-mandated changes in energy use (in favor of renewables), a circular flow of resources to promote eco-efficiency, and the introduction of new financial instruments that support green growth are cornerstones of China’s innovative framework. It seems probable that these initiatives will be emulated around the world—in India and Brazil as well as in other East Asian countries. Innovation and Schumpeterian creative destruction are central to this vision of the greening of global capitalism. China actively promotes its firms to move from technology followers to leaders, through emphasis on indigenous innovation and standards. Firms that develop technologies and business models that comply with ecological limits can be expected to prosper, through the migration of consumer preferences and competitive emulation. These technologies and business models represent fundamental ruptures with the practices of the first two centuries of industrialization.
Emerging Trends in Global Sourcing of Innovation: Outsourcing, Knowledge Business Service Providers, and Unbundling of Innovation Work
Silvia Massini, University of Manchester

Global sourcing of innovation has gathered increasing attention in the last decade. Although multinational enterprises have established innovation FDIs in emerging economies for several decades, there are important elements that distinguish the more recent phenomenon of global sourcing of innovation from traditional FDIs:

1) Increasing use of outsourcing of innovation (e.g., R&D, engineering services, product design);
2) A growing and increasingly specialized supply of knowledge business service providers; and
3) The emergence of knowledge brokers, crowdsourcing and employing STEM talent on demand.

These dynamics are not independent of one another but co-evolve to different extent in different countries depending of the role of local institutions and policies, for example, in the evolution of IPR laws in India and China.

Politics in Command: Political Economy and China's Innovation Prospects
Douglas B. Fuller, Zhejiang University

China's last three and a half decades of high growth have involved increased if uneven marketization of the economy along with a continued large if changing role for the state. This model has unquestionably served to propel China's economy from low-income to middle-income status. Nevertheless, there are several features of China's political economy that do not bode well for negotiating around the middle-income trap to achieve developed economy status, and these problematic features of China's political economy are at their most salient when one considers China's institutions for innovation. These features include China’s mal-distribution of finance, ineffective state intervention in markets, the shift from incentives to disincentives for development due to past developmental success, and the party-state's tradition of Leninist control.

The paper discusses what has gone well and badly for technological upgrading and innovation within this political economy context and the near-term prospects for reform of the more problematic features. Finally, the paper advocates for embedding our analyses of firm behavior and performance in China in a more finely grained analysis of the political institutions and patterns of behavior that undergird and shape China's marketplace, and provide some examples of potential ways forward.
China’s Prospects for Innovation
Lan Xue, Tsinghua University

Since the late 1970s, China has experienced the most rapid and remarkable industrial development in history. Currently, China still continues to trail the developed economies by all innovation measures. However, the trajectory of improvement in innovation in China suggests that in coming decades the relationship will change. The changes in the Chinese national innovation system must be understood within the context of over 20 years of major organizational reform, and a substantial expansion in research investments in the last decade through programs such as the 985 and 211. These programs are meant to move Chinese universities into the top rank of global universities. In the business sector, the challenge lies in how to shift current business models from largely imitation-driven to ones that can produce global-class innovations. One vital area of innovation that highlights some of the challenges facing business and government is in the field of sustainability. The transformation of innovation in China over the past two decades was largely the result of strong political leadership. The question for the next two decades is whether enterprises can build the internal processes to encourage innovation and what the role of the state will be.
Frank (Fan) Xia, ESC Rennes School of Business
Gordon Walker, Southern Methodist University

A firm’s type of owner is an important institutional variable in comparative research on countries with emerging markets. Here we test the influence of owner type on firm product innovation in Chinese manufacturing firms from 1998 to 2007. Building on the market transition and comparative capitalism literatures, we identify three owner types - state owned, privately held, and foreign owned – that vary widely in their governance practices and resource networks.

We compare the regional spillover effects and receptivity of wholly owned firms and joint ventures among the three owner types. We speculate and find that spillovers vary by owner type and between wholly owned firms and types of joint venture. Further, we argue and find that spillover effects differ between private sector firms and the two other owner types, which do not differ. Finally, with regard to the receptivity to spillovers, we hypothesize and find that private sector firms benefit more from local spillovers than state or foreign firms. Our rationale for this proposition is that private sector firms have no formal ties within a bureaucracy and so have a higher percentage of weak ties in local search. We discuss the implications of these findings for the debates regarding firm ownership and innovation in emerging markets.

Frank (Fan) Xia, ESC Rennes School of Business
Gordon Walker, Southern Methodist University

In this project we predict the entry of private sector firms by year into regions and industries in China from 1998 to 2007. We argue that institutional factors associated with a firm’s type of owner (state, foreign, private) will create more or less strong competitors among incumbent firms, and stronger competitors will make a region/industry less attractive to entry. We use a large data base on Chinese manufacturing firms in 31 regions (27 provinces and four autonomous cities) and thirty industries. We show that the prevalence of privately-owned incumbents (poor access to resources, good governance, good local knowledge) make entry least attractive; state firms (good access, poor governance and good local knowledge) make entry most attractive; and foreign firms (good access, good governance and poor local knowledge) lie in between the other two types. We infer that because they inhibit entry the most, private firms are the most competitive, then foreign firms, and then state-owned enterprises. The combination of governance and local knowledge thus produces the strongest competitors, and poor governance produces the weakest competitive pressure, no matter what resources or local knowledge are available. The implications for research on privatization trends in emerging markets is discussed.
**Whether and How Exporting Improves Firm Performance: A Quasi-Experimental Approach to Learning-by-Exporting**

Sea-Jin Chang, National University of Singapore

The gradual opening of Chinese markets to foreign multinational firms was designed to buy time for local firms to restructure themselves and improve performance before being forced to compete head to head with them. This panel presentation examines the restructuring process of local firms in order to consider how strong local firms emerge in China. We also witnessed the inflow of new entrepreneurial firms that challenge incumbent local and foreign firms with their high productivity in China. These local firms benefit greatly from spillover from foreign firms as well as learning from engaging in exporting activities. We find strong evidence that export improves local firm productivity and such performance improvement is greater when firms have higher learning opportunities.

**When Suppliers Climb the Value Chain: A Theory of Value Distribution in Vertical Relationships**

Zhixi Wan, University of Illinois, Urbana-Champaign
Brian (Xun) Wu, University of Michigan at Ann Arbor

While offshore outsourcing is a key strategy to lower production costs among western firms, this strategy may also enable the suppliers to climb the value chain. Suppliers from emerging markets may accumulate technological and marketing capabilities by supplying, with aspirations to compete with buyers in the product market. This shadow of future competition opens a new set of issues regarding how firms manage their value chain activities. Our panel represents an initial attempt to explore the implications of these issues, highlighting the complexity of buyer-supplier relationships in the global value chain.
Plenary Panel 3: *Beyond Individuals: A Chinese Contextual Perspective on Creativity*

*Have We Been Looking for Creativity in the Right Places? Toward Closing the Gap between What’s Happening in China and Creativity Research*
Jing Zhou, Rice University

Academic research on creativity in China has flourished: more and more papers have been published in the very best journals in our field, and the sophistication of data collected and statistical analysis used has been truly impressive. On the other hand, for those who have been keeping track of the social development, economic reform, and business practices in China, they cannot help but notice a significant disconnection between what’s happening in China and what gets written in research articles. In this talk, I will give a few examples to illustrate the disconnection and speculate the root causes of it. It is my hope that these provocative ideas will stimulate a productive dialogue on where creativity research may go from here.

*The Barriers to Organizational Creativity for Chinese Firms*
Zhi-Xue Zhang, Peking University

The fast economic growth and huge market have provided Chinese firms affluent opportunities to develop and make profits in the last two decades, and many firms have successfully expanded their business through imitating or importing the existing technologies and business models from the Western countries. While a few Chinese firms have developed their competitive advantage based on technological and management innovation, most firms are difficult to continue their business growth when facing the economic slowing down and the more competitive market. The reason is that, these firms are not ready for innovation. In this talk, I argue that the general growth pattern of Chinese firms has created barriers to the innovation of Chinese firms, which inhibit the motivation and capacity for innovations. Some cases will be provided to illustrate the pivotal role of firm leaders and the necessity for reviving the spirit of entrepreneurs for Chinese firms. The directions for future research on firm innovation in the Chinese contexts are suggested.

*The Interplay between Culture and Work Context in Shaping Creativity and Innovation*
Miriam Erez, Technion - Israel Institute of Technology

In this talk, I would like to focus on the interplay between national culture and the work context as they impact creativity and innovation. I suggest that the ability to be creative is universal. Yet, certain national cultural values inhibit creative ideas and innovation. Such national cultural values can be activated or inhibited by the work context. This means that subcultures at the work context can be created to support innovation and to attenuate the effect of those national cultural values that inhibit innovation. Hence, creativity is shaped by the interplay between cultural values and the work context. I’ll further elaborate on the interplay between the national culture and the specific work context, using some research based examples.
Is Cultural Diversity Always Beneficial to Team Creativity?
Lin Lu, Shanghai Jiao Tong University
Fuli Li, Xi’an Jiaotong University
Kwok Leung, Chinese University of Hong Kong

The prevalence of culturally diverse teams in multinationals raises the research question whether and when cultural diversity promotes team creativity. In the extant literature, cultural diversity has long been conceptualized as a “double-edged sword”, simultaneously hampering and benefiting team functioning and outcomes. To unpack the complexity of the cultural diversity-team creativity relationship, we examine low team identification and intercultural communication as two independent processes that block the beneficial effect of cultural diversity on knowledge integration and hence team creativity. We also examine collectivism and benevolent leadership as moderators to account for the contingent effect of cultural diversity on team creativity. Multi-wave, multisource data from 48 culturally diverse teams in China show that both low team identification and intercultural communication mediate the negative effect of cultural diversity on knowledge integration, which, in turn, predicts team creativity. Collectivism mitigates the negative relationship between cultural diversity and team identification, and benevolent leadership buffers the negative relationship between cultural diversity and intercultural communication. We explore the significance of the findings and their implications for future research.
China's Technological Catch-up in a comparative perspective with focus on Korea-China comparison
Keun Lee, National Seoul University

The literature on catch-up by the latecomers have been accumulated now over several decades. Taking Neo-Schumpeterian perspective, Lee and Lim (2001) used the Korean experiences and Lee (2005) compared the Korea-Taiwan experiences to derive somewhat generalizable patterns of, and lessons for, catch-up policies and strategies. This paper now reviews the more recent case of catch-up in China to come up with a new round of summary and synthesis. The followings are the main findings and policy implications

First, while we confirm importance of the technological regime in affecting the chance of catch-up by the latecomers, we find the final outcomes of the catch-up in sectors are also changeable depending upon the actions by the governments and firms. Thus, the point is not the deterministic role of the technologies but the necessity of taking different strategies across sectors, bearing in mind the sectoral heterogeneity implied by the technological regimes. The usefulness of SSI framework is more on the correct understanding of the nature of sectors and thereby deriving right policy and strategy reactions based on the understanding. For example, Lee and Lim (2001) argued that where innovations are less frequent or cumulative and the innovation path is more predictable, a path-following or stage-skipping strategy is more likely to happen largely by private initiatives in industries, and that where the involved technology is more fluid and the risk is high with bigger capital requirements, a leapfrogging or path-creating catching-up is more likely to happen by public-private collaboration to tackle uncertainty. Regarding the double-edged sword nature of short cycle technologies, this paper find that in such sectors with short cycle technologies, simply going along the path-following strategy would not bring in ultimate success but requires leapfrogging strategy to target and jump to emerging technologies; otherwise the latecomers would always be left behind the frontier because the forerunners keep moving ahead. In other words, precisely because catch-up is chasing not a fixed but moving target, it often requires leapfrogging. The logic behind this idea is simple: if a latecomer continues to follow the same path as its forerunner, it is almost certain that the latecomer would always remain behind the forerunning company, unless it runs much faster than their target. Thus, an alternative is for a latecomer to outdo the forerunner is to explore a short-cut or a different path (Lee 2013: xxi).

Second, an important, common finding across China, Korea and Taiwan is that the eventual success or over-taking requires building capabilities of indigenous firms rather than relying on FDI. FDI can be an important channel for learning of foreign knowledge but FDI tend to interfere with eventual growth of local or indigenous technological capabilities. This can be said based on the comparable examples in auto sectors in China and Korea, such as Geely and Cherry vs. Shanghai Volkswagen and First Auto Works in China, and Hyundai motors vs. Daewoo (a joint venture with GM) in Korea. Taiwanese catch-up success is also supported by the eventual rise of the indigenous firms although they were initially relied upon foreign firms for learning (Amsden and Chu 2003). Bringing up indigenous firms are important because foreign firms tended to become increasingly reluctant to provide technology transfer or sell technology even with licensing arraignment as the latecomers are getting to close to the frontier. Foreign firms' reluctance in technology
transfer is both a crisis and opportunity as this situation tend to lead the latecomer firms to embark on a decisive journey for technological independence and to seek their own technological path. This may be rather a blessing because effort to seek its own path often lead to better product or technologies. This is again consistent with the path-creation argument discussed above. Typically, the latecomer firm would try to imitate the forerunner by incorporating the same or similar technologies in its early stages, often with FDI or OEM arrangements; however, to be successful eventually, or in the later stages it should try to beyond imitation for creative imitation or innovation, which may bring them onto a new or different trajectory from the forerunning firm.

Third, another common finding from east Asia is that the role of the government or public sectors are quite important but not always successful. Thus, a more important thing is to find out right forms of intervention in each sector. Many literature find local content requirements not successful but it worked very effectively in wind-turbine sector in China, as in some sectors in Korea, such as machine tools (Lee and Kim 2009). It seems that in high-tech sectors, simple provision of tariff or just encouraging licensing or FDI may not be effective but requires more direct invention in terms of public-private joint R&D or R&D subsidies or grant, as well as foreign-domestic joint R&D and scouting of foreign engineers, as in the case of mobile phones in China. If we attempt at another way of brave generalization, the early stage of growth of local industry tent to be prone with rather simple tools such as tariffs and local content requirement, as in several sectors in China and many sectors in Korea, including Auto and consumer electronics in Korea (Shin et al 2013), whereas the later stage would require joint R&D between firms and public labs, as seen from the telecom equipment (switches) and TD-SCDMA in China, IC chip, mobile phones, digital TV in Korea (Lee 2013, ch. 7).

Finally, if there is any difference or uniqueness of China’s pattern of catch-up, compared with Korea or Taiwan, some of such differences can be explained at least in terms of size difference. Given its huge size, the Chinese were more open or flexible toward foreign capital, being less concerned about the foreign influence in the domestic economy and also, more importantly, were able to strake a better deal with foreign companies in getting technology transferred, often adopting the so-called ‘trading market for technology’ policy (Mu and Lee 2005). In contrast, there was some costs of such open or flexible approach to foreign firms because it often created a lot of difficulties for local firms in their competition against foreign firms. The automobile industry is a good example where the Chinese government encouraged local firms to form JV with MNEs, which made it easy for MNEs to control their local partners. In fact, because almost all leading local firms have formed JVs with MNEs, second tier and third tier local firms have been finding it harder and harder to survive. This is because MNEs and their local partners are moving also into the low end market after they have developed a solid position in the high end market. In contrast, the more protected Korea market seems to have offered more effective support to local firms. In the meantime, the peculiar nature of Chinese markets with several tiers of segmented market was an additional benefits for indigenous companies as the low end segment in inner provinces served as their nurturing home, like infant industry protection in Korea where protection had to be closed market. Of course, on the other hand, the more decentralized nature of political and economic system with almost 40 provinces of a country size must have been a handicap in conducting more coordinated and tight industrial policy as in Korea or Taiwan (Eun and Lee 2002). In China, for example, some government agencies are more active in promoting indigenous innovation, while some believe that globalization is more important. The complicated process of developing TD-SCDMA is a good example (Gao, 2014).
**Can China Emulate the Korean Path to Prosperity?**  
Michael Witt, INSEAD

Complexity economics argues that 3 factors are needed for a country to get rich: physical technology, social technology, and businesses bringing them together. This presentation explores the question of social technology in comparative perspective with Korea. Drawing on institutional similarities between Korea around 1980 and China today, it raises the possibility that China may face considerable challenges to development beyond middle income levels. It concludes by raising a number of research questions.

**Open questions that policy makers have about stimulating innovation in emerging economies**  
Kirsten Bound, NESTA UK

The presentation will first summarize Nesta's recent report on the Chinese innovation system. The report highlights that China is an absorptive state, increasingly adept at attracting and profiting from global knowledge and networks. Next the presentation will lay out an agenda for future research that policy makers are interested in. This includes such questions as: Could innovation challenge prizes help stimulate low carbon innovation in China? How are spaces which offer digital fabrication tools changing manufacturing in China? Can UK SMEs take advantage of the capabilities of Chinese companies to accelerate the innovation process?
Plenary Panel 5: Role of Cultural Diversity in Creativity and Innovation in Developing Economies: A Multilevel Perspective

Cross-National Differences in Eminent Creativity (Big-C) and Profound Innovation (Big-I): The Role of Institutions and Innovation Input
Letty Yan-Yee Kwan, Sun Yat-Sen University, China

Past research on culture and creativity has sought to explain country differences in creativity in terms of distal cultural orientations (e.g., individualism). Taking a different approach, our analysis focuses on how more proximal institutional factors and innovation input in a country jointly contribute to its records of eminent creativity (Big-C) and profound innovations (Big-I). Results from analysis of multinational data show that countries with better political, legal and business institutions can more effectively attract, grow and retain quality talents, who would produce more eminent creativity and profound innovations, but only in the presence of adequate innovation input. The theoretical significance and policy implications of these results for talent and innovation management at the country and organization levels are discussed.

Diversity and Innovation across Cultures
Namrita Bendapudi, Nanyang Technological University

What country-level factors, beyond factors such as infrastructure and the business environment, influence innovation? In this talk, I explore the role of ethno-cultural diversity and cultural values in predicting successful innovation processes across over 100 countries using archival datasets. In the first paper, we demonstrate that two different sources of diversity, ethnic and cultural diversity, have differential and opposing effects on innovation input and output of a country. In the second paper, we examine the role of education quality and cultural values in predicting two types of innovation output -- the Knowledge and Technology output, and the Creative output, and found that while high education quality predicts more Knowledge and Technology output, it is only a necessary but not sufficient predictor of Creative output of countries. Specifically, countries that have both high education quality and low in self-protective values (conformity, power, or tradition values) show the highest Creative output than other countries. Our findings have implications for researchers and policy makers in the fields of education and management, especially in emerging economies.

Enhancing performance of integrative research projects: The case of National Science Council and Industrial Technology Institute in Taiwan
Shyhnan Liou, National Cheng-Kung University, Taiwan

In this presentation, I would like to share my team's research on the opportunities and challenges in promoting integrative research in Taiwan, which includes both interdisciplinary collaborations (collaborations between different academic disciplines) and transdisciplinary collaborations (collaborations between academia and the industry). In our previous research (Chiu, Kwan, & Liou, 2013a, 2013b) conducted at the Industrial Technology Research Institute (ITRI) in Taiwan, we found that recognizing deep value differences among disciplines and having an interdisciplinary mindset are important for overcoming intellectual centrisms and promoting performance and quality of collaboration in interdisciplinary collaborations. Building on these findings, we are developing a holistic framework to identify the
organizational, operational and task factors that contribute to appreciation of interdisciplinary contributions and success in integrative research. In this presentation, I will share our preliminary results from our critical analysis of interdisciplinary projects sponsored by the National Science Council (NSC) or ITRI in Taiwan, focusing on the formal and informal social networks, interaction dynamics, and task interdependence structure in the project teams. Based on detailed case analyses and complementary interview and survey data, we propose concrete management policies, strategies and operation procedures for improving the quality of integrative research, taking into consideration the existing interaction dynamics in the pertinent organizations and the teams, the preferred level of autonomy among teams and team members within the teams, and the level of task interdependence between team members and teams.

Unpacking the multicultural experience -- creativity relationship
Angela Ka-Yee Leung, Singapore Management University

With the expansive scale of connectivity and global competition among different nations, individuals will increasingly meet with foreign cultures that are strikingly different from their own. Emerging empirical evidence has lent support for the positive relationship between multicultural experience and creativity (Leung, Maddux, Galinsky, & Chiu, 2008; Leung & Chiu, 2010; Maddux & Galinsky, 2009). Inspired by the creative cognition paradigm, these research advances focus on the cognitive mechanisms, a “cool” system pertaining to the creative benefits of multicultural experiences (Cheng, Sanchez-Burks, & Lee, 2008; Leung et al., 2008). Going beyond this “cool” creative cognition approach, we can gain new insights into the multicultural experience – creativity link by studying the “hot” emotional system. I argue that when individuals are dealing with apparent cultural contradictions upon encountering two cultures simultaneously, mentally juxtaposing dissonant cultural stimuli could lower positive affect or increase negative affect, which could in turn induce a deeper level of cognitive processing of cultural discrepancies and inspire creativity. In this talk, I will present research studies concerning the roles played by cognitions and emotions underlying the multicultural experience – creativity relationship. These findings will help illuminate the underlying mechanisms of why simultaneous exposure to diverse cultures would promote one’s creative bandwidth.

Influence of Bicultural Identity Integration on Creative Idea Generation and Selection
Chi-Ying Cheng, Singapore Management University

Drawing from social identity theory and the creative cognition approach (Smith, Ward, & Finke, 1995), it is proposed that recombinant mindsets associated with higher levels of identity integration—individual differences in perceived compatibility between two identities—predict higher levels of creative performance including creative idea generation and selection in tasks that draw on both cultural identity-relevant knowledge domains. Study 1 showed that Asian Americans with higher recombinant mindsets were more creative in developing new dishes, but only when both Asian and American ingredients were available. Study 2 showed that women engineers with higher recombinant mindsets were better at selecting video games that will be accepted by female gamers. These findings suggest that fostering a culture that facilitates “biculturalism” and incubating recombinant mindsets is beneficial for employees’ creativity performance.
Plenary Panel 6:  Polycontextual Perspectives: Nuanced Understanding Of Business Dynamics In Emerging Economies

Knowledge Creation in Emerging Economies: The Role of National Innovation Systems
Claudia (Kaye) Bird Schoonhoven, U.C Irvine, California.

Comparing across countries, the rate of new product creation, the actual innovations, varies tremendously. Some countries have created national systems and incentives intended to bolster innovation by private individuals and formal business organizations. In the United States, for example, the US Constitution (1787) contains a provision to allow inventors to profit from their innovations: “Article 1, Section 8: to promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writing and discoveries.”

Contemporary countries with emerging economies have created “national innovation systems” to enhance the country’s innovative potential and output. In this portion of our panel, I will discuss national innovation systems in emerging economies, focusing on China, Korea, and Thailand. The goal of this portion of the panel is to suggest fruitful areas for research, bringing together the existing literature on industrial economies (the preponderance of research) with what is known about the emerging economies of China, Korea, and Thailand.

Influences of Evolving Multifaceted and Multileveled Institutional Policies on Firm Strategic Positioning in Emerging Market: The Case of Chinese IT Outsourcing Services Firms
Weidong Xia, Florida International University

A firm’s institutional environment exerts significant constraints and influences on the firm’s strategic orientation, structure, processes and practices (Di Maggio and Powell, 1983; North, 1991; Scott, 1995). MNEs’ success largely resides in understanding the complexity inherent in operating in distinct institutional environments (Barkema & Vermeulen, 1998; Kostova, 1996; Sanders & Carpenter, 1998). While international business researchers have addressed differences on institutional dimensions across countries (e.g., Hofstede; Buckey et al, 2007; Yu et al., 2005), the dynamic and polycontextual nature of institutional factors within a country, particularly in fast changing institutional environments of the emerging markets, has largely been ignored.

Built on field studies and policy analyses, we present our findings on the influences of the evolving polycontextual government policies on the behaviors of Chinese IT firms that provide outsources services to clients in other countries. In particular, we present (1) the parallel evolutions between the Chinese government global economic development policies and the government’s specific policies for the IT industry; (2) the polycontextual nature (multiple facets, multiple levels, multiple directive authorities, and multiple interpretations) of Chinese government’s policies for the IT industry; and (3) a framework shoring how the evolving polycontextual policies for the IT industry influence the behaviors of firms that provide IT outsourcing services to clients in other countries.
Plenary Panel 7: Comparative Perspectives from Developed and Developing Markets on Firm Innovation

How do SMEs from Developed and Developing Economies Innovate to Export?
John Child, Chair of Commerce, Birmingham Business School

In developed countries, SMEs are important generators of innovation and employment. They are particularly significant players in newer knowledge-based sectors such as software and biotech. In these sectors, developed country SMEs often become globally competitive at an early stage of their development. A key research question is whether this pattern is being, and can be, repeated in developing economies. At present, despite pockets of SME innovation, such as Zhejiang and Shenzhen in China, SMEs in most developing countries are not meeting the promise of delivering innovation. So, further key research questions are (1) what constrains innovation by developing country SMEs, and (2) what are the necessary conditions for them to become more innovation-based?

Research on SME innovation has tended to be rather broad-brush, often employing data that are aggregated in terms of innovation specifics, sector and economy categories (e.g. “developing economy”). There is a need to investigate SME contributions to different forms of innovation (e.g. exploratory and exploitative) and how these are link to different market strategies. Secondly, the distinctive forms of innovation that characterize different sectors need to be better understood together with the sector specifics of market opportunity that foster such innovation. Thirdly, the supports for SME innovation that have been identified in developed economies also deserve examination in developing economies. Can they be readily replicated in developing economies; are alternative support structures and systems feasible? Key conditions for SME innovation include access to appropriate sources of knowledge, the presence of internal enablers (such as an entrepreneurial orientation, trained and creative staff), external enablers (such as a strong science and technology infrastructure, an eco-system for open innovation, targeted financial support, demand factors), and network links (such as innovation networks and knowledge-transferring links into global supply chains).

Research into SMEs has drawn upon a wide range of theoretical perspectives which focus on different levels of analysis. Examples are the psychological (focusing on the individual entrepreneur and experimental learning), the economic (looking at general associations between, say, innovation and exporting), the resource-based view (focusing on the availability of skills, R&D intensity, knowledge assets), network theory (focusing on innovation-relevant networks internal and external to the firm), and institutional theory (focusing on institutional supports and voids in a society or sector). As in many areas of business and management inquiry, the challenge is how to combine insights from these different theoretical perspectives.
Societal innovativeness as a universally almost impossible escape route from the middle income trap: if China succeeds can it still be China?
Gordon Redding, Adjunct Professor, INSEAD

1. The entry of a society out of the pre-modern world into the modern, and its successful adaptation into the new more open context, rests on its ability to craft within its own traditions a more benevolent form of domination than the one that preceded. Such restructuring is especially crucial to the challenge of competing globally on total factor productivity. This is because such productivity rests eventually on the widespread releasing of creative energy. For that to work at world standards of competitive efficiency, the proliferation of systems of order must engage the participants in the building of the necessary institutions.

2. There is new evidence that ancient patterns of evolution affected by geographic location (and so reliable access to water) has led certain societies to evolve over 60,000 years into the two major cultural clusters so repeatedly confirmed from comparative research. One cluster with agonic behavior (most societies) has societal survival dependent on hierarchically coordinated order and infrastructure in conditions of unreliable water supply. The other has societal survival dependent on independent actors encouraged to hunt and gather and settle on land they feel strong ownership of, with related values of individualism and relative freedom from dominance. China may have evolved inexorably as a former type, in contrast to Japan and northern Europe that evolved as the latter. If so the trajectory of China as always hierarchical may remain deeply hard-wired and perhaps unchangeable.

3. The first indication of the consequent stress is as China moves towards the seriously challenging Middle Income Trap faced by all developing societies and impassable so far for most. China is aware of this at the highest level. It has plans to meet the challenge but they do not deal with the deeper causes of it, and so may not work.

4. The second indication is the unacknowledged influence of the endemic fear that stems from the current mode of political domination of the socio-economy and the adaptations needed to cope with it. This inhibits the needed fullness of response.

5. The third indication is the path dependency element of Party control.

6. Certain routes out are considered: bourgeois marketization, mercantilism, ‘connections capitalism’. They are assessed for their political feasibility and their capacity to release the needed volumes of innovativeness and cooperativeness.

7. Analysis of such issues would benefit from linking at the interfaces between the realm of ideas (rationale, norms, social axioms) and institutions (structures of economic coordination and control), so as to judge their likely functioning in fuller terms than is normal in current social science. An example lies in the configurations of Socially Enabling (or Disabling) Mechanisms.
Based on a survey of 320 firms and 30 in-depth case studies in mainland China we examine how foreign multinational enterprises (MNEs) and local partners, including suppliers, customers and competitors improve their innovation capabilities through collaboration. While MNEs tend to provide ‘firm-specific advantages’ such as technologies, brands or transferrable management practices, local firms tend to provide access to local suppliers, customers or government networks. These ‘location-specific advantages’ help reduce the ‘liability of foreignness’ for MNEs.

In some cases the partnerships are relatively short-lived, caused by a lack of trust, imbalanced reciprocity or the absence of any real ‘fit’ in terms of the respective competitive advantages of the collaborating firms. But in many cases a balanced give-and-take underpins an integration of assets, capabilities and knowledge resulting in highly successful innovation outcomes. These outcomes, in the form of new products or services, new technologies or production processes, give rise to local competitive advantages which are only occasionally transferrable to foreign markets.