

Cross-Border Business in Asia

EE-402a / MS&E 478
September 30, 2004

Richard B. Dasher, Ph.D.

Director, US-Asia Technology Management Center
Executive Director, Center for Integrated Systems
Stanford University

Outline

- ◆ **Course introduction and administrative items**
- ◆ **Some aspects of the rise of intra-Asia trade, regional businesses, and S&T cooperation**
- ◆ **Underlying trends**
- ◆ **Challenges**
- ◆ **Discussion: What does this all mean?**
 - ◆ **Welcome guest commentators**

EE-402a / MS&E 478
“Topics in International Technology Management”

Theme for 2004-05:

“Cross-border partnering in Asia: Globalization challenges for high-tech industries”

<http://asia.stanford.edu/events/fall04/index.html>

- ◆ **Registered students and visitors welcome**
- ◆ **Series of nine presentations or panel discussions**
 - ◆ **Distinguished speakers from industry and other organizations outside Stanford**
- ◆ **Networking: refreshments after each session**

Financial support of the series

- ◆ Official Stanford University Course
- ◆ Presented by the US-Asia Technology Management Center
- ◆ With support from Squire Sanders & Dempsey, L.L.P.
<http://www.ssd.com/>

Requirements for course credit

- ◆ See “Syllabus” on course webpage
<http://asia.stanford.edu/events/fall04/index.html>
- ◆ Register (either for EE-402a or MS&E 478)
- ◆ Attend and submit comments on eight out of nine sessions
 - ◆ Use online form at course webpage (above)
 - ◆ 30 to 60 words
 - ◆ Something that shows you watched the session (not just info from the slides)
 - ◆ Within two weeks of the session; 12/02 comments by final exam time

Important contact information

- ◆ For students: course concerns to ee402a-aut0405-staff@lists.stanford.edu
- ◆ For anyone: comments, questions to Richard Dasher (rdasher@stanford.edu)
- ◆ Course assistant Chirag Bhatt (cbhatt@stanford.edu)
- ◆ For event logistics (directions, etc.) Viji Jagannathan (viji@stanford.edu)
- ◆ US-ATMC: 650-724-0096

**Cross-border trade, business, and S&T
cooperation in Asia**

Example: Taiwan and PRC

- ◆ Taiwan investment in PRC: 2000 estimate
\$60-70 billion = 40% of total outward investment
 - ◆ 30% of Taiwan's 411 high-tech companies had invested in PRC by 2001, with 90% planning to by end 2001
 - ◆ Taiwanese companies generated 70% of PRC's \$25.5 billion IT production value in 2000
- ◆ Estimated 400,000 - 700,000 Taiwan nationals living and working in PRC = 7-10% of labor force (Jan. 2002)

*US-China Economic and Security Review Commission
7/02 report to Congress*

Example: Some Taiwan and PRC Joint Ventures

- ◆ **Chinese Petroleum Corp. (Tw) + China National Offshore Oil Corp (PRC) for exploration in the Taiwan Strait**
- ◆ **China Airlines (Tw) buys 25% of China Cargo (subsidiary of China Eastern Airlines, PRC)**
- ◆ **Sampo Group (Tw) _ Haier Group (PRC) for reciprocal distribution of consumer appliances**
- ◆ **Grace Semiconductor Manufacturing (JV between Winston Wang (TW) and Jiang Mianheng, son of PRC Pres. Jiang Zemin)**

Background: Some Asia Economies 2001-02 (*< World Bank 2004 GDI*)

Country	GNI (\$ bn)	PPP GNI	GDP growth
PRC	1,234	5,792	8.0
Japan	4,324	3,481	0.3
S. Korea	473	808	6.3
Thailand	123	425	5.4
Singapore	86	99	2.2
India	495	2,778	4.6

Direction of Merchandise Exports (%)

(< Asian Development Bank, Key Indicators)

From \ To	Asia 1990	Asia 2003	N/C Amer 1990	N/C Amer 2003
China	68.8	47.3	10.2	23.9
S. Korea	35.4	51.2	33.4	23.5
“Taipei”	38.2	59.4	36.0	20.2
Thailand	39.2	54.7	25.3	19.0
Singapore	51.1	61.2	23.1	16.1
India	21.5	29.7	16.3	23.7

What the export statistics show (explanation of previous slide)

- ◆ **PRC has decreased % of merchandise exports to Asia and increased % to N./C. Americas (and Europe)**
- ◆ **Other East Asian economies have increased % of merchandise exports to Asia (versus N.America)**
- ◆ **India shows increase both to Asia & N.America (at expense of western Europe)**
- ◆ **Intra-Asia trade now makes up ~half of exports of the East Asian economies; India less tightly integrated with rest-of-Asia**

What is going on?

Growth of Asia-regional supply chains

- ◆ PRC imports subassemblies (and raw materials) from Asia; exports finished products to major markets

- ◆ Logistics spending represents about 20% of PRC GDP (vs. about 10% in U.S.)
- ◆ China logistics industry is expecting an average annual growth of 25% during 2000 - 2005
- ◆ Domestic China air cargo market expects 10.3% annual growth from 2001-2021
- ◆ Intra-Asia international air cargo market growth 8.4% (versus 7.5% for Asia-Americas & 7.0% for Asia-Europe)

Hong Kong General Chamber of Commerce (Quat 2002)

Also: Cross-border joint ventures, foreign direct investment, M&A

- ◆ **Comprehensive statistics for intra-Asia joint ventures, mergers & acquisitions difficult to find**
- ◆ **Apparent increase in advertising for legal and other consulting services, investor interest in Asia JVs, M&A**

Top-5 developing Asia FDI recipients

Brooks et al., Asian Development Review 2003, 20:1

Country	Amount 1991-93	Country	Amount 1998-2000
PRC	\$14.3 bn	PRC	\$ 41.6 bn
Malaysia	5.0	Hong Kong	33.8
Hong Kong	3.9	S. Korea	8.0
Singapore	3.9	Singapore	7.9
Thailand	2.0	Thailand	3.8

Also: Increasingly complex cross-border joint activities

◆ Outsourcing / offshoring of R&D, clinical trials

Examples:

- ◆ UTStarcom invested \$25M in Bangalore Development Center, bringing its total India-based R&D to \$50M (2003)**
- ◆ Huawei Data Communications also has India Research Centre in Bangalore**
- ◆ Chinese telecom ZTE Corp. plans R&D center in Bangalore by end 2004**
- ◆ International joint product development projects**
 - ◆ Round-the-clock chip design**

Underlying trends / reasons for increased cross-border partnering

- ◆ **Opening up of China, its access to WTO**
 - ◆ **China now cannot keep up with world demand without sourcing subassemblies, materials, semi-finished goods from elsewhere (especially in Asia)**
 - ◆ **Growth of China market a major factor in return to favorable business conditions in other economies**
 - ◆ **New IP legislation, improvements in enforcing laws**
- ◆ **New technologies enable cheap real-time data-rich communications**
- ◆ **Talk about Free-Trade-Areas to establish scale competitive with EU, US markets**

Free Trade Areas

- ◆ **ASEAN Free Trade Area (AFTA)**
 - ◆ Reduced intra-area tariffs to maximum 5%
 - ◆ Plan collective free trade agreements with China, Japan, India
 - ◆ But, trade to outside group growing as fast as that inside group (and trade growth to China is growing more rapidly)
- ◆ India has FTA with Thailand, plans to sign with AFTA, bilateral with Singapore (by end 2004)
- ◆ Japan has FTA with Singapore, in negotiations with S. Korea, Malaysia, Thailand, Philippines

Some challenges to cross-border partnering in Asia

- ◆ **Language and cultural differences**
- ◆ **Business culture differences: governance expectations**
- ◆ **Historical animosity**
- ◆ **Regulatory differences: different technology standards**
- ◆ **Leveling of cost differentials (wages, etc.)**
- ◆ **Risks: political, security, economic (currency, financial institution strength, etc.)**
- ◆ **Absence of multinational company tradition**

Summary to this point

- ◆ Increase in intra-Asia trade and business partnerships reflect the growth of China as a market and as a supply chain hub
- ◆ Investments (FDI, joint ventures, M&A) related to cross-border Asia business are likewise increasing
- ◆ New technologies and the availability of educated skilled workers are pushing such cooperation to more complex activities (joint R&D, etc.)
- ◆ There are major challenges to Asia cross-border partnering

Now: views/comments from experts, discussion

- ◆ **Sridhar Iyengar, President, TiE, Silicon Valley**
- ◆ **Michael Zielenziger, Visiting Scholar, IEAS (UC Berkeley), formerly San Jose Mercury News correspondent, Tokyo**
- ◆ **Moderated by Richard Dasher (rdasher@stanford.edu)**