Comments on

A Study on China's International Specialization Status of Advanced Technology Industry: the case of Zhejiang Pinghu photoelectron industry cluster By Xinhai Huang et. al

Zhi Wang U.S. International Trade Commission



*The views expressed in this presentation are solely those of the presenter. They are not meant to represent in anyway the views of the U.S. International Trade Commission or any of its individual Commissioners.

S	I	i	d	е	1

z1 zhi.wang, 9/21/2007

Summary of the Paper

- Based on an unique survey date set of more than 120 optical-mechatronics firms in Pinghou, Zhejing, the authors obtain very interesting fact:
 - Most firms(80%) engage in assembling and testing.
 - FDI firms produce high value and relative sophisticated products, but with lower domestic value-added and lower R&D inputs.
 - Local firms produce parts and components with relative lower values but higher R&D inputs
 - China's position: lower end of the global production chain
- Consistent with China's comparative advantage

Summary of the Paper

- The development of Pinghu high-tech industry follow "exogenous industry cluster development model"
 - Government provide incentive to attract FDI as initial engine, using both comparative advantage of their local economy and policy incentives
 - Spill over effect to local firms, learning by doing drives local private firms to grow
 - The creation of public platform for technology innovation promotes the further industry development: FDI and local firm grow together

Suggested Improvements

- To provide in depth insights of the issue, may need re-focus what the paper would like to address as central theme: China's position in global production chain? or China's high-tech industrial development policy ?
- Further quantify China's position in global production chain beyond anecdotal evidence need combine with analysis based on additional data
 - Why this issue is so important
 - Using detailed trade statistics at city level, some examples
 - Combine with industry level data
 - Using price and cost information on each stage of production for particular products
- China's optical-electronic industrial development policy: Value chain Analysis (products and factor market issues)

Why analyzing the position of China's IC and optical-Electronic industry in the world production chain is so important to understand U.S. -China ATP trade

Advanced technology fields	U.S. reported			China & Hong Kong reported		
	1998	2002	2006	1998	2002	2006
Biotechnology	3	5	5	10	31	20
Life Science	196	269	617	-173	-419	-867
Optical-Electronics	-512	-3,316	-12,794	313	1,888	11,800
IC products	-1,600	-12,024	-50,705	1,215	7,848	43,104
Electronics	511	2,693	6,514	-1,150	-2,267	-5,946
Flexible Manufacturing	223	544	795	-200	-642	-1,404
Advanced Materials	123	60	42	-227	-320	-151
Aerospace	3,932	3,616	6,326	-2,077	-2,332	-5,833
Weapons	-10	2	-98	-6	-18	70
Nuclear Technology	14	-82	-29	-6	78	29
Total	2,881	-8,233	-49,327	-2,301	3,847	40,822

Data Source: U.S. Census ATP definition, official Custom statistics

Prices and Quality in U.S.-China Trade of Optical-

Electronic Products

Unit value ratios between US exports to and imports from China

Year	HS-10 line	< 1	< 10	<100	> 100
1997	8	1	4	2	1
1998	9	0	1	2	6
1999	8	1	3	3	1
2000	9	1	4	3	1
2001	9	1	3	5	0
2002	10	0	5	4	1
2003	10	0	4	4	2
2004	10	2	4	4	0
2005	13	1	2	8	2
2006	13	0	4	8	1
Total	99	7	34	43	15

Example: Microscopes U.S. exports to China and China exports to U.S. HS 9011, 2006

HTS number	HTS Product	Total exports U.S. Dollars	Unit value U.S. Dollars
U.S. exports to	China		
9011100000	Stereoscopic microscopes	487,179	3,431
9011200000	Microscopes, for microphotography & cinema	693,491	11,754
China exports t	to U.S.		
9011104000	Stereoscopic microscopes with means to photo image	1,592,944	251
9011108000	Stereoscopic microscopes	3,647,098	115
9011204000	Microscopes with means to photograph the image	1,459,958	215
9011208000	Microscopes, exc with means to photograph the image	1,864,786	61