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Economic Integration in East Asia and its Impact on the Korean Economy

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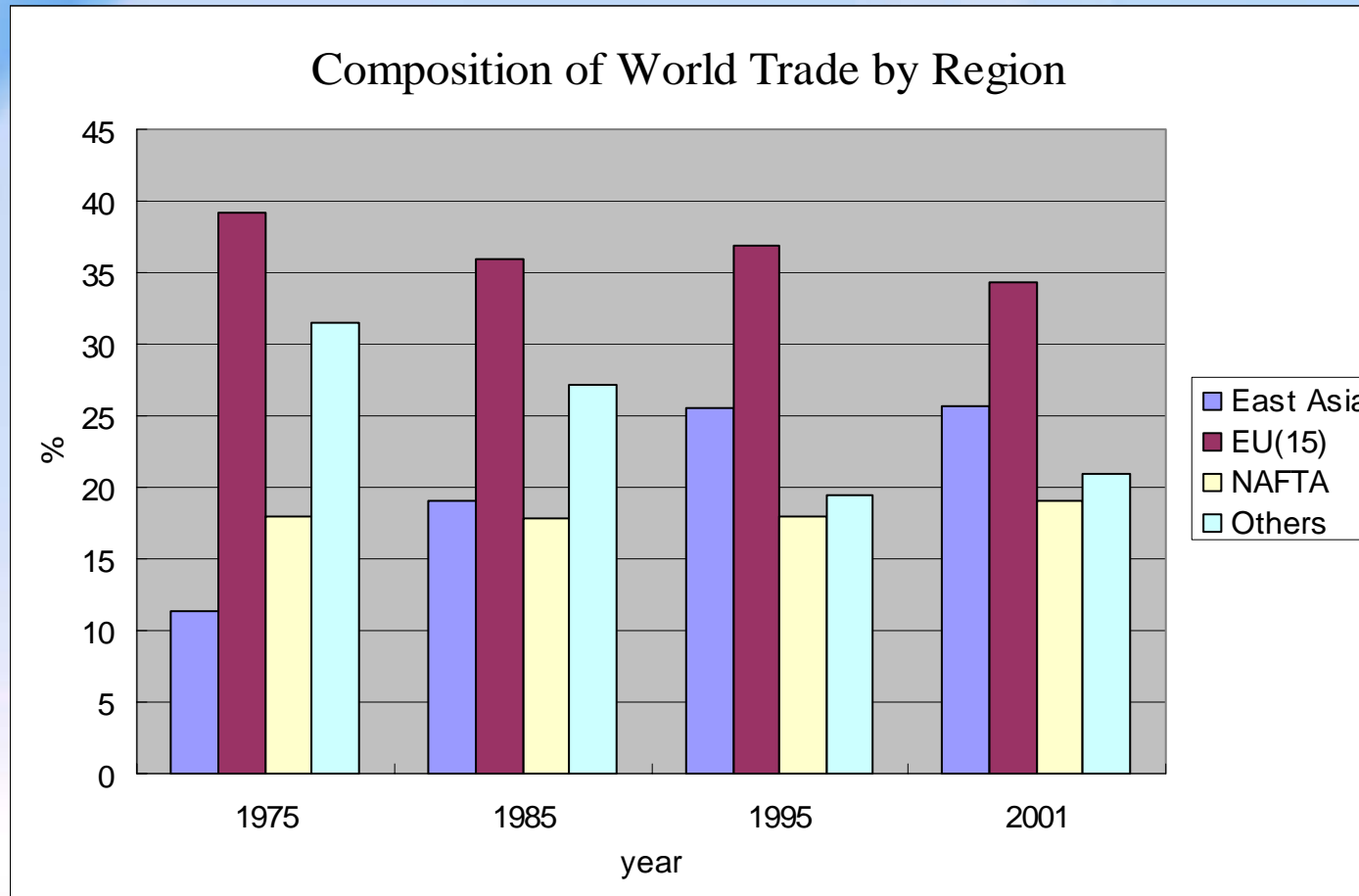
Impacts of Economic Integration

I. Trade in Northeast Asia

- **Continued Increase in Trading Levels of East Asian Countries**
- **Strong Increase in Trade Activity between Korea, China and Japan**
- **Potential of Northeast Asia's Intra-regional Trade**
- **Northeast Asia's "Triangular Trade" Pattern**
- **International Division of Labor in accordance with Technological Differences**

Continued Increase in Trading Levels of East Asian Countries

Due to export-oriented development strategies and an expansion of regional production networks



East Asia's levels of trade: Slower growth expected

Prediction of East Asia's Export Share

(Unit: As % world exports)

Year	2004	2005	2006	2007	2008	2009	2010
East Asia	27.3	27.6	27.9	27.8	28.0	28.3	28.6
Northeast Asia	15.7	16.2	16.6	16.5	16.7	16.9	17.1

source: Global Insight, *World Overview*, second-quarter 2004.

Strong potential for intra-regional trade in Northeast Asia

Intra-regional Trade of Major Regions

(Unit: %)

Year	Northeast Asia		EU		NAFTA	
	1990	2001	1990	2001	1990	2001
Intra-regional Trade	12.7	21.8	64.5	59.4	37.2	46.6
Extra-regional Trade	87.3	78.2	35.5	40.6	62.8	53.0

Deepening of Trade Relations between Korea, Japan and China

			Importer		
			Korea	Japan	China
Exporter	Korea	1992		15.5	3.5
		2000		11.9	10.7
		2003		8.9	18.1
	Japan	1992	5.3		3.5
		2000	6.4		6.3
		2003	7.4		12.2
	China	1992	2.8	14.2	
		2000	4.5	16.8	
		2003	4.6	13.6	

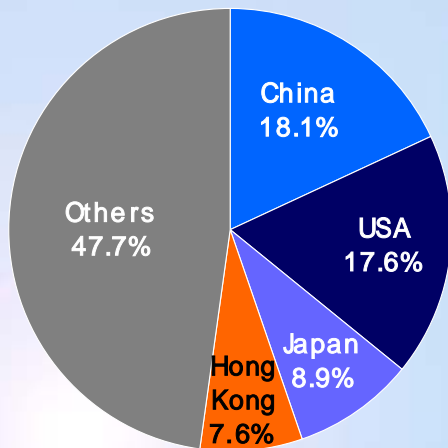
Source: UNCTAD (<http://unstats.un.org/unsd/comtrade/>);
KITA(<http://www.kita.net/top/>)

Korea, Japan, and China are becoming more closely linked by trade

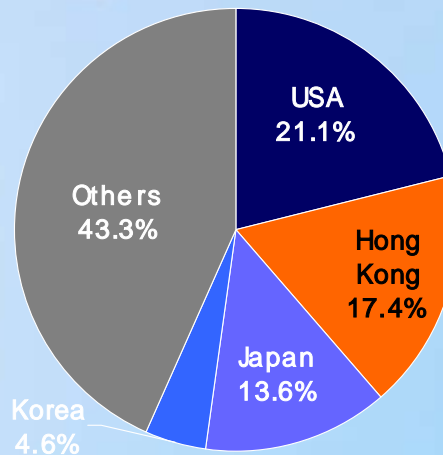
Ranking of Trading Partners (According to exports in 2003)

<i>Ranking</i>	1	2	3	4
<i>Korea</i>	China	USA	Japan	Hong Kong
<i>China</i>	USA	Hong Kong	Japan	Korea
<i>Japan</i>	USA	China	Korea	Hong Kong

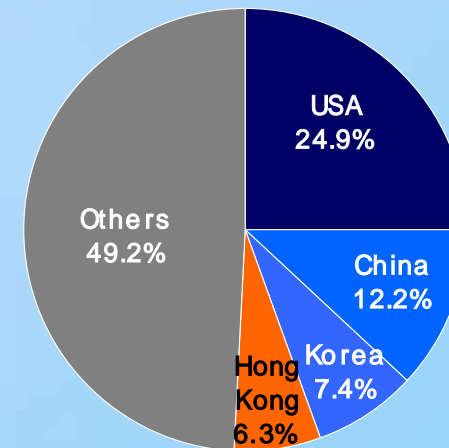
Korea



China



Japan



East Asian Countries: Main Investors in China

FDI in China (by Country)

(Unit: million US\$, %)

Year	2001		2002	
	amount	% of total	amount	% of total
Hong Kong	16,717	35.7	17,861	33.9
Virgin Islands	5,042	10.8	6,117	11.6
US	4,433	9.5	5,424	10.3
Japan	4,348	9.3	4,190	7.9
Taiwan	2,980	6.4	3,971	7.5
Korea	2,152	4.6	2,721	5.2
Singapore	2,144	4.6	2,337	4.4
Germany	1,213	2.6	928	1.8
Cayman Island	1,067	2.3	1,180	2.2
UK	1,052	2.2	896	1.7

Source: National Bureau of Statistics of China, *China Statistical Yearbook*, 2003 .

Triangular Trade Pattern

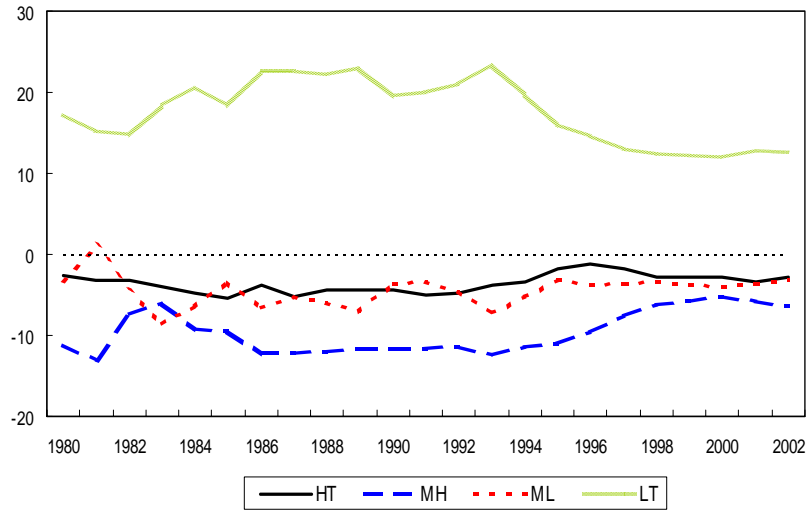
- **Division of labor among Northeast Asian countries based on technology differences.**
 - ⇒ **Overall, China shows comparative advantage in low-tech industries.**
 - ⇒ **Japan shows comparative advantage in high-tech & medium high-tech industries.**
 - ⇒ **Trade patterns of China and Korea are becoming similar except in low-tech industries.**
 - **Rapid catching-up of China**

Classification of Industry by Technology Level: OECD

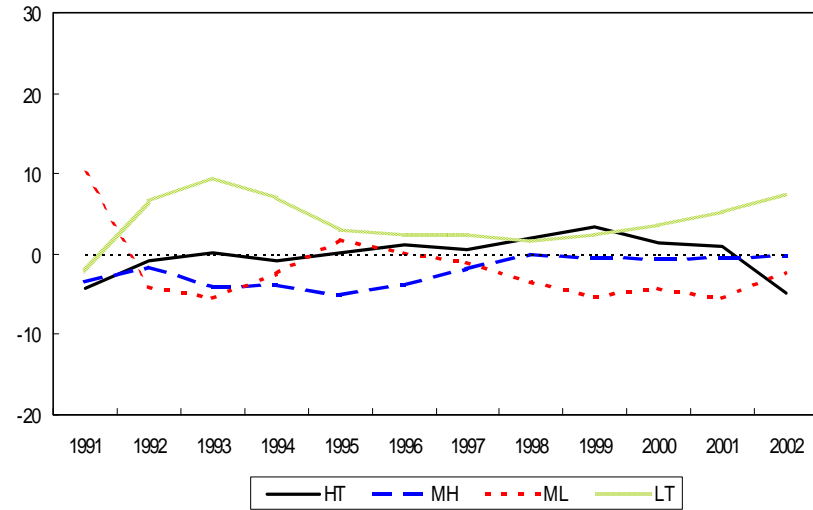
High-technology industries	Medium-high-technology industries
Aircraft and spacecraft	Electrical machinery and apparatus, n.e.c.
Pharmaceuticals	Motor vehicles, trailers and semi-trailers
Office, accounting and computing machinery	Chemicals excluding pharmaceuticals
Radio, television and communication equipment	Railroad equipment and transport equipment, n.e.c.
Medical, precision and optical instruments	Machinery and equipment, n.e.c.
Medium-low-technology industries	Low-technology industries
Coke, refined petroleum products and nuclear fuel	Manufacturing, n.e.c. and recycling
Rubber and plastic products	Wood and products of wood and cork
Other non-metallic mineral products	Pulp, paper, paper products, printing and publishing
Building and repairing of ships and boats	Food products, beverages and tobacco
Basic metals	Textiles, textile products, leather and footwear
Fabricated metal products, except machinery and equipment	
Source: OECD, <i>Science, Technology and Industry Scoreboard</i> , 2003	

International Division of Labor in accordance with Technological Differences

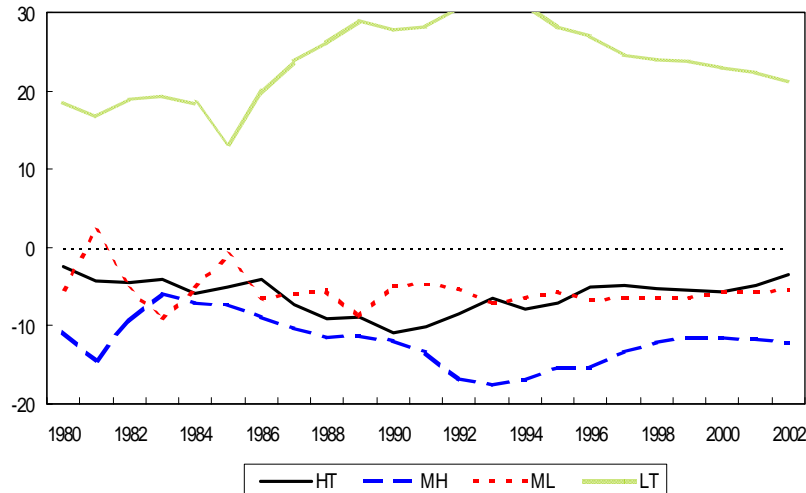
China's Overall Trade Specialization Pattern



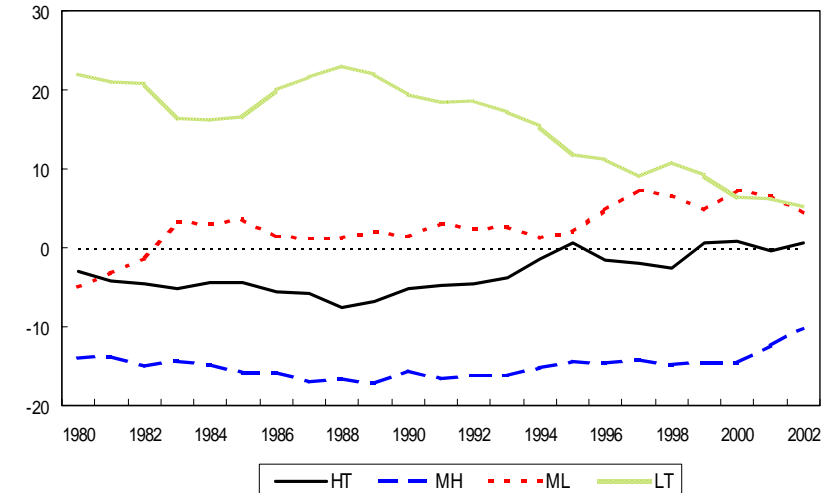
Bilateral Trade of China with Korea



Bilateral Trade of China with Japan



Bilateral Trade of Korea with Japan

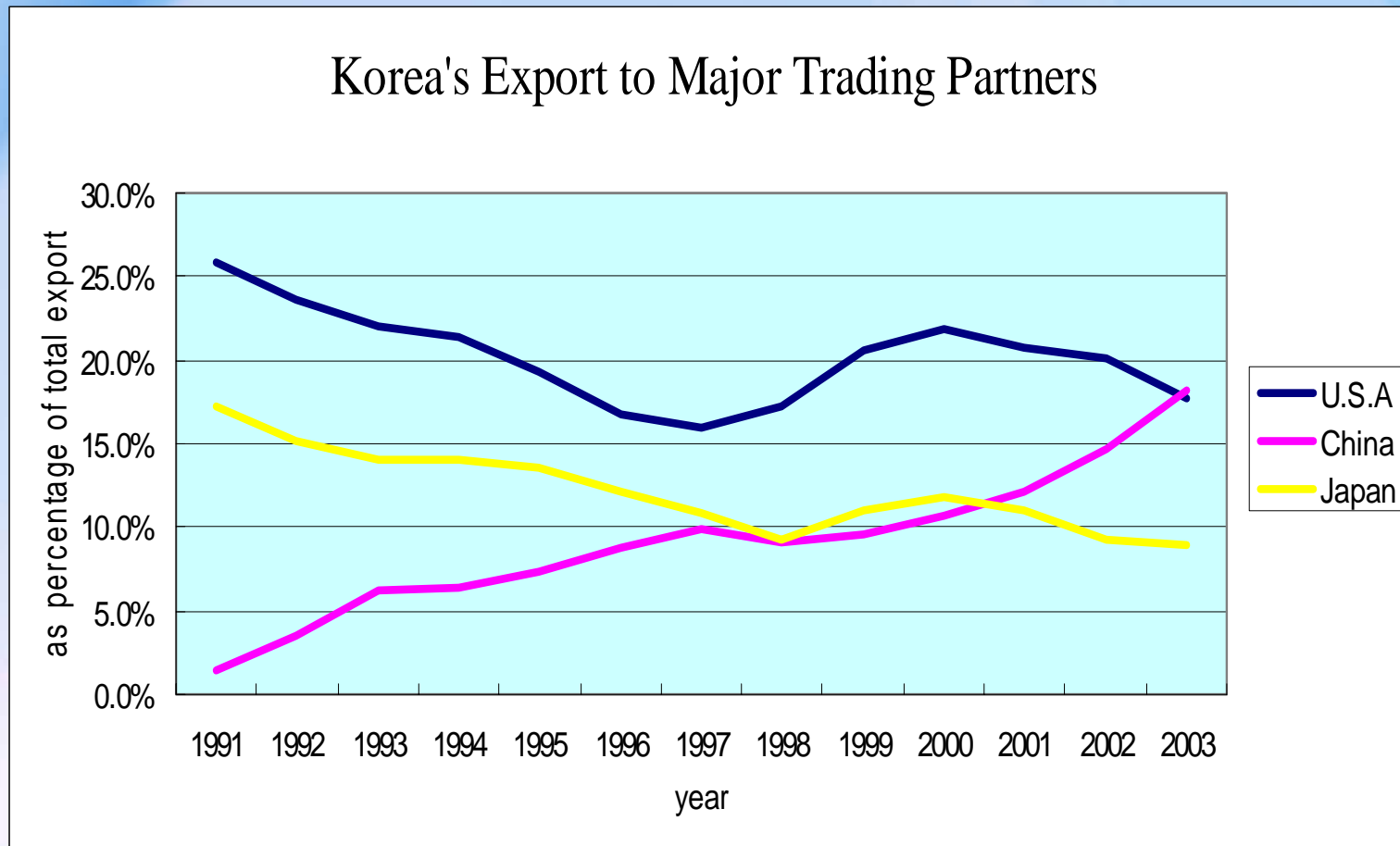


II. Korean Firms' Investment Pattern

- Trade Growth**
- Korea's Outbound FDI**
- Supply Chains in China - SSE & LGE**
- Korean Firms' Investment Patterns**

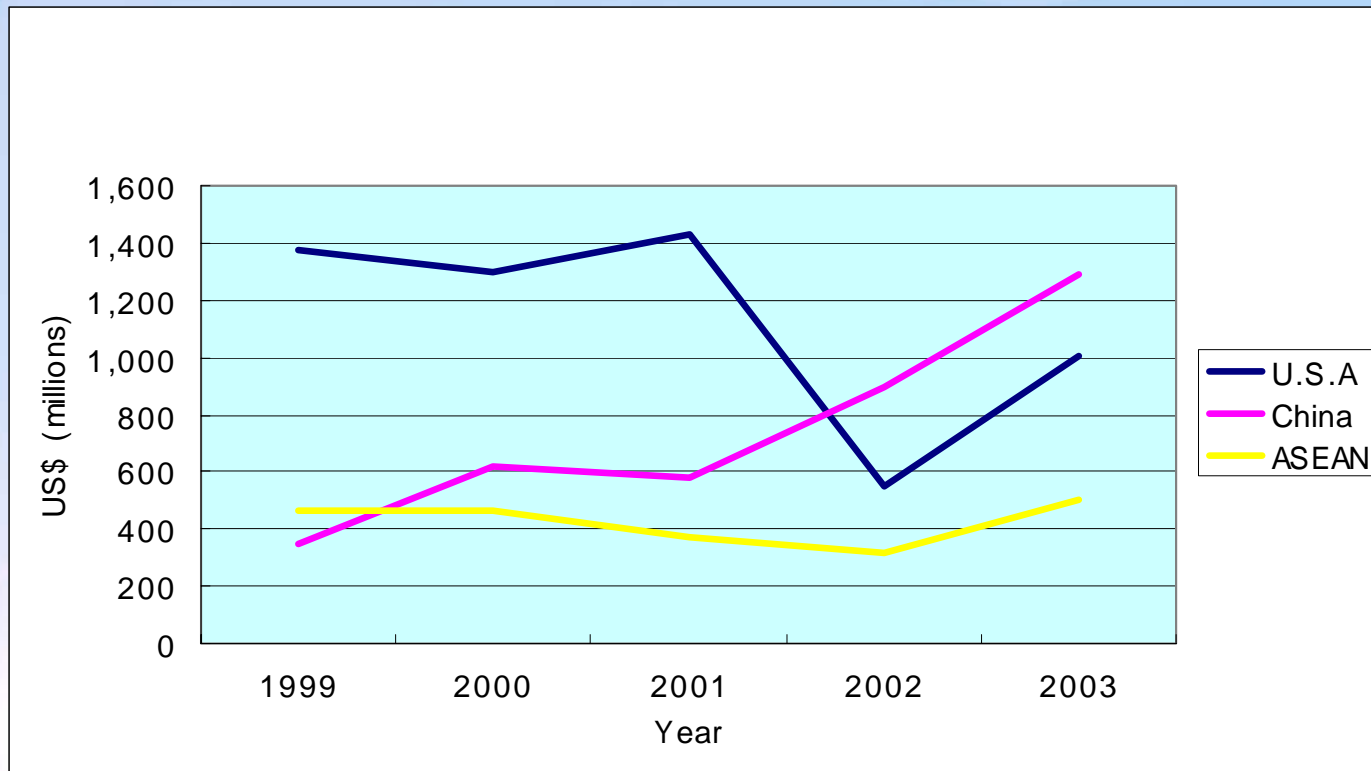
Trade Growth

In 2003, China overtook the U.S. as the top destination for Korean exports. Export proportions to the U.S. and Japan show a declining trend.

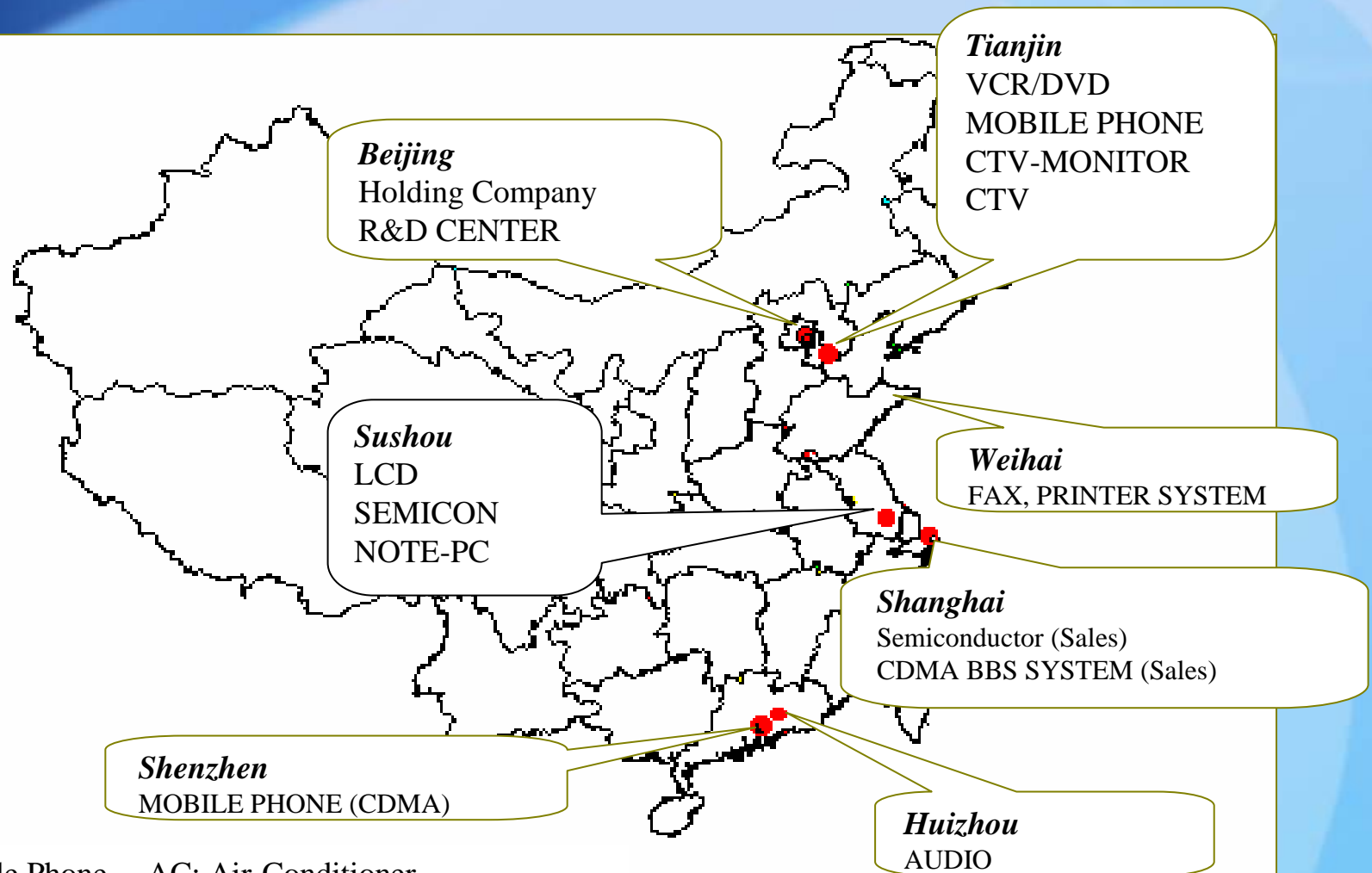


Korea's Outbound FDI

Initially, investments were made mainly by SMEs. From the late 1990s, however, large corporations (*Chaebols*) increased their levels of FDI. In 2002, China overtook the U.S. for Korean firms' FDI.

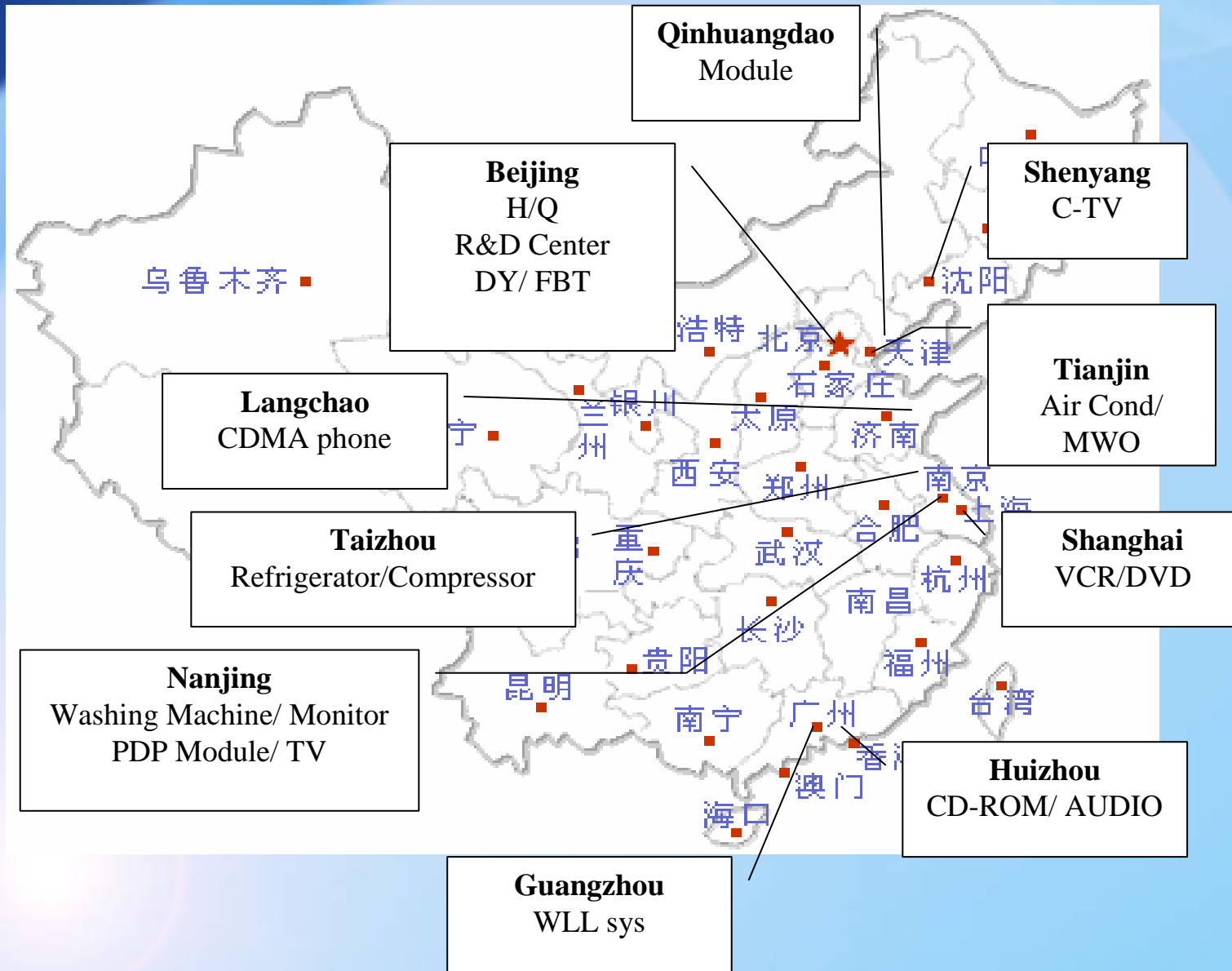


Samsung Electronics - Major Projects in China



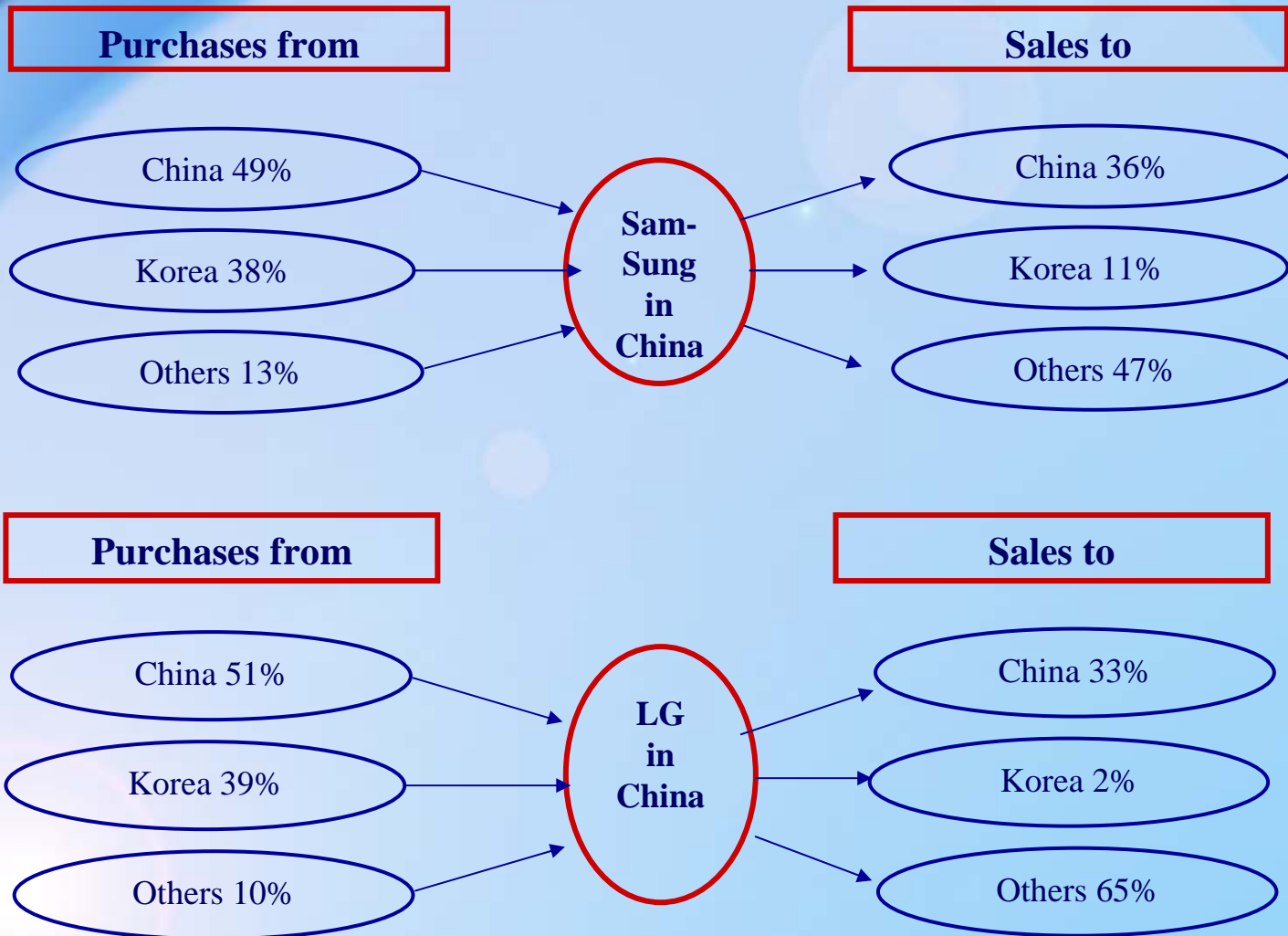
HHP: Mobile Phone AC: Air-Conditioner
REF: Refrigerator MWO: Microwave Oven
W/M: Washing Machine

LG Electronics - Major Projects in China



Supply Chains in China - SSE & LGE

Korea firms' high level of local sourcing



Korean Firms' General Patterns of Investment

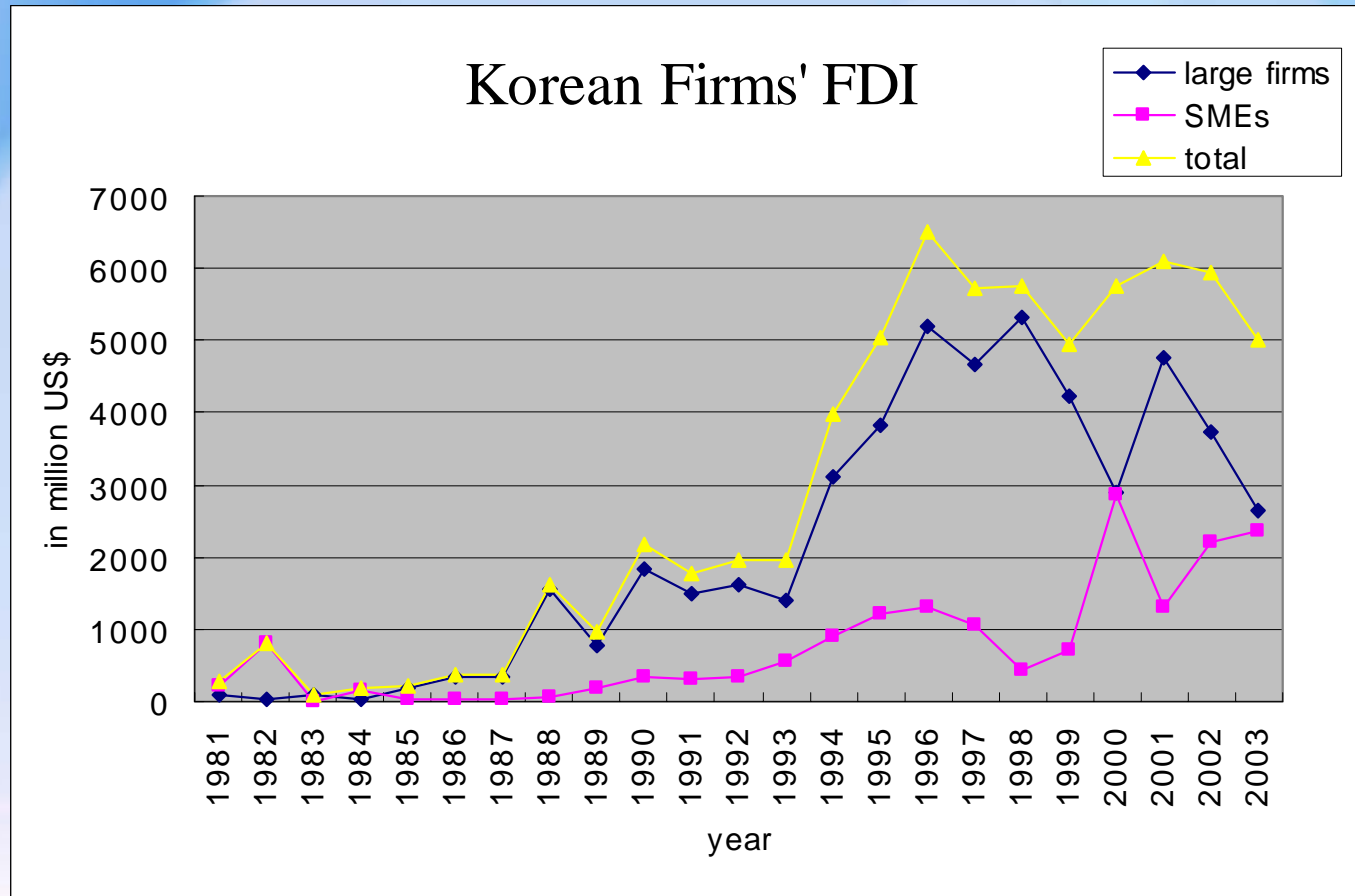
- Potential Competition: not Japanese but Chinese firms
- Localization: 98% of local employees with Korean managers
- Product Mix: from mid-quality, mid-cost products to high-quality and general products
- R&D: product improvement for customization for China
- Synergy of Products Diversity: brand images

III. Impacts of Economic Integration

as a consequence of swift regional economic integration

- **Concerns over “hollowing out”**
- **Widening gap between export growth and domestic value-adding activity**
- **Interruption of domestic production networks**

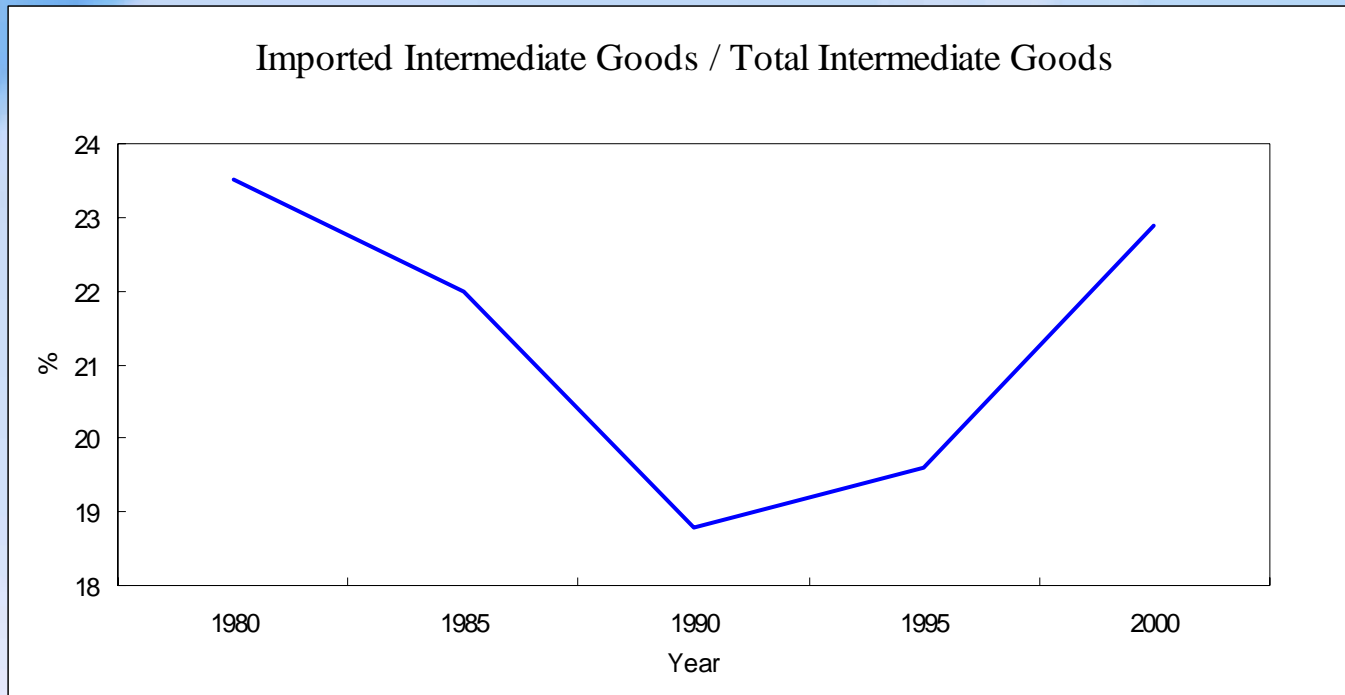
Does hollowing-out really happen in Korea?



Widening Gap between Export Growth and Domestic Value-Adding Activities

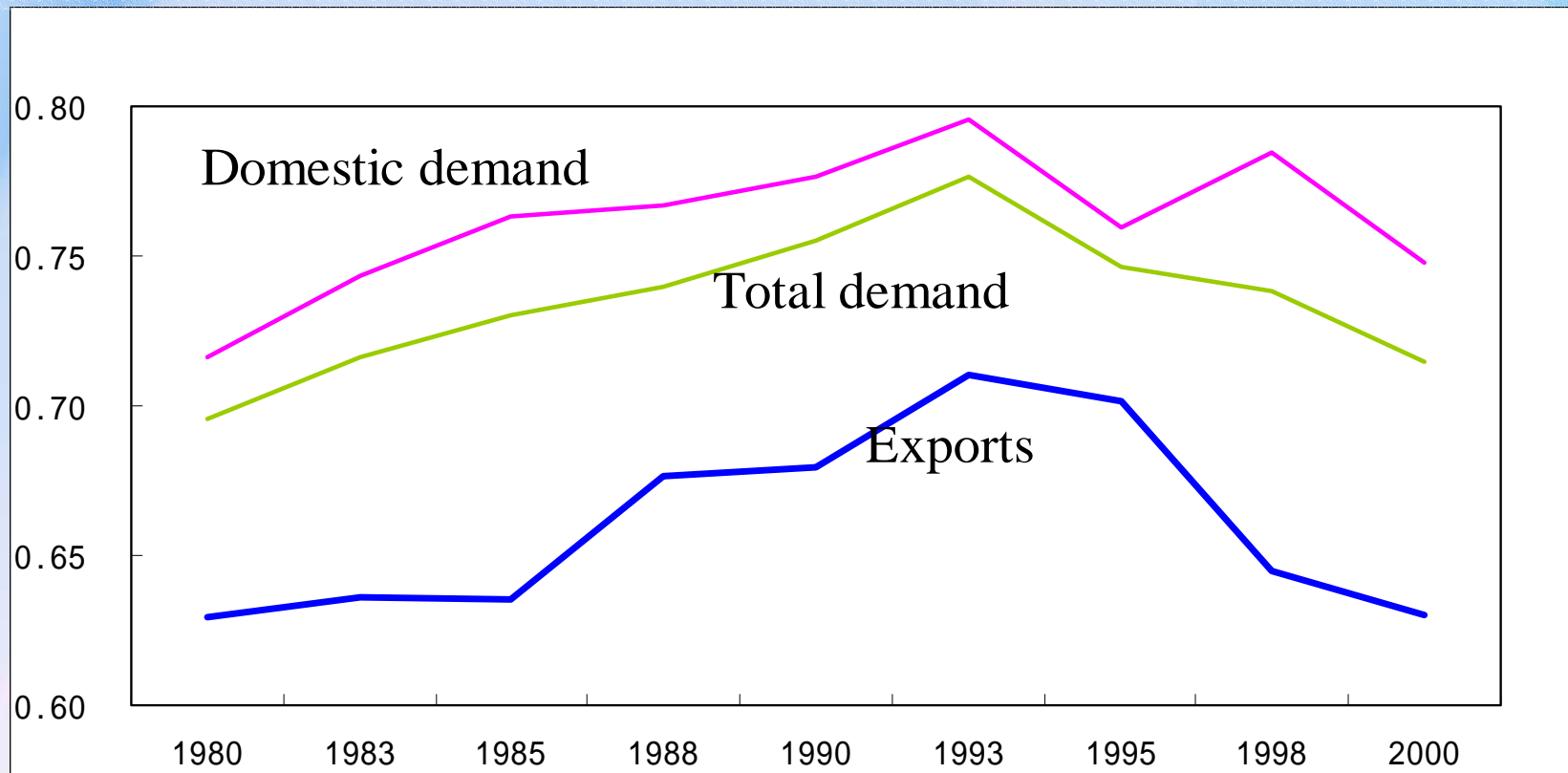
- **The value-added generated by per unit exports continued to decline since the mid-1990s.**
- **This reflects a sharp increase in intra-regional trade and integration into regional supply chains.**
- **This becomes a source of bipolarization in the domestic economy.**

Imported Portion Among Intermediate Goods Continued to Increase Since 1990



The Impact of Integration on Regional Production Networks

The value-added generated by demand per unit declined from the early 1990s. The rate of export-generated value-added declined more drastically than domestic demand.



Problems of SMEs

Interruption in Domestic Production Networks as a Consequence of Leading Firms' move

- SMEs lost domestic input suppliers or output demanders
- Sharp increase in costs in delivery or sourcing
- Difficulty finding new partners
- Large number of SMEs considered shutting-down

Korea: Large Number of SMEs with Low Productivity

Proportion of Employment by Firm Size

(unit: as % of total employment)

firm size (# of employment)	Korea	Japan	Germany	U.S.	Italy
5-19	26	22	16	7	41
20-99	33	31	17	23	25
100-499	21	27	26	37	17
SMEs subtotal (less than 500)	81	80	59	67	84
large firms (more than 500)	19	20	41	33	16

Productivity Differences by Firm Size

(unit: productivity of large firms=100)

firm size (# of employment)	Korea	Japan	Germany	U.S.	Italy
5-19	21	35	46	43	47
20-99	31	49	62	51	77
100-499	56	73	74	66	92
SMEs subtotal (less than 500)	34	53	63	58	65
large firms (more than 500)	100	100	100	100	100

Passivity of Korean Businessmen regarding a Tripartite FTA

Q: Do you support a Korea-Japan-China FTA?

(Unit: %)

	Korea	Japan	China
"Yes"	70.9	78.7	85.3
"No"	13.3	5.9	1.5
"Conditional yes or no"	15.8	14.2	13.2

Source: NIRA, KIEP, DRC (2003)

Q: How to respond to increased domestic competition due to a Tripartite FTA?

(multiple answers)

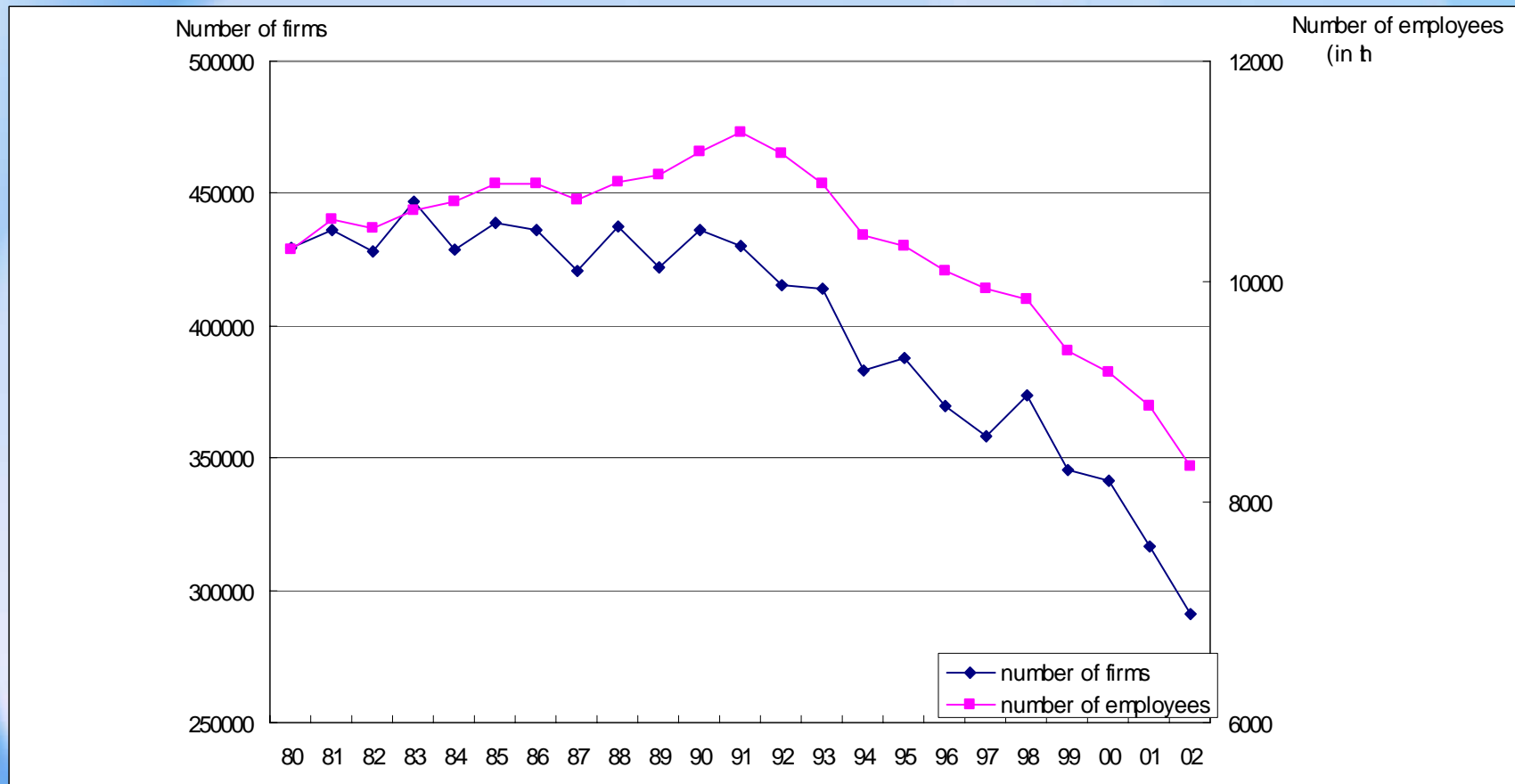
(Unit: %)

	Korea	Japan	China
Enhance productivity by adopting new technology	11.8	26.9	61.1
Cost reductions through layoffs, etc.	37.9	18.8	54.2
Try to increase value added	13.8	62.3	39.5
Product diversification or enter a new area	26.6	26.5	43.7
No change	14.8	11.4	6.3
Other	2.5	4.6	2.1

Source: NIRA, KIEP, DRC (2003)

SMEs expected to decline based upon Japan's Experience

Continued decline of SMEs in Japan since the early 1990s.
Is Korea to follow the same pattern?



Thank you