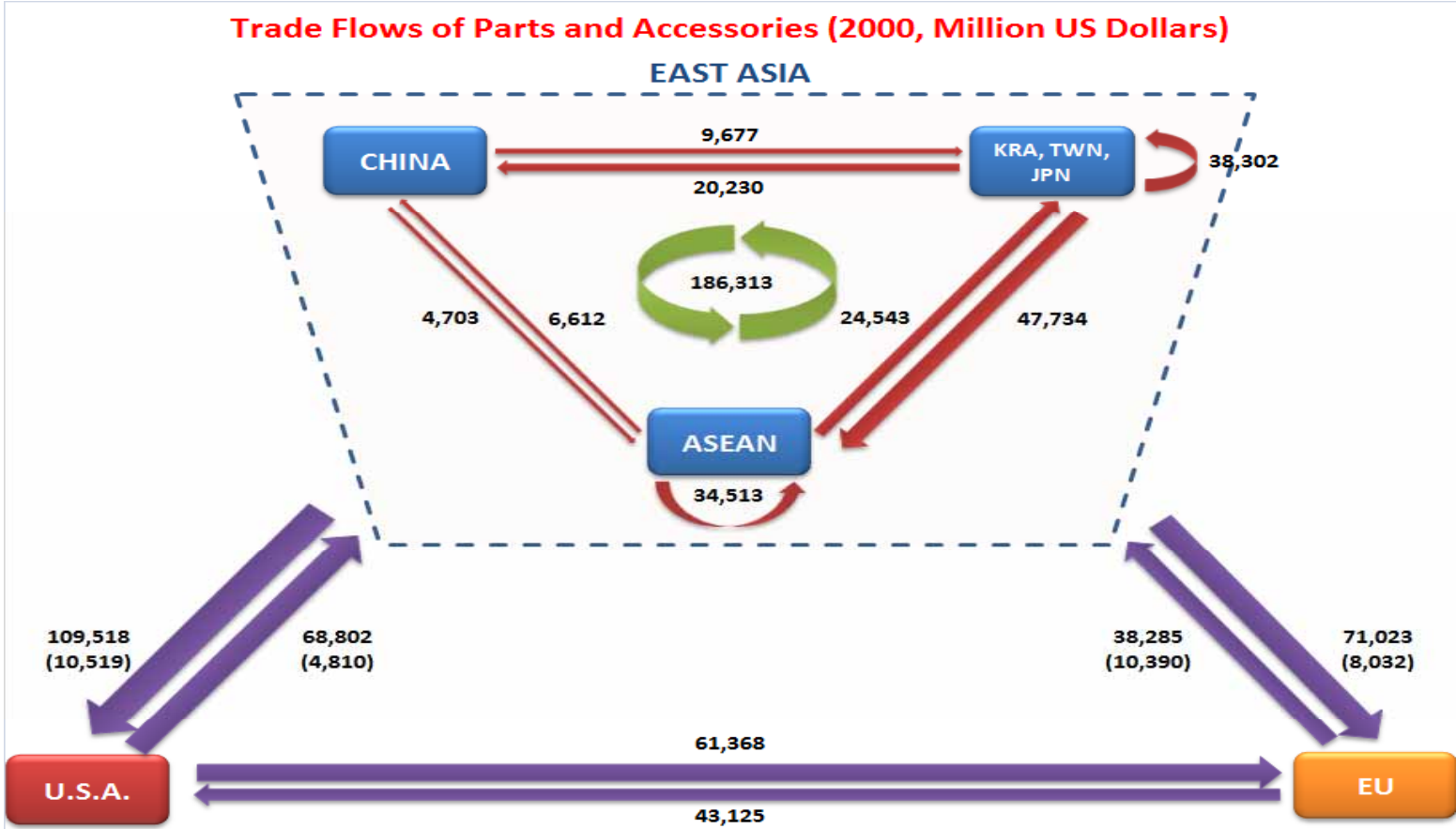

Triangular Trade and the Impact of 1 Financial Crisis on East Asia

Ikuo Kuroiwa

**Development Studies Center, Institute of
Developing Economies (IDE-JETRO)**

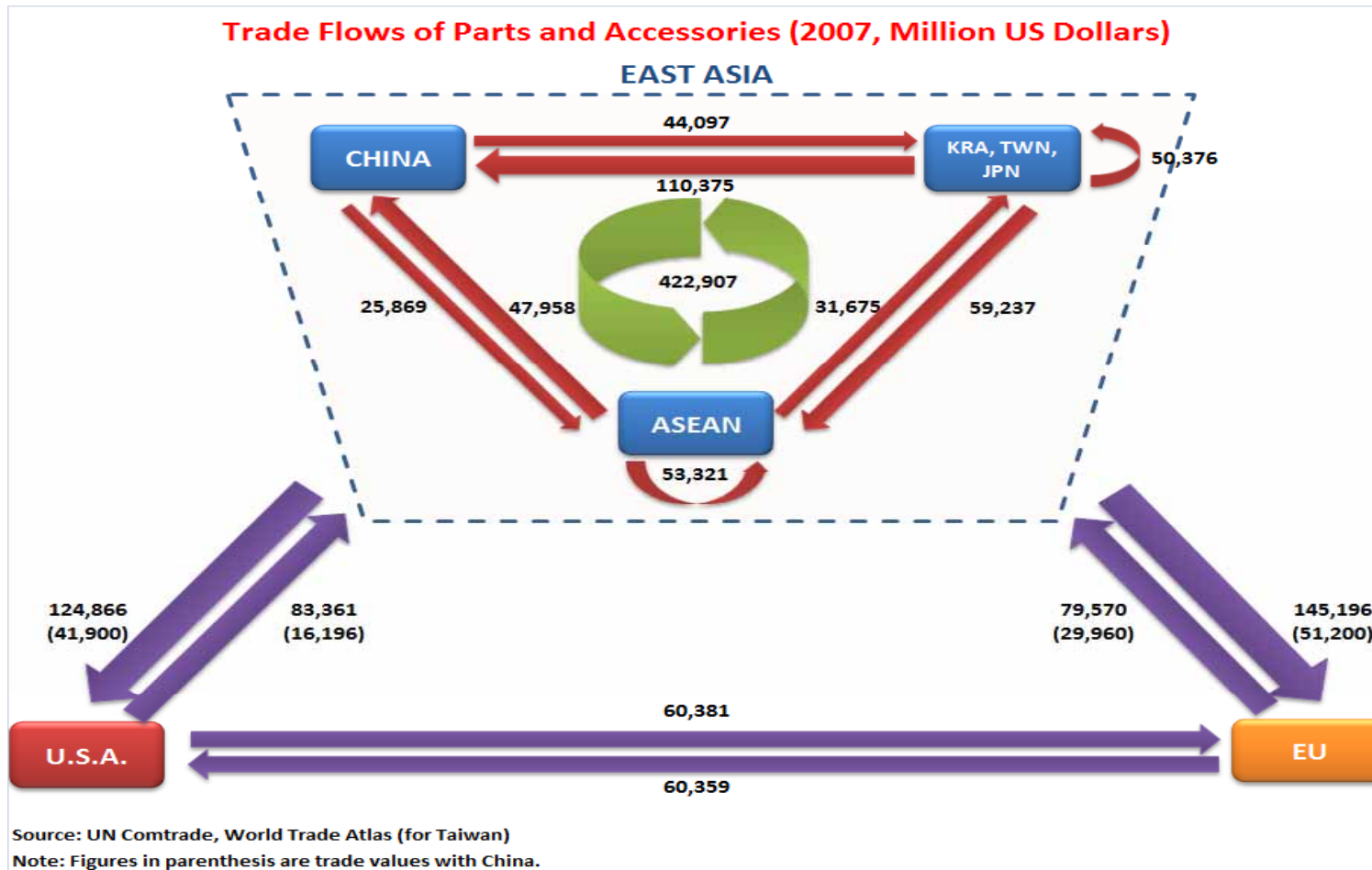
December 1, 2009

Production networks in East Asia

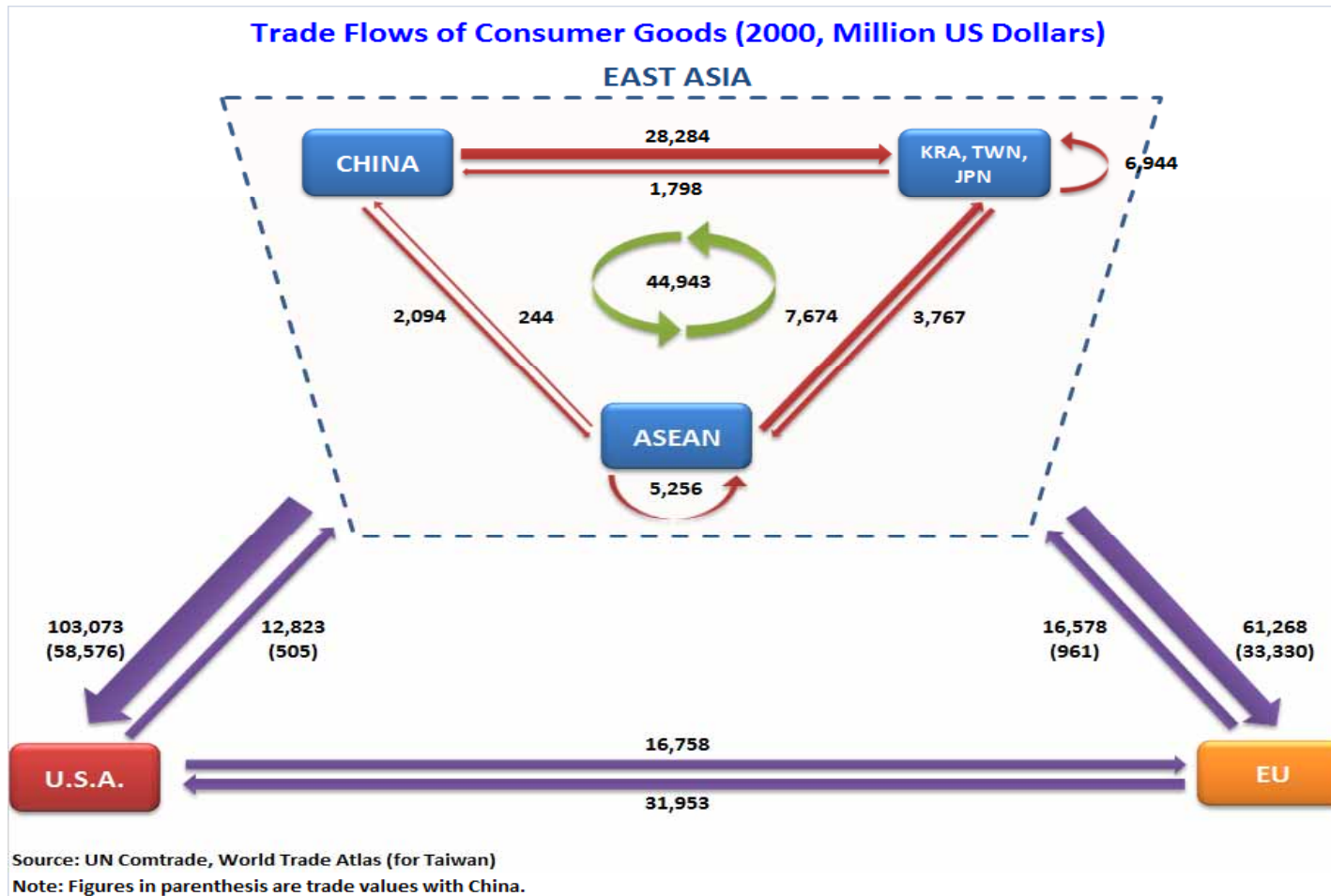


Source: UN Comtrade, World Trade Atlas (for Taiwan)
 Note: Figures in parenthesis are trade values with China.

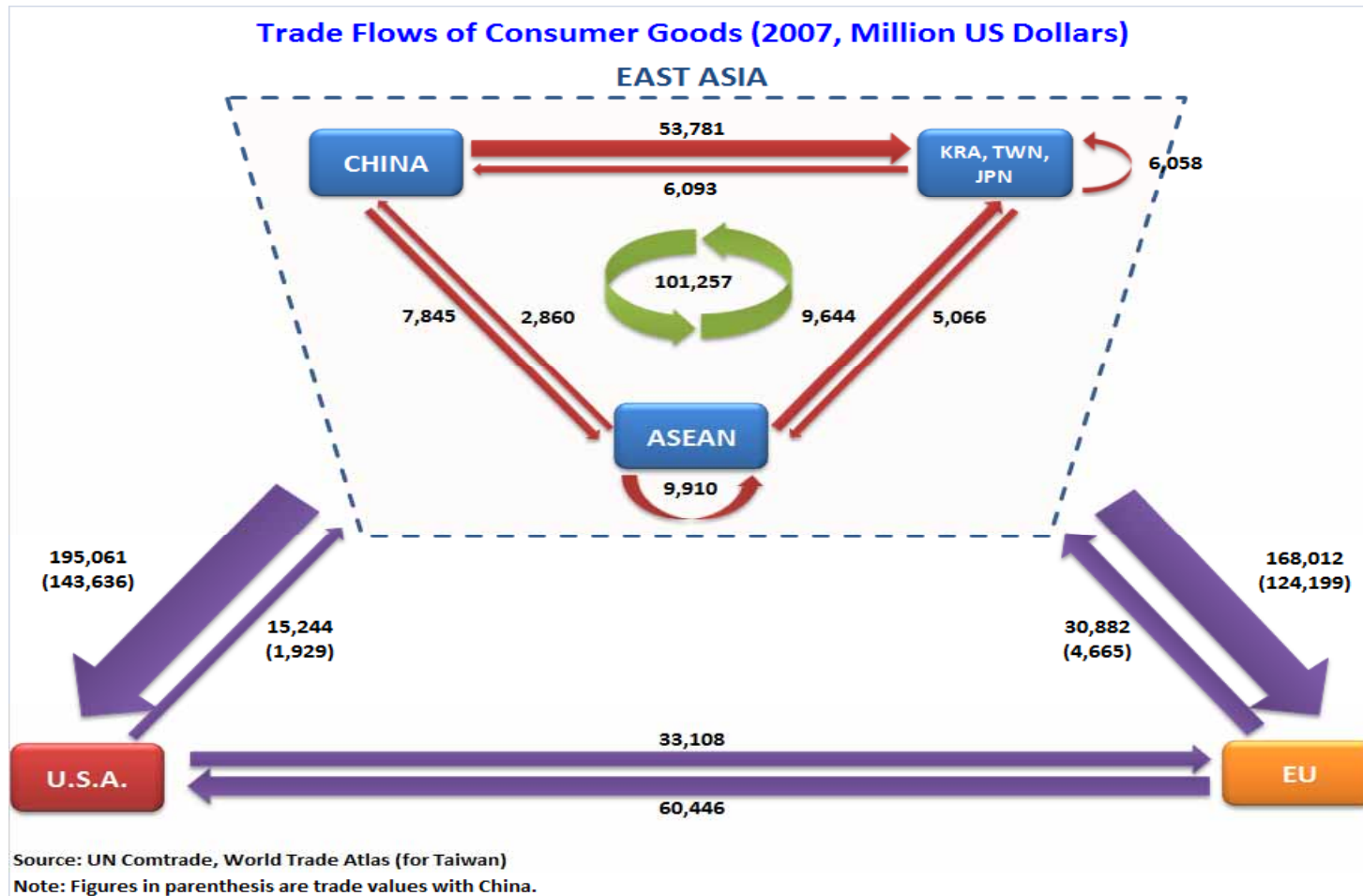
Expanding triangular trade through China



Weak intra-regional trade and high dependency on the US and EU market

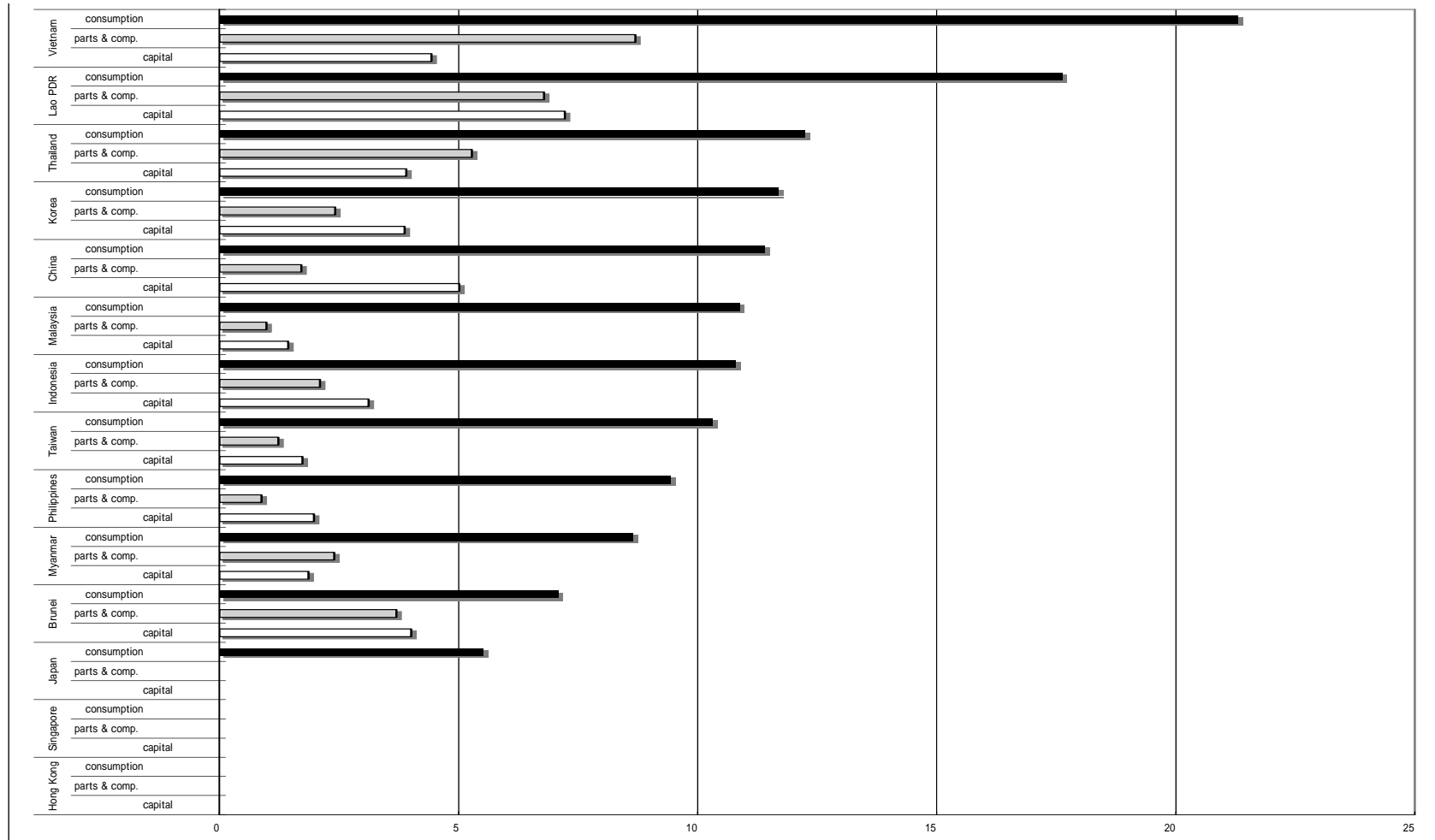


Rising trade imbalance with developed countries, especially in China



Promoting export industry while restraining import of consumption goods

Average effective tariff rate of intra-regional trade in East Asia (2006)



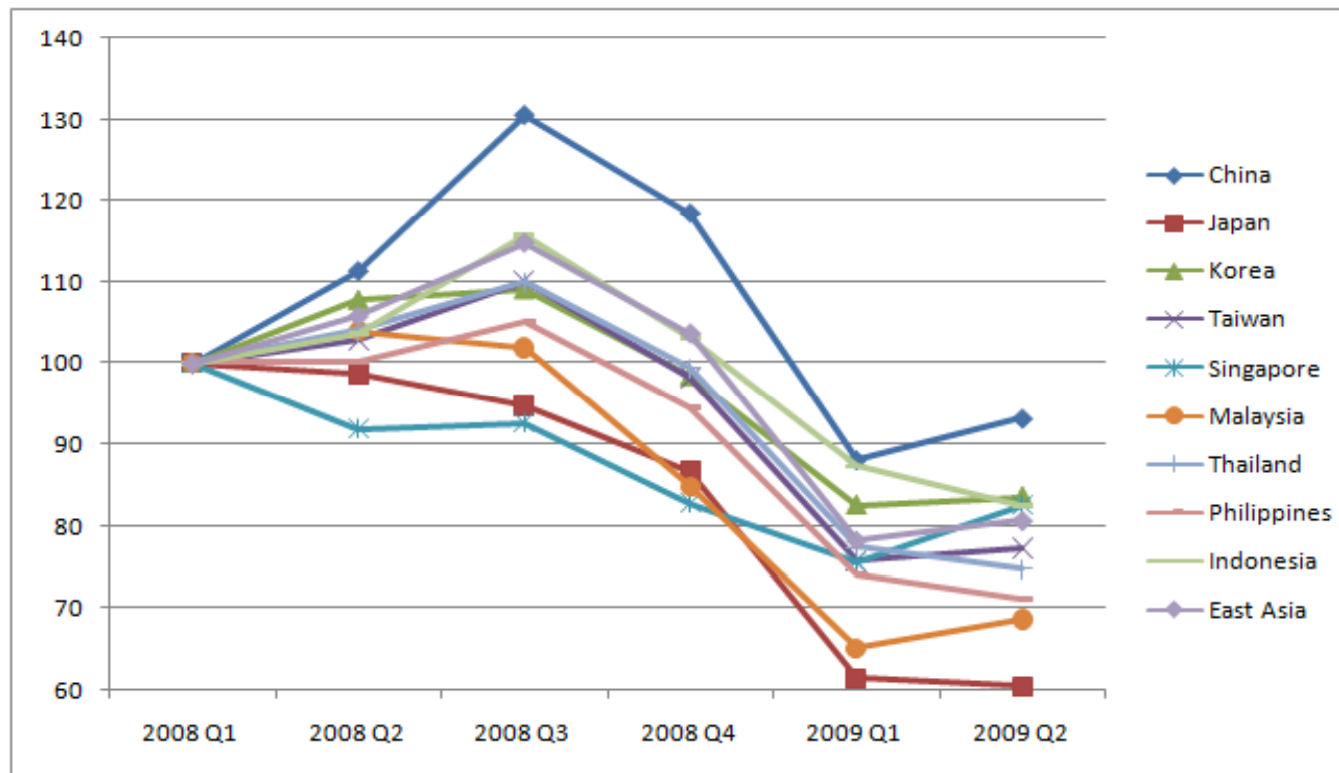
Background of the triangular trade through China

- A large part of FDI (cumulative, 2008) came from neighboring East Asian economies: Hong Kong (40.7%), Japan (7.6%), Taiwan (5.6%), Korea (4.9%), and Singapore (4.4%).
- Forty percent of China's imports for export processing came from Korea, Taiwan, and Hong Kong, and one-fifth from Japan (2002).
- The US accounts for one-fourth of China's processed exports (2002).



Rapid decline in production induced by US import demand after the Lehman Shock (the largest decline in Japan)

Trend in production induced by US import demand (2008Q1=100)
Estimation by the 2008 Asian International Input-Output Table



- Textile, electronics, and material industries declined sharply in China, while transport equipment, electronics, general machinery, and material industries were strongly affected in Japan.

- Transport equipment was much less affected by the triangular trade than electronics.

Change in production induced by US import demand (08Q3-09Q1)

China

-61.0 billion USD

	share (%)	own country export	triangular trade (direct)	through China	triangular trade (indirect)	through China	Elasticity
Textile and leather	14.4	99.0	1.0		0.1		1.0
Computers and electronic equipment	13.8	92.2	6.7		1.0		0.9
Other electrical equipment	12.7	97.2	2.5		0.3		1.1
Other manufacturing products	10.4	98.4	1.4		0.2		1.1
Metal products	9.3	94.2	5.1		0.7		1.0
Chemical products	8.3	96.1	3.5		0.5		1.0
Trade and transport	4.7	92.4	6.7		0.9		1.0
Services	3.5	96.2	3.3		0.4		1.0

Japan

-28.2 billion USD

	share (%)	Own country export	Triangular trade (direct)	Through China	Triangular trade (indirect)	Through China	Elasticity
Transport equipment	20.8	99.0	0.9	0.4	0.1	0.1	1.3
Services	20.0	93.7	5.3	2.9	1.0	0.6	1.2
Computers and electronic equipment	13.2	68.3	26.2	14.9	5.6	3.2	1.0
Other electrical equipment	8.5	88.7	9.7	4.7	1.5	0.9	1.1
General machinery	7.6	92.2	6.7	2.9	1.1	0.6	0.8
Metal products	7.5	71.8	24.2	11.2	4.0	2.3	0.9
Trade and transport	6.8	75.9	20.5	11.0	3.7	2.2	1.0
Chemical products	3.8	66.7	27.9	16.6	5.4	3.8	0.6

- Electronics, material industries, and transport equipment declined sharply in Korea, while electronics, material industries, and textile were strongly affected in Taiwan.

- The impact of the triangular trade through China was extremely strong in these two countries.

Change in production induced by US import demand (08Q3-09Q1)

Korea

-7.2 billion USD

	share (%)	Own country export	Triangular trade (direct)	Through China	Triangular trade (indirect)	Through China	Elasticity
Computers and electronic equipment	23.9	49.8	43.3	30.4	7.0	3.3	1.2
Metal products	12.8	66.3	30.3	19.5	3.5	1.5	1.1
Services	11.2	77.2	20.2	14.3	2.6	1.2	0.9
Other electrical equipment	8.6	73.1	24.2	15.6	2.7	1.1	0.6
Petroleum and petro products	8.1	82.7	15.1	12.3	2.2	1.0	1.8
Chemical products	7.8	47.8	47.8	38.8	4.5	2.3	1.1
Transport equipment	5.3	96.4	3.2	1.3	0.4	0.1	0.9
Trade and transport	4.9	54.8	40.1	28.3	5.2	2.4	1.0

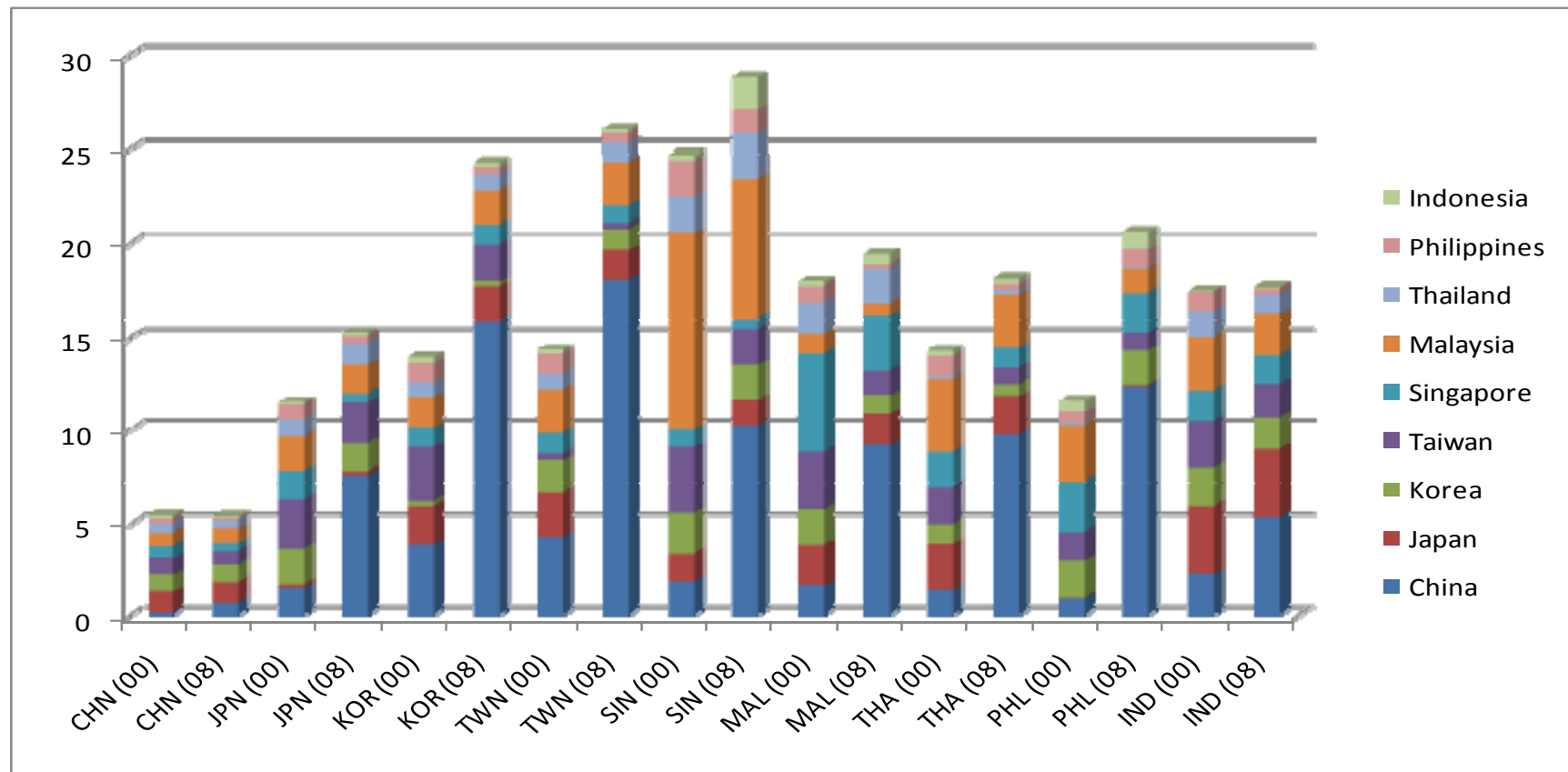
Taiwan

-6.7 billion USD

	share (%)	Own country export	Triangular trade (direct)	Through China	Triangular trade (indirect)	Through China	Elasticity
Computers and electronic equipment	25.9	56.5	38.0	27.6	5.5	2.4	1.0
Metal products	13.0	78.1	20.1	15.9	1.8	0.7	1.1
Services	12.4	81.9	16.3	12.3	1.8	0.8	1.1
Other electrical equipment	6.7	84.9	13.6	9.2	1.5	0.6	0.6
Trade and transport	6.6	56.2	39.4	29.8	4.4	1.9	1.0
Other manufacturing products	5.5	85.5	13.2	10.2	1.3	0.5	1.0
Textile and leather	5.5	87.8	11.7	10.4	0.4	0.2	1.2
General machinery	5.2	94.0	5.4	2.9	0.7	0.3	1.1

Rapid increase in the repercussion effects caused by the triangular trade through China in neighboring East Asian economies (especially in Korean and Taiwan)

Shares of the triangular trade (2000, 2008)



Source: Calculated from Asian International Input-Output Tables (2000, 2008)