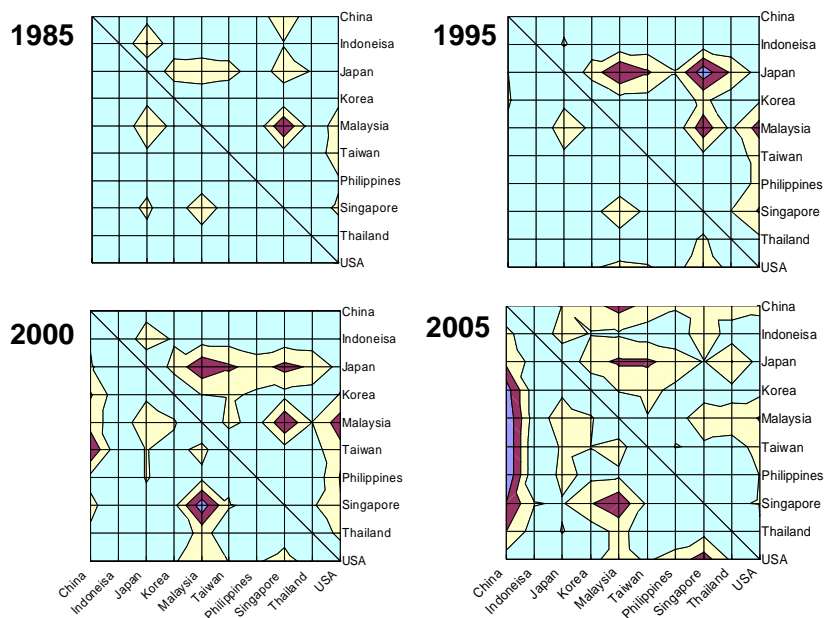


Trade Patterns, Production networks, and Trade and employment in the Asia-US region

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Development of cross-national production linkages, 1985-2005



Cross-national transfer of employment opportunities, 2000, 2005 (1,000 persons)

| 2000 | China | Indonesia | Japan | Korea | Malaysia | Taiwan | Philippines | Singapore | Thailand | USA | total |
|-------------|-------|-----------|--------|-------|----------|--------|-------------|-----------|----------|--------|--------|
| China | | 911 | 18,817 | 3,406 | 916 | 1,425 | 362 | 839 | 992 | 28,509 | 56,177 |
| Indonesia | 1,139 | | 3,733 | 702 | 612 | 591 | 244 | 525 | 399 | 5,406 | 13,350 |
| Japan | 420 | 66 | | 264 | 113 | 285 | 63 | 94 | 123 | 1,816 | 3,244 |
| Korea | 340 | 32 | 373 | | 30 | 88 | 31 | 25 | 29 | 736 | 1,685 |
| Malaysia | 201 | 47 | 569 | 109 | | 111 | 50 | 260 | 84 | 1,051 | 2,484 |
| Taiwan | 373 | 22 | 318 | 59 | 43 | | 25 | 21 | 38 | 722 | 1,620 |
| Philippines | 314 | 30 | 1,506 | 228 | 127 | 213 | | 52 | 98 | 2,780 | 5,348 |
| Singapore | 33 | 8 | 43 | 18 | 31 | 20 | 14 | | 16 | 146 | 328 |
| Thailand | 473 | 149 | 1,539 | 182 | 279 | 243 | 123 | 247 | | 2,516 | 5,751 |
| USA | 250 | 38 | 822 | 237 | 70 | 214 | 45 | 65 | 61 | | 1,801 |
| total | 3,543 | 1,303 | 27,720 | 5,206 | 2,221 | 3,190 | 956 | 2,128 | 1,839 | 43,682 | 91,787 |

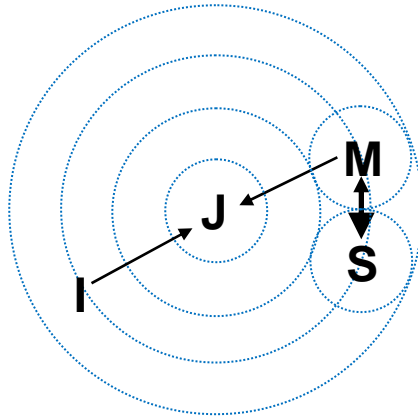
| 2005 | China | Indonesia | Japan | Korea | Malaysia | Taiwan | Philippines | Singapore | Thailand | USA | total |
|-------------|-------|-----------|--------|-------|----------|--------|-------------|-----------|----------|--------|---------|
| China | | 1,943 | 23,266 | 5,521 | 1,055 | 2,617 | 481 | 844 | 2,032 | 51,542 | 89,301 |
| Indonesia | 1,795 | | 3,032 | 746 | 610 | 417 | 166 | 686 | 508 | 4,422 | 12,382 |
| Japan | 1,003 | 110 | | 425 | 62 | 349 | 57 | 46 | 204 | 1,754 | 4,009 |
| Korea | 727 | 44 | 330 | | 20 | 71 | 18 | 12 | 45 | 599 | 1,866 |
| Malaysia | 1,030 | 170 | 776 | 221 | | 156 | 62 | 185 | 300 | 2,044 | 4,944 |
| Taiwan | 818 | 31 | 308 | 83 | 32 | | 33 | 13 | 55 | 593 | 1,966 |
| Philippines | 1,565 | 107 | 1,249 | 282 | 101 | 204 | | 34 | 238 | 1,606 | 5,385 |
| Singapore | 82 | 59 | 69 | 58 | 27 | 15 | 12 | | 23 | 110 | 456 |
| Thailand | 1,203 | 422 | 1,568 | 246 | 249 | 213 | 94 | 122 | | 2,418 | 6,536 |
| USA | 406 | 56 | 661 | 245 | 40 | 147 | 48 | 69 | 82 | | 1,753 |
| total | 8,629 | 2,942 | 31,258 | 7,827 | 2,195 | 4,189 | 973 | 2,010 | 3,486 | 65,089 | 128,598 |

Cross-national transfer of employment opportunities, 2000, 2005 (1,000 persons)

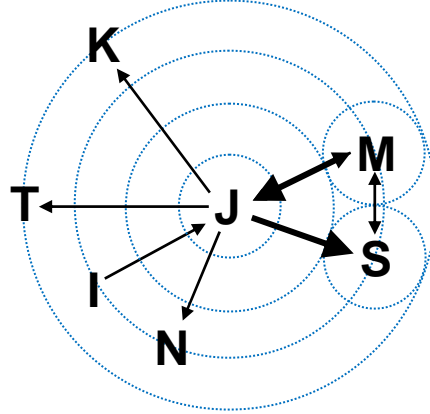
| 2000 | China | Indonesia | Japan | Korea | Malaysia | Taiwan | Philippines | Singapore | Thailand | USA | total |
|-------------|-------|-----------|--------|-------|----------|--------|-------------|-----------|----------|--------|--------|
| China | | 911 | 18,817 | 3,406 | 916 | 1,425 | 362 | 839 | 992 | 28,509 | 56,177 |
| Indonesia | 1,139 | | 3,733 | 702 | 612 | 591 | 244 | 525 | 399 | 5,406 | 13,350 |
| Japan | 420 | 66 | | 264 | 113 | 285 | 63 | 94 | 123 | 1,816 | 3,244 |
| Korea | 340 | 32 | 373 | | 30 | 88 | 31 | 25 | 29 | 736 | 1,685 |
| Malaysia | 201 | 47 | 569 | 109 | | 111 | 50 | 260 | 84 | 1,051 | 2,484 |
| Taiwan | 373 | 22 | 318 | 59 | 43 | | 25 | 21 | 38 | 722 | 1,620 |
| Philippines | 314 | 30 | 1,506 | 228 | 127 | 213 | | 52 | 98 | 2,780 | 5,348 |
| Singapore | 33 | 8 | 43 | 18 | 31 | 20 | 14 | | 16 | 146 | 328 |
| Thailand | 473 | 149 | 1,539 | 182 | 279 | 243 | 123 | 247 | | 2,516 | 5,751 |
| USA | 250 | 38 | 822 | 237 | 70 | 214 | 45 | 65 | 61 | | 1,801 |
| total | 3,543 | 1,303 | 27,720 | 5,206 | 2,221 | 3,190 | 956 | 2,128 | 1,839 | 43,682 | 91,787 |

| 2005 | China | Indonesia | Japan | Korea | Malaysia | Taiwan | Philippines | Singapore | Thailand | USA | total |
|-------------|-------|-----------|--------|-------|----------|--------|-------------|-----------|----------|--------|---------|
| China | | 1,943 | 23,266 | 5,521 | 1,055 | 2,617 | 481 | 844 | 2,032 | 51,542 | 89,301 |
| Indonesia | 1,795 | | 3,032 | 746 | 610 | 417 | 166 | 686 | 508 | 4,422 | 12,382 |
| Japan | 1,003 | 110 | | 425 | 62 | 349 | 57 | 46 | 204 | 1,754 | 4,009 |
| Korea | 727 | 44 | 330 | | 20 | 71 | 18 | 12 | 45 | 599 | 1,866 |
| Malaysia | 1,030 | 170 | 776 | 221 | | 156 | 62 | 185 | 300 | 2,044 | 4,944 |
| Taiwan | 818 | 31 | 308 | 83 | 32 | | 33 | 13 | 55 | 593 | 1,966 |
| Philippines | 1,565 | 107 | 1,249 | 282 | 101 | 204 | | 34 | 238 | 1,606 | 5,385 |
| Singapore | 82 | 59 | 69 | 58 | 27 | 15 | 12 | | 23 | 110 | 456 |
| Thailand | 1,203 | 422 | 1,568 | 246 | 249 | 213 | 94 | 122 | | 2,418 | 6,536 |
| USA | 406 | 56 | 661 | 245 | 40 | 147 | 48 | 69 | 82 | | 1,753 |
| total | 8,629 | 2,942 | 31,258 | 7,827 | 2,195 | 4,189 | 973 | 2,010 | 3,486 | 65,089 | 128,598 |

1985

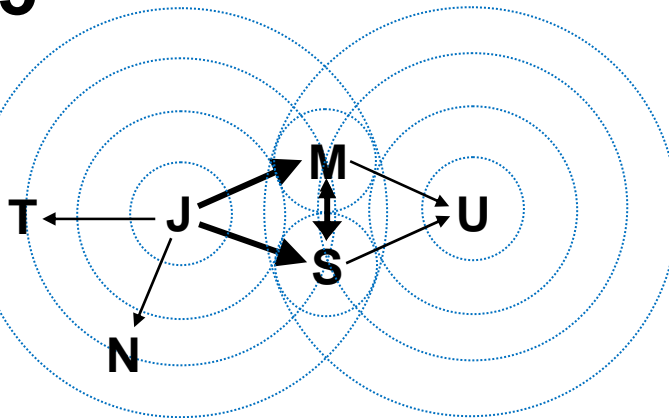


1990

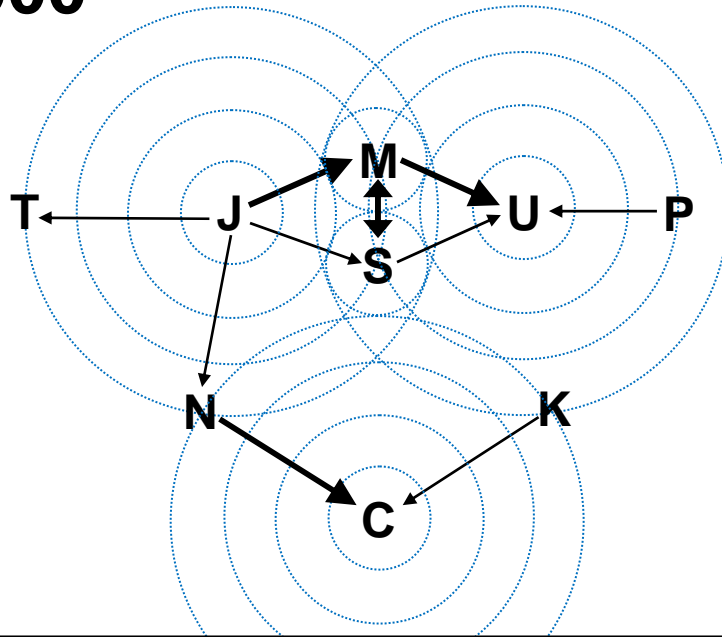


C: China, I: Indonesia, J: Japan, K: Korea, M: Malaysia, N: Taiwan, P: The Philippines, S: Singapore, T: Thailand, U: The USA

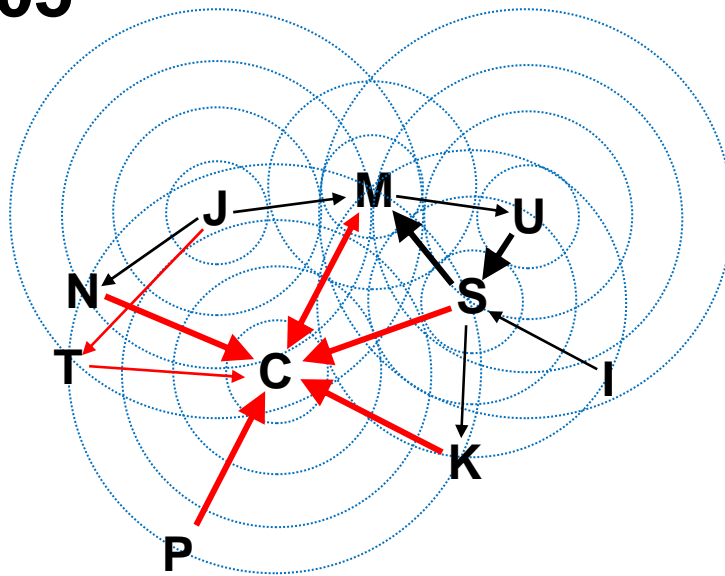
1995



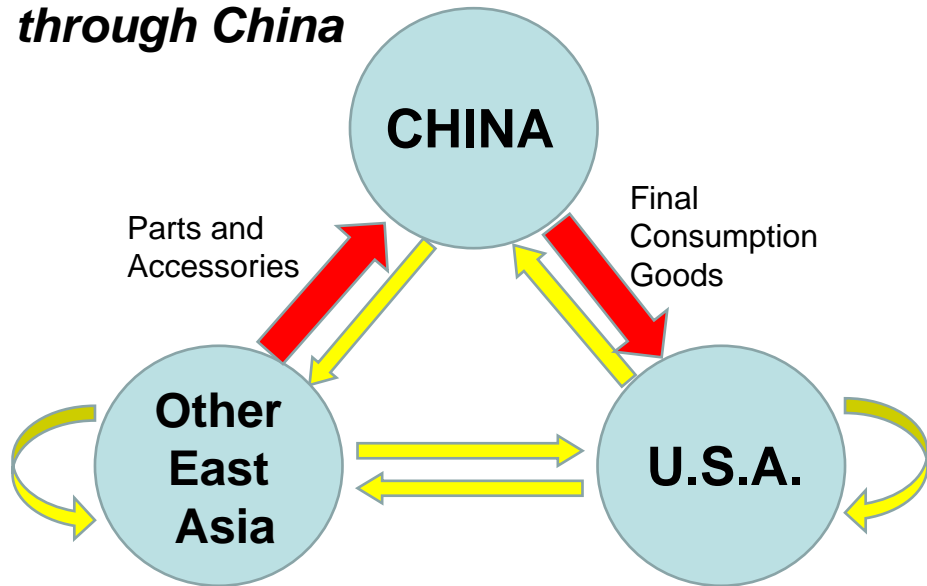
2000



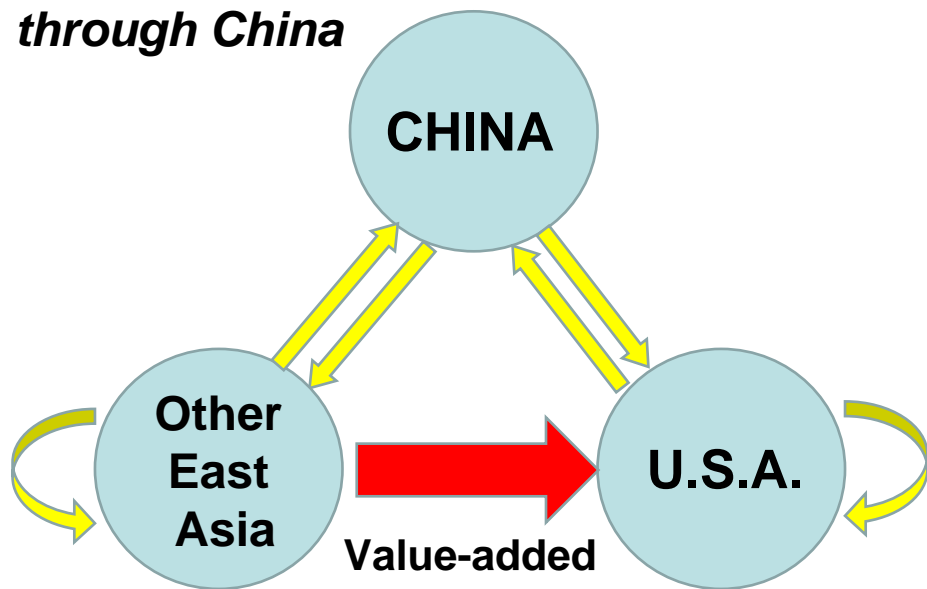
2005

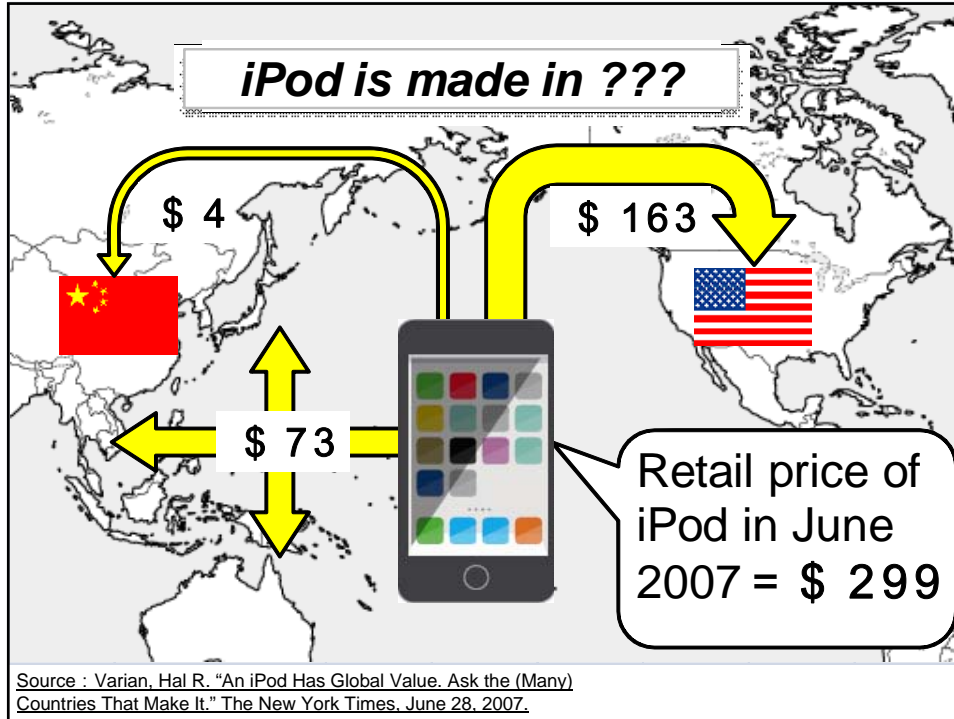


Tri-polar Trade through China



Tri-polar Trade through China



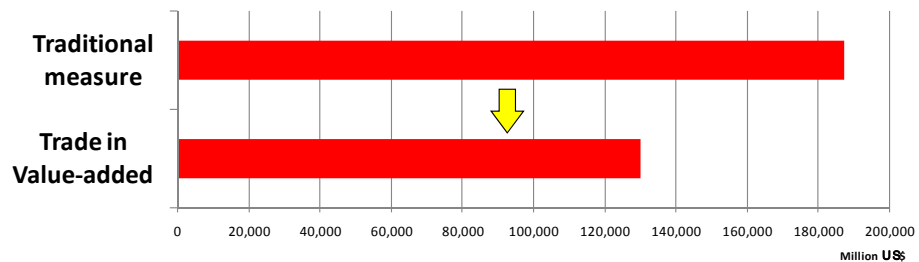


A schematic image of the Asian International Input-Output Table

| | Intermediate Demand (A) | | | | | | | | | | Final Demand (F) | | | | | | | | | | Export (L) | | | | | Total Output (X) |
|--|-------------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|--------------------------|-------------------|-----------------------|------------------------------|------------------|
| | Indonesia (AD) | Malaysia (AM) | Philippines (AP) | Singapore (AS) | Thailand (AT) | China (AC) | Taiwan (AN) | Korea (AK) | Japan (AJ) | U.S.A. (AU) | Indonesia (FD) | Malaysia (FM) | Philippines (FP) | Singapore (FS) | Thailand (FT) | China (FC) | Taiwan (FN) | Korea (FK) | Japan (FJ) | U.S.A. (FU) | Export to India (LI) | Export to Hong Kong (LH) | Export to EU (LE) | Export to R.O.W. (LW) | Statistical Discrepancy (LD) | |
| Indonesia (AD) | A ^{II} | A ^{MI} | A ^{PH} | A ^{SI} | A TH | A ^{CH} | A ^{TA} | A ^{KO} | A ^{JA} | A ^{US} | F ^{II} | F ^{MI} | F ^{PH} | F ^{SI} | F TH | F ^{CH} | F ^{TA} | F ^{KO} | F ^{JA} | F ^{US} | L ^{IG} | L ^{HI} | L ^{EO} | L ^{EW} | Q ^I | X ^I |
| Malaysia (AM) | A ^{MI} | A ^{MM} | A ^{MP} | A ^{MS} | A ^{MT} | A ^{MC} | A ^{MN} | A ^{MK} | A ^{MJ} | A ^{MU} | F ^{MI} | F ^{MM} | F ^{MP} | F ^{MS} | F ^{MT} | F ^{MC} | F ^{MN} | F ^{MK} | F ^{MJ} | F ^{MU} | L ^{MG} | L ^{MH} | L ^{MO} | L ^{MW} | Q ^M | X ^M |
| Philippines (AP) | A ^{PH} | A ^{PM} | A ^{PP} | A ^{PS} | A ^{PT} | A ^{PC} | A ^{PN} | A ^{PK} | A ^{PJ} | A ^{PU} | F ^{PH} | F ^{PM} | F ^{PP} | F ^{PS} | F ^{PT} | F ^{PC} | F ^{PN} | F ^{PK} | F ^{PJ} | F ^{PU} | L ^{PG} | L ^{PH} | L ^{PO} | L ^{PW} | Q ^P | X ^P |
| Singapore (AS) | A ^{SI} | A SM | A ^{SP} | A ^{SS} | A ST | A ^{SC} | A ^{SN} | A ^{SK} | A ^{SJ} | A ^{SU} | F ^{SI} | F SM | F ^{SP} | F ^{SS} | F ST | F ^{SC} | F ^{SN} | F ^{SK} | F ^{SJ} | F ^{SU} | L ^{SG} | L ^{SH} | L ^{SO} | L ^{SW} | Q ^S | X ^S |
| Thailand (AT) | A ^{TI} | A TM | A ^{TP} | A ^{TS} | A ^{TT} | A ^{TC} | A ^{TN} | A ^{TK} | A ^{TJ} | A ^{TU} | F ^{TI} | F TM | F ^{TP} | F ^{TS} | F ^{TT} | F ^{TC} | F ^{TN} | F ^{TK} | F ^{TJ} | F ^{TU} | L ^{TG} | L TH | L ^{TO} | L ^{TW} | Q ^T | X ^T |
| China (AC) | A ^{CI} | A ^{CM} | A ^{CP} | A ^{CS} | A ^{CT} | A ^{CC} | A ^{CN} | A ^{CK} | A ^{CJ} | A ^{CU} | F ^{CI} | F ^{CM} | F ^{CP} | F ^{CS} | F ^{CT} | F ^{CC} | F ^{CN} | F ^{CK} | F ^{CJ} | F ^{CU} | L ^{CG} | L ^{CH} | L ^{CO} | L ^{CW} | Q ^C | X ^C |
| Taiwan (AN) | A ^{NI} | A ^{NM} | A ^{NP} | A ^{NS} | A ^{NT} | A ^{NC} | A ^{NN} | A ^{NK} | A ^{NJ} | A ^{NU} | F ^{NI} | F ^{NM} | F ^{NP} | F ^{NS} | F ^{NT} | F ^{NC} | F ^{NN} | F ^{NK} | F ^{NJ} | F ^{NU} | L ^{NG} | L ^{NH} | L ^{NO} | L ^{NW} | Q ^N | X ^N |
| Korea (AK) | A ^{KI} | A ^{KM} | A ^{KP} | A ^{KS} | A ^{KT} | A ^{KC} | A ^{KN} | A ^{KK} | A ^{KJ} | A ^{KU} | F ^{KI} | F ^{KM} | F ^{KP} | F ^{KS} | F ^{KT} | F ^{KC} | F ^{KN} | F ^{KK} | F ^{KJ} | F ^{KU} | L ^{KG} | L ^{KH} | L ^{KO} | L ^{KW} | Q ^K | X ^K |
| Japan (AJ) | A ^{JI} | A ^{JM} | A ^{JP} | A ^{JS} | A ^{JT} | A ^{JC} | A ^{JN} | A ^{JK} | A ^{JJ} | A ^{JU} | F ^{JI} | F ^{JM} | F ^{JP} | F ^{JS} | F ^{JT} | F ^{JC} | F ^{JN} | F ^{JK} | F ^{JJ} | F ^{JU} | L ^{JG} | L ^{JH} | L ^{JO} | L ^{JW} | Q ^J | X ^J |
| U.S.A. (AU) | A ^{UI} | A ^{UM} | A ^{UP} | A ^{US} | A ^{UT} | A ^{UC} | A ^{UN} | A ^{UK} | A ^{UJ} | A ^{UU} | F ^{UI} | F ^{UM} | F ^{UP} | F ^{US} | F ^{UT} | F ^{UC} | F ^{UN} | F ^{UK} | F ^{UJ} | F ^{UU} | L ^{UG} | L ^{UH} | L ^{UO} | L ^{UW} | Q ^U | X ^U |
| Freight and Insurance (BY) | BA ^I | BA ^M | BA ^P | BA ^S | BA ^T | BA ^C | BA ^N | BA ^K | BA ^J | BA ^U | BF ^I | BF ^M | BF ^P | BF ^S | BF ^T | BF ^C | BF ^N | BF ^K | BF ^J | BF ^U | | | | | | |
| Import from India (CO) | AG ^I | AG ^M | AG ^P | AG ^S | AG ^T | AG ^C | AG ^N | AG ^K | AG ^J | AG ^U | FG ^I | FG ^M | FG ^P | FG ^S | FG ^T | FG ^C | FG ^N | FG ^K | FG ^J | FG ^U | | | | | | |
| Import from Hong Kong (CH) | AH ^I | AH ^M | AH ^P | AH ^S | AH ^T | AH ^C | AH ^N | AH ^K | AH ^J | AH ^U | FH ^I | FH ^M | FH ^P | FH ^S | FH ^T | FH ^C | FH ^N | FH ^K | FH ^J | FH ^U | | | | | | |
| Import from EU (CO) | AO ^I | AO ^M | AO ^P | AO ^S | AO ^T | AO ^C | AO ^N | AO ^K | AO ^J | AO ^U | FO ^I | FO ^M | FO ^P | FO ^S | FO ^T | FO ^C | FO ^N | FO ^K | FO ^J | FO ^U | | | | | | |
| Import from the R.O.W. (CW) | AW ^I | AW ^M | AW ^P | AW ^S | AW ^T | AW ^C | AW ^N | AW ^K | AW ^J | AW ^U | FW ^I | FW ^M | FW ^P | FW ^S | FW ^T | FW ^C | FW ^N | FW ^K | FW ^J | FW ^U | | | | | | |
| Duties and Import Commodity Taxes (DT) | DA ^I | DA ^M | DA ^P | DA ^S | DA ^T | DA ^C | DA ^N | DA ^K | DA ^J | DA ^U | DF ^I | DF ^M | DF ^P | DF ^S | DF ^T | DF ^C | DF ^N | DF ^K | DF ^J | DF ^U | | | | | | |
| Value Added (VY) | V ^I | V ^M | V ^P | V ^S | V ^T | V ^C | V ^N | V ^K | V ^J | V ^U | | | | | | | | | | | | | | | | |
| Total Inputs (OX) | X ^I | X ^M | X ^P | X ^S | X ^T | X ^C | X ^N | X ^K | X ^J | X ^U | | | | | | | | | | | | | | | | |

* Each cell of A** and F** represents a matrix of 76 x 76 and 76 x 4 dimension, respectively.

US trade deficit with China (2005)



Characteristic features of the production networks in the Asia-US region

- * Deepening interdependency, while showing a gradual shift of weight towards China.
- * A high degree of fragmentation and sophistication.
- * The emergence of “tri-polar trade” structure in the international distribution of value-added.



Thank you !!