East Asian Trade Relations in the Wake of China's WTO Accession

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Contents

- China's Emergence and the Asian Trade Triangle: Projections to 2020
- II. East and Southeast Asian Regionalism
- III. Global Supply Networks
- IV. A New Perspective on Regional Comparative Advantage
- V. Labor Market Determinants of China's Comparative Advantage

Introduction

- China's accession to the WTO is a watershed event, for the global economy generally and for East Asia in particular.
- Initial reactions of regional partners, who perceive China as a strong export competitor and magnet for FDI, have been somewhat defensive.
- Our research reveals a more complex picture of China's emergence, one that may present as many opportunities as threats to East Asian policy makers.

Introduction

- Because of its size and stage of development, China will play two roles in the region with unusual prominence.
 - 1. It will stiffen export competition in a broad spectrum of products, particularly in extra-regional markets.
 - 2. The growth of China's economy will make it the region's largest importer, and this absorption will create unprecedented opportunities for regional exporters.

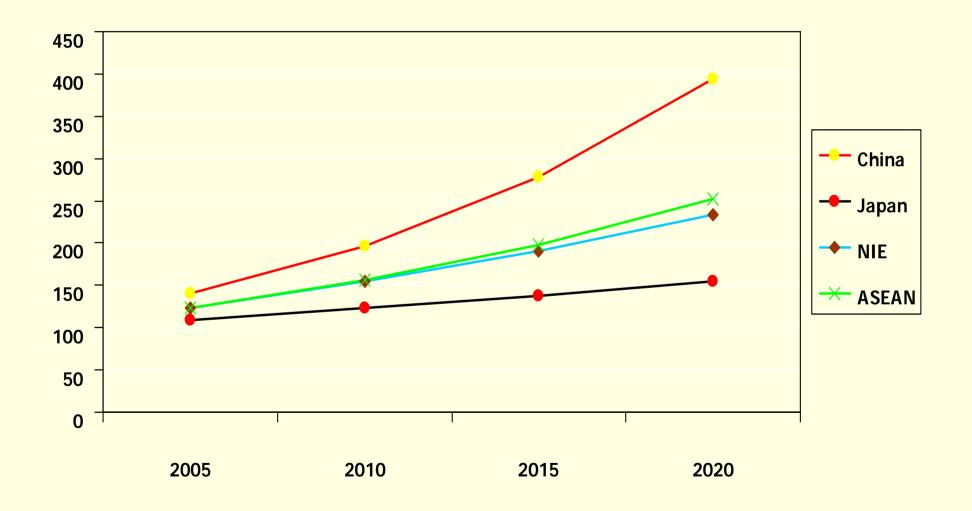
China's Emergence and the Asian Trade Triangle

Projections to 2020

Using a global forecasting model.

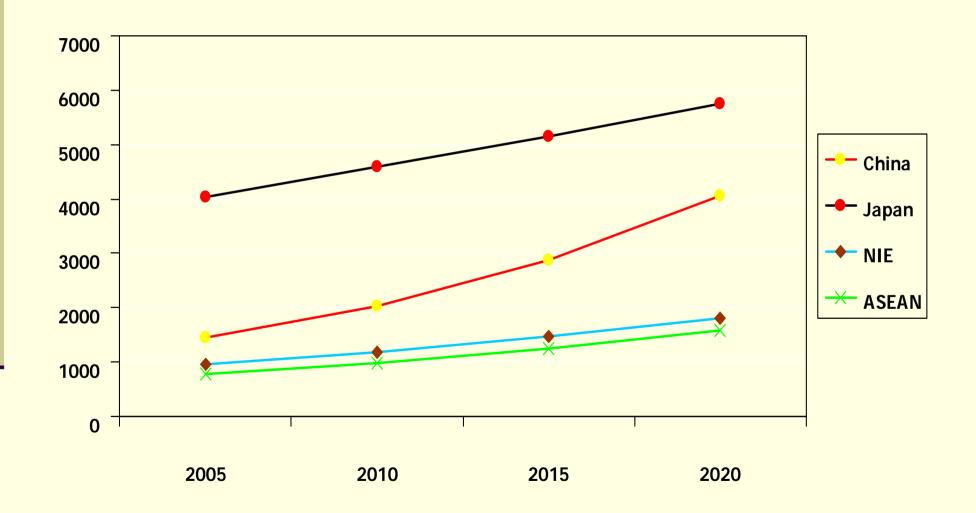
Real GDP Growth

(Normalized to 100 in 2000)



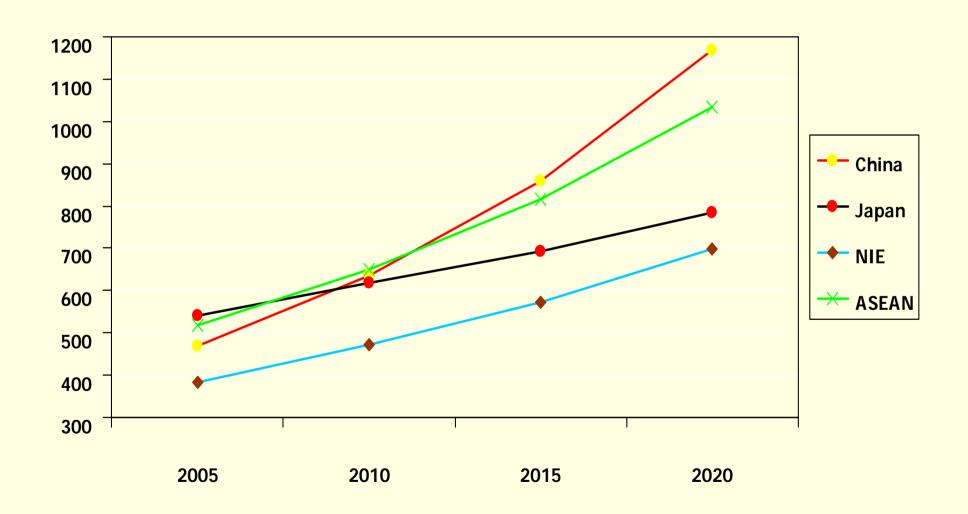
Real GDP

(billions of 1997 USD)

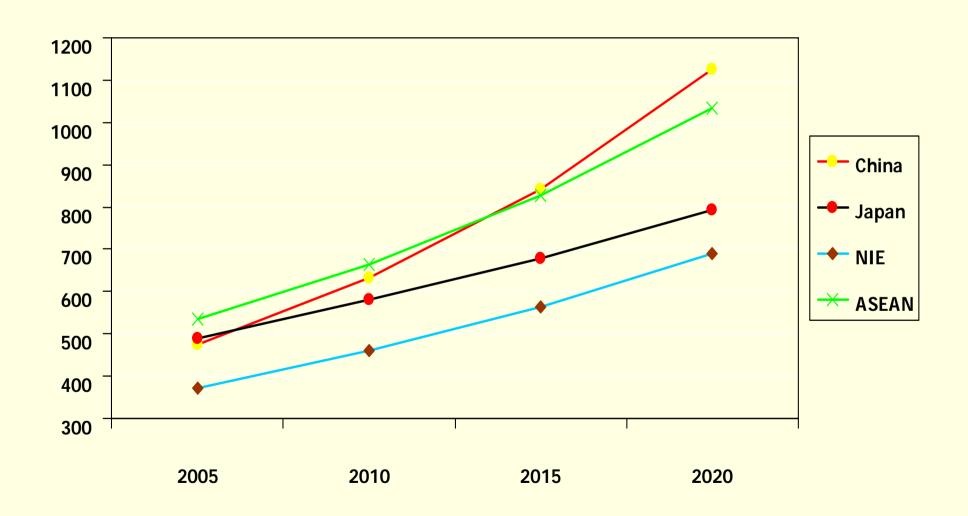


Real Exports

(billions of 1997 USD)



Real Imports (billions of 1997 USD)



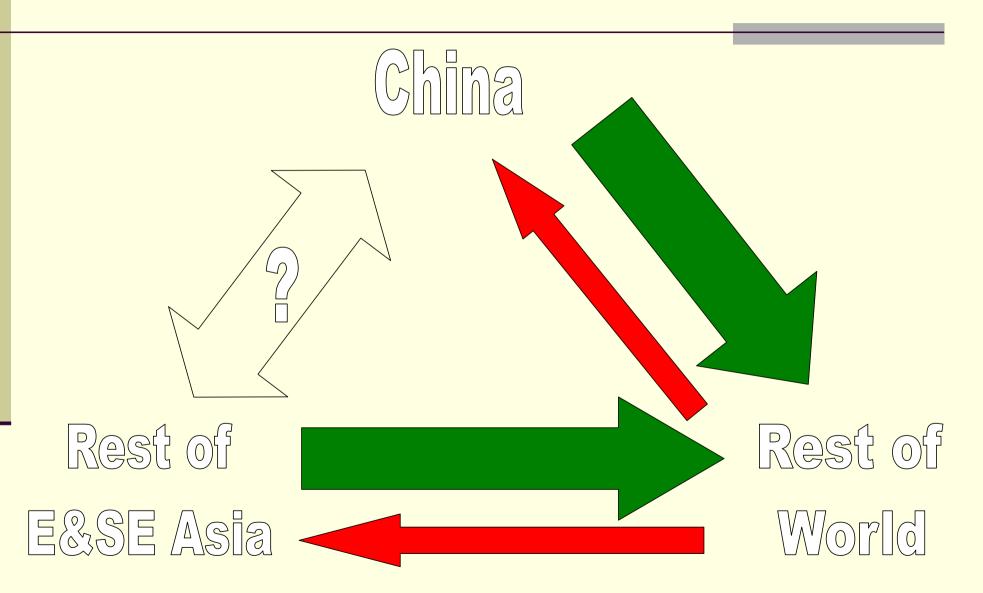
The Asian Trade Triangle

These forecasts indicate the emergence of a systematic pattern of triangular trade between China, the Rest of East and Southeast Asia, and the Rest of the World

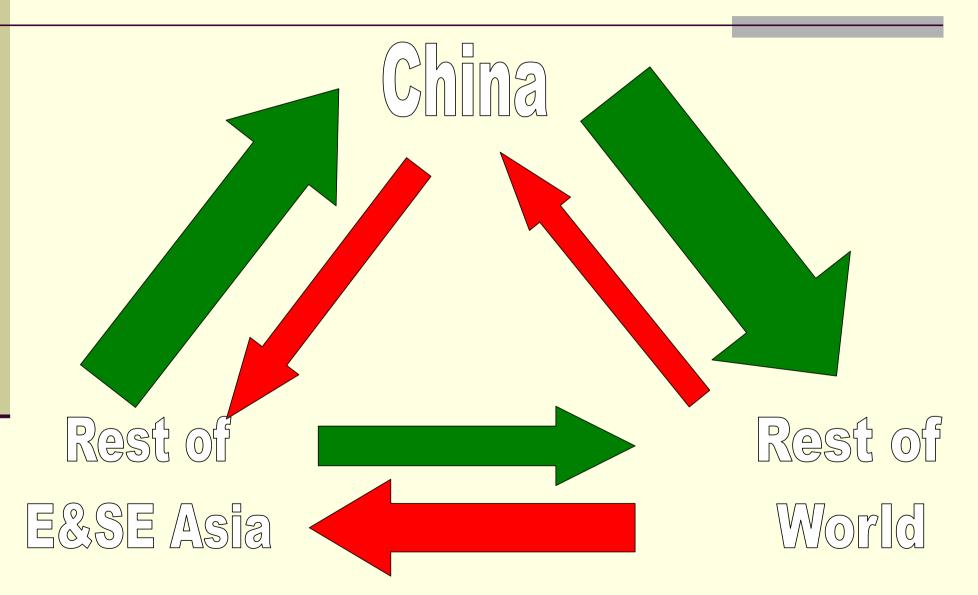
This Trade Triangle reveals that China's export expansion offers significant growth leverage to its neighbors.

Chinese absorption will emerge to dominate regional demand. Provided Asian economies do not isolate themselves from this process, the net effect of China's growth can be hugely positive.

Trade Triangle 2000



Trade Triangle 2020



Bilateral Trade Balances Baseline in 2020

(1997 billions of USD)

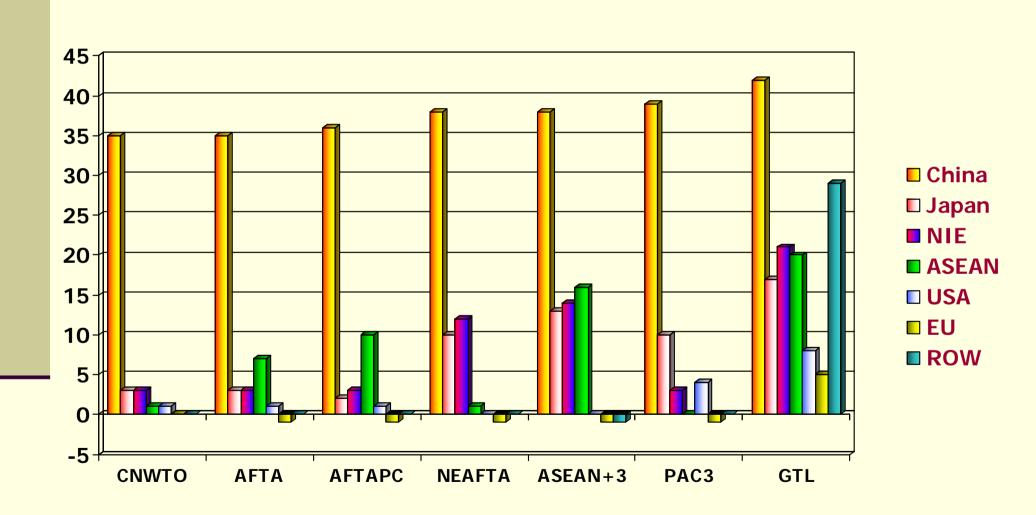
Importor

| | Importer | - | | | | | | |
|-----------------|----------|-------|------|-------|-----|------|-----|-------|
| <u>Exporter</u> | China | Japan | NIE | ASEAN | USA | EU | ROW | Total |
| China | 0 | -5 | -135 | -41 | 166 | 66 | 71 | 122 |
| Japan | 5 | 0 | 39 | 20 | 23 | - 15 | -50 | 21 |
| NIE | 135 | -39 | 0 | 19 | -32 | -32 | -12 | 40 |
| ASEAN | 41 | -20 | -19 | 0 | 18 | 8 | 12 | 41 |
| USA | -166 | -23 | 32 | -18 | 0 | 48 | -40 | -168 |
| EU | -66 | 15 | 32 | -8 | -48 | 0 | 34 | -41 |
| ROW | -71 | 50 | 12 | -12 | 40 | -34 | 0 | -16 |
| Total | -122 | -21 | -40 | -41 | 168 | 41 | 16 | 0 |

II. Regional Strategic Scenarios

- How can regional economies best respond to China's global initiative?
- A variety of alternative regional arrangements were examined empirically. All include the first scenario.
- 1. **CNWTO:** China joins WTO, status quo elsewhere
- 2. **AFTA**: ASEAN Free Trade Area
- 3. **AFTAPC**: AFTA plus China
- 4. **NEAFTA**: Northeast Asian Free Trade Area
 - China, Japan, and Korea
- 5. ASEAN+3: ASEAN, China, Japan, and Korea
- 6. PAC3: Pacific Trilateralism China, Japan, USA
- 7. **GTL**: Global Trade Liberalization

Exports (percentage change from Baseline in 2020)



The "China Threat" Bilateral Trade Growth: CNWTO

(percentage changes in 2020, relative to Baseline)

| | <u>Importer</u> | | | | | | | |
|-----------------|-----------------|-------|----|-------|-----|-----|-----|-------|
| Exporter | China | Japan | NE | ASEAN | USA | EU | ROW | Total |
| China | 0 | 37 | 43 | 36 | 31 | 35 | 32 | 34 |
| Japan | 38 | -5 | -4 | -6 | -7 | -5 | -5 | 3 |
| NE | 32 | -10 | -7 | -11 | -13 | -10 | -10 | 3 |
| ASEAN | 28 | -4 | -1 | -2 | -5 | -3 | -4 | 1 |
| usa | 24 | -1 | 1 | -1 | 0 | -1 | -1 | 1 |
| EU | 22 | -0 | 1 | -1 | -2 | -1 | -2 | -0 |
| ROW | 13 | -0 | 2 | 2 | -2 | -1 | -1 | -0 |
| | 26 | 5 | 6 | 2 | 2 | 0 | 1 | 3 |

Bilateral Trade Growth: ASEAN+3

(percentage changes in 2020, relative to Baseline)

| | Importer | | | | | | | |
|-----------------|-----------------|-------|-----|-------|-----|-----|-----|------|
| Exporter | China | Japan | NE | ASEAN | USA | EU | ROW | Tota |
| China | 0 | 66 | 91 | 73 | 21 | 23 | 21 | 38 |
| Japan | 41 | 0 | 33 | 32 | -9 | -7 | -7 | 13 |
| NE | 37 | 35 | 22 | 27 | -12 | -11 | -12 | 14 |
| ASEAN | 33 | 44 | 33 | 23 | -1 | 1 | -4 | 15 |
| usa | 30 | -6 | -10 | -10 | 1 | -0 | -1 | -0 |
| EU | 26 | -2 | -8 | -11 | -2 | -1 | -2 | -1 |
| ROW | 19 | -9 | -8 | -6 | -1 | -0 | -0 | -1 |
| Tota | 31 | 17 | 17 | 15 | 1 | 0 | -0 | 6 |

Regionalism and China

- China is in a relatively unique position. This country can apparently "go it alone" to globalization. It also possesses two carrots and one stick in regional negotiations:
 - Carrots: Access to domestic market and the "bandwagon" effect, selling into China's export growth.
 - Stick: Denial of access.
- However, this strategic leverage appears to be limited for two reasons:
 - Chinese imports are essential to its export capacity
 - WTO standards will not sustain exclusion

Regionalism and Globalism

- East and Southeast Asia can capture most of the absolute export growth expected from full globalization by just forming ASEAN+3.
- Thus, head-to-head export global competition is less important than leveraging opportunities presented by East Asia's fastest growing internal market.
- The best strategy for East and Southeast Asia is to pursue globalism through more comprehensive regionalism.

III. Global Supply Networks

- Supply chain decomposition is one of the most dramatic features of globalization, particularly in E&SE Asia.
- This propagation of multinational supply networks is changing the Asian economic landscape in four ways:
- 1. Capital allocation
- 2. Production patterns
- 3. Trade
- 4. The development process itself

1. Capital Allocation

FDI across the supply chain is driven by:

- Resource costs (the traditional explanation)
- Rent seeking and other institutional imperfections
- Market access: double targeting
- Proximate markets
 - Portfolio decisions
 - risk management
 - asset allocation

2. Production Patterns: Regional Hierarchy and FDI Competition

- Regional hierarchies are being expanded according to the characteristics of FDI.
- Countries are increasingly FDI "quality" conscious.
- They are competing for FDI with financial incentives and real policies toward human capital and infrastructure.

3. Trade: Multilateralism in Bilateralism

- Bilateral linkages often reflect components of more extended, multilateral supply chains.
- Our results indicate that over one third of total value creation in bilateral ties actually arises from multilateral network linkages.
- This is due mainly to trade in intermediates.
 - Intermediate trade is growing faster than final goods trade, and will ultimately dominate as it does in the EU.

4. Development Process: Bamboo Capitalism

- From the nodes in an ever-expanding root system of intermediate supply, independent producers and even complete local markets emerge to join the dynamic of regional competition and innovation.
- Microeconomic replication of this kind is accelerating and diversifying growth, overcoming exactly the specialization tendencies dictated by traditional comparative advantage.
- Regional economies are thereby becoming more diversified, balanced in their growth properties, and convergent in economic structure.

IV. A New Perspective on Regional Comparative Advantage

- Exhaustive analysis of trade flow data can reveal emergent patterns of commodity trade, but not the underlying sources of comparative advantage.
- In the long run, capital is mobile and wage differentials can only be sustained by productivity differences.
- Therefore, the skill content of trade is an essential determinant of real comparative advantage.

Relative Skill Content of Output

To elucidate this issue, trade flow data were adjusted to capture differences in embodied labor services.
In particular, for country k and sector i, we define

$$\lambda_{i}^{k} = \frac{LVA(Skilled)_{i}^{k}}{LVA(Unskilled)_{i}^{k}}$$

where LVA denotes labor value added for each sector and country. This measure indicates the relative skill content, per unit of output, and is independent of exchange rates.

Skill-adjusted Trade Flows

We now adjust a traditional Intra-industry trade flow measure

$$IIC_i^{km} = \frac{E_i^{km} - E_i^{mk}}{E_i^{km} + E_i^{mk}}$$

for skill content, i.e.

$$ELT_{i}^{km} = \frac{\lambda_{i}^{k} E_{i}^{km} - \lambda_{i}^{m} E_{i}^{mk}}{\lambda_{i}^{k} E_{i}^{km} + \lambda_{i}^{m} E_{i}^{mk}}$$

an index (between -1 and 1) of the relative export or import orientation of embodied labor service trade. Here the variable E_i^{km} denotes exports from k to m of sector i goods.

Export and Import Orientation of Trade in Goods and Labor Services

JAPAN Trade Weighted Percentages

IIT: Intra-industry Commodity Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 54 | 0 | 25 | 46 | 27 | 34 | 35 |
| | 9 | 0 | 6 | 4 | 10 | 15 | 7 |
| Neutral | 3 | 0 | 57 | 5 | 16 | 6 | 9 |
| | 28 | 0 | 11 | 44 | 42 | 35 | 43 |
| Strong Export | 6 | 0 | 0 | 2 | 4 | 10 | 5 |
| Total | 100 | 0 | 100 | 100 | 100 | 100 | 100 |

ELT: Embodied Labor Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 23 | 0 | 14 | 21 | 8 | 12 | 13 |
| | 4 | 0 | 2 | 0 | 5 | 9 | 2 |
| Neutral | 4 | 0 | 27 | 4 | 10 | 3 | 4 |
| | 3 | 0 | 50 | 56 | 51 | 34 | 14 |
| Strong Export | 66 | 0 | 7 | 18 | 25 | 41 | 66 |
| Total | 100 | 0 | 100 | 100 | 100 | 100 | 100 |

Export and Import Orientation of Trade in Goods and Labor Services

ASEAN Trade Weighted Percentages

IIT: Intra-industry Commodity Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 13 | 20 | 28 | 0 | 13 | 17 | 5 |
| | 12 | 73 | 53 | 0 | 13 | 11 | 10 |
| Neutral | 11 | 4 | 16 | 0 | 48 | 15 | 74 |
| | 55 | 1 | 1 | 0 | 21 | 54 | 8 |
| Strong Export | 9 | 1 | 3 | 0 | 5 | 3 | 2 |
| Total | 100 | 100 | 100 | 0 | 100 | 100 | 100 |

ELT: Embodied Labor Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 6 | 48 | 57 | 0 | 10 | 10 | 1 |
| | 5 | 27 | 24 | 0 | 42 | 14 | 8 |
| Neutral | 6 | 4 | 1 | 0 | 29 | 57 | 48 |
| | 56 | 0 | 2 | 0 | 7 | 6 | 35 |
| Strong Export | 26 | 21 | 17 | 0 | 12 | 14 | 8 |
| Total | 100 | 100 | 100 | 0 | 100 | 100 | 100 |

Export and Import Orientation of Trade in Goods and Labor Services

CHINA Trade Weighted Percentages

IIT: Intra-industry Commodity Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 0 | 18 | 83 | 26 | 5 | 5 | 3 |
| | 0 | 48 | 11 | 55 | 1 | 8 | 18 |
| Neutral | 0 | 3 | 2 | 8 | 7 | 52 | 49 |
| | 0 | 5 | 2 | 6 | 43 | 7 | 26 |
| Strong Export | 0 | 26 | 2 | 5 | 44 | 28 | 5 |
| Total | 0 | 100 | 100 | 100 | 100 | 100 | 100 |

ELT: Embodied Labor Trade

| | China | Japan | NIE | ASEAN | USA | EU | Total |
|---------------|-------|-------|-----|-------|-----|-----|-------|
| Strong Import | 0 | 66 | 86 | 26 | 6 | 14 | 5 |
| | 0 | 3 | 8 | 56 | 42 | 54 | 41 |
| Neutral | 0 | 4 | 2 | 7 | 8 | 3 | 24 |
| | 0 | 4 | 1 | 5 | 7 | 7 | 23 |
| Strong Export | 0 | 23 | 2 | 6 | 38 | 22 | 7 |
| Total | 0 | 100 | 100 | 100 | 100 | 100 | 100 |

V. Labor Market Determinants of China's Comparative Advantage

- In this age of capital mobility, employment patterns are more important determinants of comparative advantage.
- Labor markets are dynamic in nature, however, and changing demand and supply conditions can shift comparative advantage decisively.

China's Labor Markets

- In China, labor is the ultimate source of comparative advantage. Domestic labor allocation patterns appear to be changing in important ways, however:
 - Rural to Urban migration is continuing. Transactions costs to this activity are rising, but the opportunity cost of labor in the rural sector continues to decline.
 - Skilled labor demand is rising faster than supply. This trend is being accelerated by FDI, for which skilled labor appears to be a complement.

1. China will be the largest trading economy in East Asia by about 2010.

China will be the region's largest exporter by about 2010, but it's largest <u>importer</u> by 2005. The latter situation presents an unprecedented opportunity for neighboring economies.

2. The growth of China's internal market will accelerate other East Asian export growth significantly and create historic opportunities for regional investors.

Provided East Asian economies do not isolate themselves from the process of Chinese trade liberalization, the net effect of China's growth will be hugely positive, as Chinese absorption emerges to dominate regional demand.

3.China will be Japan's largest trading partner by 2020.

In terms of both exports and imports, China will become Japan's largest bilateral partner. Japan will also be China's largest individual source of imports.

- 4. An East Asian Trade Triangle will emerge, where China develops a sustained trade deficit with East Asia and a surplus with Western OECD economies of nearly equal magnitude.
 - In other words, most of China's trade surplus will ultimately accrue to its regional neighbors. This has profound implications for patterns of both North-South and regional capital accumulation.

5. The Trade Triangle enables China to "deliver globalization" to the region by joining the WTO.

In this sense, East Asia can capture most of the benefits of full globalization by just forming ASEAN+3. The other EA countries should negotiate collectively with China, with an eye toward broader objectives.

Our results indicate that, in the wake of China's WTO accession, the best strategy for East Asia is to pursue globalism through more comprehensive regionalism.

6. China can "go it alone" on the path to globalization.

By conforming to its existing WTO commitments, China will realize most of the gains it would enjoy in a world of free trade. Thus its unilateral initiative makes it less reliant on regional and bilateral commitments.

- China has a special position in the regional trade matrix, but its strategic leverage appears to be limited.
 - Preferential access to individual EA exporters is not sustainable under its WTO commitments. The carrots are real, but their strategic value is limited.
 - Furthermore, EA imports are essential to China's export capacity. The stick is not credible against most EA partners.

8. Bilateral trade flows only reveal the direct part of regional comparative advantage.

Indirect linkages, spanning complex regional and global supply chains, often determine the majority of net gains from trade.

Detailed multiplier decomposition analysis reveals that the East Asian trade mosaic is decomposing global supply chains and distributing the gains from China's domestic growth through rapid trade expansion.

- **9.** Shifting commodity trade patterns in East Asia do not fully reflect underlying comparative advantages. In particular, detailed analysis of the factor content of regional trade reveals the following (1996-2000):
 - Japan is strongly export oriented in high wage sectors.
 - ASEAN is "holding its own" in bilateral trade with China by concentrating on higher wage exports.
 - Korea and Taipei, China have both maintained strong regional export orientation in high wage activities.
 - China has maintained most of its export orientation in low wage activities, although a new component of high wage net exports is emerging.

10. China's conditions of comparative advantage are likely to experience rapid evolution for two reasons:

- Significant and relatively sustained inbound FDI is rapidly expanding production capacity and altering patterns of factor productivity and returns.
- Labor markets are entering an important transition period:
 - Migratory patterns for unskilled labor are likely to intensify.
 - Supply conditions for skilled labor may not keep pace with demand.
 - Economic reform may adversely affect short term aggregate labor demand.

Looking Ahead

After a relatively upbeat analysis, three emergent areas deserve a closer look:

- 1. Regional Trade: From export competition to import competition
- 2. China's export terms-of-trade
- 3. Labor markets in China

Looking Ahead 1: Regional Trade

From export competition to import competition.

China's export position is now well established, but the pace of absorption is forcing it onto more intense competition for resources and other intermediate goods.

- Resource seeking integration/partnerships
- Upstream FDI
- Value added shifting/transfer pricing

Looking Ahead 2: Terms of Trade

China's export terms-of-trade may weaken

- This will narrow export margins and increase inflationary pressure
- Domestic resources (and FDI) may begin shifting from exports to import substitutes and nontradables (reverse Dutch disease)
- Employment intensity of this sectoral rotation will be a very important issue (services vs. property)

Looking Ahead 3: Labor Markets

Labor markets in China:

- How high?
 - Skilled labor demand may be rising faster than supply. This trend is being accelerated by FDI, for which skilled labor appears to be a complement.
 - What exactly is the capacity of formal and informal education/innovation to deliver higher productivity?
- How long?
 - Demographic transition and rising dependency
 - The only way out is ever-increasing labor productivity
- How wide?
 - Migratory pressure will continue as the opportunity cost of labor in the rural sector declines monotonically
 - Actual migration must continue to be demand-driven
 - Regional growth rates will increasingly determine aggregate growth (median vs. average growth)