# The Trans -Pacific Partnership Agreement: an Opportunity for Viet Nam to reduce or exit the Dependence of China Economy

by Scott H. Murray &Tai H. Pham
Discipline of Mathematics & Statistics
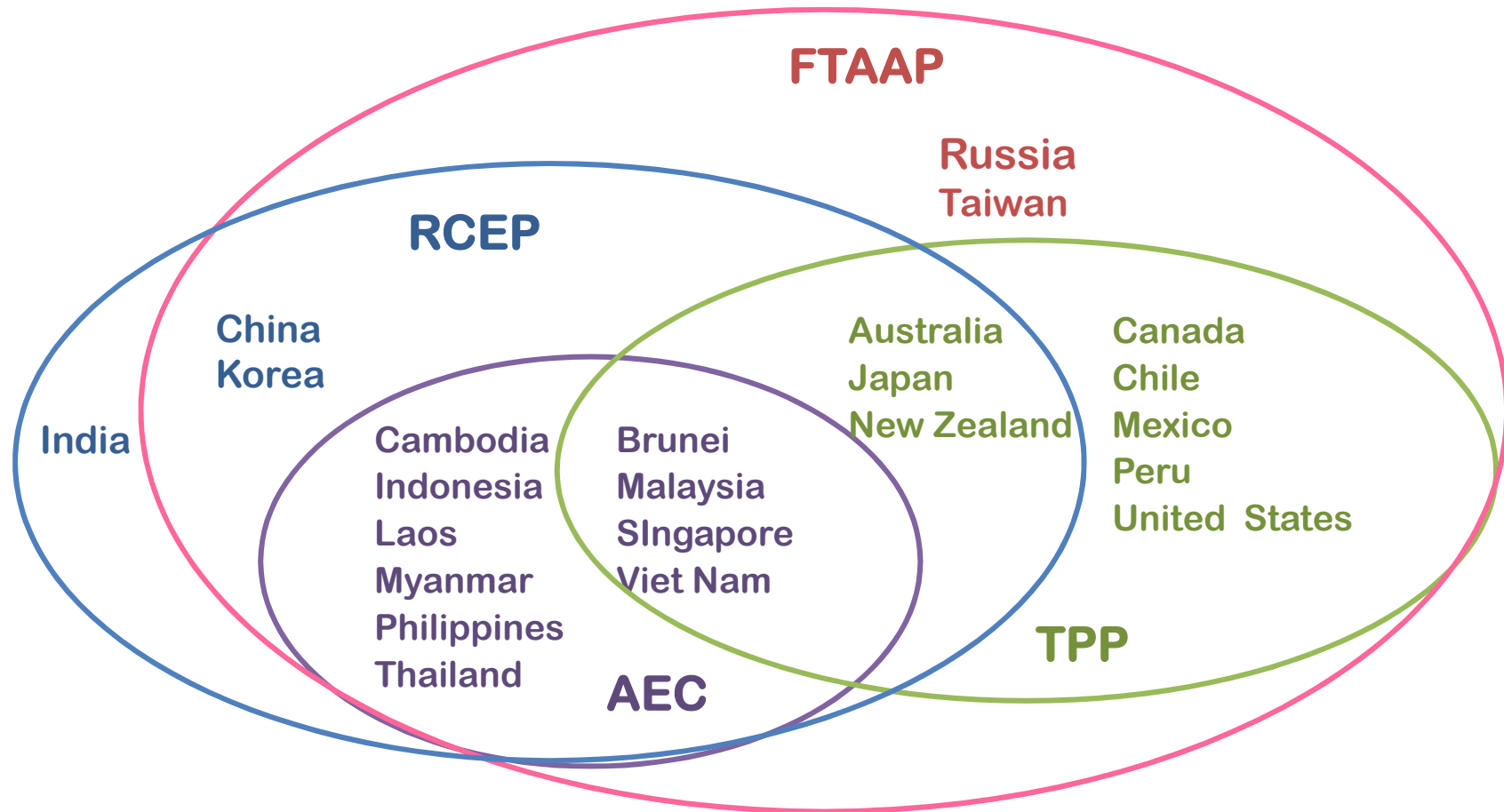August, 2014

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# Contents

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# 1. Problem statement

- **The ASEAN Economic Community (AEC) by 2015**

- **The Trans-Pacific Partnership (TPP) by 2014.**

- **The Scenarios**

# The flagship FTAs: AEC, TPP, RCEP & FTAAP ?

# 2 The parties of AFTA,TPP, RCEP & FTAAP



FTAAP

Russia
Taiwan

RCEP

China
Korea

India

Cambodia
Indonesia
Laos
Myanmar
Philippines
Thailand

AEC

Brunei
Malaysia
SIngapore
Viet Nam

Australia
Japan
New Zealand

Canada
Chile
Mexico
Peru
United States

TPP

# TPP

# RCEP

# FTAAP

# 3.US' Trans-Pacific Partnership Agreement vision

- Strengthen ties three continents: America, Asia, and Oceania
- Seek to become the basis and the means to establish the Free Trade Area of the Asia Pacific (FTAAP)
- The baseline: the U.S existing trade and investment agreements
- Create mutuality of benefit among participants
- Ensure the third parties do not take advantage of the agreement
- Apply "yarn-forward" style rules of origin rather than

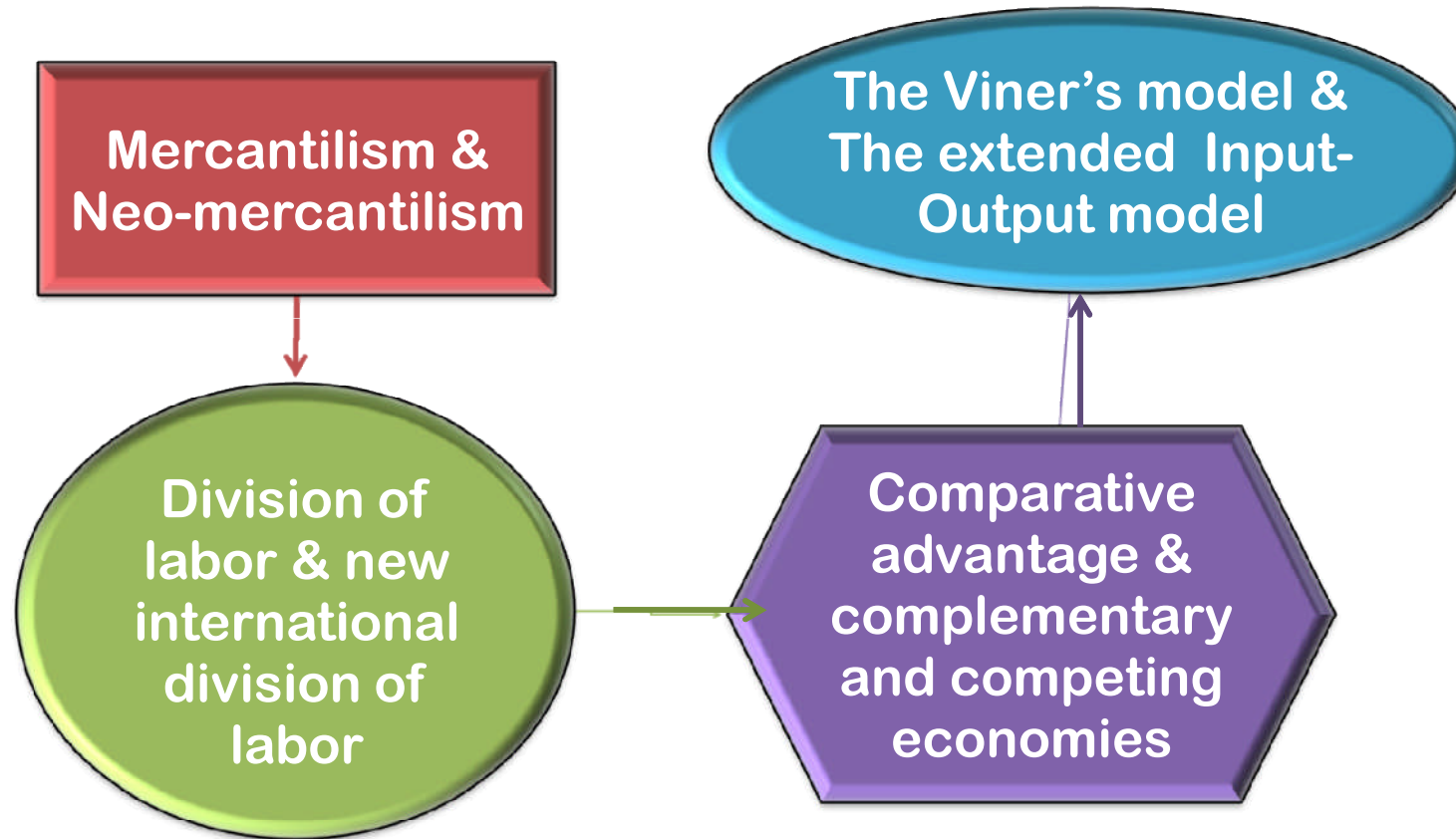# 4. China's Free Trade Agreement of the Asia Pacific vision

- Obtain step by step the ambitiousness for the "New Silk Road" and "New Maritime Silk Road" through bilateral negotiation, SCO, ASEAN, BRICS & APEC.

- Compete with the U.S

# China's New silk road vision

# FTA: Beneficial to poor countries ?

# 5. Theories of international trade

**Mercantilism & Neo-mercantilism**

**The Viner's model & The extended Input-Output model**

**Division of labor & new international division of labor**

**Comparative advantage & complementary and competing economies**

# 5.1 China & keeping the exchange rate weak

**Reality check**

China's yuan-dollar exchange rates

Q1 2005=100

Real

Nominal

150

140

130

120

110

100

90

2005    06    07    08    09    10
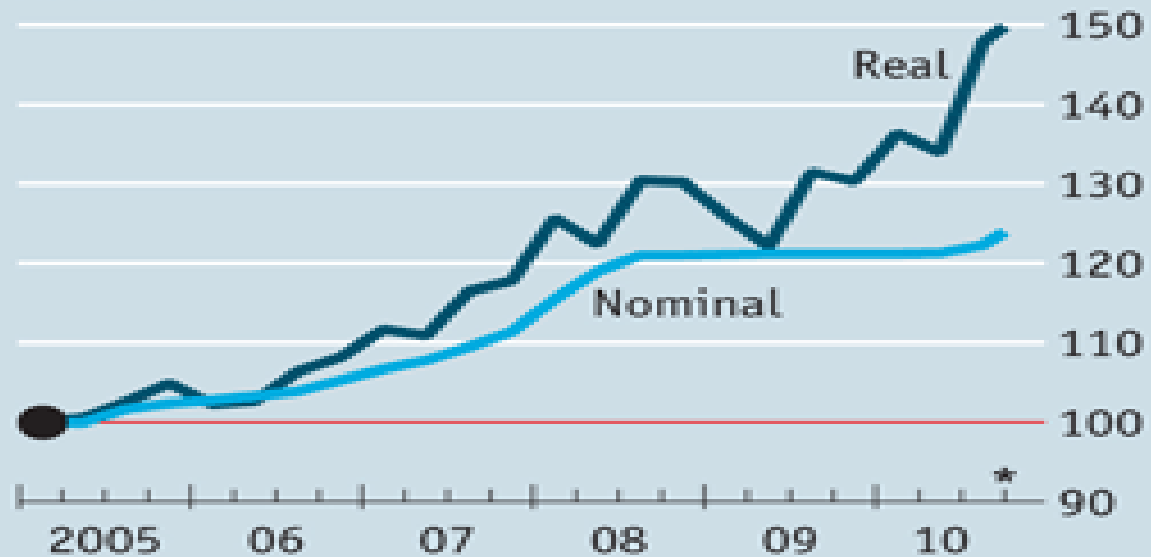
Sources: *The Economist*; Bureau of Labour
Statistics; CEIC; Thomson Reuters     *November 2nd

# 5.2 China & encouraging exports and discouraging imports



Billion USD

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |

China: 169, 256, 151, 141, 139
Japan: 49
United States of America: (796), (731), (418), (539), (518)
Viet Nam: (134)

Year

**China** **United States of America** **Japan** **Viet Nam**
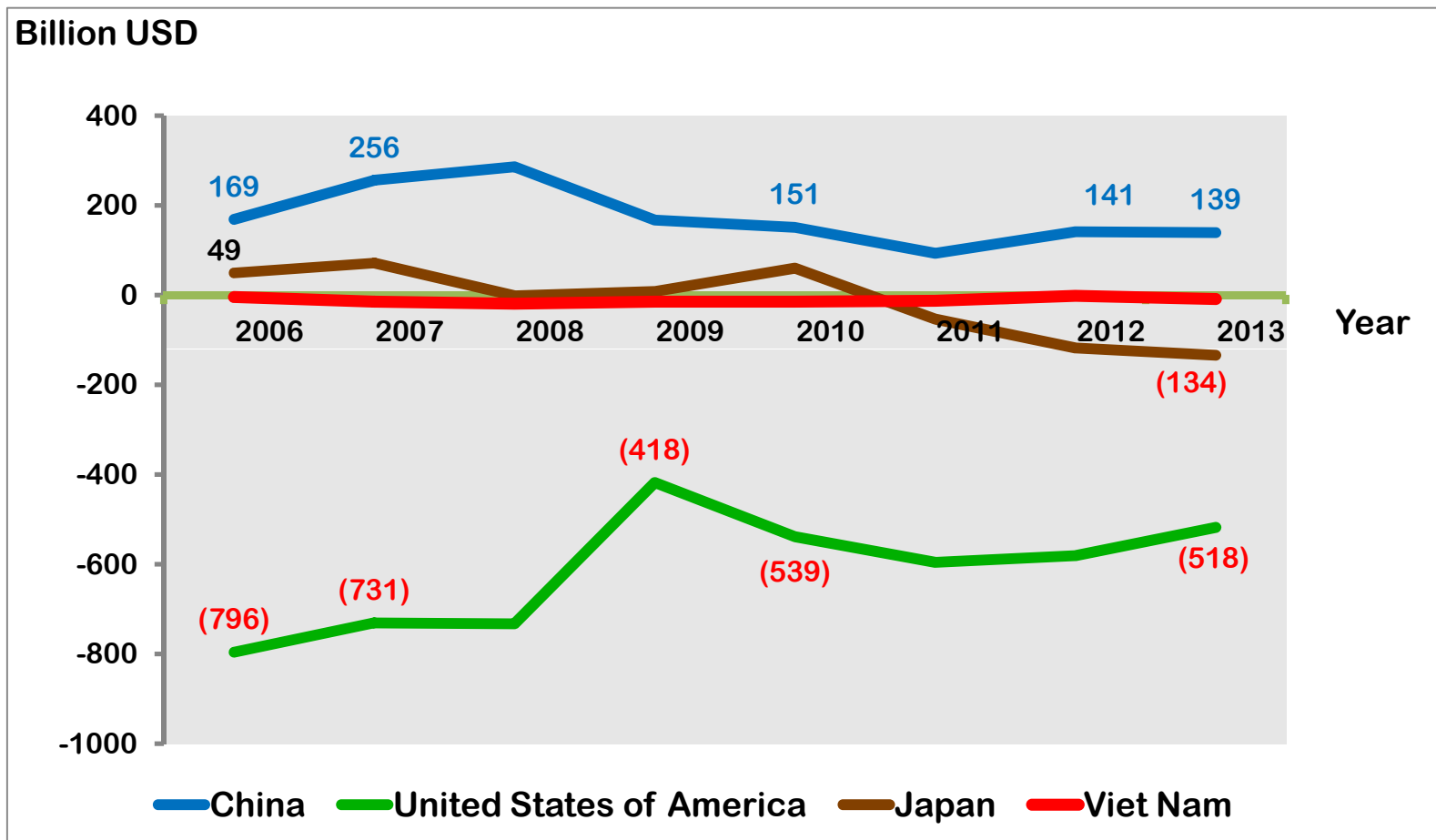
# 5.3 China & New International Division of labor

# 5.3 China & Viet Nam: competing economies

## Trade indicators

**Revealed symmetric comparative advantage index**

**Intra-industry trade index**

**Trade specialization index**

**Bilateral trade intensity index**

**Trade complementarity index**

# Revealed symmetric comparative advantage index (RSCA)

**Revealed comparative advantage (RCA)** $=$ $\dfrac{X_{iw}^{k}}{X_{iw}}$ $\div$ $\dfrac{X_{jw}^{k}}{X_{jw}}$

**RSCA** $=$ $\dfrac{(RCA -1)}{(RCA +1)}$

| HS code | | RSCA of VIetnam, relative to | | RSCA of China, relative to | |
|---------|---|---|---|---|---|
| | | China | Global | VN | Global |
| 01-05 | Animal & Animal Products | 0.8 | 0.5 | (0.8) | (0.4) |
| 06-15 | Vegetable Products | 0.8 | 0.5 | (0.8) | (0.5) |
| 16-24 | Foodstuffs | 0.3 | (0.1) | (0.3) | (0.4) |
| 25-27 | Mineral Products | 0.7 | (0.1) | (0.7) | (0.8) |
| 28-38 | Chemicals & Allied Industries | (0.5) | (0.7) | 0.5 | (0.3) |
| 39-40 | Plastics / Rubbers | 0.2 | 0.1 | (0.2) | (0.1) |
| 41-43 | Raw Hides, Skins, Leather, & Furs | 0.0 | 0.4 | (0.0) | 0.4 |
| 44-49 | Wood & Wood Products | 0.1 | (0.1) | (0.1) | (0.2) |
| 50-63 | Textiles | 0.1 | 0.6 | (0.1) | 0.5 |
| 64-67 | Footwear / Headgear | 0.5 | 0.8 | (0.5) | 0.6 |
| 68-71 | Stone / Glass | (0.1) | (0.2) | 0.1 | (0.1) |
| 72-83 | Metals | (0.4) | (0.4) | 0.4 | 0.0 |
| 84-85 | Machinery / Electrical | (0.4) | (0.1) | 0.4 | 0.3 |
| 86-89 | Transportation | (0.5) | (0.7) | 0.5 | (0.3) |
| 90-97 | Miscellaneous | (0.2) | 0.0 | 0.2 | 0.3 |
| 98-99 | Commodities not elsewhere specified | 0.6 | (0.6) | (0.6) | (0.9) |

Explanatory notes

| | |
|---|---|
| Maximum value | 1 |
| Minimum value | -1 |
| Critical point | Comparative advantage = >0 |

| HS code - top ten | | RSCA of VIetnam, relative to | | RSCA of China, relative to | |
|---|---|---|---|---|---|
| | | China | Global | VN | Global |
| '85 | Electrical, electronic equipment | (0.2) | 0.1 | 0.2 | 0.3 |
| '27 | Mineral fuels, oils, distillation products, etc | 0.8 | (0.1) | (0.8) | (0.8) |
| '64 | Footwear, gaiters and the like, parts thereof | 0.5 | 0.8 | (0.5) | 0.6 |
| '62 | Articles of apparel, accessories, not knit or crochet | 0.4 | 0.7 | (0.4) | 0.5 |
| '61 | Articles of apparel, accessories, knit or crochet | 0.2 | 0.7 | (0.2) | 0.6 |
| '84 | Machinery, nuclear reactors, boilers, etc | (0.6) | (0.4) | 0.6 | 0.2 |
| '03 | Fish, crustaceans, molluscs, aquatic invertebrates nes | 0.8 | 0.8 | (0.8) | (0.0) |
| '94 | Furniture, lighting, signs, prefabricated buildings | 0.1 | 0.6 | (0.1) | 0.5 |
| '09 | Coffee, tea, mate and spices | 0.9 | 0.9 | (0.9) | (0.4) |
| '10 | Cereals | 1.0 | 0.7 | (1.0) | (0.8) |

Explanatory notes

Maximum value   1
Minimum value   -1

Critical point   Comparative advantage = >0

# 5.4 TPP & Viet Nam: complementary economies

## Trade indicators

Revealed symmetric comparative advantage index

Intra-industry trade index

Trade specialization index

Bilateral trade intensity index

Trade complementarity index

| HS code | | RSCA of Vietnam, relative to | | RSCA of TPP, relative to | |
|---|---|---|---|---|---|
| | | TPP | Global | VN | Global |
| 01-05 | Animal & Animal Products | 0.5 | 0.5 | (0.5) | (0.0) |
| 06-15 | Vegetable Products | 0.5 | 0.5 | (0.5) | 0.1 |
| 16-24 | Foodstuffs | 0.1 | (0.1) | (0.1) | (0.2) |
| 25-27 | Mineral Products | (0.0) | (0.1) | 0.0 | (0.1) |
| 28-38 | Chemicals & Allied Industries | (0.7) | (0.7) | 0.7 | (0.1) |
| 39-40 | Plastics / Rubbers | 0.1 | 0.1 | (0.1) | (0.0) |
| 41-43 | Raw Hides, Skins, Leather, & Furs | 0.7 | 0.4 | (0.7) | (0.4) |
| 44-49 | Wood & Wood Products | (0.1) | (0.1) | 0.1 | 0.0 |
| 50-63 | Textiles | 0.8 | 0.6 | (0.8) | (0.5) |
| 64-67 | Footwear / Headgear | 1.0 | 0.8 | (1.0) | (0.8) |
| 68-71 | Stone / Glass | (0.2) | (0.2) | 0.2 | 0.0 |
| 72-83 | Metals | (0.3) | (0.4) | 0.3 | (0.0) |
| 84-85 | Machinery / Electrical | (0.2) | (0.1) | 0.2 | 0.1 |
| 86-89 | Transportation | (0.8) | (0.7) | 0.8 | 0.2 |
| 90-97 | Miscellaneous | 0.0 | 0.0 | (0.0) | 0.0 |
| 98-99 | Commodities not elsewhere specified | (0.7) | (0.6) | 0.7 | 0.3 |

**Explanatory notes**

| | |
|---|---|
| Maximum value | 1 |
| Minimum value | -1 |
| Critical point | Comparative advantage = >0 |

| HS code - top ten | | RSCA of VIetnam, relative to | | RSCA of TPP, relative to | |
|---|---|---|---|---|---|
| | | TPP | Global | VN | Global |
| '85 | Electrical, electronic equipment | 0.0 | 0.1 | 0.1 | 0.0 |
| '27 | Mineral fuels, oils, distillation products, etc | 0.1 | (0.1) | (0.2) | 0.1 |
| '64 | Footwear, gaiters and the like, parts thereof | 1.0 | 0.8 | (0.8) | 1.0 |
| '62 | Articles of apparel, accessories, not knit or crochet | 0.9 | 0.7 | (0.7) | 0.9 |
| '61 | Articles of apparel, accessories, knit or crochet | 0.9 | 0.7 | (0.7) | 0.9 |
| '84 | Machinery, nuclear reactors, boilers, etc | (0.4) | (0.4) | 0.1 | (0.4) |
| '03 | Fish, crustaceans, molluscs, aquatic invertebrates nes | 0.8 | 0.8 | (0.1) | 0.8 |
| '94 | Furniture, lighting, signs, prefabricated buildings | 0.7 | 0.6 | (0.3) | 0.7 |
| '09 | Coffee, tea, mate and spices | 1.0 | 0.9 | (0.5) | 1.0 |
| '10 | Cereals | 0.6 | 0.7 | 0.2 | 0.6 |

**Explanatory notes**

| | |
|---|---|
| Maximum value | 1 |
| Minimum value | -1 |
| Critical point | Comparative advantage = >0 |

# The Viet Nam's the Extended Input-Output Table

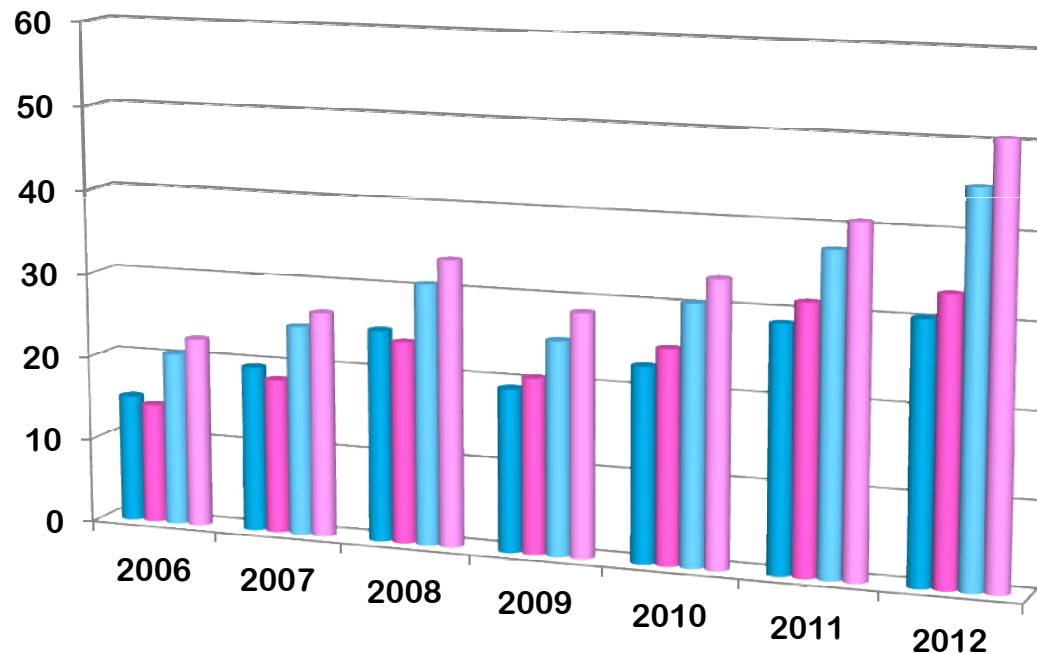# The skew of value of exports and imports between Viet Nam and China

Billion USD
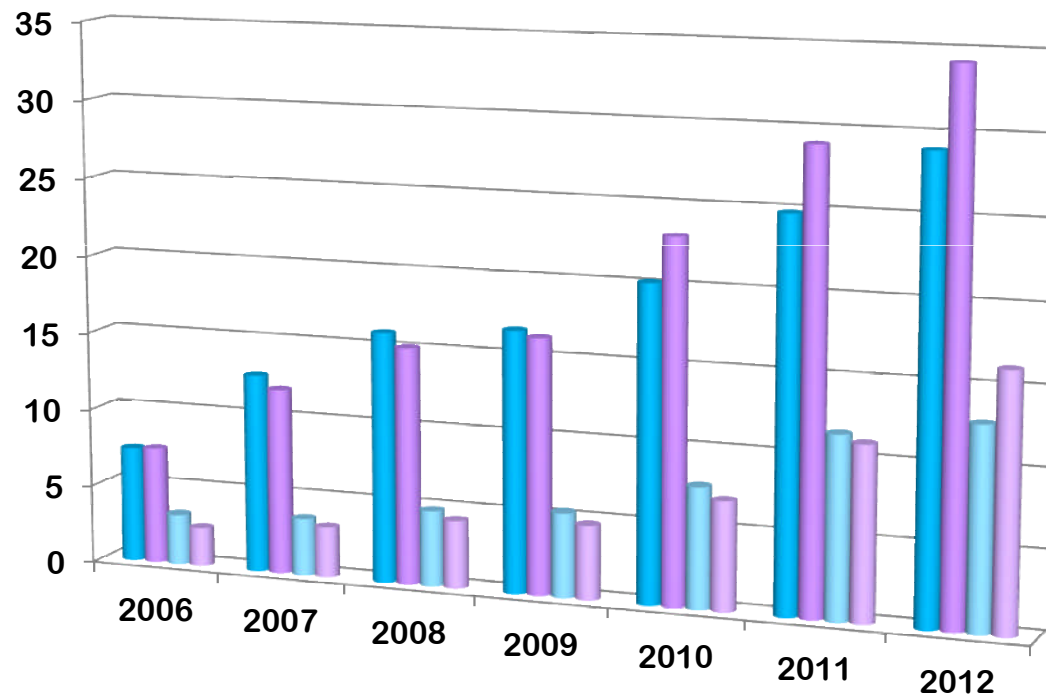
China_export > VN_import: 8,1%

VN_export > China_import: 0,4%

- Viet Nam_imports_China
- China_exports_Viet Nam
- Viet Nam_exports_China
- China_imports_Viet Nam

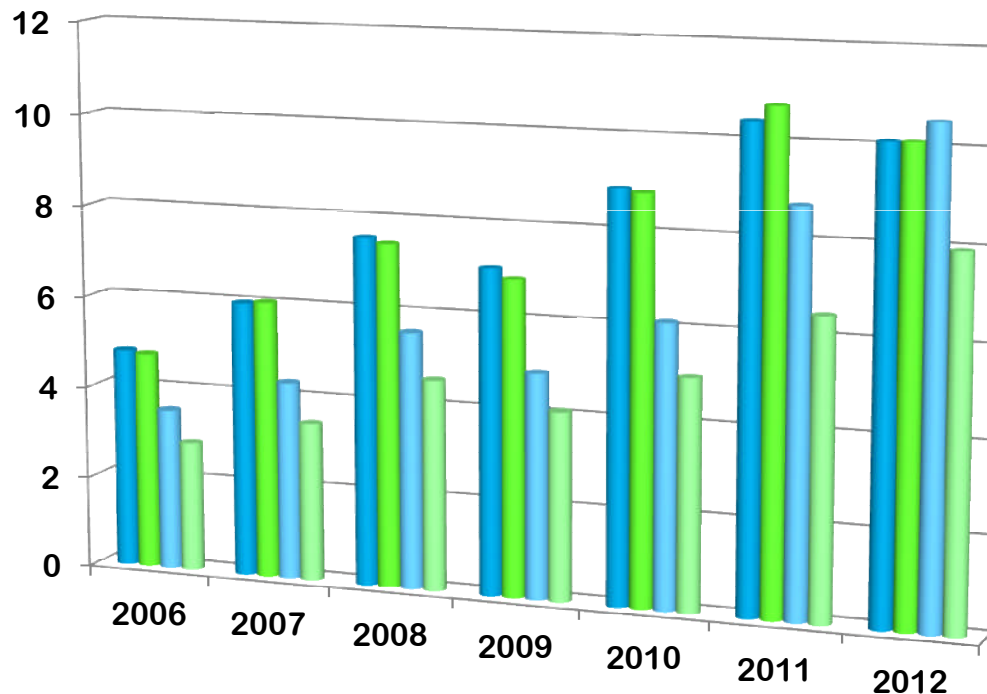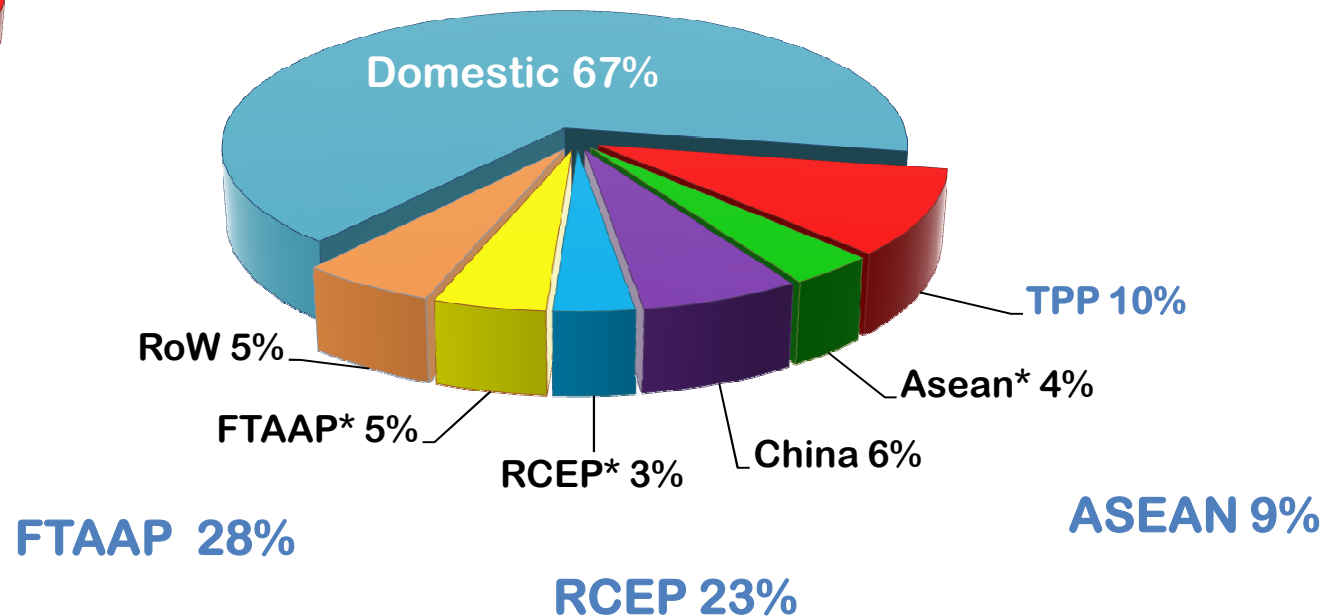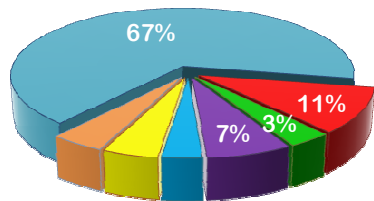# The skew of value of exports and imports between TPP and Viet Nam

**Billion USD**

**TPP_export > VN_import: 3,6%**

**TPP_import > VN_export: 10,2%**



- Viet Nam_imports_TPP
- TPP_exports_Viet Nam
- Viet Nam_exports_TPP
- TPP_imports_Viet Nam

The skew of value of exports and imports between Asean* and Viet Nam

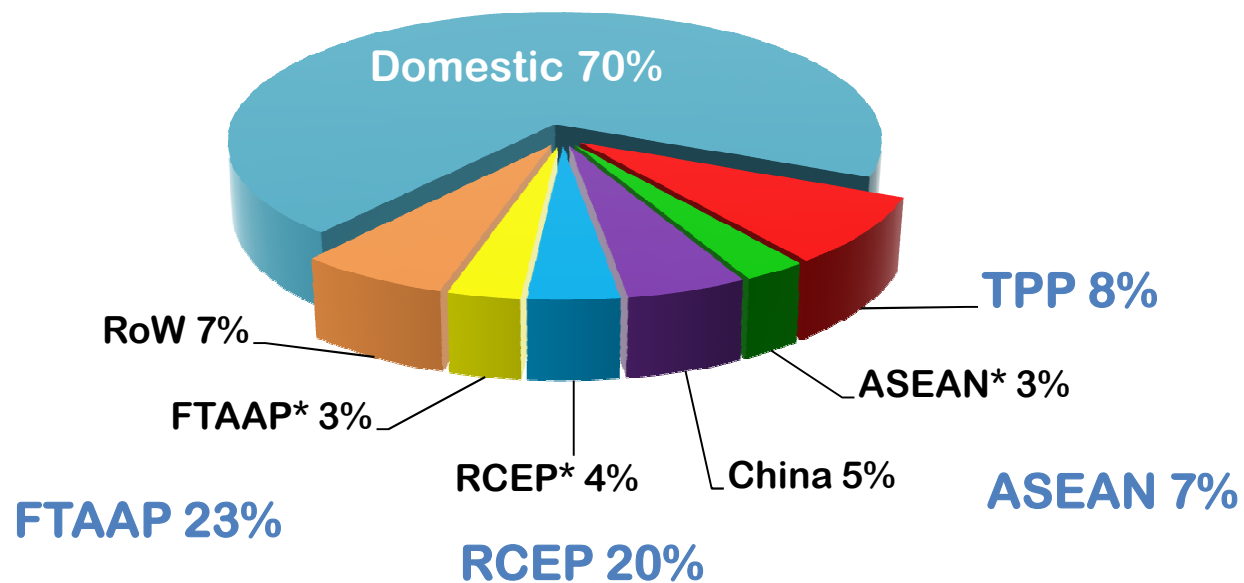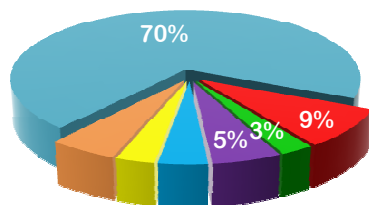# 6.The Viet Nam's the Extended Input-Output Table

## Intermediate use

# 6.The Viet Nam's the Extended Input-Output Table

## Consumption use



70%

Domestic 70%

RoW 7%

FTAAP* 3%
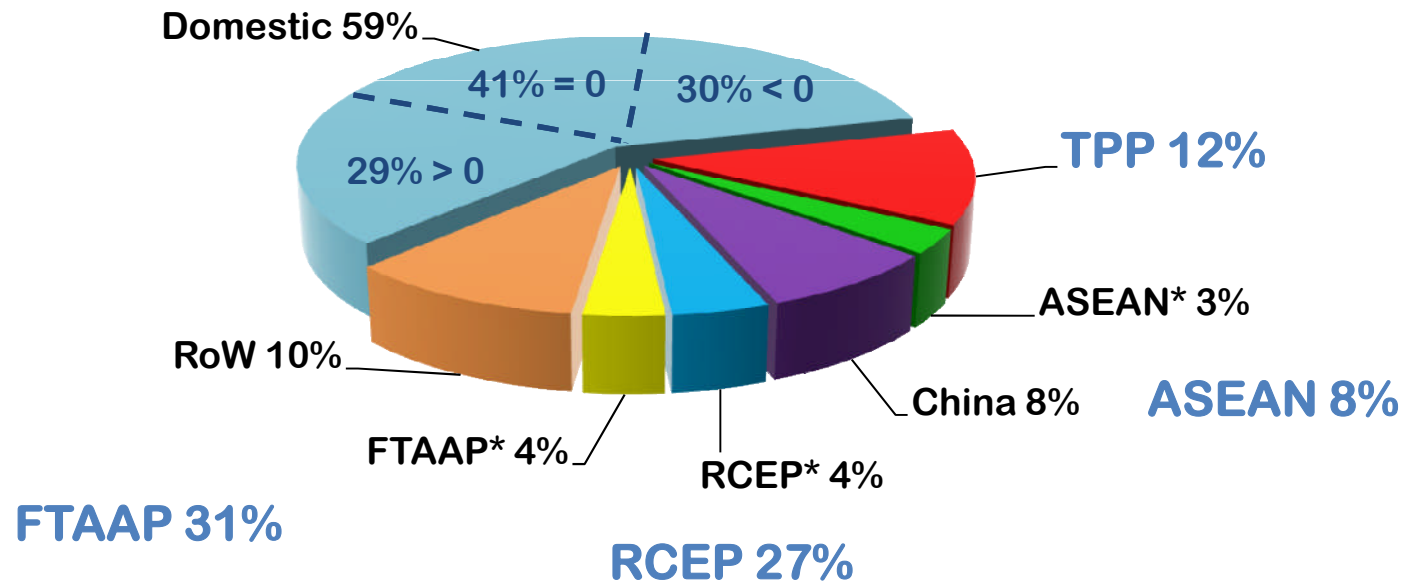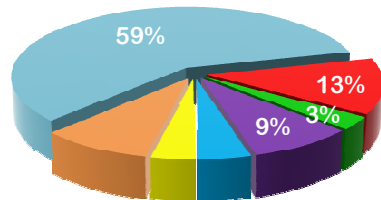
RCEP* 4%

China 5%

ASEAN* 3%
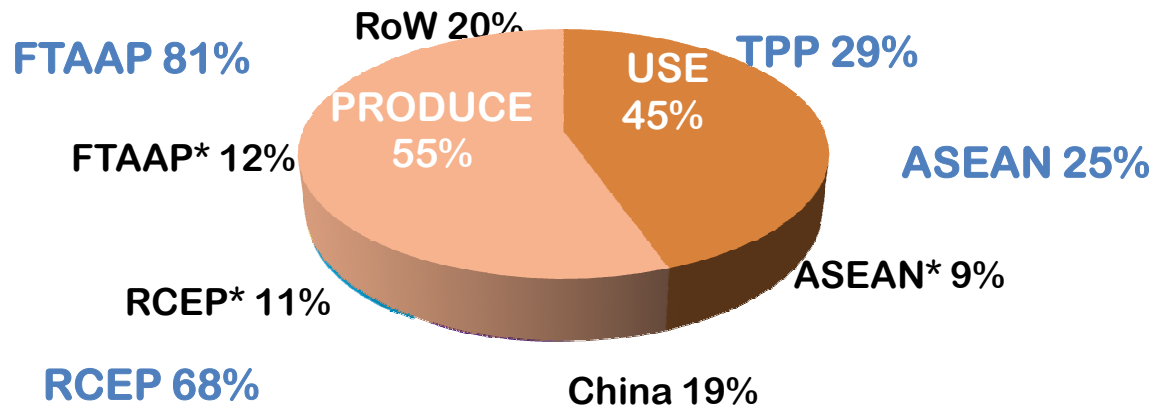
TPP 8%

FTAAP 23%

RCEP 20%

ASEAN 7%

# 6.The Viet Nam's the Extended Input-Output Table

## Investment use

# 6.The Viet Nam's the Extended Input-Output Table

**IMPORT**

FTAAP 81%

RoW 20%

USE 45%

TPP 29%

FTAAP* 12%

PRODUCE 55%

ASEAN 25%

RCEP* 11%

ASEAN* 9%

RCEP 68%

China 19%

**EXPORT**

RoW 25%

TPP 55%

FTAAP* 3%

RCEP* 3%

ASEAN 17%

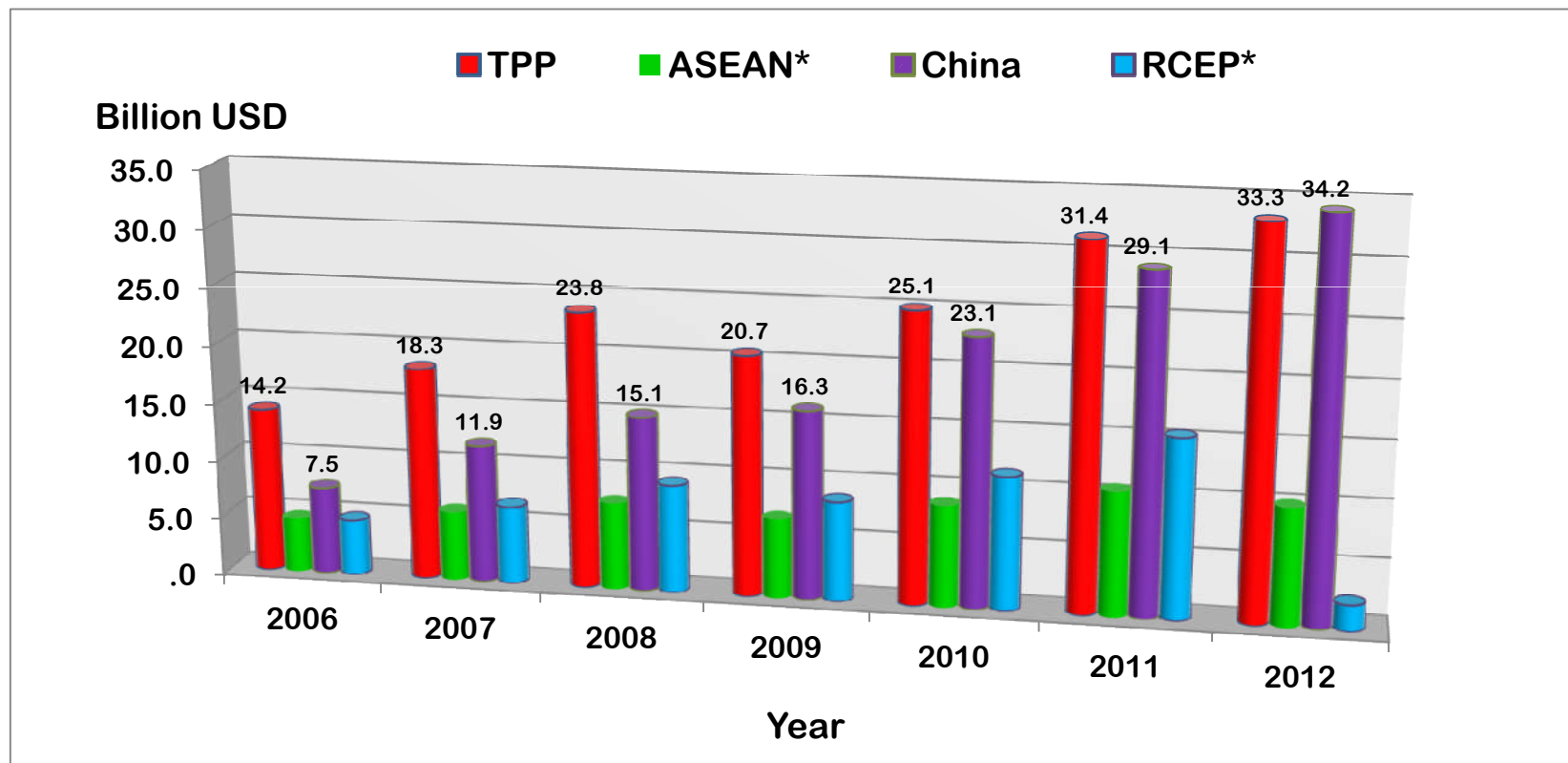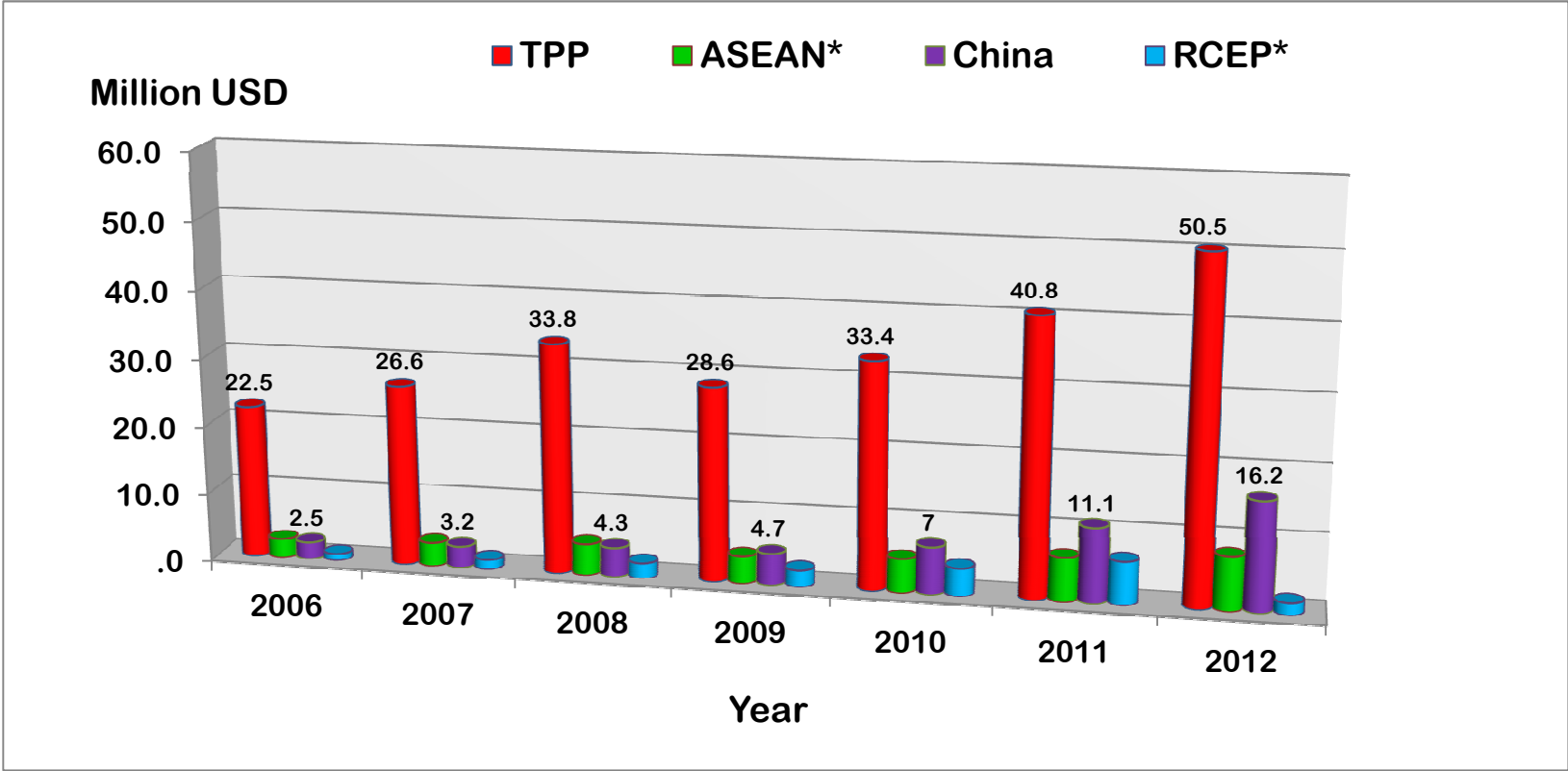China 7%

Asean* 7%

FTAAP 74%

RCEP 47%
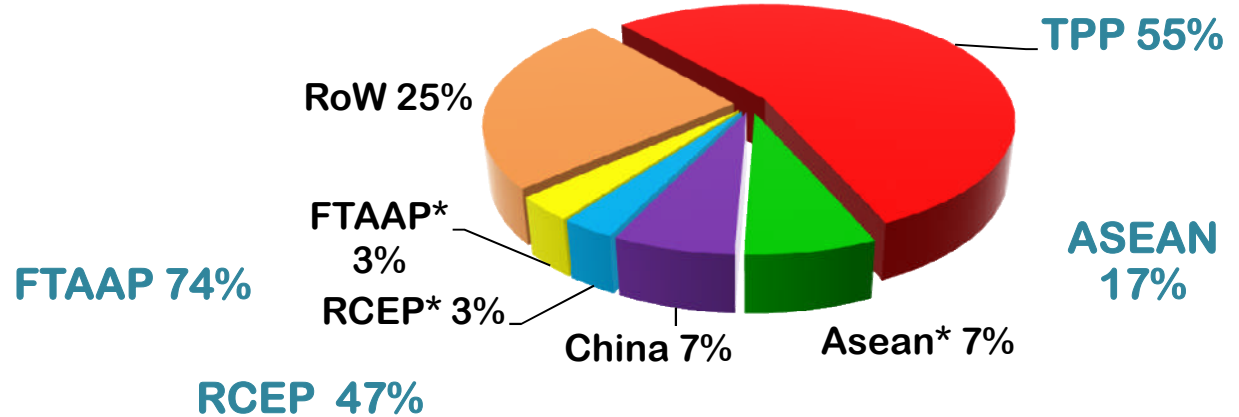
# 6.1 VN's imports from the blocs

# 6.2 VN's exports to the blocs

# 7. Scenarios

## The scenarios exit the dependence of China economy

# 7.1 The Extended Input-Output Table

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
| --- | --- | --- | --- | --- | --- | --- |
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
| **Domestic** | **1,171,126** | **552,607** | **76,626** | **294,203** | **757,554** | **2,852,116** |
| TPP | 174,174 | 73,383 | 724 | 59,563 | | 307,844 |
| Asean* | 62,671 | 24,118 | 239 | 15,155 | | 102,183 |
| China | 114,097 | 45,628 | 470 | 40,394 | | 200,589 |
| RCEP* | 57,560 | 34,727 | 264 | 21,433 | | 113,984 |
| FTAAP* | 80,441 | 27,615 | 297 | 17,940 | | 126,293 |
| RoW | 97,805 | 57,489 | 486 | 52,317 | | 208,097 |
| **Total Import** | **586,748** | **262,960** | **2,480** | **206,802** | | **1,058,990** |
| **Total Intermediate** | **1,757,874** | | | | | |
| **Value added** | **1,094,242** | | | | | |
| **Total** | **2,852,116** | **815,567** | **79,106** | **501,005** | | |

# 7.2 The scenario 1

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
|---|---|---|---|---|---|---|
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
| **Domestic** | **1,171,126** | **552,607** | **76,626** | **294,203** | **707,225** | **2,801,787** |
| TPP | 174,174 | 73,383 | 724 | 59,563 | | 307,844 |
| Asean* | 62,671 | 24,118 | 239 | 15,155 | | 102,183 |
| **TPP + APEC** | **119,802** | **47,909** | **494** | **42,414** | | **210,619** |
| RCEP* | 57,560 | 34,727 | 264 | 21,433 | | 113,984 |
| FTAAP* | 80,441 | 27,615 | 297 | 17,940 | | 126,293 |
| RoW | 97,805 | 57,489 | 486 | 52,317 | | 208,097 |
| **Total Import** | **592,453** | **265,241** | **2,504** | **208,822** | | **1,069,020** |
| **Total Intermediate** | **1,763,579** | | | | | |
| **Value added** | **1,038,208** | | | | | |
| **Total** | **2,801,787** | **817,848** | **79,130** | **503,025** | | |

**GDP - 5,1%**

# 7.3 The scenario 2

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
|---|---|---|---|---|---|---|
| **Domestic** | **1,171,126** | **552,607** | **76,626** | **294,203** | **707,225** | **2,801,787** |
| TPP | 174,174 | 73,383 | 724 | 59,563 | | 307,844 |
| Asean* | 62,671 | 24,118 | 239 | 15,155 | | 102,183 |
| **TPP + APEC** | **131,782** | **52,700** | **543** | **46,655** | | **231,680** |
| RCEP* | 57,560 | 34,727 | 264 | 21,433 | | 113,984 |
| FTAAP* | 80,441 | 27,615 | 297 | 17,940 | | 126,293 |
| RoW | 97,805 | 57,489 | 486 | 52,317 | | 208,097 |
| **Total Import** | **604,433** | **270,032** | **2,553** | **213,063** | | **1,090,081** |
| **Total Intermediate** | **1,775,559** | | | | | |
| **Value added** | **1,026,228** | | | | | |
| **Total** | **2,801,787** | **822,639** | **79,179** | **507,266** | | |

**GDP - 6,2%**

# 7.4 Scenarios ( cont.)

**The scenarios reduce the dependence of China economy**
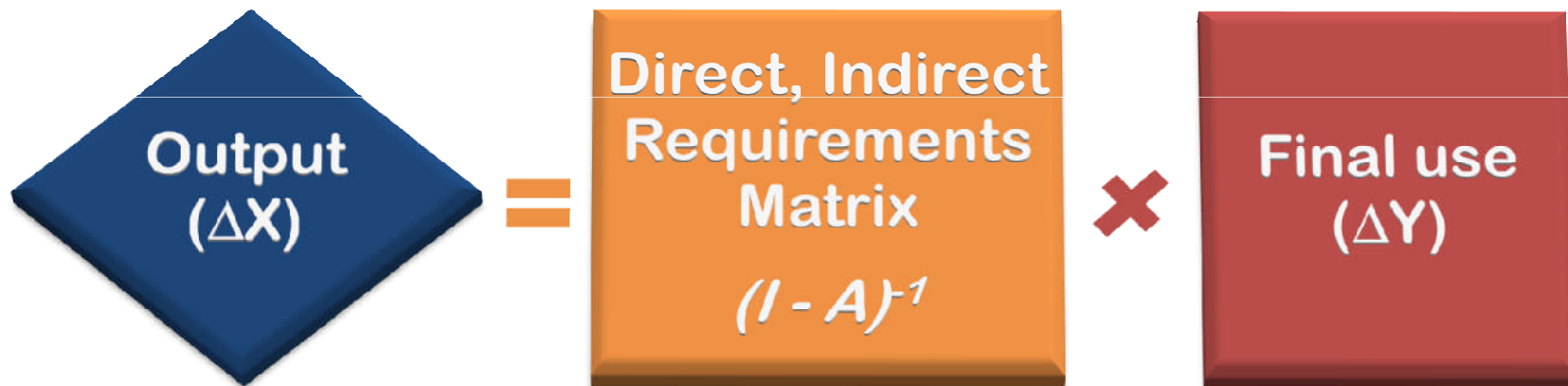
# 7.5 The scenario 3

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
|---|---|---|---|---|---|---|
| Domestic | 1,171,787 | 552,607 | 76,626 | 295,203 | 777,071 | 2,872,294 |
| China + AEC + TPP | 115,705 | 46,541 | 479 | 41,202 | | 203,927 |
| RoW | 472,651 | 217,332 | 2,010 | 166,408 | | 858,401 |
| Total Import | 588,356 | 263,873 | 2,489 | 207,610 | | 1,062,328 |
| Total Intermediate | 1,760,143 | | | | | |
| Value added | 1,112,151 | | | | | |
| Total | 2,872,294 | 816,480 | 79,115 | 501,813 | | |

**GDP + 1,6%**

# 7.6 The scenario 4

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
|---|---|---|---|---|---|---|
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
| **Domestic** | 1,171,787 | 555,082 | 76,626 | 295,244 | 777,071 | 2,872,810 |
| **China + AEC + TPP** | 115,705 | 46,541 | 479 | 41,202 | | 203,927 |
| RoW | 472,651 | 217,332 | 2,010 | 166,408 | | 858,401 |
| **Total Import** | 588,356 | 263,873 | 2,489 | 207,610 | | 1,062,328 |
| **Total Intermediate** | 1,760,143 | | | | | |
| **Value added** | 1,115,667 | | | | | |
| **Total** | 2,872,810 | 818,955 | 79,115 | 502,854 | | |

**GDP + 2,0%**

# 7.7 The scenario 5

*Unit: Billion VND*

| | Intermediate used | Final use | | | | Total |
|---|---|---|---|---|---|---|
| | | Consumption | | Investment | Export | |
| | | HHs. | Govt. | | | |
| **Domestic** | 1,171,787 | 559,385 | 76,626 | 296,806 | 777,071 | 2,881,675 |
| **China + AEC + TPP** | 115,705 | 46,541 | 479 | 41,202 | | 203,927 |
| RoW | 472,651 | 217,332 | 2,010 | 166,408 | | 858,401 |
| **Total Import** | 588,356 | 263,873 | 2,489 | 207,610 | | 1,062,328 |
| **Total Intermediate** | 1,760,143 | | | | | |
| **Value added** | 1,121,531 | | | | | |
| **Total** | 2,881,675 | 823,258 | 79,115 | 504,416 | | |

**GDP + 2,5%**

# 8. Conclusion

**Thanks for listening!**