

# NEW EVIDENCE OF EXPORT COMPETITIVENESS BETWEEN ASIA AND EUROPE:

## Industry-specific Real Effective Exchange Rates

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# Motivation

- Lehman Brothers collapse and global financial crisis brought the asymmetric effects on Asian currencies:  
We need to check whether and to what extent Asian firms' export price competitiveness is different **across countries and industries**.
- **Comparing** the export price competitiveness between Asian and European countries.
  - 8 Asian countries: China, Japan, Korea, Taiwan, Malaysia, Philippines, Singapore, Thailand.
  - 4 Eurozone countries: France, Germany, Italy, Spain.
  - UK, USA
- **Monitoring** the changes in international price competitiveness across countries and industries

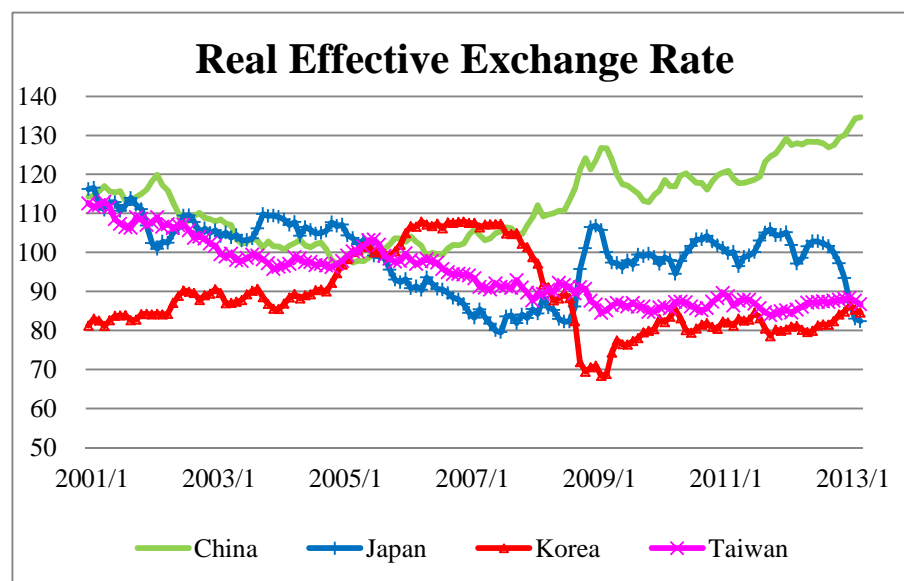
# Contents

1. Data construction of **Industry-specific** REE
  - To show how to calculate the industry-specific REER.
2. Overview of Industry-Specific REER of major industries in Asian countries, Europe countries and USA
  - To check whether and what extent export price competitiveness of industries are different.
3. Factor **decomposition** analysis:
  - By decomposing REER into NEER and RP, we check and compare these factors across the industries and countries.

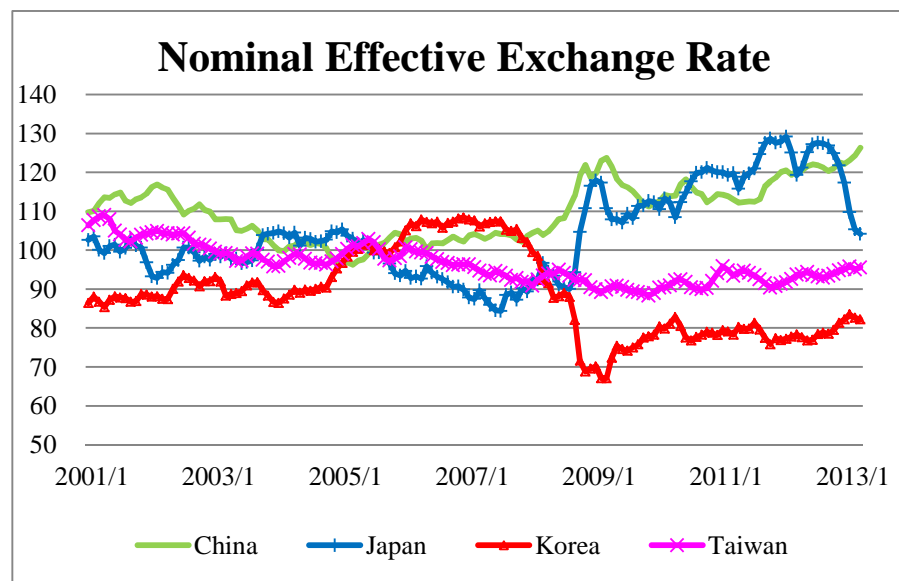
# NEER/REER of Asian Currencies (1)

(BIS, 2005=100)

## 1. Real Effective Exchange Rates



## 2. Nominal Effective Exchange Rates

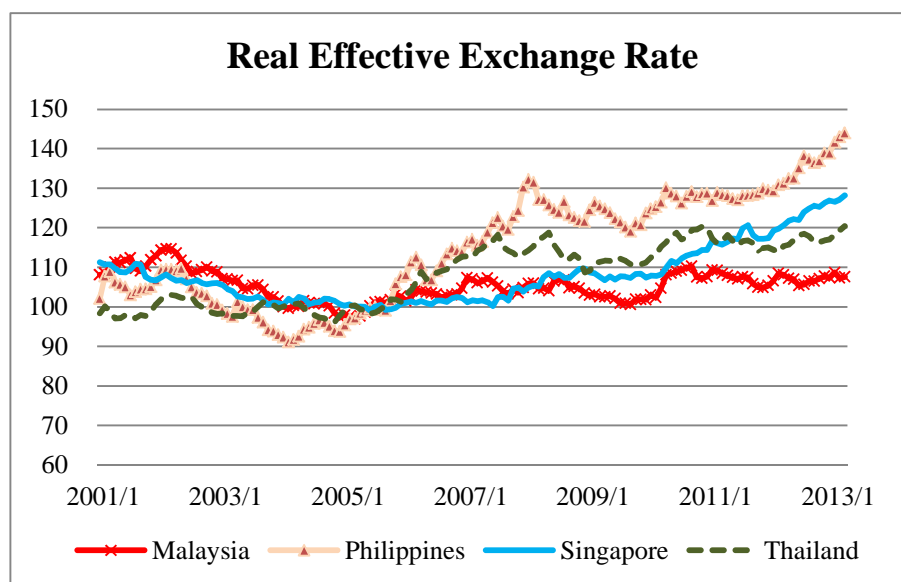


Data Source: BIS effective exchange rate indices (broad indices) comprising 61 economies (<http://www.bis.org/statistics/eer/index.htm>).

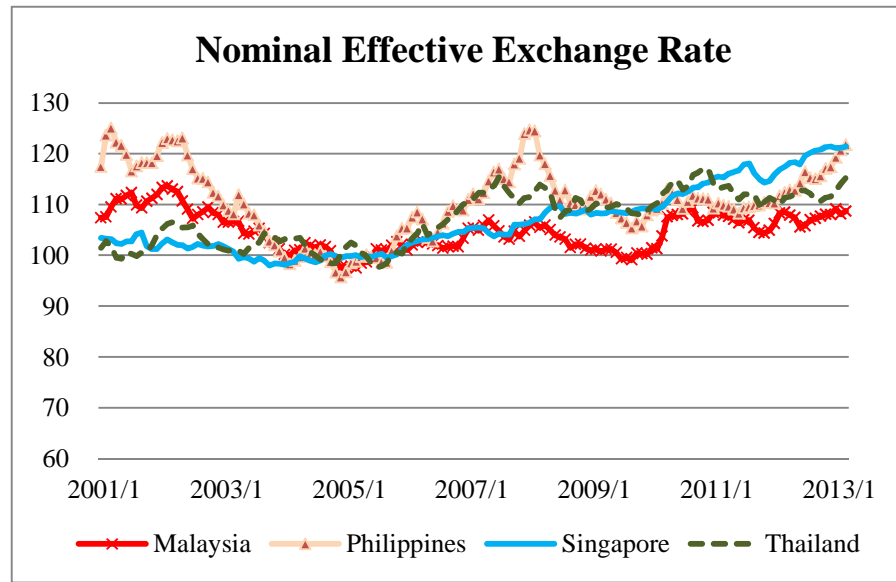
# NEER/REER of Asian Currencies (2)

(BIS, 2005=100)

## 1. Real Effective Exchange Rates



## 2. Nominal Effective Exchange Rates

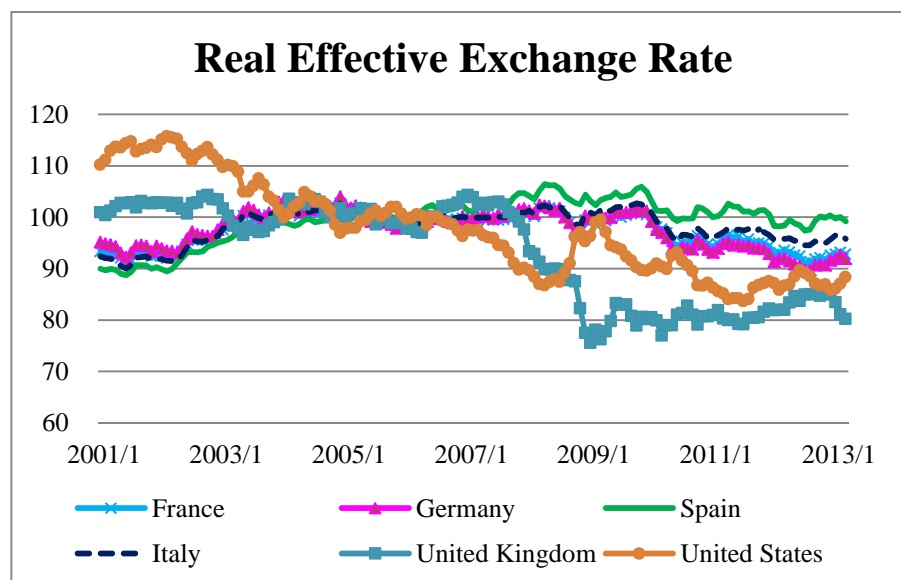


Data Source: BIS effective exchange rate indices (broad indices) comprising 61 economies (<http://www.bis.org/statistics/eer/index.htm>).

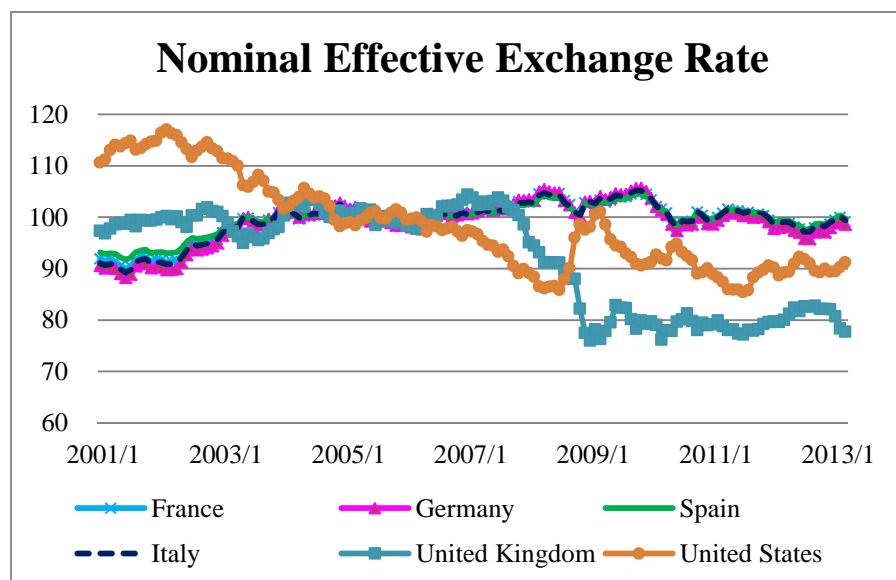
# NEER/REER for European Countries and USA

(BIS, 2005=100)

## 1. Real Effective Exchange Rates



## 2. Nominal Effective Exchange Rates



Data Source: BIS effective exchange rate indices (broad indices) comprising 61 economies (<http://www.bis.org/statistics/eer/index.htm>).

# Related Research

- Goldberg (2004) : US
  - Aggregate indices misses the empirical importance of the exchange rate on producer profits in specific industries.
  - The industry-specific EER is appropriate for understanding the effects of exchange rate fluctuations on specific U.S. industries.
- Alexandre et al. (2009): Prorogue
  - The sector-specific exchange rates are more informative than aggregate exchange rates in explaining changes in employment.
- Sato et al. (2012a. 2012b): Japan
  - Daily NEER/REER of the yen for major manufacturing industries provide a better indicator of the industry-wide international price competitiveness of Japanese firms.
  - Data is available on the website of RIETI  
(<http://www.rieti.go.jp/users/eeri/en/index.html>)

# 1. DATA CONSTRUCTION OF INDUSTRY-SPECIFIC REER

- Effective Exchange Rate Formula
  - Partner Country and Industry Classification
  - Industry-Specific Price Data
  - Trade Weight
-



# Industry-Specific REER

$$REER_{it} = \prod_{j=1}^n \left( RER_{it}^j \right)^{\alpha_{it}^j}$$

$$\rightarrow RER_{it}^j = NER_{jt/k} \cdot \left( \frac{P_{it}^k}{P_{it}^j} \right)$$

*Note:*

$i \rightarrow$  industry    $j \rightarrow$  partner    $k \rightarrow$  home country    $t \rightarrow$  sample date  
 $\alpha_i^j \rightarrow$  the share of home country's exports of industry  $i$  to country  $j$

*Data Frequency:*

*Exchange Rate: Daily, Prices: Monthly and Partners' Weight: Annual*

# Calculation Process

We employ the BOJ's method of calculation of real effective exchange rate (REER)



$$E_{2002,1}^{2001} = \prod_i \left( \frac{RER_{i,2002,1}}{RER_{i,2001,1}} \right)^{W_{i,2001}}$$

$$E_{2013,m}^{2013} = \prod_i \left( \frac{RER_{i,2013,m}}{RER_{i,2013,1}} \right)^{W_{i,2012}}$$



$$REER_{2013,m} = E_{2002,1}^{2001} * E_{2003,1}^{2002} * \dots * E_{2011,1}^{2010} * E_{2013,m}^{2013}$$

# Availability of the Price Data (27 economies)

ISIC.Rev3	Industry Classification	AUS	BLX	CAN	CHN	GER	GRC	ESP	FRA	IDN	IND	ITA	JPN	KOR
15	Food and Beverage	▲	▲	●	○	○	▲	●	○	○	●	○	○	○
16	Tobacco	○	○	○	○	○	○	○	○	○	○	○	○	○
17	Textiles	○	○	○	▲	○	○	○	○	○	○	○	○	○
18	Wearing Apparel, Fur	○	X	○	○	○	○	○	○	○	X	○	●	○
19	Leather, Footwear	○	○	○	○	○	○	○	○	○	○	○	●	○
20	Wood products (excl. furniture)	○	○	○	○	○	○	○	○	○	○	○	○	○
21	Paper and Paper products	○	○	○	○	○	○	○	○	○	○	○	○	○
22	Printing and Publishing	○	X	○	○	X	○	○	○	○	○	○	●	○
23	Coke, Refined Petroleum product	○	○	○	○	○	○	○	○	○	X	○	○	○
24	Chemicals and Chemical products	○	○	○	▲	○	○	●	○	○	○	○	○	○
25	Rubber and Plastics products	○	○	○	▲	○	○	○	○	○	○	○	○	○
26	Non-metallic Mineral products	○	○	○	○	▲	○	○	○	○	○	○	●	○
27	Basic Metals	○	○	○	▲	○	○	○	○	○	○	○	●	○
28	Fabricated Metal products	○	○	○	○	X	○	○	X	X	X	○	X	X
29	Machinery and Equipment n.e.c.	○	○	○	▲	○	○	○	○	○	○	○	○	○
30	Office, Accounting and Computing Machinery	X	○	○	○	X	○	○	X	X	X	○	○	X
31	Electrical Machinery and Apparatus n.e.c.	▲	○	○	○	○	○	○	○	○	●	○	○	○
32	Communication Equipment and Apparatus	○	○	X	○	X	○	X	○	○	X	○	○	○
33	Optical Instruments	○	○	X	○	X	○	X	X	○	X	○	○	○
34	Motor Vehicles, Trailers and Semi-trailers	○	○	○	○	○	○	○	○	○	○	○	○	○
35	Other Transport Equipment	○	○	○	○	○	○	○	○	○	○	○	○	○
Weight		○	X	○	X	X	X	○	X	X	○	X	○	○
Area		Oceania	Euro	Euro	Asia	Euro	Euro	Euro	Euro	Asia	Asia	Euro	Asia	Asia
Index		PPI	PPI	PPI	PPI	PPI	PPI	PPI	PPI	WPI	WPI	PPI	CGPI	PPI

○ means that the data is available but not exactly corresponds to ISIC.

● means that more detailed data is available, and the industry weight data is also available.

▲ means that more detailed data is available, but the industry weight data is not available.

X means that the data is not available.

# Availability of the Price Data (27 economies)

ISIC.Rev3	Industry Classification	MYS	NLD	NOR	PHL	RUS	SGP	SWE	IRL	THA	TUR	TWN	UK	USA	ZAF
15	Food and Beverage	○	○	○	○	○	○	○	○	○	○	▲	▲	○	▲
16	Tobacco	○	○	○	○	○	○	○	○	○	○	○	○	○	○
17	Textiles	○	○	○	○	○	○	○	○	○	○	○	○	○	○
18	Wearing Apparel, Fur	○	○	○	○	○	●	○	○	○	○	○	○	○	○
19	Leather, Footwear	○	○	○	○	○	○	○	○	○	○	○	○	○	▲
20	Wood products (excl. furniture)	○	○	○	○	○	○	○	○	○	○	○	○	○	○
21	Paper and Paper products	○	○	○	○	○	○	○	○	○	○	○	○	○	○
22	Printing and Publishing	○	○	○	○	○	X	○	○	○	○	○	○	○	○
23	Coke, Refined Petroleum product	○	○	○	○	○	○	○	X	○	○	○	○	○	○
24	Chemicals and Chemical products	○	●	●	○	○	○	○	○	○	○	○	○	○	○
25	Rubber and Plastics products	○	○	○	▲	○	●	○	○	○	○	○	○	○	○
26	Non-metallic Mineral products	○	○	○	○	○	○	○	○	○	○	○	○	○	○
27	Basic Metals	○	○	○	○	○	●	○	○	○	○	○	○	○	○
28	Fabricated Metal products	○	○	○	○	○	X	○	○	○	○	○	○	○	○
29	Machinery and Equipment n.e.c.	○	○	○	○	○	●	○	○	○	○	○	○	○	○
30	Office, Accounting and Computing Machinery	○	○	X	X	○	○	○	○	○	○	○	○	X	X
31	Electrical Machinery and Apparatus n.e.c.	○	○	○	○	○	○	○	○	○	○	○	○	○	○
32	Communication Equipment and Apparatus	○	X	X	X	○	○	X	X	○	○	○	X	○	○
33	Optical Instruments	○	X	X	X	○	●	○	X	○	○	○	X	X	X
34	Motor Vehicles, Trailers and Semi-trailers	○	○	○	○	○	○	○	○	○	○	○	○	○	○
35	Other Transport Equipment	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Weight		X	○	○	X	X	○	X	X	X	X	X	X	X	X
Area		Asia	Euro	Euro	Asia	Euro	Asia	Euro	Euro	Asia	Euro	Asia	Euro	Amer	Africa
Index		PPI	PPI	PPI	PPI	PPI	PPI	PPI	PPI	PPI	PPI	WPI	PPI	PPI	PPI

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# Industry Classification

Code	ISIC.rev3	Industry Name	Description
1	15-16	Food	Food, Beverage, Tobabcoo
2	17-19	Textile	Textiles, Textile Products, Leather and Footwear
3	20	Wood	Wood Products(excl. furniture)
4	21-22	Paper	Paper, Paper Products, Printing and Publishing
5	23	Petroleum	Coke, Refined Petroleum Products,Nuclear Fuel
6	24	Chemical	Chemicals and Chemical Products
7	25	Rubber	Rubber and Plastics Products
8	26	Non-Metal	Non-metallic Mineral Products
9	27-28	Metal	Basic Metals and Fabricated Metal Products
10	29	General Machinery	Machinery and Equipment n.e.c.
11	30-32	Electrical Industry	Electrical Industry
12	33	Optical Instruments	Optical Instruments
13	34-35	Transport Equipment	Transport Equipment

# Data Source

Country	Data Source	Link
American	FEDSTATS U.S. Bureau of Labor Statistics (BLS)	<a href="http://www.bls.gov/ppi/#data">http://www.bls.gov/ppi/#data</a>
Australian	Australian Bureau of Statistics	<a href="http://www.abs.gov.au/">http://www.abs.gov.au/</a>
Belgium	CEIC	
Canada	Statistics Canada	<a href="http://www5.statcan.gc.ca">http://www5.statcan.gc.ca</a>
China	1. CEIC 2. <i>China Monthly Statistic</i> 3. <i>China Statistical Yearbook</i>	
France	National Institute of Statistics and Economic Studies	<a href="http://www.bdm.insee.fr">http://www.bdm.insee.fr</a>
German	GENESIS-Online Database	<a href="https://www-genesis.destatis.de">https://www-genesis.destatis.de</a>
Greece	CEIC	
India	Office of Economic Adviser to Government of India	<a href="http://eaindstry.nic.in/">http://eaindstry.nic.in/</a>
Indonesia	1. BPS, <i>Indikator Ekonomi (Economic Indicators)</i> 2. CEIC	
Ireland	CEIC	
Italy	CEIC	
Japan	Bank of Japan	<a href="http://www.boj.or.jp/">http://www.boj.or.jp/</a>
Korea	The Bank of Korea	<a href="http://eng.bok.or.kr/eng/engMain.action">http://eng.bok.or.kr/eng/engMain.action</a>
Malaysia	CEIC	
Netherlands	Statistics Netherlands Statline Database	<a href="http://statline.cbs.nl/StatWeb/?LA=en">http://statline.cbs.nl/StatWeb/?LA=en</a>
Norway	Statistics Norway	<a href="http://statbank.ssb.no">http://statbank.ssb.no</a>
Philippines	1. Republic of Philippines National Statistics Office 2. <i>Philippine Yearbook</i>	<a href="http://www.census.gov.ph">http://www.census.gov.ph</a>
Russia	CEIC	
Singapore	CEIC Statistics Singapore	<a href="http://www.singstat.gov.sg/">http://www.singstat.gov.sg/</a>
South Africa	CEIC	
Spain	National Statistics Institute	<a href="http://www.ine.es">http://www.ine.es</a>
Sweden	CEIC	
Thailand	CEIC	
Taiwan	CEIC(include output data)	
Turkey	CEIC	
UK	CEIC	
Trade Data	UN Comtrade	<a href="http://comtrade.un.org/">http://comtrade.un.org/</a>

# Trade Weight in 2012 for Asian Countries (1)

## by industry and region

(Percent)

Country Region	China					Japan					Korea					Taiwan				
	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other
Food	54.3	12.9	2.4	19.8	10.6	62.6	4.5	1.3	24.8	6.8	73.8	3.8	0.5	11.6	10.3	73.2	2.7	0.6	16.5	6.9
Textile	28.9	23.5	5.1	28.3	14.3	82.7	6.5	0.9	8.2	1.7	70.8	7.1	1.2	13.7	7.1	70.4	5.9	1.7	16.7	5.4
Wood	34.6	19.6	6.8	28.9	10.1	73.7	6.0	1.6	16.9	1.8	66.8	9.3	0.5	13.7	9.6	49.4	15.0	4.1	23.2	8.2
Paper	34.6	13.5	7.6	30.6	13.7	69.9	7.3	1.0	14.6	7.3	60.2	2.9	1.1	19.8	16.0	76.6	4.0	1.5	11.5	6.4
Petroleum	58.8	11.8	0.1	13.8	15.5	68.0	3.5	0.0	21.3	7.1	96.0	0.4	0.2	1.5	1.9	93.1	2.1	0.0	4.6	0.1
Chemical	53.4	18.4	2.1	16.2	9.8	72.2	10.7	1.2	13.7	2.3	83.5	5.1	0.5	5.6	5.4	89.0	3.8	0.5	3.8	2.9
Rubber	26.3	17.5	5.3	36.5	14.5	66.9	8.9	1.5	14.4	8.3	51.2	10.6	2.5	24.9	10.8	53.5	9.3	2.8	25.0	9.4
Non-Metal	39.7	20.1	3.8	21.8	14.6	78.5	8.2	0.8	9.8	2.7	69.8	6.9	0.9	15.0	7.4	76.6	6.0	1.3	12.1	4.0
Metal	47.7	16.4	3.3	19.4	13.2	80.1	3.4	4.6	8.2	3.8	75.6	5.9	1.5	10.4	6.7	56.9	10.9	3.2	19.1	9.9
General	37.1	19.1	3.8	25.5	14.5	65.1	10.4	1.5	17.5	5.5	60.1	7.3	1.4	20.9	10.3	62.4	8.9	1.8	17.9	9.0
Electrical	30.7	23.9	3.5	33.9	8.0	63.5	12.0	2.2	18.5	3.8	55.1	9.2	2.5	26.8	6.4	52.1	14.7	3.4	23.3	6.6
Optical	48.2	16.4	2.4	25.2	7.9	57.6	16.6	2.2	20.5	3.1	89.4	3.4	0.3	4.8	2.1	82.4	2.7	1.8	10.6	2.5
Transport	38.4	23.4	4.2	21.6	12.4	30.4	11.1	4.0	36.5	17.9	28.4	24.0	3.5	23.0	21.2	20.0	28.9	5.8	33.0	12.3

Source: Authors' calculation from the UN Comtrade Database.

Asia contains CHN IDN IND JPN KOR MYS PHL SGP THA TWN

EZ includes BLX DEU ESP FRA GRC IRL ITA NLD

Other includes AUS CAN NOR RUS SWE TUR ZAF

# Trade Weight in 2012 for Asian Countries (2)

## by industry and region

(Percent)

Country Region	Malaysia					Philippines					Singapore					Thailand				
	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other
Food	68.0	11.7	0.6	11.6	8.0	33.5	24.7	2.2	36.4	3.2	85.0	1.7	0.9	3.3	9.2	49.9	11.1	5.7	21.0	12.3
Textile	42.6	14.2	4.8	29.8	8.6	14.1	8.3	2.3	71.1	4.1	63.5	5.6	3.5	18.9	8.6	33.4	22.0	5.5	30.4	8.6
Wood	72.1	11.1	4.6	5.3	6.9	95.1	1.0	0.2	3.2	0.4	54.7	16.6	0.7	4.4	23.5	85.3	4.0	1.9	6.8	2.1
Paper	71.2	6.5	3.9	6.9	11.5	63.2	16.2	9.5	7.5	3.5	71.5	3.7	4.3	9.9	10.8	78.8	6.8	0.7	4.6	9.1
Petroleum	95.6	2.3	0.0	1.7	0.4	99.3	0.0	0.0	0.0	0.7	95.4	0.4	0.0	0.1	4.1	60.4	3.2	0.2	3.0	33.1
Chemical	79.9	9.0	0.9	4.6	5.6	81.1	4.8	0.4	7.3	6.4	64.5	18.1	4.5	7.1	6.0	83.7	4.9	1.1	2.6	7.6
Rubber	52.6	13.5	5.5	19.5	8.8	57.8	12.8	2.4	20.1	6.9	77.1	8.4	1.1	8.9	4.5	55.5	11.2	2.2	21.7	9.4
Non-Metal	84.3	5.9	1.3	2.8	5.7	63.8	3.2	0.6	18.9	13.5	83.9	1.3	0.2	1.7	13.0	62.8	8.8	2.9	10.6	14.8
Metal	74.3	7.4	0.9	5.7	11.6	85.1	5.2	0.5	6.9	2.2	78.5	5.3	0.5	2.6	13.2	50.9	5.1	2.0	9.3	32.8
General	61.9	11.3	3.4	14.4	9.0	76.1	4.6	1.5	15.8	2.0	82.4	4.3	1.1	6.8	5.4	62.6	12.5	2.1	9.9	12.8
Electrical	56.6	14.9	1.5	20.4	6.5	58.6	19.7	0.3	19.4	2.1	72.4	9.5	1.8	12.8	3.6	61.5	11.4	1.1	21.5	4.4
Optical	57.6	16.3	1.0	21.9	3.1	40.3	26.2	0.8	28.4	4.3	64.9	11.8	1.4	17.3	4.7	53.9	18.7	2.9	18.8	5.8
Transport	66.7	9.7	7.5	10.3	5.7	63.3	26.1	1.8	5.1	3.7	55.4	9.8	8.1	15.7	11.0	57.9	6.6	3.4	4.8	27.4

Source: Authors' calculation from the UN Comtrade Database.

EZ includes BLX DEU ESP FRA GRC IRL ITA NLD

Other includes AUS CAN NOR RUS SWE TUR ZAF



# Trade Weight in 2012 for Europe countries and USA by industry and region

(Percent)

Country Region	Germany					Spain					France					Italy					UK				USA			
	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	UK	USA	other	Asia	EZ	USA	other	Asia	EZ	UK	other
Food	4.0	69.2	10.8	3.8	12.2	6.2	69.2	9.9	6.5	8.3	10.7	61.5	14.2	7.2	6.4	5.9	57.1	12.7	13.4	10.9	9.5	70.0	9.9	10.6	44.3	8.8	2.8	44.1
Textile	6.1	63.7	8.3	3.7	18.1	7.4	70.7	8.3	3.4	10.2	14.5	62.5	8.5	7.9	6.5	13.3	55.6	8.1	9.4	13.6	6.9	76.4	5.9	10.8	29.6	15.5	5.9	49.0
Wood	6.9	63.6	9.3	4.5	15.7	4.7	70.3	13.5	5.8	5.7	2.2	74.5	6.7	10.5	6.0	7.1	60.1	9.2	8.8	14.8	5.1	80.4	2.8	11.7	31.5	11.9	4.5	52.1
Paper	6.6	60.8	12.8	5.8	14.0	4.1	74.8	10.5	3.8	6.7	6.2	71.2	13.3	3.1	6.3	4.0	74.4	9.0	3.5	9.1	11.1	63.6	9.0	16.3	29.8	15.3	5.7	49.2
Petroleum	5.5	63.1	8.1	11.3	12.0	1.1	87.8	1.6	2.4	7.1	6.9	52.0	13.3	17.4	10.4	3.6	81.4	2.7	3.6	8.7	1.6	82.7	2.4	13.3	38.0	21.1	8.5	32.4
Chemical	13.9	55.8	7.5	10.8	12.1	10.9	63.3	8.2	7.1	10.5	11.9	57.6	9.3	9.0	12.2	12.0	62.7	6.7	8.2	10.4	9.4	57.5	22.7	10.4	35.8	33.6	6.1	24.5
Rubber	9.8	56.7	11.0	7.2	15.2	4.5	76.0	8.2	3.1	8.2	5.6	70.0	11.8	4.8	7.9	5.4	72.8	7.5	4.1	10.3	6.7	71.0	10.7	11.7	22.4	15.7	4.9	57.0
Non-Metal	13.4	54.2	7.9	9.2	15.3	5.1	66.6	10.4	7.9	10.0	9.2	61.1	11.1	9.1	9.5	6.3	60.4	6.6	13.4	13.2	9.7	63.4	11.8	15.1	28.8	19.8	3.7	47.7
Metal	14.4	51.1	11.0	9.1	14.4	4.5	69.0	12.2	5.3	9.0	9.8	67.8	8.1	5.4	8.8	7.2	70.5	6.9	6.2	9.2	18.5	52.7	14.1	14.8	22.0	11.5	21.8	44.7
General	30.1	32.4	6.6	11.9	19.0	12.8	56.1	6.8	9.9	14.4	15.4	54.2	7.9	8.8	13.7	19.7	46.0	6.6	9.3	18.4	19.7	44.4	16.6	19.2	37.3	16.6	5.3	40.8
Electrical	21.4	44.9	8.2	9.6	15.8	7.2	72.2	7.2	5.2	8.2	14.1	58.3	9.4	6.7	11.5	10.6	64.3	6.6	6.5	12.0	13.1	59.6	14.7	12.7	41.4	19.4	5.9	33.3
Optical	24.6	34.9	6.7	19.6	14.2	11.6	65.5	7.3	8.6	7.0	12.2	58.0	8.6	12.3	8.8	14.6	49.7	8.2	15.8	11.6	17.2	44.2	24.6	14.0	39.5	34.1	5.3	21.1
Transport	16.6	42.1	12.5	14.0	14.8	2.9	74.8	10.9	2.6	8.9	14.8	57.0	8.3	9.0	10.9	7.7	57.7	10.9	13.6	10.2	17.0	45.7	20.6	16.7	15.1	14.0	3.4	67.5

Source: Authors' calculation from the UN Comtrade Database.

EZ includes BLX DEU ESP FRA GRC IRL ITA NLD

Other includes AUS CAN NOR RUS SWE TUR ZAF

# Industry Weight by Export in 2012

(Percent)

Industry	CHN	JPN	KOR	TWN	MYS	PHL	SGP	THA	ITA	DEU	ESP	FRA	UK	USA
Food	2.5	0.7	1.2	1.2	<b>17.40</b>	8.72	3.68	<b>16.48</b>	6.4	4.6	<b>10.4</b>	<b>9.9</b>	6.5	5.5
Textile	<b>20.3</b>	1.1	3.4	5.0	1.90	4.66	1.42	5.26	<b>15.6</b>	3.6	7.3	5.4	3.9	2.5
Wood	0.7	0.0	0.0	0.1	2.60	3.74	0.07	0.91	0.5	0.7	0.8	0.6	0.2	0.7
Paper	1.0	0.7	0.8	0.8	0.93	0.70	1.54	2.80	2.4	3.0	3.0	2.6	3.2	3.3
Petroleum	0.2	0.1	0.4	0.1	1.51	0.20	0.63	0.21	0.2	0.6	0.7	0.9	0.7	0.8
Chemical	6.6	<b>12.0</b>	<b>13.7</b>	<b>17.7</b>	<b>10.54</b>	4.40	<b>23.13</b>	<b>11.00</b>	<b>10.6</b>	<b>14.8</b>	<b>13.4</b>	<b>17.5</b>	<b>19.8</b>	<b>16.9</b>
Rubber	3.3	4.3	2.8	4.1	5.98	1.51	1.62	6.07	4.2	3.8	3.9	3.5	2.9	3.2
Non-Metal	2.3	1.7	0.4	1.4	1.49	0.48	0.39	1.55	3.5	1.5	3.6	1.6	1.2	1.1
Metal	8.5	<b>10.7</b>	<b>11.3</b>	<b>11.8</b>	6.90	5.68	7.00	<b>9.26</b>	<b>10.1</b>	8.4	<b>9.0</b>	7.5	7.3	6.4
General	10.1	<b>18.4</b>	<b>10.0</b>	8.7	5.82	1.82	<b>12.94</b>	<b>8.81</b>	<b>23.5</b>	<b>16.6</b>	7.8	<b>10.1</b>	<b>11.5</b>	<b>14.0</b>
Electrical	<b>33.4</b>	<b>14.6</b>	<b>18.4</b>	<b>32.2</b>	<b>38.08</b>	<b>58.65</b>	<b>32.33</b>	<b>21.80</b>	7.5	<b>12.9</b>	8.4	<b>11.8</b>	<b>19.6</b>	<b>17.3</b>
Optical	4.3	6.8	<b>9.5</b>	<b>12.5</b>	4.22	2.13	6.44	2.59	2.7	4.7	1.4	3.7	5.2	7.4
Transport	6.8	<b>29.0</b>	<b>28.0</b>	4.4	2.62	7.30	8.82	<b>13.25</b>	<b>12.7</b>	<b>24.8</b>	<b>30.3</b>	<b>24.9</b>	<b>17.9</b>	<b>20.9</b>

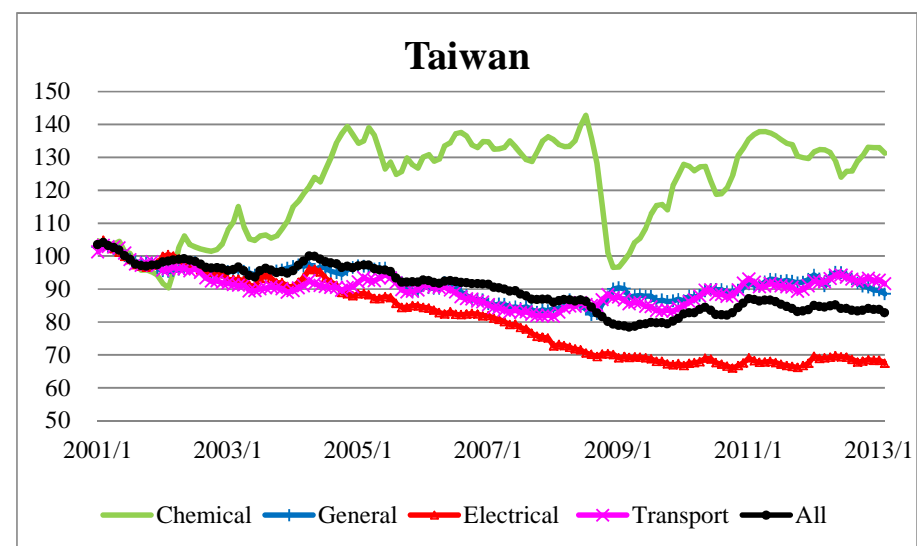
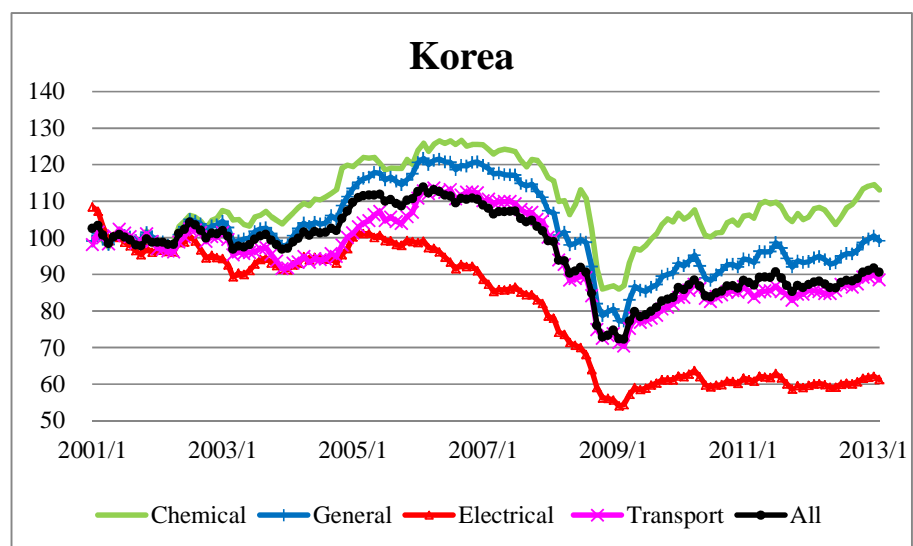
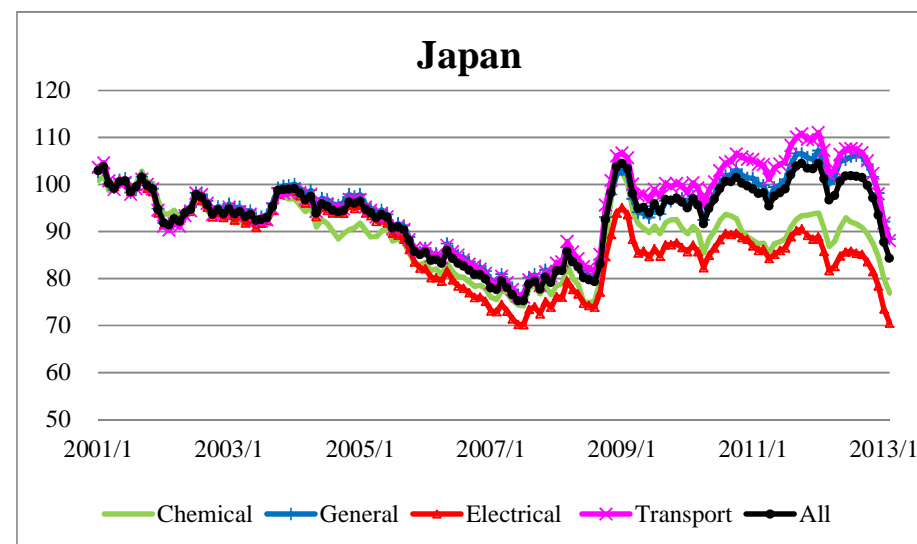
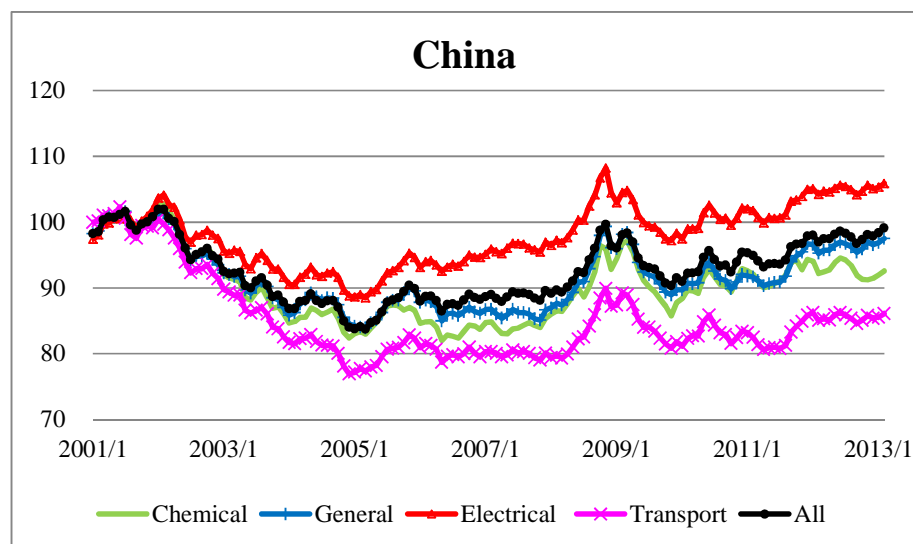
Source: Authors' calculation from the UN Comtrade Database.

## 2. INDUSTRY-SPECIFIC REER OF SELECTED INDUSTRIES

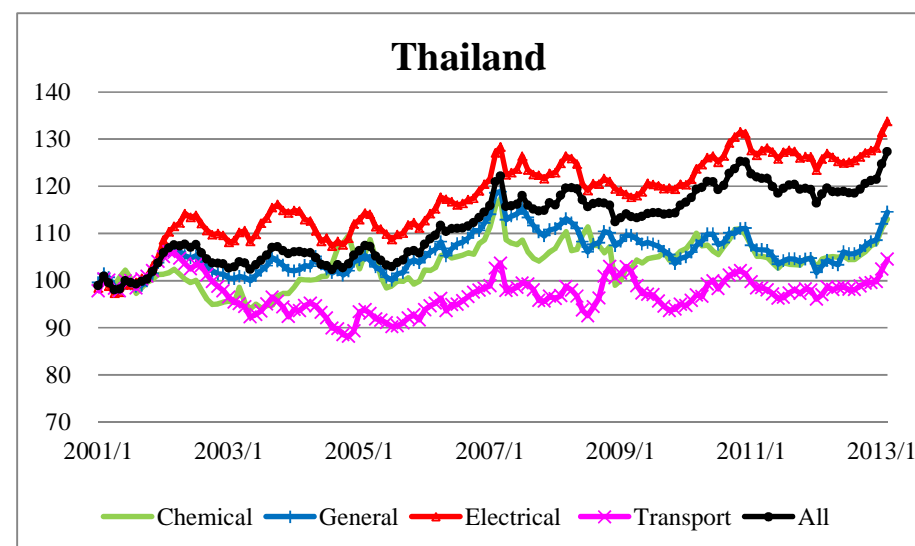
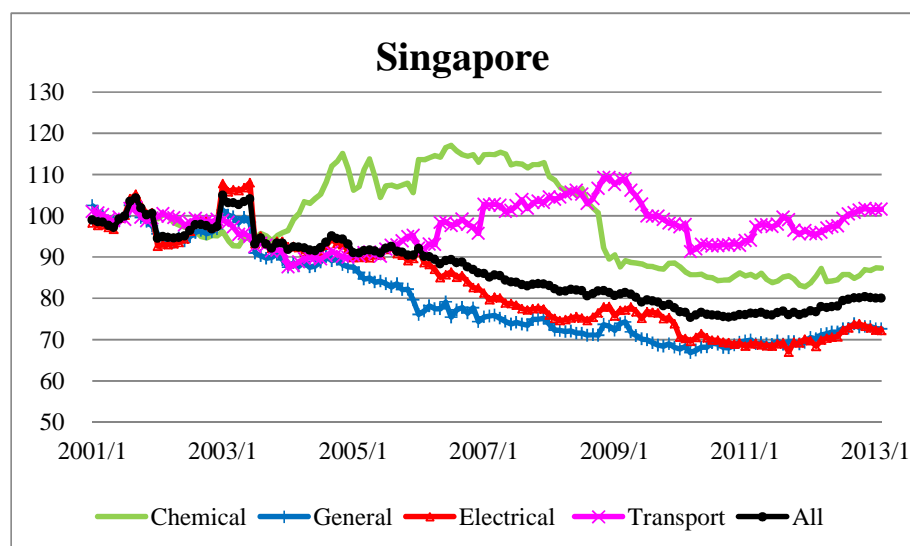
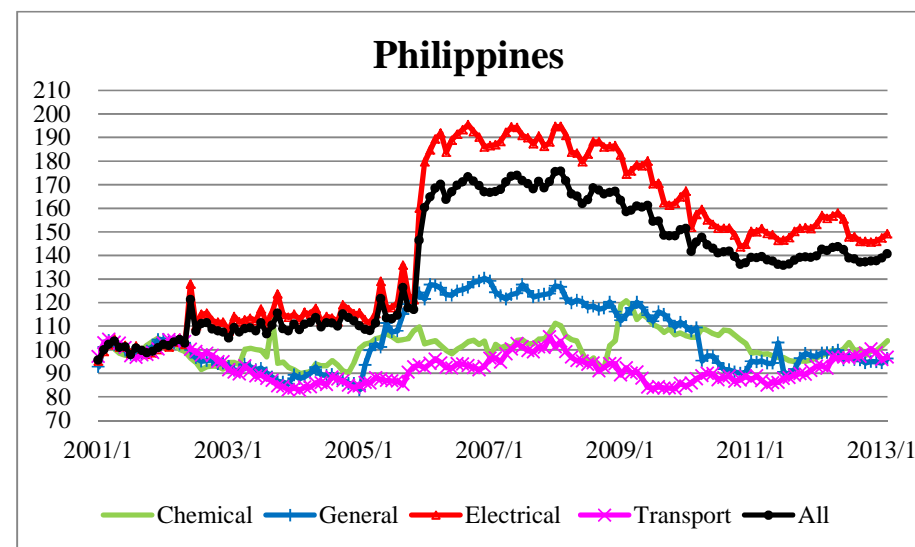
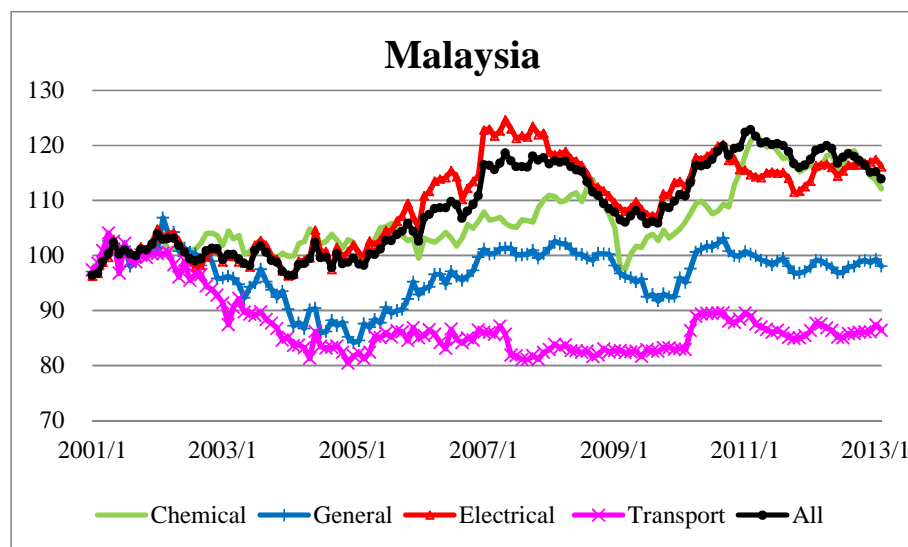
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- Overview of Industry-Specific REER of major industries in Asian and western countries (2001=100)
- Factor Decomposition Analysis

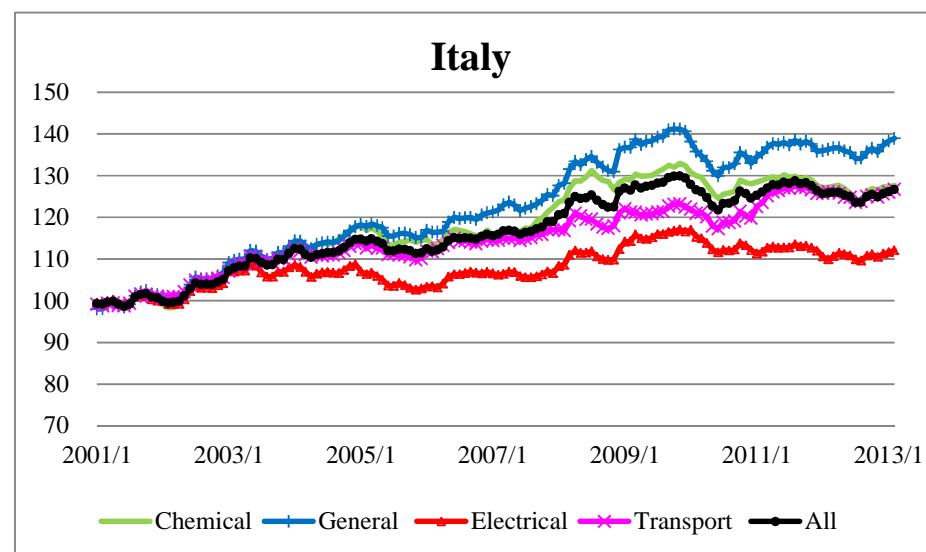
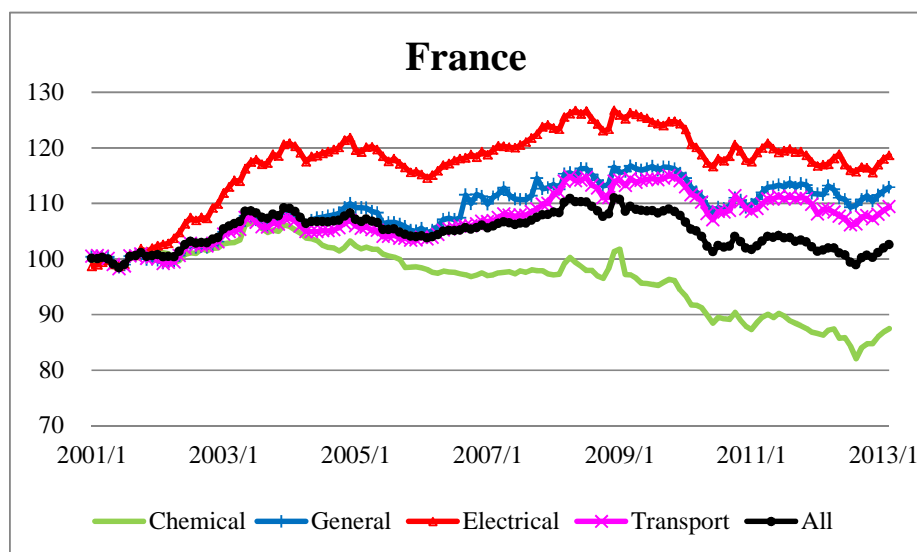
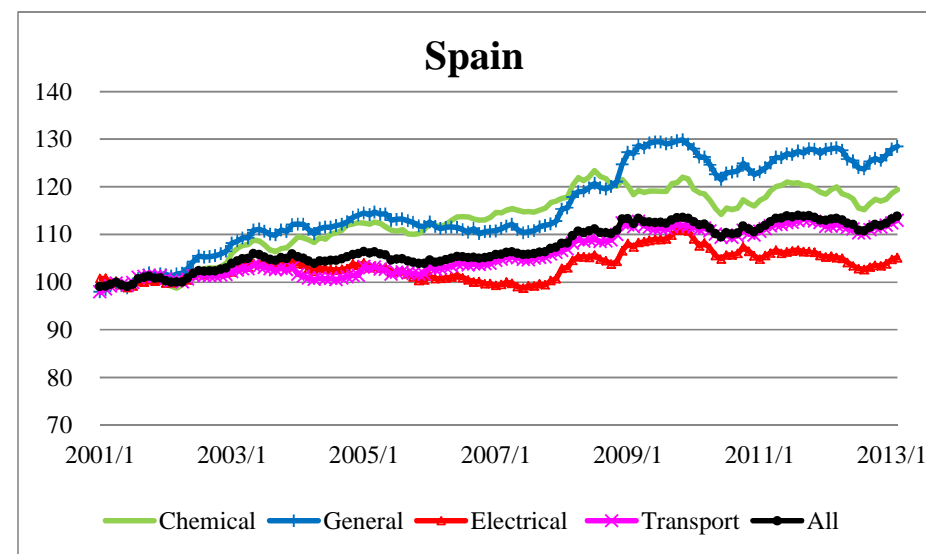
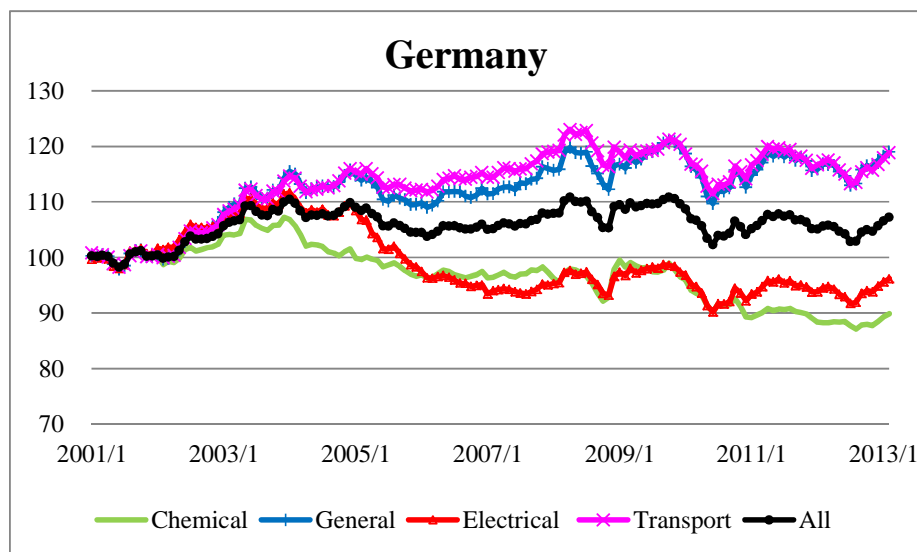
# Industry-Specific REER–Asian countries (1)



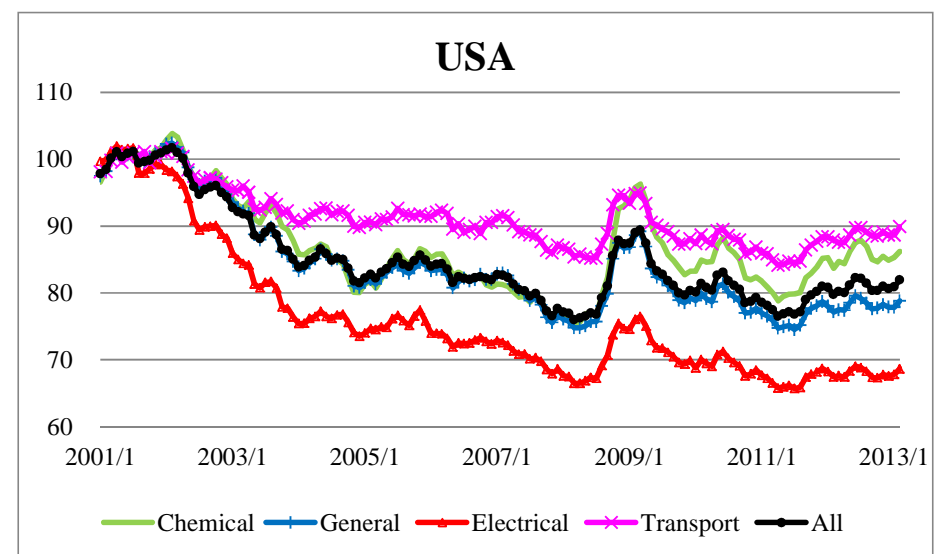
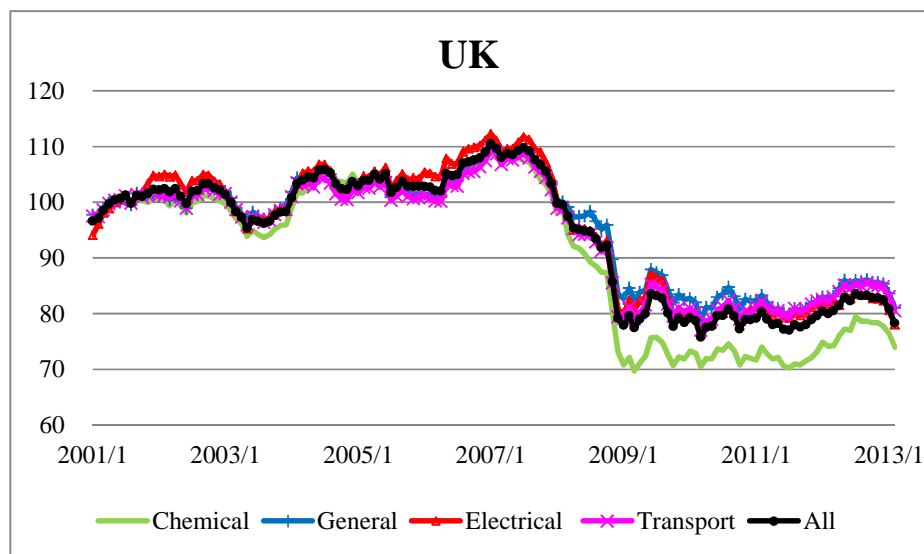
# Industry-Specific REER–Asian countries (2)



# Industry-Specific REER–European countries



# Industry-Specific REER-UK and USA



# Averages of I-REER for selected industries in 2012

Country	All		Chemical		General		Electrical		Transport						
East Asia															
China	97.7	6	92.8	7	96.2	6						104.9	9	<b><u>85.5</u></b>	2
Japan	99.8	7	89.9	6	103.8	9						<b><u>84.1</u></b>	6	105.4	10
Korea	88.2	5	108.4	10	95.3	5						<b><u>60.2</u></b>	1	86.5	4
Taiwan	84.2	4	129.8	14	92.7	4						<b><u>68.9</u></b>	3	93.0	6
East Asia: ASEAN															
Malaysia	117.9	11	116.9	11	98.2	8						116.0	11	<b><u>86.2</u></b>	3
Philippines	140.0	14	99.3	8	96.8	7						151.3	14	<b><u>96.4</u></b>	7
Singapore	78.8	1	85.4	2	72.1	1						<b><u>71.5</u></b>	4	98.7	9
Thailand	119.2	12	105.3	9	105.4	10						126.0	13	<b><u>98.4</u></b>	8
Euro Zone															
France	100.8	8	<b><u>85.4</u></b>	3	111.1	11						116.8	12	107.7	11
Germany	104.7	9	<b><u>88.1</u></b>	5	115.68	12						93.6	7	115.8	13
Italy	125.1	13	126.4	13	135.9	14						<b><u>110.6</u></b>	10	125.1	14
Spain	112.2	10	117.6	12	126.2	13						<b><u>104.0</u></b>	8	111.4	12
Others															
UK	82.1	3	<b><u>77.1</u></b>	1	84.9	3						82.6	5	84.3	1
USA	80.8	2	85.5	4	78.1	2						<b><u>67.9</u></b>	2	88.6	5



# Factor Decomposition Analysis

$$REER_{it} = \prod_{j=1}^n \left( RER_{it}^j \right)^{\alpha_{it}^j} \quad RER_{it}^j = NER_{jt/k} \cdot \left( \frac{P_{it}^k}{P_{it}^j} \right)$$



$$REER_{it} = NEER_{it} * RP_{it}$$



$$\Delta \ln(REER_{it}) = \Delta \ln(NEER_{it}) + \Delta \ln(RP_{it})$$

- where  $NEER_{it} = \prod_{j=1}^n \left( NER_{it}^j \right)^{\alpha_{it}^j}$  and  $RP_{it} = \prod_{j=1}^n \left( P_{it}^k / P_{it}^j \right)^{\alpha_{it}^j}$

# DECOMPOSITION OF I-REERS (1)

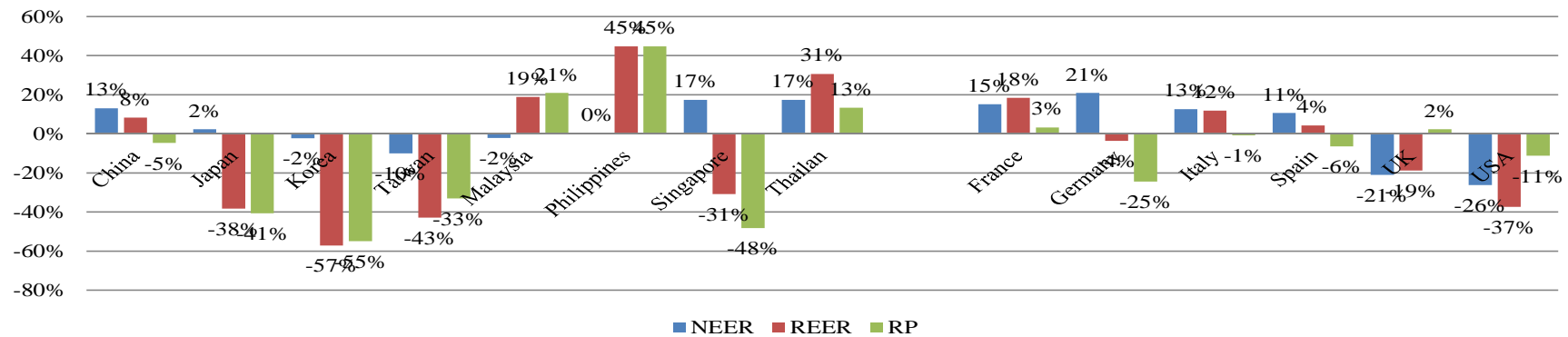
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- Overview

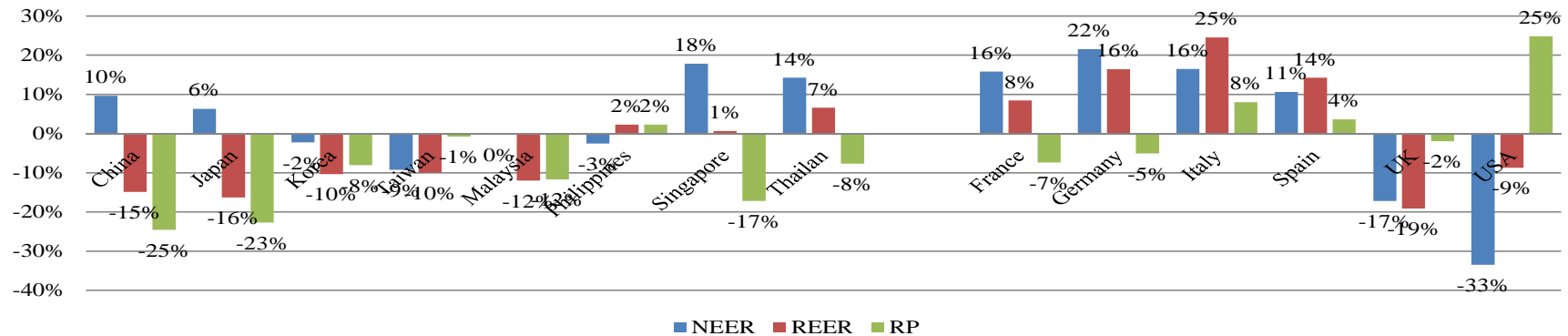
- Percentage Change From January 2001 to February 2013

# Percentage Change From January 2001 to February 2013 27

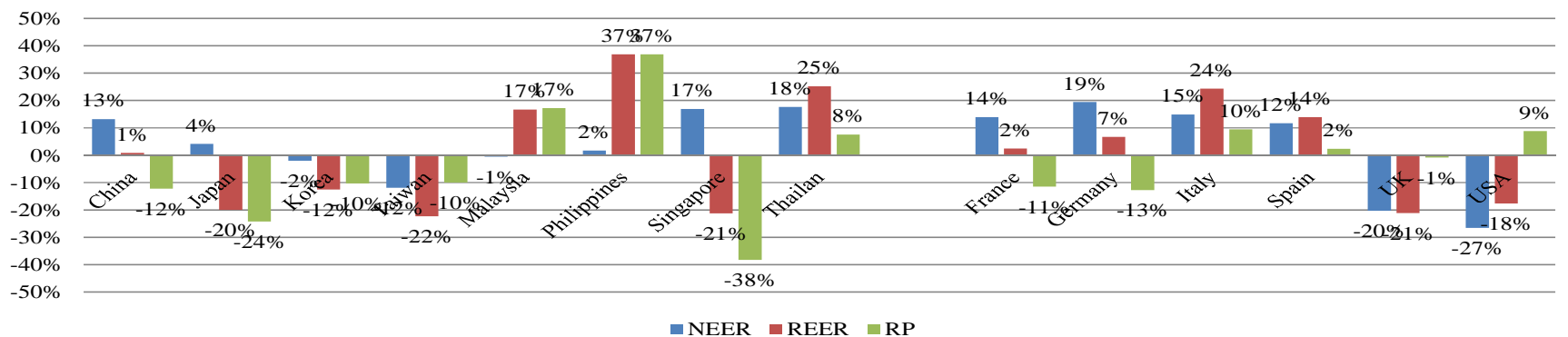
## Electrical



## Transport



## All

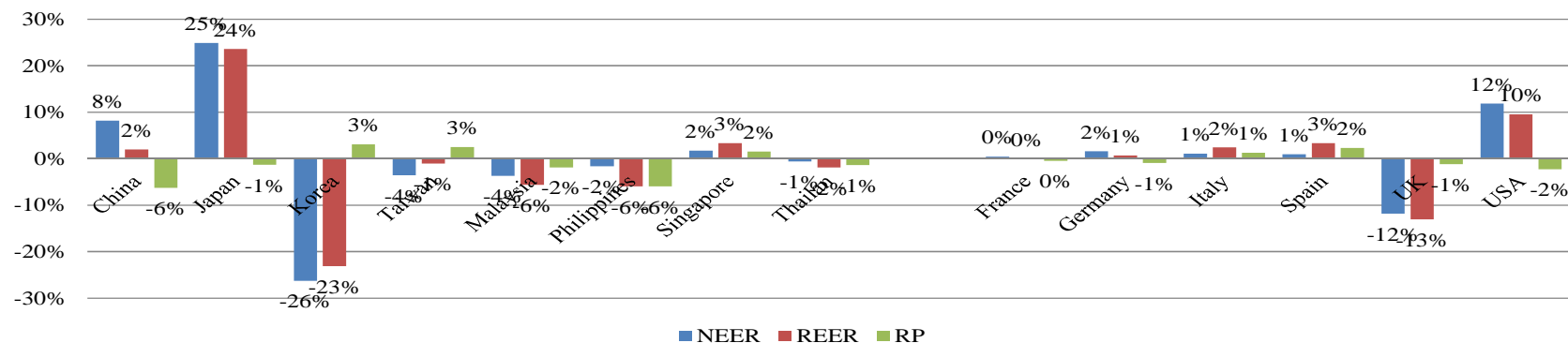


# DECOMPOSITION OF I-REERS (2)

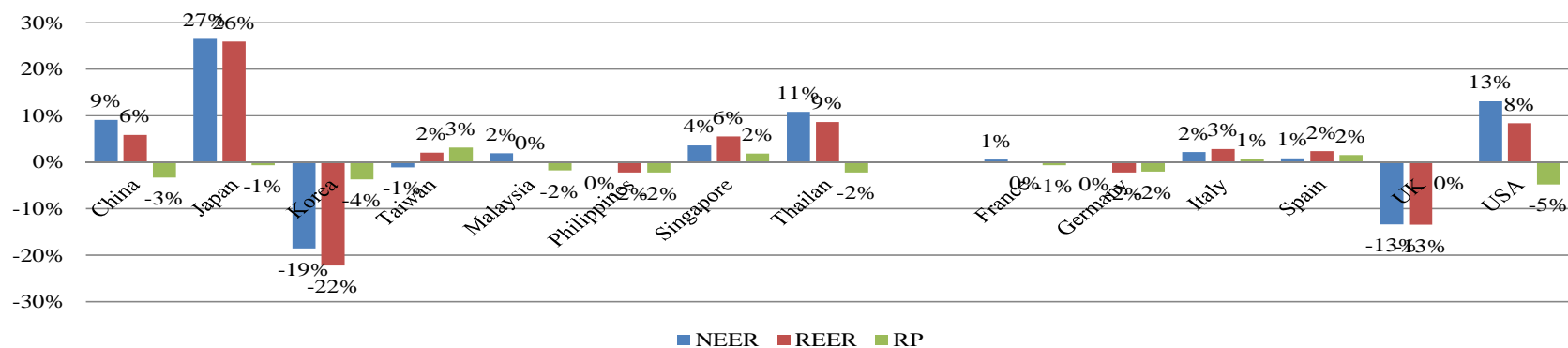
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□ Percentage Change During Crisis  
Period: August 2008 to February 2009

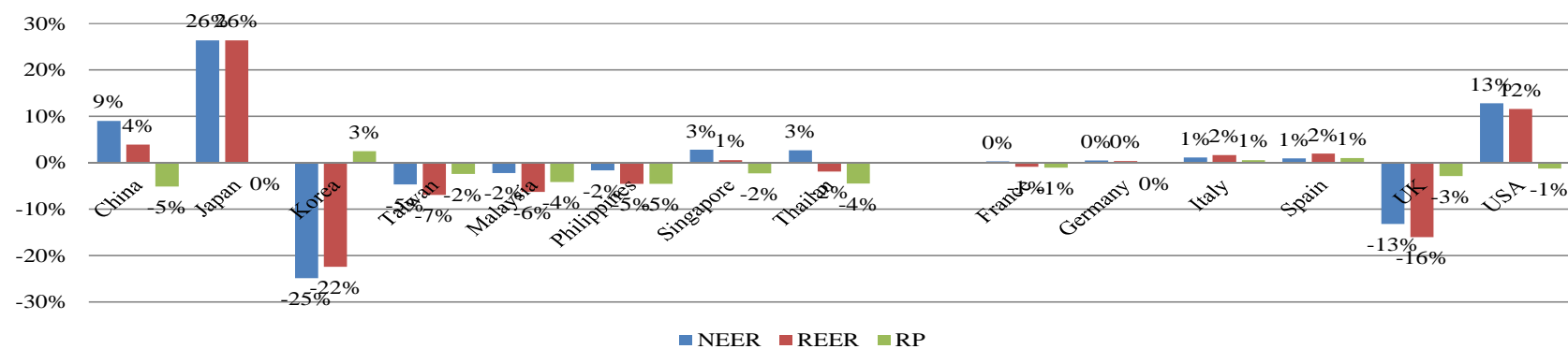
## Electrical



## Transport



## All



# Tentative Findings

- I-REERs provide a better gauge of **international price competitiveness** with advantage of capturing the **heterogeneity** of industries:
  - There is large a **difference** in the level of I-REERs not only across countries but also across industries.
- Decomposition analysis:
  - Asian region: the changes in **relative price** tend to larger than changes in **I-NEERs**.
  - Europe and U.S.: the **relative price** changes relatively small except for Germany

## Further Research

- We want to investigate what **fundamental factors** (ex. TFP) that affects I-REERs and what the impact of the changes of the I-REERs on **firms' export performance**.

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# Appendix

Table A1. Chinese Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	2.6	1.1	2.6	4.4	2.2	1.3	0.1	2.3	0.3	0.1	1.3	29.5	9.6	3.6	2.3	0.2	2.2	3.8	1.4	0.5	2.6	0.2	2.9	2.4	19.8	0.7	74.1
Textile	2.7	1.9	2.7	7.2	3.2	3.6	0.4	1.5	1.8	0.3	4.1	16.4	3.7	1.8	2.9	0.4	1.1	4.9	1.0	0.7	1.0	1.0	0.7	5.1	28.3	1.8	65.6
Wood	2.4	2.5	4.3	5.3	1.9	3.1	0.4	1.2	1.4	0.6	2.3	19.5	4.5	1.8	3.6	0.3	0.5	1.5	2.0	0.7	1.8	0.5	1.9	6.8	28.9	0.5	80.3
Paper	5.4	1.3	2.2	3.4	1.4	2.4	0.4	1.7	3.3	0.2	1.9	13.4	3.5	2.9	2.5	0.2	1.9	2.5	1.9	0.6	2.2	1.7	3.8	7.6	30.6	1.2	65.7
Petroleum	5.8	5.7	2.4	0.5	0.6	0.5	0.0	1.9	16.8	0.0	0.2	13.0	8.6	1.8	4.2	0.0	8.7	3.4	3.7	0.0	2.2	0.3	2.0	0.1	13.8	3.6	57.6
Chemical	2.5	2.4	1.2	5.3	2.0	1.9	0.2	3.6	12.3	0.3	2.6	12.0	9.2	2.7	3.9	0.2	1.3	2.3	1.9	0.2	3.9	2.2	6.6	2.1	16.2	1.2	71.4
Rubber	4.5	1.9	3.4	4.6	1.9	2.5	0.3	1.5	2.8	0.3	2.5	10.7	2.6	2.1	3.3	0.3	1.8	3.2	1.6	0.6	1.6	1.0	1.8	5.3	36.5	1.4	67.0
Non-Metal	3.4	2.4	3.1	5.8	2.4	2.0	0.5	2.1	5.1	0.3	3.2	10.4	10.0	3.1	3.5	0.3	1.7	3.6	2.5	0.7	2.3	2.0	2.6	3.8	21.8	1.6	63.6
Metal	3.8	2.2	2.7	4.1	1.9	1.6	0.6	3.0	7.3	0.1	2.8	9.5	14.3	2.5	3.2	0.3	1.7	3.5	3.1	0.5	3.0	1.4	3.4	3.3	19.4	1.0	66.0
General	3.2	1.3	2.6	6.0	2.1	2.9	0.4	3.4	7.3	0.1	3.8	12.0	4.0	2.2	2.5	0.2	1.0	4.2	2.3	0.7	2.7	2.1	2.1	3.8	25.5	1.4	66.6
Electrical	2.4	0.8	1.7	7.8	1.2	2.9	0.2	1.3	3.4	0.3	2.6	10.2	5.9	1.9	8.1	0.1	0.7	1.6	3.2	0.5	1.6	0.9	2.5	3.5	33.9	0.7	63.8
Optical	1.2	0.7	0.9	7.1	1.2	1.7	0.1	2.5	2.8	0.2	2.1	14.5	10.0	5.4	3.2	0.1	0.7	2.7	1.9	0.3	3.7	2.4	6.5	2.4	25.2	0.4	53.5
Transport	2.9	0.9	2.2	9.7	0.6	2.9	2.2	2.5	2.1	0.0	3.9	8.4	6.8	2.5	3.2	2.0	0.8	2.8	12.3	0.3	1.3	1.3	1.7	4.2	21.6	0.9	54.0

Table A2. Japanese Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	2.3	0.3	1.6	15.4	1.0	0.3	1.2	0.0	1.3	0.1	0.1	0.4	11.2	1.6	1.2	0.1	1.3	2.0	5.2	0.1	7.4	0.3	19.1	1.3	24.8	0.4	66.0
Textile	0.5	0.5	0.5	59.9	1.7	0.3	1.4	0.0	2.0	0.6	0.1	2.1	6.7	1.9	0.4	0.0	1.1	0.3	1.4	0.1	4.4	0.2	4.6	0.9	8.2	0.1	73.1
Wood	0.2	0.4	0.3	24.9	2.9	0.1	1.6	0.0	2.9	0.2	0.0	0.2	14.1	0.9	0.7	0.0	22.2	1.0	1.1	0.1	2.6	0.0	4.9	1.6	16.9	0.0	91.5
Paper	3.8	0.3	0.6	30.6	2.0	0.3	1.0	0.0	2.8	1.2	0.0	0.5	11.0	3.7	3.2	0.0	1.9	2.2	2.4	0.1	6.3	0.2	10.0	1.0	14.6	0.3	86.8
Petroleum	0.6	0.0	0.0	11.5	0.1	0.5	0.8	0.0	1.1	17.1	0.0	0.7	29.1	0.7	1.5	0.0	0.7	0.0	0.1	6.4	4.7	0.0	3.0	0.0	21.3	0.2	92.7
Chemical	0.8	1.8	0.3	27.2	2.7	0.5	1.4	0.0	2.2	1.6	0.7	1.2	17.2	2.0	2.4	0.0	1.4	0.3	2.4	0.2	5.0	0.4	13.2	1.2	13.7	0.2	90.0
Rubber	3.3	2.4	1.8	21.1	2.7	0.3	1.0	0.1	2.9	1.1	0.1	0.9	20.7	1.5	1.3	0.1	1.7	1.7	1.9	0.3	3.9	0.5	12.1	1.5	14.4	0.6	80.3
Non-Metal	1.1	0.9	0.4	20.5	3.7	0.1	0.8	0.0	1.1	1.0	0.0	0.5	24.5	3.0	2.2	0.1	1.6	0.3	2.1	0.1	3.8	0.1	20.9	0.8	9.8	0.6	89.6
Metal	1.2	0.4	0.8	25.0	1.1	0.2	0.4	0.1	4.2	2.6	0.0	0.3	16.4	5.2	0.8	0.6	2.4	0.6	4.7	0.2	9.5	0.3	10.1	4.6	8.2	0.2	84.9
General	1.9	1.5	1.0	27.1	3.2	0.5	1.4	0.1	3.5	2.6	0.1	1.1	10.8	2.1	2.5	0.1	1.4	1.1	3.2	0.2	5.6	0.7	8.8	1.5	17.5	0.5	85.5
Electrical	1.1	0.7	1.1	29.4	5.5	0.5	1.2	0.0	1.8	1.4	0.1	0.7	7.9	4.7	3.4	0.0	3.0	0.5	3.6	0.5	5.6	0.2	6.3	2.2	18.5	0.3	79.6
Optical	0.8	1.4	1.0	27.2	9.5	0.3	0.9	0.0	0.8	1.4	0.1	0.9	10.1	3.2	3.5	0.1	1.6	0.4	2.1	0.3	3.8	0.3	7.3	2.2	20.5	0.2	84.3
Transport	6.5	1.3	4.2	13.0	3.0	1.1	1.8	0.3	2.7	0.8	0.1	1.4	1.7	2.2	1.9	0.5	1.0	3.8	2.6	0.4	4.4	0.7	2.0	4.0	36.5	1.8	69.2

Table A3. Korea Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	2.3	0.1	1.2	19.2	0.4	1.6	0.5	0.0	2.2	0.2	0.0	0.8	38.7	1.4	0.4	0.1	2.6	6.2	1.4	0.1	5.3	0.1	2.7	0.5	11.6	0.3	76.2
Textile	1.0	0.5	1.1	36.9	1.8	0.9	1.5	0.1	14.8	1.3	0.0	1.6	9.9	0.8	0.7	0.1	2.9	2.0	0.8	0.2	1.8	2.3	1.6	1.2	13.7	0.4	59.7
Wood	2.2	0.5	0.4	22.5	1.8	1.4	0.2	0.1	3.6	1.8	0.0	4.5	31.4	0.4	0.6	0.0	3.4	5.6	2.1	0.3	0.9	0.8	0.7	0.5	13.7	0.3	68.1
Paper	7.2	0.1	1.3	19.5	0.4	0.2	0.5	0.3	2.5	7.5	0.1	1.2	13.0	3.3	0.2	0.0	2.0	2.9	2.1	0.0	5.2	2.3	5.2	1.1	19.8	2.2	72.1
Petroleum	0.5	0.1	0.3	77.6	0.1	0.0	0.0	0.0	0.2	0.4	0.0	0.0	14.4	0.3	0.2	0.0	0.7	0.8	0.4	0.0	0.1	0.2	1.8	0.2	1.5	0.1	96.6
Chemical	1.1	0.8	0.4	52.1	1.4	0.5	0.4	0.1	3.0	4.9	0.1	1.0	7.8	1.9	0.8	0.0	1.7	1.7	1.5	0.1	3.0	1.6	7.5	0.5	5.6	0.5	79.9
Rubber	2.7	0.8	2.1	25.7	3.1	1.4	1.1	0.2	1.5	1.7	0.1	1.8	13.5	1.2	2.1	0.2	1.2	2.7	1.3	0.6	1.5	1.8	3.6	2.5	24.9	0.6	75.5
Non-Metal	2.0	0.6	1.2	18.0	2.6	0.6	0.8	0.2	2.7	1.6	0.0	1.6	20.4	1.7	0.4	0.4	1.7	2.2	1.9	0.2	1.6	1.0	20.3	0.9	15.0	0.5	78.4
Metal	2.5	1.0	1.1	25.9	0.9	0.6	0.4	0.1	3.2	7.6	0.0	2.0	16.0	3.4	0.8	0.1	3.1	1.0	3.5	0.3	7.0	1.3	5.9	1.5	10.4	0.3	69.8
General	1.6	1.2	2.2	34.7	2.3	0.5	0.9	0.2	2.1	4.9	0.0	1.0	8.3	1.4	1.2	0.1	1.4	3.4	1.7	0.2	2.7	2.1	3.1	1.4	20.9	0.7	74.1
Electrical	1.8	0.2	1.3	36.2	3.9	0.9	1.6	0.2	1.5	2.4	0.2	1.1	6.9	1.8	1.1	0.1	1.1	1.7	1.8	0.4	1.5	0.6	2.0	2.5	26.8	0.4	74.1
Optical	0.1	0.1	0.1	76.5	2.3	0.3	0.2	0.0	0.6	0.7	0.0	0.2	4.8	2.9	0.3	0.0	0.2	1.0	0.5	0.0	1.1	0.7	2.2	0.3	4.8	0.1	73.5
Transport	4.3	1.8	3.6	11.0	9.4	0.9	3.7	3.8	0.5	3.9	0.4	2.3	1.6	0.9	1.7	3.1	0.7	6.2	8.5	0.4	0.5	2.3	0.8	3.5	23.0	1.3	49.5

Table A4. Taiwan's Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	UK	USA	ZAF	WOR
Food	3.2	0.2	3.0	9.4	0.7	0.1	0.3	0.4	0.9	0.3	0.0	0.2	31.1	6.6	3.3	0.8	0.4	2.0	0.1	4.6	0.0	15.0	0.1	0.6	16.5	0.2	82.7
Textile	1.2	0.4	1.5	44.5	2.0	0.4	0.9	0.1	7.6	2.0	0.1	1.3	5.3	1.7	2.1	0.7	0.2	1.6	0.9	1.1	0.3	4.5	0.6	1.7	16.7	0.7	65.7
Wood	1.4	0.3	4.7	10.7	8.3	0.4	2.4	0.1	1.9	0.6	0.7	1.8	29.5	0.6	1.3	1.1	0.2	0.9	1.0	2.6	0.3	1.5	0.4	4.1	23.2	0.3	88.3
Paper	3.3	0.2	1.2	35.6	1.3	0.2	0.9	0.1	4.8	1.4	0.2	0.5	8.4	3.2	11.2	0.6	0.1	3.6	0.6	4.1	0.2	4.3	0.5	1.5	11.5	0.5	79.4
Petroleum	0.0	0.0	0.0	43.1	0.7	0.1	1.2	0.0	1.9	1.2	0.0	0.1	6.8	19.8	2.0	0.1	0.0	15.0	0.0	0.4	0.0	2.9	0.0	0.0	4.6	0.0	88.0
Chemical	0.6	0.4	0.4	63.5	1.6	0.3	0.4	0.1	2.1	3.7	0.0	0.7	6.5	3.8	2.6	0.4	0.0	0.9	0.3	2.9	0.1	3.1	1.2	0.5	3.8	0.4	83.2
Rubber	3.4	0.5	2.8	32.7	3.6	0.5	1.7	0.1	1.1	0.8	0.1	1.2	9.7	2.9	1.5	1.6	0.3	0.5	1.2	1.4	0.5	2.8	0.7	2.8	25.0	0.6	82.7
Non-Metal	1.5	0.4	1.2	43.9	2.2	0.5	1.2	0.1	1.0	0.8	0.1	1.2	19.6	3.8	3.1	0.4	0.1	0.6	0.4	3.0	0.1	0.8	0.4	1.3	12.1	0.3	82.2
Metal	2.5	1.2	3.2	30.0	4.2	0.5	1.4	0.1	2.1	3.2	0.1	2.2	6.0	3.7	3.6	1.2	0.4	1.2	1.0	2.5	0.9	4.8	1.3	3.2	19.1	0.6	83.5
General	1.7	0.7	2.3	35.5	3.7	0.5	1.1	0.1	3.3	3.6	0.1	1.5	6.1	2.9	3.7	1.2	0.2	0.8	1.4	2.3	0.5	4.3	1.9	1.8	17.9	0.9	83.6
Electrical	1.2	0.3	2.0	27.2	6.1	1.1	3.0	0.1	0.6	1.1	0.2	1.4	5.3	4.1	4.2	2.4	0.6	3.2	1.0	4.0	0.5	2.4	0.9	3.4	23.3	0.5	79.0
Optical	0.5	0.1	1.1	76.3	1.5	0.1	0.4	0.0	0.1	0.3	0.1	0.2	2.9	1.3	0.5	0.3	0.1	0.1	0.3	0.6	0.1	0.2	0.1	1.8	10.6	0.2	94.7
Transport	3.6	2.0	4.2	4.8	10.5	1.7	3.9	0.5	1.1	0.5	0.1	4.7	7.9	2.2	0.5	5.3	1.0	0.6	0.9	1.0	1.1	1.3	0.5	5.8	33.0	1.0	83.4

Table A5. Malaysian Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	3.0	0.0	0.3	27.4	1.4	0.5	0.3	0.2	4.4	8.1	0.0	1.2	6.4	3.0	8.0	0.0	3.7	2.2	9.8	0.4	3.5	0.6	1.8	0.6	11.6	1.5	62.3
Textile	1.5	3.1	1.5	5.2	4.2	0.8	2.1	0.3	6.9	1.6	0.1	2.3	10.4	1.1	1.4	0.1	1.8	0.2	10.6	0.3	3.7	4.5	1.4	4.8	29.8	0.5	73.9
Wood	4.3	1.8	0.3	4.7	2.2	0.1	1.1	0.1	1.6	1.9	0.1	0.9	30.9	10.1	4.8	0.1	2.7	0.1	5.5	0.2	6.6	0.2	8.2	4.6	5.3	1.7	81.8
Paper	8.7	0.6	0.5	3.7	2.6	0.3	1.3	0.2	7.2	2.7	0.3	0.2	6.0	2.0	1.0	0.1	4.4	0.0	33.0	0.2	10.0	0.4	2.2	3.9	6.9	1.6	77.5
Petroleum	0.3	0.1	0.0	3.9	1.4	0.0	0.0	0.0	6.6	8.6	0.0	0.0	8.4	18.4	0.8	0.0	4.4	0.0	39.3	0.0	4.1	0.0	1.8	0.0	1.7	0.0	90.9
Chemical	2.1	0.7	0.3	20.1	1.6	0.9	0.6	0.1	11.0	8.0	0.0	0.5	7.3	5.4	4.7	0.0	3.4	0.3	10.2	0.5	10.3	1.7	4.3	0.9	4.6	0.7	79.7
Rubber	4.5	1.5	1.2	20.3	4.4	1.4	2.0	0.3	3.1	1.1	0.3	2.1	9.0	1.7	1.5	0.1	1.9	0.9	10.5	0.3	4.0	1.0	1.0	5.5	19.5	0.7	83.6
Non-Metal	4.2	0.7	0.5	5.2	2.4	0.3	1.2	0.0	9.8	2.1	0.0	0.6	21.5	8.4	0.6	0.1	2.3	0.1	26.2	0.1	4.0	0.4	4.8	1.3	2.8	0.4	85.7
Metal	8.3	0.9	0.7	8.5	2.1	0.6	0.4	0.1	7.4	5.9	0.1	1.7	6.8	5.9	1.6	0.1	2.2	0.8	24.0	0.2	10.6	0.5	3.0	0.9	5.7	1.0	79.2
General	4.7	0.4	0.8	7.0	4.5	0.8	1.8	0.1	9.2	3.6	0.3	1.4	5.7	1.9	2.1	0.4	2.1	1.1	21.5	1.0	9.0	0.4	2.0	3.4	14.4	0.6	78.8
Electrical	4.3	0.3	1.0	13.4	6.4	0.3	1.2	0.0	1.4	2.9	0.2	0.6	10.7	2.1	5.9	0.0	1.1	0.3	14.9	0.2	7.3	0.3	2.7	1.5	20.4	0.5	82.4
Optical	1.6	0.6	0.8	9.3	5.5	0.1	0.3	0.0	1.9	1.2	0.1	0.5	13.9	3.0	9.2	0.2	1.1	0.1	14.4	0.3	7.7	0.0	5.0	1.0	21.9	0.2	91.4
Transport	3.3	0.4	0.4	5.4	4.5	0.6	1.7	0.1	10.9	3.7	0.0	1.0	4.3	0.6	1.4	0.2	1.1	0.1	25.0	0.3	10.5	0.5	5.3	7.5	10.3	0.9	77.3

Table A6. Philippine Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	0.8	0.4	1.8	3.6	2.4	1.7	0.8	0.1	2.1	0.2	0.1	2.0	8.7	5.4	3.6	17.3	0.1	0.1	2.7	0.1	5.7	0.1	1.6	2.2	36.4	0.3	88.6
Textile	0.6	0.5	2.4	1.7	1.8	0.9	1.2	0.0	0.2	0.2	0.0	1.6	6.0	1.9	2.5	2.2	0.0	0.2	0.5	0.0	0.6	0.7	0.7	2.3	71.1	0.2	91.8
Wood	0.2	0.3	0.1	1.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.2	93.6	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.2	3.2	0.0	99.3
Paper	3.2	0.5	0.1	3.4	1.6	0.1	2.9	0.0	3.9	22.4	0.0	0.2	10.7	3.5	4.2	10.9	0.0	0.0	6.3	0.2	3.8	0.0	5.1	9.5	7.5	0.0	76.5
Petroleum	0.7	0.0	0.0	5.8	0.0	0.0	0.0	0.0	3.2	0.5	0.0	0.0	0.8	0.5	68.1	0.0	0.0	0.0	5.3	0.0	1.3	0.0	13.7	0.0	0.0	0.0	91.1
Chemical	3.0	1.4	1.0	14.0	0.8	0.6	0.2	0.0	4.1	2.9	0.0	0.3	33.5	6.5	3.5	1.5	0.0	0.3	2.0	0.2	4.0	0.4	10.6	0.4	7.3	1.5	83.0
Rubber	3.4	0.3	0.2	3.9	4.7	0.1	1.2	0.6	5.6	1.2	0.1	4.2	26.3	1.9	5.6	1.6	0.4	0.2	4.0	1.6	4.0	0.8	5.1	2.4	20.1	0.4	78.6
Non-Metal	12.7	1.4	0.4	4.9	0.6	0.1	0.2	0.1	2.9	0.7	0.0	0.2	36.1	6.2	3.9	0.5	0.0	0.1	2.1	0.1	1.3	0.1	5.6	0.6	18.9	0.1	86.2
Metal	1.1	0.9	0.4	18.9	1.8	0.3	0.4	0.0	1.9	0.8	0.0	1.4	10.3	13.5	4.0	0.3	0.1	0.0	2.2	0.1	19.9	0.4	13.7	0.5	6.9	0.2	79.6
General	1.5	0.1	0.2	8.2	2.2	0.1	0.6	0.0	5.0	1.2	0.0	0.3	32.8	2.5	3.5	1.3	0.0	0.0	8.2	0.1	8.0	0.0	6.8	1.5	15.8	0.1	81.0
Electrical	0.8	0.1	1.1	16.2	6.9	0.1	1.4	0.0	0.3	0.8	0.1	0.6	16.7	5.8	2.6	10.4	0.0	0.0	9.7	0.1	1.9	0.1	4.6	0.3	19.4	0.1	83.3
Optical	2.3	15.3	1.3	4.4	2.3	0.6	1.8	0.0	5.3	1.2	0.1	0.6	14.2	1.9	1.7	5.7	0.0	0.0	1.9	0.1	7.4	0.0	2.3	0.8	28.4	0.5	88.6
Transport	0.7	2.2	0.0	2.9	22.7	0.1	0.2	0.0	5.9	2.7	0.1	0.1	21.9	0.1	1.7	0.6	0.0	0.3	3.2	0.0	22.9	0.3	2.0	1.8	5.1	2.4	82.9

Table A7. Singapore Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	7.6	0.2	0.3	15.6	0.1	0.1	0.3	0.0	9.9	3.5	0.1	0.3	15.0	2.9	18.5	0.5	0.0	6.0	0.5	0.0	7.2	0.1	6.3	0.9	3.3	0.6	70.2
Textile	5.8	0.7	0.6	2.2	1.4	0.2	1.3	0.3	29.6	1.2	0.1	0.7	1.4	2.7	18.8	0.9	0.2	2.3	0.8	0.0	4.5	0.9	0.7	3.5	18.9	0.2	79.0
Wood	20.2	2.5	0.4	5.0	7.4	0.1	1.5	0.1	13.9	1.2	0.0	2.6	6.0	2.1	20.7	2.5	0.0	1.3	0.0	0.6	3.7	0.8	0.9	0.7	4.4	1.5	71.7
Paper	9.5	0.2	0.6	5.0	1.1	0.2	1.1	0.0	10.7	13.7	0.0	0.2	5.1	3.5	15.0	0.8	0.1	3.1	0.0	0.1	11.7	0.1	3.7	4.3	9.9	0.3	76.6
Petroleum	4.0	0.0	0.0	30.4	0.2	0.0	0.1	0.0	27.3	1.1	0.0	0.0	0.1	0.4	33.7	0.0	0.0	1.1	0.0	0.0	1.2	0.0	0.0	0.0	0.1	0.0	86.6
Chemical	2.8	7.4	2.7	17.0	0.4	0.4	4.8	0.0	9.8	5.5	0.1	0.2	5.2	5.3	9.4	4.7	0.0	2.3	0.1	0.0	6.1	0.2	4.0	4.5	7.1	0.3	83.2
Rubber	3.7	1.2	0.1	10.1	1.6	0.4	0.4	0.0	18.7	4.0	0.2	0.4	6.0	2.7	22.8	4.2	0.0	3.4	0.4	0.0	7.1	0.1	2.2	1.1	8.9	0.2	80.9
Non-Metal	12.0	0.2	0.1	2.9	0.2	0.0	0.1	0.0	13.6	1.9	0.0	0.1	5.1	16.7	34.0	0.5	0.0	1.3	0.7	0.0	3.5	0.1	5.0	0.2	1.7	0.1	90.0
Metal	10.0	0.2	0.2	12.5	1.4	0.2	0.3	0.0	19.8	5.4	0.1	0.2	5.0	2.3	21.8	2.9	0.1	1.7	0.2	0.0	5.2	0.5	4.7	0.5	2.6	2.2	78.5
General	3.8	0.6	0.2	14.1	1.6	0.1	0.5	0.0	25.3	5.5	0.1	0.3	3.6	4.8	15.9	1.1	0.2	2.2	0.6	0.1	5.5	0.2	5.5	1.1	6.8	0.3	78.7
Electrical	2.8	0.3	0.3	10.5	3.8	0.2	1.6	0.0	15.2	5.7	0.7	0.2	6.4	3.2	17.4	2.8	0.0	3.6	0.1	0.1	6.3	0.1	4.1	1.8	12.8	0.1	76.2
Optical	3.1	1.8	0.7	8.7	5.0	0.3	1.1	0.0	11.4	5.8	0.2	0.5	9.5	4.9	13.0	3.0	0.1	1.5	0.4	0.1	4.8	0.1	5.1	1.4	17.3	0.2	84.1
Transport	5.9	0.4	1.1	8.0	2.8	0.3	2.9	0.1	15.0	3.9	0.6	0.6	4.1	7.9	7.3	2.0	2.0	1.4	0.3	0.1	3.7	0.2	4.1	8.1	15.7	1.4	73.9

Table A8. Thailand Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	TUR	TWN	UK	USA	ZAF	WOR
Food	3.9	0.9	3.3	4.8	2.2	0.9	1.9	0.1	5.9	1.1	0.2	2.0	22.7	2.4	4.4	2.8	0.3	3.3	1.0	2.8	0.6	0.2	2.6	5.7	21.0	2.9	69.7
Textile	2.2	2.8	1.7	6.6	4.8	3.5	4.1	0.3	2.9	2.3	0.2	2.7	11.2	1.6	2.7	3.6	0.3	1.5	0.9	3.1	0.7	2.0	1.5	5.5	30.4	0.8	68.0
Wood	1.0	0.4	0.5	50.5	1.0	0.3	0.9	0.1	2.6	2.4	0.1	0.6	9.1	6.5	8.7	0.7	0.1	0.4	0.1	0.4	0.2	0.1	4.6	1.9	6.8	0.1	88.1
Paper	7.0	3.7	0.3	20.0	0.6	0.2	1.2	0.1	8.3	1.2	0.0	0.4	14.4	8.6	10.8	0.7	0.0	3.7	0.2	6.0	0.0	0.4	5.7	0.7	4.6	1.1	31.4
Petroleum	27.9	0.0	3.3	41.8	3.0	0.0	0.1	0.0	3.4	0.4	0.0	0.0	0.6	0.9	7.2	0.2	0.0	2.0	0.0	0.5	0.0	0.0	3.6	0.2	3.0	1.9	75.4
Chemical	4.2	0.8	0.2	32.7	0.9	0.6	0.3	0.1	10.0	8.4	0.0	0.7	10.9	2.6	6.9	1.4	0.0	4.2	0.4	4.6	0.0	2.2	3.4	1.1	2.6	0.7	72.8
Rubber	5.5	1.7	0.7	20.4	3.4	0.7	1.8	0.1	4.2	2.2	0.1	1.2	13.7	1.6	7.3	2.1	0.1	2.7	0.5	2.1	0.3	0.7	1.3	2.2	21.7	1.6	77.1
Non-Metal	10.7	0.8	0.8	5.4	2.7	1.2	2.0	0.1	5.1	3.6	0.1	1.3	24.7	3.3	6.3	0.8	0.3	3.8	0.2	7.1	0.7	0.4	3.4	2.9	10.6	1.6	54.4
Metal	29.4	0.5	0.7	3.0	1.3	0.3	0.8	0.1	5.1	4.8	0.0	1.0	20.2	1.2	6.3	1.0	0.1	2.6	0.3	5.7	0.1	0.3	2.0	2.0	9.3	2.0	52.8
General	8.2	1.6	0.7	5.3	3.6	1.5	1.6	0.4	9.7	5.7	0.1	2.1	21.6	2.0	6.7	1.6	0.2	2.4	0.7	6.8	0.7	1.0	2.6	2.1	9.9	1.3	70.8
Electrical	1.8	0.9	0.5	25.1	2.9	0.3	1.0	0.0	1.5	2.1	0.7	0.4	12.3	2.4	8.4	5.2	0.0	1.6	0.3	5.9	0.5	0.2	2.3	1.1	21.5	1.0	75.1
Optical	1.8	0.8	1.1	10.6	4.9	1.1	4.2	0.0	2.1	1.2	0.2	1.5	27.5	1.0	3.0	5.8	0.2	1.7	0.2	5.7	1.5	0.3	1.1	2.9	18.8	0.7	77.1
Transport	20.7	0.8	0.4	1.5	1.7	0.4	1.0	0.5	15.7	3.5	0.0	0.9	9.5	1.1	10.7	1.1	0.2	7.5	1.5	7.3	0.4	1.3	1.2	3.4	4.8	3.0	65.1

Table A9. Germany Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	0.6	7.2	0.6	0.7	6.7	15.6	2.8	0.1	0.1	1.2	17.0	1.5	0.4	0.2	18.8	1.4	0.2	4.9	0.2	3.2	0.3	1.0	0.2	10.8	3.8	0.5	65.7
Textile	0.8	9.2	0.9	2.4	6.6	17.1	1.3	0.4	0.4	1.0	10.4	1.3	0.6	0.1	18.1	1.5	0.1	7.3	0.3	3.8	0.2	3.2	0.3	8.3	3.7	0.6	49.3
Wood	0.9	9.3	1.1	2.8	4.7	22.6	0.7	0.2	0.9	0.5	11.6	1.6	0.5	0.1	14.3	1.5	0.2	4.6	0.1	4.2	0.1	3.0	0.3	9.3	4.5	0.4	52.5
Paper	1.1	9.8	0.6	2.1	5.3	20.2	1.5	0.3	1.1	0.7	10.2	0.9	0.4	0.4	13.1	1.1	0.2	4.3	0.3	3.3	0.3	2.7	0.5	12.8	5.8	1.0	59.2
Petroleum	0.1	16.4	0.1	0.7	2.7	28.9	0.1	0.1	0.5	0.2	2.2	0.8	3.0	0.1	12.6	0.3	0.0	0.3	0.1	10.3	0.1	0.3	0.1	8.1	11.3	0.5	74.6
Chemical	1.0	16.6	1.0	4.1	5.0	10.7	1.3	0.4	1.2	0.9	8.8	3.3	1.6	0.5	12.3	0.8	0.2	3.9	0.7	1.9	0.5	2.5	1.5	7.5	10.8	1.0	71.2
Rubber	1.0	7.7	0.6	5.0	7.0	18.0	1.0	0.2	0.8	0.7	10.2	1.2	0.8	0.3	12.1	1.5	0.1	4.6	0.7	3.6	0.3	2.7	0.4	11.0	7.2	1.2	58.7
Non-Metal	0.9	8.0	0.7	4.8	5.1	15.7	0.7	0.2	1.5	0.5	9.0	2.0	1.3	1.4	15.3	1.7	0.2	4.7	0.7	3.8	0.5	1.8	1.0	7.9	9.2	1.7	60.6
Metal	0.8	6.5	1.0	6.7	5.3	16.5	0.6	0.3	1.9	0.7	10.6	1.1	1.5	0.4	10.9	1.3	0.1	3.8	1.2	4.5	0.6	2.1	0.6	11.0	9.1	0.9	57.6
General	1.8	4.1	1.1	16.5	4.4	10.5	0.6	0.7	3.3	0.5	6.6	1.9	3.0	0.7	5.7	1.2	0.2	7.3	1.6	3.1	0.8	3.2	1.5	6.6	11.9	1.3	66.0
Electrical	1.2	4.3	1.0	11.4	6.7	13.1	1.1	0.3	2.1	0.8	11.6	1.7	1.8	1.1	7.3	1.2	0.2	4.2	1.5	4.1	0.4	3.0	0.9	8.2	9.6	1.2	61.5
Optical	1.4	3.5	1.1	10.0	4.5	10.2	0.7	0.2	2.3	0.7	6.8	5.1	2.9	0.7	8.4	1.0	0.2	4.7	1.4	2.4	0.6	2.4	1.1	6.7	19.6	1.2	71.6
Transport	1.6	4.2	1.5	10.3	5.9	19.1	0.6	0.1	0.8	0.4	8.3	2.4	1.4	0.2	3.7	1.5	0.1	3.1	0.6	2.6	0.2	2.8	0.5	12.5	14.0	1.6	74.7

Table A10. France Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	0.5	14.4	1.7	3.0	15.6	10.0	2.2	0.2	0.1	1.0	11.2	3.2	0.7	0.3	7.1	0.5	0.2	1.7	2.2	1.3	0.3	0.4	0.5	14.2	7.2	0.3	79.2
Textile	0.5	11.9	1.0	2.6	13.9	14.2	1.7	0.0	0.3	0.5	17.1	6.8	1.7	0.1	3.4	0.4	0.1	2.5	2.0	0.8	0.3	1.1	0.6	8.5	7.9	0.2	67.3
Wood	2.2	17.9	0.3	1.4	20.3	15.9	0.5	0.0	0.1	0.3	11.9	0.4	0.0	0.1	7.7	0.2	0.0	0.9	0.0	0.8	0.0	0.5	0.1	6.7	10.5	1.2	77.9
Paper	0.5	17.1	2.6	1.6	23.1	12.3	0.7	0.5	0.9	0.6	11.2	1.3	0.8	0.2	6.2	0.1	0.1	0.8	0.2	0.8	0.2	1.0	0.4	13.3	3.1	0.4	75.0
Petroleum	0.1	16.0	0.1	0.1	21.8	1.8	0.5	0.0	0.0	0.7	6.8	5.7	1.0	0.0	4.4	0.1	0.0	4.2	0.0	4.4	0.0	0.2	0.1	13.3	17.4	1.3	92.3
Chemical	1.3	12.4	1.3	2.7	17.2	8.8	1.4	0.2	0.6	1.0	10.7	3.4	1.2	0.2	6.0	0.3	0.2	3.4	2.2	2.6	0.4	2.4	0.6	9.3	9.0	0.8	73.2
Rubber	0.8	11.2	0.8	1.9	27.1	13.1	0.8	0.1	0.6	0.8	11.5	1.2	0.7	0.1	5.5	0.4	0.1	1.2	0.4	1.9	0.3	2.2	0.2	11.8	4.8	0.5	74.1
Non-Metal	0.9	10.9	1.0	2.8	21.9	10.1	0.6	0.2	1.1	0.5	12.5	2.7	0.9	0.3	4.5	0.8	0.1	3.3	0.4	1.4	0.3	1.4	0.5	11.1	9.1	0.8	73.1
Metal	0.5	12.2	0.8	3.3	25.7	11.0	0.9	0.2	1.6	0.3	14.0	1.2	1.7	0.2	3.7	0.6	0.3	1.1	0.6	2.3	0.2	3.1	0.4	8.1	5.4	0.4	74.5
General	1.7	8.2	1.2	6.5	22.2	8.1	0.8	0.4	1.9	0.4	9.8	1.6	2.0	0.5	4.7	0.9	0.1	3.3	1.7	2.3	0.4	3.1	0.4	7.9	8.8	1.2	67.1
Electrical	1.1	5.5	1.0	5.6	21.3	11.6	0.8	0.4	2.3	0.7	11.3	1.3	1.6	0.5	7.0	0.6	0.2	2.4	1.6	2.9	0.4	2.5	0.4	9.4	6.7	1.0	64.7
Optical	0.9	5.3	1.3	3.6	19.3	8.7	0.6	0.3	2.0	1.0	9.9	2.3	1.1	0.3	13.2	0.8	0.2	2.1	1.4	1.4	0.4	1.5	0.4	8.6	12.3	0.7	75.0
Transport	2.2	6.2	0.3	5.7	29.6	10.6	0.6	0.7	1.0	0.5	7.6	0.8	1.4	1.3	1.8	0.7	0.3	2.6	2.3	1.2	0.9	3.3	0.4	8.3	9.0	0.6	74.8

Table A11. Spain Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	0.9	3.5	0.9	1.8	10.2	27.7	1.8	0.1	0.2	0.6	20.8	2.0	0.8	0.1	4.5	0.7	0.4	3.3	0.2	1.2	0.4	0.7	0.2	9.9	6.5	0.6	67.1
Textile	0.3	4.9	0.7	2.3	10.9	28.0	5.1	0.4	0.4	0.9	17.4	2.0	0.6	0.2	3.4	0.4	0.2	2.7	0.6	1.1	0.3	4.8	0.2	8.3	3.4	0.2	59.2
Wood	0.6	2.3	0.6	1.1	10.4	39.2	1.6	0.1	0.5	1.1	11.0	0.6	0.9	0.0	4.7	0.7	0.0	1.8	0.1	0.4	0.0	0.7	1.5	13.5	5.8	0.8	58.0
Paper	0.4	2.8	0.6	1.6	8.3	40.3	1.5	0.7	0.5	0.6	13.9	0.4	0.1	0.2	7.4	0.3	0.2	1.4	0.1	1.0	0.1	2.7	0.3	10.5	3.8	0.4	60.8
Petroleum	0.0	9.9	0.8	0.2	6.0	70.2	0.3	0.1	0.6	0.0	1.0	0.0	0.1	0.0	0.5	0.7	0.0	0.5	0.0	4.1	0.1	0.9	0.0	1.6	2.4	0.1	58.9
Chemical	2.1	4.5	1.7	3.3	15.4	18.0	1.8	0.3	1.3	0.9	15.1	2.9	1.0	0.4	7.6	0.1	0.2	1.2	0.5	0.9	0.4	3.7	0.8	8.2	7.1	0.7	67.2
Rubber	1.5	5.9	0.5	1.6	20.5	32.7	1.3	0.1	0.8	0.7	10.3	0.6	0.2	0.1	4.5	0.5	0.4	1.2	0.3	1.7	0.3	1.7	0.1	8.2	3.1	1.0	67.2
Non-Metal	0.9	4.3	0.7	1.1	11.9	35.9	2.0	0.1	0.9	1.4	8.8	0.4	0.9	0.3	2.4	0.4	0.3	5.2	0.3	0.8	0.3	1.4	0.4	10.4	7.9	0.5	56.1
Metal	0.4	3.7	0.6	1.1	18.4	25.8	1.0	0.2	1.2	0.5	15.5	0.6	0.3	0.4	4.0	0.6	0.1	0.8	0.3	2.1	0.2	4.1	0.2	12.2	5.3	0.5	63.1
General	1.9	2.6	0.7	5.5	17.6	21.0	1.4	0.4	3.3	0.5	9.7	0.4	0.9	0.4	3.3	0.7	0.2	3.6	0.6	2.1	0.7	4.1	0.3	6.8	9.9	1.2	55.4
Electrical	0.6	2.7	0.4	2.5	21.8	23.1	1.3	0.4	1.6	0.5	18.4	0.6	0.5	0.3	4.5	0.6	0.1	1.2	0.4	2.3	0.2	2.5	0.7	7.2	5.2	0.5	63.7
Optical	0.9	12.3	0.4	5.3	17.6	19.7	0.7	0.3	1.9	0.3	10.4	1.7	1.0	0.3	4.5	0.9	0.1	1.1	0.4	1.5	0.2	1.7	0.3	7.3	8.6	0.6	61.1
Transport	1.0	4.6	0.3	0.8	19.6	38.4	0.7	0.1	0.5	0.3	9.0	0.3	0.2	0.0	2.3	1.1	0.0	1.1	0.8	0.8	0.1	3.9	0.0	10.9	2.6	0.8	78.2

Table A12. Italian Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	USA	ZAF	WOR
Food	1.8	3.8	3.1	1.0	23.7	4.9	16.6	3.3	0.1	0.1	0.6	3.2	0.5	0.1	4.3	0.7	0.2	2.2	0.2	2.0	0.2	0.7	0.3	12.7	13.4	0.4	75.2
Textile	0.6	3.8	1.1	3.7	16.3	9.1	18.7	3.1	0.2	0.5	0.4	5.2	2.3	0.1	4.2	0.6	0.1	7.4	0.4	1.1	0.2	2.5	0.6	8.1	9.4	0.2	62.0
Wood	0.9	3.0	1.2	2.3	21.3	6.2	21.3	4.7	0.1	1.4	0.6	1.2	0.9	0.1	3.1	0.4	0.1	8.8	0.4	1.0	0.3	2.2	0.5	9.2	8.8	0.2	59.8
Paper	1.4	3.5	0.7	1.1	20.7	9.8	32.4	4.0	0.3	1.0	0.4	0.5	0.3	0.2	3.6	0.3	0.1	2.5	0.2	1.0	0.2	2.4	0.2	9.0	3.5	0.7	70.7
Petroleum	0.0	7.0	0.3	1.5	22.1	18.9	27.7	1.2	0.0	0.9	0.5	0.0	1.0	0.0	4.0	0.2	0.0	0.2	0.0	0.9	0.0	6.8	0.1	2.7	3.6	0.2	41.6
Chemical	1.2	8.5	1.0	2.7	20.7	8.9	14.3	3.5	0.3	1.3	1.0	3.8	1.5	0.4	5.9	0.2	0.2	2.2	0.6	1.1	0.6	4.0	0.7	6.7	8.2	0.7	68.1
Rubber	1.1	4.8	0.7	2.3	26.1	11.3	23.2	2.5	0.1	0.8	0.5	0.6	0.4	0.1	4.6	0.5	0.0	2.1	0.4	2.2	0.3	3.2	0.3	7.5	4.1	0.6	68.7
Non-Metal	1.6	4.5	3.0	1.5	19.3	5.2	24.7	3.3	0.3	0.9	0.4	0.9	1.0	0.2	3.0	0.7	0.1	4.2	0.6	1.8	0.3	1.4	0.4	6.6	13.4	0.6	65.4
Metal	0.7	3.6	0.6	2.1	28.5	9.5	23.3	1.7	0.3	1.8	0.3	0.3	0.8	0.3	3.6	0.8	0.1	2.2	0.7	1.6	0.6	3.1	0.3	6.9	6.2	0.4	58.7
General	2.1	3.3	1.3	9.5	16.4	6.5	14.6	1.7	0.7	3.5	0.4	0.9	1.6	0.7	3.1	1.0	0.2	6.1	1.1	2.2	0.9	4.6	0.6	6.6	9.3	1.1	60.5
Electrical	1.0	2.9	0.6	4.1	24.2	11.5	18.4	2.5	0.2	1.8	0.7	0.6	1.0	0.6	4.1	0.8	0.2	3.3	1.2	1.7	0.4	3.7	0.5	6.6	6.5	0.8	59.0
Optical	1.9	2.5	1.3	4.6	15.7	9.0	15.7	2.3	0.2	1.6	0.2	3.3	1.7	0.5	4.2	0.6	0.3	2.7	1.0	1.3	0.8	3.1	0.5	8.2	15.8	0.8	66.4
Transport	1.3	4.0	0.6	2.0	23.5	7.4	19.0	1.1	0.2	1.0	0.1	1.9	1.0	0.6	2.5	0.4	0.0	1.7	0.7	1.3	0.2	4.4	0.2	10.9	13.6	0.5	69.0

Table A13. UK Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	USA	ZAF	WOR
Food	1.6	3.9	2.1	1.5	8.3	6.5	15.0	1.9	0.1	0.5	23.0	4.1	1.3	1.4	0.3	7.2	1.4	0.1	1.2	2.5	1.7	0.6	0.7	1.1	9.9	1.9	79.3
Textile	1.2	3.3	0.8	1.1	17.7	5.1	11.8	2.0	0.3	0.5	21.7	9.3	2.2	0.7	0.2	5.3	0.9	0.2	2.5	1.0	2.5	0.4	2.4	0.2	5.9	0.4	75.0
Wood	0.5	5.8	0.5	1.2	5.1	0.7	7.0	0.2	0.2	2.2	54.0	2.0	0.5	0.2	0.2	5.6	4.4	0.1	0.5	0.2	4.0	0.1	0.9	0.1	2.8	0.8	87.7
Paper	4.8	3.2	1.6	2.0	12.3	4.2	10.0	1.2	0.2	2.4	21.7	4.2	1.8	0.8	0.7	6.8	1.2	0.3	2.5	1.8	3.2	0.4	1.0	0.7	9.0	2.1	78.8
Petroleum	0.1	15.7	0.5	0.3	7.7	3.9	19.6	0.1	0.0	0.2	3.1	0.5	0.6	0.1	0.1	32.1	5.4	0.0	1.6	0.0	4.8	0.2	0.2	0.0	2.4	0.7	78.6
Chemical	2.1	6.5	1.6	2.3	15.6	6.2	9.8	1.1	0.2	0.6	5.6	5.1	3.0	1.0	0.3	7.6	0.6	0.2	1.5	0.7	1.9	0.4	1.9	0.6	22.7	0.8	81.8
Rubber	1.8	5.4	1.2	1.9	17.2	4.8	16.9	0.5	0.2	1.0	12.9	6.1	1.0	0.6	0.4	7.2	1.8	0.1	1.5	0.9	2.9	0.3	1.5	0.3	10.7	1.1	78.6
Non-Metal	1.7	6.3	1.1	1.6	15.8	3.7	9.9	0.4	0.2	0.9	16.8	6.3	2.2	1.3	1.5	4.3	2.5	0.1	1.7	1.3	5.4	0.3	1.4	0.3	11.8	1.3	80.5
Metal	1.9	3.8	2.8	3.7	18.5	3.7	9.3	0.4	0.3	6.2	6.9	4.3	3.1	1.5	0.6	5.8	3.3	0.1	0.8	1.5	4.6	0.8	0.9	0.5	14.1	0.6	79.3
General	2.7	3.6	3.4	5.9	12.8	3.1	9.1	0.4	0.5	2.9	5.5	5.0	2.3	2.3	1.3	4.9	4.0	0.2	2.2	2.8	2.8	0.8	2.2	0.7	16.6	1.8	72.0
Electrical	2.0	2.8	1.3	3.1	17.4	4.2	9.4	0.5	0.2	1.7	9.0	6.4	1.0	1.6	1.2	9.9	1.7	0.4	1.8	2.3	3.1	0.9	1.4	0.6	14.7	1.3	70.3
Optical	2.1	4.5	2.0	4.6	14.1	3.2	7.6	0.4	0.2	2.0	4.4	4.3	4.2	1.6	0.8	5.6	3.4	0.1	2.2	2.3	1.9	0.5	1.4	0.7	24.6	1.1	77.0
Transport	2.0	7.2	2.8	6.5	14.4	5.4	6.3	0.5	0.2	1.0	1.9	5.8	2.6	0.6	0.9	4.3	1.1	0.1	4.0	3.9	3.0	1.0	2.1	0.4	20.6	1.7	79.8

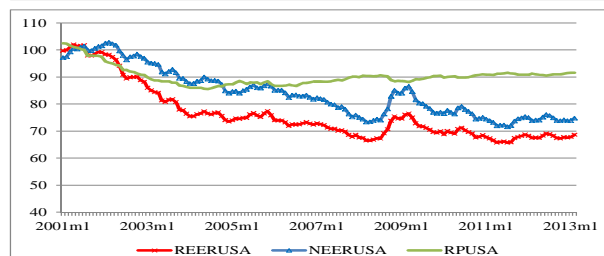
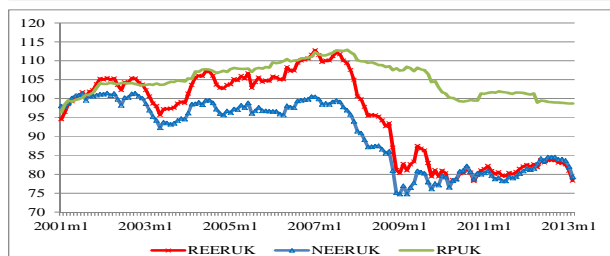
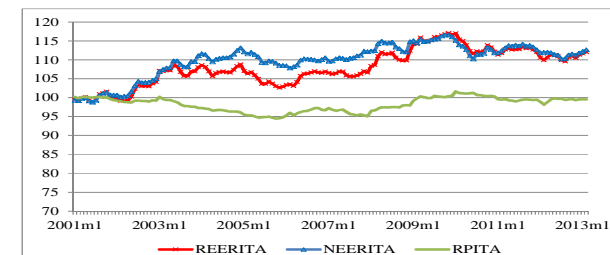
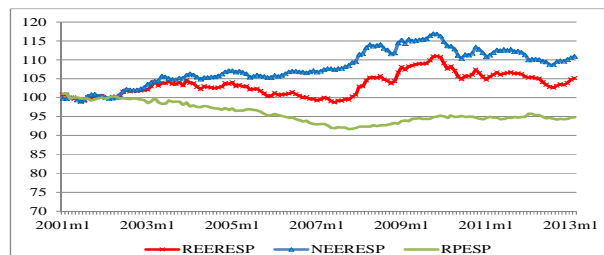
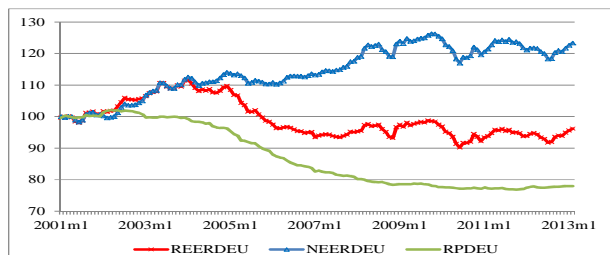
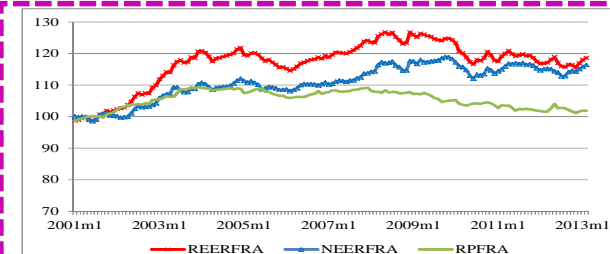
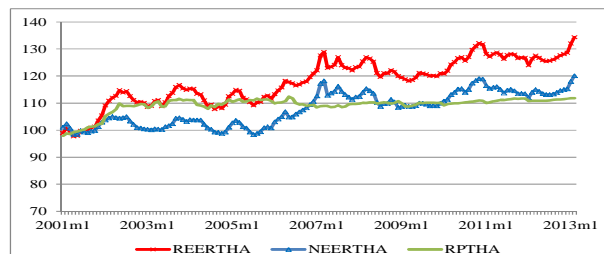
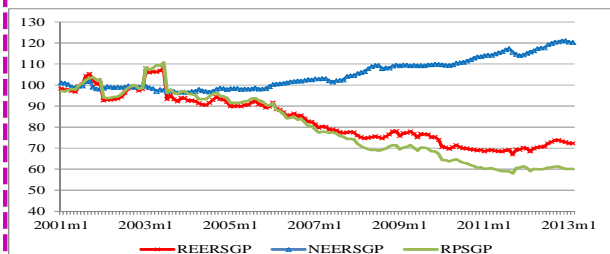
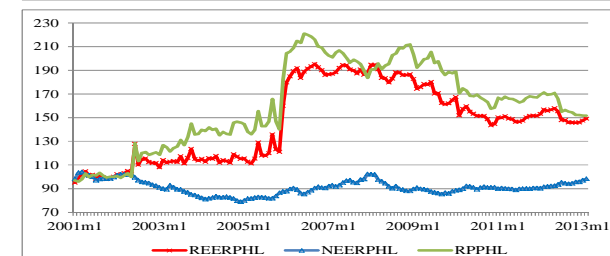
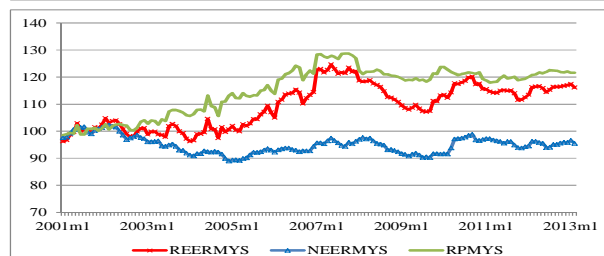
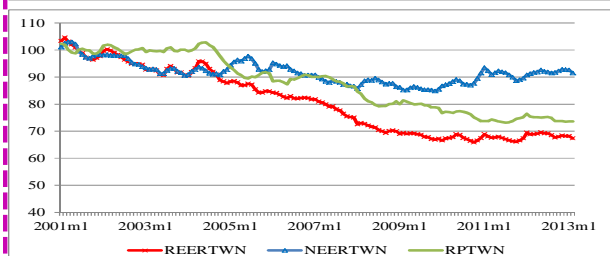
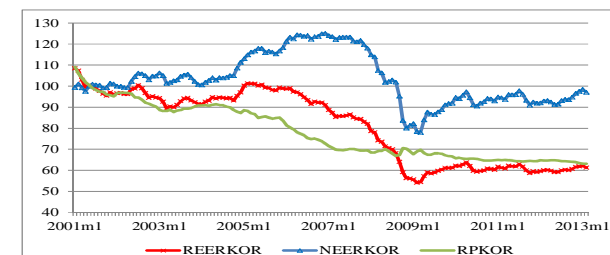
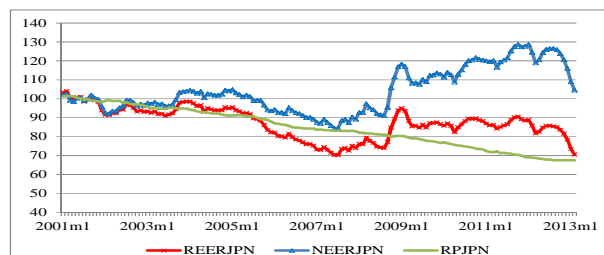
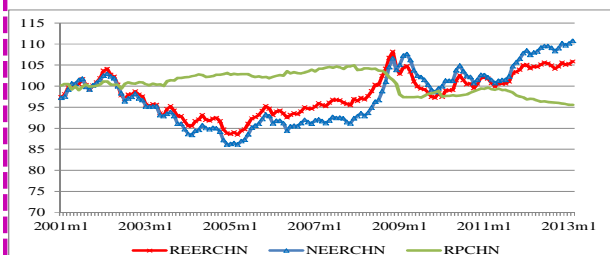
Table A14. USA Trade Share by Industry and by Destination Country in 2012

Industry	AUS	BLX	CAN	CHN	DEU	ESP	FRA	GRC	IDN	IND	IRL	ITA	JPN	KOR	MYS	NLD	NOR	PHL	RUS	SGP	SWE	THA	TUR	TWN	UK	ZAF	WOR
Food	2.4	0.8	36.8	8.2	1.9	0.6	1.0	0.1	1.7	0.6	0.3	0.9	18.3	6.8	1.0	3.2	0.2	2.8	3.0	1.1	0.2	1.1	1.0	2.6	2.8	0.4	62.3
Textile	2.9	3.4	43.9	10.6	3.8	0.7	1.4	0.3	0.6	1.1	0.4	3.4	8.0	4.7	0.4	2.1	0.2	0.2	0.6	1.2	0.4	1.4	0.5	1.3	5.9	0.5	44.9
Wood	1.5	0.8	47.7	16.1	3.1	1.9	0.9	0.3	1.1	0.5	0.5	3.5	9.0	1.3	0.5	0.8	0.2	0.8	0.3	0.3	0.6	0.6	1.4	1.4	4.5	0.4	74.8
Paper	2.3	1.4	43.4	11.3	3.8	1.4	1.7	0.2	0.8	2.0	0.2	3.7	7.6	2.9	0.8	2.9	0.0	0.8	0.2	1.0	0.4	0.7	2.0	1.9	5.7	0.7	69.1
Petroleum	3.7	2.2	20.2	6.0	2.3	3.8	2.7	0.6	0.1	1.9	0.2	3.1	20.9	4.1	0.1	6.3	1.2	0.0	1.4	0.4	2.0	0.1	2.3	4.3	8.5	1.6	63.0
Chemical	2.4	8.4	19.2	10.2	7.6	2.6	4.0	0.1	0.8	3.5	1.5	2.3	8.0	5.0	0.6	7.1	0.3	0.3	0.6	3.1	0.5	1.2	0.8	3.0	6.1	0.6	70.7
Rubber	4.2	3.2	50.4	7.4	4.6	0.5	2.3	0.1	0.3	1.2	1.2	0.9	4.7	2.3	0.9	2.9	0.3	0.7	0.5	2.5	0.4	0.8	0.4	1.7	4.9	0.9	60.2
Non-Metal	2.3	1.4	42.8	7.9	10.8	1.0	3.1	0.1	0.2	1.3	0.4	1.8	6.7	4.6	2.7	1.2	0.2	0.4	0.5	1.8	0.4	0.6	0.4	2.7	3.7	1.1	75.3
Metal	3.0	1.5	38.8	6.2	4.0	0.6	2.4	0.0	0.3	3.5	0.5	1.5	3.4	2.6	0.8	1.0	0.3	0.4	0.5	2.0	0.5	1.4	0.6	1.5	21.8	1.0	63.0
General	5.5	2.9	29.4	10.3	5.1	0.8	2.8	0.2	0.8	2.6	0.4	1.8	4.4	6.7	1.2	2.5	0.7	0.5	2.1	4.9	0.7	1.1	0.9	4.8	5.3	1.5	64.0
Electrical	3.0	1.4	26.9	9.2	6.7	1.0	3.2	0.1	0.5	2.1	1.5	1.7	6.2	6.5	3.1	3.8	0.4	2.7	0.8	6.0	0.7	2.2	0.8	2.8	5.9	0.7	58.6
Optical	3.7	5.0	12.7	9.6	10.0	1.2	4.4	0.2	0.2	2.0	1.8	2.2	12.7	4.9	1.1	9.4	0.7	0.6	0.8	3.8	1.9	1.0	0.7	3.5	5.3	0.6	74.8
Transport	4.3	1.3	59.6	6.0	8.6	0.5	0.9	0.9	0.1	0.6	0.0	1.0	3.6	2.3	0.2	0.8	0.3	0.1	0.7	1.1	0.5	0.3	1.1	0.8	3.4	1.0	64.4



# Decomposition of Electrical machinery REER

40





# Decomposition of Transport equipment REER

41

