Textile and Garment Industry

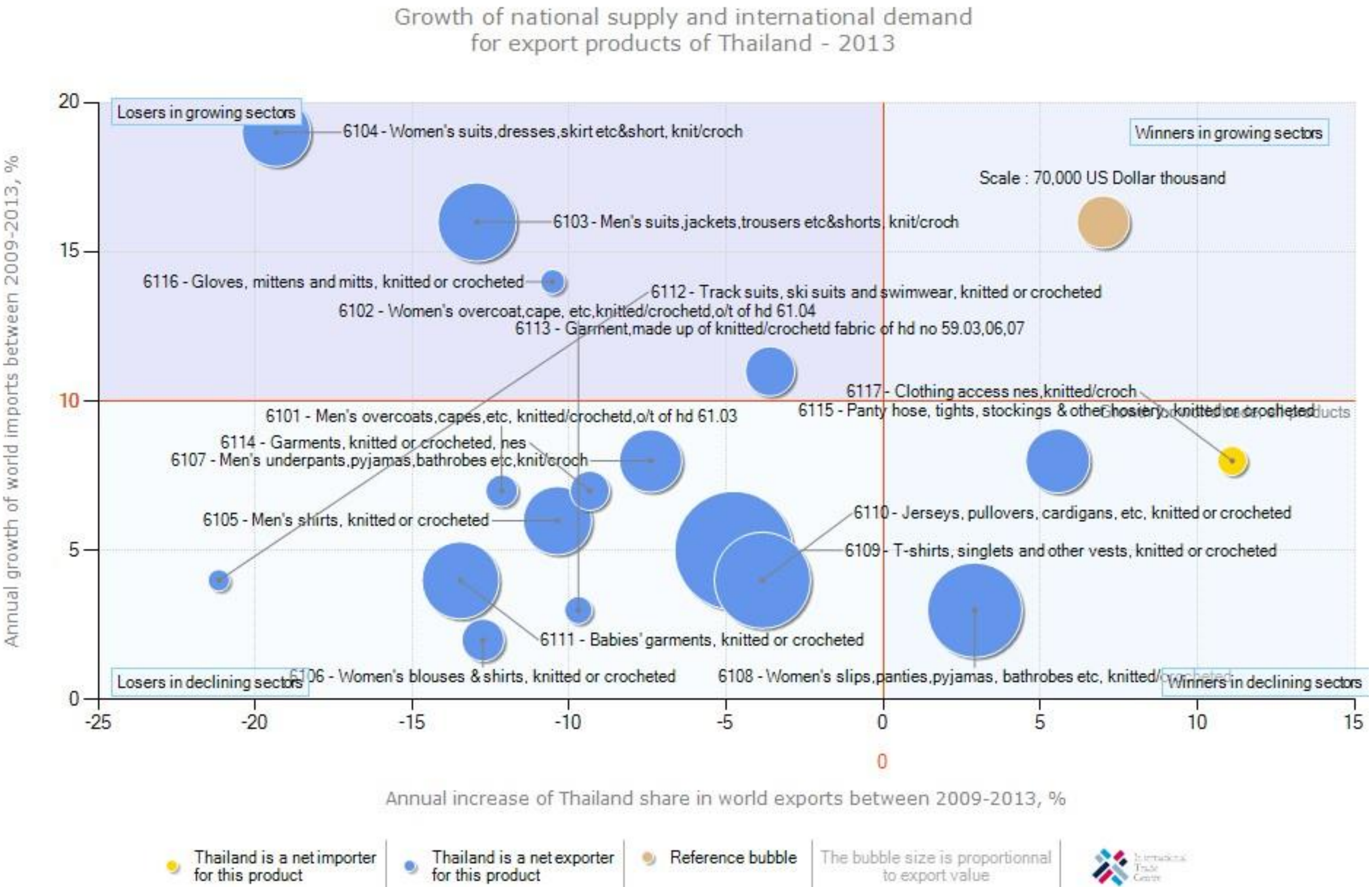
Lecture 14
bhanupong

Outline

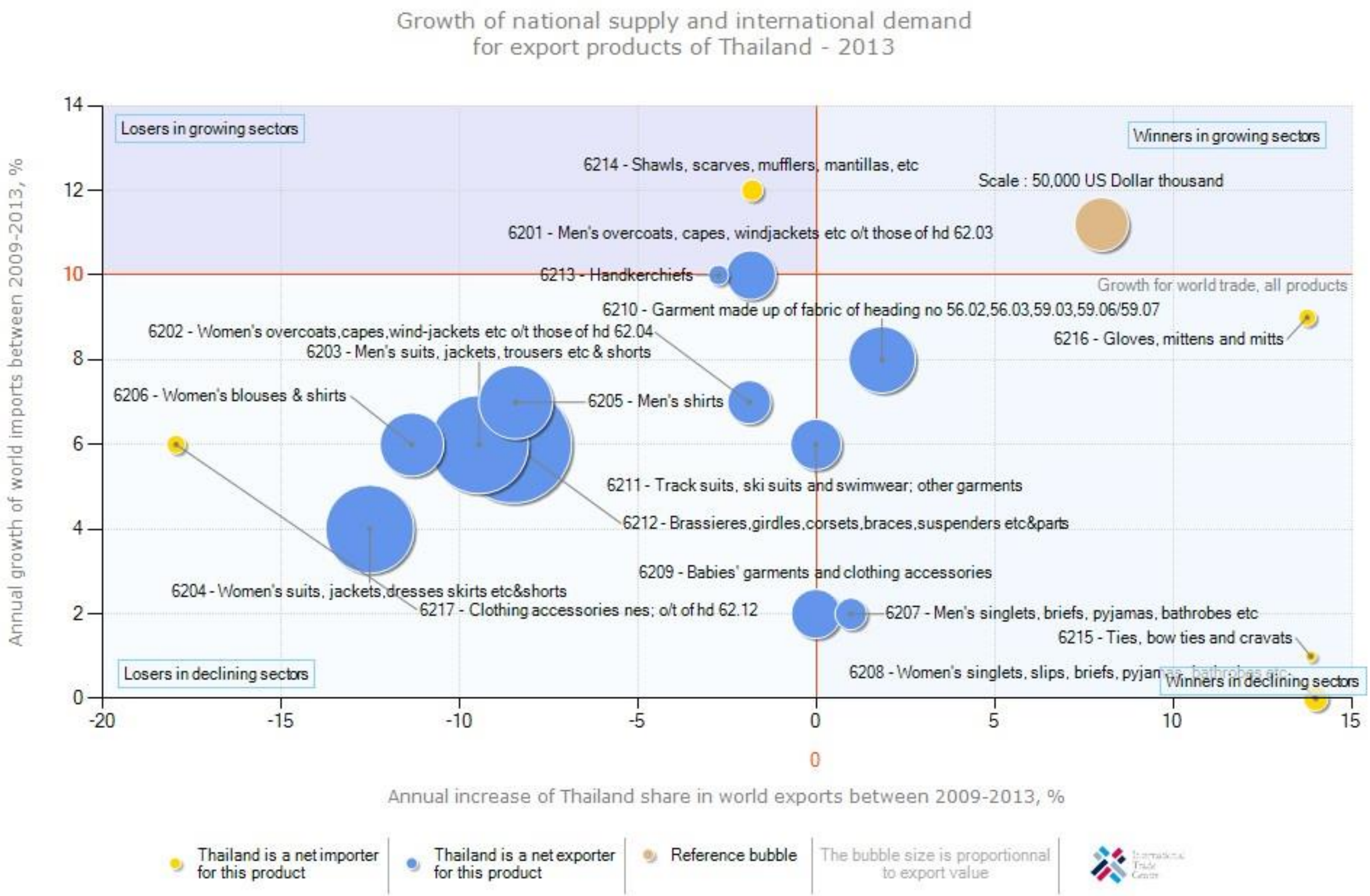
- BCG framework
- The importance of textiles and clothing industry
- Competitive characteristics
- Specialization index
- The role of FDI
- FDI outflows
- RCA

	Losers (Losing world market share)	Winners (Gaining world market share)
World import growth of this sector is higher than average commodities	Lost opportunities	Rising stars
World import growth of this sector is lower than average commodities	Retreat	Falling stars

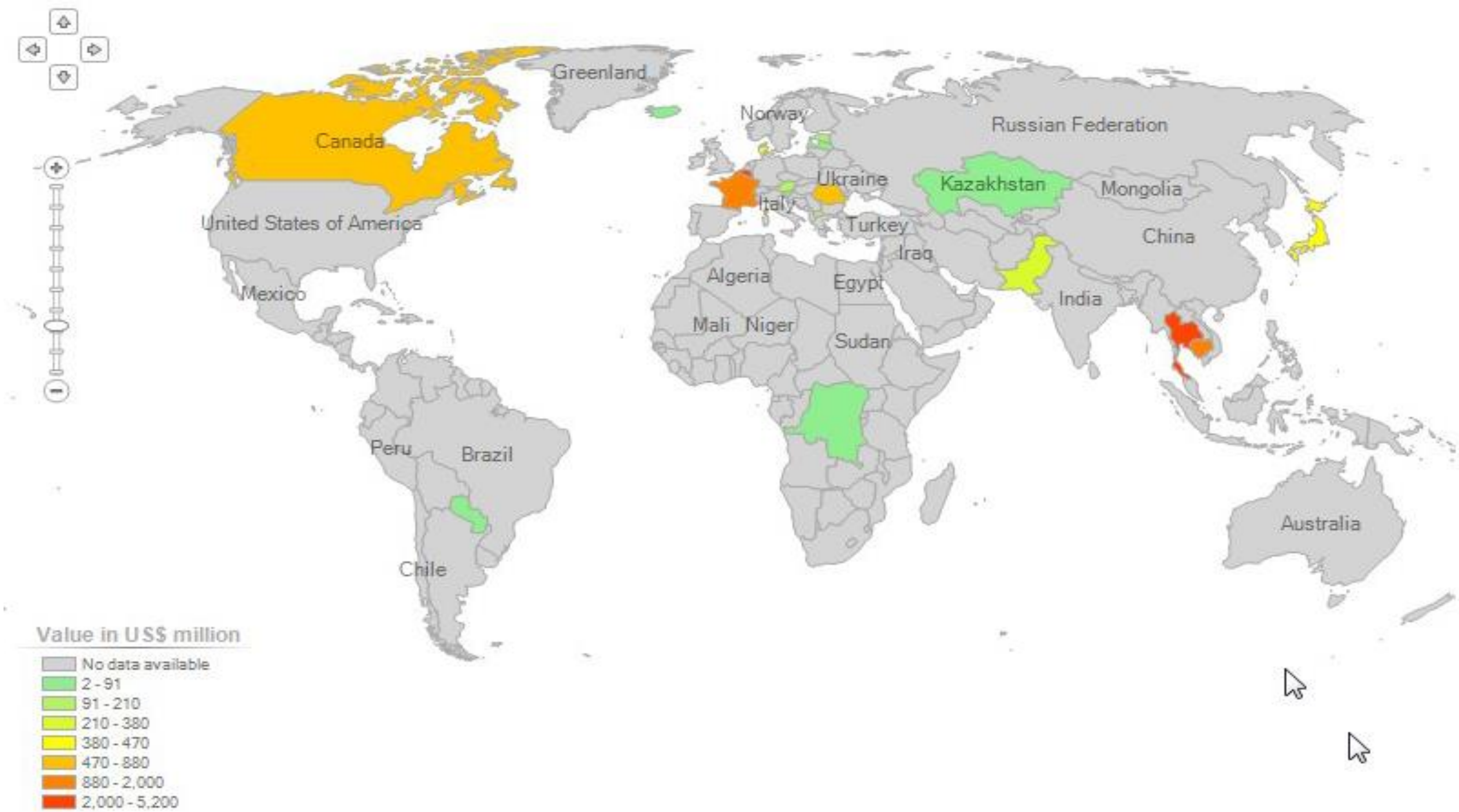
Losers in declining sectors product 61



Losers in declining sectors: Product 62



Inward FDI stock: Textiles and clothing



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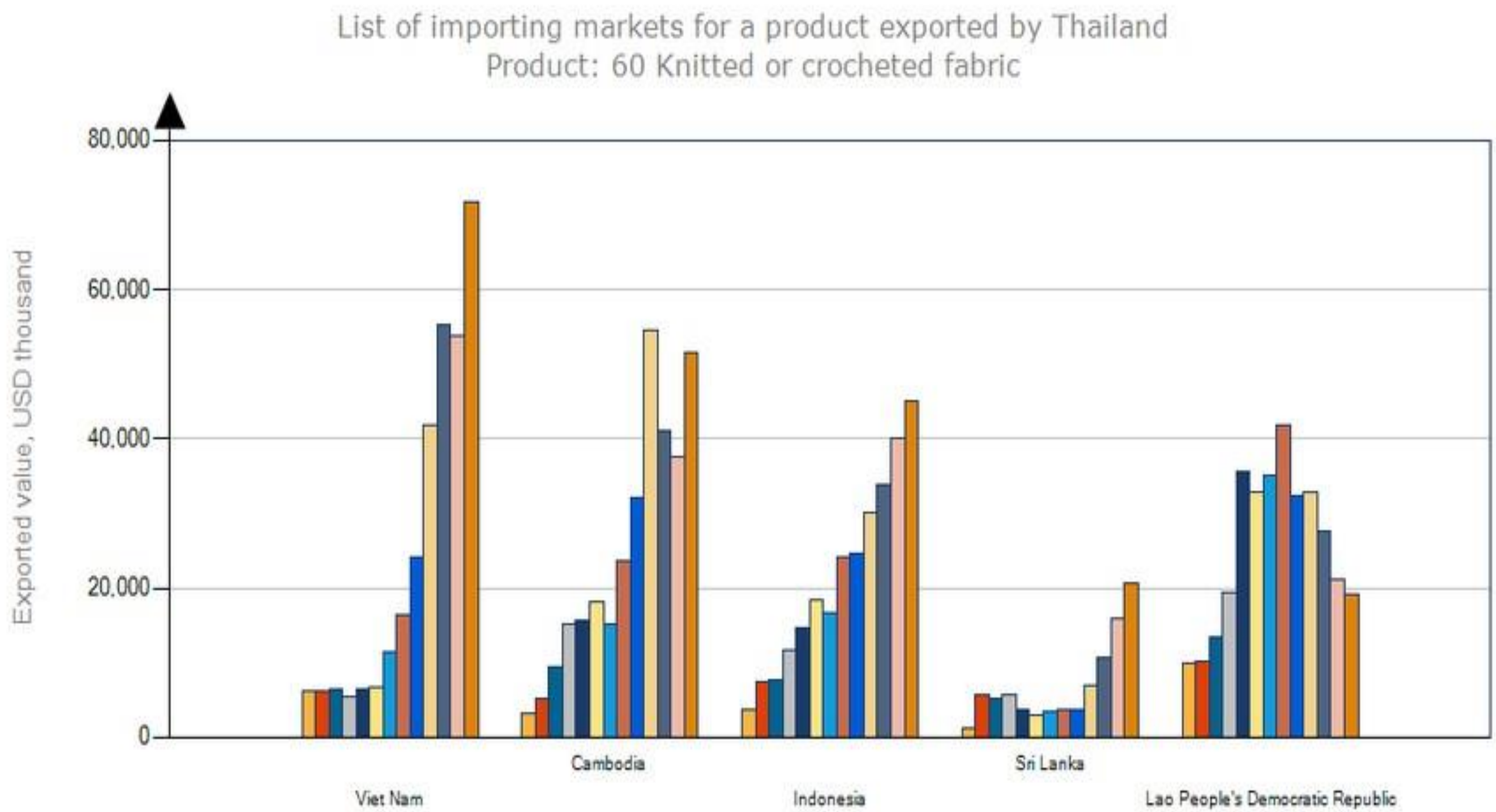
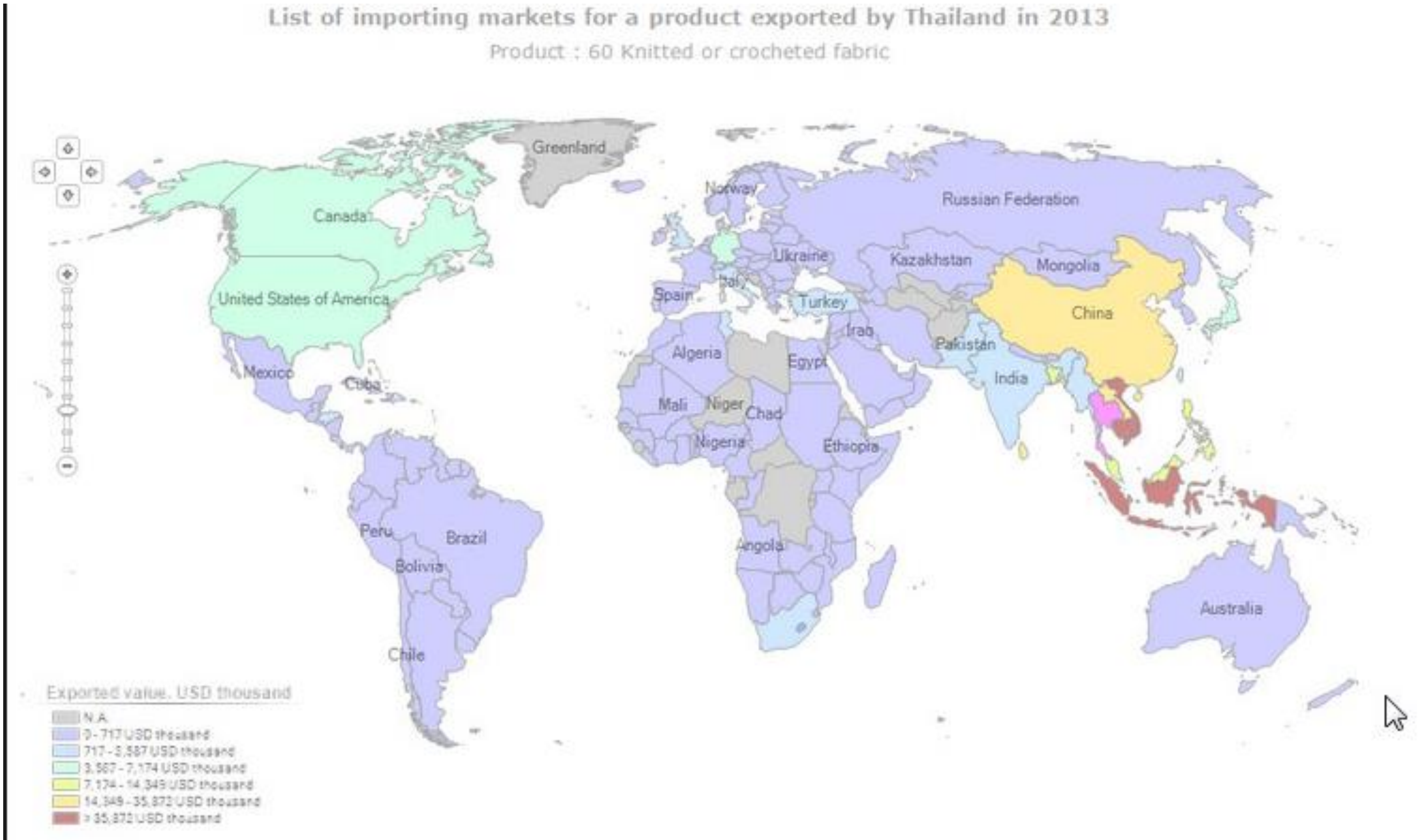
Thailand's exports of knitted fabric



Markets for Thailand’s product 60 (Knitted or crocheted fabric)

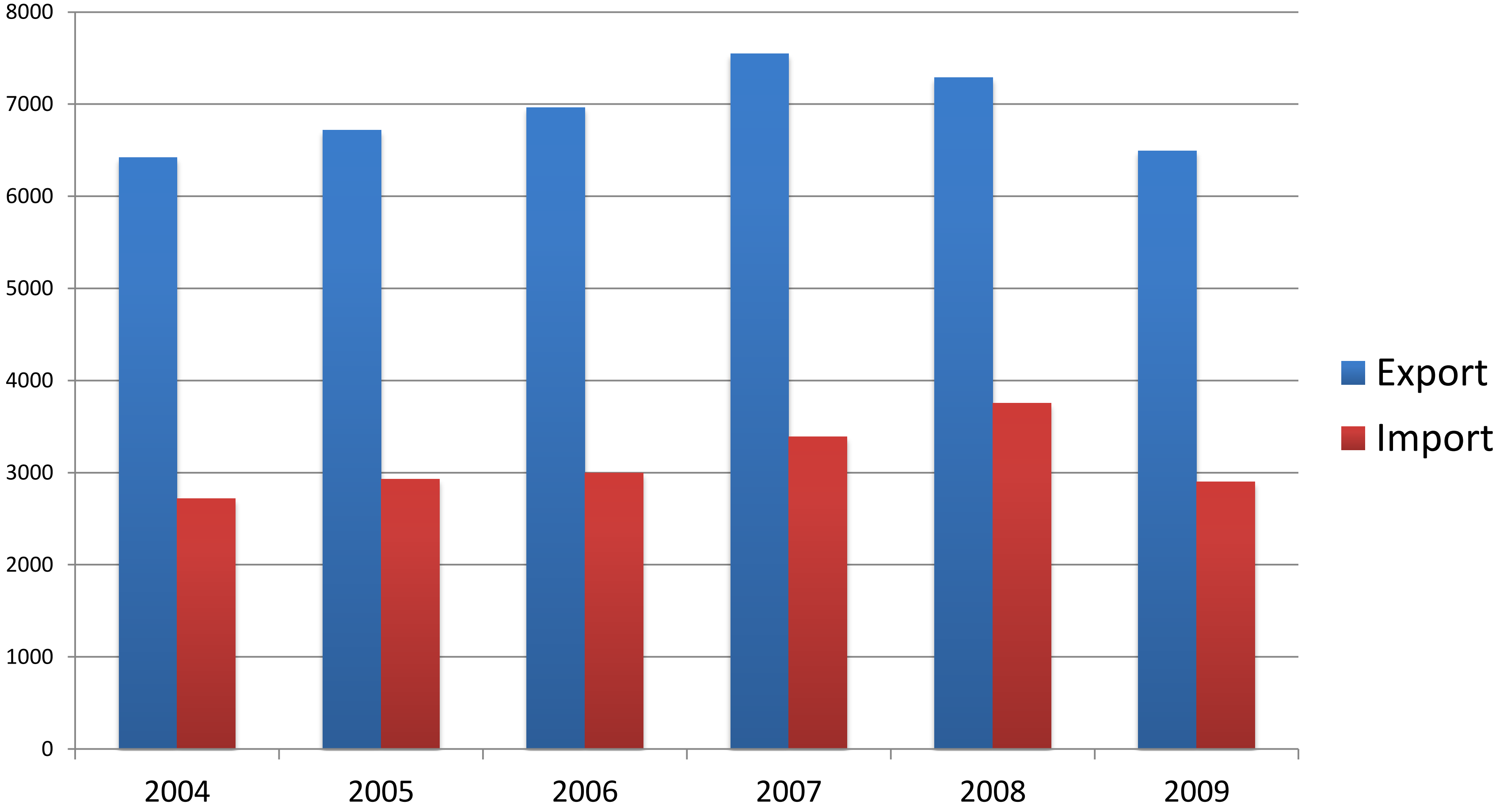


Thailand’s markets for product 62: Apparel

Labor intensive industry

- As a labor-intensive industry, it employed about 1.2 million workers and generated US$3.16 billion (Bt119 billion) in foreign-exchange income in 2007.
- Thailand's textile and garment industry was worth 500 billion baht in 2007, split almost evenly between domestic and export markets.
- But that was many years ago.
- How much did the industry generate output? How many labor were employed in 2014?

Trade balance of Thai textile industry



Where did Thailand import textiles?

(source: OIE)

- ***Fibers used in Textile Production***

  USA (31.8%), Australia (14.8%) and India (9.3%).

- ***Yarn***

  China (19.9%) , Japan (16.5%), Taiwan (12.3%) and Indonesia (11.6%).

Extensive activities of ***intra-industry trade***

Product fragmentation

Sources of imported textile products

- ***Fabrics:***

  China (39.7%) , Taiwan (16.3%) , Japan (8%), and Hong Kong (8%).

- ***Ready-made Apparel:***

  China (48%), Hong Kong (12.9%), Spain (6.1%) and Italy (5.8%).

- ***Textile Machinery:***

  Germany (21.2%), Japan (18.8%), Taiwan (13.8%), China (12.9%).

In 2009, the industry employed more than 1 million workers, or 1 of 5 of the workers in industrial sector.

Workers	2006	2007	2008	2009
Industrial sector	5,504,000	5,619,000	5,453,000	5,374,000
Textile and Garment Industry	1,063,000	1,057,000	1,049,000	1,045,000
Share in industrial sector	19.3%	18.8%	19.2%	19.4%

Impact of GFC: Bleak future?

- About 10,000 workers in the textile and garment industry lost their jobs due to closure of 100 factories in the first 10 months of 2008.
- Global economic recession, especially in the United States, as well as Thailand's political unrest have hurt growth prospects for the industry that employs more than a million people.
- The impact of worsening conditions was clearly seen in September and October 2008, when 19 factories closed, affecting 5,350 workers.

A rebound after GFC

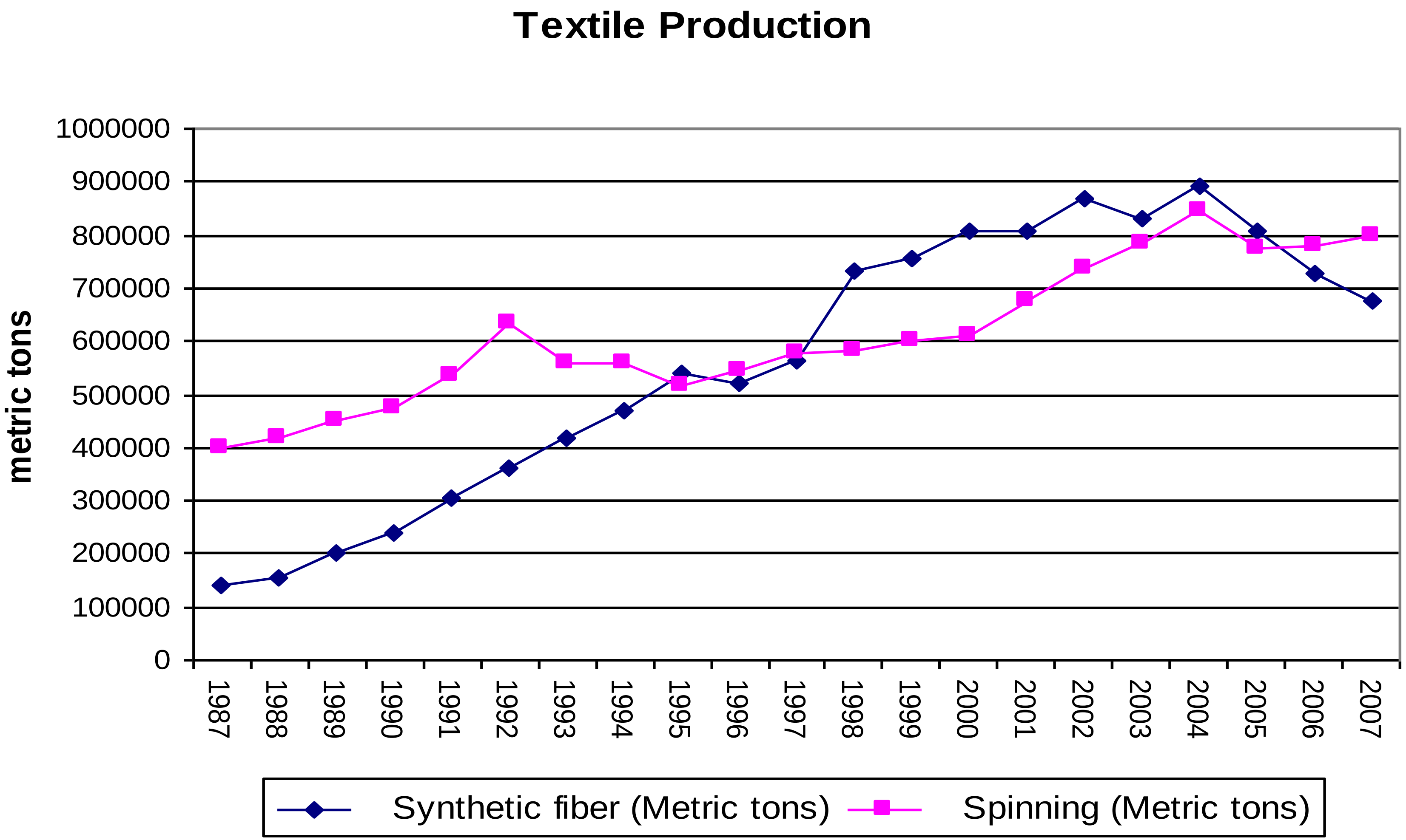
- By March 2010, the rate capacity utilization of the textile and garment industry had been rising in response to world trade recovery.
- Thailand's total exports increased by 15.5 % in 2008, declined by 14% in 2009 and rebounded by 28% in 2010.
- What happened in 2014?

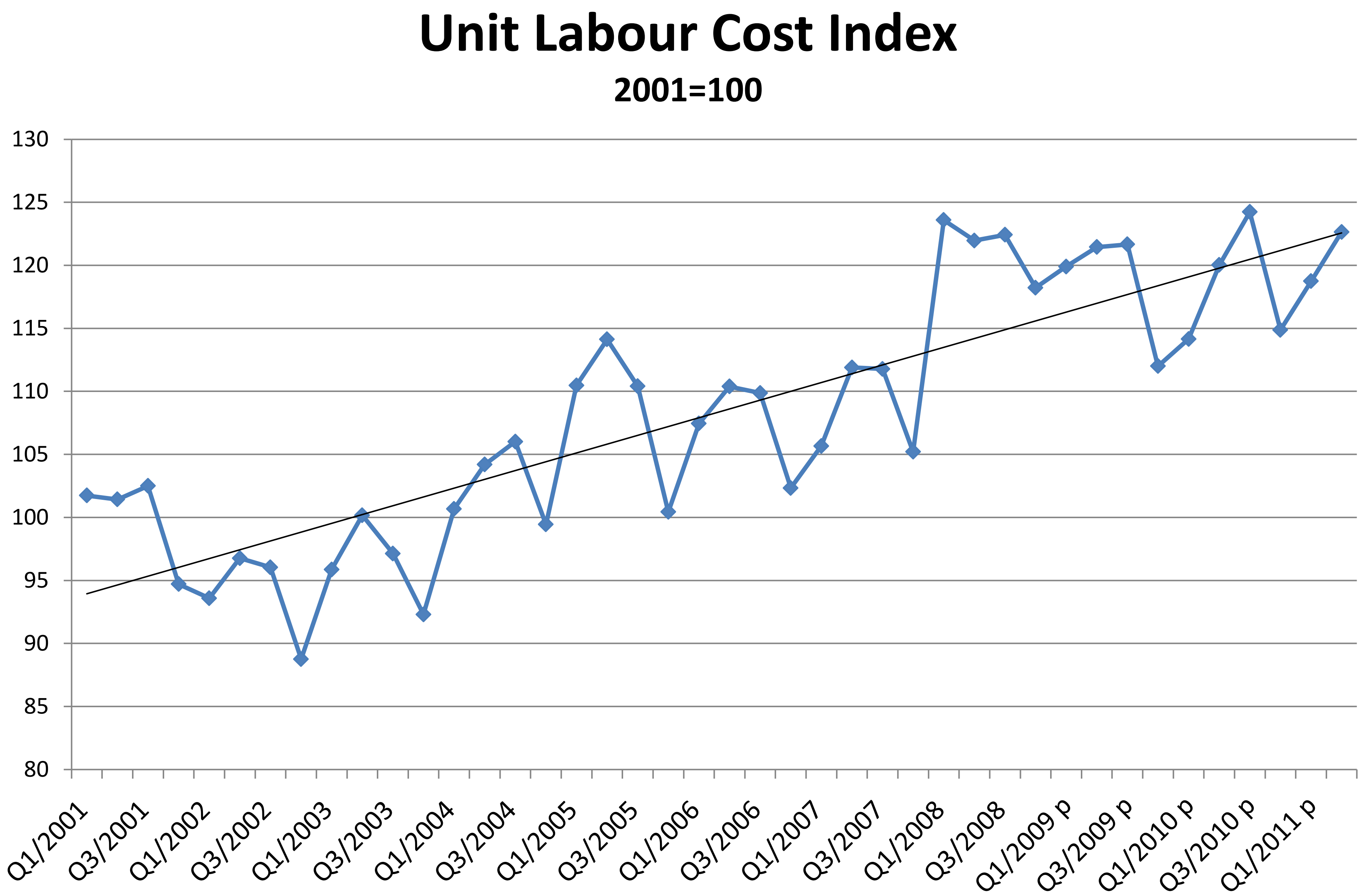
From spinning to fabrics, from fabrics to garments: ***integrated textile business*** ***vertical integration and logistics cost***

- The Thai factories spin, weave, dye, finish and fabricate units for consumers in Thailand and abroad in the US and Europe such as Wal-Mart and Calvin Klein.
- By integrating production from spinning to fabrics, Thai firms are able to cut ***logistics cost and inventories.***
- It can ***react quickly*** to any change in customer needs.

Labor productivity index
2000=100
170
160
150
140
130
120
110
100
90
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
ISIC : 17 Manufacture of textiles
ISIC : 18 Manufacture of wearing apparel,dressing and dyeing of fur

Upstream textile industry




Unit Labour Cost Index
2001=100
130
125
120
115
110
105
100
95
90
85
80
Q1/2001
Q3/2001
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Q3/2002
Q1/2003
Q3/2003
Q1/2004
Q3/2004
Q1/2005
Q3/2005
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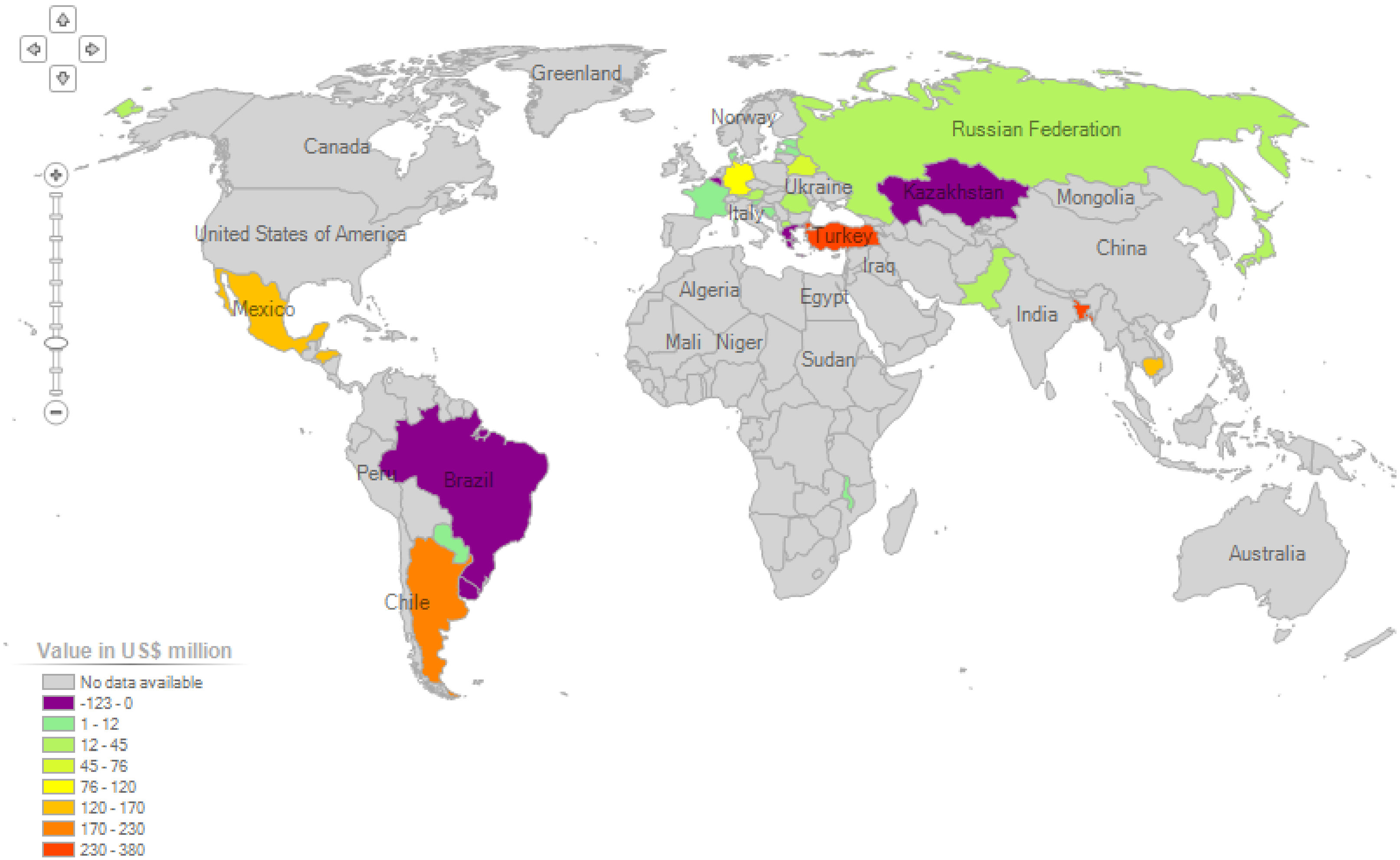
Q3/2006
Q1/2007
Q3/2007
Q1/2008
Q3/2008
Q1/2009 p
Q3/2009 p
Q1/2010 p
Q3/2010 p
Q1/2011 p

Surviving strategy

- The industry faces rising wage rates, losing its low cost advantage to other labor abundant economies.
- The textile and garment industry has lowered manufacturing costs by **moving labor-intensive** operations to neighboring countries in order to enjoy tax privileges for exporting to US and European markets.
- In automobile industry: Nissan production plants in Japan uses higher K/L than its' plants in India.

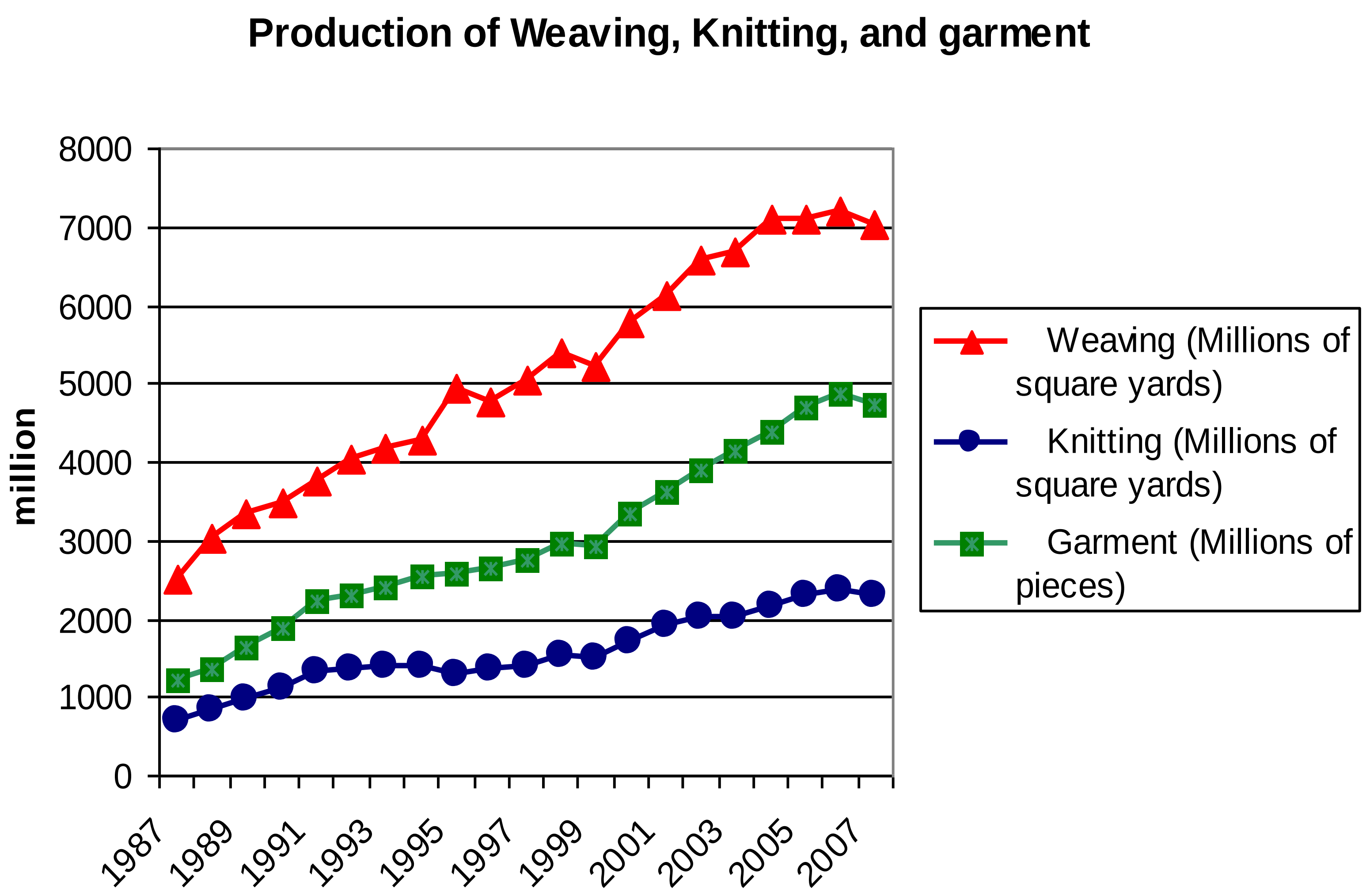
Countries attracting FDI in textiles, clothing, and leather (in 2013)



Thailand’s next production stage

- Thailand is already the production base of upstream and downstream textile industry and what the industry must do is to develop **value-added textile** and garment products.
- Should Thailand build up its brand name if it wants greater world recognition like Italian-made products?

Downstream textile industry



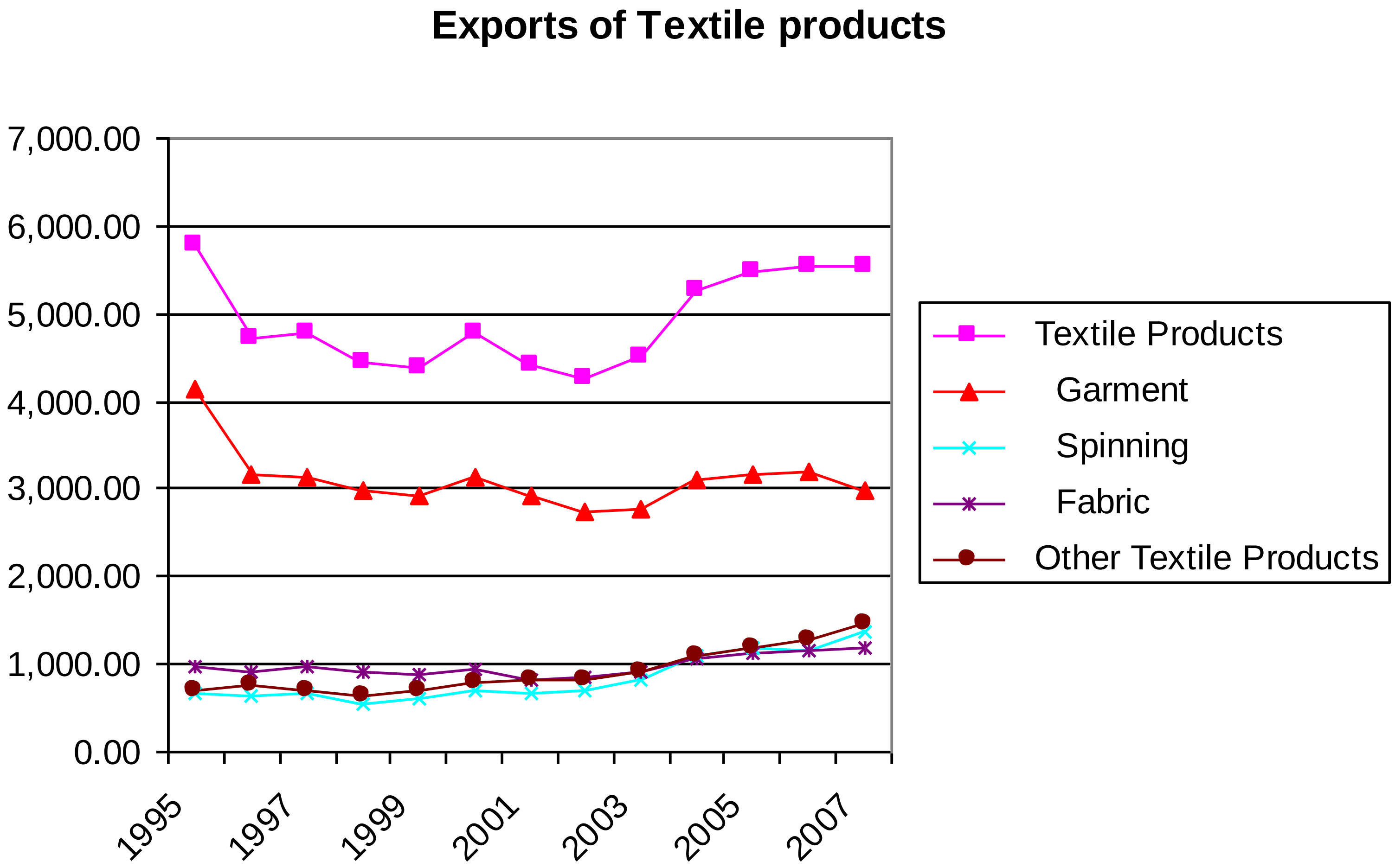
Already encountered problems since 2007

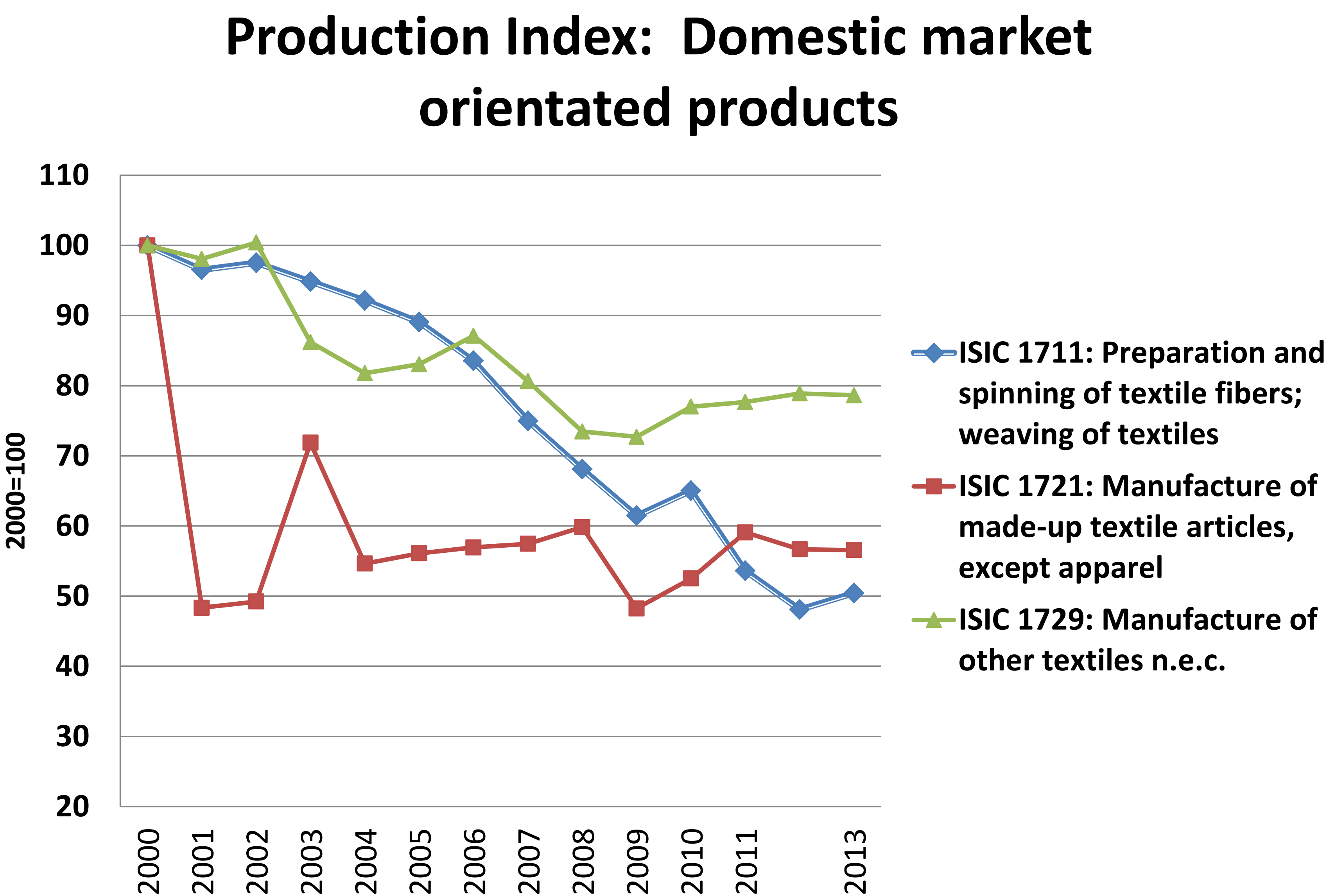
- Textile and wearing apparel industries were severely affected by the currency exchange rate and influx of inferior quality products from China.
- Local producers tried to adjust by cutting costs and focusing more on export markets.

Product Diversification

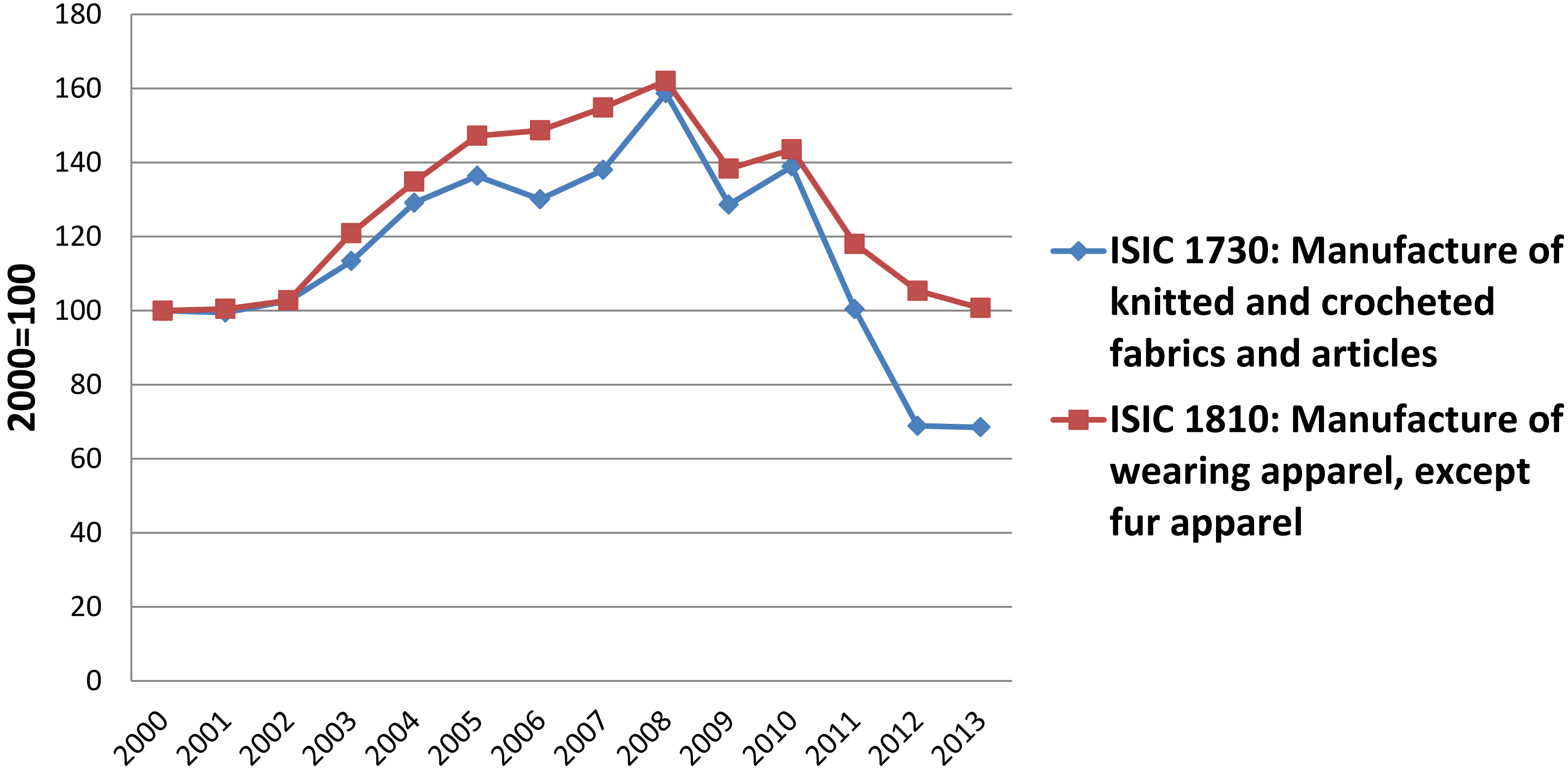
- Ready-made apparel exports declined due to the continued baht appreciation and exchange rate volatility, causing exporters reluctance to accept export orders.
- However, other textile products grew in 2007: brassieres, girdles and accessories, fabric, yarn and synthetic fiber, household and furnishing textiles, synthetic fiber and embroidered and lace fabrics.

Exports of textile products

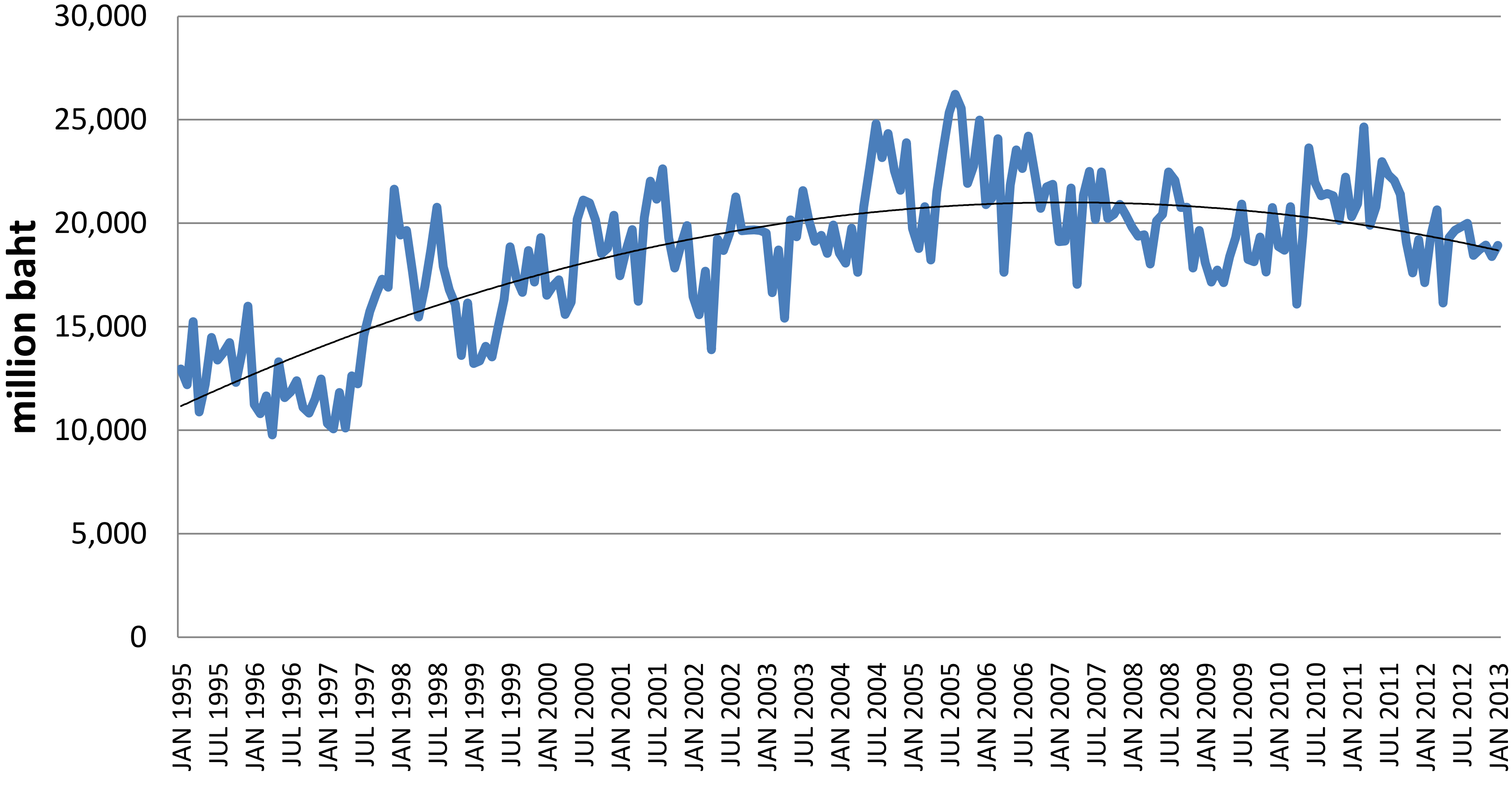



Production Index: Domestic market orientated products
110
100
90
80
70
60
50
40
30
20
2000=100
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2013
ISIC 1711: Preparation and spinning of textile fibers; weaving of textiles
ISIC 1721: Manufacture of made-up textile articles, except apparel
ISIC 1729: Manufacture of other textiles n.e.c.

Production Index: Ultra export orientated products



Exports of Apparels and Textile Materials 1995-2013



Can FTA help?

- At present, Thai garments exported to the US are subject to an average import tariff of 27 per cent.
- The FTA with USA would bring the duty down to zero. But that was a science fiction, because the deal was off after the 2006 coup.
- The 2014 coup has delayed the EU-Thailand free trade agreement.
- More orders came after the Japan-Thailand Economic Partnership Agreement (JTEPA) went into effect on 1 November 2007.

China: Threat and opportunity

- China is the world's biggest exporter, facing increases in production costs.
- China's exports this year will fall short of last year's level, because of quota restrictions, poor quality, rising export prices, and lower demand from world growth slowdown in 2015.

Some cost advantages remain

- Thailand is the world's 13th largest garment exporter.
- With the exception of China, those countries with higher rankings control a 40-per-cent share of the market
- But only 10 per cent of large exporters enjoy cheaper labor costs than Thailand, and 40-50 percent of top exporters carry higher labor costs than Thailand.
- Therefore, to be top exports, labor cost advantage is just one factor.
- Note that quantity demanded depends on both prices and income.
- **High labor cost with high income elasticity of demand (brand names) can still command high world market shares**

Can FTA lead to higher FDI?

- Investment opportunities arise in Southeast Asia as Japanese companies are looking to supply their home country, one of the world's biggest garment importing markets.
- **Interest in Thailand as a production hub has increased mainly because of the Japan-Thailand Economic Partnership Agreement (JTEPA) and the ASEAN-Japan Free Trade Area Agreement.**
- Thailand, as the integrated production base for the textile and garment industry from downstream to upstream, offers advantages in drawing foreign investments in this industry.

Moving production bases to neighboring countries

- In Lao, Cambodia, Myanmar, and Vietnam, factories are **exempt from taxes**, so they can export to Europe with cost advantages compared to manufacturers in China, where they have to pay 15% tariff.
- The Japan-Thailand Economic Partnership Agreement (JTEPA) has allowed Thai manufacturers to export to Japan with a 15% handicap *against Chinese* manufacturers.

Trade preferences

- Those preferences help strengthen price competitiveness of Thai products against rivals from China in the key export markets.
- **Given a shortage of labor in Thailand, more investment expansion by Thai producers is likely in Myanmar, Lao PDR, and Cambodia.**

Where to invest

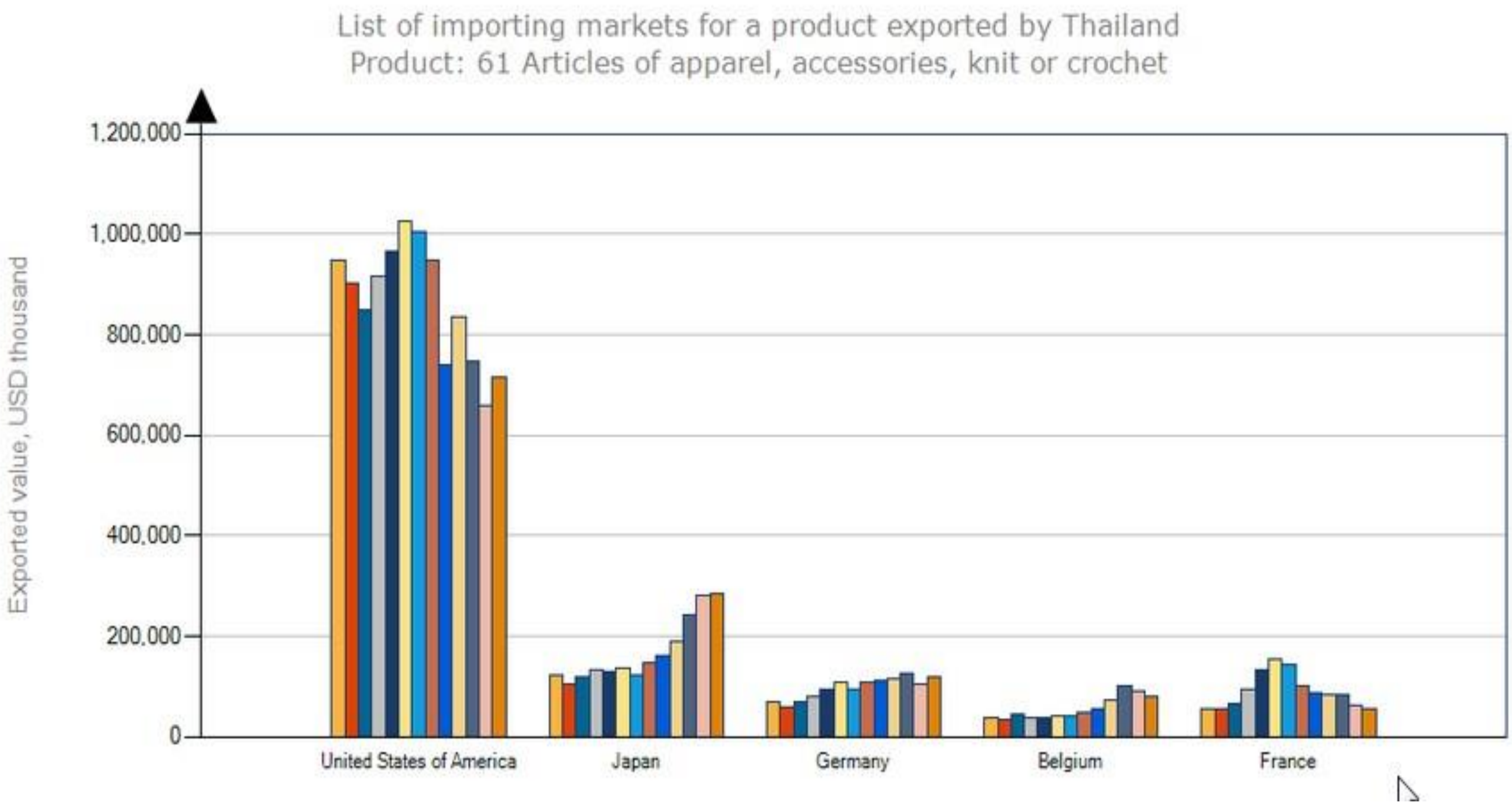
- Expanding foreign markets encourage outflow of Thai FDI.
- A study by the Industrial Economics Office (2007) shows that operators in the textile and clothing industries should shift to invest in Vietnam, China and India, to reduce their production costs and boost their competitiveness in international markets.
- Besides investing in Vietnam, the study indicated that Thai operators could reduce their production costs 10.6 per cent if they made their products in China and 5.1 per cent in India.

Expanding some products with high value added

Major exports products for USA, EU and Japan are ready-made apparel, brassieres, girdles and accessories, **household and furnishing textiles**, fabric, as well as yarn and synthetic fiber.

These items have been steadily increasing, while garment exports are declining.

Thailand's exports of apparel
Top 5 markets from 2001 to 2013



A tiny exporter

- Thai textile and garment exporters are committed to raising export revenue to 20 billion USD in 2012 and *shifting* their focus on producing more fashion and design products.
- **China is the market leader commanding 33% of the world's market share.**
- **Thailand's textile and garment exports account for only 1.4% of the world's market currently.**
- Thai textile and garments industry cannot have influence on the world market prices.

Chemicals and textile

- The global textile dyes and chemicals market was worth $16 billion, and Asia accounts for some 45 percent of total consumption, much of it destined for export markets.
- ***Stricter environmental standards*** required by Western countries are prompting consolidation and innovation in the industry, which requires imported textile dyes and chemicals.
- Jim Thomson: Where can we find him?

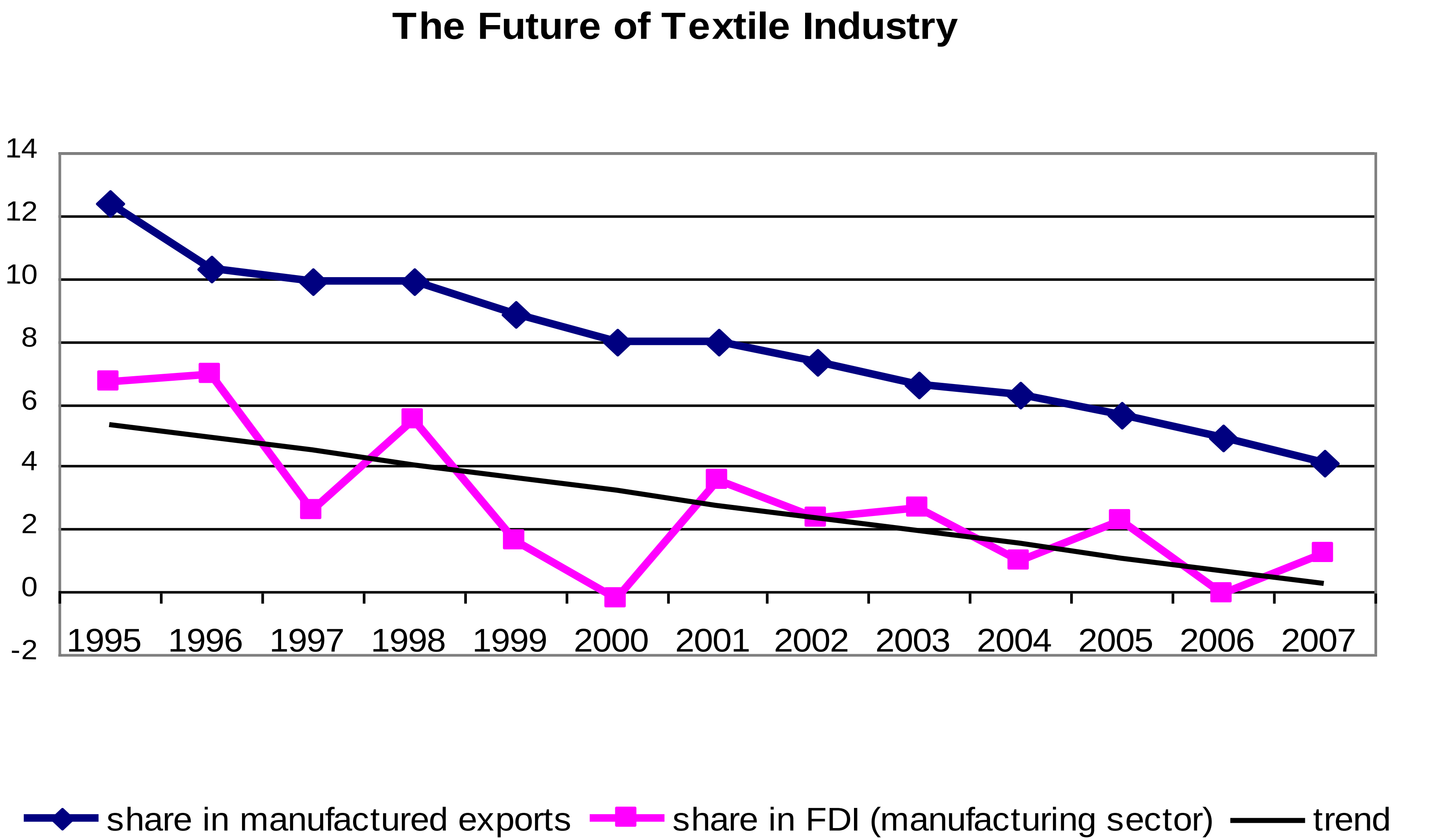
- Time magazine (1958) claimed he "almost singlehandedly saved Thailand's vital silk industry from extinction
- Jim Thompson disappeared on Easter Sunday, March 26, 1967, while on vacation in the Cameron Highlands of north central Malaysia.

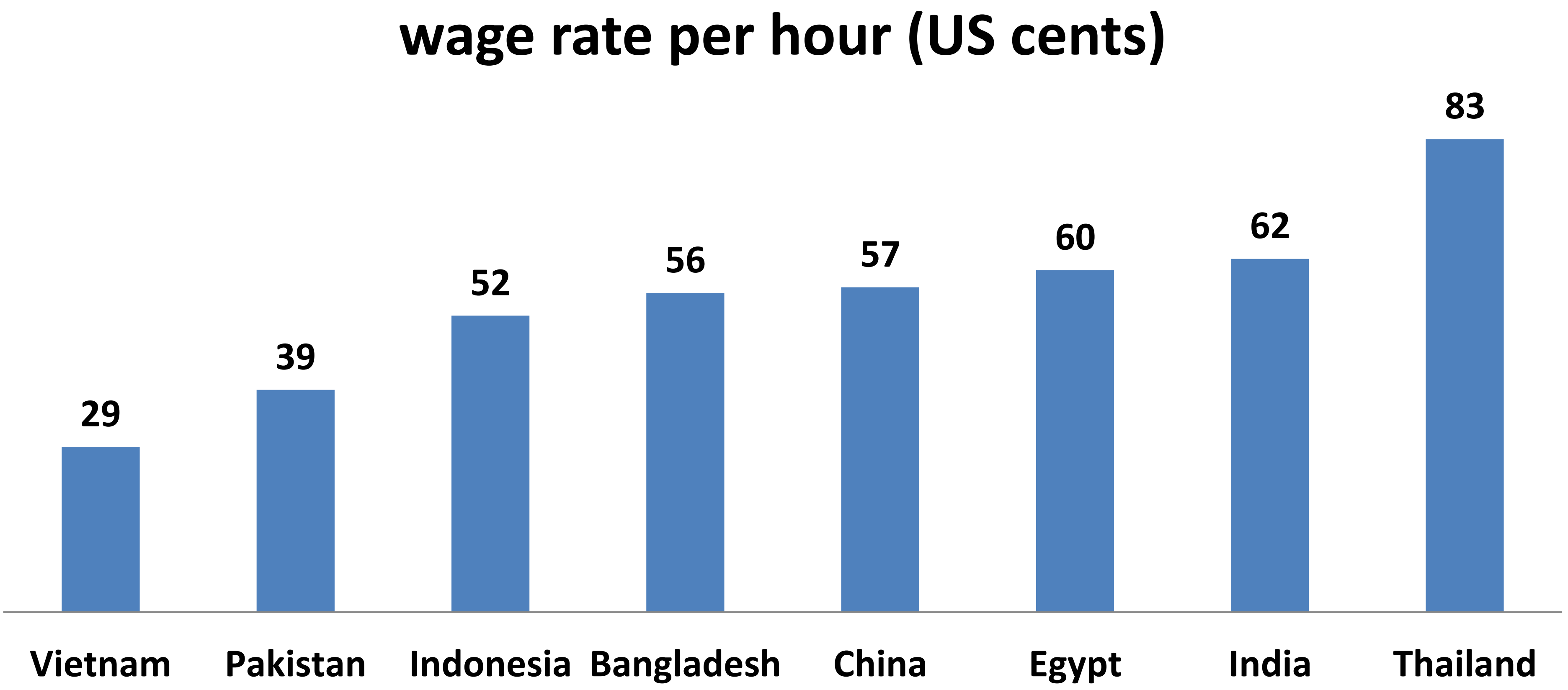
- China, Bangladesh and India are the world’s top textile producers and are major consumers.
- Pakistan and Southeast Asia are important and growing players.
- Apart from apparel, a major driver for the industry is demand for “technical textiles” or fabrics used in cars, mattress covers, bags, tents and parachutes, among others.

Technical textiles

- In the medical field, chemicals are incorporated in surgeons' gowns to repel blood and dirt, raising the hygiene level.
- As Asia's spending power rises, "people want different products and that's going to lead to the development of a whole new market for technical textiles which didn't exist before"
- The market for ***technical textiles*** is likely to grow by 20 percent per year over the next decade.
- Thai companies must ride the growth by moving up to higher value-added products.
- **Product differentiation and competitiveness**

Declining importance of textiles





wage rate per hour (US cents)
29
39
52
56
57
60
62
83
Vietnam
Pakistan
Indonesia
Bangladesh
China
Egypt
India
Thailand

share of total Thai exports (%)	0.03
exports as a share of world exports (%)	0.36
number of export product	21
Number of export market	36
share of top 3 export markets	81.7
Balassa index (RCA)	0.3

Revealed Comparative Advantage (RCA)

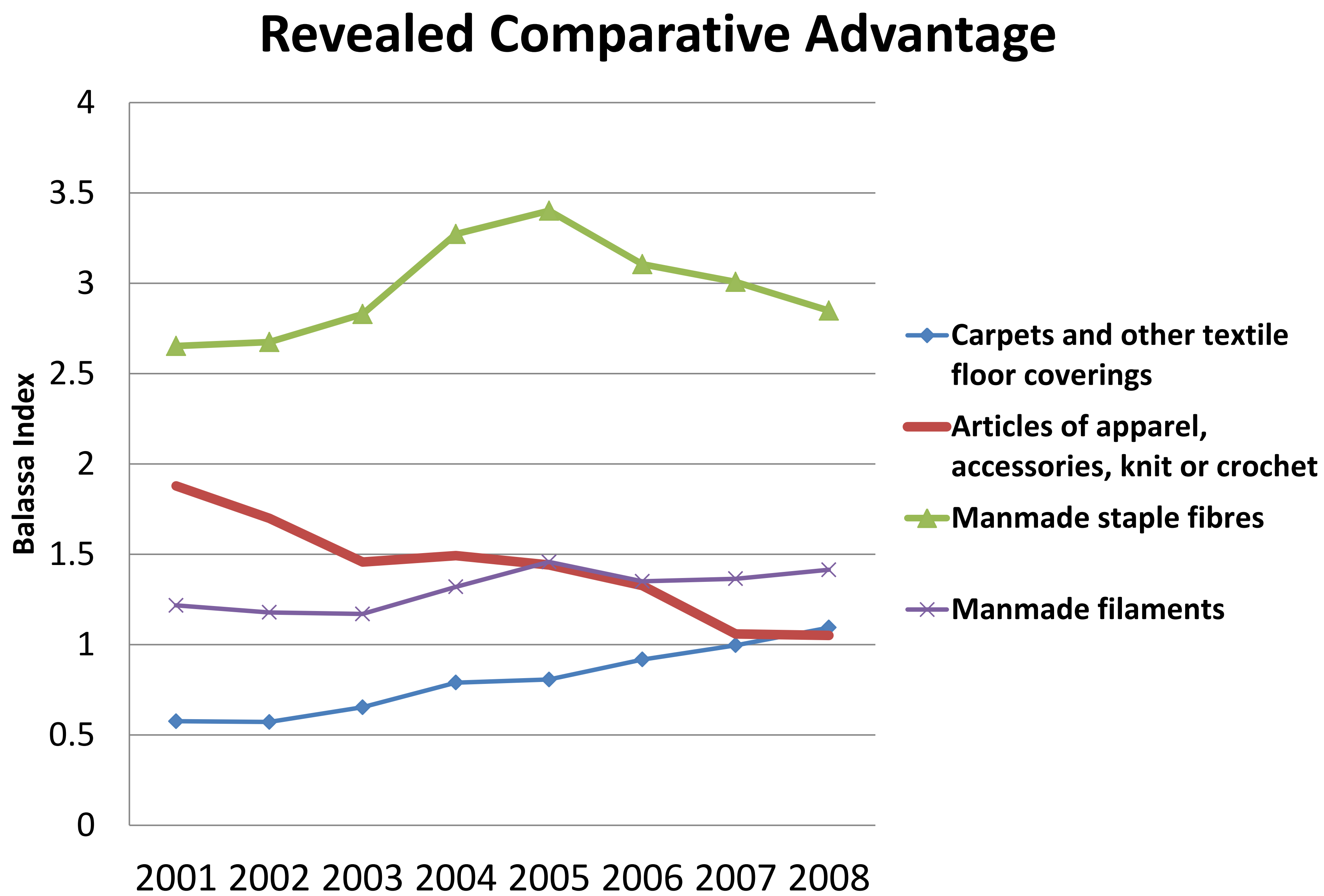
- **Balassa** (1965) measure of relative export performance by country and industry, defined as a country's share of world exports of a good divided by its share of total world exports.
- The Balassa index measures the degree of specialisation of export products.
- **If the Balassa index for a product is more than 1, it means that product involves specialisation.**
- **If it is less than 1 it means that no specialisation is involved in the product**.
- The index for country *i* good *j* is $RCA_{ij} = 100(X_{ij} / X_{wj})/(X_{it} / X_{wt})$ where X_{ij} is exports by country i (*w*=world) of good j (*t*=total for all goods).

RCA

- One should compare the share of textile exports in Thailand’s total exports with the share of textile exports in the world’s total exports.
- The Balassa index is therefore essentially a normalized export share
- If RCAj >1, the country is said to have a *revealed* comparative advantage in industry *j*, since this industry is more important the country ’s exports than for the exports of the world.

RCA: Specialization Index

$$RCA = \frac{\text{Thailand's } \mathit{Rice\ Exports} / \text{Thailand's Total } \mathit{Exports}}{\mathit{WorldRice\ Trade} / \mathit{TotalWorld\ Trade}}$$

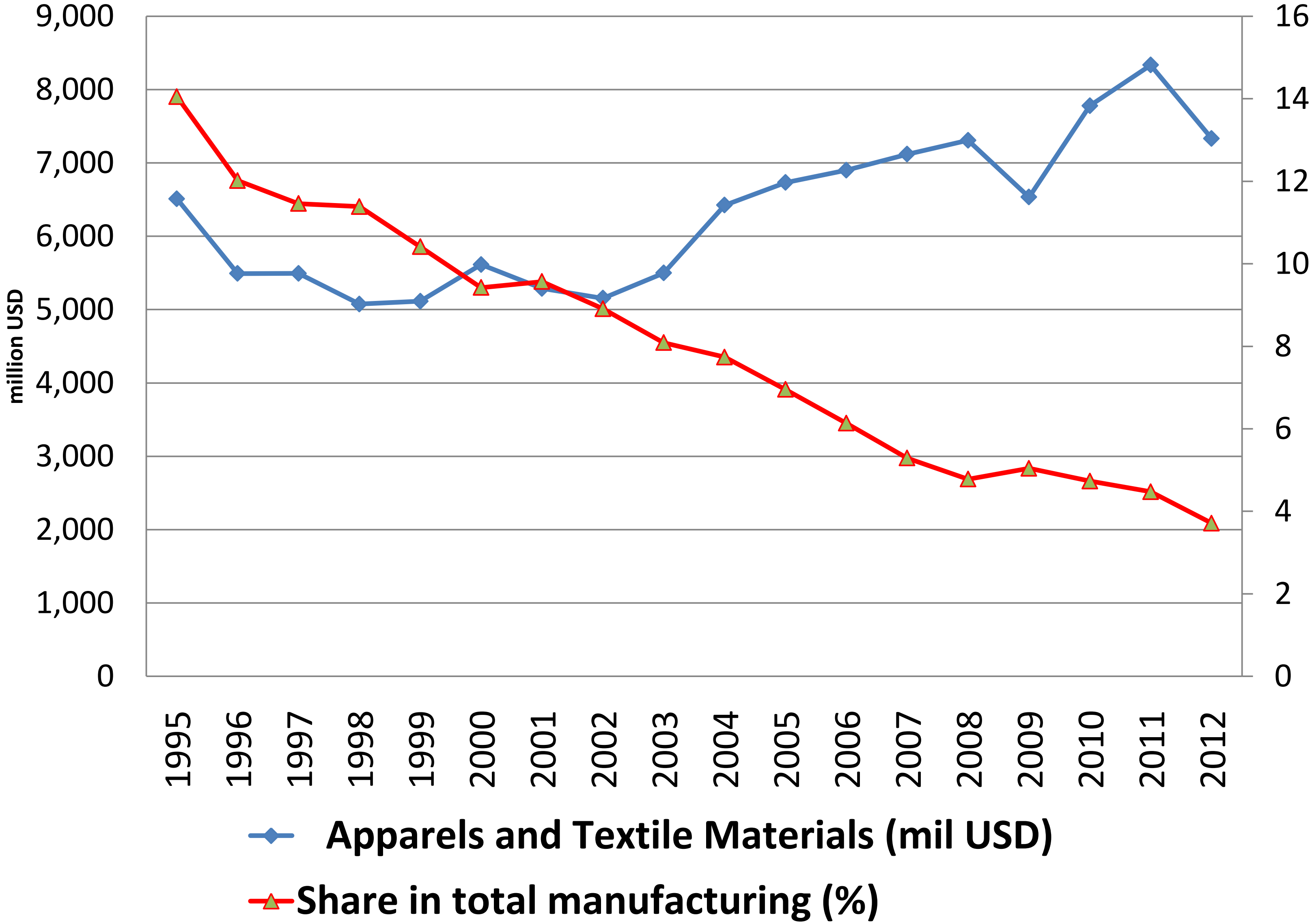


Revealed Comparative Advantage
Balassa Index
4
3.5
3
2.5
2
1.5
1
0.5
0
2001
2002
2003
2004
2005
2006
2007
2008
Carpets and other textile floor coverings
Articles of apparel, accessories, knit or crochet
Manmade staple fibres
Manmade filaments

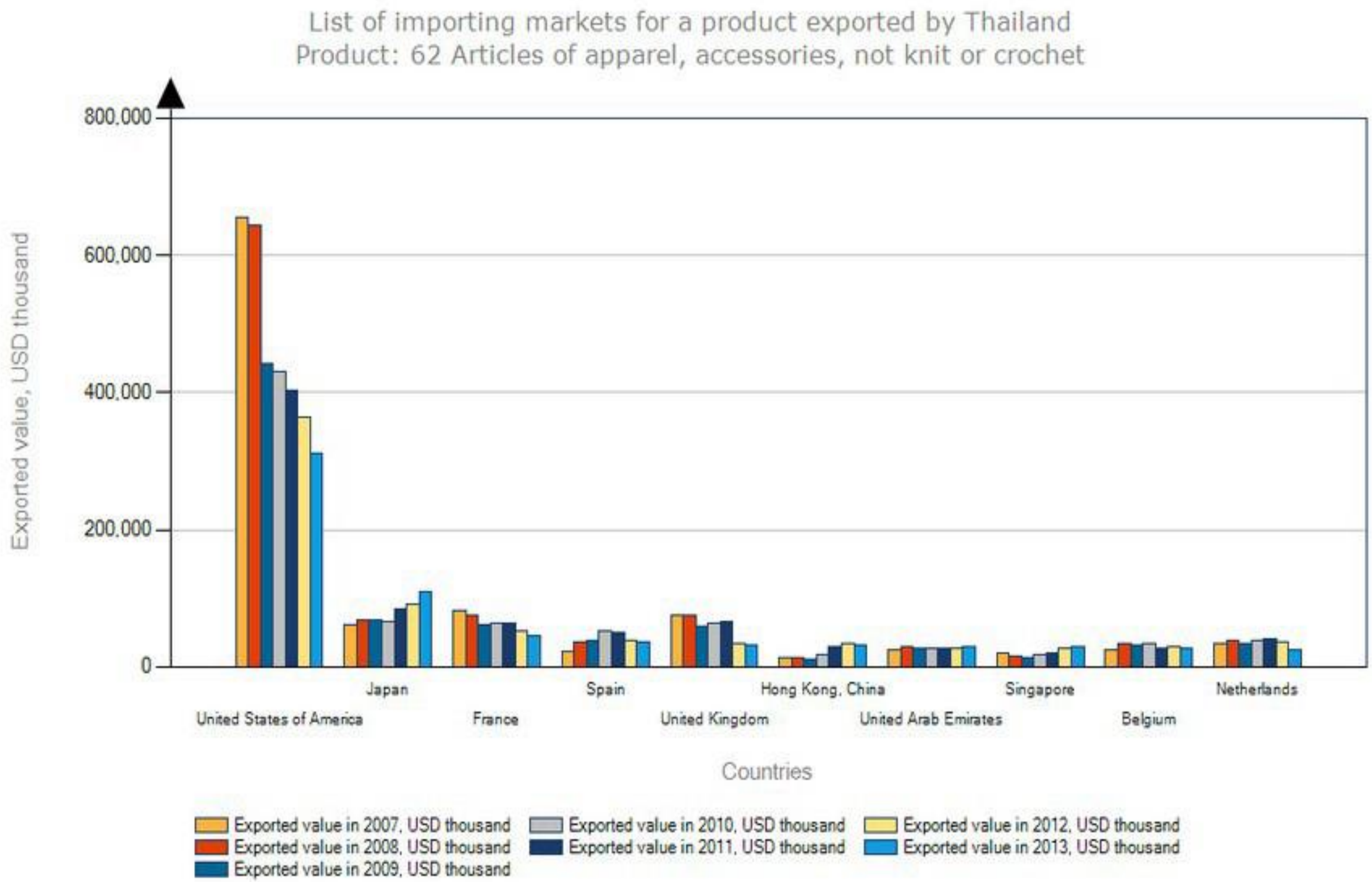
Textile: A retreating industry?

- **The booming garment industry in China had led Chinese producers to focus more on their home market, which would create opportunities for Thai businesses.**
- More than 90% of Japan's garment imports come from China, leaving the Japanese market open if China switches focus away from Japan.

Exports of clothes and textile products



Export Product 62: Apparel 2007-2013



atistics.

How to attract FDI

- Textile production costs in Vietnam were 19.5 per-cent lower than those in Thailand, because of import-duty exemptions for raw materials, cheaper labor and lower energy costs.
- Thai workers in all sectors earn average wages of US$14 (Bt479) per day
- Workers in Vietnam and Pakistan earn the least: $3.7 a day.
- From 2004 to 2006, Vietnam's GDP expanded 8.2 per cent, India's 8.9 per cent and China's 10.2 per cent

More than tax incentives to attract FDI

- China and India, despite having higher production costs and fewer tax privileges than Vietnam, are more attractive than Thailand in terms of larger-sized markets and infrastructure.
- What are factors attracting foreign direct investment?

Research subsidy and product differentiation

- Investment (BoI) has approved incentives for Innovation Textile Research Co for its 20-million-baht investment in a research and innovation factory in Samut Prakan.
- Innovation Textile Research will develop textiles and garments, with distinctive features such as *UV protection, freer air flow and a cotton-like ability to absorb perspiration* easily.
- How about suits made by fabric that can prevent swine flu?
- Technical spillover effects deserve public subsidy.

Thailand: Falling market share in the US market

- According to the Thailand Textile Institute, the market share of Thai-made clothing in the US has been falling steadily and is now 3.4%, down from double digits several years ago, due to intensified price competition from products shipped from China, Vietnam, Cambodia and Bangladesh.

Outflows of FDI

- Myanmar, Laos and Bangladesh are among the countries where the Thai Garment Manufacturers Association (TGMA) is encouraging members to invest
- Of the 1,600 factories in Thailand's garment industry, at least five are moving to foreign countries, where low-wage workforces are plentiful, with planned investments of 200 million baht each.
- Those five are among the 80 large-scale garment factories located in the country.

Countries investing abroad in Textiles and Clothing FDI Outflows

Thai Garment Manufacturers Association (TGMA): labor shortage crisis

- "We would call this period a labor crisis. Right now we have a shortage of 50,000 to 60,000 people in the industry, and it should definitely reach 60,000 by next year," said the TGMA president.
- A main contributor to the shortage is the fact that prices of agricultural products have been increasing, shifting labor from the garment sector to farming.
- Thailand has 400,000 people working in the garment industry.
- Can immigrant workers ease the labor shortage?

Garment industry in Cambodia

- The importance of the garment industry to Cambodia’s economic output is clear: $5.7 billion in clothing and footwear was exported last year, and is a major factor in the country’s official zero percent unemployment rate.

Cambodia's Garment Industry Rollercoaster

- Recently released Ministry of Commerce data shows that garment industry growth has continued its downward trend, shrinking to only four percent in 2014. Compare this with the 35 percent growth of only a few years ago. With the 500 or so factories in Cambodia reporting reduced orders, blame from management has predictably fallen on the wage protests and strikes, which they claim has damaged buyer confidence.
- With the $128 monthly minimum wage now double that of competitor Bangladesh, the sector's ability to compete regionally has been questioned.

Garment Workers (the same every where in the world)

- The slowing growth means less overtime, which many workers rely on to supplement their earnings.
- Compounding the problem is the fact that the wage increase, which took effect on January 1, 2015, was met as expected with raised rents and food costs.
- These two events have effectively negated any practical improvement in the workers' financial situation.

Sweatshop

- With Cambodia’s growing population, and a job market still overwhelmingly linked to manual labor, there are few alternatives for the garment workers.
- Stories of indentured slavery faced by Cambodians in Thailand’s fishing industry certainly seem to reinforce this fact.
- With little diversification of industry on the horizon, the best they can hope for domestically is more support from the government in terms of minimum wage increases and living costs.
- It is unlikely, but not inconceivable, that programs like *Sweatshop* have any effect on consumers, which might drive improvements in wages and conditions from the other side.

Conclusion

- The importance of textiles and clothing industry (mass employment because of labor-intensive technology)
- Competitive characteristics (Market and product diversification)
- Specialization index (RCA Index)
- The role of FDI (outflows vs. inflows)
- Cost disadvantages (wage rate and labor productivity)