

EE460: Thai Textile and Garment Industry

Lecture 16
bhanupong

Outline

- The importance of textiles and clothing industry
- Competitive characteristics
- Specialization index
- Integrated and export-oriented
- The role of FDI
- Cost disadvantages
- FDI outflows
- Japan and the Thai textile industry

Share in the world market

	2006	2007	2008	2009
Textile	1.41	1.50	1.40	1.56
Clothing	1.33	1.19	1.10	1.07

General Profile of the Industry in 2009

Textiles	Textiles		Clothing	Clothing
	(Value)	(Rank)	(Value)	(Rank)
Number of exporting countries for the ranking in the sector	131		126	
Value of exports (in thousand US\$)	3,002,377		3,724,238	
Export growth in value, p.a. (%)	2%	55	-2%	67
Share in national exports (%)	1%		2%	
Share in national imports (%)	1%		0%	
Relative trade balance (%)	22%		81%	
Relative unit value (world average = 1)	1		1.4	

Position in 2009

	Textiles	Textiles	Clothing	Clothing
	(Value)	(Rank)	(Value)	(Rank)
Net exports (in thousand US\$)	1,089,672	10	3,352,351	8
Per capita exports US\$/inhabitant)	44.6	40	55.3	54
Share in world market (%)	1.47%	17	1.19%	16
Product diversification (N° of equivalent products)	81	5	20	54
Product concentration (Spread)		5		51
Market diversification (N° of equivalent markets)	28	1	5	55
Market concentration (Spread)		1		49

Change index (2005-2009)

	Textiles	Textiles	Clothing	Clothing
	(Value)	(Rank)	(Value)	(Rank)
Competitiveness effect, p.a. (%)				
Initial geographic specialization, p.a. (%)	2.31%	43	-1.03%	91
Initial product specialization, p.a. (%)	-0.02%	72	1.33%	33
Adaptation effect, p.a. (%)	-0.85%	75	-1.12%	80
Matching with dynamics of world demand		87		85
Absolute change of world market share (% points p.a)	0.02%	12	-0.07%	116

Average index (rank among 131 exporting countries)

	textile	clothing
Average Index: Current Index	6	19
Average Index: Change Index	79	86

Textile exports to rise 17% in 2010

The Nation, 22 September 2010

- Despite the strong baht and higher raw material costs, Thailand's textile and garment exports this year are expected to reach US\$7.5 billion, thanks to increasing demand, according to the director of the Thai Textile Institute.
- For the first seven months of this year, the sector's exports totalled \$4.26 billion, a 16.2% increase from the same period last year.
- Of the total, \$1.8 billion came from garments and \$2.45 billion from textiles.
- “The value of exports this year should be a lot higher than the \$6.4 billion seen last year. There have been so many orders that we can barely keep up,”
- The demand jump has helped the industry offset higher cotton costs, the result of strong demand in China and India.

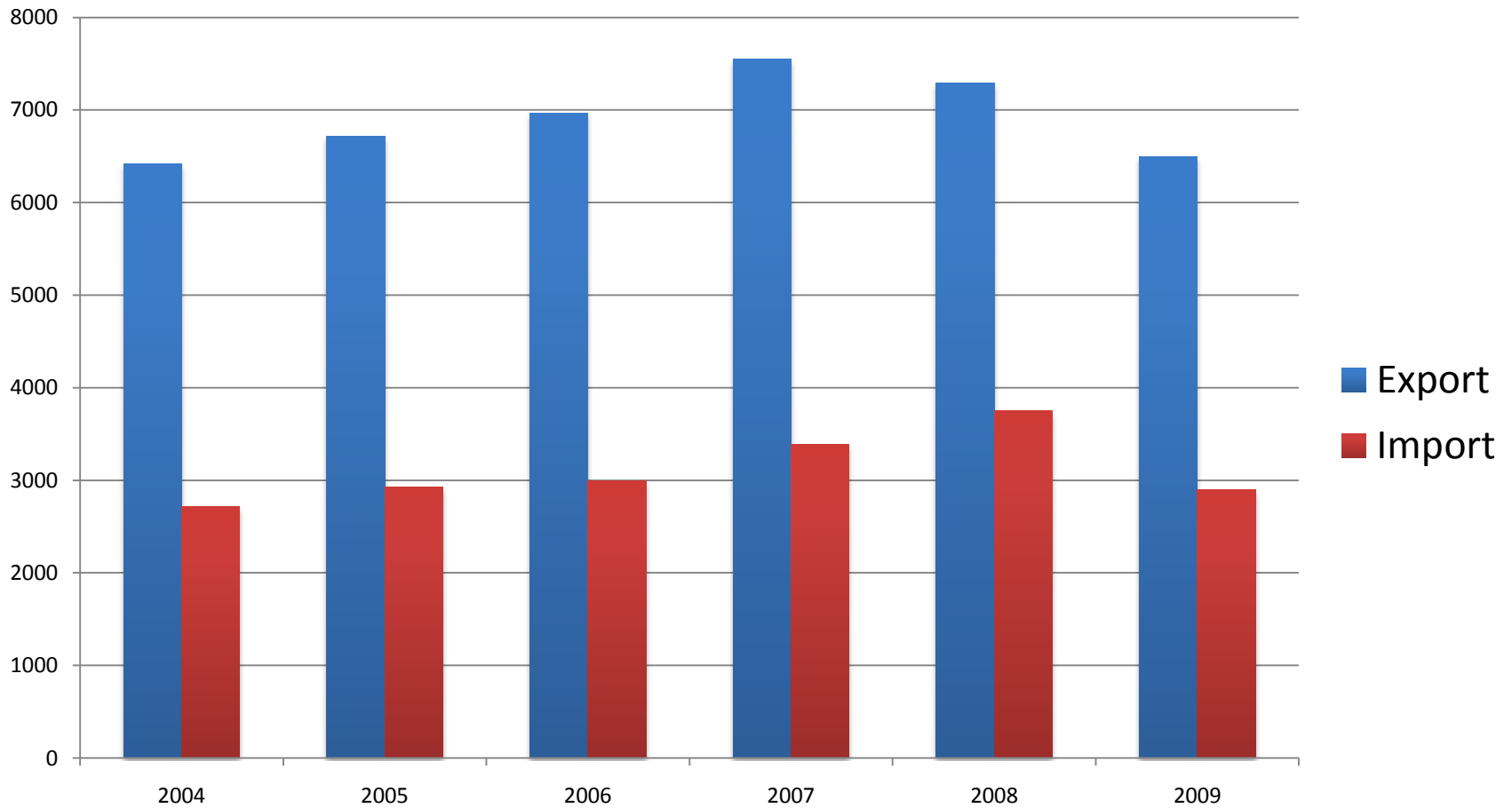
Elasticity of substitution in the demand for factor inputs

- India, the world's second largest exporter, has stopped exporting cotton in order to serve the local market.
- Cotton prices have jumped to a 15-year record at almost \$1 a pound in the New York futures market from 60 cents six months ago.
- Severe flooding in Pakistan, a major producer, has damaged an estimated 2 million tonnes of cotton output.
- "Businesses need to adapt by using substitute materials such as synthetic fabrics,"
- Development in design is essential if Thai businesses are to shift from being original equipment manufacturers to original design manufacturers.
- "Thailand's share in the industry worldwide is only 1.3% of total value of over \$500 billion last year, so we still have a lot of room for growth,"
- Home textiles such as curtains, bed sheets and pillow cases were in high demand, especially in the European market, while medical and agricultural textiles could also compensate for imports.

Its importance

- 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.

Trade balance of Thai textile industry



In 2009, the industry employed more than 1,000,000 workers, or 1 of 5 of the workers in industrial sector.

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

Bleak future?

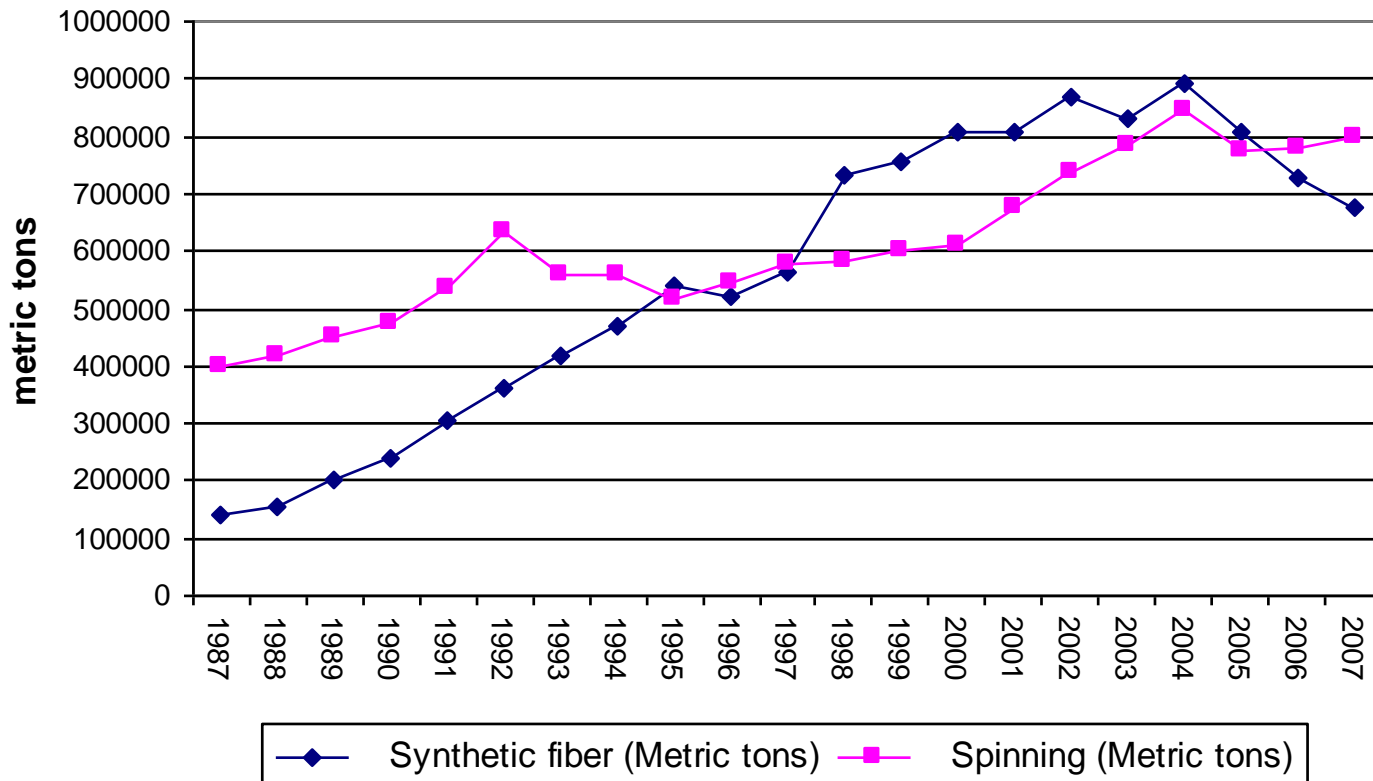
- About 10,000 workers in the textile and garment industry lost their jobs due to closure of 100 factories in the first 10 months of 2008.
- Global economic recession, especially in the United States, as well as Thailand's political unrest have hurt growth prospects for the industry that employs more 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.
- By March 2010, the rate capacity utilization has been rising in response to world trade recovery.

From spinning to 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.

Upstream textile industry

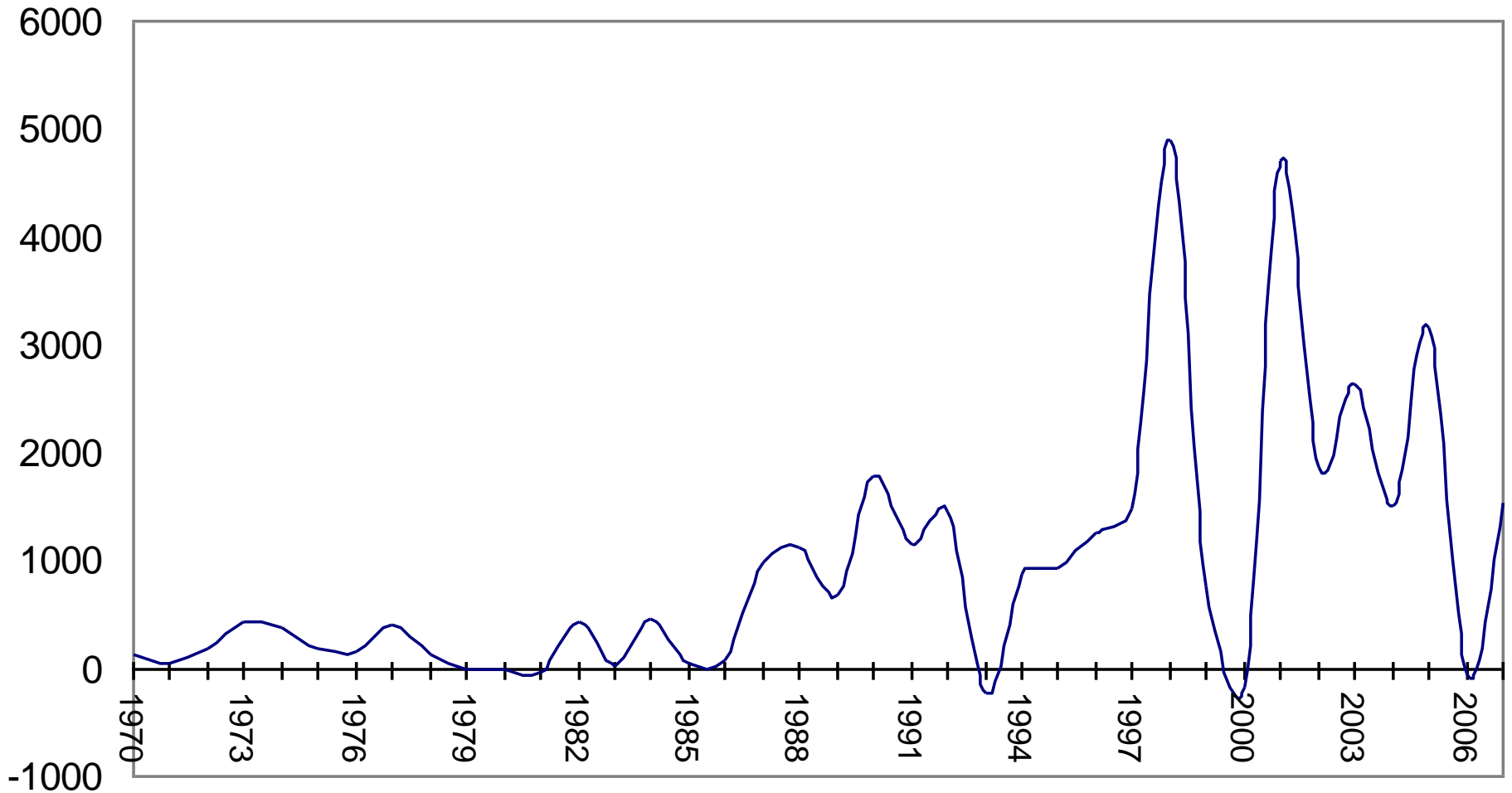
Textile Production



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.

Net FDI in Textile industry (mil USD)
(Equity plus loan from related companies)

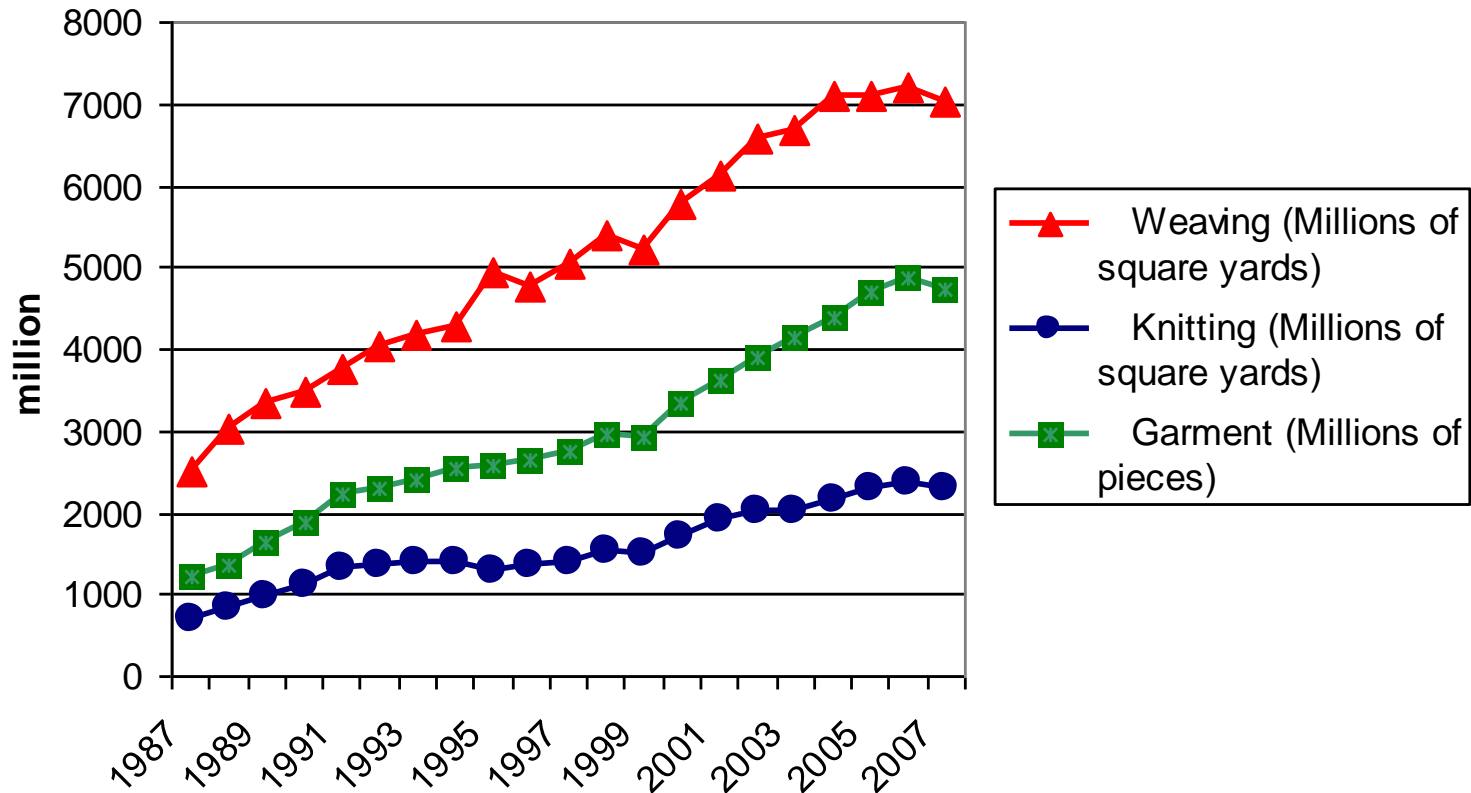


The next production stage

- Thailand is already the production base of upstream and downstream textile industry and what the industry must do is 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

Production of Weaving, Knitting, and garment



Already encountered problems in 2007

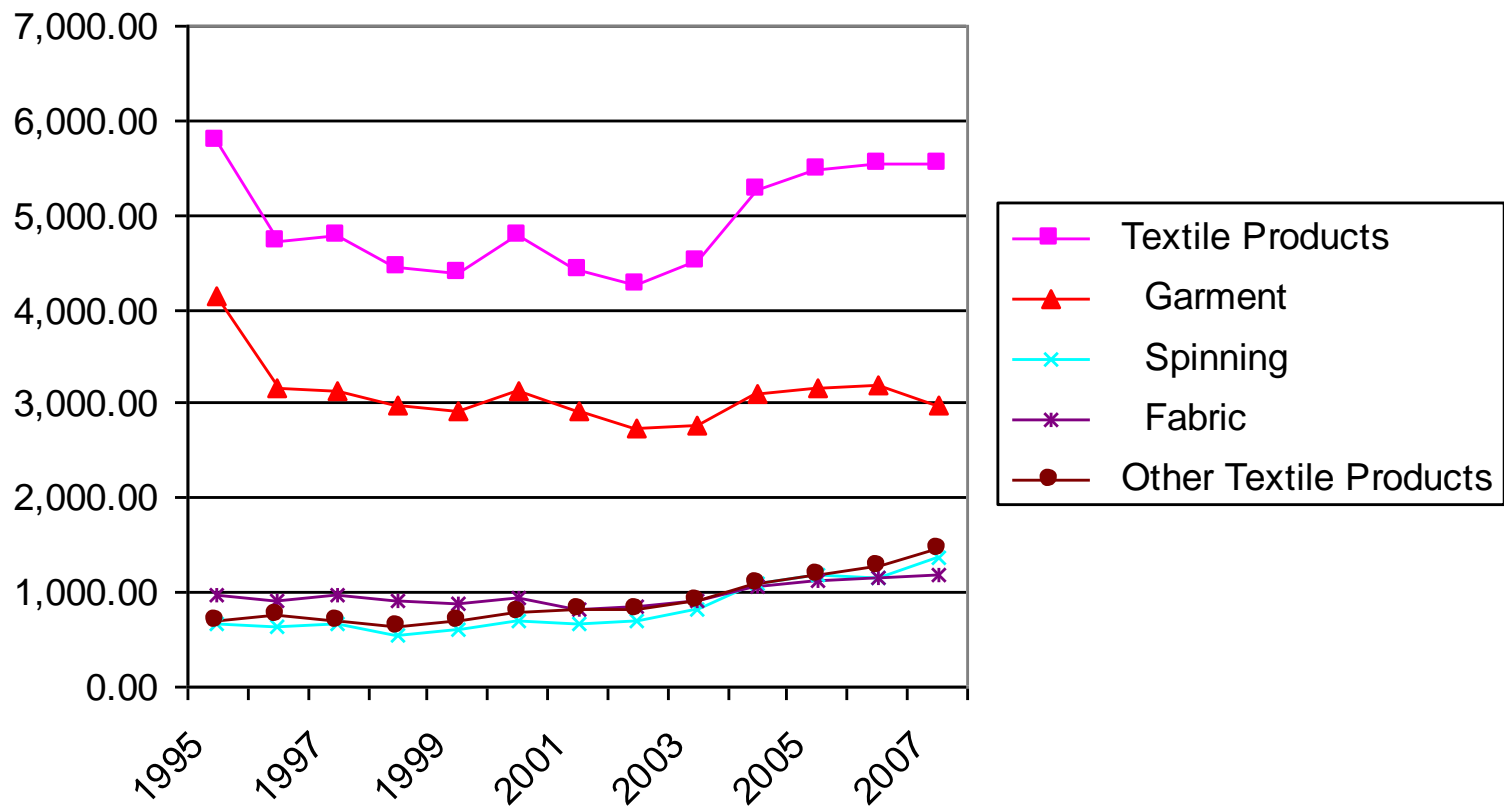
- Textile and wearing apparel industries were severely affected by the currency exchange rate and influx of inferior quality products from China.
- Local producers tried to adjust by cutting costs and focusing more on export markets.

Diversification and mitigation

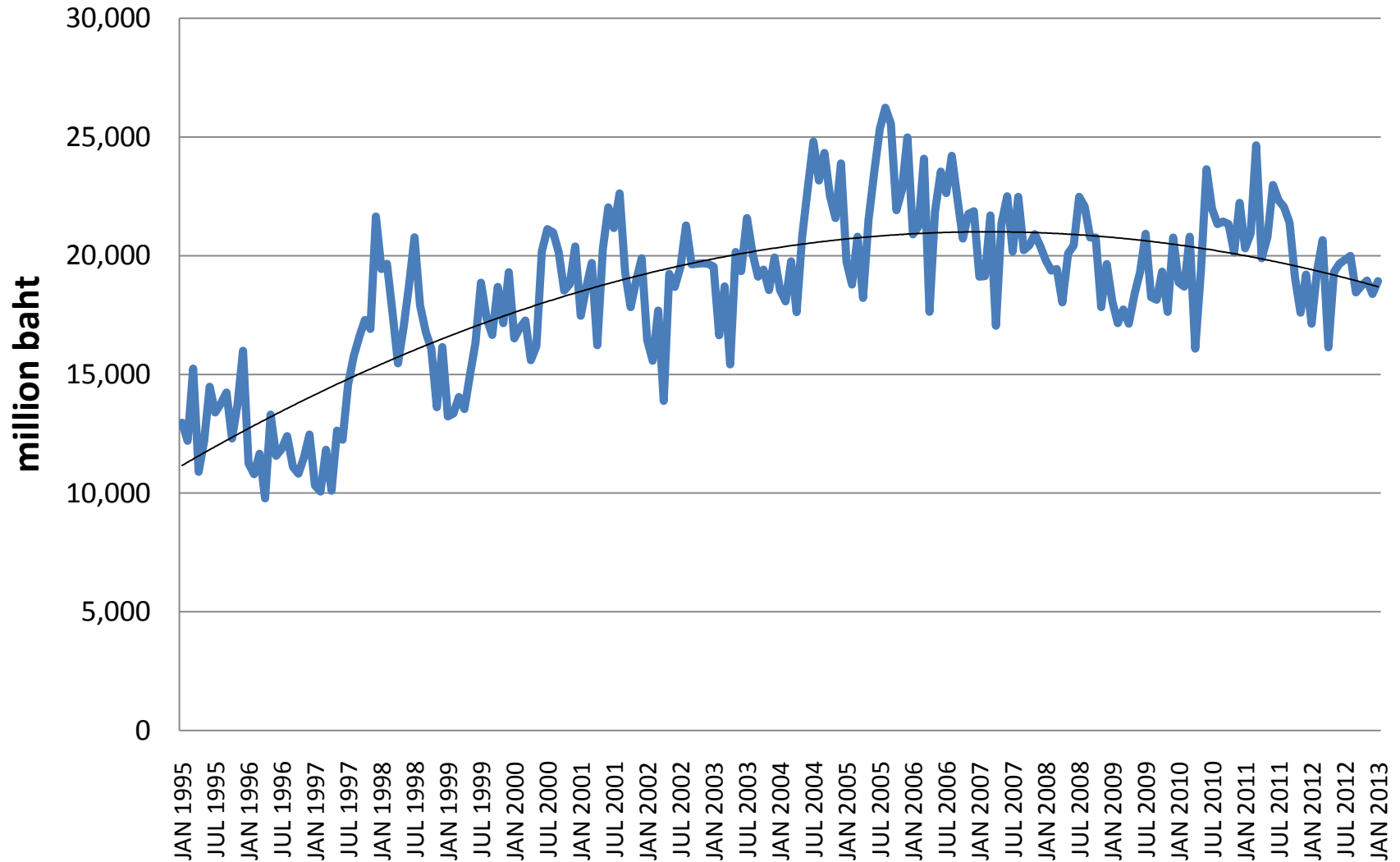
- **Ready-made apparel exports** declined due to the continued baht appreciation and exchange rate volatility, causing exporters reluctance to accept export orders.
- However, **other textile products** grew in 2007: brassieres, girdles and accessories, fabric, yarn and synthetic fiber, household and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

Exports of textile products

Exports of Textile 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.
- More orders came after the Japan-Thailand Economic Partnership Agreement (JTEPA) went into effect on 1 November 2007.
- *Did FTA with India help?*

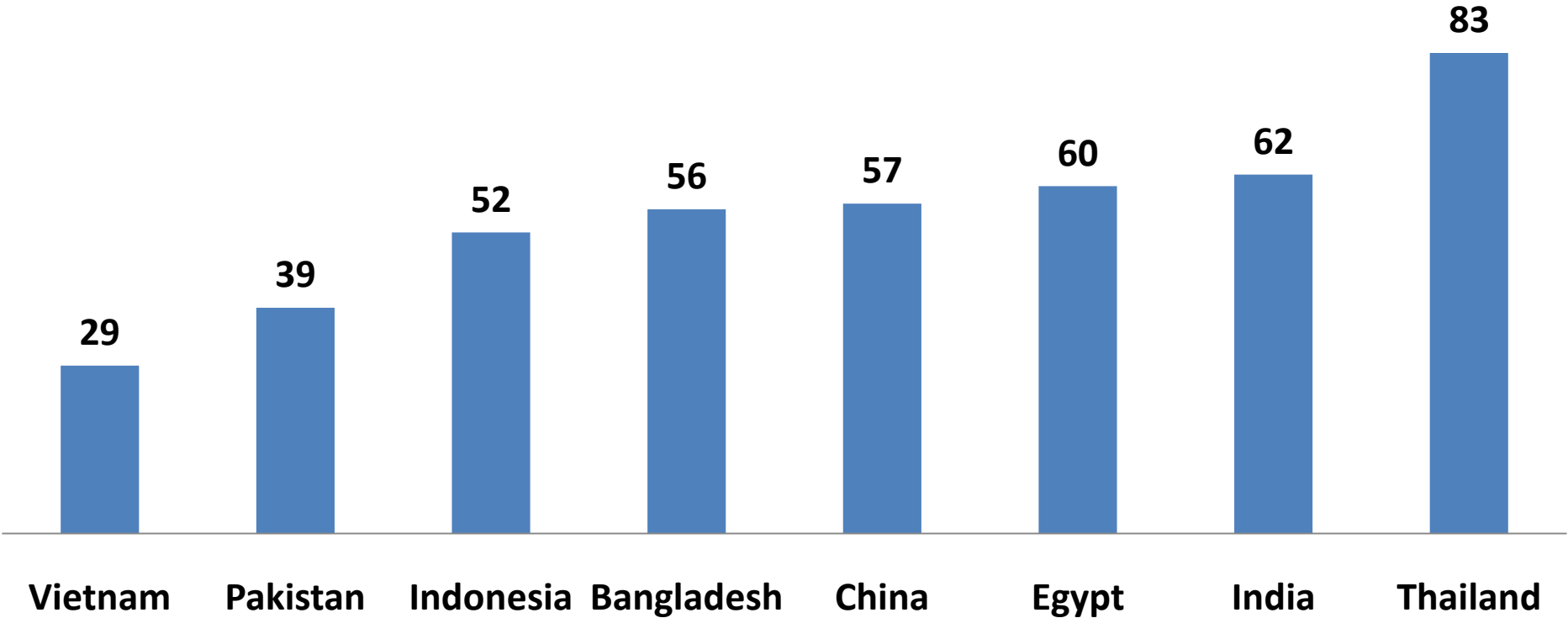
China: Threat and opportunity

- 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.
- There were demand for 101 million Chinese pieces last year and 181 million expected in 2010.
- Demand from ASEAN was expected to be 247 million in 2010, against only 88 million last year.
- But these forecasts were made before the global recession.

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 them enjoy cheaper labor costs than Thailand, and 40-50 per cent carry higher costs.
- Note that quantity demanded depends on both prices and income.

wage rate per hour (US cents)



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 base to neighboring countries

- In Lao, Cambodia, Burma 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 Burma, Lao PDR, and Cambodia.**

Investors' worries

- Drawbacks in neighboring countries.
- Sanctions are imposed on Burma by the United States and the European Union.
- Laos has a population of only 6.3 million, limiting its workforce.

Where the markets are expanding

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.

Major Export Markets

share of Thailand's textile exports

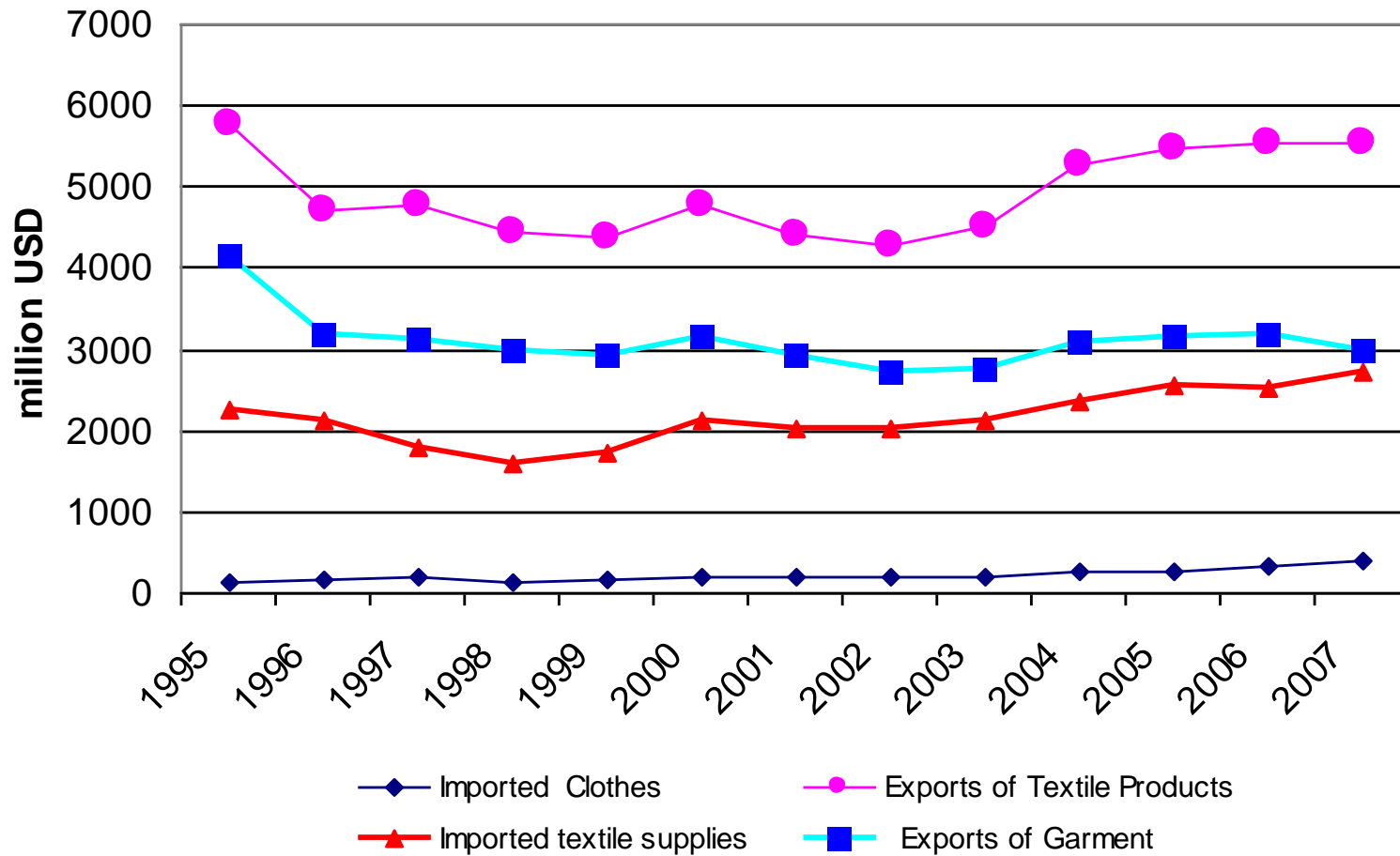
- **The United States: 28.6%**
- **The European Union: 18.8%**
- **Japan imported 5.3%**

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.**
- A small country assumption fits well with the industry.

Imported raw materials

Intra Industry Trade in Textile Products



Where did Thailand import from?

(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

Production 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%).

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.

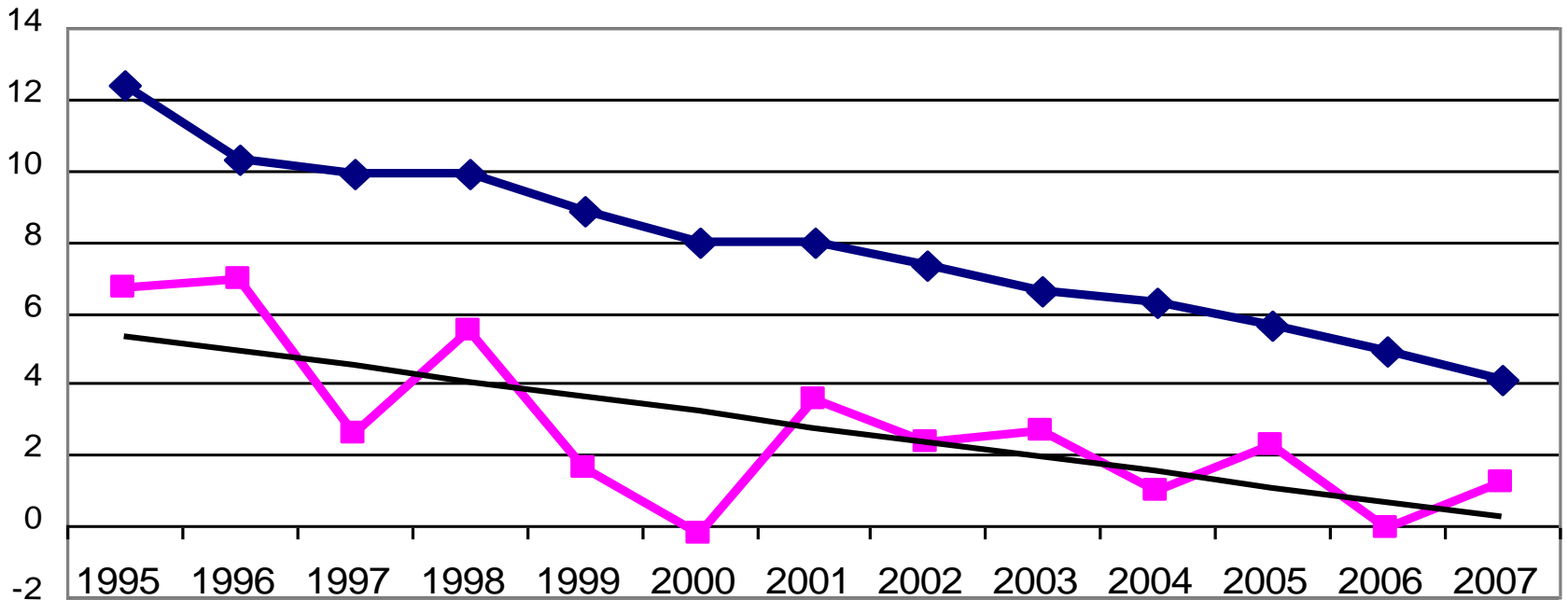
- China, Bangladesh and India are the world's top textile producers and are major consumers.
- Pakistan and Southeast Asia are important and growing players.
- Apart from apparel, a major driver for the industry is demand for “**technical textiles**” or fabrics used in cars, mattress covers, bags, tents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

Importance of textile exports

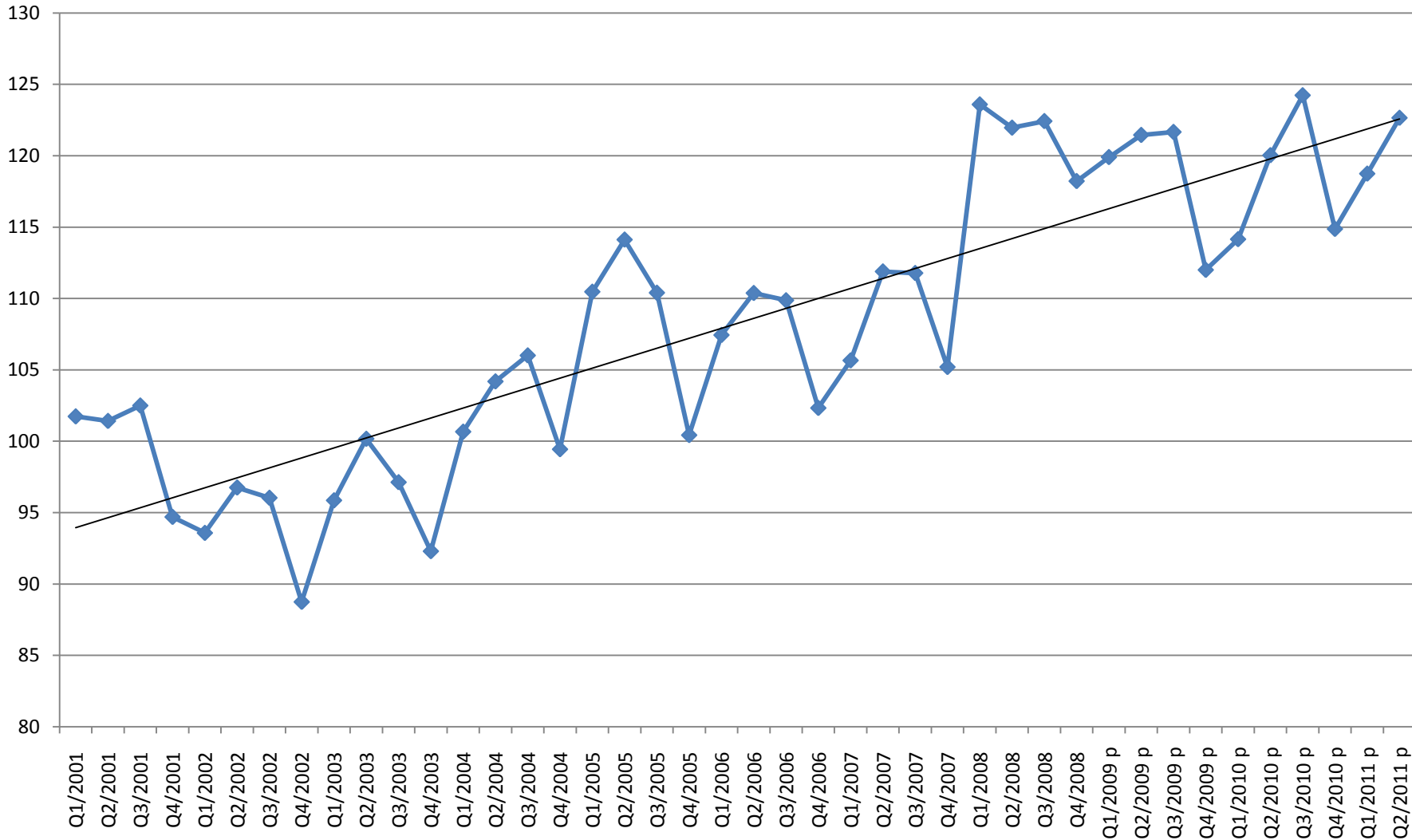
The Future of Textile Industry



◆ share in manufactured exports ■ share in FDI (manufacturing sector) — trend

Unit Labour Cost Index

2001=100



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	0.3

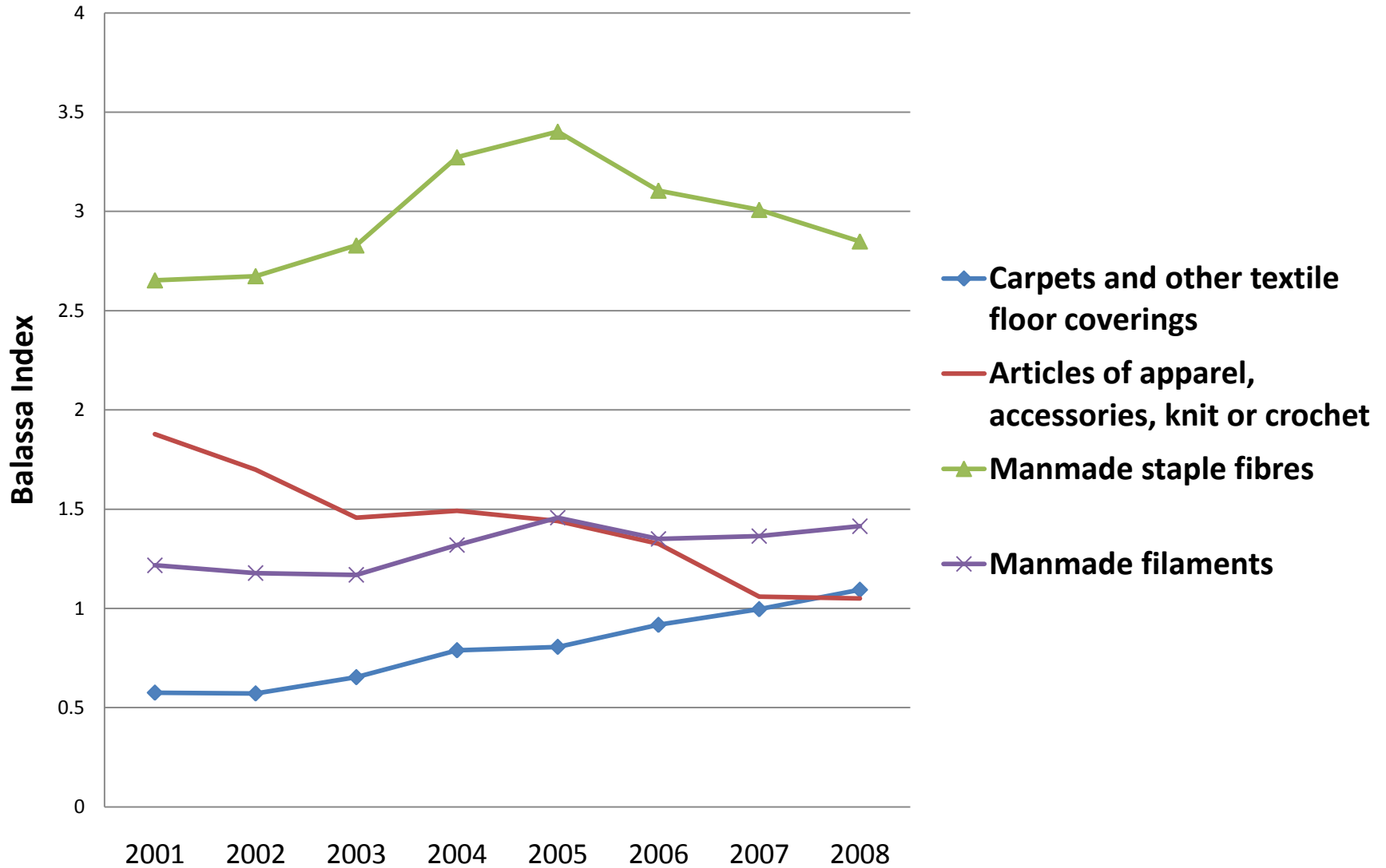
Revealed Comparative Advantage

- **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 $RCA_j > 1$, the country is said to have a *revealed* comparative advantage in industry j , since this industry is more important in the country's exports than for the exports of the world.

Revealed Comparative Advantage



Textile: A falling star?

- **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.

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

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**.

More than tax incentives

- China and India, despite having higher production costs and fewer tax privileges than Vietnam, are more attractive 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 flue?
- Technical spillover effects deserve public subsidy.

R&D and competitiveness

- In the first three years the innovative textile research company plans to develop garments using special materials that can reduce the wearer's urge to smoke.
- It also manufactures fabric used for wound bandages to reduce imports.
- In the future, the company plans to develop and patent garments able to capture solar energy to serve travelers, and license the technology to other entrepreneurs.

Retreat: Falling 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.

The JTEPA

- Thai textile and garment exports to the US were worth US\$1.3 billion in the first 10 months in 2008, down 10% from the same period in 2007,
- The industry has done well in Japan and Asean markets, thanks to tax privileges under the Asean Free Trade Area (Afta) and the Japan-Thailand Economic Partnership Agreement (JTEPA).
- Shipments to Japan rose 30% year-on-year to US\$179 million for textiles and \$228 million for garment.
- The sector earlier expected export growth in range of 10-12% in 2008 from \$7.55 billion in 2007, but minimum growth of 10% was unlikely to be achieved.

Distance matters

- Japan currently imports 84% of its garments from China due to the short transport distance, the abundance of raw materials and cheap labor.
- However, this is going to change because Japan believes it is risky to invest so much in China.
- In order to increase Thailand's garment market share in Japan, Thai business operators need to understand Japanese garment trends

- Japan's Ministry of Economy, Trade and Industry provided a budget of 11.5 million yen to support advisers to come to Thailand and offer help to factories.
- Japan currently imports \$22 billion worth of garments, but only 1.2% or \$270 million from Thailand.
- The number is expected to increase to 5% by 2012, which will increase Thailand's exports to Japan from 8% to 30% of the total garment market, or 1.1 billion baht.

- The textile industry has performed relatively well in 2008 with export growth of 7% expected for textile exports and 5% for garments.
- But the market would be tougher in 2009 with the possibility of deflation and stiff competition pushing down prices of products by 20%.
- The economy of the US bottomed out at the end of 2009 but would take up to five years to fully recover.
- Household saving rate started to rise sharply from -1% to 6%.

Plea to bad consequences

(An example of illogical arguments)

- Thai Garment Manufacturers Association, called on the government to inject funds to increase domestic liquidity flow, saying the industry expected to see significant layoffs in 2009.
- To weather the crisis, Thai manufacturers must focus more on the growing Asean and Indian subcontinent markets, which each account for 9% of the industry's total exports.

- The garment industry is expected to decline by 10% from last year with a value of US\$3.3 billion
- Although orders in the fourth quarter of 2009 will come from Europe and the United States, the industry is expected to grow by 5% next year and will focus on Japan.

Garments

- Thailand's garment exports were not particularly focused on Japan in the past, since most of the orders were small lots, and that Japan was serious about high-quality products.
- The garment industry in Thailand sees no future or prospect for new investment due to severe labor shortages, with all eyes on investments in neighboring countries with cheaper labor for producing exported goods.

Outflows of FDI

- Burma, 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.

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?

Attractiveness of the Thai industry

- Japanese textile and garment investors are showing a growing interest in relocating their production bases to Thailand after the emergence of labour strikes in China, according to the Commerce Minister.
- But Japanese companies also had other choices including Vietnam, Indonesia and Bangladesh.
- Factory workers in China have become increasingly bold in demanding better pay and working conditions as they become more aware of their rights and the growing labour shortage in some cities.
- The result has been a rise in industrial unrest at both foreign- and Chinese-owned factories.

Obedient workers?

- Chinese clothing and textile mills have also witnessed several strikes in recent months. Wantai Group in Zaozhuang, Shandong province was affected by a collective labour strike, while workers from Pingdingshan cotton factory protested for better salaries.
- Hundreds of Chinese workers at a Japanese electronics plant and a Toyota auto parts supply factory in Tianjin also went out on strike in August 2010.
- Out-sourcing vs. in-sourcing?

View from the JTF

- The president of the Japan Textile Federation (JTF) said recently in Tokyo that Thailand has greater competitive edge over those candidates given superior production skills, color expertise, and design.
- Thailand is also well prepared with integrated supply chains that cover upstream, midstream and downstream and has greater competitive edge on geography, logistics and human resources.
- The textile industry is seen as having made the most progress among industries for which tariff cuts were agreed under the Japan-Thailand Economic Partnership Agreement (JTEPA) which took effect in November 2007, as the Japan Textile Federation has actively helped Thai operators with market access and technical co-operation.

North-south, South-south, and South-north investment

- The Thai textile industry desperately needs to upgrade to become a trendsetter in Asean if it really aims to attract more Japanese investment.
- The Thai government itself must also ensure that investment promotion policy will continue even if the government changes.
- For the first six months of 2010, Thailand's exports to Japan were worth US\$9.39 billion, a rise of 32% from the same period last year.