

## Paradigm Change in the Asian Fashion Industry: In terms of Production, Consumption and Trade

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### Abstract

This study focuses on apparel production and consumption trends in major Asian economies in order to understand a paradigm change in the Asian fashion industry. A comparison of trade among ASEAN, NICs, and developed countries shows the changes that have occurred in terms of production and consumption of fashion products before and after 2000 in Korea, Hong Kong, and China. The flow of imports and exports in the apparel industry was analyzed using UN trade statistics data. The results found a change of industry structures in Asian NICs and ASEAN countries. Garment production bases have moved to lower cost regions like China and ASEAN; in addition, NICs sent a part of their export business in the fashion industry to ASEAN countries. The Asian fashion industry has transformed from a production base for developed countries into a consumption market with the emergence of newly industrializing economies.

### Keywords

NICs, ASEAN, apparel trade, fashion industry, imports, exports

## Introduction

The apparel industry is global, patterned with surging cross-border production and subject to accelerated trade flows. The increased importance of globalization and trade liberalization has brought intense recent challenges to the apparel industry of developed countries (Wong & Au, 2007).

The Asian fashion industry has gone through additional changes since the year 2000. Globalization, trade liberalization, and developments in information and communication technology are major factors behind the changes. First, the development and expansion of information and communications (including the Internet) is homogenizing consumer preferences and lifestyles around the world, which have internationalized the fashion market. Moreover, the trade environment of the Asian fashion industry has gone through changes with the expiration of the Multi Fibre Agreement (MFA), increase of free trade agreements (FTAs), and introduction of new trade barriers from developed countries (including environmental regulations) since the start of the World Trade Organization (WTO). In particular, the spread of information and communication technology is a major factor behind changes in the worldwide production and consumption paradigm. The fashion industry in developed nations

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has regularly moved its production base towards low-wage workers. Global fashion trends and consumption are going through faster changes with the; subsequently, the market is implementing a new system for faster production and supply.

The fashion industry in Asia is going through significant changes as well. In terms of trade, the economy of scope and scale has gained more importance (Hassler, 2003; Reimer, 2009), and lead time and location proximity have also become more important (Wong & Au, 2007). The paradigm of the Asian fashion industry has changed and NICs (including Korea, Hong Kong, and Taiwan) have played important roles in garment manufacturing since the 1980s and have become emerging markets. China is leading production with its current high economic growth. Southeast Asian countries have also been rising as emerging manufacturing regions due to their low-wage labor markets. The signing of free trade agreements has reorganized the structure of the Asian fashion into a new economic bloc .

The massive outward movement of garment investment to mainland China and Southeast Asia from Taiwan, including the transition to least developed countries (LDCs) that started in the late 1990s, has facilitated the shift towards a capital-intensive textile sub-sector in the overall industry. The share of production of woven textiles and garments in Taiwan has shown a falling trend and the share of synthetic fibers in overall production rose from 2000 to 2007 (Chiu, 2009). Similar events have also occurred in China. The effect of China's competitiveness in textile exports has been significant toward other Asian economies, whereas China's clothing exports had a smaller impact on other Asian suppliers (Amann *et al.*, 2009). Arnold and Shih (2010) reported that China and Vietnam have been considered primary competitive threats to Cambodia's industry since 1999. The sluggish economy of advanced nations since the global financial crisis has increased the importance of emerging markets. The share of Japanese exports to Asia is growing (Kim, 2011) and the Korean fashion industry is also pursuing a globalization strategy to cooperate with and assist countries in Asia as a part of its efforts to become a leader in the Asian consumption market (Lee, 2005).

What kind of changes has the Asian fashion industry seen along such external environmental changes? Asian economies have an important role in the global fashion industry and the structure

of their roles has changed; however, previous studies have been limited to the competitiveness of the Asian fashion industry as compared to advanced economies or comparative countries. From a macro perspective of the economy, this study is to understand the paradigm change in the Asian fashion industry by focusing on apparel trade flows in major Asian economies such as Korea, Hong Kong, Japan and China. This study examines the paradigm shift of production and consumption in the Asian fashion industry as facilitated by external changes over time. A comparison of trade flows among ASEAN, Asia NICs, and developed countries will provide practical information on the changes that have occurred in terms of production and fashion product consumption before and after 2000.

## Literature Review

### Changes in the Fashion Industry under the Acceleration of Globalization

The apparel industry is characterized by market instability due to seasonal factors and changing demand for apparel products. The life cycle of fashion products has become shorter and on-time supply has become an essential factor in production. Under liberalized trade, Asian countries are called to open their markets to the EU. These phenomena have resulted in the issues of the higher flexibility, reduced lead time, and location proximity for Asian developing countries (Wong and Au, 2007).

In terms of global trade, the apparel industry depends on an economy of scope or scale. It could be generally argued that higher fashion standards have led to shorter product life cycles for garments and a higher requirement for economies of scope to maintain competitiveness. High fashion clothing segments require higher production cost and higher time intensity; consequently, low fashion clothing segments need lower production cost and have to achieve relatively high economies of scale (Hassler, 2003; Reimer, 2009).

The global sourcing of fashion products is part of a complex supply chain that includes economic agents such as suppliers for the upstream market of fiber, textile, fabric and raw material, and the downstream market of cutting, sewing and finishing processes, buying, marketing brands, and retailing. These economic agents are

generally spread all across the world. The perspective of a global supply chain has emphasized the need to look at the geographical spread of production arrangements as well as organizational scope (Jin, 2004). Developed and under-developed countries have formulated collaborative relations and have engaged in the division of labor. Their relations are based on a vertical hierarchy, and trademark owners and large retailers in developed countries possess the control power (Hassler, 2003; Gereffi, 1999; 2001). Hassler (2003) mentioned that the driving force in the supply chain is the owner of the brand name under which the garment is sold and marketed, rather than the manufacturer of the garment. Natsuda *et al.* (2010) also referred that the global value chains are buyer-driven, and that governance is exercised at the retail end, which are global buyers and international trading companies that coordinate global garment production in relation to final customers and the local industry in developing countries.

According to many mainstream economists, the labor-intensive and low-technology base of garment manufacturing is suited to meet the endowments of early economies. Moreover, they represent an ideal platform for early developers to promote industrialization (Kelegama, 2009). The textile industry is important for developing countries due to its high employment potential and ease of establishment with a limited amount of investment (Leseure *et al.*, 2009). The EU clothing industry has faced a massive inflow of low-price clothing products from developing countries and seeks to restructure its industry in response to the delocalization of clothing production sector. Delocalization pattern: Western European firms have shifted sourcing from the first-tier countries (e.g. Poland and Hungary.) to lower-wage second-tier clothing suppliers (e.g. Romania and Turkey) in the Committee of European Economic Cooperation (CEEC) and North African regions. Subsequently, less-developed second-tier countries have greater significance in EU clothing import markets with the popular practice of OPT flows (Wong & Au, 2007).

#### The Role of NICs and ASEAN in Asian Fashion Industry

From the 1970s to the 1990s, the Newly Industrializing Countries (NICs) of Hong Kong, South Korea, and Taiwan were the big three exporters of textile and clothing to developed countries (Jin, 2004). The Association of South-East Asian Nations

(ASEAN) is made up of Brunei, Cambodia, Indonesia, Laos, Malaysia, Singapore, the Philippines, Thailand, Vietnam, and Myanmar. In many ASEAN countries, the garment industry has developed through foreign direct investment from NICs and China. The biggest textile-producing countries are currently in East and South Asia, including China, India, Pakistan, Bangladesh, Korea, Taiwan and Vietnam (Leseure *et al.*, 2009).

NICs are part of the 'triangular manufacturing' model in the global apparel value chain. Under this arrangement, U.S. buyers place orders with the manufacturers in NICs and subcontract the requested production to factories in lower-wage locations such as China, Sri Lanka, and Indonesia to reduce production costs. Global buyers devolve sourcing to well-established international garment manufacturing companies from NICs, and these companies operate in a variety of countries and are considered by some commentators to have considerable market power (Natsuda *et al.*, 2010).

Since the 1990s, triangular manufacturing has allowed NICs to move beyond OEM production and into a facilitator role in organizing global production that is considered an asset in the buyer-driven supply chain. Asian NICs are not directly involved in manufacturing but have become buying offices or trading companies (Jin, 2004). East Asian NICs have moved to capital and knowledge intensive industry that features nano-materials, quick response and marketing know-how. The massive outward movement of garment investment from Taiwan to China and Southeast Asia, including the transition to least developed countries (LDCs) from the late 1990s, has facilitated the shift towards the capital-intensive textile sub-sector in the overall industry. The share of woven textiles and garments in the overall production of textile and garments in Taiwan has decreased, as opposed to the rise of synthetic fibers from 2000 to 2007. Chiu (2009) mentioned that changes or growth of specialized garments and textiles were reflected in the trade structure of the industry. The biggest textile producing countries still remain in East and South Asia including China, India, Pakistan, Bangladesh, Korea, Taiwan and Vietnam (Leseure *et al.*, 2009).

Previous studies have discussed how the Asian garment industry can maintain global competitiveness in the post Multi-Fibre Agreement (MFA) era (Natsuda *et al.*, 2010; Ofreneo, 2009; Thee, 2009; Ahmed, 2009; Rasiyah, 2009). The MFA aimed to

restrain exports from NICs and Asian developing countries to developed countries (Heron, 2006); consequently, Asian countries with a small fashion industry (such as Bangladesh) have grown rapidly under the umbrella of the MFA import quota and with an abundant supply of low-cost labor (Comino, 2007; Ahmed, 2009). Rasiah (2009) suggested that textile and garment firms in Malaysia follow a path previously taken by industrial nations, who reached the technology frontier in textile and garment manufacturing (e.g. Italy, Britain, USA, Germany, Japan, Taiwan and Korea). This path inevitably drives a further contraction in employment but should support the evolution of high value-added textile manufacturing.

We can formulate assumptions about the trade shift between NICs and ASEAN based on recent changes and literature suggestions. Labor costs in ASEAN have steadily increased, but are still considered one of lowest labor costs in the world. Low labor costs improve price competitiveness in apparel production and lead to an increased production by ASEAN. NICs price competitiveness in apparel production has shifted to ASEAN countries as they provide cheaper labor than NICs. The structure of import and export in NICs has changed as well due to the trade rearrangement that has occurred between ASEAN and NICs. The change evokes NICs to move part of their apparel exporters to Southeast Asia. This study focuses on the trade shift of Asia NICs through a comparison with ASEAN and advanced countries.

### China Effect on Global Fashion Industry

The absence of the MFA requires that smaller developing countries now have to compete with the world's most competitive T&C exporters. Regional preferential trade arrangements remain another trade barrier for competitive Asian T&C exporters (Ahmed, 2009). The global clothing market is expected to revert to liberalized trade after 2005 with the ending of the ATC; consequently, most Asian countries expect to have free access to developed countries (Wong & Au, 2007). Restrictions such as the rules of origin, selective safeguards, environmental regulations, and FTA still exist in the post-MFA era. For example, the FTA between Korea and ASEAN went into effect in 2007.

Recent studies refer to the China effect, which has been crucial in the Asian fashion industry since the end of the MFA (Amann *et al.*, 2009; Comino, 2007; Arnold & Shih, 2010; Haar, 2011).

Comino (2007) suggested that China's key advantage in the T&C sector lies in its vertically integrated structure, which can carry out all stages of production and is not dependent on importing raw material like other producers. China is no longer a cheap labor country compared to its Asian competitors; however, China offers price value from the perspective of productivity, reliability and indirect costs. Chinese firms have been preparing for the end of restrictions through massive investments in new machines and improved infrastructure that will enable it to immediately increase exports as soon as quotas disappear.

Ofreneo (2009) illustrated in that the Philippine garment and textile industries were in crisis before the end of the MFA in 2004 and would be uncompetitive in a global market dominated by full-package producers such as China and India. In Philippine and Indonesia, after the Asian economic crisis, garment exports also declined because of weak competitiveness from other developing countries, particularly China and Vietnam (Thee, 2009).

China's rapid economic growth has focused the attention of global fashion retailers on the consumer market. The growth of China has accelerated the speed of the Asian market transition into a consumer market. Numerous global brands are expanding into the Asian market adjacent to China. The center of global fashion consumption has shifted toward Asia, which was previously known as the center of fashion production.

The changes of trade flow in Asia economies have been influenced by FTA and MFA regulations, labor development costs, and technology. Numerous external factors have resulted in the change of trade structures; however, previous studies have focused on specific economies, factors such as financial crises that led to current changes and FTA for the production of garment and textiles. Asian economies need to analyze the changes of the trade structure in the fashion industry based on a macro perspective of economic changes; consequently, a longitudinal approach of trade changes can offer primary information on predicting future changes in Asia economies.

This study explores the evolution of trade in Asia economies over time. The research questions were as follows. First, "How has the trade structure of fashion industry in Asian economies changed since 2000?" It is expected that due to price competitiveness, production base has been moved from NICs to ASEAN countries

that their labor costs are lower than NICs. Products from NICs are now mostly exported to Southeast Asia, whereas such products in the past were mostly exported to developed economies. Second, "Have Asia economies turned into fashion consumption markets?" It is assumed that developed economies have increased dependency on exports to NICs and China; consequently, China has been in the lead since 2000. This study focused on the role of NICs previously regarded as the center of fashion production that has now changed as into global consumption markets.

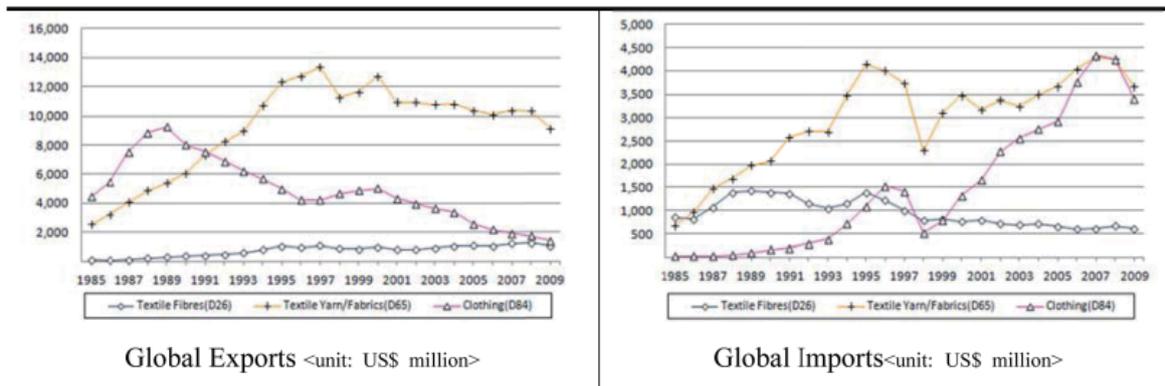
## Method

### Data Collection

Secondary data based on the inward and outward trade of fashion products were collected to analyze the flow of resources in Asia. All export and import statistics data between 1985 and 2009 were extracted from UN Commodity Trade Statistics Database (<http://comtrade.un.org>). To confine the scope of the fashion industry, UN statistics data were used for all of the three Divisions related to apparel in the second revision of SITC. It was also included in Division 26, which consists of non-manufactured textile fibers and waste. Division 65 consists of textile yarn, fabrics, and made-up articles and Division 84 consists of clothing. The data was extracted by each country unit.

All inward and outward trade in Korea was extracted by three SICT Divisions (Table 1). Korea showed a steady increase in the export of fibers, but a downward trend in the export of fabrics after the 1990s. Clothing exports have dramatically decreased since the peak of 1989. The global imports graph showed that Korea

Table 1. Global Exports and Imports of Korea



recorded a huge increase in the imports of both fabrics and clothing products.

To analyze the changes of trade flows among economic blocs, Asian countries were categorized into NICs and ASEAN. Hong Kong, South Korea, and Taiwan were included as NICs. However, the Chinese fashion industry has grown rapidly and become a newly emerging country for trade and requires its inclusion in the analysis. Taiwan was a part of the NICs; however, it was excluded from the analysis because secondary data were limited to only collect and identify those in China for the targeted period. The three countries were presented separately in order to compare data.

A total of 10 ASEAN member nations including Brunei, Cambodia, Indonesia, Laos, Malaysia, Singapore, the Philippines, Thailand, Vietnam, and Myanmar were grouped. Buying countries for Asia-manufactured products included developed countries such as North America (U.S. and Canada), EU12 and Japan. Data for ASEAN and developed economies were also extracted by each country unit and summated by economic bloc.

### Data Analysis

To test the research questions, trade value, trade balance, and G-L index were calculated based on extracted data between trading partner nations. To estimate the amount of trade balance by country, this study subtracted the total exports from imports between comparable countries in the fashion industry including fiber, textiles and clothing.

Intra-industry index was estimated by measuring the G-L index to investigate the structure of intra-industry trade. The G-L index was introduced by Herb Grubel and Peter Lloyd in 1971 to

measure the intra-industry trade of a particular product. If the value of GLi is 1, it means that there is only intra-industry trade, but no inter-industry trade; conversely, if value of GLi is 0, there is no intra-industry trade, but only inter-industry trade.

$$GLi = \frac{(Xi + Mi) - |Xi - Mi|}{xi + Mi} = 1 - \frac{|Xi - Mi|}{Xi + Mi} ; 0 < GLi < 1$$

Where, Xi denotes the export, Mi the import of good i.

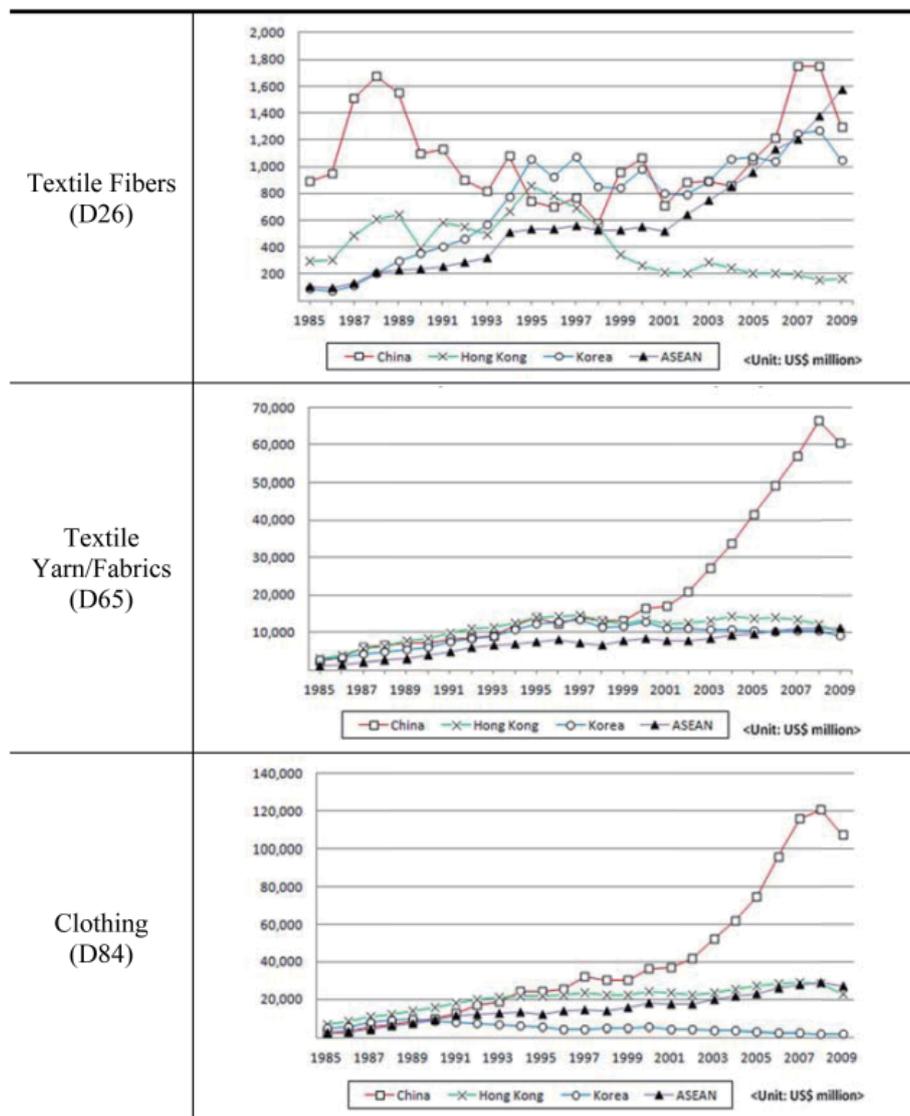
## Results and Discussion

### Changes of Trade Structure in Asia Economies

To investigate shift of apparel production bases in Asia, this

Table 2. NICs and ASEAN's Global Exports by Fiber, Textiles, and Clothing

study compared the export values of three Divisions (Divisions 26, 65 and 84) based on SITC Rev. 2 between NICs and ASEAN. A comparison of each NIC's global export with total ASEAN's exports indicated that ASEAN and Korea reported a steady increase in the global export of fibers (Division 26), but Hong Kong showed a decrease of its fiber exports from the mid of 1990s while China's exports increased (Table 2). It can be inferred that China and Hong Kong are engaged in a very close complementary relationship and division of labor. China reported a dramatic increase in global exports of fabrics and clothing products after the mid of 1990s while ASEAN showed a steady increase. The findings imply that in a close relationship with China, Hong Kong



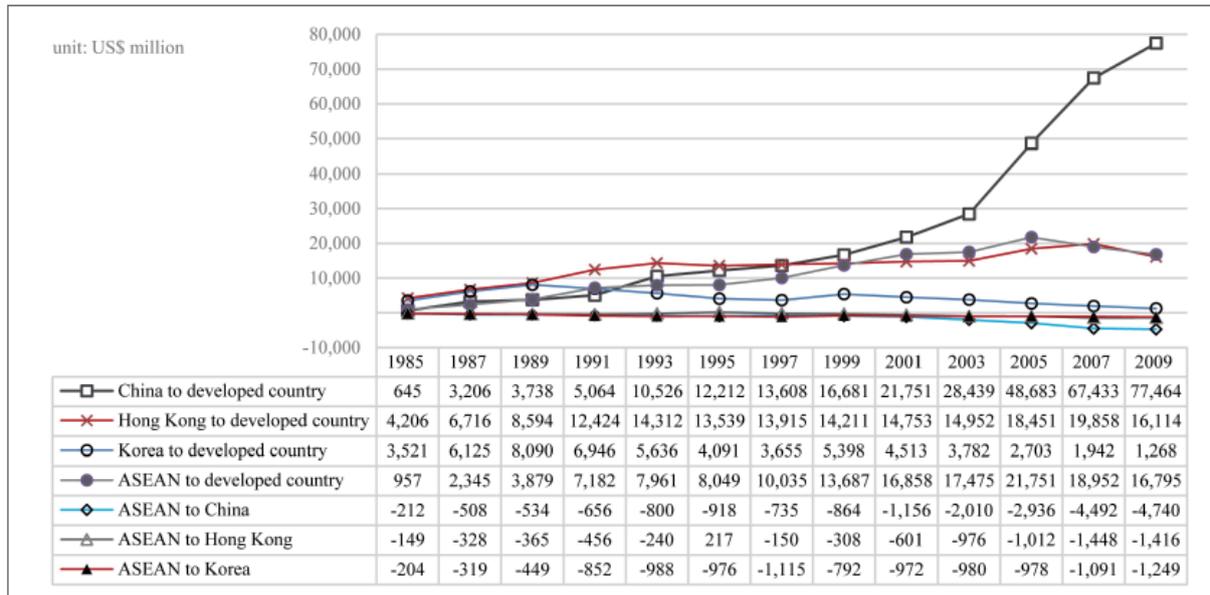


Figure 1. Trade Balance.

seems to maintain its competitive edge in the export of apparel products, in which unit labor cost is an essential element. China is a global main supplier due to its abundant low cost labor. Korea and Hong Kong are followed by ASEAN in supporting low cost production.

This study investigated trade balance and intra-industry trade index among developed countries, NICs and ASEAN in order to examine the change in import/export structure of the Asian fashion industry.

We first focused on the increase and decrease in trade balance to validate the paradigm shift from ASEAN to developed economies through NICs. An over zero value of trade balance indicates a trade surplus and below zero (a negative trade balance) is a trade deficit among nations. Figure 1 shows exports exports from Hong Kong to developed countries and from Korea to developed countries that reported a positive trade balance; however, the trade balance of other nations leveled off in 1985. In 2009, exports from China to developed countries, from Hong Kong to developed countries, and from ASEAN to developed countries recorded trade surpluses while exports from Korea to developed countries, from ASEAN to Korea, from ASEAN to China, and from ASEAN to Hong Kong showed a negative trade balance. The results implies that in 1985, NICs were competitive in the export of apparel products compared

to developed countries like the U.S., EU, and Japan, but in 2009 ASEAN were competitive in the export of apparel products compared to NICs as garment manufacturing moved from NICs to ASEAN for lower labor costs.

Second, G-L index was estimated among exporting countries. Based on G-L index, the relation between intra-industry trade and inter-industry trade is a tradeoff. A high value of GLI means the incremental intra-industry trade, but the decreased inter-industry trade.

Figure 2 shows the exchange of products has increased the trade from Korea to developed countries and from ASEAN to Korea. The exchange of products from ASEAN to Hong Kong and from ASEAN to China increased in the late 1980s, but then began to decrease in the late 1990s. Intra-industry trade from China to developed countries, Hong Kong to developed countries, and ASEAN to developed countries has also decreased. The result indicated that Korea has maintained the competitiveness of its apparel exports to advanced countries. ASEAN has developed the competitiveness of its apparel exports to Korea in response to the technological gap or qualitative differentiation, but ASEAN have not maintained the competitiveness of apparel exports to Hong Kong because of the impact of China.

In the case of Korea, it can be verified to some degree that its

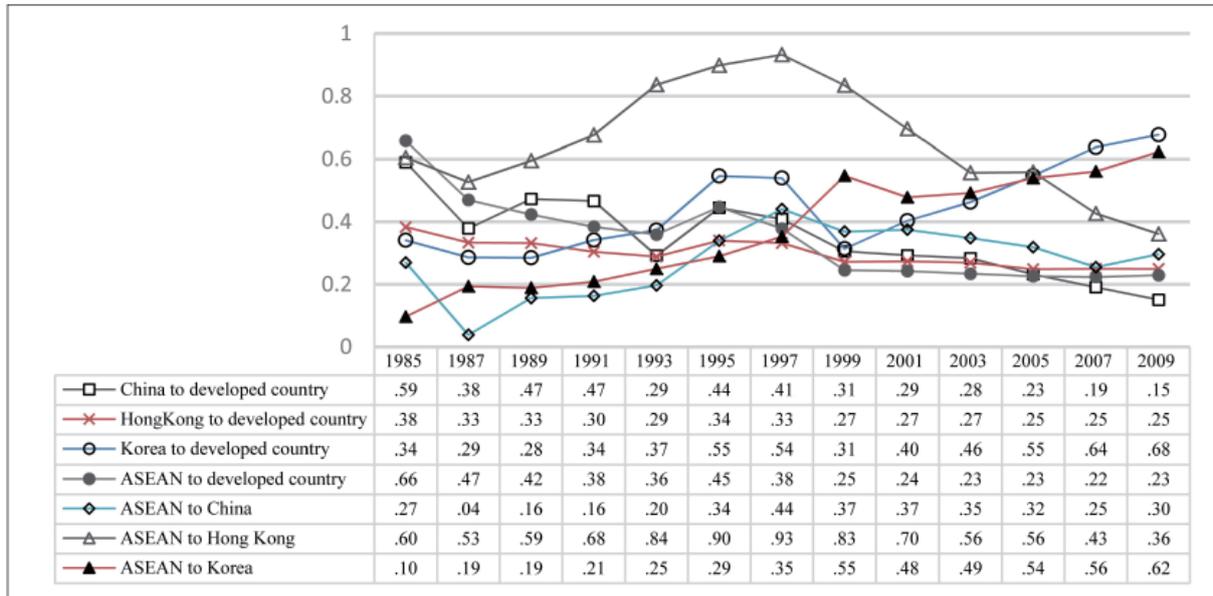


Figure 2. Intra-industry Trade Index.

import/export structure (similar to the relations between developed economies and NICs) has developed into relations between ASEAN and NICs. However, Hong Kong does not show such relations due to the effect of China. Rather than being part of NICs, China is more similar to ASEAN nations as it shows many characteristics of developing nations. Based on such low costs, developed countries designated their suppliers in NICs and are sourced from them. In supply chains, Hong Kong and Korea take important parts in triangular manufacturing and have subcontracts with lower wage manufacturers in China and ASEAN countries (Jin, 2004; Natsuda *et al.*, 2010). Therefore, it is inferred that garment production bases have moved to lower cost regions like China and ASEAN.

### Clothing Imports in Asia Economies

Changes in clothing imports were analyzed in order to examine the fashion consumption of NICs and ASEAN. It was presumed that the amount of fashion goods consumed enabled increased clothing imports in NICs. They especially expand the import of clothing as consumption goods in the supply chain; however, ASEAN countries also participate in producing fiber in up-stream and clothes in down-stream. Thus, this study analyzed NIC's changes in clothing imports from developed countries. The import

rate of clothing products versus a total of fashion goods including fiber, textiles, and clothing were analyzed to compare with ASEAN. Clothing products were identified as only SITC Division 84. Import rate of clothing were estimated as the percentage of clothing imports to the total import of fashion products including fiber (Division 26), textiles (Division 65) and clothing goods (Division 84). The import data from developed countries including North America, EU12, and Japan were tallied.

Figure 3 shows that China, Korea and Hong Kong reported increase in clothing imports since 1985 except for the period when the three nations were hit by the Asian Financial Crisis. Hong Kong still leads clothing consumption in Asia NICs; Korea has also continuously increased clothing imports. China follows Hong Kong, but since 1995 in the peak of importing, clothing imports from developed economies have decreased.

The percentage of imports for clothing products out of the total imports of fiber, textiles and clothing products from developed countries were analyzed for comparison with ASEAN. Only six ASEAN countries (Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Viet Nam) had imports between 1985 and 2009; therefore, Hong Kong, China, Korea and ASEAN were compared in the import rate of clothing.

Figure 4 showed that Korea had a dramatic increase in the

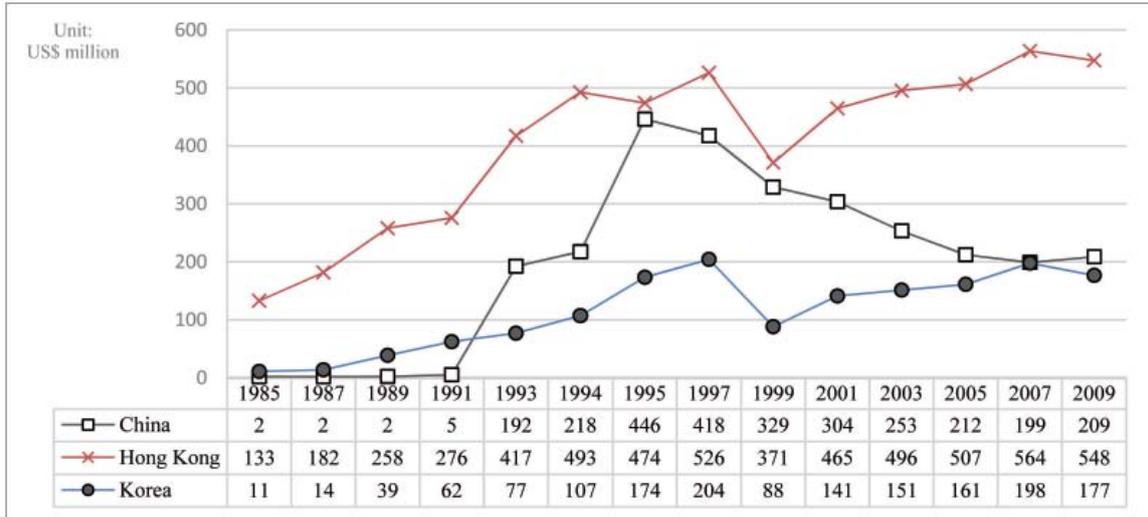


Figure 3. NICs' Clothing Imports from Developed Economies.

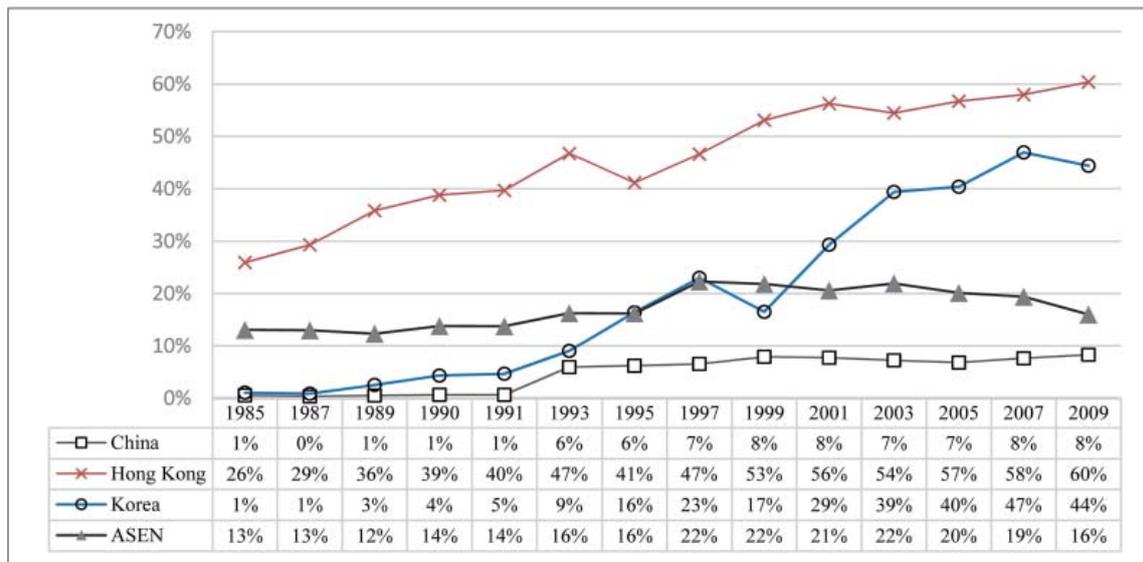


Figure 4. Import Rate of Clothing in Apparel Industry from Developed Economies.

imports of clothing products from developed countries. Hong Kong also reported rapid increases and led the consumption market in Asia. However, ASEAN and China have experienced modest changes compared to Korea and Hong Kong. Singapore is the only ASEAN country to have expanded clothing imports. These findings imply that Korea and Hong Kong, which were robust clothing exporters during the 1980s and 1990s, turned into major consumers similar to developed countries. The Asian fashion industry has transformed itself from a production base for

developed countries into a consumption market with the emergence of newly industrializing economies. Korea and Hong Kong have expanded their import apparel markets since the beginning of the 21<sup>st</sup> century, while China has recorded high growth in both the export and import of clothing due to its rapid economic growth.

### Conclusion and Implications

The Asian apparel industry is faced with significant changes.

NICs including Korea, Hong Kong, and Taiwan have played important roles in garment manufacturing since the 1980s. In particular, China is leading production with its high economic growth. Southeast Asian countries have also established themselves as emerging manufacturing regions due to their low-cost labor. Liberal trade agreements and economic growth have accelerated changes in changes the trade structure in the Asian fashion industry which has been reorganized into a new economic bloc. On the perspective of longitudinal economic changes, the current research has been asked to predict crucial trade change among Asian economic blocs. Thus, this study investigated the change related to production and consumption in the Asian fashion industry and explained the reasons of the paradigm shift in NICs and ASEAN countries before and after 2000 when Asian countries faced high economic fluctuations due to a financial crisis. After 2000, a reorganization of the Asian fashion industry has been expected; consequently, the analysis of longitudinal data indicates implications for Asian fashion marketers and researchers against the paradigm shift.

To analyze the flow of import and export in the apparel industry, NICs, ASEAN and developed countries were divided into independent categories. The scope of fashion industry data for analysis was also limited to textile fibers, fabrics, and clothing. First, exports of fiber, textiles, and clothing, trade balance, intra-trade index among ASEAN, Hong Kong, China, and Korea were analyzed to examine changes in the trade structure of the Asia fashion industry.

ASEAN and Korea reported a steady increase in the global exports of fibers recording to a comparison made between NICs' and ASEAN's global exports from 1985 to 2009; however, Hong Kong recorded a decrease in exports of fiber from the mid of 1990s while China's global exports increased. In the case of global exports of fabrics and clothing, China recorded a dramatic increase and ASEAN saw a steady increase after the mid of 1990s while Korea and Hong Kong showed a downward trend. ASEAN and Korea's exports to developed countries also recorded a steady increase, while China began to see an increase after the mid of 1990s. China's exports of clothing products to developed countries have rapidly increased while ASEAN and Hong Kong have seen modest increases. Under the triangular manufacturing arrangement,

NICs have subcontracts with China and ASEAN countries due to low labor costs. The results indicate that garment production bases have moved to lower cost regions like China and ASEAN. The effect of production based on labor costs is expected to increase after further deregulation among the different levels of economies. For example, increased costs in China have resulted in other BRICs countries emerging as production bases for the short lead time to America and Europe.

As the result of the trade balance, Hong Kong and Korea recorded a trade surplus in 1985, but exports from Korea to developed countries became negative. The trade balance between ASEAN and Korea, ASEAN and China and ASEAN and Hong Kong also became a negative trade balance. The Intra-industry index (GL) between 1985 and 2009 was examined to compare the structure of intra-industry among NICs, ASEAN, and developed countries. The exchange of fiber and clothing products from Korea to developed countries and from ASEAN to Korea has increased. The exchange of products from ASEAN to Hong Kong and from ASEAN to China increased in the late 1980s, but then decreased in the late 1990s. Intra-industry trade from China to developed countries, Hong Kong to developed countries, and ASEAN to developed countries has also decreased. The results imply that triangular manufacturing has occurred in different tiers of Asian economic blocs. In addition, increased intra-trade can occur within the Asian countries due to resources like labor and technology.

Second, clothing imports and the import rate from developed economies were analyzed in order to investigate the shift of NICs as a consumption market. Hong Kong and Korea reported a dramatic increase during the period except for the period of the Asian Financial Crises. Compared with NICs, ASEAN countries were found not to have a high growth in clothing imports based on the analysis of the clothing import rate. The findings imply that Hong Kong and Korea have developed from former production bases into new apparel consumption markets. Developing economies like China and ASEAN can gradually participate in the primary roles of triangular manufacturing.

This study indicates that the center of global consumption of fashion goods has gradually shifted to NICs and the Asian market; consequently, NICs price competitiveness has moved into developing Asian countries such as China. The relation between

NICs and ASEAN has followed the footsteps of those maintained between developed countries and NICs. Triangular manufacturing in the global garment value chain that first emerged in the 1990s is still in place. The changes indicate that the following factors are still important to gain competitiveness in the fashion industry. This study found that internal factors have taken priority to external factors for the decision of a production base. Production cost is a major factor to decide supply regions rather than factors mentioned in previous studies (Ahmed, 2009; Jin, 2004). Low costs in new developing countries like BRICs, geographical accessibility is still very important in the global supply chain management (GSCM) of the fashion industry, especially Asian trade. In the aspect of the external factors, trade regulations, friendliness of trading partners, and government assistance are crucial factors behind NICs price competitiveness and developing countries as shown by the Korea and ASEAN Free Trade Agreement.

This study represents a significant contribution to understanding the paradigm shift in the Asian fashion industry based on the analysis of secondary trade data over time; however, this study was limited to import/export trade, trade balance, and intra-industry analysis. To elaborate on further studies, a more in-depth assessment of external factors other than the essential factors of the fashion industry can lead to a more logical explanation of the paradigm needs. With economic development, investment flow among economic blocs needs to be considered to understand the trade structure and inter trade assessment. Especially, data on FDI inflow and outflow in regards to NICs and ASEAN should be collected along with many other Asian countries for use in a future study. From late 2000, technology like B2B and B2C electronic commerce has accelerated the supply chain management system and the direct exchanges between buyers and vendors. Further research will better able to analyze structural change by the level of technological operation over time.

## References

- Ahmed, N. (2009). Sustaining ready-made garment exports from Bangladesh. *Journal of Contemporary Asia*, 39(4), 597-618.
- Akamatsu, K. (1962). A Historical pattern of economic growth in developing countries. *Journal of Developing Economies*, 1(1), 3-25.
- Amann, E., Lau, B., & Nixon, F. (2009). Did China hurt the textile and clothing export of other Asian Economies 1995-2005. *Oxford Development Studies*, 37(4), 333-362.
- Arnold, D., & Shih, T. (2010). A Fair model of globalization? Labour and global production in Cambodia. *Journal of Contemporary Asia*, 40(3), 401-424.
- Chiu, L. (2009). Industrial policy and structural change in Taiwan's textile and garment industry. *Journal of contemporary Asia*, 39(4), 512-529.
- Comino, A. (2007). A Dragon in cheap clothing: what lessons can be learned from the EU-China textile dispute?. *European Law Journal*, 13(6), 818-838.
- Gereffi, G. (1999). International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics*, 48, 37-70.
- Gereffi, G. (2001). Beyond the producer-driven/buyer-driven dichotomy: the evolution of global value chains in the Internet era. *IDS Bulletin*, 32, 30-40.
- Haar, E. (2011). Philippine trade policy and the Japan-Philippines economic partnership agreement. *Contemporary Southeast Asia*, 33(1), 113-139.
- Hassler, M. (2003). The global clothing production system: commodity chains and business networks. *Global Networks*, 3(4), 513-531.
- Heron, T. (2006). An unraveling development strategy? Garment assembly in the Caribbean Basin after the Multifibre Arrangement. *Bulletin of Latin American Research*, 15(2), 264-281.
- Jin, B. (2004). Apparel industry in East Asian newly industrialized countries: Competitive advantage, challenge and implications. *Journal of Fashion Marketing and Management*, 8(3), 230-244.
- Kelegama, S. (2009). Ready-made garment exports from Sri Lanka. *Journal of Contemporary Asia*, 39(4), 579-596.
- Kim, G. (2010). Japan's international trade strategy toward Asian new emerging countries. *2010 Summer Conference Proceedings*, Northeast Asia Economic Association of Korea, 1-15.
- Lee, Y. (2005). The vision of Korean fashion companies and plans for cooperation in East Asia. *Journal of Korean Society of Clothing and Textile Industry*, 7(3), 262-266.
- Leseure, M., Hurreeram, D., & Bennett, D. (2009). Playing catch-

up with China: Challenges and strategies for smaller developing countries. *Technology Analysis & Strategic Management*, 21 (5), 617-637.

Natsuda, K., Goto, K., & Thoburn, J. (2010). Challenges to the Cambodian garment industry in the global garment value chain, *European Journal of Development Research*, 22(4), 469-493.

Ofreneo, R. (2009). Development choices for Philippine textile and garments in the post-MFA era. *Journal of Contemporary Asia*, 39(4), 543-561.

Ofreneo, R., & Rasiah, R. (2009). Introduction: The dynamics of textile and garment manufacturing in Asia. *Journal of Contemporary Asia*, 39(4), 501-511.

Rasiah, R. (2009). Malaysia's textile and garment firms at the crossroads. *Journal of Contemporary Asia*, 39(4), 530-541.

Reimer, S. (2009). Geographies of production II: Fashion, creativity and fragmented labor. *Progress in Human Geography*, 33(1), 65-73.

Thee, K. (2009). The Development of labour-intensive garment manufacturing in Indonesia. *Journal of Contemporary Asia*, 39(4), 562-578.

Wong, M., & Au, K. (2007). Central and eastern European countries and North Africa: The emerging clothing supplying countries to the EU. *Journal of Fashion Marketing and Management*, 11(1), 56-68.