

Development of Textile Industry of India and China: Flying Geese Model Revisited

S. M. Imamul Haque

Professor, Department of Commerce,
Aligarh Muslim University,
U. P. India

Ishfaq Ahmad Thaku

Research Scholar, Department of
Commerce, Aligarh Muslim University,
U. P. India

Abstract

The flying geese theory asserts that labour intensive industries tend to relocate from higher income economies to lower one. It has been quite intact in case of Asia's textile industry. Textile industry has been relocated from Japan to East-Asia then to ASEAN and other countries (China, India & Bangladesh). In relocation of this industry USA import market and cost effectiveness has played important role. However, Despite China and India possessing almost equal resources and cheap labour, China is far ahead in the development of textile industry and is dominating world textile export market. In the development of China's textile industry foreign direct investment (FDI) had played important role to explore the comparative advantage of China in Labour intensive manufacturing. While India seems to have shown dismal position in attracting FDI in labour intensive industries and exploring its comparative advantage in labour intensive manufacturing as compare to China. To develop and attract FDI in textile industry of India, China can provide interesting and valuable insights.

Keywords:

Flying Geese, Foreign Direct Investment, MFA Phase Out, Textile Industry

Introduction

Historically, textile industry and trade have played an important role in many nations. From England to the U.S. to Japan and then further to the NIEs, China and India, the development of the textile and apparel industry has been the initial economic engine for development (Kim, Traore & Warfield 2006). The changing pattern of and leadership in the world textile trade have, therefore, been of great concern to many nations (Lim 2003). Gereffi (1999) referred textile industry as “typical starter industry”. Number of presently developed countries (UK, USA & Japan) started their industrialisation process first through development of textile industry (Gelb 2007).

The development of textile industry is of great importance to developing economies. The low-technology requirement is one of the important features of textile industry, which allows it to accommodate the surplus labour in primary sector. Apart from employment, export has been important feature of this industry. The export led economic growth which is a development model offers emerging markets the

chance to grow via increased integration with the world economy (McMillan, Pandolfi & Salinger 1999).

It has been asserted by flying geese theory that labour intensive industries will tend to move from higher income to lower income countries. Because the competitiveness of these industries in the world exports market depends upon the cost effectiveness. This is the reason, in Asia Japan has relocated its labour intensive industry to East Asian Economies and later East Asian Economies relocated to China and to some extent in Bangladesh. The relocation of these industries has benefited both as former were able to find cheap manufacturing destinations and later were able to attract foreign investment, particularly FDI to fill its investment and technological gap, so as to promote exports. As attracting and increasing FDI in developing countries has been viewed as important strategy in market liberalisation, a way of jump-starting labour-intensive, export oriented economic activity in the absence of sufficiently high domestic savings and investment (McMillan, Pandolfi & Salinger 1999).

However the assertion of flying geese theory and comparative advantage theory that developing economies will attract FDI in their labour intensive industries, did not seem to hold ground in every economy. It has been observed that some developing countries are more successful than others in attracting FDI in labour-intensive industries, such as Textiles. One of the prominent examples is of India and China. India despite being low-income and labour surplus country is not able to develop and attract FDI in textile industry as contrary to China. China has been known for its exports in labour-intensive goods, and India is not able to perform like China in labour-intensive exports (Khondoker & Kalirajan 2012).

Review of Literature

Textile industry had played typical starter role in rapid industrialisation (Gereffi 1999), and most of presently developed countries (UK, USA & Japan) has started their industrial journey by developing their textile industries (Gelb 2007). Being a wage sensitive industry, the rising income in developed countries forced them to relocate this industry in lower income countries. The shift in comparative advantage or shifting patterns of relative factor prices, also explains the rise and demise of textiles and clothing manufacturing, not only in the USA, but also in Japan, Korea and elsewhere around the world (McMillan, Pandolfi & Salinger 1999). With the sharp increase in wages in Japan, it relocated its textile industry first from urban to rural areas of Japan, and later to China and other East Asian economies mainly to cut down costs (Yamamura et al., 2003). In the 1970s the textile industry gradually developed in East Asian Economies, and by end of the decade, Hong Kong, Korea, Taiwan and Singapore

emerged as prominent global textile exporters (Khondoker & Kalirajan 2012). Being a typical starter industry to rapid industrialisation textile industry is playing a prominent role in developing countries, as rapid industrialisation is imperative to eradicate extreme poverty from South Asia and Africa (Lin & Chang 2009). It also helps emerging markets through export led growth to grow via increased integration with the world economy (McMillan, Pandolfi & Salinger 1999). However, despite being such a strategic industry for developing countries to start their industrialisation, not all of the developing countries endowed with relatively cheap labour have been equally successful in exporting high labour-intensive garments and textiles (Khondoker & Kalirajan 2012). The present example of two giant economies (India & China) endowed with almost similar resources, has shown contrary results when it come to manufacturing especially labour-intensive industries. The Chinese economy has shown massive expansion in the labour intensive manufacturing, mostly concentrated in the coastal areas (Qu, Cai, & Zhang, 2012). In the process of exploring China's comparative advantage in cheap unskilled labour, exports provide an effective vent for China's surplus labour, but the availability of Town and Village Enterprises (TVEs) and FDI are necessary preconditions (Fu 2004:92). On the other hand Indian manufacturing sector has underperformed in this respect because it has not grown as rapidly as it should have, and it has also been less labour intensive than it might have been hoped (Ahluwalia 2013).

Objectives of the study

1. To look how much textile industry development of Asia is intact with flying geese theory.
2. To compare performance of Indian and Chinese textile industry.
3. To find out what lesson India can learn from China in development of textile industry.

Flying Geese Model and Textile Industry in Asia

The industrial development of Japan through relocation of labour-intensive industries from USA is known as "Flying Geese" pattern of development. This idea was first put forward by Akamtsu Kaname, as he coined the term "Ganko-Keitai" in his 1935 and 1937 articles. And later translated as "Flying Geese" in his 1961 and 1962 papers (Kojima 2000). The theory describes the sequential development of developing economies, as the product life cycle theory describes sequential development of developed economies. The theory predicts that the sequential industrial development of developing economies begins with the relocation of labour-intensive industries (Textiles & leather"), then gradually moves towards up gradation and engages in

capital and technology intensive production. It has been stated by Kwan (2002), that a typical sequence seen among Asian countries is the shift from the textile industry to chemical industry than further to steel industry and automobile industry (see fig 1a).

Japan was first among Asian countries which benefited from the post World War II trade policies of USA and other European Economies. With the establishment of General Agreement on Tariffs and Trade (GATT) 1947 the construction of the competitive Japan's textile and apparel industry began. During that period Japan emerged as a gravitational centre of textile production due to mainly its cheap labour relatively to USA and other European Economies (Kim, Traore & Warfield 2006). The principle reason of the relocation of this industry was the low capital and skill requirement, which makes relocation easy, in other words is the main reason for this sectors increasing concentration in low income countries especially in Asia (Weib 2004). Prior to climb on ladder of structural up gradation, labour-intensive manufacturing was Japan's leading exporting sector. It was textile, clothing, toys and other sundries that were initially exported to the USA and were jump-starter for Japan's early post war recovery (Culter, Berri & Ozawaa 2003).

However, due to socio-economic importance of textile and apparel industry as it was putting severe competition pressure on domestic manufacturers and employment of USA and other European Economies, consequently restrictions were imposed by these economies to curb textile imports. Japan was panelised for its success as in 1955 Voluntary Export Restraint (VER) were imposed on Japan to curb its exports towards USA, it was followed by

Short Term Agreement (STA) in 1961 and Long Term Agreement (STA) in 1962 and which remained in effect up to 1973.

The imposition of constraints accelerated the factors that fuelled the migration of labour-intensive apparel production to neighbouring four countries (Hong Kong, Singapore, South Korea and Taiwan) in the 1960s and 1970s (Kim, Traore & Warfield 2006). Japan supplied the rest of Asia with capital and technological know-how through the expansion of trade and FDI (Park, 1989). Dowling and Cheang (2000) have divided Asia into three groups according to their relative state of industrial development. Japan as lead country (*senshinkoku*), followed by the NIEs as the newly rising countries (*shinkookoku*), and lastly the ASEAN4 as the follower countries (*kooshinkoku*) (Fig 1b).

In migration of textile industries from Japan to other Asian Economies apart from rising costs, USA import market had played pivotal role. The preferential access to Japan in USA market resulted in development of textile industry of Japan and after imposition of VER, STA and LTA to Japan, preferential treatment were provided to East Asian Tigers which resulted in relocation of textile industry to these economies. However, when market penetration reached at socio-politically unacceptable level, protectionist measures were imposed (Moon & Chang 1989). The restriction were imposed on NIEs (Hong Kong, Taiwan, Korea, & Singapore) by enacting Multi Fibre Agreement (MFA) in 1974 and was renewed three times (MFA II, MFA III, MFA IV).

Fig: 1a

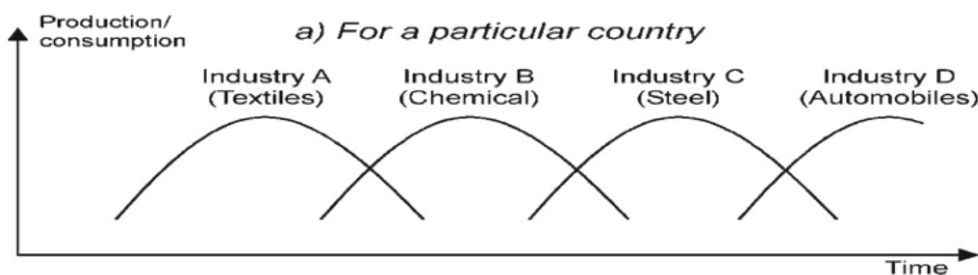
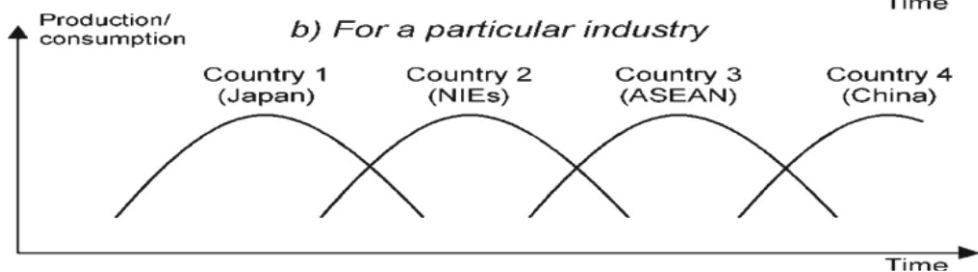


Fig: 1b



Source: Based on Kwan 1994: 82 and Yamazawa 1990: 9.

The imposition of restriction by USA coupled with rising production cost in domestic market prompted the transfer of production activities of textile to Malaysia, Thailand, Indonesia and Philippines were more generous quota were available (Kim, Traore & Warfield 2006). The second generation NIEs (Indonesia, Thailand, Malaysia and Philippines) emerged as textile manufacturing leaders on the expense of first generation NIEs. Gibbon (2000) has examined the USA import trade data for several years and he has found that in years 1978, 1981, 1994 and 1998 the share of garment exports of second generation NIEs were 4 percent, 5.9 percent, 12.6 percent, and 12.4 percent. On the other hand in same years the share of first generation of NIEs was 53.9 percent, 62.6 percent, 24.2 percent and 16.4 percent. However it has been argued by Kim, Traore & Warfield (2006) that in the absence of strong domestic government industrial policies mere U.S. preferential policies would have not been resulted in successfully development of NICs textile industry.

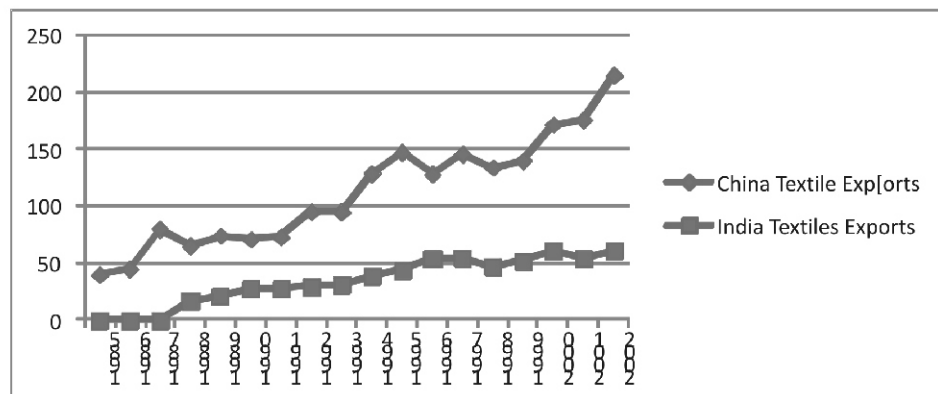
Textile Industry of India and China

China and India have long established textile and clothing

industries by virtue of their endowments of labour and raw materials. The textile and apparel industry served as a cornerstone for the economic and industrial development of China and India in the 1980s and 1990s (21 Abernathy, Dunlop et al 1999). In both countries the two industries provide employment to around 13 million people. In the year 2000, they accounted for more than 20% of the total industrial output of Rs. 3791 billion in India and 10% of RMB881 billion in China. The two industries together account for around a quarter of the total export earnings in the two countries (Balasubramanyam & Wei 2005).

Despite having almost equal resource endowments in textile industries in terms of cheap labour, and raw materials, there is very huge difference in terms of performance. The share of China in world market in terms of exports is very high as compared to India. China has increased its share in textile exports from US\$ 6500 million in 1988 to US\$ 17200 million in 2000. On other hand India managed to increase its share from US\$ 1700 million to US\$ 6100 million in 2000 (Fig 2).

Fig 2: Textile Exports of India & China 1985-2002, US\$100 Million



Source: Customs Statistics of the People's Republic of China; International Trade Statistical Yearbook, various issues.

The slow performance of Indian textile arose due to low foreign investment as compared to China. Foreign investment is one of the main tools in modern day economies to improve the competitiveness of industries and reap the benefits of the comparative advantage. Although the global value chains in textiles and clothing are primarily buyer-driven, FDI plays an important role at the production stage and foreign affiliates in many developing countries dominates exports (UNCTAD 2005:08). China has been more successful than India in reaping benefits of its comparative advantage in labour-intensive industries by attracting foreign investment in

this sector. FDI is also mutually beneficial because it acts as a channel for the advanced countries to recycle comparative advantage and the developing countries to attain technology transfer and managerial and other production skills (Dowling & Cheang 2000). In 1990s one of the dramatic changes took place in international division of labour as China became one of the main sources of cheap labour. China quickly took over the ASEAN-4, which had once been a favourite destination of FDI, and its labour-intensive exports to the U.S. began to rise phenomenally (Culter, Berri & Ozawa 2003).

The FDI projects in textiles have been dominated as host regions by the Asian countries particularly developing ones during the period of 2002-2004 (Table 2). Out of total 275 projects 106 (38.5 percent) projects went to developing Asia followed by Central and Eastern Europe with 80 (29.1 percent) projects and Latin America and the Caribbean with 36 (13.1 percent). When it comes to host economy China has been emerged as most dominated destination for FDI projects in textiles. Out of total 275 projects China has attracted 48 (17.45 percents), followed by Bulgaria 18 (6.55 percents), United States 16 (5.81 percents) and Hungary 13 (4.73 percents). Despite having huge potential of cheap labour and raw material India were able only to attract 9 (3.27 percent) projects (Fig 2).

The flying geese pattern of industrial development and comparative advantage theory does not seems able to

explain the textile industry development pattern of India. In India FDI has generally played limited role in the textiles and clothing sector. India has competed almost exclusively on the basis of low labour costs and it will not be sufficient to compete in international market after 2005 MFA phase out (UNCTAD 2005:42). The imposition of quotas by developed economies has been also one of the factors responsible for low FDI inflows in Indian T&C sector. Quotas had the advantage of attracting investment to less restricted countries and product categories. Despite being small in size hence low ability of economies of scale, such as Bangladesh, and Sri Lanka have experienced dramatic increase in foreign investment and exports of textiles and clothing, the story would have been otherwise if these investing countries had not been subjected to quotas in major T&C importing countries (Seyoum 2010)

Table 2:

FDI Projects in Textiles & Clothing Manufacturing by Host regions, 2002 -2004.

Host Region	No. Of Projects	Percentage
Developing Asia-Pacific	106	38.5
Central and Eastern Europe	80	29.1
Latin America & the Caribbean	36	13.1
North America	20	7.3
Africa	16	5.8
Western Europe	14	5.1
Developed Asia-Pacific	03	1.0
Total	275	100

Source: UNCTAD, based on LOCOMonitor

Fig:3:



Source: Drawn by Author by using Data from UNCTAD.

MFA Phase Out and Changing Pattern of Textile Competition

Developed economies have always been striving to protect its labour intensive industries from the fierce competition of developing countries. Textiles is one of the most strategic industry in terms of both economic and political sense, developed economies despite having liberalised other manufacturing industries under the GATT and WTO rules under “MFN Status” and “tariff imposition rather than quantitative restriction” the textile and apparel industry remained deviated from the main stream (Li, Shen, & Yao et al, 2003:01).

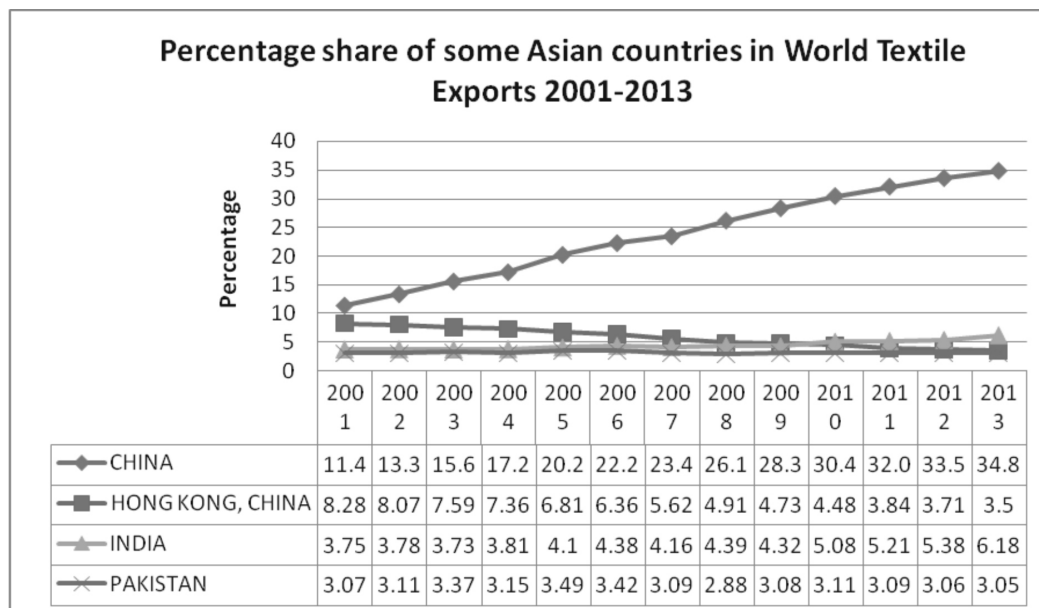
The “Voluntary” Export Restraints Agreement (VER), and the short-term and long-term Arrangement Regarding International Trade in Textiles (STALTA), paved the way for later enforcement of the Multi fiber Arrangement (MFA) in 1974, a multilateral commitment exerting great influence upon the world textile and apparel trade pattern until 2005. These agreements were worked out to manage the textile exports from developing economies and restrict these developing economies to reach their full potential in world textile exports. By getting more and more strength in the international market developing countries strived hard for the removal of these restrictions through agreements. This resulted in abolishment of MFA in 2005, after going through series of developments (Li, Shen, & Yao et al, 2003).

The MFA phase-out in 2005 has resulted in intensified changing international trading pattern in textile

industries. With the 2005 phase out many new challenges and opportunities have also taken place, which are now shaping future of this industry. It has been emphasized that the 2005 phase out will be more beneficial to some countries on the expense of others. Among Asian economies, India and China has been predicted by most studies will be main beneficiaries of phase out, although the magnitude of these changes may vary (UNCTAD 2005:28).

After 2005 MFA phase out, the share of Asian countries in textile and clothing exports has increased, although with varying degree. Although 2005 phase out has opened the gates for developing countries to tap the international market, but all are not able to reap benefits at par with others. China has benefited most, as the share of its textile exports in world market has increased from 11.4 percent in 2001 when China joined WTO, to 17.2 percent in 2004 before one year of phase out. After 2005, there has been remarkable increase in textile exports from China as it raised to 34.8 percent in 2013, apart from that China managed increasing trend during financial crisis also. On other hand India despite been top exporter in textile after China managed to increase its share only from 4.1 percent in 2005 to 6.18 percent in 2013. Pakistan has managed its constant share around 3 percent during 2001 to 2013. Hong Kong's (China) share has declined from 8.28 percent in 2001 to 3.5 percent in 2013 (Fig 4).

Fig 4: % share of some Asian Countries in World Textile Exports 2001-2013.



Source: Self prepared on the data available at: WTO Trade statistics.

It has been quite evident from the export performance of Some Asian countries, particularly India and China, that mere lifting restriction to access developed markets are not enough rather there is need to increase the competitiveness of textile industry in international market. The presence of foreign players in textiles in China has made it able to engage full package production, making it relatively easy for US, European, and Japanese companies to source reliably completed garments from Chinese factories (UNCTAD 2005:21). The export expansion in labour-intensive manufacturing in China has promoted the industrial output and had led huge volume of surplus labour transfer from agriculture sector to non-agriculture sector, as these substantial gains are important for overpopulated developing countries (Fu, 2004:188). It will be highly in the interest of India to attract foreign investment in textile industries by framing favourable policies. China's development model can be a very important and useful role model for India to develop its textile industry.

Conclusion

In development of Asia's textile industry Japan has played a lead role. It has relocated its textile industries to first generation NIEs due to rising labour costs and restriction imposed by USA and other European import market. The first generation NIEs were also forced to relocate its textile industries to comparatively low income countries of second generation NIEs. In addition to that second generation NIEs were enjoying preferential access to USA and other European markets. The relocation does not stopped here, after reaching to some advancement the textile has been relocated to other Asian economies such as China, India, and Bangladesh. The textile manufacturers have been always in search of low income economies, because this industry is cost sensitive. This whole process of relocation of labour intensive industries has been termed as Flying Geese Pattern of development.

Although, as predicted by the "Flying Geese Theory" that textile industry will be relocated from high to low income countries, but there seems contradiction between theory and development pattern of some economies. The most important and interesting case is of China and India, despite being endowed both with surplus cheap labour, they have shown contradiction in their development path. China has been successful in attracting FDI in textile industry, generating employment, and achieving most prominent place in world textile exports by contribution almost more than one-third of world textile exports. While India has shown dismal performance regarding attracting FDI in textiles and contribution in world textile exports, as its contribution is just over 6 percent. The 2005 MFA phase-out provided an opportunity to India to develop its textile industry and realise its full potential, so

as to give stiff competition to China. But it would not be easy India has to attract foreign players in this sector and increase its competitiveness viz-a-viz China to tap international market.

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