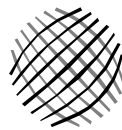


# Unleashing the Export Potential of Bangladesh's Furniture Industry: An Analysis of Prospects and Policy Support

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# Abbreviations and Acronyms

<b>AIT</b>	<i>advanced income tax</i>
<b>ATV</b>	<i>advanced trade value</i>
<b>BB</b>	<i>Bangladesh Bank</i>
<b>BBS</b>	<i>Bangladesh Bureau of Statistics</i>
<b>BDT</b>	<i>Bangladeshi taka</i>
<b>BEI</b>	<i>Bangladesh Enterprise Institute</i>
<b>BEZA</b>	<i>Bangladesh Economic Zone Authority</i>
<b>BFEA</b>	<i>Bangladesh Furniture Exporters' Association</i>
<b>BFIOA</b>	<i>Bangladesh Furniture Industries Owners Association</i>
<b>BIDA</b>	<i>Bangladesh Investment Development Authority</i>
<b>BRPD</b>	<i>Banking Regulation and Policy Department</i>
<b>BFID</b>	<i>Bangladesh furniture and interior décor expo</i>
<b>CCS</b>	<i>cash compensation scheme</i>
<b>CD</b>	<i>customs duty</i>
<b>CFT</b>	<i>cubic feet</i>
<b>CN</b>	<i>combined nomenclature</i>
<b>CO2</b>	<i>carbon dioxide</i>
<b>CTI</b>	<i>Centre for Trade and Investment</i>
<b>ECGS</b>	<i>Export Credit Guarantee Scheme</i>
<b>EDF</b>	<i>Export Development Fund</i>
<b>EPB</b>	<i>Export Promotion Bureau</i>
<b>EPZ</b>	<i>export processing zone</i>
<b>ERP</b>	<i>Enterprise Resource Planning</i>
<b>EU</b>	<i>European Union</i>

<b>FDI</b>	<i>foreign direct investment</i>
<b>f.o.b</b>	<i>free on board</i>
<b>FSC</b>	<i>Forest Stewardship Council</i>
<b>FY</b>	<i>fiscal year</i>
<b>GDP</b>	<i>gross domestic product</i>
<b>GNI</b>	<i>gross national income</i>
<b>GVC</b>	<i>global value chain</i>
<b>HS</b>	<i>harmonized system</i>
<b>ICT</b>	<i>information and communications technology</i>
<b>ICCB</b>	<i>International Convention City Basundhara</i>
<b>IDLC</b>	<i>Industrial Development Leasing Company of Bangladesh</i>
<b>ISO</b>	<i>International Organisation for Standardisation</i>
<b>ITC</b>	<i>International Trade Centre</i>
<b>IT</b>	<i>information technology</i>
<b>ITES</b>	<i>information technology enables services</i>
<b>LDCs</b>	<i>least developed countries</i>
<b>MDF</b>	<i>medium-density fibreboard</i>
<b>MFN</b>	<i>most favoured nation</i>
<b>NSDP</b>	<i>National Skill Development Policy</i>
<b>NTVQF</b>	<i>National Technical and Vocational Qualification Framework</i>
<b>PFIL</b>	<i>PARTEX Furniture Industries LTD.</i>
<b>PKSF</b>	<i>Palli Karma Sahayak Foundation</i>
<b>QFLS</b>	<i>Quarterly Labor Force Survey</i>
<b>RD</b>	<i>regulatory duty</i>
<b>R&amp;D</b>	<i>research and development</i>
<b>REER</b>	<i>real effective exchange rate</i>
<b>RMG</b>	<i>readymade garments</i>
<b>SD</b>	<i>supplementary duty</i>
<b>SEZS</b>	<i>special economic zones</i>

## Unleashing the Export Potential of Bangladesh's Furniture Industry: An Analysis of Prospects and Policy Support

<b>SMEs</b>	<i>small and medium enterprises</i>
<b>SMIs</b>	<i>Survey on Manufacturing Industries</i>
<b>TED</b>	<i>Tannery Estate Dhaka</i>
<b>TTI</b>	<i>total tax incidence</i>
<b>TVET</b>	<i>Technical and Vocational Education and Training</i>
<b>UCEP</b>	<i>Underprivileged Children's Educational Programs</i>
<b>UNCOMTRADE</b>	<i>United Nations Comtrade</i>
<b>UK</b>	<i>United Kingdom</i>
<b>USA</b>	<i>United States of America</i>
<b>VAT</b>	<i>value added tax</i>
<b>WTO</b>	<i>World Trade Organisation</i>

# Executive Summary

## Background

Exports of furniture have shown strong dynamism in recent years, reaching over US\$63 million in 2017–18 and registering a growth of 20 percent over the previous year. The furniture industry is recognized as one of the prominent sectors with high export and diversification potential in the backdrop of readymade garments' overwhelming and ever-growing dominance in Bangladesh's export basket. However, after more than 20 years since the country initiated commercial exporting of furniture items, the sector has achieved far less than its export potential. Given the recent encouraging trends, it is high time to bolster policy support measures and consider other practical options to boost the export supply response.

## Contribution of the furniture sector

Credible information on furniture enterprises, production and employment is difficult to obtain. Based on the available statistics, the total furniture manufacturing value added stood at BDT 210 billion in FY16–17. The sector's net contribution (in value-added terms) to GDP, therefore, is estimated to be 1.1 percent. Its share in manufacturing employment is about 9 percent. Considering both direct and indirect engagement, the total employment in the sector is thought to be in the range of 1.5–2.5 million.

Bangladesh's furniture industry has evolved from a predominantly very small-scale carpentry-based activity to a sector with the presence of some medium-to-large scale commercial

production. Currently, it is largely focused on the domestic market, which is growing rapidly in the face of intensifying urbanization and rising middle-class consumers.

## Global export markets

Since 2000, the global furniture export market has expanded from US\$74 billion to about US\$240 billion. Major global exporters are China (US\$89 billion), Germany (US\$17 billion), Italy (US\$14 billion), Poland (US\$13 billion) and the United States (US\$11 billion), while major importers include the U.S. (US\$67 billion), Germany (US\$21 billion), the UK (US\$12 billion), France (US\$11 billion), and Canada (US\$9 billion). Over the past two decades, Bangladesh's furniture exports increased by a modest US\$60 million in comparison with a staggering US\$67 billion for China and US\$8 billion for Vietnam. India's exports also rose significantly from a small base to US\$1.44 billion.

The composition of global furniture exports has changed over the past two decades or so. While the share of various metal, wooden and other furniture items (under HS 9403) declined, the same of the product range comprising lamps and light fittings and fixtures (under HS 9405 including searchlights and spotlights and parts thereof; illuminated signs, and different types of lights) increased. Export baskets of leading suppliers are largely dominated by wooden, plastic, metal, and cane and rattan furniture items (HS 9403), electric and non-electric lamps and lighting fittings (HS 9405), and different types of seats including those that are convertible into beds (HS 9401). Bangladesh's export composition is, however, quite different and concentrated in mattress support, sleeping bags and articles of bedding (HS 9404), accounting for about 56 percent of furniture export earnings.

## Furniture export markets of Bangladesh

In FY17–18, Bangladesh exported various furniture items to more than 80 countries. The main export products were sleeping bags (50% of all furniture export earnings), different types or parts of seats (18%), parts of furniture (9%), mattress supports and articles of bedding (5%) and wooden furniture (5%). Bangladesh's major furniture exporting destinations are the United States (21%), Japan (21%), Spain (16%), China (9%), and Sweden (5%).

Individual items of Bangladesh are exported to limited destinations. Bangladesh exports a maximum of 25 furniture products (at the HS 6-digit level) to around 80 destinations. In comparison, Vietnam exports 38 items to 122 markets while both India and China export 39 furniture items to 185 and 210 markets, respectively.

Despite mixed evidence, the quality of a range of Bangladesh's furniture products is quite impressive. Bangladesh outperforms its Asian comparators in securing higher unit value prices for sleeping bags, reflecting very good quality. Besides, products under HS 9401 (seats and parts of thereof) and HS 9403 (wooden, plastic, metal, and cane and rattan furniture items) are also found to attract relatively high unit value prices.

## Transforming the furniture industry into a billion-dollar-export sector: Major policy recommendations

Despite its potential, the furniture sector has not really taken off to establish a solid base and contribute meaningfully to overall export diversification. In a world market of US\$240 billion for a relatively labour-intensive sector like furniture, Bangladesh's exports of just above US\$60 million (0.026%) shows a huge export market prospect that must be harnessed. To transform this

sector into a billion-dollar-export industry, some critical challenges faced by the industry must be addressed on a priority basis. While many of those are generic in nature being relevant for promoting overall exports, several of them are more specific to the furniture industry.

- The sector is constrained by, among others, weak backward linkages, high procurement costs of raw materials, difficulties faced in accessing finance, shortage of skilled labour, excessive cost of doing business, lack of trade promotional activities, etc. Although successive export policies since 2009 have considered furniture among the priority sectors, the support measures should be deepened and consolidated further to address gaps in certain areas as well as to help exporters overcome adverse consequences arising from the generally high cost of doing business in Bangladesh.
- The sector is critically dependent on imported raw materials and intermediate inputs. Only about 40 percent of the required wood and timber comes from domestic sources. The import dependence of other raw materials is even greater. Allowing bonded warehouse facilities for exporters can greatly reduce production costs given that import duties and taxes on imported inputs are quite high, and the time needed between export orders received and goods shipped to destination countries is longer than that of many other comparator countries. At present, most exporters are also not using the duty drawback scheme, which is known to have cumbersome and lengthy processes involved. When raw materials procured at world prices (i.e. without paying domestic duties and taxes) cannot be used in production, it is extremely difficult to compete in the global market. It cannot be overemphasized that uninterrupted and instant supplies of intermediate inputs at competitive global prices are a key determinant of export success. Any policy barrier in this respect will undermine exporters' competitiveness. Bonded warehouse facilities played a critical role in boosting the supply response from the garment sector. The same policy stance should be replicated for furniture as well as other sectors.

- Bonded warehouse facilities should be made available to all exporters for their export-oriented production. One reason for restricting bond facilities is firms' sales both in domestic and foreign markets. For the readymade garment industry, it has been relatively easy for firms to focus on overseas markets alone. The nature of clothing items exported by Bangladesh, in most instances, is quite different from the ones for which the domestic market would be competing directly. For furniture, the demand patterns may not be so obviously differentiated. As such, the policy that bonded warehouse facilities to be used by 100-percent export-oriented firms only is very stringent. Rather, the provision should be that such facilities be used only for the portion of export production. Expecting that manufacturers who wish to make use of bonds should have separate plants for local and export sales is onerous and may not help firms achieve economies of scale. Issues like leakages from bonded warehouses and governance failures should be dealt with legal procedures rather than by imposing policy barriers that affect firms across-the-board.
- There is scope for deepening direct policy support in the form of cash assistance. Furniture exporting firms not using bonded warehouses and duty drawbacks are accorded with cash assistance of 15 percent of their FOB value of export orders. This is helpful. However, the attractiveness of domestic sales under the shield of high tariffs and other trade taxes and sustained real exchange rate appreciation imply that the provided rate of cash incentive is just too small to help overcome policy-induced anti-export bias. While cash assistance alone cannot be enough, raising its level can add to improved competitiveness in the short to medium term. In the 1990s, the readymade garment sector enjoyed cash assistance of up to 25 percent, which helped many firms improve their competitiveness. Similarly, such the corresponding incentive for the furniture sector can be raised to ponding boost export supply response.
- To reiterate, under current circumstances, providing bonded warehouse facilities and higher export incentives should be considered most urgent policy priorities. Even when firms access duty drawback facilities or bonded warehouse facilities, they should also be



provided with cash assistance. This is because the duty-free import of intermediate inputs for exporting firms is no privilege or incentive at all. Rather, this is a mere necessity for becoming globally competitive as all comparator countries allow their exporters procuring raw materials at world prices without charging any import duties. A policy of export incentive should be put in place in addition to such usual practice.

- Difficulties in accessing finance is a major challenge faced by most furniture firms. High cost of borrowing, large value of collaterals needed for bank loans, and limited access to trade finance seriously constrain export supply response. The Export Development Fund (EDF) and the Export Credit Guarantee Scheme (ECGS) should be proactively used to help expand support for furniture exporters. Many potential exporting firms are not aware of the facilities like EDF and ECGS. Raising awareness for available export support measures will thus constitute a useful initiative.
- Shortage of skilled workers and managers with specialization in furniture production processes using modern technologies is a constraint that requires urgent attention. Vocational training facilities for workers are extremely limited and the sector should be given priority by establishing a national technical and vocational qualification framework (NTVQF) under the National Skills Development Policy. Private enterprises can also play an important role by offering apprenticeship programmes and providing on-the-job training as part of a national furniture sector development strategy. Furthermore, policy support is needed for setting up a specialized training and design institute for the furniture sector.
- Attracting foreign direct investment (FDI) in the furniture sector can be an important way of unleashing export potential. FDI inflows help promote skill upgradation, productivity improvement, and transfer of technology benefiting local firms. FDI firms are generally well-linked to global value chains comprising the entire range of activities including design, production/manufacturing, marketing, distribution and support to the final

consumer. Being part of this integrated supply chain process ensures sustainability of export orders and growth. Bangladesh currently offers a range of attractive incentives for FDI. Bonded warehouse facilities and higher direct incentives can encourage FDI inflows including joint ventures involving local firms. Over the medium term, developing furniture clusters within the special economic zones or export processing zones can attract foreign investments.

- Like the successful furniture exporting countries, Bangladesh must proactively explore new market opportunities and aim to increase the number of furniture items sold in each market simultaneously. Therefore, support measures for regular hosting of and participation in international furniture fairs and expos need to be expanded and strengthened. The possibilities of Bangladeshi firms' participation as suppliers in various online portals need to be looked into and support can be provided in this respect particularly to small and medium-size firms.
- These days export success is critically dependent on fulfilling certain environmental standards such as the use of recycled and recyclable raw materials, use of woods certified by specialized agencies, environment-friendly manufacturing activities and waste management mechanisms, use of eco-friendly varnishes and glues, etc. Certifications on quality standards, labour standards and wood sector-specific standards are widely recognized as important for satisfying consumers in developed countries. Relatively new and successful furniture exporting firms from comparator countries have adopted and implemented the relevant standards. Along with the export policy support recommended above, firms should also consider complying with relevant standards as part of their future business success. Special assistance for small and medium scale enterprises can be designed to help them upgrade their current production practices and achieve certifications.

- Lack of good quality information (e.g. on different types of firms, size of workforce, specialization, materials used in different products, sources of raw materials, production capacity, and various skill types of employed workers, sales in domestic and foreign markets etc.) is an important obstacle in undertaking and attracting regular research on the sector. Mainstreaming the sector by generating credible information can greatly help better appreciate the role of policy options and possible implications. The Bangladesh Bureau of Statistics (BBS) can conduct specialized periodical surveys on the sector as a part of the Survey on Manufacturing Industries (SMI) to gather useful information. Besides, the *Bangladesh Furniture Industries Owners Association* can strengthen its capacity to update relevant information on the furniture sector regularly.
- Finally, the improved competitiveness of the furniture industry or any other sector for that matter is also affected by the overall economic and enabling environment in the country. Infrastructural bottlenecks including weak and inadequate port facilities, poor inland transportation system, inefficient trade logistics, lack of human resources, etc. – all tend to have an impact on competitiveness and export performance. In each of these areas, Bangladesh can make substantial improvements. The *World Bank Doing Business Survey 2018* ranks Bangladesh in lower rungs in most indicators in comparison with other comparators. Therefore, a medium to long-term export development strategy for any sector should also consider making progress on ‘doing-business’ indicators that affect private sector firms’ performance.

# Chapter 1: Introduction

The furniture industry in Bangladesh is one of the most prominent non-traditional sectors with significant potential for enhanced export earnings thereby helping diversify the country's existing export structure. The production process being largely labour-intensive in nature, the skill-mix in the industry is comparable to that of in readymade garment (RMG) sector. Furthermore, the experience of clothing exports would also suggest that being dependent on imported intermediate inputs should not be any major constraint for the furniture industry to be globally competitive. Although the export response has so far been lower than expected, the furniture industry has flourished, catering mainly for the needs of the domestic consumers. As the overall economic growth outlook is expected to remain buoyant over the medium term, the domestic demand for furniture as well as production capacity is also likely to expand by leaps and bounds. Enhanced production capacity and supply response often result in enlarged exporting opportunities. Recognising its export potentials, the furniture industry has been considered as a 'thrust sector' and was included as one of the highest priority sectors in Bangladesh's 2015–2018 Export Policy.

Despite a relatively small base until now, furniture exports from Bangladesh have been on a rising trend in recent times. While this is an encouraging factor, exports appear to be concentrated in a few products. That is, there is much greater scope for expanding product lines including the high value-added items. Similarly, exports are concentrated in only a few markets and thus exploring new markets is essential for future expansion of the sector. The role of policies in boosting furniture exports needs strengthening as well.

Amongst a series of export sector-specific analyses undertaken by the Bangladesh Enterprise Institute (BEI), this current study is focused on the furniture industry to explore global market

prospects, identify key challenges and consider policy options for stimulating and sustaining export response from the sector and contributing to export diversification efforts. Another key objective of this study is to facilitate consultations with the private sector stakeholders so that their perspectives can be gathered in providing inputs into high-level policy discourses on export promotion and diversification.

This study is organized as follows: Followed by the introduction in Section I, Section II highlights some salient features of Bangladesh's furniture industry; Section III analyses the trends in furniture exports from Bangladesh; Section IV provides an assessment of global export markets and prospects for Bangladesh; Section V contains discussions on the challenges faced by the furniture industry in Bangladesh and policy priorities to address those challenges; Section VI includes major recommendations along with concluding remarks.

## Chapter 2: Salient Features of the Furniture Industry in Bangladesh

### 2.1 Growth of the sector and its contribution to the national economy

The furniture industry has a long history as well as tradition in the Indian subcontinent including today's Bangladesh. The subcontinent was known for its crafting and artistic woodwork. Over time, the sector has evolved from a predominantly home-based small-scale carpentry activities to medium-to-large scale commercial production to meet growing demand for all types of furniture. The traditional cottage-based manual activities have also had to come to terms with increasing use of machines and power tools. Modern furniture manufacturing is also different in using materials other than woods. Plastics, laminated plywood boards, and metals are frequently used, requiring specialized craftsmanship of various types. Despite the transformation process that is underway, the industry continues to portray relatively labour-intensive production processes.

Although furniture exporting was initiated in the mid-1990s, some of the biggest commercial firms had been in operation since the pre-independence period. These include the country's two most prominent furniture and related products exporting firms: Partex Furniture Industries Ltd. (PFIL) and HATIL. Partex started its journey with the production of particle boards in 1962 whereas the furniture manufacturing unit was added later in 1999.<sup>1</sup> Because of the existence of strong backward linkages of furniture production,<sup>2</sup> it produces and distributes both wooden furniture and furniture produced using particleboard, decorative plywood etc. HATIL, previously

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<sup>1</sup> The Daily Star, 13 January 2014 and the Daily Star, 5 April 2015.

<sup>2</sup> Sister concerns of PARTEX star group produce particleboard, plywood, veneered board etc.

known as H. A. Timber Industries Ltd. was established in the 1960s. It possessed vast experience in furniture production with special focus on quality, durability and aesthetic sense. In the post-independence period, another renowned firm, OTOBI, was established in 1975 and started exporting in the mid-1990s. It operates both domestically and globally with more than 400 outlets, dealers and franchises in the domestic market and one franchise in Kolkata, India.<sup>3</sup> Then, Akhter Furnishers Ltd. started its journey in furniture manufacturing in 1976. Apart from developing its own seasoning capacity of 2,000 cubic feet of solid wood per month (IDLC, 2017), it established Akhter Furniture Academy in 2012 for furniture education realizing huge potentials of such specialized training.<sup>4</sup> Massive growth in the demand for furniture resulted in further expansion in manufacturing capacity in the country. Navana, another giant furniture manufacturing enterprise, came into operation in 2002 and developed expertise on producing home and office furniture. It operates across the country with 44 outlets (IDLC, 2017). Another dominant firm in the market is the Bengal Group of Industries, established in 1969 specializing in plastic products, started producing plastic furniture since 2003. Different types of home furniture and office furniture made of plastic are its main products. The above-named commercial firms have their brands established in the domestic market and are involved in mass production targeting the local market. As the industry became a promising export sector, the government established a dedicated furniture exhibition zone in Purbachal, Dhaka.<sup>5</sup> Two associations – Bangladesh Furniture Exporters Association (BFEA) and Bangladesh Furniture Industries Owners Association (BFIOA) – are working to promote furniture production and expand exports (Quamruzzaman, 2014). The exporters' association (BFEA) has 19 members (IDLC, 2017).

In the domestic market, the industry is characterized by the predominance of micro, small, and medium enterprises scattered all over Bangladesh as against big firms that are mostly located in some major cities such as Barisal, Bogra, Chittagong, Dhaka, Manikgonj, Narayangonj and Sylhet (Jalil *et al.*, 2017). The prominent furniture factory clusters in Dhaka can be found in areas of

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<sup>3</sup> See <https://bdbanijjo.wordpress.com/tag/leading-furniture-industries/> for details.

<sup>4</sup> See <https://bdbanijjo.wordpress.com/tag/leading-furniture-industries/> for details.

<sup>5</sup> Business Intelligence Bangladesh; 7 April 2017.

Badda, Chankharpul, Gandaria, Madanpur, Mirpur, Panthapath, Shajahanpur, Shayampur, and Sutrapur while several large firms are located in Gazipur and Savar.<sup>6</sup>

There is lack of credible information on furniture enterprises, production and employment in the country. According to one study (PKSF, 2013), there are about 71,000 micro and small enterprises in the sector, while the corresponding figure for medium-sized enterprises is just 81. IDLC (2017) reports a total number of “engaged enterprises” in the industry as 75,000, while another source suggests 42,000.<sup>7</sup> Most of the enterprises are perceived to be in the informal sector. This is one reason for not having reliable information on production and employment in the sector. According to the data reported by the Bangladesh Bureau of Statistics (BBS), the total value added from all types domestically produced furniture items stood at almost BDT 210 billion in 2016–2017, increasing from BDT 74 billion in 2009–10. The share of the sector in the country’s gross domestic product (GDP) is thus estimated to be about 1.1 percent (Figure 2.1). The average annual growth rate of the sector since 2009–10 was about 10 percent, higher than the growth of GDP.<sup>8</sup>

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<sup>6</sup> The Financial Express; 25 January 2010.

<sup>7</sup> This information is taken from <https://bdbanijjo.wordpress.com/tag/leading-furniture-industries/> accessed on 10 August 2018. This source also reports that there are about 75,000 carpentry households in addition to about 12,000 wooden and non-wooden furniture manufacturing SMEs.

<sup>8</sup> Growth rate is calculated based on constant 2005-06 price.



**Figure 2. 1**


Source: Authors' estimates using data from the Bangladesh Statistical Yearbook, various issues, Bangladesh Bureau of Statistics (BBS).

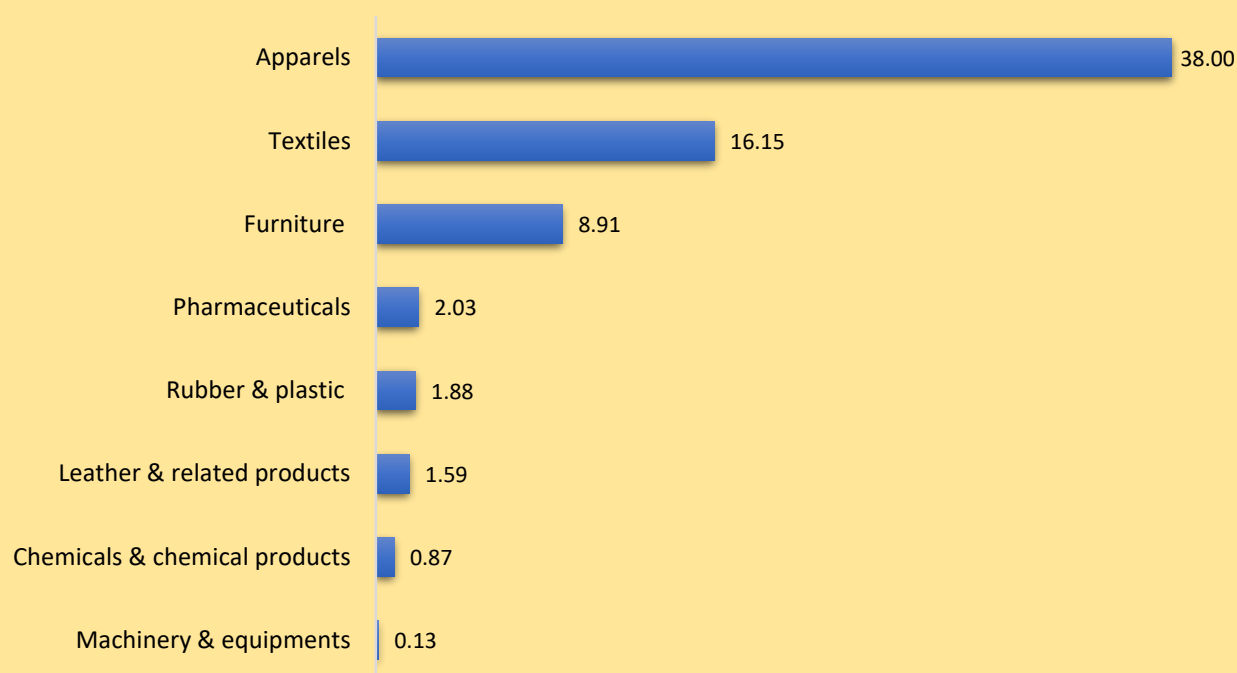
The domestic market for furniture in Bangladesh is expanding due to a rising middle-class population leading to a thriving real estate business, and rising urbanization. The usage of various home and office furniture items is becoming more widespread day by day. According to various unofficial sources, the domestic furniture market is expanding at a rate of 20 percent per annum. With the growing economy, such a buoyant trend is likely to be maintained in the foreseeable future. High domestic demand is met by both domestically produced as well as imported furniture. The import of furniture has almost doubled over the past decade, reaching US\$87 million in 2016–17. Nevertheless, with the expansion in domestic production capacity and improvement in quality, the furniture sector is now set to generate more export revenues.

The furniture sector requires a large pool of labour with varying skills in different tiers of production and marketing. In carrying out such activities as designing and furnishing, the demand for skilled labour is significantly high. Indeed, labour is a key success factor for the industry.

According to official sources, i.e. labour force surveys carried out by the Bangladesh Bureau of Statistics (BBS), the total employment in furniture and related activities is 0.78 million. The sector contributes to about 9 percent of all manufacturing employment in the country. While apparel and textile industries are the two largest employment providers, among the remaining sectors furniture is way ahead of others (Figure 2.2). About 80 percent of furniture sector jobs are related to basic production whereas the remaining 20 percent involve more specialized skills such as designing, furnishing, assembling, and marketing.

**Figure 2. 2**

**Share of employment in manufacturing sector (%)**



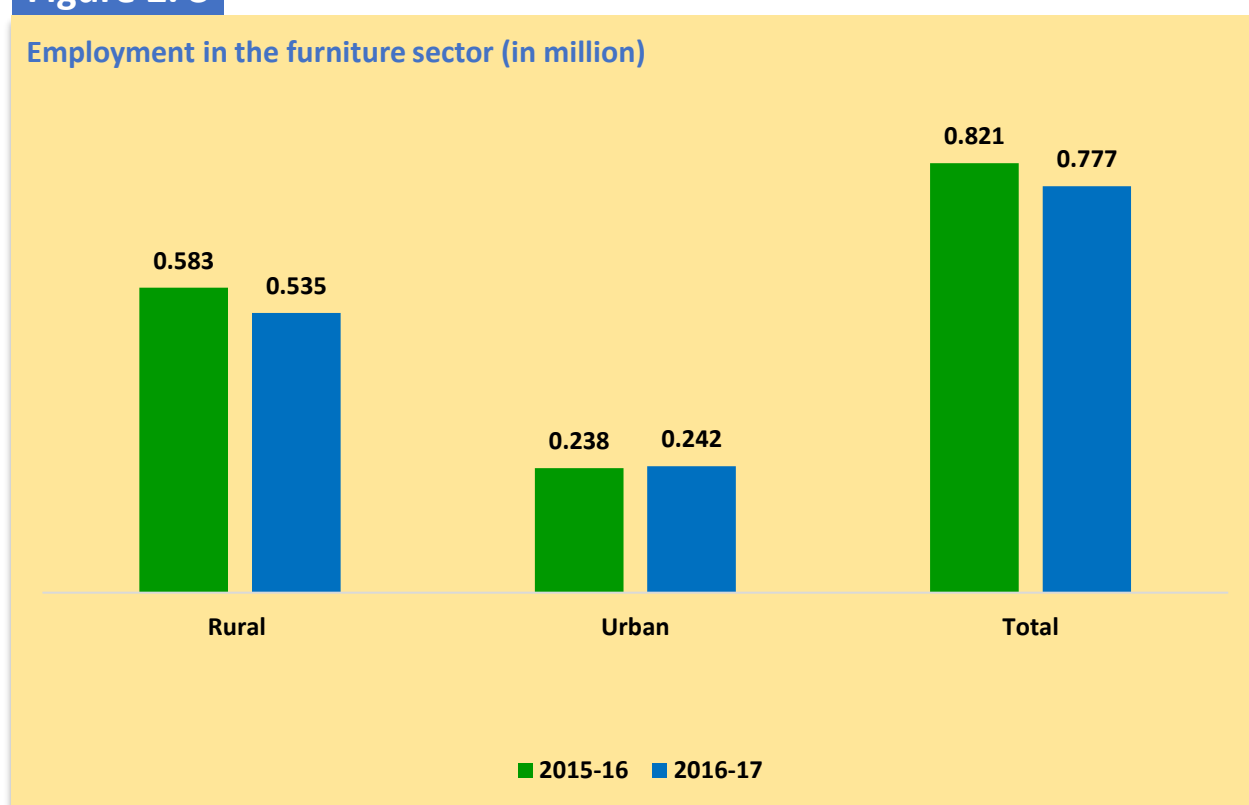
Source: Authors' analysis using the Quarterly Labour force survey (QFLS), 2016–17, BBS.

Despite a relatively high share in manufacturing employment, jobs in the furniture sector in recent times have slightly declined according to BBS labour force surveys. Between 2015–2016 and 2016–2017, furniture jobs fell by about 0.05 million: from 0.82 million to 0.77 million (Figure 2.3). Not only furniture but the manufacturing sector as a whole has seen reduced employment intensity. This has been a subject matter of an intense policy debate (Beyer and Rama, 2018) with

the reason for this being attributed to the spread of technology-intensive production processes and automation (Razzaque and Dristi, 2018). Disaggregated data for the furniture sector shows only the rural employment declining while jobs in the urban sector remaining largely unchanged. It could be that productivity growth with expanded supply-side capacities in urban-sector firms, including those in large and medium ones, met much of the increased demand for furniture in the country. One important limitation with the employment data, however, is that surveys fail to capture information on the informal sector. There is a general recognition that a significant proportion of production and employment in the furniture sector is informal in nature. Various sources report a much higher level of employment associated with the sector ranging from 1.5 million to 2.5 million.<sup>9</sup>

**Figure 2. 3**

**Employment in the furniture sector (in million)**



Source: Authors' calculation using data from Quarterly Labour Force Survey (QLFS), 2015-16 and 2016-17, BBS.

<sup>9</sup> This is based on the information obtained from the Bangladesh Furniture and Interior Décor Expo (2018), and IDLC (2017).

## 2.2 Production processes

Production of wooden furniture follows an involved chain of activities from log wood collection to the making of final furniture products. After collection, log woods are sent to sawmills, where they are cut to varying sizes and thickness as per requirements. For manufacturing activities, woods of different sizes have to go through a process of seasoning to reduce the moisture in the woods. Seasoning can be done either through air drying or kiln drying. In the next phase, seasoned woods are processed to manufacture wood pieces as well as different types of boards (i.e. chipboards, medium-density fibreboard, etc.) which are the primary means of making furniture parts in the subsequent stage. Parts of furniture are then varnished/painted. Assembling of various furniture parts can take place before or after the varnishing/spraying work depending on the nature of the product and whether this is produced by small firms or large commercial firms. For medium to large firms, packaging prior to transportation and distribution is also an important activity. A detailed production process for a typical wooden furniture industry is shown in Figure 2.5.

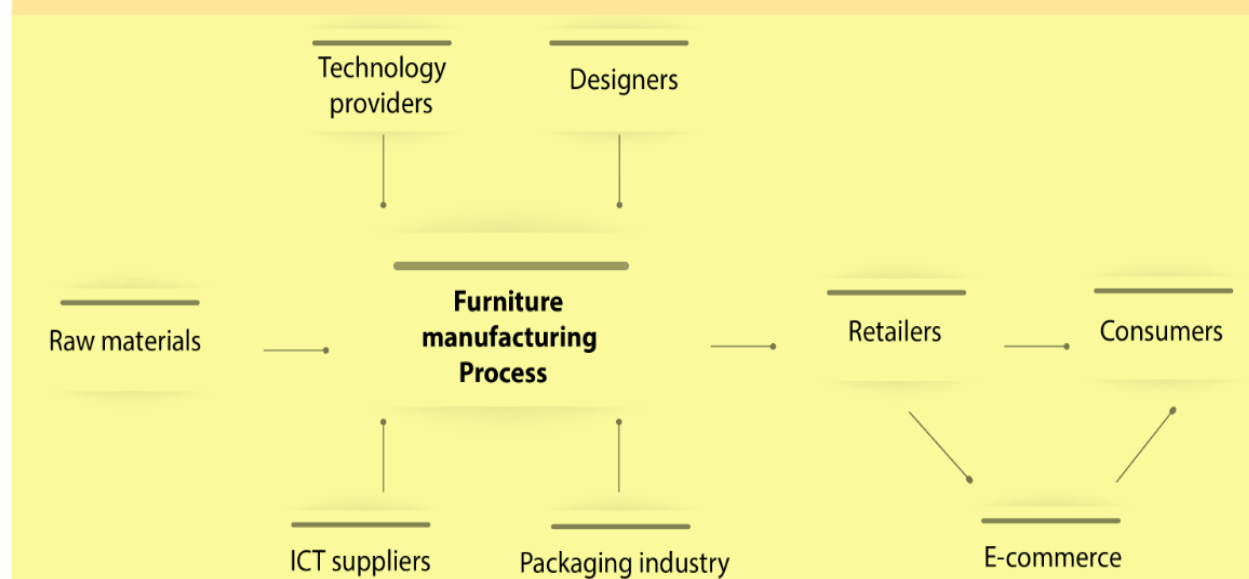
For other types of furniture – e.g. metal, cane and rattan, plastic and specialized items such as medical and office furniture as well as accessories considered as furniture items such as lamps and lights, mattresses, etc. the supply chains require gathering different varieties of raw materials and intermediate inputs including MDF, particle and veneered board; ply wood; plastic materials; stainless steel; and fabrics and cotton production. These materials are collected from local as well foreign sources.

Both indigenous and modern technologies are widely used in the furniture industry. Export-oriented and large firms are increasingly relying on more capital and technology-intensive production techniques for the purpose of cutting, grooving, routing, seasoning and edge-banding operations using different types of sophisticated machines and power tools. However, adopting modern technologies for small and micro-enterprises and those in the informal sector remains a major challenge. Along with machineries and tools, modern firms are using computer software

in designing products and undertaking the so-called Enterprise Resource Planning (ERP) to ensure administrative and managerial efficiencies. Designing furniture for the export-oriented firms, one of the most important parts of the entire supply-chain process, follows largely the modern, customized and internationally recognized practices. This is one particular area where many firms in Bangladesh do not have adequate technical and human resource capacities. Information and communications technology (ICT) providers comprise another critical supply chain pillar with their main activities being collection of market-related information both for domestic and global consumers and connecting individual firms with big retailers and consumers. E-commerce has now globally emerged to be an important online marketing and shopping platforms, for taking orders and delivering furniture from retailers to consumers. This is an underdevelopment area in Bangladesh but is likely to develop in the near future. One of the final stages in manufacturing supply chain framework is the activities related to packaging which is important for transportation. As against a modern furniture industry supply chain system (Figure 2.4), much of the domestic production in Bangladesh is still at an early stage of development.

**Figure 2. 4**

**Furniture manufacturing – a supply chain framework**



Source: Authors' presentation using information from European Commission (2013).

Lack of availability of raw materials and intermediate inputs from domestic sources means the industry is excessively reliant on imports. The most needed and widely used basic raw materials such as timber, MDF, particle and laminated boards, glues, polishing and colouring ingredients, wood coating materials, fabrics and foam, etc. as well as capital and machinery goods are not available in the country. According to one report, two of the major domestic sources of raw materials – the Sundarbans and greater Chittagong – account for just 40 percent of the wood and timber required in the furniture industry (EU, 2013). China, Malaysia, Myanmar, and Thailand are amongst the important sources of raw materials for Bangladesh. Of all the raw materials, gamar and hard wood, and oak and barmatic wood are imported from Africa and Myanmar respectively. According to some sources, almost all wood coating and locks are imported into the country. For ply boards the import dependence is about 60 percent, for particle boards it is 20 percent, and almost half of all adhesive used in the local industry is sourced from abroad.<sup>10</sup> Key raw materials required for the production of furniture and their principal sources are provided in Table 2.1.

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<sup>10</sup> Information obtained from Business Intelligence Bangladesh; 7 April 2018 and The Daily star; 13 January 2014.

**Table 2. 1 Furniture raw materials and sources**
**Home furniture**

Items	Raw materials	Sources of raw materials	Chemicals used	Sources of chemicals	Machinery used	Sources of machinery
<b>Beds and sofas</b>	Oak wood, segun wood, mahogany, hard wood, gamari, barmatic wood, MDF, solid wood, processed wood, cane, melamine laminated board, veneered particle board	Both domestic and foreign sources – Canada, Ghana, India Ivory coast, Malaysia, Myanmar U.S., and some other European countries	Lacquer, glue, varnish, shellac, spirit, padding, varnish thinner, cream, apex adhesive gum	Both local and foreign (shellac from Italy), Liker & glue from China and India	Locks, screws, magnets, handle bars, metal pipes, mechanical and adjusting devices, glass, mirrors, plastic, magnets, pipes, melamine boards, locks, hinges, channels, stoppers	Both from local and foreign sources – mainly China and Germany
<b>Cabinets (kitchen, show, dinner, storage)</b>	MDF, processed wood, solid wood, melamine laminated board, veneered particle board					
<b>Tables (dining, side, centre, study, dressing)</b>						
<b>Chairs</b>	Segun wood, MDF, solid wood, processed wood, padding materials, sponge foams, upholstery fabrics, melamine laminated boards, veneered particle board					
<b>Accessories (stools, hangers, wall shelves, shoe racks, mirror frames, bowls, showpieces)</b>	Solid and processed wood, metal, stainless steel					

**Office furniture**

Items	Raw materials	Sources of raw materials	Chemicals used	Sources of chemical	Machinery used	Sources of machinery
<b>Tables (office, working, work stations, conference, computer)</b>	MDF, ply wood, processed wood, solid wood, melamine laminated board, veneered particle board, light block board	Both domestic and foreign sources- Canada, Ghana, India, Ivory Coast, Malaysia, Myanmar, U.S. and some other European countries	Lacquer, glue, varnish, shellac, spirit, padding, thinner, cream, apex adhesive gum	Both local and foreign (shellac from Italy), lacquer and glue from China and India	Locks, screws, magnets, handle bars, metal pipes, mechanical and adjusting devices, glass, mirrors, plastic, magnets, pipes, melamine board locks, hinges, channels, stoppers	Both from local and foreign sources – China and Germany
<b>chairs</b>	Metal pipes, solid and processed wood, padding materials, sponge, foams, upholstery fabric					
<b>Shelves and cabinets</b>	Processed wood, solid wood, melamine laminated board, veneered particle board					
<b>Waiting lounge sofas</b>	Processed wood, solid wood, upholstery fabrics					
<b>Factory furniture</b>	Solid wood, stainless steel					
<b>Ship furniture</b>	Solid wood, stainless steel, upholstery fabrics, different types of boards					
<b>Different types metal furniture used in office</b>	Stainless steel, mild steel	China				

### Decorative and plastic furniture

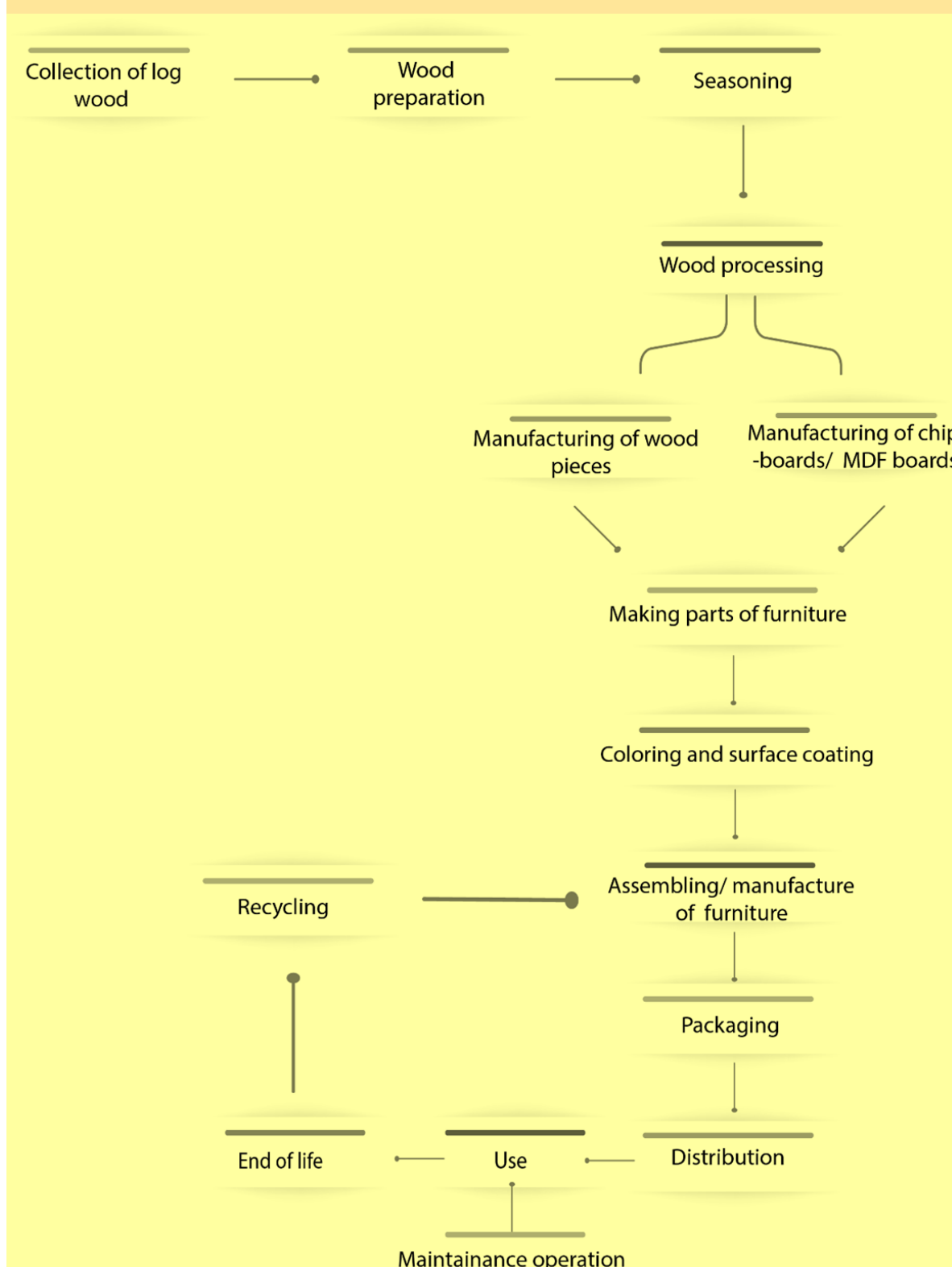
Furniture type	Items	Raw materials	Sources of raw materials	Chemicals used	Sources of chemical	Machinery used	Sources of machinery
<b>Decorative</b>	Different types of home and office decorative items	Cane and rattan	Both local and foreign: Indonesia and Malaysia	Liquor, glue, varnish, shellac, spirit, padding, thinner, cream, apex adhesive gum	Both local and foreign (shellac from Italy), liquor & glue from China and India	Locks, screws, magnets, handle bars, metal pipes, mechanical and adjusting devices, glass, mirrors, plastic, magnets, pipes, melamine board locks, hinges, channels, stoppers	Both from local and foreign sources – China and Germany
<b>Plastic</b>	Chairs, tables, stools, wardrobes, racks	Plastic, polymers of vinyl acetate or of other vinyl esters, polymer of ethylene etc. steel	Australia, China, Germany, India, Japan, Korea, Kuwait, Malaysia, Singapore, Sri Lanka, Taiwan, Thailand, U.A.E., U.S.				

Source: Authors' analysis and compilation from various sources.



**Figure 2. 5**

**Production process of furniture (typical wooden furniture)**



Source: Authors' representation using information from the European Commission (2013) and Barua *et.al.*, (2014).

## Chapter 3: Furniture Exports from Bangladesh

At the outset, it is useful to define what constitutes furniture exports. Under the Harmonized System (HS) of traded goods classification, the product code 94 (HS 94) at 2-digit level broadly covers furniture items. It includes different types of furniture as well as fittings made from mainly wood, plastics, rattan, cellular, sponge or expanded rubber, bamboo, and some other particles used by agro-processing industries. Under the HS classification, more specific divisions of furniture items are provided at 4-digit levels of HS 9401, 9402, 9403, 9404, 9405 and 9406.<sup>11</sup> HS 9401 contains seats whether or not convertible into beds, and parts thereof. HS 9402 comprises medical, surgical, dental or veterinary furniture (for example operating tables, examination tables, hospital beds with mechanical fittings, dentists' chairs); barbers' chairs and similar chairs, with rotating as well as both reclining and elevating movements; parts of the foregoing articles. While HS 9403 includes other furniture and parts thereof (e.g. metal furniture, wooden furniture for offices, kitchen, bedroom, plastic furniture, bamboo and rattan furniture etc.), HS 9404 covers mattress supports; articles of bedding and similar furnishing (e.g. mattresses, quilts, eiderdowns, cushions, pouffes and pillows) fitted with springs or stuffed/internally fitted with any material of cellular rubber or plastics. HS 9405 encompasses lamps and lighting fittings including searchlights and spotlights and parts thereof; illuminated signs, illuminated name-plates and the like, having a permanently fixed light source, and parts thereof not elsewhere specified or included. Finally, prefabricated buildings (of wood, sandwich panel with or without cold room facility used by agro-processing, pharmaceutical, and other industries) are categorized under HS 9406. This study considers these conventional sub-divisions of furniture items.

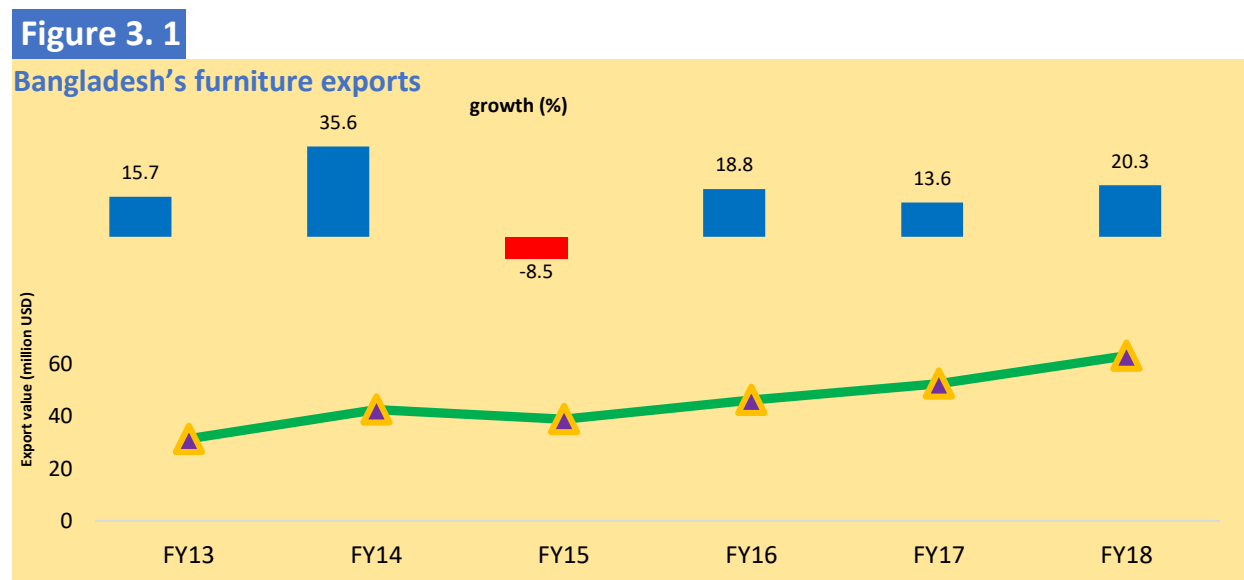
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<sup>11</sup> Export Promotion Bureau (EPB) follows the same definition as defined under Harmonized System of Classification.

### 3.1 Trends in furniture exports

Bangladesh's furniture exports stood at US\$63.18 million in FY18, rising from US\$31.4 million in FY13 (Figure 3.1). The share of furniture in overall exports increased from 0.12 percent in FY13 to 0.17 percent in FY18 (Figure 3.2). During the same period, the annual average export growth rate of furniture was estimated at an impressive 15.9 percent, albeit from a relatively small export base.<sup>12</sup>

The furniture export composition is highly concentrated in HS 9404 (mattresses, articles of bedding, sleeping bags etc.) (Figure 3.3). This category alone comprises about 56 percent of total furniture export earnings of Bangladesh. The share of different types of wooden, metal, plastic and cane and rattan products (HS 9403) and various wooden, plastic, metal, cane and rattan products are about 21 percent each (Figure 3.3). HS 9406 (prefabricated buildings and parts of buildings) had a sizeable share in 2010 (8.27%), but it fell to less than 1 percent in FY18. Bangladesh's exports of products categorized under HS 9402 (medical furniture) and HS 9405 (varying types of electrical and non-electrical lamps and lighting fittings, lighting sets and illuminated signs and nameplates etc.) are insignificant although in the global market these products are found to be growing apace.

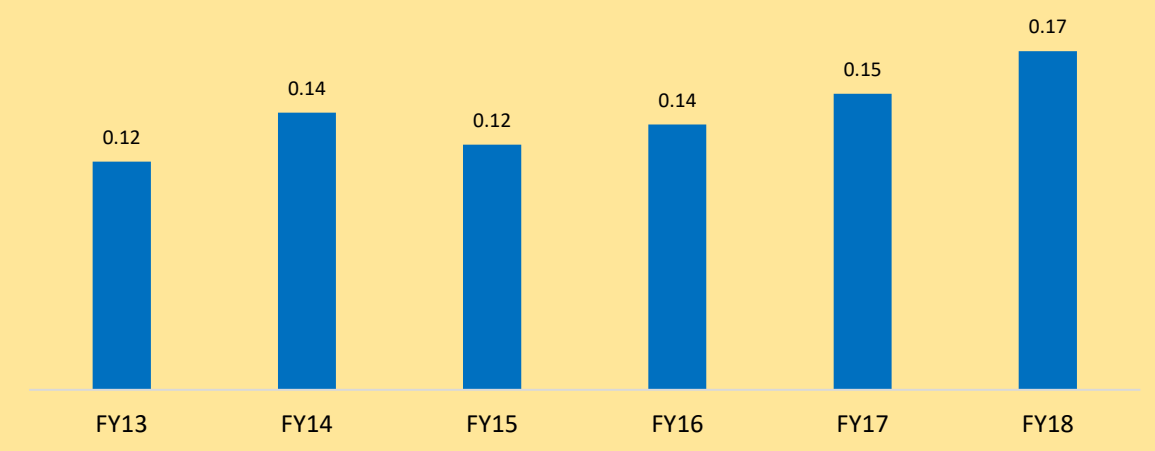


Source: Authors' presentation using data from the Export Promotion Bureau (EPB) of Bangladesh.

<sup>12</sup> Although the export of furniture is expanding, Bangladesh experienced a negative export growth in this sector in FY2015 (Figure 3.2). This could be accounted for a slowdown in global trade. Indeed, in 2015 and 2016, world exports of goods and services declined in absolute terms (Razzaque, 2017). Bangladesh's export of furniture was affected in FY2015 but then it bounced back.

**Figure 3. 2**

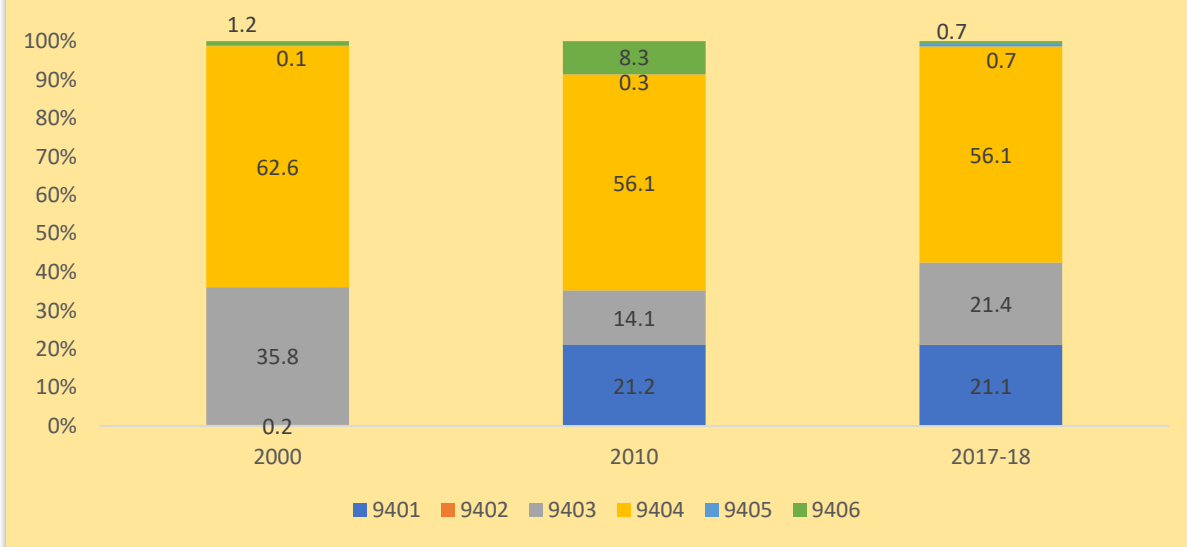
**Share of furniture exports in total exports (%)**



Source: Authors' presentation using data from EPB.

**Figure 3. 3**

**Bangladesh's Export Composition of Furniture (%)**



Sources: Authors' analysis using data from the International Trade Centre (ITC) and EPB.

Trends of furniture exports at a more disaggregated level reflect that both the base and capacity of exports have expanded. The export earnings from plastic furniture and sleeping bags show an increasing trend over time whereas exports of wooden furniture had increased until 2015–2016 before depicting a declining trend. Bamboo, cane and rattan furniture as well as metal products have been fluctuating in nature (Table 3.1).

**Table 3. 1 Exports of different types of furniture from Bangladesh (million US\$)**

Year	Wooden furniture	Metal furniture	Plastic furniture	Bamboo, Cane & rattan furniture	Sleeping bags	Others	Total furniture
<b>2017–18</b>	6.912	0.175	1.046	0.035	31.583	23.464	63.180
<b>2016–17</b>	8.263	0.481	0.652	0.004	30.433	12.695	52.526
<b>2015–16</b>	15.679	0.179	0.324	0.004	25.308	4.765	46.257
<b>2013</b>	4.383	0.390	0.122	0.002	14.110	9.234	28.241
<b>2011</b>	6.276	0.620	0.051	0.092	9.570	7.215	23.761
<b>2011</b>	6.276	0.620	0.051	0.092	9.570	7.215	23.761
<b>2009</b>	1.476	0.160	0.084	0.000	1.170	11.194	14.084
<b>2007</b>	0.909	0.926	0.028	0.044	-	3.302	5.209
<b>2005</b>	0.896	0.160	0.002	0.063	-	2.011	3.132

Sources: Authors' analysis using data from ITC and EPB.

Disaggregated data from EPB for 2017–18 show that exports are highly concentrated in just one HS 6-digit category, sleeping bags (HS 940430), which alone accounts for almost 50 percent of all furniture exports (Table 3.2). Other items (at the HS 6-digit level) with at least US\$1 million exports include parts of seats, parts of furniture, wooden furniture, mattresses support, seats with metal frames, bedroom and office furniture, and plastic furniture. The top five products at HS 6-digit level together account more than 80 percent of furniture exports from Bangladesh.

**Table 3. 2 Top furniture exporting items of Bangladesh, 2017–18**

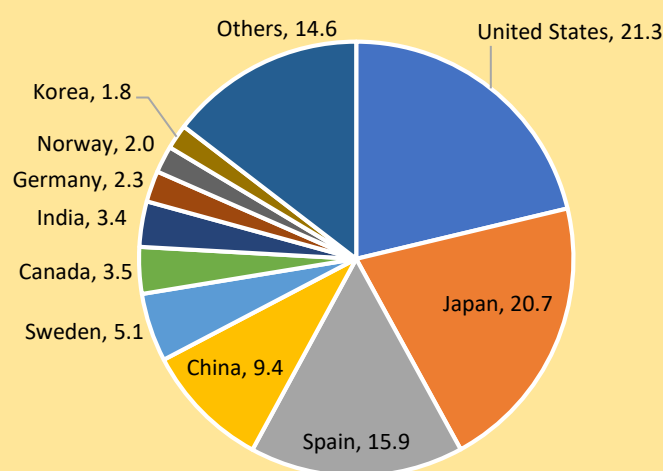
HS code	Description of the items	Export value (million US\$)	Share in total furniture export (%)
<b>94</b>	Total furniture	63.18	100
<b>940430</b>	Sleeping bags	31.58	49.99
<b>940190</b>	Parts of seats	11.26	17.82
<b>940390</b>	Parts of furniture	5.38	8.51
<b>940360</b>	Wooden furniture, nes	3.39	5.36
<b>940410</b>	Mattress supports	3.23	5.12
<b>940179</b>	Seats with metal frames, not upholstered	1.98	3.14
<b>940350</b>	Wooden furniture of a kind used in the bedroom (excl. seats)	1.58	2.50
<b>940330</b>	Wooden furniture of a kind used in offices (excl. seats)	1.32	2.09
<b>940370</b>	Furniture (excl. seats) of plastics	1.05	1.66
<b>940340</b>	Wooden furniture of a kind used in the kitchen (excl. seats)	0.62	0.99
<b>940490</b>	Articles of bedding, stuffed, etc (excl. mattresses and sleeping bags)	0.61	0.97
<b>940540</b>	Other electric lamps and lighting fittings, nes	0.30	0.47
<b>940510</b>	Chandeliers and other electric ceiling or wall lighting fittings	0.10	0.16
<b>940320</b>	Metal furniture, nes (excl. seats)	0.10	0.15
<b>940310</b>	Metal furniture of a kind used in offices (excl. seats)	0.08	0.13
<b>940161</b>	Upholstered seats, with wooden frames	0.04	0.07
<b>940599</b>	Parts (excl. of glass or plastics) of lamps and lighting fitting etc	0.04	0.07
<b>940389</b>	Furniture of other material, including cane, osier or similar materials	0.03	0.05
<b>940560</b>	Illuminated signs, illuminated name-plates and the like	0.02	0.04
<b>940180</b>	Seats, nes	0.02	0.03

Source: Authors' presentation using data from the EPB.

The major export destinations for Bangladesh furniture products are Canada, China, Japan, Spain, Sweden and the United States. The United States is the largest export market capturing 21.3 percent of Bangladesh's furniture exports followed by Japan (20.7%), Spain (15.9%), China (9.4%), Sweden (5.1%) and Canada (3.5%) (Figure 3.4). The top five markets together comprise about 72 percent of total exports of furniture and the combined share of the most important 10 markets are more than 85 percent. This reflects a very high degree of market concentration.

**Figure 3. 4**

**Bangladesh's major Furniture export destinations, 2017-18**



Source: Authors' analysis using EPB data.

## 3.2 Furniture exports to main European markets

Considering Europe as one broad destination, the continent captures almost half of Bangladesh's shipment of furniture items. Currently, Spain and Sweden are the two top furniture export destinations. In Spanish market, the export value of furniture made in Bangladesh was only US\$0.034 million in 2011. But, since then exports have expanded significantly to US\$10.05 million in 2017–18 (Table 3.3). Most common exporting items in that market are sleeping bags, wooden furniture, seats of different types, and articles of bedding.

In Swedish market, exports in 2017–18, US\$ 3.22 million, remained lower than the peak (US\$ 4.40 million) reached in 2013 (Table 3.4). Main exporting items to this market are sleeping bags, mattress supports, articles of bedding and similar furnishing, wooden furniture (excluding for offices, kitchens and bedrooms and seats). The analysis on Bangladesh's furniture export to Spanish and Swedish markets reveals very high degree of export concentration on very a limited number of products, which is largely due to the overall narrow export base of Bangladesh's furniture industry.

**Table 3. 3 Furniture exports in Spanish market**

Year	Exports (million US\$)	Exporting items
2017–18	10.05	Sleeping bags, wooden furniture
2016–17	10.43	Sleeping bags, wooden furniture, different types of seats
2015–16	7.49	Sleeping bags, articles of beddings
2013	1.02	Sleeping bags
2011	0.034	Sleeping bags, wooden furniture

Sources: Authors' analysis using data from ITC and EPB.

**Table 3. 4 Furniture exports in Swedish market**

Year	Total exports (million US\$)	Exporting items
2017–18	3.22	sleeping bags, mattress supports, wooden furniture, articles of beddings, electric lamps & lighting fittings
2016–17	2.32	sleeping bags, mattress supports, articles of bedding/furnishing, wooden furniture
2015–16	1.93	sleeping bags, mattress supports, articles of bedding/furnishing, wooden furniture
2013	4.40	Sleeping bags, mattress supports, seats of different types, articles of bedding/furnishing, bamboo or rattan furniture
2011	3.68	Mattress supports

Sources: Authors' analysis using data from ITC and EPB.



### 3.3 Furniture export to China, Japan and the USA

Despite China being the dominant global importer, Bangladesh captures a minimal portion of market share in that market. Exports from Bangladesh to China increased to US\$5.93 million in 2017–18 from US\$1.38 million in 2011 (Table 3.5). Major exporting items are wooden furniture, sleeping bags, parts of furniture and electric lamps and lighting fittings. Bangladesh's export is highly concentrated in wooden furniture. In Japan – the second major furniture export destination of Bangladesh – exports increased by more than US\$13 million (Table 3.6) between 2011 and 2018. Again, sleeping bags and electric lamps & lighting fittings are the main export products.

The export base and share of Bangladesh's furniture exports to the United States are very small. In 2017–18, export receipts were US\$13.44 million – up from US\$6.86 million in 2011 (Table 3.7). The notable export products in the US are wooden furniture, sleeping bags, seats with metal frames, electric lamps and lighting fittings, articles of beddings, parts of furniture, metal furniture and mattresses supports.

**Table 3. 5 Furniture exports to China**

Year	Total exports (million US\$)	Exporting items
2017–18	5.93	Wooden furniture, parts of furniture, sleeping bags, electric lamps and fittings
2016–17	3.36	wooden furniture, parts of furniture, sleeping bags, lamps and lighting fittings, mattress supports, cane and osier furniture
2015–16	8.47	Wooden furniture, Parts of seats, metal furniture, parts of furniture, sleeping bags, electric lamps & lighting fittings, medical, surgical, dental/veterinary furniture & parts
2013	2.78	Wooden furniture
2011	1.38	Wooden furniture

Sources: Authors' analysis using data from ITC and EPB.

**Table 3. 6 Furniture exports in Japanese market**

Year	Total exports (million US\$)	Exporting items
2017–18	13.11	Sleeping bags, articles of beddings, seats of different types, parts of seats, wooden furniture, medical, surgical, dental/veterinary furniture & parts, electric lamps & lighting fittings, illuminated signs & name-plates
2016–17	3.50	Sleeping bags, parts of seats, seat of different types, seats with metal frames, electric lamps & lighting fittings
2015–16	1.00	Sleeping bags, wooden furniture, seats with metal frames
2013	0.22	Sleeping bags, wooden furniture, electric lamps & lighting fittings
2011	0.07	Electric lighting set, electric lamps & lighting fittings, wooden furniture

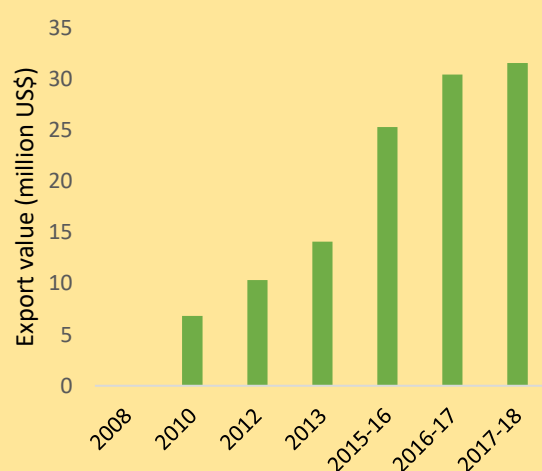
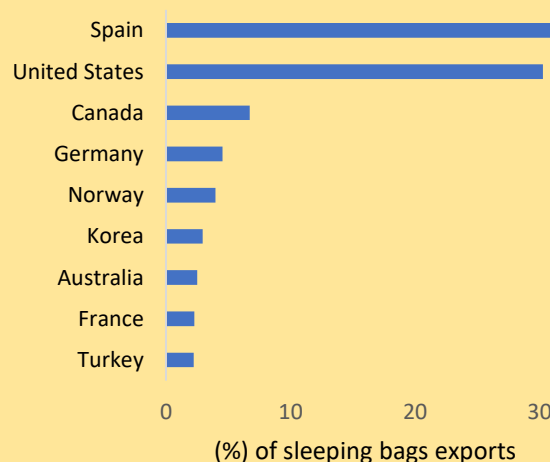
Sources: Authors' analysis using data from ITC and EPB.

**Table 3. 7 Furniture exports in US market**

Year	Total exports (million US\$)	Exporting items
2017–18	13.44	Sleeping bags, Seats of different types, metal furniture, wooden furniture, parts of furniture, chandeliers and other electric lamps, lightings & fittings
2016–17	9.29	Sleeping bags, Seats of different types, metal furniture, mattress supports, chandeliers and other electric lamps, lightings as well as fittings, wooden furniture, parts of furniture
2015–16	7.36	Sleeping bags, wooden furniture, mattress supports, articles of beddings, parts of seats, seats with metal frames, electric lightings & fittings
2013	5.56	Sleeping bags, wooden furniture, articles of bedding, different types of seats, seats with metal frames
2011	6.86	Sleeping bags, wooden furniture, seats with metal frames

Sources: Authors' analysis using data from ITC and EPB.

Considering the single most important export item, the export of sleeping bags grew from less than US\$1 million in 2008 to US\$31.5 million in 2017–18 (Figure 3.5). The main reason behind this growth can be attributable to the fact that the basic materials used for sleeping bags come from the apparel sector, in which Bangladesh is a leading global exporter. Spain and the United States are the principal buyers of sleeping bags from Bangladesh (Figure 3.6). Other major sleeping bags export destinations are Canada (7%), France (5%), Norway (4%) and Korea (3%).

**Figure 3. 5**
**Export value of sleeping bags (HS 940430)**

**Figure 3. 6**
**Major export destinations of sleeping bags (HS 940430)**


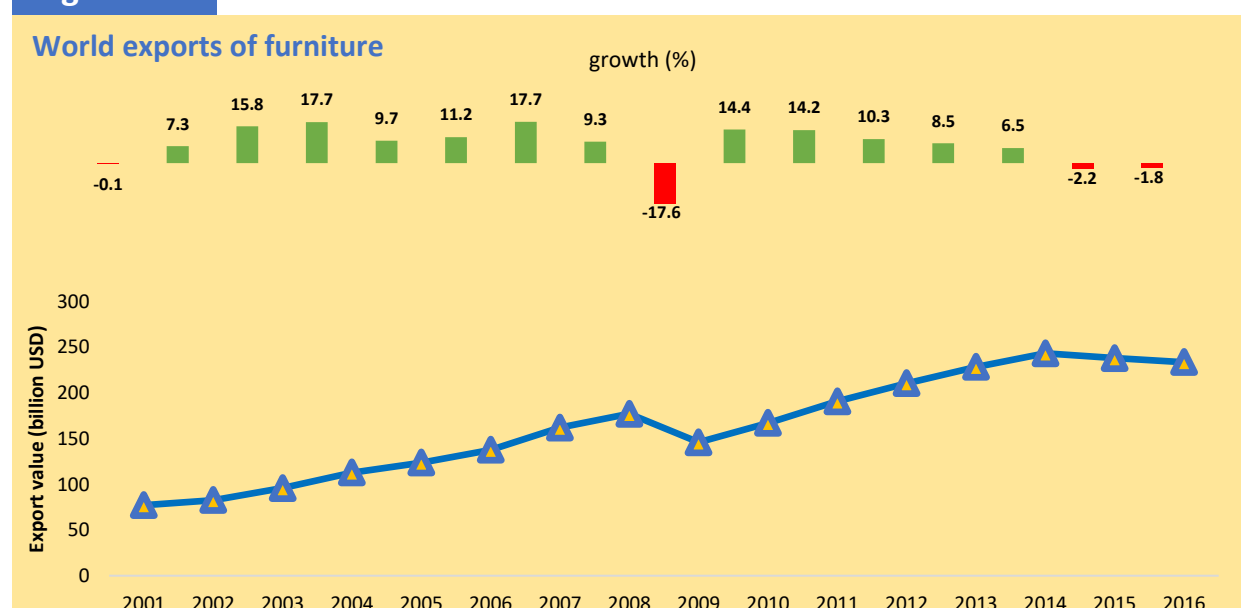
Source: Authors' analysis using data from EPB.

## Chapter 4: Global Export Market Prospects for Bangladesh

### 4.1 The global furniture export market

The global furniture market, as measured by exports from all countries, has witnessed a massive expansion in recent times, as its size trebled between 2001 and 2017: from US\$77.2 billion to US\$240 billion (Figure 4.1). The annual average growth rate was 7.3 percent during this time.<sup>13</sup>

**Figure 4. 1**



Source: Authors' presentation using data from ITC.

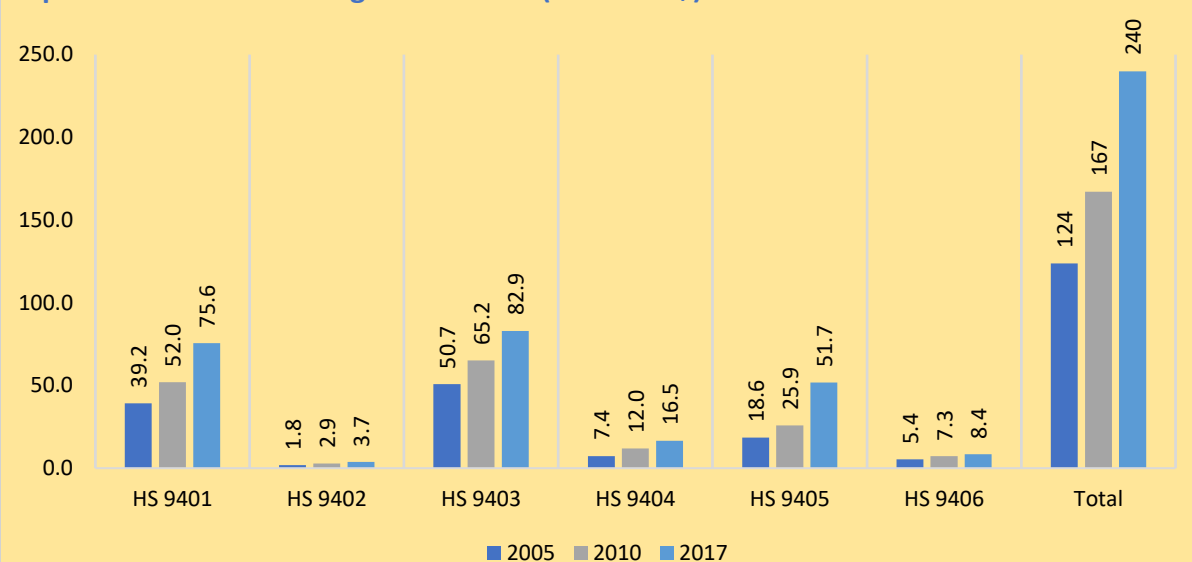
A comparative static analysis of global exports reveals that the demand for almost all types of furniture has risen significantly in the past decade (Figures 4.2 and 4.3). The most

<sup>13</sup> The world exports of furniture reached a peak of US\$243.5 billion in 2014. The slowdown in overall global trade affected furniture exports as well. World furniture exports fell by 2.2 percent in 2015 and again by 1.8 percent in 2016. Emerging data seem to suggest a strong recovery in 2017.

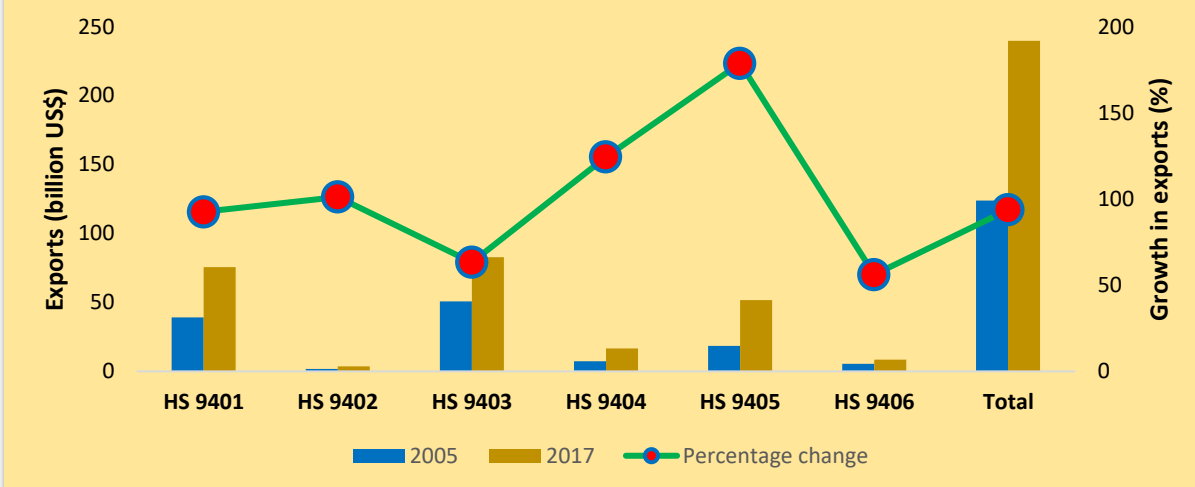
remarkable growth has been for the category HS 9405, which comprises different types of electrical and non-electrical lamps and lighting, parts of lamps and lights, fittings, electric lighting sets, electric tables, desks, chandeliers and other electric ceilings, illuminated signs, name plates, etc. Between 2005 and 2017, the world exports in this category increased from US\$19 billion to US\$52 billion. The market size for medical furniture (HS 9402) and different types of mattresses, sleeping bags, etc. (HS 9404) more than doubled during the same period. The growth for prefabricated building items (HS 9406) was relatively weak: just over 50 percent between 2005 and 2017. During the same period, furniture items classified under HS 9403, comprising various wooden, plastic, metal, cane and rattan products expanded from about US\$51 billion to US\$83 billion, of which the value of plastic furniture (HS 940370) was US\$2.2 billion in 2017. The growth in global plastic furniture exports between 2005 and 2017 was about 94 percent. A close look at Figure 3.3 and Figure 4.2 would suggest that Bangladesh's current furniture export composition is quite different from that of the world exports in terms of the size of the market and products that are growing at faster rates.

**Figure 4. 2**

**Export of furniture in the global market (billion US\$)**

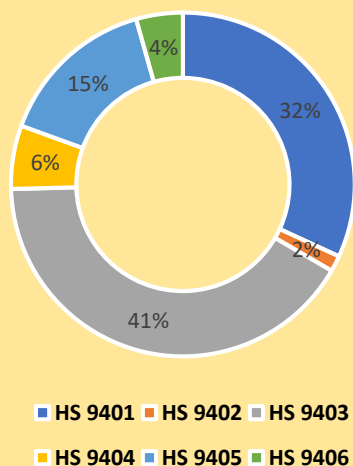
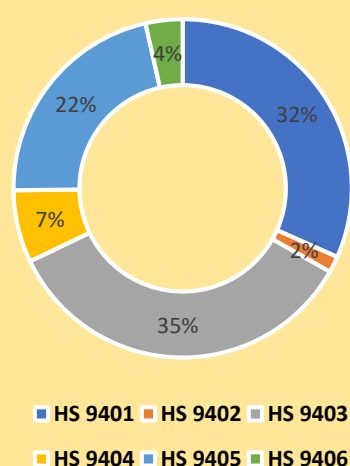


Source: Authors' analysis using data from ITC.

**Figure 4. 3**
**Global furniture exports growth**


Source: Authors' analysis using data from ITC.

The composition of global furniture export composition has changed (Figures 4.4 and 4.5). The share of various metal, wooden and other furniture items (HS 9403) has declined from 41 percent in 2005 to 35 percent in 2017. This change is largely due to the growing share of HS 9405 (lamps and lighting fittings including searchlights and spotlights and parts thereof; illuminated signs, illuminated name-plates and the like and different types of lights) from 15 percent to 22 percent during the same period. However, the relative significance of medical furniture (HS 9402), prefabricated buildings and parts (HS 9406) and different types of mattresses (HS 9404) remained largely unchanged.

**Figure 4. 5****Export composition of furniture, 2005****Figure 4. 4****Export composition of furniture, 2017**

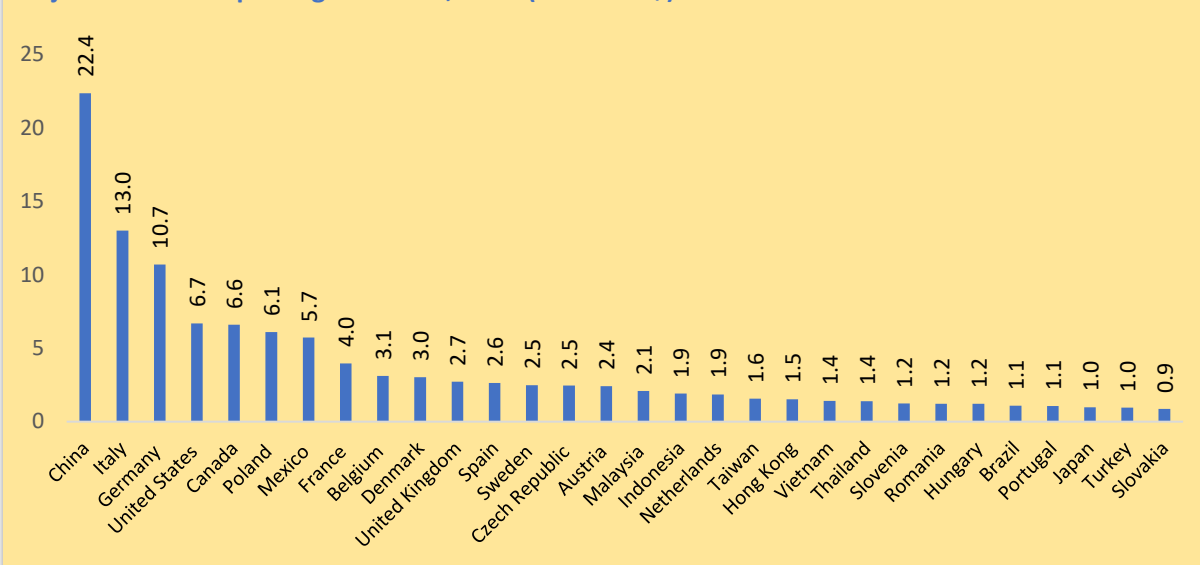
Source: Authors' analysis using data from ITC.

## 4.2 Major exporters and importers

China, the world's leading exporter, retains its dominance in world furniture exports. Chinese exports registered a fourfold rise during 2005–2017, causing its market share to expand from 18 percent to more than 37 percent (Figures 4.6 and 4.7). The other major exporters include Germany (US\$17.4 billion), Italy (US\$13.7 billion), Poland (US\$12.9 billion), the United States (US\$10.8 billion), Mexico (US\$10.7 billion) and Vietnam (US\$6.6 billion). Apart from China and Vietnam, other major exporters from Asia are Malaysia (US\$2.6 billion), Taipei (US\$2.0 billion), Republic of Korea (US\$2.0 billion), Indonesia (US\$1.7 billion) and India (US\$1.4 billion). Vietnam's furniture exports grew more than four times during 2005–2017, making it the seventh largest exporters in 2017. India did not have any noticeable market presence in 2005, but its exports rose rapidly to reach US\$1.4 billion within a decade. By comparison, Bangladesh's furniture export growth has been insignificant, and the export base remains very small.

**Figure 4. 6**

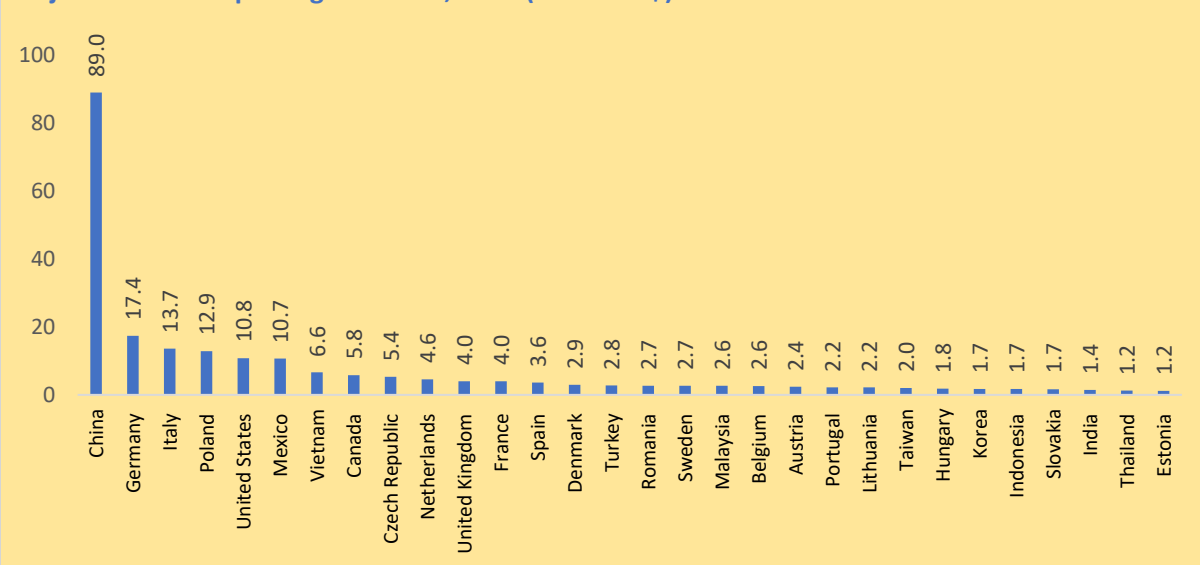
**Major furniture exporting countries, 2005 (billion US\$)**



Source: Authors' analysis using data from ITC.

**Figure 4. 7**

**Major furniture exporting countries, 2017 (billion US\$)**



Source: Authors' analysis using data from ITC.

An analysis of export composition of leading exporting countries in most cases does not show any significant change taking place between 2005 and 2017 (Figures 4.8 and 4.9). Their export baskets are dominated by wooden, plastic, metal, and cane and rattan furniture items under HS 9403, electric and non-electric lamps and lighting fittings under HS 9405, and different types of seats including those convertibles into beds under HS 9401. The shares of medical

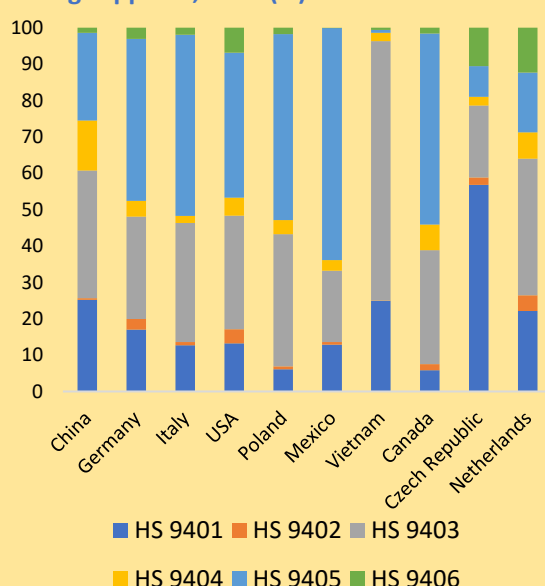


furniture (HS 9402) and mattress support and parts thereof (HS 9404) remain relatively low during 2005–2017.

However, there are instances of countries exhibiting significant shifts in their respective export compositions. In the case of China, the relative significance of HS 9403 declined while the share of HS 9405 increased by about 8 percentage points. Vietnam's furniture exports are highly concentrated in HS 9403; having 65 percent share in 2017 declining from 71 percent in 2005. In recent years, rapid growth in Vietnamese furniture industry has taken place through the production and exports of electrical and non-electrical lamps and lightings.

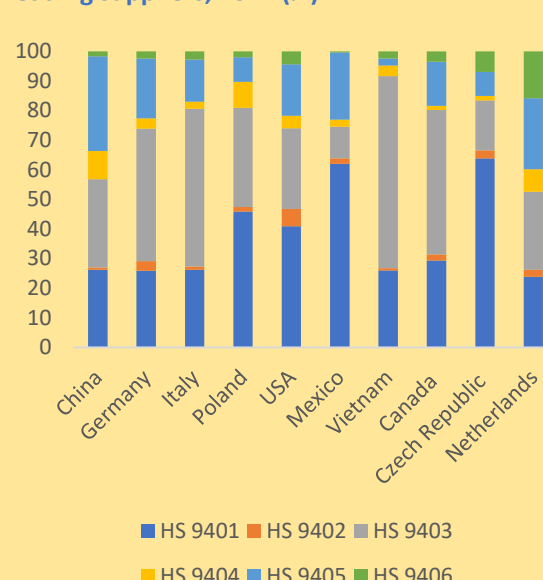
**Figure 4. 9**

**Furniture export composition of leading suppliers, 2005 (%)**



**Figure 4. 8**

**Furniture export composition of leading suppliers, 2017 (%)**

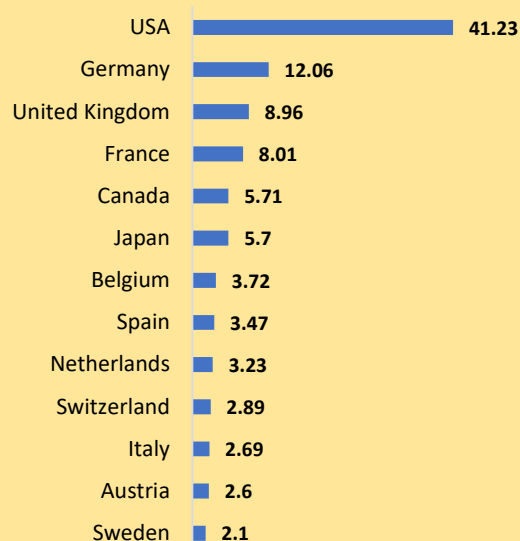


Source: Authors' analysis using data from ITC.

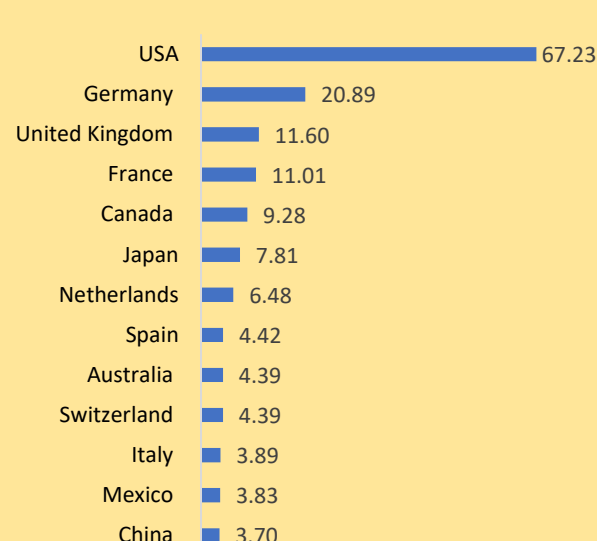
On the import side, major furniture importing countries include the United States, Germany, the United Kingdom, France, Canada, Japan, the Netherlands, Spain, Austria, Switzerland and Italy (Figures 4.10 and 11). During 2005–2017, U.S. imports increased by about 50 percent to reach US\$61 billion. The combined imports of major European countries in 2017 as shown in Figure 4.11 were almost identical to U.S. imports.

**Figure 4. 11**

**Major furniture importers, 2005  
(billion US\$)**


**Figure 4. 10**

**Major furniture importers, 2017  
(billion US\$)**

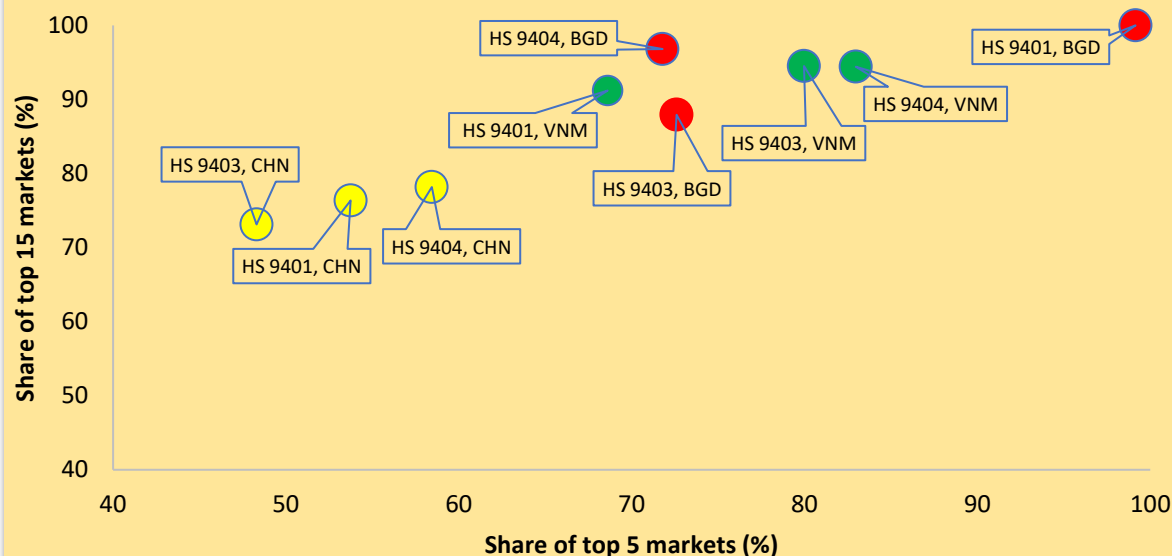


Source: Authors' analysis using ITC data.

### 4.3 Export market concentration

As mentioned above, Bangladesh's furniture export is concentrated in a few markets. Figure 4.12 shows export market concentration of three most important items at HS 4-digit level, namely HS 9401, HS 9403 and HS 9404.<sup>14</sup> In the case of HS 9401, virtually all exports of Bangladesh (more than 99 percent) go to just five importing countries. For the same product, the corresponding share of Vietnamese exports is less than 70 percent and is just 54 percent for China. For the two other products, HS 9403 and HS 9404, Vietnam has, however, higher export market concentration in top five markets. One reason for this is Vietnam's rapid export expansion which has been based on a few markets only. However, unlike Vietnam, Bangladesh's high export concentration is associated with very small export volume.

<sup>14</sup> Analysis is carried out the mirror data on the world furniture export performance.

**Figure 4. 12****Furniture export market concentration**

Source and note: Authors' analysis using data from the UN Comtrade. CHN, BGD and VNM stand for China, Bangladesh and Vietnam respectively.

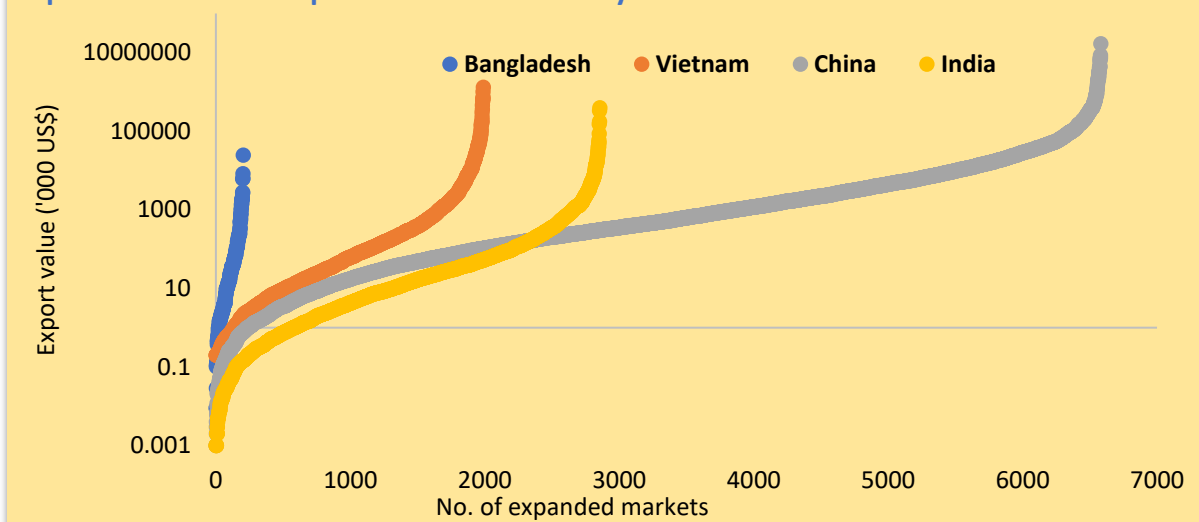
The nature of Bangladesh's excessively high market concentration in comparison with other comparators can also be demonstrated with the help of expanded furniture market reach analysis (Figure 4.13).<sup>15</sup> This approach considers the total number of all possible destination markets based on the country's individual export items and number of importing countries where they are exported. If, for instance, there are 20 furniture export items with 200 importing markets, the expanded market reach (i.e. the product and market combination) can be as high as 4,000. Bangladesh exported 25 furniture products at the HS 6-digit level in about 80 countries. However, Bangladesh managed to reach out to only 202 expanded export market destinations (Figure 4.13). In comparison, Vietnam exported 38 furniture products to 129 destinations with an expanded market reach of 1,988 destination. India having 2,854 market reaches, exported 39 products to 185 countries. China, the global furniture export

<sup>15</sup> Expanded market reach is defined by total export relationship. Suppose, if a country sells  $N$  number of products in country  $i$ , where  $i = 1, 2, \dots, m$ , then the total or expanded export market reach would be  $\sum_{i=1}^m N_i$ . The higher the value of this expansion, the more diversified the economy. Here,  $N$  has been considered at HS 6-digit level while  $m$  is the number of countries. For example, if a country sells 23 furniture products in country 1 and 43 furniture products in country 2, then the expanded market reach/destination for furniture products would be  $23 + 43 = 66$ . The higher the value, the higher is the number of markets being reached by an exporting country.

leader, exported 39 products in 210 markets covering an expanded market reach of 6,580 destinations.

**Figure 4. 13**

**Expanded furniture export market reach analysis**

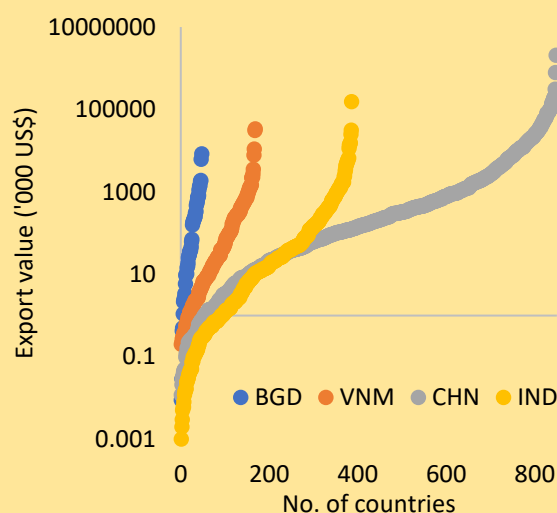


Source and note: Authors' analysis using data from the UN Comtrade. The vertical axis shows the amount earned from each market. Here BGD, VNM, CHN and IND stand for Bangladesh, Vietnam, China and India respectively.

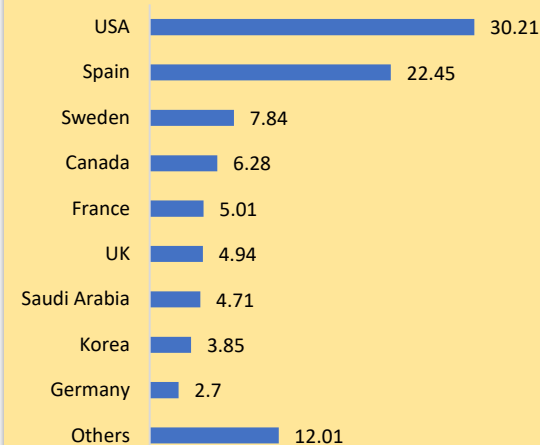
Product category-wise market reach analysis shows that Bangladesh exported four items of mattress supports and articles of bedding (HS 9404) to 37 destinations with an export value of US\$35.4 million in 2017-18 (Figure 4.14). Top export destinations for mattresses supports are Canada, Spain, Sweden, and the United States; together these countries accounted about 71 percent of exports from this category (Figure 4.15). In comparison, to Bangladesh, India exported 5 products of mattresses support to 149 countries; Vietnam five products to 76 countries and China five products to 203 countries. This reveals that comparator countries' e export baskets are significantly different from Bangladesh and they export more items to a higher number of markets.

**Figure 4. 15**

**Market concentration for mattresses supports, 2015**


**Figure 4. 14**

**Bangladesh's major export destinations for mattresses supports (%)**

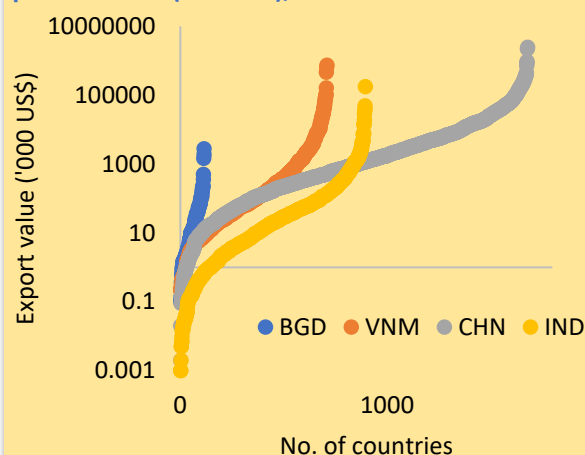


Source and note: Authors' analysis using data from the UN Comtrade and the EPB. The vertical axis in Figure 4.15 shows the amount earned from each market. Here BGD, VNM, CHN and IND stand for Bangladesh, Vietnam, China and India respectively.

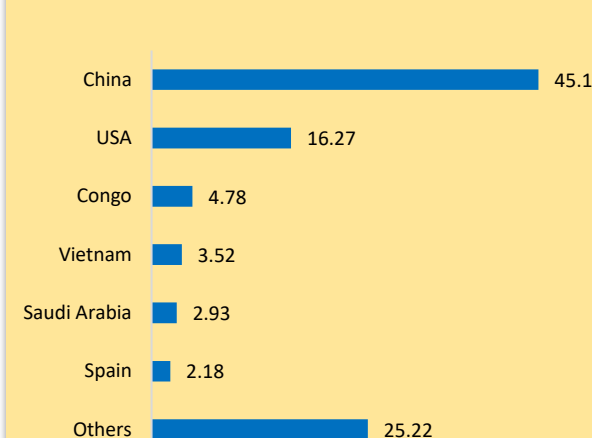
For furniture and parts thereof (HS 9403), Bangladesh exported nine products to 64 destinations. While Bangladesh's market reach is very limited, China, India and Vietnam have diversified their export destination markets. China exported to 207 markets while India and Vietnam exported to 172 and 119 destinations respectively (Figure 4.16). Most importantly, Bangladesh and its comparators exported the same number of products (nine products), but Bangladesh managed to reach far fewer markets. The major export destinations of Bangladesh under HS 9403 include China (44%) the U.S. (23%) and India (13%) (Figure 4.17).

**Figure 4. 16**

**Market concentration for Furniture and parts thereof (HS 9403), 2015**


**Figure 4. 17**

**Bangladesh's major export destinations for furniture and parts thereof (%)**



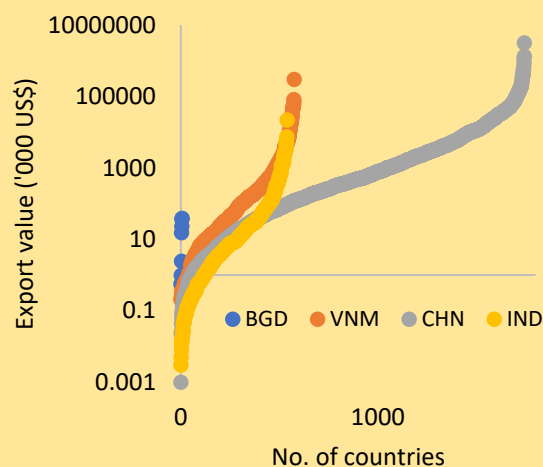
Source and note: Authors' analysis using data from UN Comtrade and EPB. The vertical axis in Figure 4.16 shows the amount earned from each market. Here BGD, VNM, CHN and IND stand for Bangladesh, Vietnam, China and India, respectively.

In the case of seats and parts thereof (HS 9401), Bangladesh exported US\$13.3 million from three products to eight destination countries (Figure 4.18).<sup>16</sup> The export market for this category is highly dominated by China. China exported 11 products to 205 export destinations while India and Vietnam exported 11 and 10 products to 126 and 115 destinations, respectively. Bangladesh's exports of seats and parts are highly concentrated in Japan. It accounted about 96 percent of exports under this category (Figure 4.19). The analysis stated above leads to one conclusion – Bangladesh's furniture export items are limited, and the number of export destinations is much lower compared to its competitors, exhibiting a high degree of market as well as product concentration.

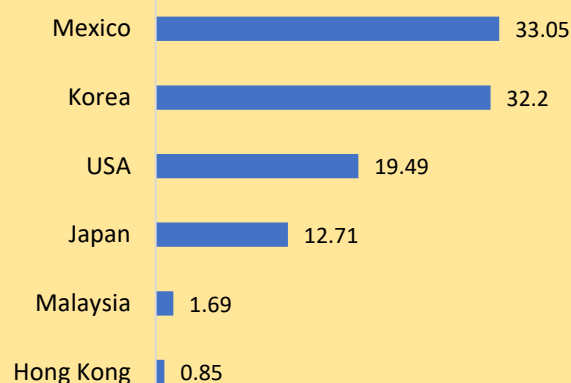
<sup>16</sup> Export volume of this product stood at US\$14.14 million in 2017 (ITC). This product is characterized by high fluctuations in export earnings.

**Figure 4. 18**

**Market concentration for Seats and parts thereof (HS 9401), 2015**


**Figure 4. 19**

**Bangladesh's major export destinations for seats and parts thereof (%)**



Source and note: Authors' analysis using data from the UN Comtrade and the EPB. The vertical axis in Figure 4.18 shows the amount earned from each market. Here BGD, VNM, CHN and IND stand for Bangladesh, Vietnam, China and India respectively.

## 4.4 Quality of Bangladesh's furniture products

Ensuring product quality is a key determining factor of improved export performance. Customization and modernization of products, quality upgradation, product sophistication and differentiation and branding are associated with higher export demand as well as higher prices in both national and international markets.

Measuring quality of products is however notoriously difficult given product varieties and many other factors. In making comparisons between suppliers, ideally one must work with extremely narrowly defined items, assessing various product characteristics. Such detailed data and analyses rarely exist. To overcome this problem, economists often use unit value prices of disaggregated exports to infer about quality. The idea is that better quality products are most likely to attract higher prices. Although subject to limitations, this approach can be quite informative based on relatively simple descriptive statistical analyses. The quality information thus obtained on same products for different countries can be used to generate

'quality ladders', measuring the relative quality of a country's exports against all other countries that export a specific product (Reis and Farole, 2012). The quality ladder reflects the extent of heterogeneity in quality across different varieties of a given product. Within a category where the global frontier of quality is high, learning and catch-up for other suppliers can be quite demanding which is captured by the constructed quality ladders.

Quality of all furniture products in HS 4-digit code and some selected products with high export capacity at the HS 6-digit level has been analyzed in Figures 4.20 (a)-(n). The measurement of the relative quality has been defined as the unit value of any product relative to the 90th percentile unit value of the same product across countries.<sup>17</sup> The 90th percentile of the unit values has been considered as the world standard. Higher values of the index correspond to higher quality levels. The closer is a country's position to the origin of the quality ladder, the lower is the quality and vice-versa. The total length of the quality ladder shows the potential for further quality improvement of a specific product.

The analysis as presented in Figures 4.20 (a)–(m) provides mixed evidence in which some of the furniture products exported from Bangladesh are found to be of relatively high quality while others have to do considerable catching up to be at par with Asian comparators. Bangladesh appears to have very high-quality products in the category HS 9404, comprising mattress supports, articles of bedding, sleeping bags, etc. In these items, Bangladesh is way ahead of its Asian counterparts such as China, India, Indonesia, Malaysia, Singapore, Thailand and Vietnam, enjoying higher unit value prices. In HS 9401 and HS 9403, the relative quality is also quite impressive. For prefabricated building items (HS 9406) and lamps and lights thereof (HS 9405), Bangladesh is somewhere between its comparators. For these two categories, Bangladesh has the potential to perform better through quality upgradation and product sophistication. In HS 9402, Bangladeshi products occupy a position towards the lower end in the quality ladder, very close to the origin.

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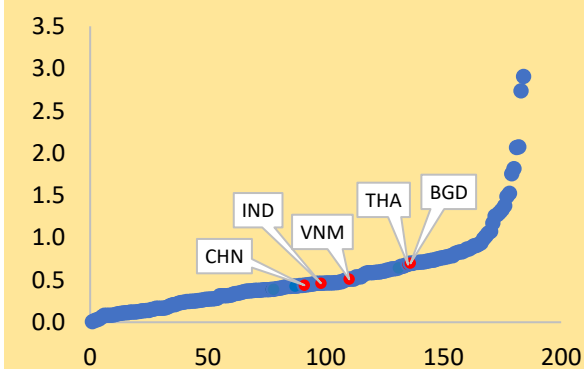
<sup>17</sup> Relative quality of a specific good of a specific country is defined as  $R_{itc} = uv_{itc}/uv_{it}^{90}$ , where  $uv_{itc}$  denotes the unit value of ith good and cth country and  $uv_{it}^{90}$  denotes the value at the 90th percentile of the unit value distribution across countries for that product.



At the HS 6-digit level, HS 940550 (non-electrical and light fittings) and HS 940430 (sleeping bags), Bangladesh is ahead of many Asian competitors. For wooden furniture excluding for homes, offices, kitchen and seats (HS 940360), Bangladesh's relative unit values are higher than those of India and Thailand but are lower than many other suppliers. For all other products analyzed such as HS 940179, HS 940190, HS 940161, HS 940490 and HS 940370, the quality of export products made in Bangladesh appears to be worse than that of most prominent comparators.

**Figure 4. 20 ( a )**

**Quality ladder for product HS 9401**



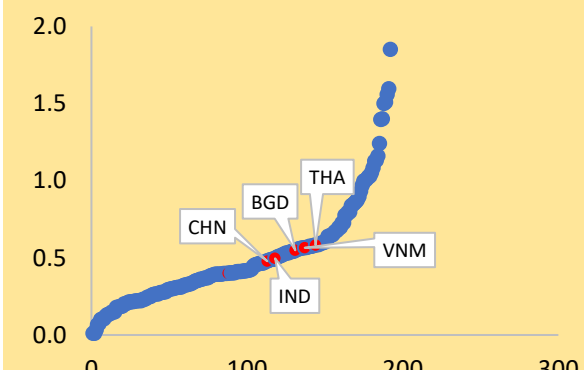
**Figure 4. 20 ( b )**

**Quality ladder for product HS 9402**



**Figure 4. 20 ( c )**

**Quality ladder for product HS 9403**



**Figure 4. 20 ( d )**

**Quality ladder for product HS 9404**



Figure 4. 20 ( e )

Quality ladder for product HS 9405

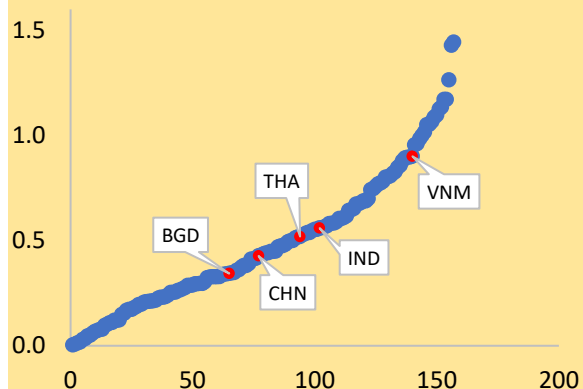


Figure 4. 20 ( f )

Quality ladder for product HS 9406

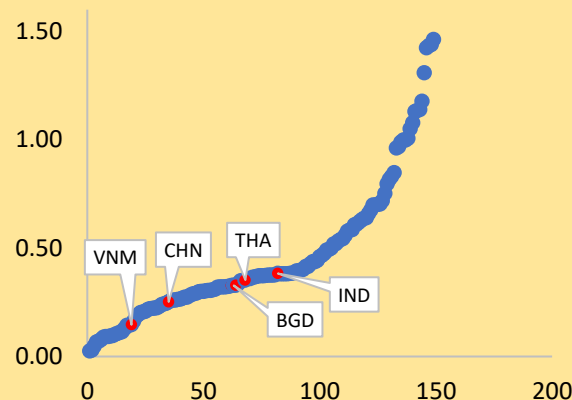


Figure 4. 20 ( g )

Quality ladder for product HS 940179

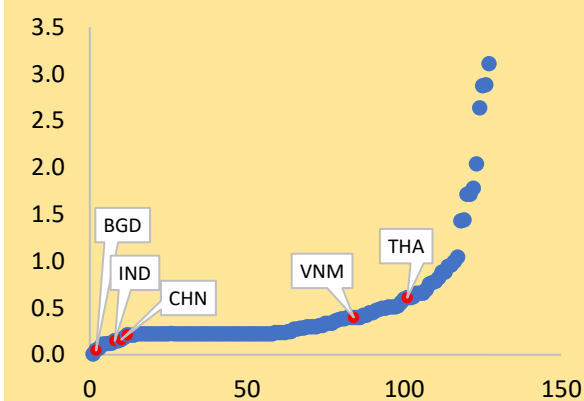


Figure 4. 20 ( h )

Quality ladder for product HS 940190

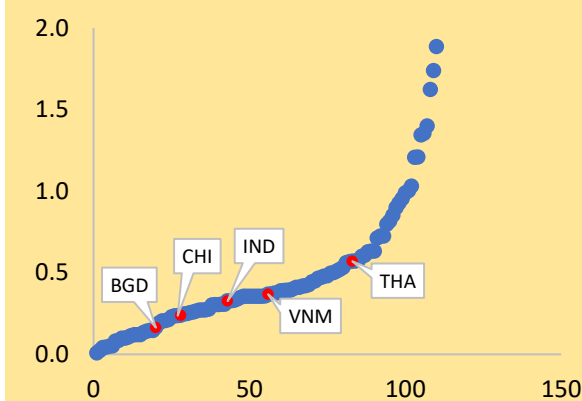


Figure 4. 20 ( i )

Quality ladder for product HS 940161

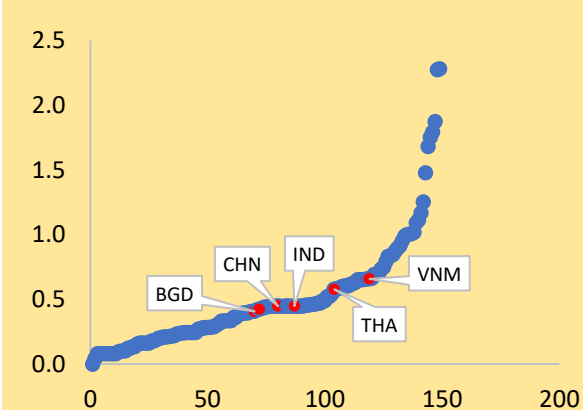


Figure 4. 20 ( j )

Quality ladder for product HS 940360

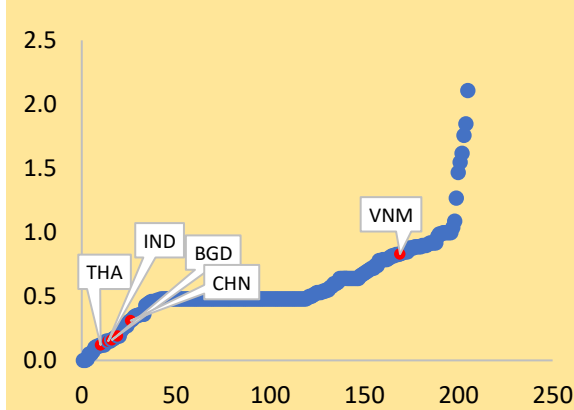


Figure 4. 20 ( k )

Quality ladder for product HS 940430

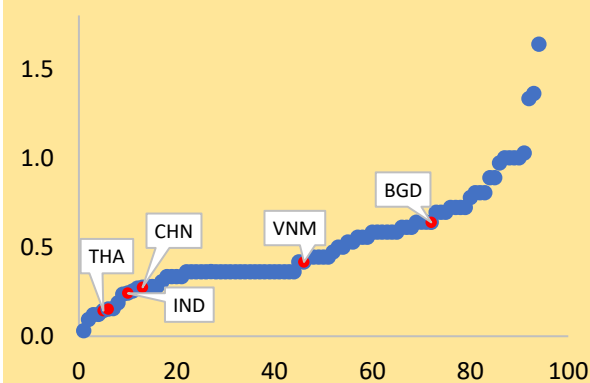


Figure 4. 20 ( l )

Quality ladder for product HS 940490

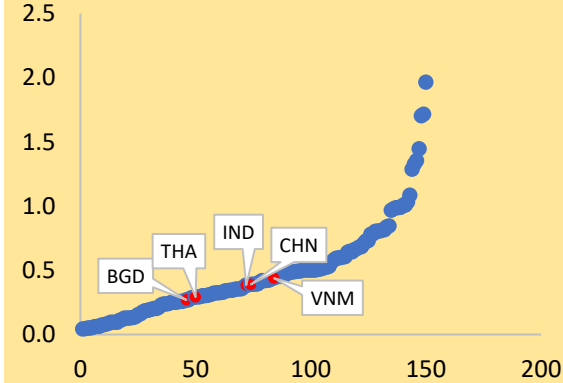


Figure 4. 20 ( m )

Product quality for product HS 940370

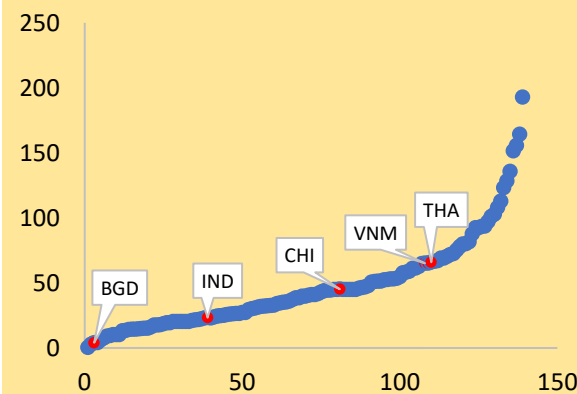
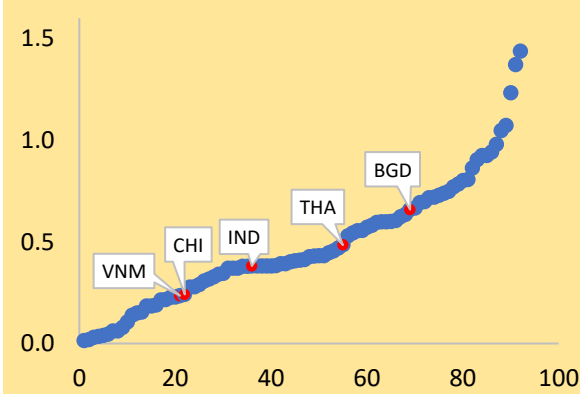


Figure 4. 20 ( n )

Quality ladder for product HS 940550



Source and note: Authors' analysis using data from the ITC. BGD, CHN, IND, THA and VNM stand for Bangladesh, China, India, Thailand and Vietnam respectively.

Overall, certain Bangladeshi export items, particularly mattress supports, articles of bedding and sleeping bags are of high quality and as such these products have great market prospects. In some other items (e.g. medical furniture, prefabricated building materials and lamps and lights fittings etc.), export unit values are low, reflecting their challenges with product quality issue. These products are relatively new export items for Bangladesh and their exports are quite small. If exporters manage to survive and stay on exporting, product quality can

eventually converge to the levels of comparators. At the initial stage, new products can suffer from poor quality but overtime their unit prices improve. There can also be scope for proactive measures both at the firm-level (e.g. procuring good quality material, utilizing improved technologies, and using more skilled workers) and national level (e.g. to provide support for workers' training) to help improve product quality and standards.

## 4.5 Assessing Bangladesh's export market prospects

China is the world's largest furniture exporter. There are suggestions that because of rising wages and shifts towards more capital and technology-intensive products, in the global furniture market China's dominance will decline leaving space for other countries including Bangladesh whose share in the world furniture market is currently very small (0.03% in 2017). But, there is also huge competition from emerging suppliers including some of the prominent Asian suppliers such as India, Indonesia, the Philippines, Thailand and Vietnam. In this section, an analysis of market prospects of some selected furniture items in major export destination countries is undertaken considering three factors: (i) the export growth rates (of the relevant furniture items) of competing countries in the destination markets, (ii) their export growth of the same product in global market, (iii) competing countries' current (average of past five years) market share in the destination country. The results are summarized in Figures 4.21(a)-(p).<sup>18</sup>

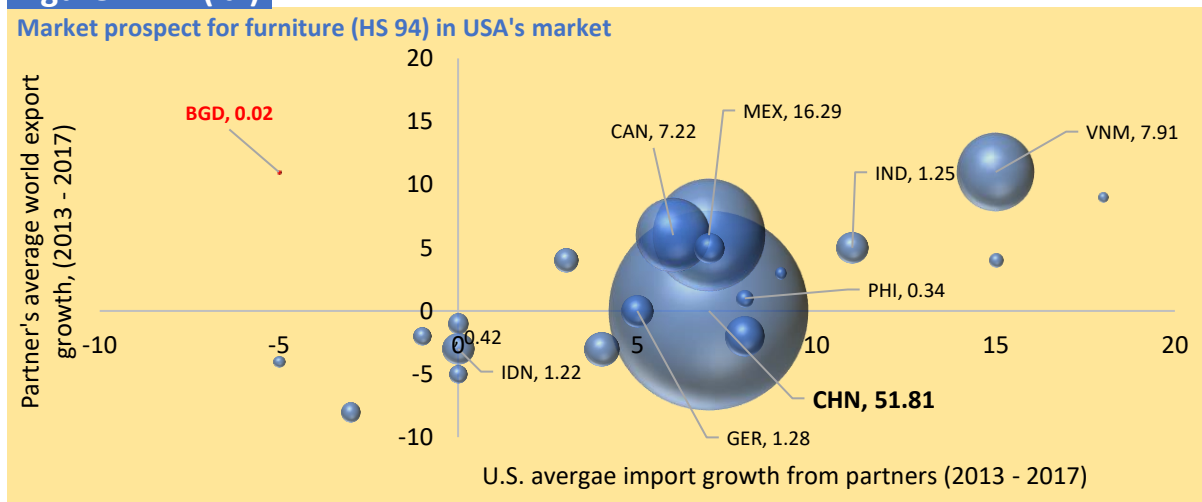
First, the U.S. market is considered. It is the largest market of imported furniture (US\$67.23 billion in 2017) capturing close to 30 percent of global furniture imports. The bubble sizes represent relative shares of various suppliers in the U.S. market with China having a share of more than half of U.S. imports. Also, from the horizontal axis, it can be inferred that over the past five-year period, China has grown its furniture exports to this market at an average annual rate of 7–8 percent. The information presented in the vertical axis shows that China's overall world export growth in furniture during the same period has been stagnant (i.e. close to zero percent per annum). That is, with a very large base of exports bound for the United

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<sup>18</sup> Furniture items are selected based on export performance of Bangladesh using data from International Trade Centre (ITC). Selected products have the highest export values among different furniture exporting items.

States, the growth of Chinese furniture in the U.S. market has been much higher than Chinese export growth to the rest of the world. Vietnam, on the other hand, has a U.S. market share of close to 8 percent with its exports in that market growing at a yearly average rate of around 15 percent vis-à-vis its overall world export growth rate of about 11 percent. India's share is 1.25 percent, its exports to the U.S. has average annual growth rate of 11 percent as against of its world furniture export growth of just 5 percent. In contrast, Bangladesh's performance is rather weak. With its current U.S. market share of just 0.02 percent, Bangladesh has seen a negative export growth rate of 5 percent (i.e. furniture exports to the U.S. actually fell) although its overall global exports of furniture grew at an annual rate of above 10 percent. Given that so many countries are doing well in the U.S. market (including Canada, Mexico, the Philippine), export market prospects in the United States are likely to be quite challenging. As many Asian suppliers are subject to most-favoured-nation (MFN) tariffs in the range 0–4.7 percent, any other factors that contribute to cost disadvantages will seriously undermine competitiveness. High transportation cost and long lead time can also affect export performance. However, as the United States is the largest importer, more concerted effort is needed to explore export potentials further.

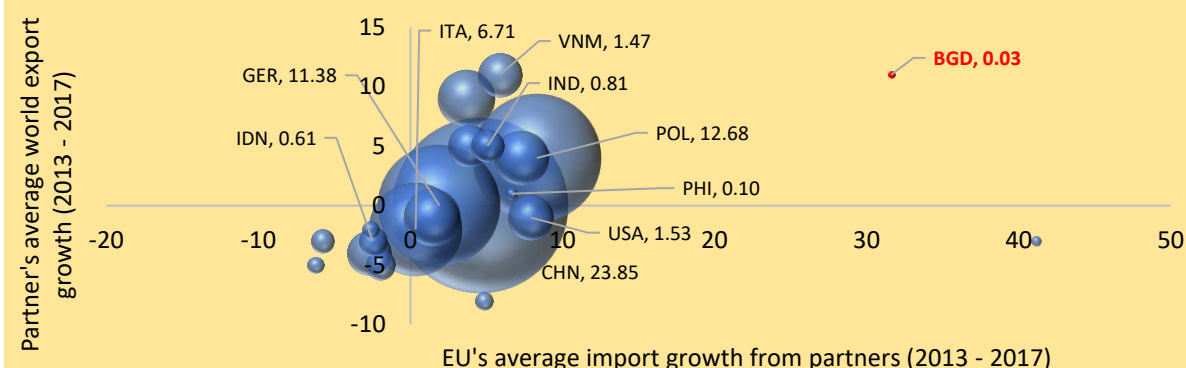
**Figure 4. 21 ( a )**



Source and note: Authors' analysis using ITC data. Bubble sizes represent market shares. Countries are indicated as BGD – Bangladesh, CAN – Canada, CHN – China, FRA – France, GER – Germany, IDN – Indonesia, IND – India, ITA – Italy, JPN – Japan, KOR – Republic of Korea, MAL – Malaysia, MEX – Mexico, PHI – Philippines, POL – Poland, SPA – Spain, SWE – Sweden, THA – Thailand, UK – United Kingdom, USA – United States of America, VNM – Vietnam.

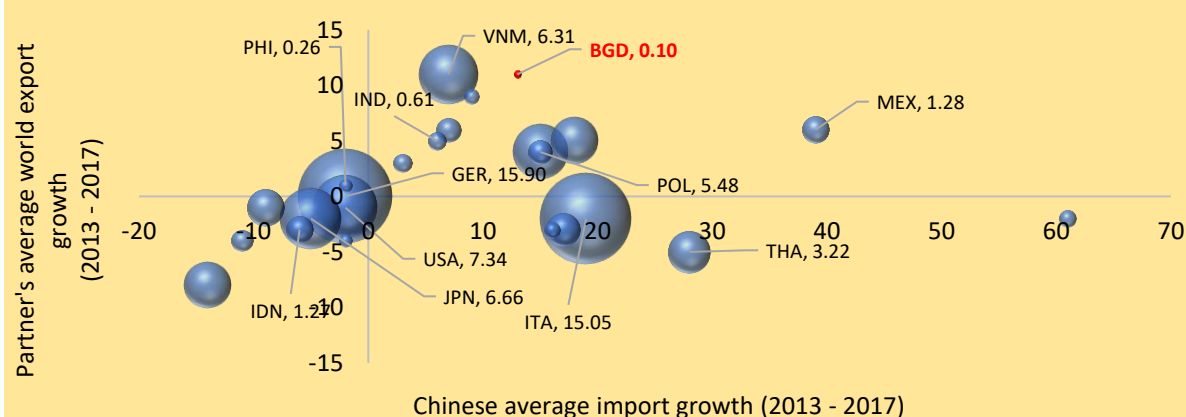
**Figure 4. 21 ( b )**

**Market prospect for furniture (HS 94) in EU market**



**Figure 4. 21 ( c )**

**Market prospect for furniture (HS 94) in Chinese market**



Source: Authors' analysis using ITC data. Bubble sizes represent market shares.

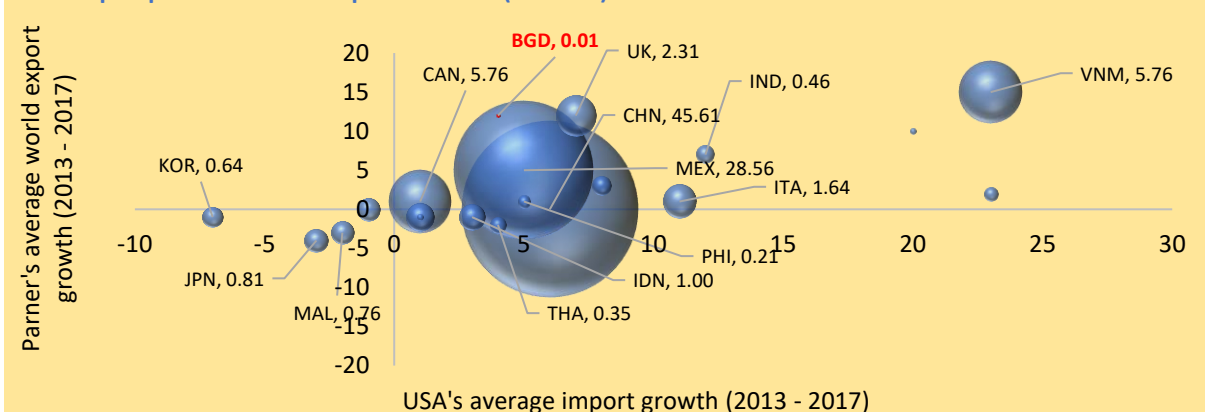
Turning to the EU market, main suppliers are China, France, Germany, Italy, Poland, Sweden, the U.S. etc. Bangladesh's export to the EU is small, US\$29.33 million in 2017, accounting for 0.03 percent of total EU imports. However, in the past five years Bangladesh's furniture export growth to this market has been very high (about 31%), which is largely attributable to a low export base. Nevertheless, the growth seems to suggest a great prospect to expand furniture exports in the EU. Since EU MFN tariffs on furniture items are either small or non-existent, Bangladesh does not enjoy any tariff preferences in the sector. This means competition can be quite intense for gaining expanded market share.

China is another market where Bangladesh has seen a high average export growth over the past five years. Bangladesh's share in total Chinese furniture import stood at just 0.10 percent in 2017 (Figure 21(c)). Germany, Italy, Mexico, Poland, Thailand, the United States and Vietnam are amongst the major suppliers to China. Of these, Italy, Mexico, Poland and Thailand have very strong growth with already sizeable market shares. On the other hand, while Indonesia, Japan, the Philippines and the U.S. also have been major players, they have experienced, on average, negative export growth in the past five years. The presence of all major suppliers indicates that the Chinese market is very competitive with product differentiation and sophistication are likely to be critical determinants of export success.

At HS 4-digit level, for seats and parts thereof (HS 9401), during 2013–2017, Bangladesh's annual average export growth to the U.S. and China was 4 percent and 13 percent respectively. The market share remains small, particularly in the U.S. Nevertheless, for this product category, these two markets would be very important. The export growth to EU market for this product was negative in recent times.

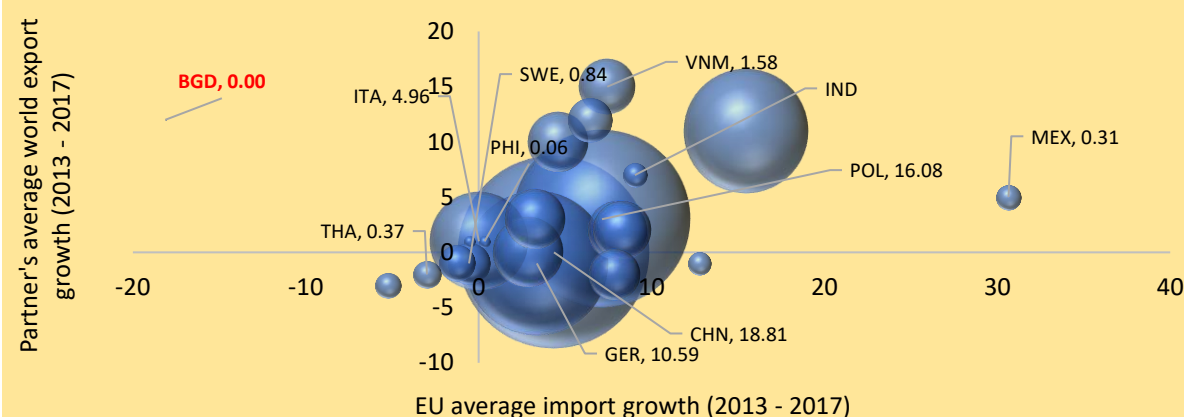
**Figure 4. 21 ( d )**

**Market prospect for seats and parts thereof (HS 9401) in USA's market**



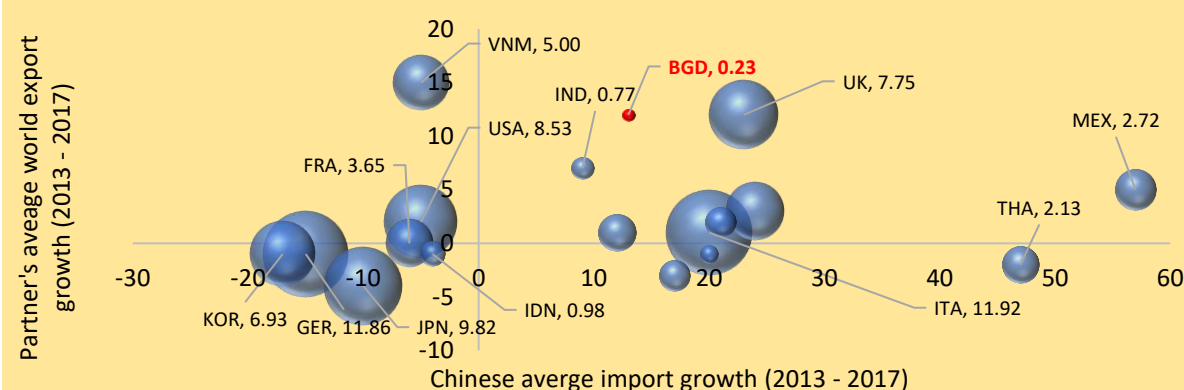
**Figure 4. 21 ( e )**

**Market prospect for seats and parts thereof (HS 9401) in EU market**



**Figure 4. 21 ( f )**

**Market prospect for seats and parts thereof (HS 9401) in Chinese market**



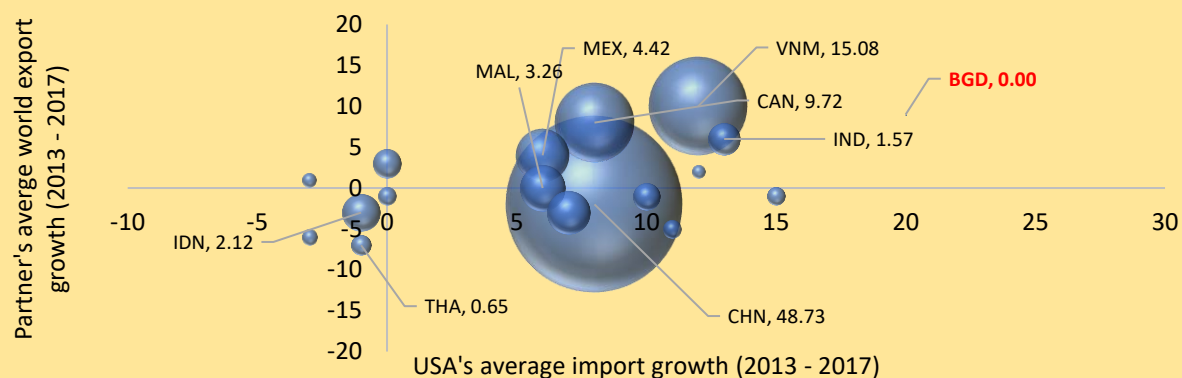
Source: Authors' analysis using ITC data. Bubble sizes represent market shares.

With a miniscule market share, Bangladesh has exhibited very high growth in HS 9403 category in the U.S. as well as the EU (Figures 4.21 (g) and (h)). Dominant exporters in these markets are China, Germany, Poland, etc. On the other hand, for HS 9404 (mattress supports and articles of bedding), Bangladesh has promising market prospects in EU and Chinese markets as the average export growth to these countries in the past five years has been very high (Figures 4.21 (j) and (k)). However, outlook for the U.S. market appears to be less than impressive for the products under HS 9403 and HS 9404.



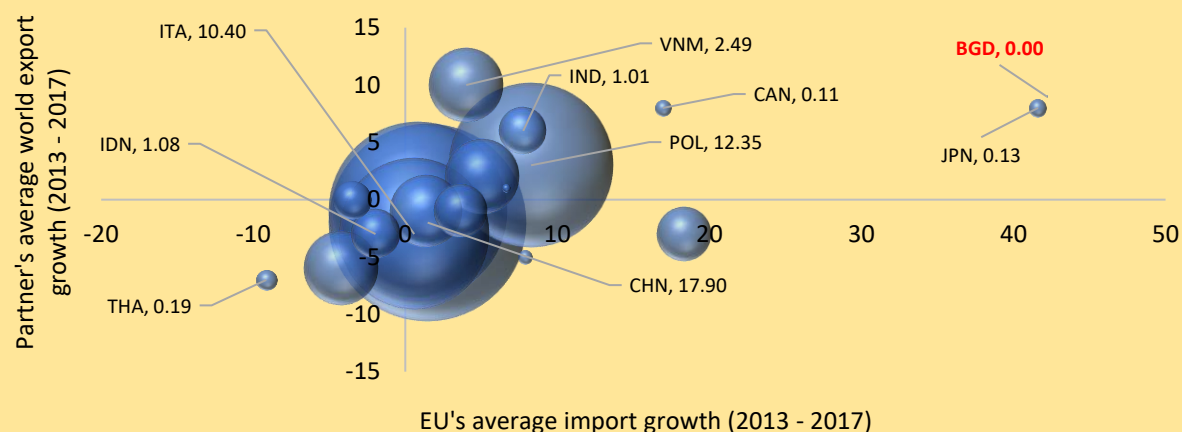
**Figure 4. 21 ( g )**

Market prospect for furniture and parts thereof (HS 9403) in USA's market



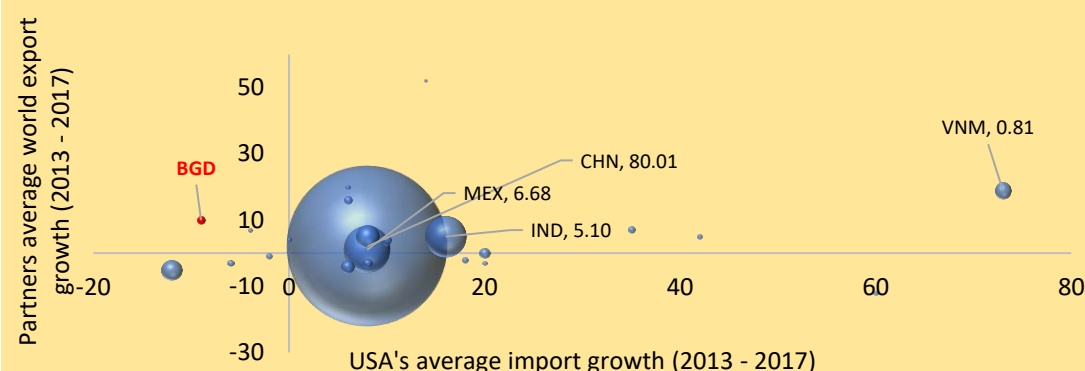
**Figure 4. 21 ( h )**

Market prospect for Furniture and parts thereof in EU market



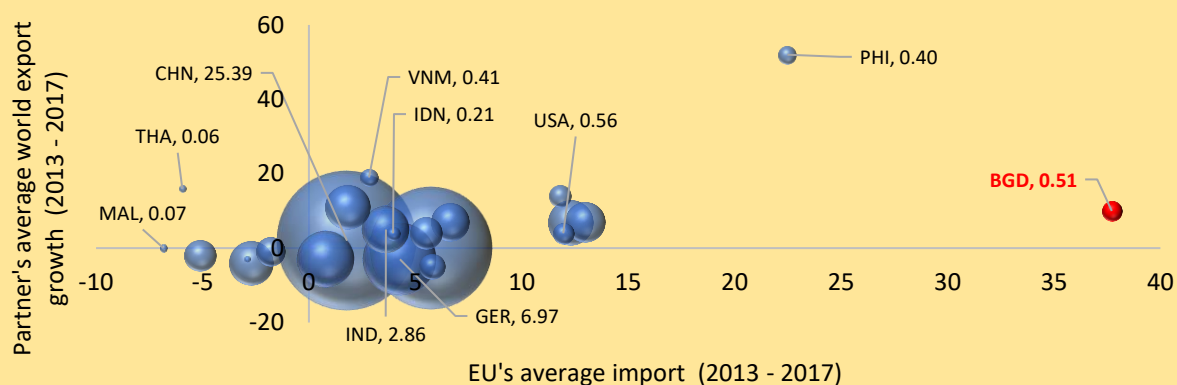
**Figure 4. 21 ( i )**

**Market prospect for mattress supports and articles of bedding (HS 9404) in U.S. market**



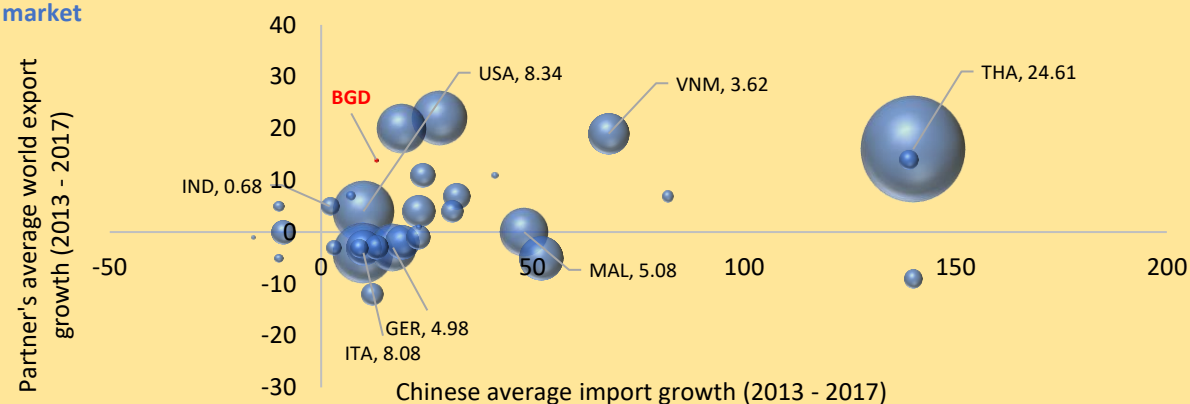
**Figure 4. 21 ( j )**

**Market prospect for mattress supports and articles of bedding (HS 9404) in EU market**



**Figure 4. 21 ( k )**

**Market prospect for mattress supports and articles of bedding (HS 9404) in Chinese market**

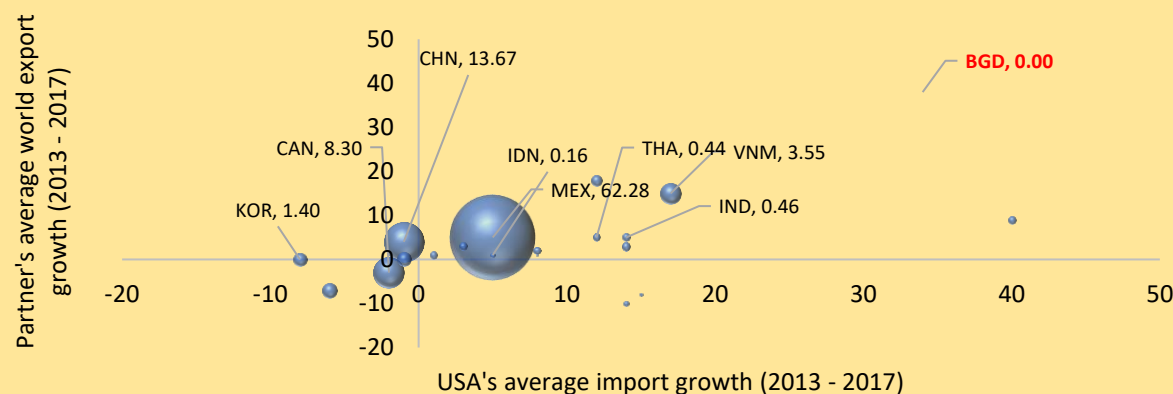


Source: Authors' analysis using ITC data. Bubble sizes represent market shares.

Market analysis of the products at a more disaggregated level shows that Bangladesh has high potential for expanding exports in HS 940190 in the U.S. and Chinese markets; average export growth during 2013–2017 was about 35 percent and 13 percent respectively (Figures 4.21 (l) and (m)). Finally, for sleeping bags (HS 940430) which account for more than half of all furniture exports, Bangladesh is the second largest exporters in the EU with a market share of 9.5 percent in 2017; the country exported US\$24 million to EU countries (Figure 4.21 (o)). Bangladesh is also the second biggest seller to the U.S. market (market share is 4.45 percent), but it is a matter of concern that export growth in this market in recent times has been negative. In the Chinese market, Bangladesh's share remains small (Figures 4.21 (m) and (p)). Overall, sleeping bags appear to be a product where Bangladesh is likely to expand exports significantly.

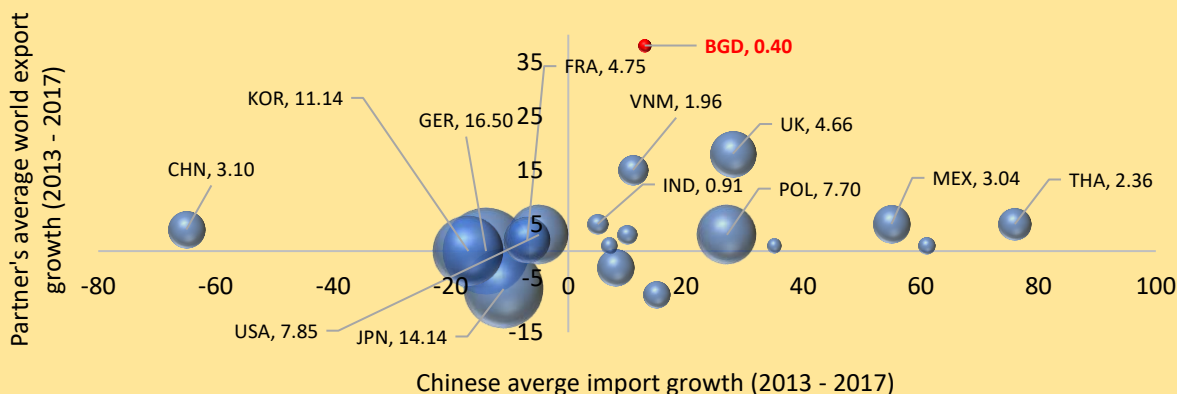
**Figure 4. 21 ( l )**

Market prospect for parts of seats (HS 940190) in U.S. market



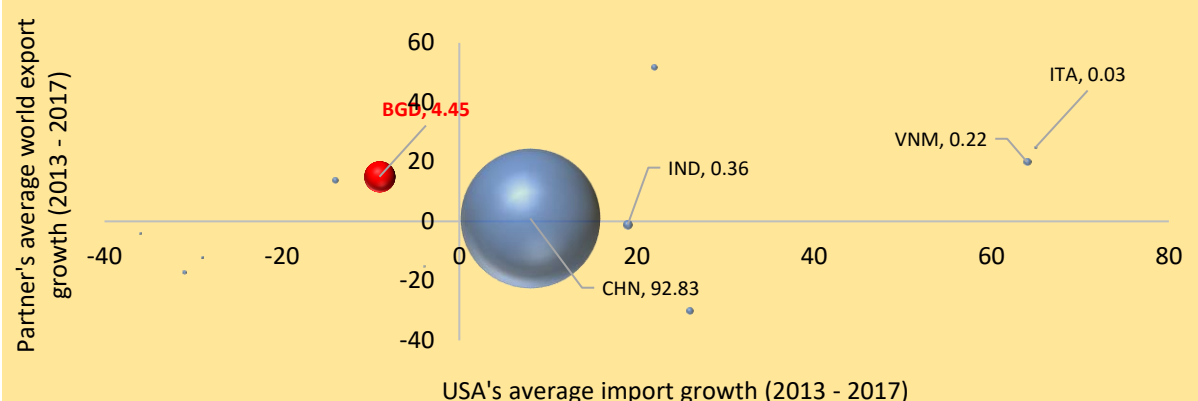
**Figure 4. 21 ( m )**

Market prospect for parts of seats (HS 940190) in Chinese market



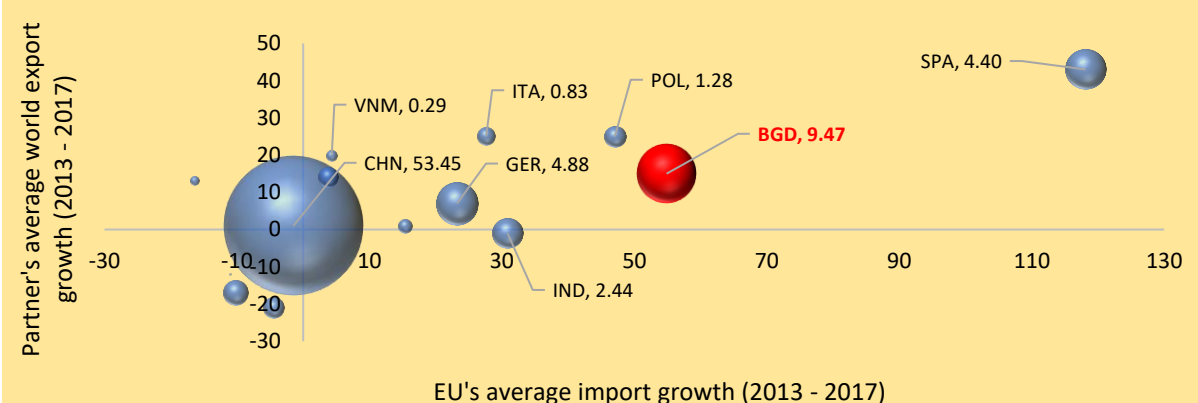
**Figure 4. 21 ( n )**

**Market prospect for sleeping bags (HS 940430) in U.S. market**

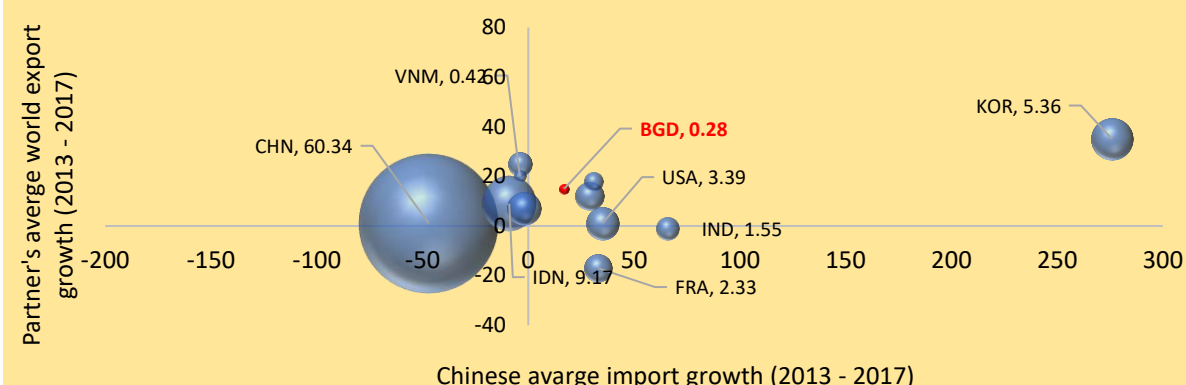


**Figure 4. 21 ( o )**

**Market prospect for sleeping bags (HS 940430) in EU market**



Note: Bangladesh's market share for sleeping bags (HS 940430) in the European Union was 9.47 percent (the second largest exporter to the EU) in 2017. Despite the average export growth of sleeping bags was about 55 percent between 2013 and 2017, it was characterized by high fluctuations. The export growth during the last five years was about 60 percent, 105 percent, 30 percent, 35 percent and 44 percent respectively.

**Figure 4. 21 ( p )****Market prospect for sleeping bags (HS 940430) in Chinese market**

Source: Authors' analysis using data from the ITC. Bubble sizes represent market shares.

## 4.6 Bangladesh furniture industry: Positioning on the global value chain landscape

Export market prospects these days are critically dependent on a country's positioning on the so-called global value chain (GVC) landscape in respective consumers' products. The value chain captures the entire range of activities (including production and services) that are needed to bring a product from its conception to end use and beyond. This includes activities such as design, production, marketing, distribution and support to the final consumer.<sup>19</sup> Fundamental changes have taken place in global trade in which the traditional concept of an entire production process being undertaken by one firm in one country has been replaced by the GVC-led trade. This process involves cross-border fragmentation of production processes, which entails specialisation in a narrower range of tasks by firms organised within global production networks (Razzaque and Keane, 2016). Given the limited productive capacity of many developing countries, integrating with global value chains (GVCs) may provide new trade opportunities for local firms to gain access to new markets through specialising in a single task.

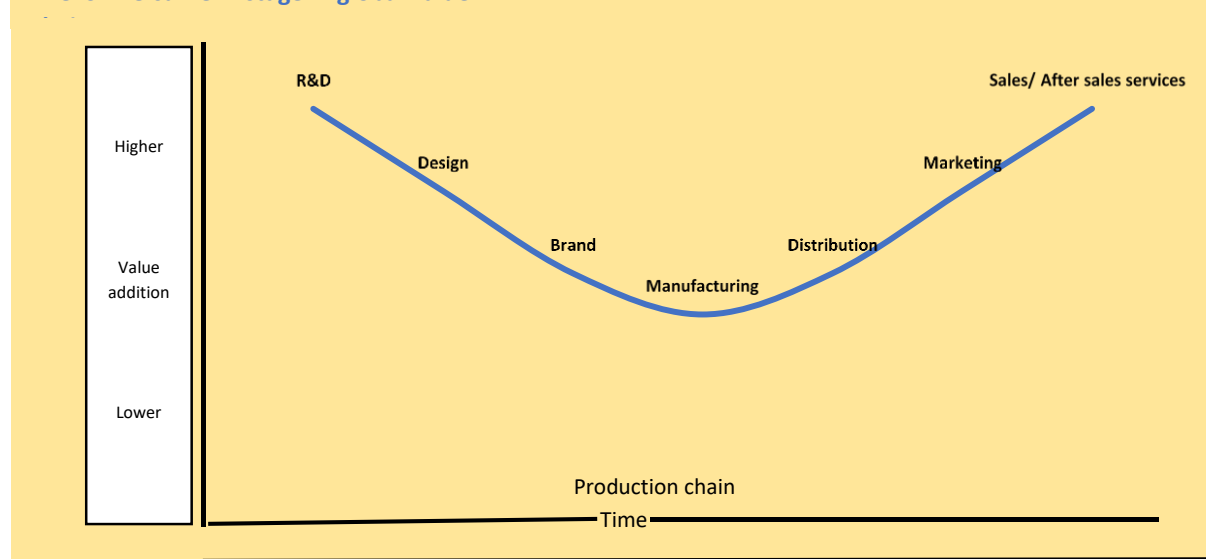
<sup>19</sup> This definition of global value chain is taken from <https://globalvaluechains.org/concept-tools>.

An example of GVC-led trade in the context of the furniture industry could be that firms located in a developing country could focus only on manufacturing activities while research and design (R&D) for product development being provided by global big brands or importers in developed countries, raw materials being imported from a third-party country, and marketing and after-sales-services provided by others in countries where consumers are located.<sup>20</sup> This phenomenon is often represented by what has come to be known as the “smile curve” (Figure 4.22). By becoming part of an integrated international production network, attracting foreign direct investment (FDI) and accessing technological know-how may be easier.

The analysis for Bangladesh furniture production process shows that it is heavily dependent on imported raw materials. Bangladesh is mainly processing these raw materials to turn into final furniture products. This stage of global supply chain is relatively labour-intensive and being a labour abundant country, Bangladesh should have some natural comparative advantage in this activity subject to availability of skilled manpower needed for the industry. However, in order to succeed in furniture export markets, it is almost inevitable for local manufacturers to be connected with global brands and importers. Recent export success stories, e.g. Vietnam, demonstrate taking advantage of GVC-led trade by integrating local manufacturing process with global importers. Along with domestic manufacturing capacity, the issues of product, labour and environmental standards have become critical success factors (Kaplinsky *et al.* 2003). Various international certification systems are in operation and most SME furniture makers in Bangladesh have difficulties in familiarizing with and making use of them.

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<sup>20</sup> Bangladesh's apparel exports are a prime example of GVC-led trade.

**Figure 4. 22****The 'Smile curve' – stage in global value**

Source: Adapted from Mudambi (2008)

One issue is that the manufacturing stage within the smile curve process is known to be generating only a small value in proportion to final retail prices. In general, activities related to R&D, design, brand development, and marketing occupy relatively greater shares in overall industry value added. It is however true that at early stages, it is very difficult to develop specialization in these activities. With increased integration into global value chains, the likelihood of moving up the value chain increases as exporters grow contacts, acquire relevant technologies and develop human resources to perform high-value-added services tasks such as designing, branding and marketing.

A significant proportion of market export operations is dealt by the globally leading furniture brands. Most of these brands are operating in the upper stream of the global value chain with the involvement of low cost labour-intensive developing countries at the manufacturing stage. They are exporting both in the developed as well as in low-income countries by setting sales stores, manufacturing facilities, subsidiary companies etc. (Table 4.1). One way of breaking into global export market is to enter into their supply chains. Various policy incentives/support as well as domestic industry capacities and reliability in delivering quality products, compliance with various standards and price competitiveness are likely to be important determinants of attracting the relevant FDI and along with apposite technical know-how.

## Box 4. 1

### IKEA – An upper-end global value chain-based furniture supplier

IKEA, established in the 1940s in Sweden, started off with the aim of providing home furnishing products at affordable prices. Overtime, it has grown rapidly with its ready-to-assemble furniture, kitchen appliances and home accessories becoming very popular. Currently, the multinational operates more than 415 stores in about 50 countries with annual sales more than US\$40 billion, employing around 154,000 workers. It is estimated that the company is responsible for approximately 1 percent of world commercial consumption. The company website contains about 12,000 products representing much of IKEA product range. It has been estimated that during 2015–2016, IKEA websites were visited by over 2.1 billion times.

IKEA invests hugely on R&D as well as design. A higher percentage of profit is spent on these activities. Designs are done by in-house employees while newer designs are often initiated by contracted designers. It releases about 2,500 new products every year under its brand name (IKEA). Most of its final furniture items are produced in developing countries to take advantage of lower labour costs. Along with them, such European countries as Italy, Lithuania, Poland, and elsewhere China, the United States and Vietnam are the major producers and suppliers (Renda *et al.*, 2014). All furniture items are produced in different locations with designs provided by IKEA. Other supply chain activities such as distribution, marketing and after-sales-services are entirely done by IKEA.

Source: IKEA.com and Wikipedia



**Table 4. 1 Global leading furniture brands**

Manufacturer	Head Quarters	Product type	Global presence	Revenue (billion US\$)	No. of employees
<b>Herman Miller Inc.</b>	U.S.	Office furniture, equipment and home furnishings	Worldwide: Canada, Europe, Latin America, South America, the Asia - Pacific region and the Middle-East	1.6	-
<b>IKEA</b>	Netherlands	Designs and sells RTA furniture (such as beds, chairs and desks)	Owns and operates 415 stores in 50 countries in Africa, Asia, Europe, North America and Oceania	30.1	139,000
<b>La-Z-Boy</b>	U.S.	Upholstered home furniture	Retail residential outlets in the Canada and US. Manufactured and distributed under license in Germany, Indonesia, Italy, Japan, New Zealand, South Africa, Turkey and UK	2	11,000
<b>Leggett &amp; Platt</b>	U.S.	Home furnishings & Fixture industrial materials	130 manufacturing facilities located in 18 countries	3.7	19,000
<b>Steelcase</b>	U.S.	Furniture, interior architecture, technology products for offices	80 locations in the Africa, Americas, Asia, Australia and Europe sales through 650 independent and company-owned dealers	2.9	11,000

## Unleashing the Export Potential of Bangladesh's Furniture Industry: An Analysis of Prospects and Policy Support

Manufacturer	Head Quarters	Product type	Global presence	Revenue (billion US\$)	No. of employees
<b>Hunter Douglas</b>	Netherlands	Manufacturer of window coverings and architectural products	Owns 167 companies with 68 manufacturing and 99 assembly plants and marketing organizations in more than 100 countries	2.5	17,000
<b>Natuzzi</b>	Italy	Upholstery and accessories	11 factories in Brazil, China, Italy, Romania 274 stores in major cities Athens, London, Paris etc.	0.45	6,048
<b>Samosa Holding</b>	China	Upholstered residential furniture	Wholesales furniture to department stores, retail chains and independent retail stores in the Canada, US etc.	-	-
<b>Okamura corporation</b>	Japan	Office furniture, Upholstered, metal etc.	25 subsidiaries and companies. Operates in China, Japan, Singapore	0.084	2,834

Source: Adapted from DaSilva-Glasgow *et al.*, (2016).

## Chapter 5: Realizing the Potential of Furniture Exports: Options for Policy Support

Contingent upon the dynamics in the world market along with availability of raw materials (including those imported) and relatively low wages, many analysts view that the furniture sector can be transformed into a billion-dollar export industry for Bangladesh. Indeed, considering its potential, the sector was included amongst the 'high priority sectors' in the national Export Policy 2015–2018. Although the response has been somewhat encouraging, the sector has not really taken off to establish a solid base and to contribute to overall export basket diversification. With a view to strengthening the sector and realizing the potential, some policy options are considered in this section. While many of these issues are generic in nature being relevant for promoting other export sectors as well, several are more specific to the furniture sector.

### 5.1 Enhancing supply-side capacities

Boosting supply-side capacities should be a key consideration in expanding exports. Furniture comprises a wide variety of items and a country like Bangladesh may not have competitive advantage in all categories. The dynamics associated with the global demand for different furniture items also vary considerably. For Bangladesh, the single most dominant furniture item is sleeping bags (with export value of US\$31.82 million in FY18 in total furniture exports of US\$63.18 million). The success of this specific product is largely attributable to the competitive advantage arising from a strong backward linkage industry, as the raw materials used come from the apparel sector. The global export market for sleeping bags is, however,

small: less than US\$600 million.<sup>21</sup> Bangladesh can expand its exports by several times, but the overall medium- to longer-term export potential in this category is likely to be limited. On the other hand, in many dynamic items that are growing fast Bangladesh does not yet have much presence. Within a decade, the global market for lamps, lighting fixtures and parts thereof (HS 9405) experienced more than a three-fold increase. While Vietnam captured a significant portion of the global furniture market by specializing in these items, Bangladesh's export supply response has been extremely limited.

Two other furniture categories with high growth potentials are seats, beds and parts thereof (HS 9401) and different types of furniture (e.g. wooden, steel, metal etc.) (HS 9403). Global exports of both these categories rose significantly, but Bangladesh has not been able to register a solid market presence as reflected in its volatile export earnings from these items. This is despite the fact that production activities associated with HS 9401 and HS 9403 are labour-intensive.

Most of the furniture manufacturing firms are small and medium enterprises (SMEs) and highly dependent on imported raw materials. They are not well-connected with global markets for final goods as well as input supply sources. Many of these firms express their concerns about import duties on imported raw materials while in reality such imports for export production should be eligible for either the duty-drawback scheme, allowing exporters to claim back duties paid on intermediate inputs, or bonded warehouse facilities, letting exporters to import materials duty-free through secured facilities supervised by customs authorities. Furniture firms are apparently facing difficulties in accessing these facilities and many of them are also unfamiliar with the provisions. Given the nature of the sector, uninterrupted and timely availability of raw materials is one of the most important preconditions for export success. This issue deserves special attention for expanding export supply capacity particularly in HS 9401 and HS 9403 furniture items. Easy access to raw materials can help facilitate domestic firms' participation in global value chains-led trade. Many small and medium furniture enterprises need critical support in establishing their contacts with global buyers. Their familiarization with exporting procedures and participation

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<sup>21</sup> This is according to the information obtained from the International Trade Centre (ITC) database.

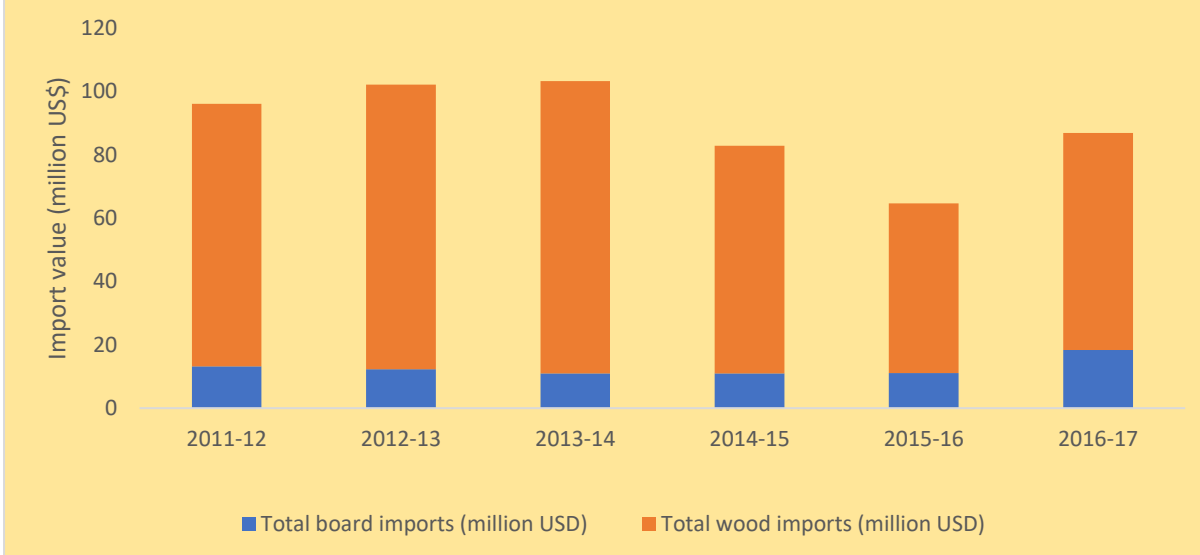
in international furniture fairs can be very helpful in this regard. In addition, export-oriented furniture manufacturing SMEs can be supported to secure their presence through online sales platform such as e.g. Alibaba.com to better appreciate the demand for topical items, price and quality competitiveness, practices and procedures involving modern business activities.

Ensuring a large supply-side capacity in an industry like furniture is possible only by creating strong backward linkage activities and supply chains. A critical constraint is the shortage of raw materials from domestic sources and the ensuing heavy dependence on imported capital goods and raw materials. A number of large and medium size enterprises in Bangladesh have already invested in heavy machineries and during some factory visits as part of this study, the process of utilizing more technology-intensive production processes and automation was quite evident. However, most small enterprises are slow in embracing modern techniques.

In terms of raw materials, there is a huge demand for various types of wood boards (e.g. plywood, veneered board, and MDF). Although there are some local firms that produce these, but domestic production is not able to keep pace with the growing demand. Furthermore, the production of wood is decreasing overtime due to limited forest resources. Bangladesh's total imports (both wood and different types of boards) stood at US\$87 million in 2016–17 (Figure 5.1).<sup>22</sup> In 2016–2017, Cameroon (26%) was the main source of imported woods followed by Myanmar (23%). Other sources were Liberia (9%), Suriname (8%) and the U.S. (7%). On the other hand, China (35%) was the dominant supplier of different types of boards followed by Malaysia (22%) in the same year. Other major suppliers of boards are India (10%), Malaysia (9%) and Vietnam (6%). Fittings and furnishing, two vital segments in the furniture production process, also rely mostly on imported products and raw materials. Therefore, export-oriented furniture firms will require uninterrupted supplies of these items. Development of backward linkage industries as well as readily available imported materials at world prices should be an important consideration in expanding overall supply capacities. Appropriate policy support can facilitate this process, and this is discussed further below in this section.

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<sup>22</sup> Wood is defined as the sum of wood in rough (HS 4403) and wood sawn/chipped lengthwise, sliced etc. (HS 4407) whereas different types of boards include wood wool (HS 4405), sheets for veneering (HS 4408), particles and similar boards (HS 4410), fibreboard of wood (HS 4411), plywood veneered panels (HS 4412) and densified wood in blocks plates etc. (HS 4413). Considering Figure 5.1, it is difficult to explain why imports fell in 2014–15 and 2015–16. These data are from are in value terms. The quantities imported cannot be inferred.

**Figure 5. 1****Wood and different types of board imports by Bangladesh**

Source: Authors' presentation using data from Bangladesh Bank.

## 5.2 Attracting FDI in the export-oriented furniture sector

As discussed earlier, participation in global value chain-led international trade can be an important determinant of export success. Integration with GVCs most often takes place through foreign direct investments. In the value chain process, mother firms or multinational corporations focus on R&D, branding and marketing while manufacturing takes place in developing countries through FDI driven capital and technical know-hows. For establishing direct contacts and business relationships with global brands and retailers, the role of FDI is thus indispensable. Skill upgradation, productivity improvement, positive spillover effects arising from knowledge and technology transfers and better management practices are some of the direct impacts of FDI participation. The spillover effects can also benefit the local firms (i.e. those without foreign investments), paving their way for integrating with GVCs.

Amongst others, weak investment climate and high cost of doing business discourage FDI inflows into Bangladesh. Since 2000, while the yearly average FDI inflow as proportion to GDP in China, Cambodia, India, and Vietnam were 2.3 percent, 7.8 percent, 1.7 percent, and 5.4

percent respectively, the comparable figure for Bangladesh is less than 1 percent.<sup>23</sup> The FDI stock as percentage of GDP for Bangladesh, 6 percent, is far lower than that of its comparators: for instance, the FDI stock for Cambodia increased from about 10 percent in 1995 to more than 80 percent in 2016, while Vietnam's share increased from around 28 percent to more than 55 percent.

Attracting FDIs, particularly in the export-oriented furniture sector can be a big boost for export growth and diversification. Availability of backward linkage activities – either through domestically sourced or imported raw materials – attractive incentives for investors (Box 5.1), and cheap labour should make furniture industry in Bangladesh an attractive sector for FDI provided that the excessive cost of doing business can be tackled. Currently, information on FDI by small sectors such as furniture is not readily available.<sup>24</sup> However, data from earlier years suggested certain FDI activities specially in wooden and steel furniture. Success of these investment projects should lead to more investment inflows (Table 5.1).

### Box 5.1

#### Incentives and benefits for foreign investors in Bangladesh

Some of the benefits for direct investors as well as joint ventures, as specified by the Bangladesh Investment Development Authority (BIDA), are as follows:

- No constraints on FDI flow and repatriation of dividends;
- No duty on imports of raw materials, construction equipment, capital machineries;
- No export duties;
- Permanent resident permits upon investing US\$75,000 and citizenship upon investing US\$500,000;
- Tax holidays in Dhaka and other major divisions;
- Depreciation allowances: accelerated depreciation for new industries on the cost of plant and machinery is offered at 50%, 30% and 20% for the first, second and third years respectively;
- Cash and added incentives provided to exporting industries include bonded warehouse facilities, 90% loans against letters of credit, credits from export promotion fund and export credit guarantee schemes. It also allows export-oriented businesses to sale up to 20% in the local market on payment of relevant duties;

Source: Bangladesh Investment Development Authority (BIDA).

<sup>23</sup> The sector that is attracting most FDI in Bangladesh is the telecommunications industry followed by the banking sector, readymade garments, energy, and leather and footwear. Apart from the flows in energy, almost all other FDIs in the manufacturing sector are directed to the EPZs.

<sup>24</sup> Bangladesh Bank does not maintain the overtime FDI inflow in furniture owing to its very poor amount.

**Table 5. 1 Chinese investment in Bangladesh furniture industry**

Project / company name	Type of ownership	Equity		Amount of investment (million US\$)	Main product
		Local (%)	Foreign (%)		
Raian Progati Building Materials Ltd.	Joint venture	51	49	0.147	Wooden made furniture
China Prance Dragon company Ltd.	Green field <sup>25</sup>	-	100	0.097	Wooden made furniture
Rupayan Furniture Ltd	Joint venture	51	49	0.429	Wooden made furniture
China Fujian Sahco wood factory Ltd.	Joint venture	51	49	0.764	Wooden made furniture
Golden Tiger Products (BD) Ltd.	Green field	-	100	15.511	Plastic furniture (chemical)
Kartell Furniture & Decorating Materials Industries	Green field	-	100	0.61	Steel furniture
Min Mao Hardware Door Industries Ltd.	Green field	-	100	0.34	Steel furniture

Source: Compiled from the information provided in Islam *et al.* (2013).

### 5.3 Addressing the problem of shortage of skilled labour

The furniture industry, being a labour-intensive sector, faces critical shortage of skilled workers and managers with the knowledge and exposure of production practices in modern factories. This is a major constraint for many manufacturing units in expanding their supply capacities. In the World Bank Enterprise Survey (2013), one in every four firms in the furniture sector reported inadequately educated and trained workforce as a major constraint affecting production. The same survey found that only about 20 percent firms offered formal training facilities to improve workers' productivity and product quality. The situation seems to have not changed much. According to a more recent survey and analysis, the most essential skills required in the manufacturing process such as general communications, team-work, self-

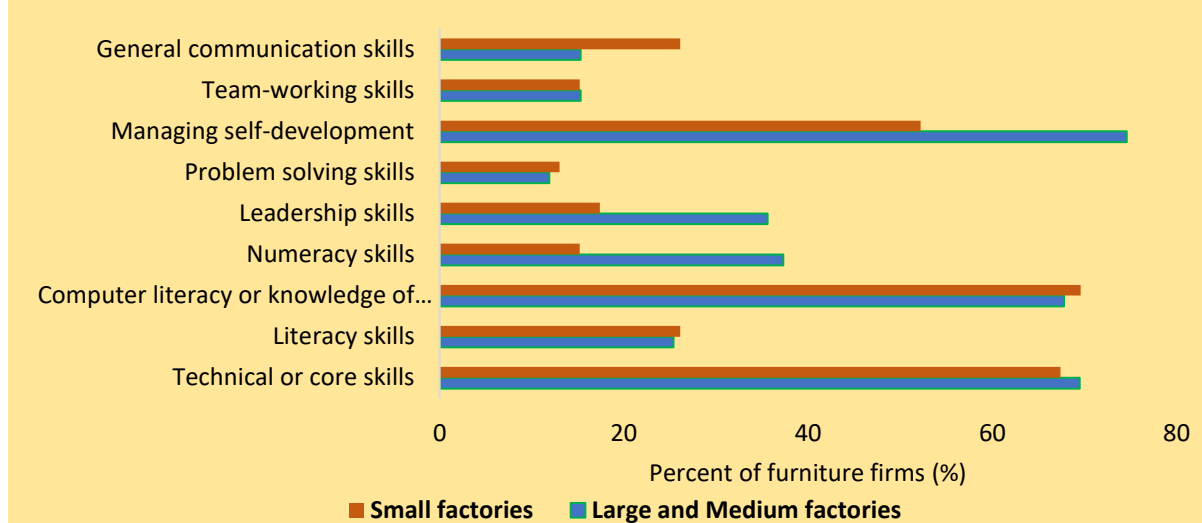
<sup>25</sup> Green field – a special type of foreign direct investment (FDI) where the investment starts by a parent company from the very beginning – starting with the construction of building to final product in other foreign countries.



development, problem-solving capacity, leadership, numeracy, computer literacy, and technical knowledge and experience are seriously lacking among the furniture industry workforce (CTI, 2017). The survey found that skill shortage is more acute for large and medium firms compared to small establishments (Figure 5.2). It is reported that about half of the large firms and a quarter of medium factories find it difficult to recruit skilled labour in the positions of machine operators, carpenters, designers and varnishers and sprayers.

**Figure 5. 2**

Particular skill type shortage as reported by firms



Source: CTI Furniture Sector Survey (2017).

The study found that in some cases where engineering graduates and diploma engineers were available to work in the industry, their training hardly matched the skillset needed for actual factory operations. On the other hand, it is also a problem that the furniture industry could not attract the most competent graduates. According to the CTI Furniture Sector Survey (2017), the skill gap resulted in low productivity, high wastage, and consequently loss of competitiveness. As many as 80 percent of the firms surveyed identified low productivity due to shortage of skilled worker as an obstacle facing the industry. Almost two-thirds of the surveyed factories attributed wastages and increased costs to lack of trained workers.

There exists very limited scope for training facilities as well as skill development programmes for furniture labourers. Although large and medium enterprises have training facilities within the firms, small firms have no such facilities. About 90 percent of large firms and a one-third

of medium firms reported on-the-job training and apprenticeship available with costs of these facilities being quite expensive. (CTI, 2017). UCEP Bangladesh through its technical and vocational education and training (TVET) programmes, provide some training facilities for wood machine operators, wood working and lacquer polishing.<sup>26</sup> Around 20 percent of firms in CTI Survey (2017) mentioned employing labourers trained from UCEP.<sup>27</sup> Some private universities are also offering courses on furniture design. However, these training facilities are not adequate to provide for the required number of skilled workers in the sector. As the National Skill Development Policy (NSDP) aims at increasing Bangladesh's competitiveness in the global market through improved skills establishing national and vocational qualification framework (NTVQF), the need for furniture industry should be given priority in this regard. Industry stakeholders are also considering the need for setting up a training and design institute dedicated for the furniture sector.

## 5.4 Dealing with the policy-induced anti-export bias

One of the issues often not appreciated well in the policy discourse is that domestic sales do compete with export supplies. As such, policy measures that help make the domestic market more profitable can discourage exporting activities. In its simplest terms, if the profitability out of local sales is higher than export orders, firms will tend to focus on home consumers. The relative attractiveness of the markets is affected by trade policy measures. Under a protective policy stance e.g. in the presence of high tariffs, local sales can be very attractive. When the supply-side capacity is small, higher profitability in the domestic market will make firms inward-looking. This is known as the policy-induced anti-export bias.

Bangladesh's main furniture export products are under HS 9403 and HS 9404, as mentioned earlier. For HS 9403 (different types furniture made of wood, metal, plastic, bamboo, rattan and cane etc.), 5 percent to 25 percent customs duty (CD), up to 20 percent supplementary

<sup>26</sup> UCEP, operating since 1972, is a non-profit and non-governmental organization which aims to help uplift the socio-economic conditions of underprivileged communities through skill development for their livelihoods. UCEP stands for Underprivileged Children's Educational Programs. However, the use of abbreviated form UCEP is preferred because it also extends its support to the youth from the underprivileged communities as a response to changing needs and contexts. See <http://www.ucepbd.org/#te> for details.

<sup>27</sup> CTI Furniture Sector Survey (2017).

duty (SD), 15 percent value added tax (VAT), 5 percent advanced income tax (AIT), up to 3 percent regulatory duty (RD) along with 4 percent advanced trade value (ATV) are imposed. These rates are almost similar for HS 9404 (different types of mattresses used for various purposes). The estimated total tax incidence (TTI) ranges between 31 and 89 percent for HS 9403 and between 58 and 89 percent for HS 9404 (Table 5.2). This implies that the domestic market for these products is highly protected. Ideally, the nominal rate of protection is determined by customs duties only, but in the context of Bangladesh it has been shown that such taxes as SD, RD and even VAT also have some protective content in the sense that these duties are not applied equally to domestically produced goods. Consequently, prices in the domestic market can be much higher than world prices. It is not only peculiar to the furniture industry, rather a similar situation prevails in almost all sectors. Indeed, a fairly robust output growth under a highly protective environment for domestic import-competing industries has been a salient feature of Bangladesh's economic development over the past two decades or so. It has been suggested that Bangladesh imposes the highest average rate of tariffs on imports when compared with that of other Asian developing countries, and during 2013–2017 Bangladeshi consumers paid a staggering US\$71 billion over and above international prices (Sattar, 2018). That is, domestic prices of comparable products are higher than world prices that exporters can earn.

**Table 5. 2 Taxes and duties on furniture imports in Bangladesh (%)**

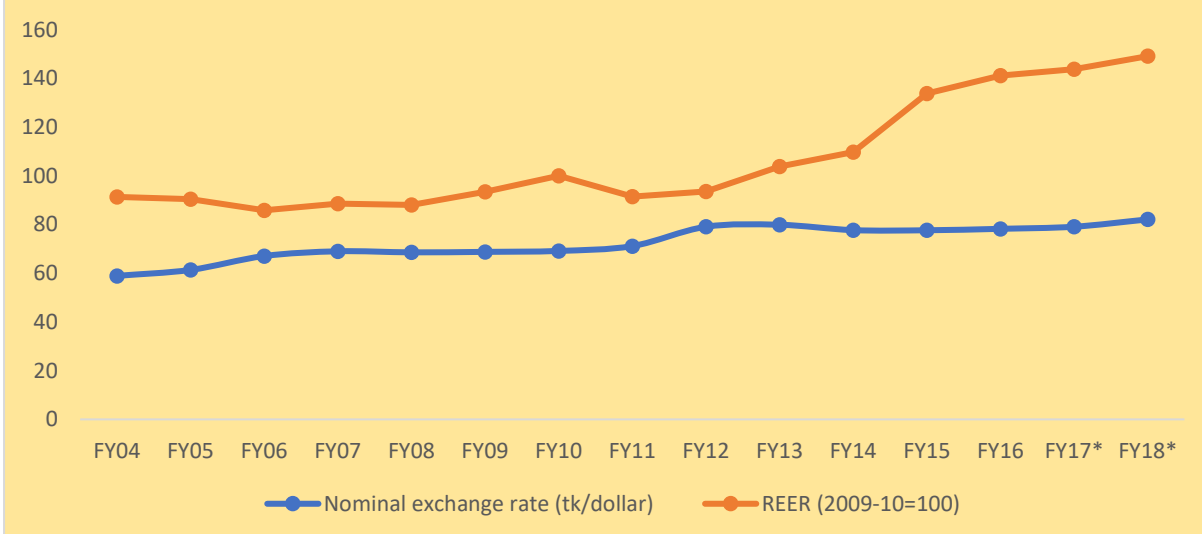
HS code	CD	SD	VAT	AIT	RD	ATV	Total Tax Incidence (TTI)
<b>9401</b>	25	0–45	15	5	3	4	89.4%–127.8%
<b>9402</b>	5–10	0	0–15	5	0	4	15.3%–37.1%
<b>9403</b>	5–25	0–20	15	5	0–3	4	31.1%–89.4%
<b>9404</b>	25	0–20	15	5	3	4	58.7%–89.4%
<b>9405</b>	5–25	0–45	15	5	3	4	15.3%–127.8%
<b>9406</b>	1–25	0	15	5	0–3	4	26.3%–58.7%

Source and note: Authors' presentation using data from National Board of Revenue (NBR). Retrieved from [www.bangladeshcustoms.gov.bd](http://www.bangladeshcustoms.gov.bd). CD = customs duty, SD = supplementary duty, VAT = value added tax, AIT = advanced income tax, RD = regulatory duty, ATV = advance trade value.

A booming domestic economy will certainly be an important source of revenues for firms. However, policy measures (such as high tariffs) can discourage exports especially when supply-side capacities are limited. This will become even more pronounced when trading costs are high. Infrastructural bottlenecks, troublesome inland road transportation, and weak trade logistics – all contribute to trade costs discouraging exports. Another policy-induced disincentive for exporters is the appreciation of the real exchange rate which undermines a country's external competitiveness. In the past five years, taka appreciated by more than 50 percent in real terms (Figure 5.3). Despite some recent nominal devaluations, the country's overall external competitiveness is flagging due to real exchange rate appreciation arising from mounting inflationary differentials with trade partners and other countries' more proactive currency adjustments.

**Figure 5. 3**

**Movements of nominal and real effective exchange rates (REER)**



Source and note: Bangladesh Bank and \* denotes REER for FY2017 and FY2018 are estimated.

The Seventh Five Year Plan of Bangladesh (FY2016–FY2020) highlights the policy-induced anti-export bias against the overall export sector and calls for rationalization of high tariffs and para-tariffs to enhance the efficiency of the producers and create a pro-export motivation

among the entrepreneurs.<sup>28</sup> Nevertheless policy reversals to accord net policy incentives to exporters have proven to be a difficult task and overtime the anti-export bias seems to have increased. Given the current tariff regime, it is almost impossible to consider an equivalent export policy support to neutralize the policy bias.

## 5.5 Tackling excessive cost of doing business

The issue of excessive cost of doing business in Bangladesh is widely discussed. Weak and inadequate infrastructure in conjunction with inefficient inland road transportation and trade logistics contribute to high cost of doing business, denting export competitiveness. This is particularly a huge challenge for nascent export industries like furniture that have limited economies of scale due to low volumes of export orders. Infrastructure and business-cost related problems therefore affect small sectors disproportionately including their ability to attract foreign investments.

According to World Bank Doing Business Survey (2018), Bangladesh ranks in the lower rung amongst its comparators in various indicators such as time needed in getting a new electricity connection, trading across borders, etc. It is reported that nine procedures and as many as 430 days are required on average to get an electricity connection in Bangladesh. The time needed is thus nine times higher than that of in Vietnam and India, and about 13 times higher when comparing with Indonesia and Thailand. Even after the connection, the reliability of supply and availability of electricity remains a question. Bangladesh scores a 0 on a scale of 0 to 8 in the case of reliability of supply and transparency of tariff index while all other comparators and leading exporters obtained a score of 6 or more (Table 5.3). Despite making impressive efforts to tackle shortage of electricity supplies in the recent past years, per capita electricity consumption in Bangladesh remains among the lowest in the world and is

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<sup>28</sup> Bangladesh did undertake significant trade liberalisation in the 1980s and early 1990s. But since the late 1990s, the pace of liberalisation slowed down. In some instances, the impact of initial tariff cuts has been offset by introducing tariffs and trade taxes in addition to customs duties. Thus, while average customs duties fell from 21 percent in 2001 to 13 percent in 2015, protection under the shield of other taxes and duties increased from 7 percent to 15 percent. It has been argued that this rise in protection for the domestic sectors creates an anti-export bias (Sattar, 2015).

approximately just one-third and one-fifth of the consumption levels in India and Vietnam, respectively. A BEI research shows that currently there is no other country in the world that exports as much as Bangladesh with as little energy use (Razzaque, 2017).

Economy	Rank	Procedures required (number)	Time (days)	Reliability of supply and transparency of tariff index (0-8)
<b>Bangladesh</b>	185	9	428.9	0
<b>China</b>	98	5.5	143.2	6
<b>India</b>	29	5	45.9	7
<b>Indonesia</b>	38	4	34	5
<b>Thailand</b>	13	4	32	7
<b>Vietnam</b>	64	5	46	6

Source: Authors' presentation using data from World Bank Doing Business (2018).

Procedures and formalities involving trading across borders are much more involved and costlier in Bangladesh. On the export side, it takes on average about 147 hours for the documentary compliance, and 99.7 hours for border compliance (Table 5.4). For a global leading exporter like Hong Kong, it takes only an hour for documentary compliance and 2 hours for border compliance. The total (procedure-related) cost of exporting for Hong Kong is only US\$57, for India US\$474, for Vietnam US\$429 in comparison with US\$633 for Bangladesh. Similarly, on the import side as well, Bangladeshi traders face much higher costs: on average 144 hours to complete the documentary compliance in contrast to 65.7, 61.3 and 76 hours are in China, India and Vietnam (Table 5.5). The resultant costs (including documentary compliance and border compliance) turn out to be on average US\$1,663.8 which is more than twice as in China, and a threefold higher than that in Vietnam. These excessive costs seriously undermine competitiveness as most exporters have to import raw materials first before going into export production and shipment.

Like World Bank Doing Business Indicators (2018), Bangladesh scores poorly amongst its comparators in institutions, infrastructure, market size and efficiency, business sophistication and innovation according to World Economic Forum's Global Competitiveness Index (Figure

5.4). In fact, excessive cost of doing business gets amplified in the presence of weak competitiveness fundamentals. This explains the grave difficulties faced by small, less-established exporter. It is important to recognize that most of infrastructure and competitiveness-related problems are medium- to long-term issues as their quick fixes are quite unlikely. Therefore, providing other kinds of policy support to the export sectors is extremely important: some discussions on this particular issue are presented later in this section.

Economy	Rank	Time to Export		Cost to Export	
		Documentary compliance (hours)	Border compliance (hours)	Documentary compliance (US\$)	Border compliance (US\$)
<b>Bangladesh</b>	173	147	99.7	225	408.2
<b>China</b>	97	21.2	25.9	84.6	484.1
<b>India</b>	146	38.4	106.1	91.9	382.4
<b>Indonesia</b>	112	61.3	53.3	138.8	253.7
<b>Thailand</b>	57	11	51	97	223
<b>Vietnam</b>	94	50	55	139	290

Source: Authors' presentation using data from World Bank Doing Business (2018).

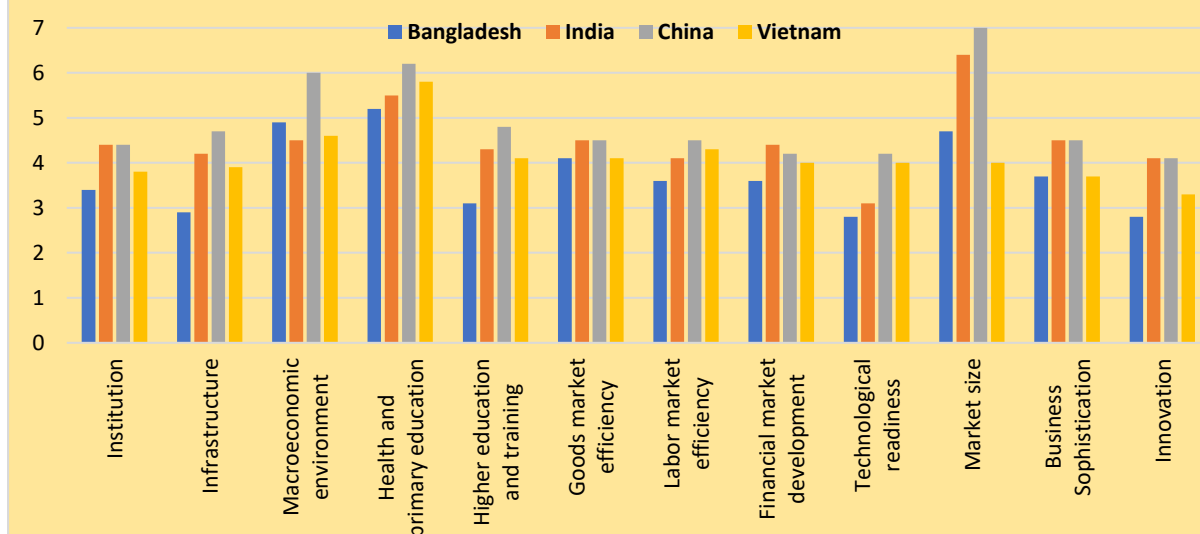
**Table 5. 5 Trading across borders (import)**

Economy	Rank	Time to Import		Cost of Import	
		Documentary compliance (hours)	Border compliance (hours)	Documentary compliance (US\$)	Border compliance (US\$)
<b>Bangladesh</b>	173	144	183	370	1293.8
<b>China</b>	97	65.7	92.3	170.9	745
<b>India</b>	146	61.3	264.5	134.8	543.2
<b>Indonesia</b>	112	119.2	99.4	164.4	382.6
<b>Thailand</b>	57	4	50	43	233
<b>Vietnam</b>	94	76	56	183	373

Source: Authors' presentation using data from World Bank Doing Business (2018).

**Figure 5. 4**

Bangladesh and comparators in various competitiveness indices, 2016-17

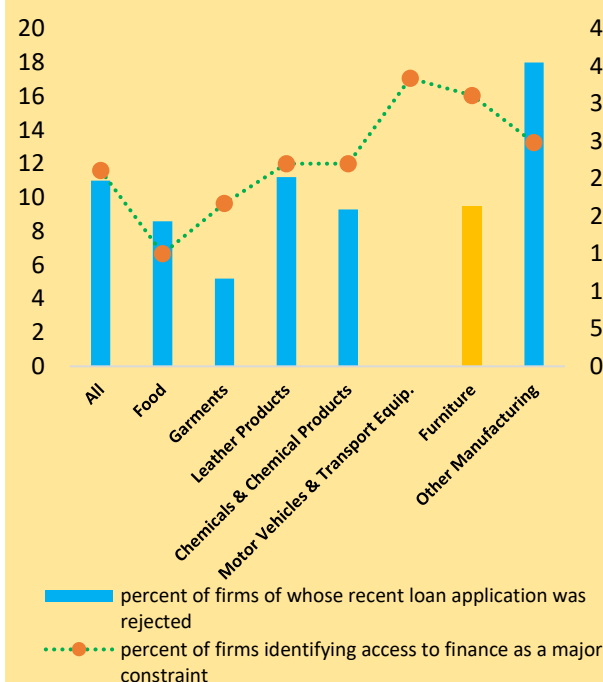
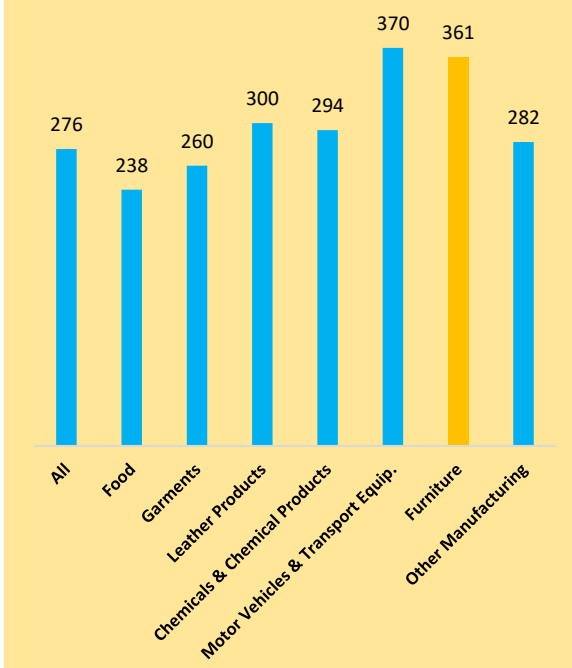


Source: Authors' presentation using data from Global Competitiveness Index (2017).

## 5.6 Difficulties in accessing finance

Like many other sectors, access to finance is a major constraint for furniture entrepreneurs. The time needed to get loans approved and involved procedures is another problem. In the World Bank Enterprise Survey (2013), more than 36 percent furniture firms reported access to finance as a major constraint running their production and business. At the same time, the value of collaterals needed for a loan to be sanctioned for a furniture firm was on average 361 percent of the loan amount – one of the highest among manufacturing industries (Figures 5.5 and 5.6). Furthermore, because of informal nature of operation, most of the firms do not have access to loans sanctioned by financial institutions.



**Figure 5. 6**
**Access to finance as a major constraint**

**Figure 5. 5**
**Value of collateral needed for a loan (% of loan amount)**


Source: Authors' presentation using data from World Bank Enterprise Survey (2013).

To provide improved financial access for exporters, the Export Development Fund (EDF) operated by the Bangladesh Bank offers trade finance at 7 percent annual interest rate.<sup>29</sup> In addition, the Export Credit Guarantee Scheme (ECGS) – administered by the Sadharon Bima Corporation – provides pre- and post-shipment export finances, whole turnover export finance (pre-shipment) guarantees and export payment risk policies.<sup>30</sup> The use of these schemes and their access by different types of export firms need to be reviewed. In these funds, how the need of the potential export sectors like furniture can be prioritized should be given due policy consideration. Furthermore, collateral requirements against loans for the export-oriented furniture firms need to be rationalized.

<sup>29</sup> BRPD Circular No. - 01, dated 10 January 2004, Bangladesh Bank.

<sup>30</sup> [http://mail.sbc.gov.bd/ins\\_export\\_credit.php](http://mail.sbc.gov.bd/ins_export_credit.php)

## 5.7 Quality upgradation, product sophistication and positive branding

Improved quality, sophistication and standards of products are important for global competitiveness. Reliable supply response of quality products attracts buyers and investors and help move up the global value chain. Sustained export performance greatly depends on product quality and sophistication. As discussed above, in export category HS 9404 – mainly in sleeping bags – Bangladesh seems to have products that are of outstanding quality. Bangladesh also exports some relatively high-value products under different types of seats (HS 9401).<sup>31</sup> However, its export performance is not stable, largely because of small export volume. Here, the supply-side capacity could be a major problem. In other furniture products e.g. prefabricated building items, lamps and lightings, and medical furniture, the unit value prices received by Bangladeshi exporters are much lower than those of many other Asian comparators, indicating product quality disadvantages. It is however worth pointing out that export supplies in these categories are so small that the industry has not had a chance to develop product maturity.

As improved quality is generally associated with higher prices, there is the need for providing attention to this area. Product quality is linked with design, usages of advanced technologies, and improved raw materials used in production. Workmanship and workers' skills are also important particularly for many wooden products. While a number of medium to large furniture factories have invested in modern technologies and improved raw materials, an overwhelming majority of factories do not have the means for undertaking the required transformations.

Building domestic capacity in product design through training of professionals and workers, spending on market and product research and development (R&D), and developing brands are also important. Currently, there is no product design institute for the furniture industry

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<sup>31</sup> It is worth pointing out here again that in this study quality is assessed using the relative unit value prices of the same products supplied by different countries.

and apart from a few relatively large enterprises, the scope of on-the-job training is also limited. As a result, firms proactively looking for furniture export opportunities are not many.

It must also be noted that in today's world, product quality is intimately linked to various global standards and compliance issues. Big brands are increasingly moving towards developing supply chains that comply with very rigorous labour and environmental standards. International certifications such as ISO 14001 for environmental sustainability, ISO 45001 for occupational health and safety standards have become an integral part of goods quality and higher export prices. Upgrading the country capacity in this direction will be critically important for future export prospects. In fact, positive branding backed by effective monitoring of the relevant standards can help establish credibility of the country as a responsible source of supplies, attracting reputed international buyers.

## 5.8 Exploring new markets and supporting new and existing export relationships

Bangladesh's furniture export is highly concentrated both in terms of products and markets. As discussed above, the market reach of furniture items is very narrow compared to Asian comparators. For the topmost three items – at the HS 4-digit level namely beds and mattress support (HS 9404), furniture and parts thereof (HS 9403) and different types of seats (HS 9401) – more than 60 percent of each product is exported to only two markets.

The high degree of product and market concentration poses a serious constraint to export expansion. In order to expand exports, new market opportunities should be explored immediately. Besides, the meagre presence in traditional export destinations needs to be looked into. The market prospect analysis in the previous section shows that Bangladesh has good prospects for certain furniture items in the markets of China, EU and the United States. These markets should be prioritized for expanding exports. It can be quite challenging for Bangladesh to explore and establish export relationships with comparatively newer markets. A comprehensive assessment can be undertaken to explore markets with high potential for

exporting and to identify the reasons for low presence or absence of Bangladesh in these markets.

Exploring new markets requires strong policy support. There is a need for export promotional measures to shift from their traditional focus on finding new export market opportunities only to supporting new and existing exporters to increase survival rates during the first few years after beginning to export. Export incentives schemes should be strengthened to make all these effective. Hosting international furniture exhibitions both at home and abroad and at a higher frequency can play a critical role in attracting buyers/importers. Bangladeshi furniture producing firms can participate in international furniture fairs, trade fairs and expos with a view to showcasing their furniture products. To help make all this effective, the role of policy incentives can be an important trigger. In the context of other countries, e.g. in Vietnam, furniture producing and exporting firms receive very generous assistance to participate in and establish pavilions in international fairs in addition to support for airfares and cost of organizing any workshops (VIETRADE/ITC).

## Box 5. 2

### Bangladesh Furniture & Interior Décor Expo, 2018

Since its inception in 2012, the 5th time Bangladesh Furniture and Interior Décor Expo, 2018 (BFID, 2018) was held on 13–15 May 2018 in International Convention City Bashundhara (ICCB), Dhaka. A total of 10 furniture producing and exporting firms participated in the fair showcasing their varying types of products. The primary objective of arranging this kind of fair is to exhibit the furniture items with new, modern and customized designs. International buyers can participate in the fair and get the necessary information and thereby establishing contact with exporting firms. Facilitation of direct interactions between buyers and sellers are made possible through the fair while the firms can also get export orders during the fair.

With a view to analyzing the global cost competitiveness of Bangladeshi furniture exporting firms, data on per unit prices for a number of selected furniture items were collected from the BFID (2018). To make comparisons with other exporting comparators of Bangladesh, Alibaba.com was used for extracting information on those selected furniture items produced in different countries. The rapid assessment seems to suggest that the product variety of Bangladeshi items is rather limited. Notwithstanding, Bangladeshi furniture exporters have the capacity to export most furniture types with specific designs. Moreover, in certain cases Bangladesh appears to have some cost competitiveness compared to its comparators' supplies. However, supplies from Alibaba.com offer shipment of products to the customers. This is an area where Bangladesh has disadvantages due to difficulties associated with inland transportation and inefficiencies port infrastructure and handling. The information provided in such online platform as Alibaba.com should be given careful consideration in understanding the competitiveness of the local industry as well as various types of support measures needed to boost Bangladesh's competitiveness further.

Source: Authors' analysis.

## 5.9 Strengthening clusters for furniture sector related activities

Although furniture firms in various locations exist in clusters, most of these establishments lack adequate, effective and well-functioning infrastructure. This is particularly true for small firms. Clustering of firms with the objective of export expansion requires facilities that will help attract foreign buyers by providing them with a positive impression about the depth of industry, complementarities that firms can enjoy from being located nearby (agglomeration economies), reliable quality of products and timely delivery of orders. Currently, most localization of firms are centred around selling for the domestic market with the main emphasis being given on showcasing available products (e.g. in the form of show-rooms only). The business of exports will, however, need to build buyers'/importers' confidence in the whole production chain including working environment, product, and environment standards can help.

Clustering of firms can be supported within the Special Economic Zones, which are currently being set up by the Bangladesh Economic Zone Authority (BEZA) (SEZs). This can help resolve the infrastructure-related problems of many small and medium-sized firms. Like the Tannery Estate Dhaka (TED), which was very recently relocated from Hazaribagh to Savar, a proper planning for establishing export-oriented furniture clusters can help transform the production processes while bolstering industry competitiveness and attracting global buyers. One advantage of Bangladesh's SEZ development strategy is that it accommodates both exporting as well as domestic market-oriented firms. This is particularly helpful for an industry like furniture that is experiencing a rapid growth in the domestic market while at the same time having a promising export potential. Among others, the benefits of furniture clustering are knowledge-sharing; positive spillover effects on procuring, using and mastering state-of-the-art technologies; possible improved access to finance (as the financial institutions will also be encouraged by the depth of the overall industry and the position of the concerned firm in it); increased likelihoods of sub-contracting, particularly in connection to export orders; greater attractiveness for skilled labour; etc. SEZs are supposed to be served by better connectivity with ports and inland transportation systems. Therefore, time and cost of international trade can be lowered adding to industrial competitiveness.

## 5.10 Complying with environmental standards for export success

Environmental standards are becoming an important determinant of export success. A growing awareness and demand for protecting the environment by using environment-friendly, renewable and recyclable products have important implications for the furniture industry. Various international market surveys seem to suggest that consumers in Europe and North America are willing to pay higher than the usual prices for furniture products satisfying sustainability and environmental issues. That is, production with low CO<sub>2</sub> emissions, environmentally responsible manufacturing activities, use of recycled and recyclable products as well as materials, and sustainably managed forest resources as sources of woods are now essential ingredients of marketing success in many developed countries. Leading world brands are increasingly becoming more demanding on being compliant with environmental standards (Table 5.6). Therefore, to succeed in world export markets, more attention should be given to meeting relevant standards such as use of recycled and recyclable raw materials, use of woods certified by Forest Stewardship Council (FSC),<sup>32</sup> environment-friendly waste management process, use of eco-friendly varnishes and glues, etc.

It has been argued that while tariff reductions in importing countries led to a decline in entry barriers for exporting firms from developing countries, but the growth of various forms of certification brought in new ones (Kaplinsky *et al.*, 2003). These predominantly relate to process characteristics (rather than products) and include quality standards (ISO 9000), labour standards (SA 8000) and environmental standards. According to Kaplinsky *et al.* (2003), in the case of furniture industry there is an additional requirement of ISO 14000, which is a wood-sector specific standard (Forestry Sustainability Council, FSC) that relates to environmental practices throughout the chain, whereas ISO 14000 only certifies processes within particular links in the chain. As these standards are becoming increasingly important for global retailers, capacity building in these areas are required for future export success. Many relatively new

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<sup>32</sup> Established in 1993, Forest Stewardship Council (FSC) – an independent, non-profit and non-government organisation are continuously taking proper initiatives to promote environment-friendly, socially beneficial and economically efficient management of global forests. Currently, Forest Stewardship Council (FSC) is operating in more than 80 countries. See <https://ic.fsc.org/en/what-is-fsc> for more details.

exporting firms, particularly those from Vietnam, have been successful by adopting and implementing these policies and global standards on environmental issues. This has largely been facilitated by foreign direct investments that are well-linked with the global markets and are well-versed in all aspects of trade compliance.

**Table 5. 6 Environmental mechanism systems adopted by leading brands**

Different stages of value chains	IKEA	Valcucine
<b>Raw materials</b>	Recycled and recyclable raw materials	Recycled and recyclable raw materials, Forest Stewardship Council (FSC) certified wood, increased use of aluminum and glass which have higher recyclability (dematerialisation)
<b>Production process</b>	Eco-efficiency; reduction of emissions; use of renewable energy, eco-friendly glues and varnishes; efficient waste management system	Eco-efficiency, emission compensation, use of waterborne varnishes to reduce formaldehyde and toxic gases
<b>Final product</b>	Environment-friendly accessories	Technical and aesthetic durability, recyclability, environment-friendly accessories
<b>Distribution and sales</b>	Reduction of emissions adopting 'Assemble-it-yourself' model at the distribution process, eco-packaging, renewable energy, building consumers' awareness about sustainable production	Eco-packaging, raising consumer awareness towards environmentally sustainable products

Source: De Marchi *et al.* (2017)

## 5.11 Generating adequate information

Although a growing sector, it is very difficult to obtain detailed information on the furniture industry. The existence of a significant proportion of production and employment being in the informal sector is one reason for this. Even within the national income accounting exercise, not much information on the sector is available. Mainstreaming the sector by generating



credible information can help better understand the role of policy options and possible implications. This process can be initiated with the categorization of the furniture producing firms by their sizes, e.g. micro, small, medium and large and gathering data on the location of the firms, raw materials for different types of furniture items, sources of raw materials, production capacity, size of workforce and various skill types of employed workers, sales in domestic and foreign markets, different activities within the firms, export capacities, etc. Identification of the problems faced by the firms and support needed to address them need to be reviewed regularly. The World Bank Enterprise Survey undertaken in 2013 provided some information on the sector but since then similar information has not been available.

Conducting a specialized survey of the furniture sector by the Bangladesh Bureau of Statistics (BBS) would generate useful information. This survey can be undertaken as part of the Survey of Manufacturing Industries (SMI) although one problem is that SMIs have become quite irregular.<sup>33</sup> Another option could be to build capacity of Bangladesh Furniture Exporters Association and Bangladesh Furniture Industries Owners Association so that they can generate the useful information on a regular basis.

## 5.12 Deepening policy support including export incentives for the furniture sector

For any relatively new sector with a small base (i.e. export value), two fundamental factors that define export success are external competitiveness and domestic supply-side capacities. They are also interlinked in the sense that competitiveness can trigger supply-side capacities and the later can also indicate the nature of productivity in the industry. In Bangladesh, like in many other developing countries, various national policy support measures are provided to help exporting firms become competitive and in dealing with the supply-side bottlenecks.

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<sup>33</sup> The latest SMI is for 2012. Dynamic and emerging sectors will require information on a regular basis to understand the market trends and support measures needed in a timely manner.

Indeed, one key ingredient in Bangladesh's readymade garment export growth success was an elaborate incentive package, which became a characteristic feature of the trade policy regime in the 1990s.<sup>34</sup> The principal policy interventions undertaken in this respect included, *inter alia*: (i) duty drawbacks on imports of intermediate goods, (ii) bonded warehouse facilities to enable exporters importing intermediate inputs duty-free, (iii) operation of cash compensation schemes for the so-called non-traditional exports with the cash assistance rate for the exporters not availing duty-drawback or bonded warehouse facilities rising to a peak of 25 percent before being phased down, (iv) a general reduction in tariffs that helped reduce anti-export bias in trade policy regime, (v) provision of duty-free imports of machineries for export-oriented firms, (vi) allowing exporters to retain a portion of their export receipts in foreign currencies, (vii) income tax rebate, (viii) an export credit guarantee scheme for exporters to cover their marketing risks, and (ix) credit disbursed through Export Development Fund at subsidised and/or lower rates of interest.<sup>35</sup>

Some of the above export incentives continue to operate, although the nature and depth of coverage in policy support have changed. The case of cash assistance is perhaps the most prominent one. Since the late 1990s, such assistance for the RMG sector has been brought down (from as high as 25 percent to currently just 4 percent), as the sector grew rapidly and became mature.<sup>36</sup> A close look at the recent provisions, as in Table 5.7, would reveal that the policy is clearly geared towards stimulating export response from the relatively less-established emerging sectors, as higher rates of assistance are offered to them. For furniture, the specified cash assistance in the most recent Export Policy has been 15 percent of the f.o.b export value. For an emerging sector with currently small exporting capacity, it can be enhanced to 25 percent. Given the size of the sector's exports, the suggested deepening of cash assistance should not have any major burden for the exchequer. The enhanced incentive scheme can be of limited duration, for instance, for a period of 5–7 years, during which time a good export base should be created.

<sup>34</sup> The major objectives of those incentives were to tackle policy and administrative constraints on export activities; enhance backward linkage; help diversify export basket; support export-oriented investment; and promote price competitiveness in global markets.

<sup>35</sup> A detailed analysis of the trade policy regime and export incentives of the 1990s can be found in Bayes *et al.* (1995) and Rahman (1997).

<sup>36</sup> In 2001, a plan was adopted to phase down the 25 percent support under the cash compensation scheme (CCS) gradually.

It is often argued that discriminations against non-RMG sectors in their accessing various incentives do not help these sectors flourish (Sattar, 2018). For example, the bonded-warehouse facilities have largely become a phenomenon associated with the export-oriented RMG industry. Similarly, as Table 15 shows, cash incentives for small and medium exporting firms were offered to the RMG sector only. Again, firms exporting apparel items to new markets (other than Canada, the EU and the U.S.) receive 3 percent cash assistance, while similar incentives for exporters of other products do not exist. Furthermore, during FY2015–FY2018, RMG exporters exporting to Eurozone countries received additional 2 percent cash assistance to compensate for the taka appreciation against the euro, but the same was not made available to other export items destined for the same market.

**Table 5. 7 Cash assistance to different export sectors (% value of export**

Sector	2002-2005	2009-2010	2014-2015	2016-2017	2017-2018
Export-oriented RMG (instead of duty drawbacks)	5	5	5	4	4
Incentives for the small & medium apparel (RMG) firms (in addition to the existing policy)	n.a.	n.a.	5	4	4
New product/new market for apparel industry - except for markets in Canada, the EU, and the U.S.	n.a.	n.a.	3	3	3
Additional cash assistance for apparel exporters to the Eurozone	n.a.	n.a.	n.a.	2	2
Articles of hogla, straw, sugarcane, etc	-	15-20	15-20	15	20
Agri and agri-processing	15-20	20	20	20	20
Light Engineering	-	10	10	15	15
100% Halal Meat	-	20	20	20	20
Frozen Shrimp (Depending on ice coverage)	10	12.5	10	7-10	7-10
Frozen Fish (Depending on ice coverage)	10	12.5	-	2-5	2-5
Articles of leather	-	17.5	15	15	15
Crust and finished leather from the relocated firms in Savar	n.a.	7.5	-	-	10
Ships/tractors and ocean-going vessels	-	-	5	10	10

Sector	2002- 2005	2009- 2010	2014- 2015	2016- 2017	2017- 2018
Potatoes	15	10	20	10	20
<b>Furniture</b>	-	-	-	<b>15</b>	<b>15</b>
Vegetable seeds	-	-	-	20	20
Carbon from Jute Stalks	-	-	-	20	20
Articles of plastic	-	-	-	10	10
Paper and paper products	-	-	-	-	10
Joss sticks and scented oil (agar and atar)	-	-	-	-	20
Diversified jute products	-	-	10	20	20
Hessian, sacking and CBC	-	-	-	7.5	10
Yarn and twine	-	-	7.5	5	5
Software, ITES and hardware	-	-	-	-	10
Synthetic and fabrics made footwear	-	-	-	-	15
Active Pharmaceuticals Ingredients (API) exports	n.a.	n.a.	n.a.	n.a.	20
Accumulator batteries (H.S 8507.10 and 8570.2)	-	-	-	-	15
Articles of coconut shell	n.a.	n.a.	n.a.	n.a.	20

Notes and sources: “-” indicates information is not available. “n.a” implies the scheme was not made available to the sector. Compiled from various official circulars; not all sectors are included.

The evidence of discriminatory treatment against the non-RMG sector (including furniture) needs due consideration. Given the relatively small size of non-RMG exports, an extension of all preferences that are at present reserved exclusively for the RMG sectors to other sector is unlikely to have any major fiscal implications for the government. Possible leakages to domestic market sales are sometimes cited as reasons for not letting non-RMG sector firms to have bonded warehouse facilities. However, governance failures should be addressed by appropriate administrative and legal provisions rather than imposing across-the-board restrictions that can hurt the competitiveness of dynamic firms within a broad sector. In the 1990s, the issue of leakages from bonded warehouses also featured prominently in the policy discourse. Nevertheless, continuation of the scheme proved to be extremely successful in boosting RMG export competitiveness (Razzaque, 2017).

As discussed above, the furniture sector is critically dependent on imported raw materials and thus export success will rely on their uninterrupted supplies. Lead time is also now an

important determinant of export success. Most of Bangladesh's Asian competitors including India, China and Vietnam are generally regarded to have a much lower lead time. When intermediate inputs will have to be procured from abroad before manufacturing the received export orders, lead time can be excessively high for Bangladesh because of several reasons including a two-way shipping of goods, i.e. first to import raw materials and then to export final products, weak and inadequate port infrastructures, inefficient inland transportation, etc. One important way of dealing with this problem is through the bonded warehouse facilities that will enable firms to import materials duty-free in advance of getting export orders.

The duty drawback scheme could be a potential option for accessing duty-free inputs. However, the difficulties associated with it makes it far less attractive and almost ineffective. First of all, most small and medium size furniture-exporting firms find it financially burdensome to import raw materials by providing high duties and taxes. Furthermore, accessing duty drawbacks is generally considered very cumbersome given the processes and time involved. Currently, no export-oriented furniture manufacturing firms are using the duty drawback facility.<sup>37</sup> This suggests that furniture-exporting firms are actually paying import duties on intermediate inputs.

It needs emphasizing that for manufacturing activities like furniture Bangladesh's main source of comparative advantage is its low-cost labour. At the initial stage of readymade garment production, it is this comparative advantage that paved the way for export expansion. This was so effectively facilitated by bonded warehouse facilities. This model of past export success should be replicated for furniture and other industries alike.

Another issue in the furniture sector (along with many other sectors as well) is that given the booming domestic market it may not be plausible to consider that there can be many firms that will be 100 percent export-oriented. One reason for restricting the bonded warehouse facilities is the firms' sales both in the domestic and foreign markets. For the readymade

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<sup>37</sup> This is based on the discussion with EPB officials and manufacturers.

garment industry, it has been relatively easy for firms to focus on foreign markets alone. The nature of the clothing items exported by Bangladesh, in most instances, is quite different from the ones for which the domestic market would be competing directly. For furniture, the demand patterns may not be so obviously differentiated. As such, the policy that bonded warehouse facilities to be used by 100 percent export-oriented firms will be somewhat devoid from reality. Expecting that firms that wish to make use of bonds will have separate plants for local and export sales is onerous and may not help them achieve economies of scale. Considering the above, it is imperative that bonded warehouses should be made available to all furniture exporters who want to make use of them.

It should be pointed out that bonded warehouse facilities and duty drawback schemes are no additional incentives for exporters. Exporting firms in all comparator countries are able to procure intermediate inputs at world prices without being subject to any tariffs in their home countries. Therefore, using bonded imports or duty drawback only makes Bangladeshi exporting firms at par with their rival suppliers. A policy of export incentives should actually provide benefits in addition to the duty-free import of raw materials. As such, under a revamped export incentive scheme, exporters of emerging or non-traditional sectors should be entitled to cash assistance along with accessing either bonded warehouse or duty drawback schemes. In offering policy support, the issue of profitability of domestic sales vis-à-vis export receipts must be taken into consideration. Industrial protection, by imposing high tariffs and other protective instruments such as supplementary duties, as discussed above, creates an environment in which producing for the domestic market (rather than exporting) becomes rationale. This anti-export bias encourages production for domestic markets at the cost of exporting activities. It is sometimes not realised that high protection actually undermines policies to support export competitiveness, especially when there is a growing domestic market for the same product. That is, to the extent that protection raises the profitability of domestic sales over exports, it also results in perverse incentives discouraging exporters. This could be particularly true for furniture exporters. Neutralising this policy bias is not an easy task as tariff rationalisation has proven to be a very difficult task in Bangladesh. In addition, appreciated exchange rates and excessive cost of doing business also undermine export competitiveness. One possible way of helping exporters overcome these problems is

by providing cash incentives. It is not possible to compensate for the full amount of anti-export bias related consequences. Nevertheless, the current provision of support can be deepened further. Indeed, considering the potential of the furniture sector, cash assistance for its exporters who are not benefited from bonded warehouses or duty drawback schemes can be provided. Given the current import duties on intermediate inputs, appreciated exchange rate and excessive trading costs, this enhanced support for the sector can be rationalised. In the 1990s, the RMG sector used to enjoy similar support. Furthermore, as the volume of the export is so small, this enhanced support should not cause any major financial burden.

Analysis undertaken as part of this study suggests that Bangladesh's furniture exports are sensitive to price incentives.<sup>38</sup> The estimated relationship between the relative unit prices (i.e. Bangladesh's exports prices relative to those of other suppliers) and furniture exports implies that there is scope for Bangladesh to be price competitive and more successful. This essentially implies that the rise in export incentives, as well as downward adjustments in the exchange rate, could lead to increased exports of Bangladesh. On the other hand, changes in importing countries' economic activities appear to not have any influence on the demand for exports of furniture from Bangladesh. These results, on the whole, would justify higher export incentives for exporters.

It also needs to be pointed out that Bangladesh is going to graduate out of the LDC group over the next 7–10 years, after which some of the existing policy flexibilities and trade preferences will either be lost or will be significantly reduced. Bangladesh as an LDC enjoys tariff-free market access not only in the EU but also in several other countries. However, unlike the textiles and clothing, furniture is not a sector with high MFN tariffs in major importing markets

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<sup>38</sup> These results are derived from estimating an export demand function for Bangladesh's furniture exports. The specified model relates to Bangladesh's exports export volume to global income and relative unit prices with respect to competing countries. Given the availability of data, only the EU market is considered. Data are gathered from EU Comext database at Combined Nomenclature (CN) 8-digit level for the period 2000–2016. A Panel fixed effect model is estimated. The estimated relative price elasticity coefficient is obtained as 0.84, which is statistically significant at the one-percent level. The income elasticity coefficient fails to register statistical significance.

such as the EU. Consequently, Bangladesh does not enjoy any preferential tariff margins through the EU's *Everything But Arms* initiative for LDCs. This means a higher level of proactive export policy support is needed for the furniture sector.

Also, after graduating from LDCs, export support measures like cash assistance schemes are most unlikely to be possible to continue given the rules and provisions of the WTO.<sup>39</sup> Therefore, it is high time to consider reinvigorated and deepened policy support with the objective of expanding export base rapidly before Bangladesh loses its LDC preferences and privileges.<sup>40</sup> Enhanced policy support is not only about cash assistance. Rather, it should include provisions for duty-free imports of raw materials (in which case the need for cash assistance will be limited), helping firms deal with certain factors that contribute to excessive cost of trading, easy access to finance, enhanced support for exploring foreign markets, support for product development, etc. which will benefit the furniture export industry to great extent.

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<sup>39</sup> Under the WTO Agreement on Subsidies and Countervailing Measures, providing export subsidies to industrial goods by LDCs is not prohibited, subject to their not achieving export competitiveness, which is defined as the global market share of the concerned/individual product being more than 3.25 percent.

<sup>40</sup> Export subsidies by Countries with per capita gross national income (GNI) less than US\$1,000 are also not prohibited. For other countries, maintaining export support regimes compatible with WTO provisions can be quite challenging. Newspaper reports have recently highlighted such difficulties faced by, for example, India with its export support under schemes such as the Merchandise Exports from India Scheme, Export Promotion Capital Goods scheme and interest equalisation scheme for the textiles sector under the country's Foreign Trade Policy. See, <http://www.financialexpress.com/economy/as-india-breaches-wto-threshold-centre-to-seek-export-subsidy-phase-out/878573/> (accessed on 2 October 2017).



## Chapter 6: Conclusion and a Summary of Major Recommendations

Bangladesh's furniture industry has shown strong export dynamism in recent years. Export earnings from this sector reached over US\$63 million in 2017–18, registering a growth of more than 20 percent over the previous year. However, having more than 20 years' export experience, the sector has so far been able to achieve far less than its export potential. Given the recent encouraging trends, it is high time to revamp the relevant policy support and consider other practical options to boost export supply response.

- Despite low labour cost, the furniture sector's export potential is hindered by weak supply-side capacities arising from interactions of many different factors including weak backward linkages, high procurement costs of raw materials, lack of skilled labour, excessive cost of doing business, lack of trade promotional activities etc. Recognising high export potential, the furniture industry has been included amongst the priority sectors in the successive export policies of Bangladesh since 2009. However, the policy support should be deepened and consolidated further to address gaps in certain areas as well as to help exporters overcome adverse consequences arising from the generally high cost of doing business in Bangladesh.
- Strengthening supply capacities will be a key factor in promoting exports of furniture. Currently, the industry is critically dependent on imported raw materials. Allowing bonded warehouse facilities for exporters can greatly reduce the cost of production – given that import duties and taxes on imported inputs are quite high – and the time needed between export orders received and goods shipped to destination countries. At present, most exporters are also not using the duty drawback scheme, which is known to be a cumbersome and lengthy process. When raw materials procured at world prices (i.e. without paying the domestic duties and taxes) cannot be used in the

production, it is extremely difficult to compete in the global market. It cannot be overemphasized that uninterrupted and instant supplies of intermediate inputs at the most competitive global prices are a key determinant of Bangladesh's export success. Any policy barrier in this respect will undermine exporters' competitiveness. Bonded warehouse facilities played a critical role in boosting the supply response in the garment sector. The same policy stance should be replicated for the furniture as well as other sectors.

- There also exists the scope for deepening direct policy support in the form of cash assistance. The furniture sector is accorded with cash assistance of 15 percent (of f.o.b export value). This is helpful. However, since exporters are paying import duties on raw materials for export production, the attractiveness of domestic market vis-à-vis export sales are boosted by high tariffs and other taxes, and the real exchange rate appreciation has been sustained, the provided support is just too small to help overcome policy-induced anti-export bias. While cash assistance alone cannot be enough, raising the level can add to improved competitiveness. In the 1990s, the readymade garment sector enjoyed cash assistance of 25 percent that helped many firms that did not access either bonded warehouse or duty-drawback facilities. Similarly, the cash incentive for the furniture sector can be increased to 25 percent to boost the export supply response. This policy incentive can be provided in addition to bonded warehouse and duty drawback facilities.

It is a standard global practice to allow exporting firms using imported inputs without being subject to any import duties. Therefore, bonded warehouse or duty drawback schemes, in a real sense, do not constitute any additional incentive for exporters. As part of a deepened policy support, exporters of non-traditional or emerging sectors like furniture should be accorded cash assistance in addition to their securing duty-free import of raw materials.

- Attracting foreign direct investment (FDI) in the furniture sector can be an important way of unleashing export potential. FDI inflows help promote skill upgradation,

productivity improvement, and transfer of technology benefiting local firms. FDI firms are generally well-linked to global value chains that connect the entire range of activities including design, production/manufacturing, marketing, distribution and support to the final consumer. Being part of this integrated supply chain process ensures sustainability of export orders and growth. Bangladesh currently offers a range of attractive incentives for FDI. Bonded warehouse facilities and higher direct incentives can encourage more FDI inflows including joint ventures involving local firms.

- Improved access to finance is to be considered as a precondition for expanding export supply capacities. Most furniture manufacturing firms are restrained by financial constraints such as high cost of borrowing, large value of collaterals needed for bank loans and limited access to trade finance. Whether the Export Development Fund (EDF) and the Export Credit Guarantee Scheme (ECGS) can be proactively used to help expand furniture exports need to be carefully reviewed. Many potential export firms are not aware of the facilities like EDF and ECGS and as such awareness-building for available export support measures will be a useful initiative.
- Shortage of skilled workforce is a major constraint inhibiting the furniture industry. Vocational training facilities for workers are limited and currently there is no national training and design institute catering to specific needs of the industry. A comprehensive support for the sector should include attention to this area. The private sector firms should also play an important role here by undertaking apprenticeship programmes and providing on-the-job training as part of a national furniture sector development strategy. Capacity development in product design and the use of advanced technologies are important for export success. While large establishments appear to have made huge investments in modern technologies, small and medium enterprises lag behind in this respect.
- Complying with product, labour and environmental standards has become a characteristic feature of the export business. The future of the furniture export success, amongst others, will certainly be dependent upon the satisfaction of

environmental standards. Use of environment-friendly, renewable and recyclable products as well as raw materials is most essential as leading world furniture brands are increasingly adopting more challenging standards. Capacity building in these areas will be critical. Involvement of FDI firms can not only help with improved export performance but will also diffuse the knowledge of modern practices to adapt to new standards.

- Bangladesh's furniture export is highly concentrated both in terms of products and destination markets. Of course, the small volume of current export is a reason for this. However, in line with successful furniture exporting countries, Bangladesh must now proactively seek new markets and aim to increase the number of items sold in each market simultaneously. Establishing export relationships in new markets can be quite challenging along with sustaining existing export relationships. Therefore, export support measures for regular hosting of and participation in international furniture fairs and expos will be important. The possibilities of Bangladeshi firms' participation in various online sales portals need to be investigated and support can be provided in this respect particularly to small and medium firms.
- Finally, it is worth pointing out that the competitiveness of the furniture industry or any other export sector for that matter is also affected by overall economic and business conditions in the country. Infrastructural bottlenecks including weak and inadequate port facilities, poor inland transportation system, inefficient trade logistics, lack of human resources etc. – all tend to impact on sustained export performance. In each of these areas, Bangladesh can make substantial improvements. Therefore, a medium- to long-term export development strategy for any particular sector should also consider these issues in materialising export potential.

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## Annex

**Table A 1 Exports of Bangladesh by major products (million US\$)**

Fiscal year	Total export	RMG	Leather and leather products	Jute and jute products	Frozen food	Furniture	Others
<b>2017–18</b>	36,668.2	30,614.8	1,085.5	1,025.5	508.4	63.2	3,370.8
<b>2016–17</b>	34,846.8	28,149.8	1,234.0	962.4	526.5	52.5	3,921.6
<b>2015–16</b>	34,257.2	28,094.2	1,161.0	919.6	535.8	46.3	3,500.3
<b>2014–15</b>	31,208.9	25,491.4	1,130.5	868.5	568.0	38.9	3,111.6
<b>2013–14</b>	30,186.6	24,491.9	1,124.2	824.5	638.2	42.6	3,065.2
<b>2012–13</b>	27,027.4	21,515.7	866.5	1,030.6	543.8	31.4	3,039.4
<b>2011–12</b>	24,301.9	19,089.8	663.5	967.4	637.6	27.1	2,916.5

Source: Authors' calculation using data from the EPB.

Table A 2 Bangladesh's exports of furniture products at HS 6-digit level to selected destination

HS code	Product description	Total exports	Exports to selected countries					Others
			China	Japan	Spain	Sweden	U.S.	
940120	Seats of a kind used for motor vehicles	0.69	-	0.69	-	-	-	0.00
940140	Seats, (excl. garden seats or camping equipment), convertible into beds)	6.29	-	0.02	-	-	6.26	0.01
940161	Upholstered seats, with wooden frames	44.89	-	-	-	-	-	44.89
940169	Seats with wooden frames, not upholstered	3.19	-	-	-	-	-	3.19
940179	Seats with metal frames, not upholstered	1,982.58	-	1,462.33	-	-	383.95	136.3
940180	Seats, nes	17.34	-	-	-	-	-	17.34
940190	Parts of seats	11,256.72	-	11,256.72	-	-	-	0.00
940290	Medical, surgical or veterinary furniture, and parts thereof	2.68	-	0.10	-	-	-	2.58
940310	Metal furniture of a kind used in offices (excl. seats)	79.15	-	-	-	-	-	79.15
940320	Metal furniture, nes (excl. seats)	96.08	-	-	-	-	2.68	93.40

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HS code	Product description	Total exports	Exports to selected countries					Others
			China	Japan	Spain	Sweden	U.S.	
<b>940330</b>	Wooden furniture of a kind used in offices (excl. seats)	1,317.41	-	0.07	-	-	1,111.51	205.83
<b>940340</b>	Wooden furniture of a kind used in the kitchen (excl. seats)	623.95	-	-	-	-	2.69	621.26
<b>940350</b>	Wooden furniture of a kind used in the bedroom (excl. seats)	1,582.33	4.63	9.30	1.14	4.59	155.68	1,406.99
<b>940360</b>	Wooden furniture, nes	3,387.86	558.35	-	-	-	1,788.65	1,040.86
<b>940370</b>	Furniture (excl. seats) of plastics	1,046.20	-	-	-	-	-	1,046.20
<b>940389</b>	Furniture of other material, including cane, osier or similar materials	34.58	4.98	-	-	-	-	29.60
<b>940390</b>	Parts of furniture	5,376.35	5,342.67	0.01	-	-	1.05	32.62
<b>940410</b>	Mattress supports	3,232.78	-	-	-	2,551.88	245.54	435.36
<b>940429</b>	Mattresses of materials, nes	0.22	-	-	-	-	-	0.22
<b>940430</b>	Sleeping bags	31,582.77	0.63	315.81	10,051.55	606.44	9,560.41	11,047.93
<b>940490</b>	Articles of bedding, stuffed, etc. (excl. mattresses and sleeping bags)	614.87	-	1.89	-	56.14	-	556.84
<b>940510</b>	Chandeliers and other electric ceiling or wall lighting fittings	102.79	-	-	-	-	74.37	28.42

## Unleashing the Export Potential of Bangladesh's Furniture Industry: An Analysis of Prospects and Policy Support

HS code	Product description	Total exports	Exports to selected countries					Others
			China	Japan	Spain	Sweden	U.S.	
<b>940540</b>	Other electric lamps and lighting fittings, nes	298.04	21.65	37.65	-	1.97	106.22	130.55
<b>940560</b>	Illuminated signs, illuminated name-plates and the like	22.14	-	22.14	-	-	-	0.00
<b>940599</b>	Parts (excl. of glass or plastics) of lamps and lighting fittings, etc.	44.40	-	-	-	-	-	44.40
<b>Total</b>		63,179.67	5,932.90	13,106.73	10,052.69	3,221.02	13,439.01	20,648.34

Source and note: Authors' presentation using data from the EPB. '-' denotes information is not available.

**Table A 3 Major furniture products exported in the global market (million US\$)**

HS code	Product label	2001	2005	2010	2015	2017
<b>940110</b>	Seats for aircraft	488.35	589.68	543.43	1,384.31	1,766.22
<b>940120</b>	Seats for motor vehicles	952.02	1,369.73	2,143.08	2,483.45	2,843.97
<b>940130</b>	Swivel seats with variable height adjustments (excluding medical, surgical, dental or veterinary)	1,042.44	1,729.22	2,851.14	4,019.23	4,105.54
<b>940140</b>	Seats, convertible into beds (excluding garden seats and camping equipment, and medical, dental)	444.66	799.65	1,263.38	2,024.35	2,003.13
<b>940150</b>	Seats of cane, osier, bamboo or similar materials	356.78	397.90	8.60	1.28	-
<b>940151</b>	Seats of bamboo or rattan	-	-	135.99	92.11	0.77
<b>940152</b>	Seats of bamboo	-	-	-	-	21.08
<b>940153</b>	Seats of rattan	-	-	-	-	82.27
<b>940159</b>	Seats of cane, osier or similar materials (excluding of bamboo or rattan)	-	-	88.94	64.95	72.99
<b>940161</b>	Upholstered seats, with wooden frames (excluding convertible into beds)	5,464.45	9,300.96	11,999.88	15,468.55	17,890.94
<b>940169</b>	Seats, with wooden frames (excluding upholstered)	1,308.49	2,363.50	2,557.00	2,895.48	2,849.54
<b>940171</b>	Upholstered seats, with metal frames (excluding seats for aircraft or motor vehicles, swivel)	1,267.23	2,086.14	4,167.61	6,781.35	6,523.59
<b>940179</b>	Seats, with metal frames (excluding upholstered, swivel seats with variable height adjustments)	1,325.86	2,249.90	3,957.47	4,719.83	4,686.17
<b>940180</b>	Seats, n.e.s.	1,410.08	1,519.03	2,311.54	2,954.43	3,382.36

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HS code	Product label	2001	2005	2010	2015	2017
<b>940190</b>	Parts of seats, n.e.s.	10,521.48	16,842.87	19,926.63	27,760.52	30,314.09
<b>940210</b>	Dentists', barbers' or similar chairs having rotating as well as both reclining and elevating	181.21	296.78	330.37	520.81	444.74
<b>940290</b>	Operating tables, examination tables, and other medical, dental, surgical or veterinary furniture	994.41	1,547.16	2,563.25	3,191.34	3,236.46
<b>940310</b>	Metal furniture for offices (excluding seats)	1,685.25	1,911.94	2,149.88	2,465.05	2,570.54
<b>940320</b>	Metal furniture (excluding for offices, seats and medical, surgical, dental or veterinary)	4,184.53	6,824.31	9,464.25	14,027.38	14,537.17
<b>940330</b>	Wooden furniture for offices (excluding seats)	2,041.50	2,703.73	3,142.53	4,175.18	3,908.40
<b>940340</b>	Wooden furniture for kitchens (excluding seats)	2,709.96	4,443.63	5,110.57	6,417.61	6,805.55
<b>940350</b>	Wooden furniture for bedrooms (excluding seats)	3,734.29	6,278.88	7,955.96	10,887.71	12,292.90
<b>940360</b>	Wooden furniture (excluding for offices, kitchens and bedrooms, and seats)	11,802.30	17,910.12	22,631.33	24,422.34	25,385.71
<b>940370</b>	Furniture of plastics (excluding medical, dental, surgical or veterinary, and seats)	716.84	1,125.89	1,595.84	2,114.43	2,181.53
<b>940380</b>	Furniture of cane, osier, bamboo or similar materials (excluding of metal, wood and plastics)	1,149.52	1,593.05	21.09	18.56	0.02
<b>940381</b>	Furniture of bamboo or rattan (excluding seats and medical, surgical, dental or veterinary)	-	-	223.58	155.55	4.79
<b>940382</b>	Furniture of bamboo (excl. seats and medical, surgical, dental or veterinary furniture)	-	-	-	-	125.54

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HS code	Product label	2001	2005	2010	2015	2017
<b>940383</b>	Furniture of rattan (excl. seats and medical, surgical, dental or veterinary furniture)	-	-	-	-	36.08
<b>940389</b>	Furniture of other materials, including cane, osier or similar materials	-	-	2,127.35	3,893.80	2,660.18
<b>940390</b>	Parts of furniture, n.e.s. (excluding of seats and medical, surgical, dental or veterinary)	4,659.54	7,947.06	10,792.17	13,012.91	13,912.76
<b>940410</b>	Mattress supports for bed frames (excluding spring interiors for seats)	290.74	535.02	844.32	970.87	1,085.10
<b>940421</b>	Mattresses of cellular rubber or plastics, whether or not covered	502.53	993.53	1,675.75	2,054.63	2,408.28
<b>940429</b>	Mattresses, fitted with springs or stuffed or internally filled with any material	449.66	889.93	1,466.45	1,978.99	2,173.51
<b>940430</b>	Sleeping bags, whether or non-electrically heated	212.90	323.02	464.23	541.74	564.80
<b>940490</b>	Articles of bedding and similar furnishing, fitted with springs or stuffed or internally filled	2,157.54	4,615.44	7,527.06	9,494.06	10,238.49
<b>940510</b>	Chandeliers and other electric ceiling or wall lighting fittings (excluding for lighting public)	4,140.05	6,429.92	8,315.84	16,893.90	15,952.29
<b>940520</b>	Electric table, desk, bedside or floor-standing lamps	1,523.18	1,855.85	2,106.66	5,302.71	3,248.88
<b>940530</b>	Electric lighting sets of a kind used for Christmas trees	812.96	1,061.42	1,227.95	2,005.58	1,686.15
<b>940540</b>	Electric lamps and lighting fittings, n.e.s.	3,485.10	5,577.20	8,977.73	25,666.35	22,939.63
<b>940550</b>	Non-electrical lamps and lighting fittings, n.e.s.	519.81	805.85	1,095.04	1,198.04	941.23
<b>940560</b>	Illuminated signs, illuminated nameplates and the like, with a permanently fixed light source	356.67	647.01	822.85	1,150.82	1,288.21

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HS code	Product label	2001	2005	2010	2015	2017
940591	Parts of lamps and lighting fittings, illuminated signs and nameplates and the like, of glass	318.28	401.07	610.12	591.16	506.05
940592	Parts of lamps and lighting fittings, illuminated signs and nameplates and the like, of plastics	176.79	273.39	402.21	675.34	832.18
940599	Parts of lamps and lighting fittings, illuminated signs and nameplates and the like, n.e.s.	959.58	1,498.42	2,370.62	4,268.33	4,335.51
940600	Prefabricated buildings, whether or not complete or already assembled	2,839.51	5,398.35	7,297.56	8,270.76	231.38
940610	Prefabricated buildings of wood, whether or not complete or already assembled	-	-	-	-	1,746.93
940690	Prefabricated buildings, whether or not complete or already assembled (excl. of wood)	-	-	-	-	6,355.93

Source: Authors' presentation using data from the ITC.



**Table A 4 Major exporters of furniture products (billion US\$)**

Country	2001	2005	2010	2015	2017
China	7.56	22.36	50.58	98.53	88.97
Germany	6.59	10.70	15.85	16.29	17.42
Italy	9.92	13.01	12.99	12.81	13.66
Poland	2.67	6.10	8.34	10.92	12.87
USA	6.11	6.70	8.59	11.56	10.81
Mexico	4.16	5.73	5.42	9.90	10.68
Viet Nam	0.28	1.42	3.06	5.48	9.02
Canada	5.36	6.59	4.23	5.27	5.77
Czech Republic	1.19	2.47	3.04	4.26	5.36
Netherlands	1.14	1.85	2.52	3.83	4.60
United Kingdom	1.93	2.72	2.50	3.60	3.99
France	2.96	3.96	3.86	3.74	3.99
Spain	2.05	2.64	2.47	3.02	3.64
Denmark	2.16	3.02	2.43	2.69	2.93
Turkey	0.25	0.96	1.79	2.75	2.76
Romania	0.53	1.23	1.65	2.44	2.71
Sweden	1.56	2.48	2.82	2.60	2.68
Malaysia	1.47	2.10	2.67	2.67	2.64
Belgium	2.31	3.12	3.11	2.31	2.58
Austria	1.68	2.42	2.65	2.61	2.56
<b>Total</b>	<b>77.19</b>	<b>123.82</b>	<b>167.13</b>	<b>237.91</b>	<b>242.43</b>

Source: Authors' presentation using data from the ITC.

**Table A 5 Major importers of furniture products (billion US\$)**

Importers	2001	2005	2010	2015	2017
<b>USA</b>	23.23	41.23	41.28	61.16	67.23
<b>Germany</b>	8.29	12.06	17.17	19.33	20.89
<b>United Kingdom</b>	4.70	8.96	9.68	11.46	11.60
<b>France</b>	4.52	8.01	10.41	9.60	11.01
<b>Canada</b>	3.61	5.71	7.62	8.74	9.28
<b>Japan</b>	4.41	5.70	6.23	7.50	7.81
<b>Netherlands</b>	2.25	3.23	4.18	5.13	6.48
<b>Spain</b>	1.37	3.47	4.12	4.07	4.42
<b>Australia</b>	0.82	2.05	3.44	4.38	4.39
<b>Switzerland</b>	1.94	2.89	3.81	4.35	4.39
<b>Italy</b>	1.34	2.69	3.66	3.51	3.89
<b>Mexico</b>	1.54	1.83	2.29	3.88	3.83
<b>China</b>	0.32	0.82	3.06	3.23	3.70
<b>Belgium</b>	2.43	3.72	4.00	3.44	3.69
<b>Austria</b>	1.94	2.60	3.14	3.49	3.61
<b>Czech Republic</b>	0.46	1.07	1.56	2.46	3.37
<b>Sweden</b>	1.20	2.10	2.61	2.97	3.34
<b>Poland</b>	0.58	1.21	1.78	2.49	3.22
<b>Norway</b>	0.96	1.84	2.42	2.89	3.09
<b>Republic of Korea</b>	0.35	1.10	1.78	2.85	3.05
<b>Total</b>	79.78	135.44	171.63	216.08	234.13

Source: Authors' presentation using data from the ITC.

**Table A 6 Bangladesh's total wood imports (million US\$)**

Year	Wood in the rough (HS 4403)	Wood sawn or chipped lengthwise sliced etc. (HS 4407)	Total
2017–18	73.51	5.61	79.12
2016–17	63.45	5.04	68.49
2015–16	50.51	3.13	53.64
2014–15	68.84	3.11	71.95
2013–14	90.27	1.99	92.26
2012–13	87.58	2.26	89.84
2011–12	81.19	1.64	82.84

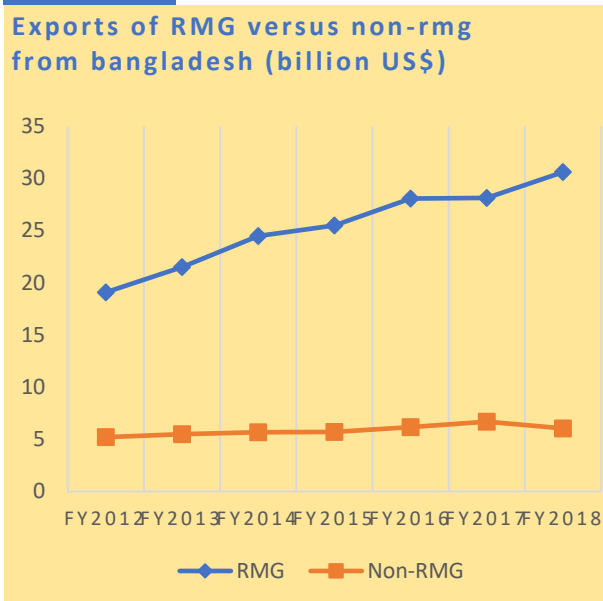
Source: Authors' presentation using data from Bangladesh Bank (BB).

**Table A 7 Total imports of different types of boards (million US\$)**

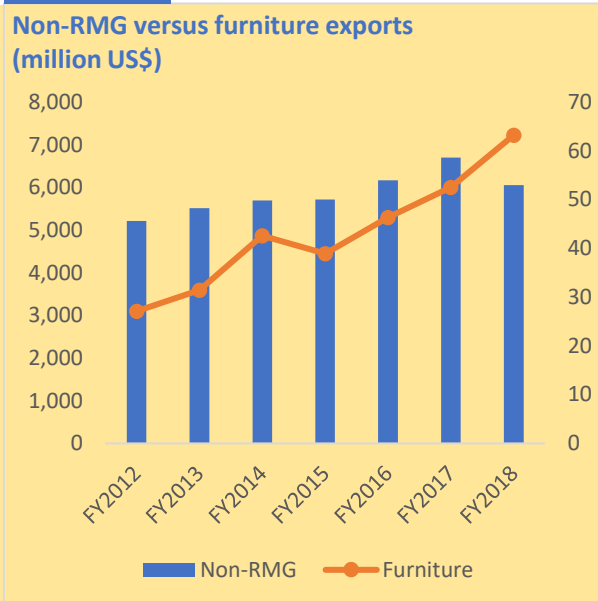
Year	Wood wool (HS 4405)	Sheets for veneering (HS 4408)	Particles and similar boards (HS 4410)	Fibreboard of wood (HS 4411)	Plywood veneered panels (HS 4412)	Densified wood in blocks (HS 4413)	Total
2017–18	0.84	6.90	0.60	10.66	2.01	1.62	22.63
2016–17	0.76	5.74	0.76	8.65	1.79	0.68	18.38
2015–16	0.82	4.08	0.56	3.78	1.22	0.60	11.06
2014–15	0.94	3.62	0.49	4.11	1.73	0.07	10.96
2013–14	0.61	3.28	1.20	3.80	1.63	0.49	11.01
2012–13	0.43	2.23	2.25	5.07	2.05	0.29	12.32
2011–12	0.73	1.57	3.60	4.64	1.94	0.79	13.26

Source: Authors' presentation using data from Bangladesh Bank (BB).

**Figure A 1**

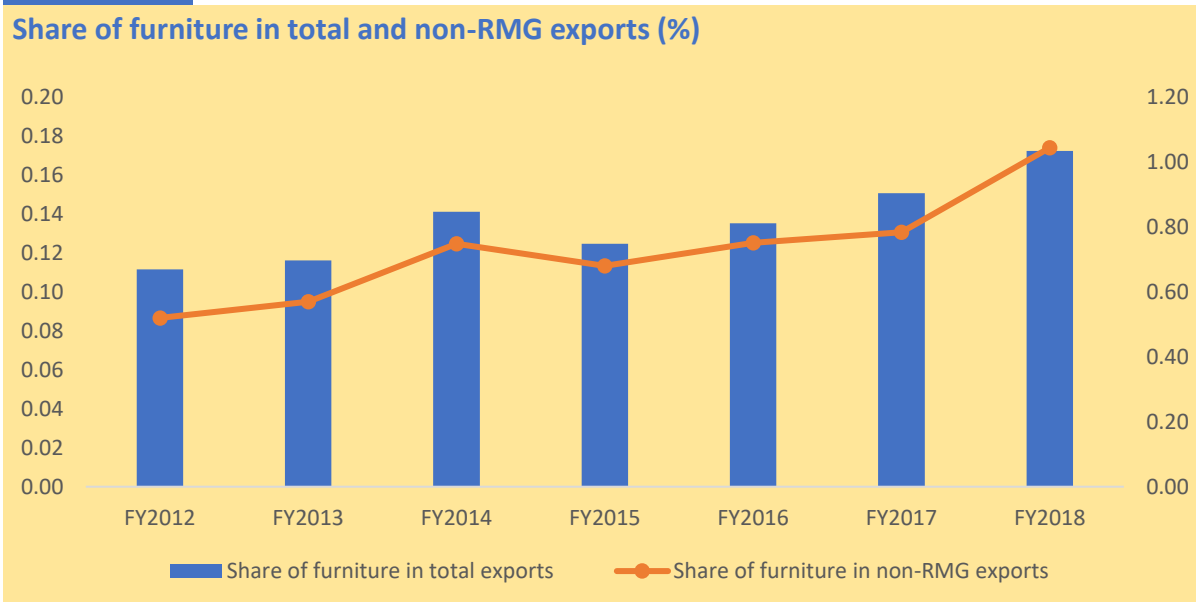


**Figure A 2**



Source: Authors' presentation using data from the EPB.

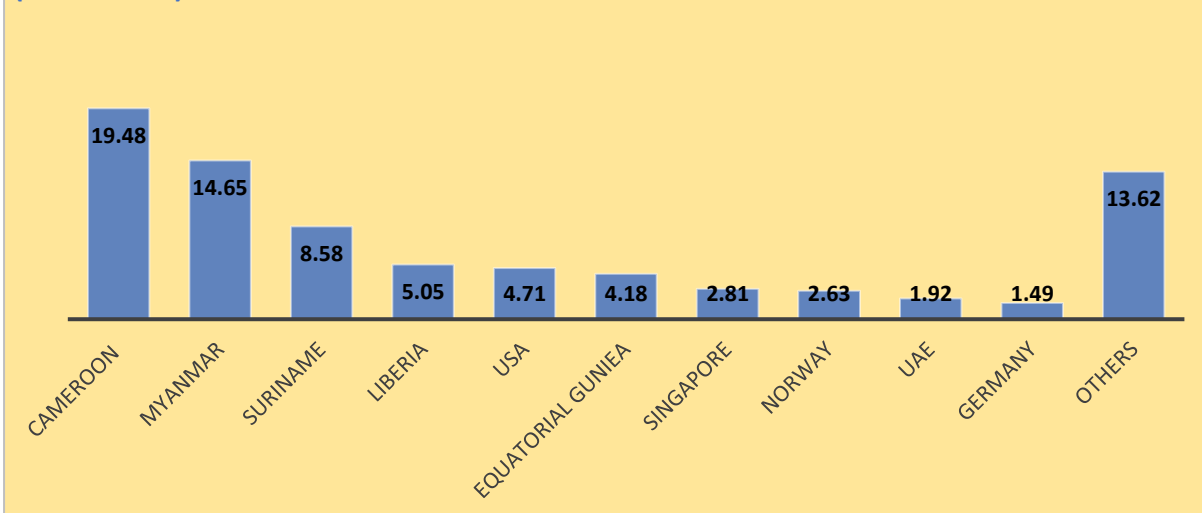
**Figure A 3**



Source: Authors' presentation using data from the EPB.

**Figure A 4**

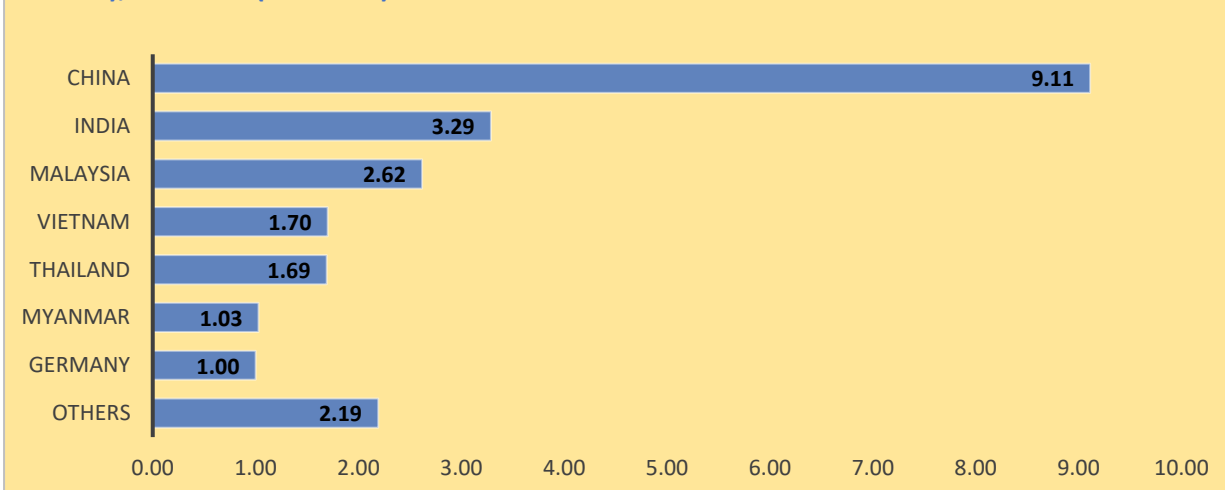
**Bangladesh's major suppliers of wood (HS 4403 & HS 4407), 2017–18  
(million US\$)**



Source: Authors' presentation using data from Bangladesh Bank (BB).

**Figure A 5**

**Bangladesh's major suppliers of wood (HS 4405, 4408, 4410, 4411, 4412  
& 4413), 2017–18 (\$ million)**



Source: Authors' presentation using data from Bangladesh Bank (BB).