DEVELOPMENT OF FOREIGN TRADE AND PRODUCTION IN FURNITURE HARDWARE SECTOR IN TURKEY

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Abstract- Nowadays, the birth and spread of modern electro-furniture equipped with technology as a necessity of modern trends and global trends have increased the importance of furniture accessories. In this study, accessories that give functionality and prestige to the furniture and contribute to the quality, aesthetics and beauty at the same time, industrial production and foreign trade as the development of the structural situation in Turkey in this field have been investigated. In this context, the development of the sector present results of the study conducted on furnishing accessories manufacturer in Turkey last 10 years foreign trade (exports-imports) was evaluated in the framework of the data. Material and technological development level of world standards, some product groups have shown that an equivalent structure of Turkey accessory industry; (45.4%) in terms of catching up and implementing the development trends in the world furniture sector and being in a market environment open to unfair competition conditions (35.6%).

As a result, the general problems of the sector study essentially both product groups, identified as undefined as well as industry groups stems from a sector effect in achieving the strategic objectives of Turkey's furniture sector, was also making suggestions for the improvement of international competitiveness of taking accessories industry into consideration.

Key Words- Furniture hardware, Hardware production, Hardware import, Hardware export.

1. INTRODUCTION

In this study, accessories that give functionality and prestige to the furniture and contribute to the quality, aesthetics and beauty at the same time, The development of production and trade in Turkey were examined.

According to literature research; furniture and building elements accessories which have been tried to be explained with various names such as hardware items, hardware items, architectural tools, building materials or woodworking aids; furniture and door-window fixing, joining, ease of movement, protection from all external influences, aesthetics and comfort. It is clear from this definition that furniture is; The importance of hardware that contribute to quality, usability, prestige appearance and reliability is steadily increasing. Because, today, with the decreasing
market conditions, in the increasing competitive environment, the furniture can gain the new
demand dimension and the sales advantage can be obtained [1-2].

It is seen that the production quantities of the accessories with various models and types are
determined by classifying them as 7 product groups based on the usage place and functions in the
researches. There are no definitions for customs tariff statistical position numbers, which are
based on furniture accessories, neither manufacturing industry classification nor foreign trade
statistics, and it is seen that they are scattered among manufacturing industry and groups
belonging to foreign trade statistics classes by TUIK. This includes product groups; Hinges are
classified as furniture and door-window, sliding mechanisms (systems), handles and knobs,
shutting equipments (locks and latches), assembly fittings and connecting elements, underfoot
equipments (castors and glides, under frames), other hardware fittings [3].

On the other hand, it is important for international competitiveness to know the level of
development of main industry and subsidiary industry integration or complementary sectors, in
the sense that the countries with the world accessory market are also important countries in world
furniture trade. For this purpose, it is determined the structural condition of this sector in Turkey
in 1992 and by two separate research results made in 2003 for the last 10 years, Turkey Statistical
Institute of foreign trade (export-import) the development of the production and foreign trade
accessories industry utilizing data was tried to determine [1, 4-7].

2. MATERIALS AND METHOD

In this research which covers the development of production and foreign trade in the furniture and
buildings element hardware sector, A method based on literature research has been chosen. The
firms to be taken in consideration in this research were chosen with reference to:
- The results of a previous research,
- The records of chamber of industry in the cities where the furniture and building elements
  producers are mainly located,
- Records of Turkey Statistics Institute,
- Records of foundations and organizations related with this profession,
- Hardware sellers and brokerage companies have benefited.

However, it has been difficult to reach all of the manufacturing enterprises that make up the sector,
largely because the majority of enterprises are not registered in the various environments
mentioned above, or because they have been closed or have changed the field of activity in parallel
with developments in world trade and economic problems. For this reason, the development of
production; were evaluated in the form of regional surveys in the regions where the enterprises
were concentrated and on the data covering 1996-2000 years. Thus, the number of 137 known
enterprises has been updated to 128 [4]. The development of foreign trade in this area has been
tried to be determined by evaluating TUIK data covering the years 2007-2017 [8].

3. RESULT AND DISCUSSION

3.1. General Characteristics of Turkey Furniture Hardware Manufacturing Sector

The production sector of furniture and building elements hardware is not defined as a separate
industrial area and is distributed in the sub-sectors of the metal goods industry in the
manufacturing industry as product groups (35590125-Furniture wheels, 38110201-locks and
keys, 38110301-Hardware materials, 38190301-nails and pin, 38190901-bolts, screws, etc.) are visible.

In this production sector, it was determined that 128 businesses operate in Turkey. Of these, 17 (13%) are active in other areas besides hardware production. In this survey where 52% participation is provided, 25% of the sector enterprises are small scale, 36% are medium scale and 39% are large scale, 21% of them are private or common partnership, 42% of them are in joint stock companies. Considering that the majority of enterprises not participating in the operation are small-scale enterprises, it has been found that the enterprises have not yet completed the process of incorporation (Table 1). However, it has been found out that most of the sector enterprises are in the tendency to turn into capital companies and as a capital enterprise [4].

<table>
<thead>
<tr>
<th>Ownership</th>
<th>S.S.B.*</th>
<th>M.S.B. *</th>
<th>L.S.B. *</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporated company</td>
<td>-</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Limited company</td>
<td>6</td>
<td>11</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Private company or simple partnership</td>
<td>11</td>
<td>3</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>Number</td>
<td>17</td>
<td>24</td>
<td>26</td>
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<tr>
<td></td>
<td>Percent (%)</td>
<td>25</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>67</td>
<td>100</td>
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</tbody>
</table>

*) As the criteria of the scale, the definition of the size of the enterprise made by TUIK was taken as basis and the evaluations were made according to this approach.

S.S.B.: Small-scale business (Less than 10 employees)
M.S.B.: Medium-scale business (10-25 employees)
L.S.B.: Large-scale business (25 or more employees)

The capacity utilization rates of sector enterprises are based on 2000 data; 40% is above the establishment capacity, and 30% is under the establishment capacity. When this situation is examined on the basis of business scale; L.S.B.’s predominantly above the establishment capacities, S.S.B.

3.2. Turkey Furniture and Building Elements Hardware Production

Furniture and building accessories Turkey production quantities in Table 2 are determined by classifying the form as shown 7 product groups. The last 5 years production quantities of this production sector determined in this frame have been given separately as product groups. Except for some product groups (such as hinges, locks, etc.), the production amounts of furniture and structural elements, which are inadequate both in terms of quality and quantitatively, have tended to increase rapidly in 1999-2000 according to the demand level of the country in 1999 and after 1999, with the economic crisis in the globalizing world, it is seen that the earthquake disasters that lived in our country, economic instability and constricted investment studies and unfair competition environment are seen to be caused by such reasons [4].
Despite the fact that the statistics of recent years have not been reached, it can be said that this development in production sector continues parallel to the development in the world furniture sector. This is evident from the fact that the sectoral reports prepared by professional organizations, as well as the information obtained from accessory sellers and brokerage houses, and positive developments from foreign trade (export and import) data [7, 9-11].

If these production quantities, which are determined as one of the indicators related to the level of development of the sector, will be examined individually by product groups; Turkey hinges and furniture production in 1996 with a total production of 105 million units in 2000 as door and window hinge is observed to be around 151 million units.

The total production of furniture and door-window sliding mechanisms was determined to be around 92 million sets in 2000, while it was 18 million in 1996. It is seen that the sector has been making a rapid leap after the 1990s, especially in this product group, where domestic production is inadequate both in terms of quantity and quality against the demand level of the country.

According to this survey is evaluated as a separate product group of drawer systems of total production in Turkey, from 47 million in 1996, the team was determined to be around 81 million sets in 2000.

The production of door and window handles in Turkey; while it was 185 million in 1996, it was determined as 188 million in 2000. If furniture handles and handles are to look at production quantities; It was determined that 265 million pieces were produced in 2000 while it was 202 million pieces in 1996. Off the supplies provided under the product groups and key manufacturing data related to Turkey, shutting equipment all kinds of locks; it was determined to be around 85 million units in 2000 while it was 76 million units in 1996.

Regarding wood screw production, the figure was 3.2 tonnes in 1996 and 7 tonnes in 2000. In relation to the production of assembly fittings and connecting elements, a total of 81 million number were produced in 1996, and about 126 million number were produced in 2000.

The production of underfoot equipments including all types of underfoot castors and elements except wooden foot was estimated to be 91.6 million number in 2000 while it was about 63 million number in 1996.
Table 2. Production amount of hardware for Turkish furniture and building elements by years.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. Hinges</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>- Furniture hinges (x bin adet)</td>
<td>70.658</td>
<td>94.490</td>
<td>137.187</td>
<td>110.080</td>
<td>114.150</td>
</tr>
<tr>
<td>- Door and window hinges (x bin adet)</td>
<td>35.000</td>
<td>41.300</td>
<td>50.100</td>
<td>48.750</td>
<td>36.700</td>
</tr>
<tr>
<td>2. Furniture and door-window sliding mechanisms (x bin takım)</td>
<td>18.700</td>
<td>55.500</td>
<td>38.090</td>
<td>62.750</td>
<td>92.000</td>
</tr>
<tr>
<td>3. Drawer systems (x bin takım)</td>
<td>47.550</td>
<td>89.450</td>
<td>92.100</td>
<td>85.320</td>
<td>81.850</td>
</tr>
<tr>
<td>4. Handles and Knobs</td>
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<td></td>
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<td></td>
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<tr>
<td>- Door-window handles (x bin takım)</td>
<td>185.000</td>
<td>190.500</td>
<td>205.100</td>
<td>192.000</td>
<td>188.500</td>
</tr>
<tr>
<td>- Furniture knobs and handles (x bin adet)</td>
<td>202.000</td>
<td>278.000</td>
<td>303.750</td>
<td>250.100</td>
<td>265.000</td>
</tr>
<tr>
<td>5. Shutting equipments (Locks and Latches)</td>
<td>76.100</td>
<td>78.500</td>
<td>85.600</td>
<td>80.200</td>
<td>85.000</td>
</tr>
<tr>
<td>- Locks (x bin adet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Assembly fittings and connecting elements</td>
<td>3.250</td>
<td>6.600</td>
<td>7.235</td>
<td>7.050</td>
<td>7.000</td>
</tr>
<tr>
<td>- Wood screws (x ton)</td>
<td>81.000</td>
<td>105.100</td>
<td>125.800</td>
<td>120.000</td>
<td>125.900</td>
</tr>
<tr>
<td>- Plastic connecting elements and knock-down fittings (x bin adet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Underfoot equipments (furniture castors, glides etc.) (x bin adet)</td>
<td>63.000</td>
<td>71.300</td>
<td>78.550</td>
<td>85.250</td>
<td>91.600</td>
</tr>
</tbody>
</table>

3.3. Foreign Trade of Turkey Furniture Hardware

It can be said that the production quantities determined in the study are the amount of hardware which are subject to commercialization at the same time. On the other hand, if the hardware will look at Turkey’s import and export value in order to demonstrate the development of foreign trade (Figure 1), which is an increase of imports and exports. However, with the economic crisis of 1998, the stagnation after the earthquake disaster in 1999 has been seen in all industrial branches as well as in the accessory sector and the import and export values have decreased. This decline continued after 2000. However, it is worth noting that the import coverage ratio of exports over the years. For example, this ratio increased from 43% in 2000 to 50% in 2003 (Figure 2).

Figure 1. The foreign trade data from the period 1995-2003 furniture hardware sector in Turkey [6].
This development in the foreign trade of the sector is obviously seen in the foreign trade values covering the years 2007-2017, which is shown in Figure 3, which has increased exponentially in favor of export especially after 2000. If we look at the export coverage of imports of this period, it is possible to say that the sector continues to develop in the positive direction by giving more foreign trade (Figure 4).

Figure 2. The export-import ratio between the period 1995-2003 furniture hardware sector in Turkey.

Figure 3. The foreign trade data between the years of 2007-2017 furniture hardware sector in Turkey [7].

Figure 4. The export-import ratio between the period 2007-2017 furniture hardware sector in Turkey.
In this research, if the import and export values in the accessory sector are to be considered as their product groups in their shares, while imports take the first order hinges while second order take furniture and door-window sliding mechanisms and drawer systems. Then comes door and window handles and knobs, plastic connecting elements and knock-down fittings, locks, underfoot equipments and wood screws, respectively. In the case of exports, it appears that the hinges and locks are in the first place. The distribution of the other product groups comes from door-window handles and knobs, wood screws, underfoot equipments, drawer systems, plastic connecting elements and knock-down fittings.

This value is determined in relation to Turkey’s foreign trade hardware, compared with developed countries in the foreign trade of hardware is quite low production values are evident (Table 3). On the other hand, while export values higher than the value of imports in these countries, the export value in Turkey until 2007, said to be lower than the import value [12]. For example, Germany imported $ 0.99 billion in 1998, compared to $ 2.81 billion in exports. Italy's imports of $ 0.95 billion compared to $ 2.35 billion of exports in 1998. In contrast, if we will see the foreign trade of Turkey the same year, 1998, $ 30 million health response to export $ 80 million worth of imports convenience. We see that these values are decreasing both in exports and imports after 2000 due to the reasons we mentioned earlier, but after 2003 we are in an increasing tendency (Figure 1, Figure 3).

### Table 3. Exports and imports of furniture and building elements hardware of some European countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Export (billion $)*</th>
<th>Import (billion $)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2.10</td>
<td>2.30</td>
</tr>
<tr>
<td>Italy</td>
<td>1.75</td>
<td>1.96</td>
</tr>
<tr>
<td>Holland</td>
<td>0.39</td>
<td>0.43</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

In the question regarding the export situation of enterprises participating in the survey, 48 enterprises did not export at all (72%), 10 enterprises exported between 1-5% (15%), 3 enterprises stated that they export between 5-10% (4% Exported over 50%. As can be seen, the share of exports of exporting enterprises in total production is very small except for a few enterprises. It has been determined that the first order is locks and the second order is hinges in the hardware exports of the sector. Again, from the results of the survey, it seems that exports to almost all the countries of the world for this manufacturing sector, but only 28% of enterprises are interested in foreign trade. It has also emerged that the Middle East, Turk and Balkan countries are important markets. However, exports have also been made to European Union countries.

### 4. CONCLUSIONS

As a result:
- Furniture and building elements hardware have been identified as the general problems of the manufacturing sector originating mainly from product groups, not necessarily defined as industrial groups. The main problem seems that the sector is underdetermined.
- It is found that the Turkish furniture hardware industry lacks vision and mission. It has been found that the vast majority of sector enterprises are in the tendency to turn into capital companies and as a capital enterprise.
• Material and technological development level of world standards, some product groups have shown that an equivalent structure of Turkey furniture hardware industry; (45.4%) in terms of catching up and implementing development trends in the world furniture sector, and being in an open market environment for unfair competition conditions (35.6%).
• Both furniture manufacturers, the industry as from interviews with both accessory marketing companies, Turkey furniture hardware required opposite the hinges and the level of demand in the country except for groups of locks production quality, has emerged as both the quantity as inadequate.
• It is clear from the findings of the development of foreign trade that the developed countries in this area remained far behind the data on foreign trade. However, like the countries that developed together with the furniture sector, our country also started to have higher export values than the import values in 2007. Within the framework of these results, the following proposals have been developed in order to enable the sector to continue its development and to increase international competitiveness;
  • As soon as possible the sector should be defined as a separate sector group,
  • Increasing the level of technology and product quality for capturing and implementing development trends in the world furniture sector,
  • Main-supply industry integration must be provided,
  • Establishment and dissemination of joint marketing organizations, increasing cooperation between businesses and preventing open market environment for unfair competition conditions,
  • Creation of an image (brand awareness) with original design and products.

5. REFERENCES

