

# Current situation of the Turkish furniture industry, global crises, and opportunities

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## Abstract

Furniture, which we encounter everywhere at home, at work, in the city, in the schools, in the hospitals, in the park, in the garden, is an inseparable part of human life and is with people, almost 24/7, wherever people are. The development of technology, the differentiation of design preferences and economic reasons cause significant changes in the materials used in the furniture production processes and on the final designs. Furniture is an important element for the people of our country and causes an increase in demand every day. Türkiye has a remarkable position in the field of furniture, both in its close geography and in the European Union. Of course, presently taking advantage for it is strategic location- is far below than what it should have been. Türkiye's young and dynamic population, entrepreneurial spirit, establishment of its industry on solid and well-established foundations, geographical and logistics advantages are the main factors in this. The Covid-19 pandemic, which emerged in December 2019 and affected the whole world suddenly and shockingly, affected the Turkish Furniture Industry as well as other countries and industries. Again, the logistics-container crisis that has emerged in the last few years has deeply affected world trade and all balances. In addition, the recent Russian-Ukrainian war has also had various effects on the industry. However, contrary to these negativities, the Turkish Furniture Industry has shown an unprecedented growth, high capacity utilization rates and export figures. This scientific study has manifested itself as a joint work of industry and non-governmental organizations. In this context, the current situation of the industry, capacity utilization, export/import figures, and changes in R&D (research & development), design and technological investment processes were examined.

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## Introduction

The reports showing the annual import and export figures of the industries made by TURKSTAT gained greater importance with the pandemic outbreak in the last days of 2019. This is because the global pandemic affected all industries negatively and

caused a serious contraction in the markets. In addition to the disruptions in imports and exports, the blockage in logistics channels and the container crisis that occurred in the middle of 2020 adversely affected the actors in the world markets.

According to the World Health Organization data, pneumonia cases detected in Wuhan, Hubei province in China in December 2019, were defined as the new coronavirus that has not been seen in humans before on January 5, 2020, as result of research. This virus, which emerged in China, spread all over the world in a short time of 3 months. In Türkiye, the first Covid-19 case was seen on March 11, 2020 (Budak and Korkmaz, 2020).

With the effect of the virus, the global recession in all industrial branches caused many brands to stop their activities in China. In this context, the fact that the decrease in China's production capacity could not meet the increasing global demand has led importers to search for different solutions. At this stage, the Turkish industry's high capacity, flexible structure, potential, cheap labor force, geographical advantage and low product costs due to the exchange rate enabled global importers to turn to Türkiye. In particular, the ready-made clothing, chemistry, automotive and food industries have taken rapid action in this regard, enabling global importers to turn their attention to Türkiye.

For the same reasons, the Turkish Furniture Industry has accelerated its export-oriented moves in order to get out of this crisis with the least damage. Considering the components of the furniture industry, it is observed that the supply and import of the sub-industry supporting this sector and therefore, supply and import of the raw materials have increased.

The wooden furniture and accessories industry has also followed a rising trend in the domestic market during the pandemic period. One of the most important reasons for this is that people are greatly restricted from going out, especially in certain periods, and therefore they tend to do modification or renovation works in the houses, which are the main living space, has given the industry a different momentum. The rapid increase in online sales channels, providing easier access to the products, also contributed to this development.

Another important reason for the excessive increase in demand is the inability of people to go to work, especially during the hardest period of the pandemic, the closure of workplaces and the development of the remote working model as a result of this. By the moment, the pandemic restrictions have eased, people can spend time comfortably at home and outside, and can easily go to their workplaces. However,

the habit formed in a few years, the reaction of business life to remote work and the new system it has created continue people's desire to work from home after the pandemic. On the other hand, the fact that employees work from home during the pandemic has offered many advantages to workplaces. Saving of space/office, elimination or reduction of food-beverage and service costs are just one of them. People who started to work from home, on the other hand, had to move and set up the work order in their workplaces, as they did not have such an order before. For this reason, it became necessary to establish a new working model in a short time by installing computers and other technological tools and equipment in houses. Some continued to do this for their comfort. For all these reasons, there has been a serious demand burst in office furniture, which is an important sub-area of the furniture industry. In this context, the production and sales of tables, chairs, task chairs, libraries, etc. have increased. The fact that education was carried out from home for several years in the form of distance education has also increased the needs of students in this direction.

The spread of online sales has led to new and functional designs in packaged furniture products. It is seen that the designs made have brought different perspectives to the industry with the R&D studies made for special connections and equipment.

In addition, many fairs planned to be held in China in the field of fair organization could not be held. Türkiye has promoted Turkish products by inviting importers to its own national fairs in these areas. With it being an alternative for companies looking for new suppliers, an important opportunity has arisen in terms of Türkiye's exports. According to the research published by Financial Times, one of the world-famous newspapers, Türkiye was the only country that could be advantageous in terms of GDP (Gross Domestic Product) as a result of the decline in the growth rate due to the pandemic that emerged in Wuhan, China.

## Export figures by years

With the outbreak of Covid-19, the uncertainty, especially in the early stages of the pandemic, caused the import and export of countries to pause around the world. The measures taken regarding the pandemic also negatively affected the global economy. In order to overcome this crisis with the least damage, all the countries of the world tried to find new supply areas by entering to different geographies for the supply of raw materials and products, as well as searching for new markets. In this context, many global manufacturers suspended their activities in China, causing the markets

to shrink. With the efforts that can attract the increasing global demand to Türkiye in the short and medium term, this shrinkage in Asian markets has created an opportunity for Turkish exporters.

Interruptions in the supply chains of the world trade volume, along with problems in production inputs, decreased the world goods trade volume by 0.8% in the third quarter of 2021 (WTO, 2022).

Türkiye has a share of 0.21% from the world trade volume of approximately 20 trillion USD. In the table below, Türkiye's import and export figures and total trade between 2017 and 2021 are given. The foreign trade volume, which was 403 billion USD in 2017, decreased to 389 billion USD in 2020 with the outbreak of the pandemic. The trade routes opened in the field of logistics and supply as a result of the regression in the pandemic with the effect of the vaccine developed against Covid-19 have been a factor in the increase of Türkiye's foreign trade volume to 496 billion USD in 2021.

**Table 1.** Data of foreign trade by years

Years	Exports		Imports		Balance of foreign trade	Volume of foreign trade	Proportion of imports covered by exports (%)
	value	change (%)	value	change (%)	value		
2017	164 494 619	10.2	238 715 128	18.1	-74 220 509	403 209 747	68.9
2018	177 168 756	7.7	231 152 483	-3.2	-53 983 726	408 321 239	76.6
2019	180 832 722	2.1	210 345 203	-9.0	-29 512 481	391 177 924	06.0
2020	169 637 755	-6.2	219 516 807	4.4	-49 879 052	389 154 562	77.3
2021 <sup>(a)</sup>	225 214 458	32.8	271 425 553	23.6	-46 211 095	496 640 011	83.0

Value: thousand US \$.

Türkiye's exports in 2021 reached 225 billion USD, with an increase of 32.8% compared to the previous year. However, with the increase in imports by 23.6%, a foreign trade deficit of 46.2 billion USD was formed.

The increase in the trade volume, by entering new markets in industries that do not have a foreign trade deficit, positively affected the growth rate in GDP and brought it to 6% in 2020 (TİM, 2022).

## Forest products industry export

All these data had reflections on both the general economy and the furniture industry. The changes in export records on an industrial basis, published every year by

the Turkish Exporters Assembly (TIM), in 2019 and after, are as shown in the table below. Considering the analyzed export data of the furniture industry by years, a 25% increase was observed in 2021. Likewise, as of 2022, there is a 27% increase when compared to the first 7 months of the previous year. When the share of this increase in the furniture industry in total exports is analyzed together, it is seen that the share, which was 3.1% in 2019, increased to 3.3% in the first 7 months of 2022, resulting in an increase of 0.2 points.

**Table 2.** Sectoral export data for 2018–2021

Sector	Export Figures 1.000\$ 1 January – 31 December									
	2018	2019	Change	Pro-portion (19)	2020	Change	Pro-portion (20)	2021	Change	Pro-portion (21)
Furniture paper forest products	5.014.621	5.529.995	10.3%	3.1%	5.566.505	0.7%	3.3%	6.993.833	25.6%	3.1%
General export total	176.860.826	180.468.488	2.0%	100%	169.514.167	6.1%		225.367.676	32.9%	32.9%

**Table 3.** 7-month export data for 2022

Sector	Export Figures 1.000\$ 1 January – 31 July			
	2021	2022	change	proportion (22)
Furniture Paper Forest Products	3.713.600	4.728.598	27.3%	3.3%
General Export Total	121.235.504	144.416.688	19.1%	100%

As can be seen in the reports published periodically by the Turkish Exporters Assembly, the furniture industry, which is an important branch of the forest products industry, has succeeded in turning the economic contraction in the world to its advantage during the pandemic.

The important point to be noted here is that some of the inputs necessary for the formation of furniture were imported, so serious problems were experienced in the industry initially. Especially with the problems experienced in particleboard (chipboard) supply and the increase in export-oriented sales of domestic particleboard manufacturers, a major bottleneck has occurred in the domestic market. Turkish wood-based panels industry, which was operating at full capacity, then faced wood raw material problems, and the bottleneck could not be overcome for a long time due to the logistics problems when it came to solutions for the import of this product.

The shortage of containers in the field of logistics not only affected the imports and exports of countries negatively, but also caused disruptions in the manufacturing sector, and even a rapid increase in product prices, as access to raw materials became almost impossible.

In academic studies, 53% of the total expenses in furniture production are raw material expenses and 13.8% of the furniture production is wood-based panel products (Koç and Aksu, 1995).

With the investments it has made in the last 20–25 years, the Turkish wood-based panel industry is the 5th in the world and the largest producer in Europe, both in terms of technology and capacity. Here, in order to raise the industry to higher levels, it is necessary to solve the raw material problems permanently and to ensure a sustainable supply of quality raw materials. In this context, many different methods can be developed. The conversion of used furniture, the creation of fast-growing tree plantations can be listed as examples (Yildirim et al., 2014).

According to the research, in Europe, 49% of panel products such as MDF and HDF are used in furniture manufacture, 31% in parquet, 10% in construction industry and 9% in manufacture of doors. While particleboard is used in the furniture industry at a high rate of 82%, it is stated that 13% of it is used in construction and 3% is used in the manufacture of doors (İstek et al., 2017).

Since most of the plate industry manufacturing in Türkiye during the pandemic was directed to export, serious raw material shortages arose in the domestic market. The decrease in the supply to the market caused great increases in prices. With the reflection of this increase in raw materials on finished products, furniture prices increased more than expected. Thereupon, the Ministry of Commerce of the Republic of Türkiye imposed an export restriction on wood-based panel manufacturers in line with the decision taken in June 2021, and contributed to the solution of this problem by allowing the export of 20% of the production. However, as this was also found to be insufficient, the relevant state institutions decided to increase the quota in panel products as of April 13, 2022 and impose a 100% prohibition of export to provide all production to the domestic market. While the manufacturers of the panel industry objected to this decision, they showed the inadequacy of raw wood materials in Türkiye as the source of the main problem. Within the framework of these decisions, board exports decreased by 17% year-on-year (İlhan, 2022). Turkish Wood-Based Panel Association (YOMSAD), one of the most important non-governmental organizations in the industry, especially in solving the raw material problem, has made a serious

effort and taken steps to solve this problem in coordination with many Ministries and their affiliates, especially the Ministry of Agriculture and Forestry, the General Directorate of Forestry.

In this situation, which seemed difficult to solve initially, measures have been taken to ensure that the relevant industry components come together and that the resources are procured with cooperation on a scaled scale. Thanks to these measures, the static furniture industry recovered in a short time and became able to respond to the demands.

### Turkish Furniture Industry

Although the furniture industry has invested in technological machinery, mainly SMEs (Small and Medium-Sized Enterprises) have an important place in terms of employment. This makes Türkiye an important supplier for the European market, as labor costs are low compared to other exporting countries.

Considering the proportional distribution of furniture trade on the basis of countries across the world, in the light of the values given in Table 4, Türkiye has a share of 1.6% in exports and 0.2% in imports. While China ranks first in exports with a share of 32.8%, the USA has a 30% share in imports.

**Table 4.** Prominent Countries in Global Furniture Trade

Countries	Export (%)	Countries	Import (%)
China	32.8	USA	30.0
Germany	6.9	Germany	8.1
Poland	6.8	England	5.0
Vietnam	6.1	France	4.9
Italy	5.8	Canada	3.8
Mexico	4.1	Japan	3.8
USA	3.9	Holland	3.2
Türkiye	1.6	Türkiye	0.2

Source: Trademap.

When we look at the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the Turkish furniture industry, its strengths include its competitive advantage, logistics infrastructure, being a developed industry with growth potential, and the fact that access to raw materials and workmanship can be solved with domestic resources at the level of 90%. In addition, factors such as the low number of integrated facilities,

the capital problem of SMEs, the shortage of qualified technical personnel, and foreign dependency in production technologies constitute its weaknesses. The industry's intensive use of e-commerce channels in sales and marketing, price and quality advantage, and increasing foreign demand due to the desire of other countries to diversify China, which is the leading country in exports, constitute an opportunity for the industry. The most important threat is that China has become an aggressive player.

When all these are compared, it is seen with the increase in the export figures in the recent period that the furniture industry has made the right moves by combining the opportunities with its strengths. However, in order for the Turkish furniture industry to be able to do this much better, it needs to attach more importance to technology, R&D and innovation investments and to create unique designs with a competitive understanding in product design. Thus, the probability of getting a larger share from the world market will increase.

## Conclusion and recommendations

The crisis that the world has experienced since the beginning of the pandemic has negatively affected the furniture industry on a global scale. However, this problem was quickly resolved with the search for different suppliers in a short time. In general, the Turkish furniture industry grew out of this crisis and became a sought-after actor in the market by expanding its market share. Of course, this is not enough, it should be able to do much better. In order to meet the demands for export, it needs to carry the developing technology and infrastructure to more advanced levels and create original and functional designs in the context of disassembled furniture.

In particular, the IKEA example, which can be formed by clustering abroad, and the creation of structures that are open to development and the quality of products and services that are systematically at the forefront will increase Türkiye's market share in the future.

Licensing and business establishment should be allowed after the companies established in the country are examined by the relevant authority with a feasibility report and whether they are suitable for competency in line with the requirement. Capital adequacy must be examined and a comparative analysis of the product to be produced, and the investment must be made.

On the other hand, factors leading to unfair competition with a small workshop and informal employment should be prevented. In order to prevent these problems,



various regulations can be introduced in important parameters such as the size of workplaces, number of employees, capital adequacy. While doing this, the models of the United States of America, the European Union and China should be examined. Of course, every country has its own socioeconomic structure. Here, other countries should be considered and Türkiye's own parameters should be revealed with a scientific approach and common sense. It will be beneficial for company managers or owners to receive training on important issues such as investment, management of financial structure, borrowing. In fact, these can be in the form of professionally and institutionally certified trainings by making agreements with the Continuing Education Centers of the Universities. Thus, wrong money management and unnecessary investments in the industry can be minimized, efficiency can be increased with the correct use of scarce resources, and more competitive formations can be strengthened. Since the conscious producers will make the right investments for the development of their businesses, the export will also develop in parallel.

Of course, the development of the sector does not happen only with machinery and infrastructure investments alone. There is a need for human resources to use these sources, manage them and make the system sustainable. Universities and vocational high schools are needed in this respect. There is a shortage and need not only for engineers, industrial designers and architects but also for qualified intermediate staff graduated from vocational high schools/colleges more than ever.

There is no department in Türkiye directly for the furniture industry. In general, Woodworking Industrial Engineering, whose main field of activity is wood, and Forest Industrial Engineering Department graduates work in this industry. Since the industry is very wide, the courses in these departments also vary. This is both an advantage and a disadvantage. The graduate gains knowledge on many subjects little by little. However, in-depth expertise in a single field rather than little knowledge in many fields is a reason for preference in the furniture industry. Of course, it is not possible to expect the courses to be only furniture-oriented. For this reason, students are required to take common basic vocational courses in the first 2 years, and specialize in specific areas with the branching of the education in the 3rd and 4th years. Similar examples are available in other engineering departments at the leading universities in Türkiye. In these sections, topics such as furniture engineering, furniture components – materials, furniture design, surface chemicals, surface coatings can be highlighted in the branch to be created for the furniture industry. Thus, graduates who have high quality and in-depth knowledge can easily find job opportunities with improved personal rights,

and they also add value to the companies they work for, and it is possible to produce more innovative and value-added products instead of just standing over the workers in those companies or maintaining the daily system.

The development of the wood-based panels industry, which is the main supplier of the furniture industry, in terms of both capacity and quality will have a positive impact on the results. It also has the environmental aspect. In Europe and the United States, there is a wide range of research and regulations. For example, the concepts of “European Green Deal”, “Circular Economy”, “Fit For 55” come to the fore. Used furniture or used wood and wood-based products in Türkiye can cause a big problem, especially in big cities. The visibility of the used and waste furniture in the streets is increasing day by day. This is not only environmental pollution, but also a great financial loss and a waste of resources. The Ministry of Environment, Urbanization and Climate Change of the Republic of Türkiye, the Ministry of Industry and Technology of the Republic of Türkiye, Governorships, Metropolitan Municipalities, District Municipalities, Universities, and non-governmental organizations operating in the field of forest products industry should come together to collect the used furniture or wood waste or urban transformation waste safely and recycle it into wood-based panels manufacture and should ensure that they are used in furniture production. Various certificates can be given to companies and their products in this context. Thus, the circular economy is supported.

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