

An Investigation of the Perception of Institutionalization in the Furniture and Board Manufacturing Businesses from the Perspective of Managers Before and During the COVID-19 Pandemics¹

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May 2022

Volume:19

Issue:47

DOI: 10.26466//opusjr.1094230

Abstract

The COVID-19 pandemic has affected businesses and business models in different ways across all industries. The forest products industry plays an important role in sustainable development not only with its unique raw material, but also because of the continuing globalization of the industry. This study was carried out in order to compare the institutionalization perceptions of the managers of 106 businesses in the furniture and board manufacturing sectors, most of which are medium-sized and family/personal ownership, before and during the COVID-19 pandemic. While the level of institutionalization perception before and during the COVID-19 pandemic is very close to the medium level in all sub-dimensions and in total, the change in the last four years is significantly lower in all sub-dimensions during the pandemic. This result showed that the COVID-19 pandemic seriously affected the institutionalization processes of the furniture and board manufacturing businesses in terms of consistency, formalization, transparency and accountability. The results of this study revealed that the institutionalization of the furniture and board manufacturing sectors show serious changes according to the changing conditions and it is important for managers to take measures to adapt to these changes, taking into account different crisis scenarios that will result in expansion and recession.

Key Words: Furniture Sector, Board Sector, Institutionalization, COVID-19 Pandemic.

Öz

COVID-19 pandemisi, işletmeleri ve iş modellerini tüm sektörlerde farklı şekillerde etkilemiştir. Orman ürünleri endüstrisi, sadece kendine özgü hammaddesi ile değil, aynı zamanda endüstrinin devam eden küreselleşmesi nedeniyle sürdürülebilir kalkınmada önemli bir rol oynamaktadır. Bu çalışma mobilya ve levha üretici işletmelerde çoğunluğu orta ölçekli ve aile/ şahıs sahiplik yapısında olan 106 işletmenin yöneticilerinin kurumsallaşma algılarının COVID-19 pandemisi öncesi ve pandemi döneminde karşılaştırılması amacıyla gerçekleştirilmiştir. COVID-19 pandemisi öncesi ve pandemi döneminde kurumsallaşma algısı düzeyi tüm alt boyut ve toplamda orta düzeye çok yakın iken, geçen dört yıl içindeki değişim tüm alt boyutlarda pandemi sürecinde ileri düzeyde anlamlı olarak düşüktür. Bu sonuç COVID-19 pandemisinin mobilya ve levha üretici işletmelerde kurumsallaşma süreçlerini tutarlılık başta olmak üzere formalleşme ve şeffaflık ve sorumluluk boyutlarında ciddi şekilde etkilediğini göstermiştir. Bu çalışmanın sonuçları mobilya ve levha sektörünün kurumsallaşmasının değişen koşullara göre ciddi değişiklik gösterdiğini ve yöneticilerin genişleme ve durgunluk gibi sonuçlar doğuracak farklı kriz senaryoları göz önünde bulundurarak bu değişimlerine uyum sağlayacak önlemleri almasının önemini ortaya koymuştur.

Anahtar Kelimeler: Mobilya Sektörü, Levha Sektörü, Kurumsallaşma, COVID-19 Pandemisi.

Citation:
Kırklıkçı, A.B. (2022). An investigation of the perception of institutionalization in the furniture and board manufacturing businesses from the perspective of managers before and during the COVID-19 Pandemics. *OPUS- Journal of Society Research*, 19(47), 427-436.

¹ This manuscript was presented as an oral presentation at the 5th International Congress on Social and Economic Sciences, Adana, Türkiye, December 1-3, 2021.

Introduction

Many perspectives have emerged in the industrial and business sectors regarding their present and future under the COVID-19 pandemic. This epidemic has affected all divisions of their businesses and their business models in different ways. According to pre-pandemic data, the forest products industry in Turkey employed about 135 thousand people in furniture manufacturing (Ministry of Trade [TB], 2018) and about 13 thousand in panel board production (Union of Chambers and Commodity Exchanges of Turkey [TOBB], 2015). It has been reported that this sector has a tendency to attract new markets (Journal of the Woodworking Machinery and Sub-Industry Businessmen's Association [AİMSAD], 2017; TOBB, 2017) and has established export and import contacts in the field of forest products with more than two-hundred countries (MDF and Particleboard Manufacturers' Association [MDF-YLSD], 2019; Independent Industrialists' and Businessmen's Association [MUSİAD], 2018). According to the Statistical Authority of Turkey (TÜİK), there are about 39 thousand workplaces in the furniture industry and 198 thousand employees. The weighted capacity utilization rate of the sector over the last five years was 73%, with a production value of about 45 billion Turkish Lira (TL) (Ministry of Industry and Technology [STB], 2020).

Despite the negative effects of the COVID-19 pandemic on trade felt significantly over the past year, an increase of 12% was recorded for furniture exports compared to the previous year, whereas furniture imports decreased by 9% (TB, 2021a). In 2020, when the effect of the pandemic began, the paper and paper products industry exported 1.7 billion dollars to 87 countries and completed the year at a level close to the previous year. The paper-cardboard packaging industry, on the other hand, constituted 11% of the European cardboard packaging market in this period and rose to the 3rd rank in the European production ranking (TB, 2021b).

Although these data only provide a comparison for the year the pandemic started, the effects for

2021 are not clear as they have yet to be reported. Again, prior to the pandemic, the international strength of the Turkish furniture and panel board industries was in particular due to the proximity to the Middle Eastern market (Serin and Şahin, 2018; İstek, Özlüsoylu, and Kızılkaya, 2017). On the other hand, their weak points include the lack of government support for small and medium-sized enterprises (SMEs) (Sarıkahya, 2012), the inability to benefit from national and international financing opportunities, the fact that raw materials are procured from the foreign market, and the lack of qualified personnel.

The forest products industry plays an important role in sustainable development, not only because of its unique raw material, but also due to the continuing globalization of the industry (Tuppura, Toppinen, and Jantunen, 2013). In a study conducted in 493 forest products industry businesses in Turkey, 94% of the businesses were in the furniture sub-sector, 60% had 10-49 employees, 79% of them were under family/individual ownership, and 75% of them had been operating in the sector for 10 years or more (Kırklıkçı, 2019). In studies carried out prior to the pandemic on forest products industries in developing countries, it was noted that policy reforms affecting the corporate transformation of the sector were inadequate and the institutionalization rate was low (Dayneko and Gustafson, 2014; Wanat, Potkanski, Chudobiecki, Mikolajczak, and Mydlarz, 2018). In Turkey, other important points observed were the effectiveness of quality assurance systems in the institutionalization of the forest industry, the applicability of EU legislation, and the inadequacy of research and development (R & D) expenditures (Koç, Dilik, and Kurtoğlu, 2017). Gedik and Özçelik (2020) pointed out the lack of the participatory management approach in the institutionalization of furniture and forest products industry businesses. In a study conducted in one province, Serin and Şahin (2018) stated that the majority of furniture businesses were small and micro businesses and that being in an individual or family ownership structure was a

weaknesses that affected professional management and institutionalization.

For the main above-mentioned reasons, the forest products industry sector is open to crises in the institutionalization process. Like many other industries, the forest products industry has also felt the impacts of the global COVID-19 outbreak. When the World Health Organization declared a global pandemic, there was a sudden decrease in the forestry sub-sector in North America along with a trending systematic risk increase throughout 2020 up until October (Størdal, Lien, and Trømborg, 2021). During the pandemic, it was revealed that for the small and medium-sized forest industry businesses in Malaysia, the greatest concerns were financial management and supply-chain disruptions. This was seen as an inevitable result of the capacity of the businesses, which were determined to be under great financial pressure in terms of their sustainability (Ratnasingam et al., 2020). On the other hand, in a study in Croatia, it was reported that the furniture preferences of customers had not been affected by the pandemic (Pirc Barčić, Kitek Kuzman, Vergot, and Grošelj, 2021). In another study, the furniture consumers in Turkey were more likely to increase their demand for outdoor furniture (Genç and Merdan, 2021).

The present study was carried out with the aim of comparing what we knew in the furniture and board manufacturing businesses before the pandemic with how the managers perceived institutionalization during the pandemic period. In the study, responses were sought to the question: "What were the effects of this viral epidemic on the perception of institutionalization in the furniture and board manufacturing businesses?"

Method

Universe of the Study, Sampling

This study aimed to compare the institutionalization perceptions of managers of businesses operating in the furniture and board manufacturing sectors based on the years 2017 and 2021. The primary data of the study is based on the data obtained from the study by Kırklıkçı (2019) in which the perception of institutionalization of the Turkish sample of furniture and board

manufacturing businesses was examined. In this respect, of the 797 people working in the 493 furniture and board manufacturing businesses who participated in the previous study, 155 managers were identified who met the criteria of the study. The sampled managers work in enterprises in the Marmara, Black Sea, Aegean, Central Anatolia and Mediterranean regions, where the furniture and plate industry is located in Turkey. These individuals were contacted by e-mail and asked about their perceptions of institutionalization, using online forms prepared via "Google forms" which were collected along with secondary data between September and October 2021. The 106 in-service managers who returned the forms were compared via the primary and secondary data.

The study criteria: (1) The businesses should be domestically established organizations (2) have at least 50 or more employees; (3) the participants should be in the positions of managers in the businesses; (4) should have continually served in the organizations between 2017 and 2021; (5) the businesses must have been affected by the pandemic and; (6) the participants must have agreed voluntarily to participate in the study.

Data Collection

In determining the perception of institutionalization, the study used the 24-item Perceived Institutionalization Scale (PIS) developed by Kırklıkçı and Gedik (2021), which is a 5-point (1: Strongly Disagree - 5: Completely Agree) Likert-type rating scale with three sub-dimensions. The sub-dimensions of the scale included Consistency (15 items), Formalization (5 items), and Transparency and Accountability (4 items). The Cronbach Alpha coefficient of the scale was 0.96, with 0.94 / 0.86 / 0.73 for the sub-dimensions, respectively; the PIS value was 0.97 and the Barlett's value was 16896.501, with all shown to have high reliability and validity. An increase in the points of the scale and sub-dimensions indicates a high perception of institutionalization.

Data Analysis

In the study, Wilcoxon signed-rank test was used to evaluate the change in the level of perception of institutionalization of the same managers before and during the pandemic period. The descriptive data were shown as number, percent, and average. Statistical significance was determined as $p < 0.05$.

Ethical Considerations

Permission to carry out the study was granted by the Social Sciences Ethics Committee of a State university. The participants were recruited as volunteers for the study.

Research Hypotheses

The hypotheses of the study included:

Compared with the pre-pandemic furniture and board manufacturing businesses-

1. The perception level of consistency decreased during the pandemic period.
2. The perception level of formalization decreased during the pandemic period.
3. The perception level of transparency and accountability decreased during the pandemic period.

Results

Results Related to Demographic Characteristics of Businesses and Managers Participating in the Study

The mean age of the managers was 41.33 ± 8.98 (23-69), 86.8% of them were male and 64.2% had a Bachelor's or graduate education degree. The managers had been working in the same businesses for an average of 7.06 ± 1.38 (5-9) years and in the same sector for an average of 8.11 ± 1.14 (5-9) years, and 25.5% of them had been working in businesses operating for more than 40 years. Furniture businesses made up 82.1% of the businesses, 84% of which were under family /

individual ownership, and 74.5% of the businesses employed from 50 to 249 workers (Table 1).

Table 1. Distribution of findings related to the socio-demographic and workplace characteristics of managers

Characteristics	n	%
Field of activity of the business		
Furniture	87	82.1
Board	19	17.9
Form of business ownership		
Family/private sole proprietorship	89	84.0
Domestic capital partnership	17	16.0
Operating period of the business		
0-19	31	29.2
20-39	48	45.3
40 and more	27	25.5
Number of employees		
50-249	79	74.5
250 and over	27	25.5
Gender of manager		
Female	14	13.2
Male	92	86.8
Age of managers (mean \pm SD)		
	41.33 \pm 8.98 (23-69)	
Working period of manager in the business (year)		
	7.06 \pm 1.38 (5-9) (mean \pm SD)	
Working period of manager in the sector (year)		
	8.11 \pm 1.14 (5-9) (mean \pm SD)	
Education of manager		
Primary-Secondary education	9	8.5
High school- Associate's degree	29	27.4
Bachelor's degree-Master's/PhD	68	64.2

Institutionalization Perception Level Before and During the Pandemic Period

The managers' total PIS and sub-dimension scores before and during the pandemic were examined and statistically found to be significantly lower during the pandemic period. These were -4.679 (0.000) for total PIS, and for the sub-dimensions, -4.326 (0.000) for Consistency, -4.100 (0.000) for Formalization, and -3.642 (0.000) for Transparency and Accountability (Table 2).

Table 2. Comparison of the level of institutionalization perception before and during the pandemic

Institutionalization Perception Sub-Dimensions and Total	Before Pandemic	During Pandemic	Z	p
Consistency	4.28 \pm 0.69	3.86 \pm 0.67	-4.326	.000*
Formalization	4.33 \pm 0.80	3.91 \pm 0.62	-4.100	.000*
Transparency and Accountability	3.74 \pm 0.86	3.22 \pm 1.05	-3.642	.000*
Institutionalization	4.20 \pm 0.68	3.76 \pm 0.63	-4.679	.000*

Z=Wilcoxon signed rank test, * $p < 0.01$

Level of Consistency Sub-Dimension Items Before and During the Pandemic Period

The items of the consistency sub-dimension of the PIS in the study were examined before and during the pandemic period and the first five items showed the largest change: "C3. Our company expects all employees to abide by the ethical (moral) rules which are accepted by the society" (-4.095; 0.000); "C7. Recruitments are conducted according to objective criteria" (-3.904; 0.000); "C11. The activities of our company conform with the norms that are determined by the state, professional and industry associations" (-3.681; 0.000); "C2. Our company keeps the promises it makes to other firms, customers and its employees" (-3.639; 0.000); and "C6. Our company is aware of its responsibilities towards the society" (-3.521; 0.000). Except for "C9. The administration creates a customer focused culture in the establishment and all applications are directed towards customer satisfaction" (-1.941; 0.052), for all other items, the change showed a decreasing trend and was significant ($p < 0.05$) (Table 3).

Table 3. Comparison of consistency sub-dimension item score levels before and during the pandemic

Items	Before Pandemic		During Pandemic		Z	p
	Mean	SD	Mean	SD		
C1. Our company takes responsibility for the results of its actions.	4.25	.95	3.82	.91	-3.164	.002*
C2. Our company keeps the promises it makes to other firms, customers and its employees.	4.49	.75	4.03	.89	-3.639	.000*
C3. Our company expects all employees to abide by the ethical (moral) rules which are accepted by the society.	4.54	.62	4.11	.85	-4.095	.000*
C4. Our company is a business that is admired by other people and establishments, especially by its employees, public, business partners and partner companies.	4.59	.66	4.23	.80	-3.411	.001*
C5. The dominant focus in our company is "not I" but "we".	4.12	1.08	3.79	1.03	-2.293	.022*
C6. Our company is aware of its responsibilities towards the society.	4.45	.79	4.02	.92	-3.521	.000*
C7. Recruitments are conducted according to objective criteria.	4.17	.95	3.56	1.16	-3.904	.000*
C8. A transparent understanding of administration is present in our company.	4.04	1.06	3.59	1.08	-2.918	.004*
C9. The administration creates a customer focused culture in the establishment and all applications are directed towards customer satisfaction.	4.29	.95	4.08	.84	-1.941	.052
C10. The mission, strategies and actions of our company are consistent.	4.31	.97	3.83	.89	-3.505	.000*
C11. The activities of our company conform with the norms that are determined by the state, professional and industry associations.	4.46	.80	3.99	.85	-3.681	.000*
C12. Our company pays attention to suggestions made by the employees and the suggestions/ideas that provide added value to the establishment are evaluated.	4.07	.92	3.64	1.04	-2.866	.004*
C13. Administrative staff consist of experts.	4.28	.95	3.80	.92	-3.457	.001*
C14. Our company has an idiosyncratic organizational culture and identity.	4.23	1.04	3.80	.95	-3.170	.002*
C15. There is a high level of cooperation and communication among units.	3.91	1.07	3.59	1.03	-2.348	.019*

Z=Wilcoxon signed rank test, * $p < 0.05$, C= Consistency

Level of Formalization Sub-Dimension Items Before and During the Pandemic Period

In the study, the largest changes for the Formalization sub-dimension in the pre-pandemic and pandemic period were found in the first two items: "F2. Our business has a mission and vision" (-4.258; 0.000) and "F1. Our enterprise has an organizational chart" (-4.252; 0.000). Except for item "F4. Our enterprise has an effective reporting system" (-1.432; 0.152), the change in all other items showed a decreasing trend and was significant ($p < 0.05$) (Table 4).

Table 4. Comparison of formalization sub-dimension item score levels before and during the pandemic

Items	Before Pandemic		During Pandemic		Z	p
	Mean	SD	Mean	SD		
F1. Our company has an organizational chart.	4.45	.96	3.87	.89	-4.252	.000*
F2. Our company has a mission and vision.	4.54	.83	4.00	.83	-4.258	.000*
F3. Each duty, authorization and responsibility is settled and these are acknowledged by the employees in our company.	4.38	.92	3.93	.83	-3.764	.000*
F4. There is an effective reporting system in our company.	4.04	1.15	3.84	.85	-1.432	.152
F5. Standards for each task and process are specified and documented.	4.26	.94	3.90	.84	-2.751	.006*

Z=Wilcoxon signed rank test, * $p < 0.05$, F= Formalization

Level of Transparency and Accountability Sub-Dimension Items Before and During the Pandemic Period

In the study, the score levels of the PIS Transparency and Accountability sub-dimension items were examined before and during the pandemic period. The largest change was seen in item "TA3. Decisions regarding the society and the future of the company are shared with the employees" (-3.548; 0.000). The change in all other items showed a decreasing trend and was significant ($p < 0.05$) (Table 5).

Table 5. Comparison of transparency and accountability sub-dimension item score levels before and during the pandemic

Items	Before Pandemic		During Pandemic		Z	p
	Mean	SD	Mean	SD		
TA1. Social activities are organized in our company to boost motivation.	3.66	1.26	3.12	1.28	-2.956	.003*
TA2. Rewards and penalties in our company are imposed according to objective and systematical criteria.	3.62	1.22	3.18	1.23	-2.433	.015*
TA3. Decisions regarding the society and the future of the company are shared with the employees.	3.76	1.16	3.18	1.19	-3.548	.000*
TA4. Middle and long-term plans of our company are shared with the shareholders.	3.93	1.09	3.38	1.11	-3.411	.001*

Z=Wilcoxon signed rank test, * $p < 0.05$, TA= Transparency and Accountability

Discussion

The Forest Products Industry sector is currently known to have many weaknesses in terms of institutionalization processes. The sector is under the pressure of drawbacks such as the inability to form large business structures due to the lack of an innovative approach, which has a direct impact on institutionalization. Additional factors include the lack of vocationally trained and qualified personnel, incompetent product development, branding problems, inadequate quality control processes, financing problems, and the instability of family businesses (Koç, Kurtoğlu, Edinler, and Hazır, 2016; Koç et al., 2017).

Additional effects on the industry of COVID-19 pandemic-related conditions have actually been delayed; however, a few studies in Turkey have already begun to examine them. In this context, this study was carried out in order to compare the perceptions of institutionalization held by the managers of 106 medium and family / individually owned businesses in the furniture and board manufacturing sectors before and during the COVID-19 pandemic. Interviews with the managers responsible for institutionalization studies in businesses, especially between the years 2017 and 2021, supported the reliability of the data before and during the pandemic.

Although the institutionalization perception before and during the COVID-19 pandemic period was very close to the medium level in all sub-dimensions and the total, the change in the last four years was significantly lower in all sub-dimensions during the pandemic period. The results showed that the COVID-19 pandemic had severely influenced the institutionalization processes of the furniture and board manufacturing sectors, especially in the Consistency, followed by the Formalization and the Transparency and Accountability dimensions, respectively. In line with these results, Hypotheses 1, 2 and 3 were confirmed. In this study, the secondary data were collected in the period of restructuring after the third wave of the pandemic. The resulting data were actually taken in the period in which the destructive effect of the pandemic was still observed, but had been reduced (September-October 2021). Kırklıkçı and Gedik (2019b) reported that the main factor considered to be effective on the perception of institutionalization in the furniture and board manufacturing sectors were Consistency, and that the most important indicator showing businesses could support their Consistency was that of "keeping their promises to other institutions, customers and employees". However, in the present study, this was one of the most negatively affected indicators. In order for businesses to survive in changing market conditions, as in the example of the current pandemic, businesses could be more successful by acting quickly on their customers' expectations and increasing the services provided before, during, and after the sale (Akyüz, Akyüz, Ersen, and Beker, 2017).

Two studies have been carried out in Turkey examining the effects of the pandemic in the forest products industry. The qualitative study of Bayram (2021) on the effects of the COVID-19 pandemic in the forest products industry pointed out the great economic damage caused by stopping the raw material supply chain and product shipment through customs gates and limiting the working hours of employees or dismissing them for economic reasons. In the same study, an evaluation was conducted between January and June 2020 that revealed the results of the first wave of the pandemic. Ateş, Enez, and

Külçe (2021), in their study of one province, found that 90% of businesses had been economically affected, approximately 50% of the employees had changes made in their working hours, and the majority of businesses had a 50% or less decrease in their production. The above studies, in which great economic damage to businesses was reported, found that the processes mentioned in this study had an effect on the decrease in the consistency of the businesses, which was one of the results of this study. On the other hand, in a study conducted before the pandemic, it was reported that 47% of forest products businesses had experienced a great many input-oriented problems and that they faced significant problems in production, production planning, and sales procedures (Öztürk, 2014). The problems present in the sector before the pandemic emerged more severely under the pandemic conditions. Therefore, businesses need to create supply sources and market cycles by planning for crises as well.

In this study, Formalization was the institutionalization perception sub-dimension in which regression was observed at the second level. During the pandemic, the score levels decreased for the items related to the presence of organizational charts, mission and vision statements, job descriptions, and other reporting systems in the businesses. This finding demonstrated that in the institutionalization process, these businesses were vulnerable to crises and that they had no plans for changing their formal structures, production targets, marketing and sales techniques, or capacities during the pandemic period. Gedik and Çil (2019) in their study of small and medium-sized forest industry businesses stated that these businesses had conducted no effective crisis management studies and lacked adequate information on crisis management, and that the top managers had not prepared any crisis management plans. In the forest industry in Malaysia, especially for SMEs, emphasis was placed on the importance of adopting automation and technology in coping with this crisis. It was stated that the transition to Industry 4.0 was inevitable as a way to increase their resilience when faced with future uncertainties (Ratnasingam et al., 2020). In a

competitive environment, the move toward developing technology with innovative approaches would enable businesses to stand out among their competitors. The traditional income model adopted in the forest products industry, however, includes unpredictable risks. Even with modeling of business type and construction site selection, target group determination, pricing policy, etc., incorrect or weak choices of parameters may cause the relevant business model to fail (Tuncel, Satır, and Candan, 2019). Therefore, in order to turn similar crises into opportunities in the future, the move to innovative models such as Industry 4.0 is a necessity in the Turkish forest industry, which consists of mostly small and medium-sized businesses.

This study has reported that the perception of institutionalization was negatively affected in terms of Transparency and Accountability by the managers' responses to the item on their businesses "Sharing the decisions concerning the society or the future of the company with the employees". Businesses that adopt a sense of responsibility towards their employees would be able to provide many benefits in terms of institutionalization, including creating social identity, gaining competitive advantage, creating company loyalty and reputation, and in branding (Gedik and Durusoy, 2012). One study reported that when the institutionalization level of family businesses in the furniture sector increased, the level of work dedication of the employees also increased whereas their level of intention to leave the job decreased (Böler, 2020).

Conclusion and Recommendations

The furniture and board manufacturing businesses managers who already had a near-medium perception level of institutionalization in 2017 had difficulties in managing this crisis that started in 2020, and said that the institutionalization of their businesses had been adversely affected, especially in terms of Consistency. The businesses could have overcome this crisis with more or less damage, but they failed to turn it into an opportunity by developing crisis management strategies. The

results of this study show that the institutionalization of the furniture and board manufacturing sectors depend on changing conditions and on its taking into account different crisis scenarios that could have consequences such as expansion or stagnation. This study has demonstrated the importance of taking measures to adapt to these changes.

Giving importance to the supply chain issue, especially in furniture and board businesses, supplying raw materials and auxiliary materials before starting production, increasing strategic cooperation with wholesalers and retailers after production, and handling all transactions with a minimum cost and maximum profit perspective will reduce the effects of the crisis. In addition, it is important for furniture and board businesses to adapt quickly to the changes created by the COVID-19 pandemic in the field of e-commerce. In this process, it has been emphasized that the furniture and board manufacturing sectors should be affected by the pandemic with the least damage or turn this epidemic into an opportunity for themselves, as well as the need to continue their institutionalization efforts.

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